## DEPARTMENT OF HEALTH AND HUMAN SERVICES

## Health Care Financing Administration

42 CFR Parts 412, 413, and 489
[BPD-847-P]
RIN 0938-AH34

## Medicare Program; Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 1997 Rates

agency: Heal th 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-rel ated 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, 1996. We are al so 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 July 31, 1996.
ADDRESSES: Mail written comments (an original and 3 copies) to the following address:
Heal th Care Financing Administration, Department of Health and Human Services, Attention: BPD-847-P, P.O. Box 7517, Baltimore, MD 21207-0517.
If you prefer, you may deliver your written comments (an original and 3 copies) to one of the following addresses:
Room 309-G, Hubert H. Humphrey Building, 200 Independence A venue, 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-847-P. Comments received timely will be available for public inspection as they are received, generally beginning approximately 3 weeks after publication
of a document, in Room 309-G of the Department's offices at 200 Independence Avenue, SW., Washington, DC, on M onday 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.

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FOR FURTHER INFORMATION CONTACT:
Nancy Edwards (410) 786-4531, Operating Prospective Payment, DRG, Wage Index Issues.
Tzvi Hefter (410) 786-4529, Capital Prospective Payment, Excluded Hospitals.

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 September 1, 1995, we published a final rule with comment period (60 FR
45778) to implement changes to the prospective payment system for hospital operating costs begi nning with Federal fiscal year (FY) 1996.

For cost reporting periods beginning before October 1, 1991, hospital inpatient operating costs were the only costs covered under the prospective payment system. Payment for capital related costs had been made on a reasonable cost basis because, under sections 1886(a)(4) and (d)(1)(A) of the Act, those costs had been specifically excluded from the definition of inpatient operating costs. However, section 4006(b) of the Omnibus Budget Reconciliation Act of 1987 (Public Law 100-203) revised section $1886(\mathrm{~g})(1)$ of the Act to require that, for hospitals paid under the prospective payment system for operating costs, capitalrelated costs would al so be paid under a prospective payment system effective with cost reporting periods beginning on or after October 1, 1991. As required by section 1886(g) of the Act, we replaced the reasonable cost-based payment methodology with a prospective payment methodol ogy for hospital inpatient capital-related costs. Under the new methodology, effective for cost reporting periods beginning on or after October 1, 1991, a predetermined payment amount per discharge is made for Medicare inpatient capital-related costs. (See subpart M of 42 CFR part 412, and the August 30, 1991 final rule (56 FR 43358) for a complete discussion of the prospective payment system for hospital inpatient capital-rel ated 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-rel ated costs. This proposed rule would be effective for discharges occurring on or after October 1, 1996. 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 1997 are set forth in section II of this preamble.
2. Changes to the Hospital Wage Index

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

- FY 1997 wage index update.
- Revisions to the wage index based on hospital redesignations.
- Solicitation of public comment on possible changes to the following:
-Contract labor-expansion of allowable costs.
-Revision in Puerto Rico labor market areas.
- Medicare Geographic Classification Review Board-composition and criteria.


## 3. Rebasing and Revision of the Hospital Market Baskets

In section IV of this preamble, we discuss our proposal to use a rebased and revised hospital market basket in devel oping the FY 1997 update factor for the operating prospective payment rates, the capital prospective payment rates, and the excluded hospital rate-ofincrease 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, 413, and 489 and set forth certain proposed changes concerning the following:

- Sole community hospitals.
- Rural referral centers.
- Disproportionate share adjustment.
- Direct graduate medical education programs.
- Hospital distribution of "An Important Message from Medicare."

5. Changes and Clarifications to the Prospective Payment System for CapitalRelated Costs
In section VI of this preamble, we discuss several provisions of the regulations in 42 CFR part 412 and set forth certain proposed changes concerning the following:

- Use of simplified cost accounting.
- The capital Federal and hospitalspecific rates.

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

In section VII of this preamble, we discuss a clarification concerning the calculation of payments to hospitals excluded from the prospective payment system.
7. Determining Prospective Payment Operating and Capital Rates and Rate-ofIncrease Limits

In the addendum to this proposed rule, we set forth proposed changes to the amounts and factors for determining the FY 1997 prospective payment rates for operating costs and capital-related costs. We are al so proposing update
factors for determining the rate-ofincrease limits for cost reporting periods beginning in FY 1997 for hospitals and hospital units excluded from the prospective payment system. In addition, we have included a detailed discussion of our methodology for setting thresholds for outlier cases. We are inviting comments on our methodology and any suggestions for changes in that methodology that could help us better predict outlier payments.

## 8. Impact A nal ysis

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

## 9. Capital Acquisition Model

Appendix B contains the technical appendix on the proposed FY 1997 capital acquisition model.

## 10. Rebased 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 1997 for both hospital s included in and hospitals excluded from the prospective payment systems. This report is included as A ppendix 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 1997 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 A ssessment 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, 1996 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 rel ating specifically to the ProPAC report, contact ProPAC at (202) 4018986.

## 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 cal cul ate 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 recal culate 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, technol ogy, 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, 1996 are discussed bel ow.
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 devel oped 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 mai ntained in the Medicare Provider A nal ysis and Review (MedPAR) file. The data in this file are used to eval uate 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). M ost MDCs are based on a particular organ system of the body (for example, MDC 6, Diseases and Disorders of the Di gestive 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 assi gnment. 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 1997 and other decisions concerning DRGs are set forth bel ow.

## 2. Pre-M DC DRGs

Effective October 1, 1994, ICD-9-CM procedure code 41.04, Autologous hematopoietic stem cell transplant, was created to capture the transplantation of stem cells obtained from bone marrow or peripheral blood. At that time, we designated the code as non-OR. This transplant procedure was previously assigned to procedure code 99.73, Therapeutic erythrocytapheresis, which is designated as a non-OR procedure. When we created this code, we recei ved comments requesting that it be designated as an OR procedure and assigned to DRG 481 (Bone Marrow Transplant) based on the resource use associated with the type of transplant. However, as we stated in the September 1, 1994 final rule (59 FR 45340), when a new code is introduced, our longstanding practice is to assign it to the same DRG category as its predecessor code. One compelling reason for this practice is our inability
to move the cases associated with a new code to a new DRG assignment as part of DRG reclassification and recalibration. Because we could not separately identify the stem cell transplant cases from the other cases coded with 99.73 in order to reclassify them and their charges to a new DRG, we were unable to predict the new weights of both the DRGs in which this code currently is classified and the new DRG to which it would be assigned. Therefore, we were prevented from redesignating code 41.04 as an OR procedure or assigning it to a DRG. However, we stated that we would anal yze the stem cell cases as soon as the FY 1995 cases were available.
This year, the FY 1995 Medicare Provider Analysis and Revi ew (MedPAR) file is available for use in DRG analysis and weight setting for FY 1997. In the December 1995 update to the FY 1995 MedPAR file, there are a total of 178 cases reporting the performance of a stem cell transplant. Of that number, 13 cases al so reported the performance of a bone marrow transplant. Those cases were removed from our analysis because they are al ready classified to DRG 481. Of the remai ning 165 cases, 100 cases did not meet the coverage criteria for Medicare payment. As set forth in the M edi care Coverage Issues Manual at section 3530.1 (see Transmittal No. 84, A pril 1996), autologous stem cell transplants are not covered when performed for the following conditions:

- Acute leukemia not in remission (diagnosis codes 204.00, 205.00, 206.00, 207.00, and 208.00).
- Chronic granulocytic leukemia (diagnosis codes 205.10 and 205.11).
- Solid tumors (other than neuroblastomas) (diagnosis codes 140.0 through 199.1)
- Multiple myel oma (diagnosis codes 203.00, 203.01 and 238.6).

After eliminating the noncovered cases, 65 cases of stem cell transplant remai ned. The average standardized charge for these cases was approximately $\$ 83,000$. The average standardized charge for bone marrow transplant cases in the FY 1995 MedPAR file is approximately $\$ 98,000$. Thus, since the average resource use associated with stem cell transplant is similar to that associated with bone marrow transplant, we are proposing to assign procedure code 41.04 to DRG 481 effective with discharges occurring on or after October 1, 1996. The overall average charge for stem cell and bone marrow combined is just under \$93,000. In addition, we propose to designate stem cell transplant as an OR procedure.
3. MDC 1 (Diseases and Disorders of the Nervous System)
a. Sleep A pnea

We have received correspondence requesting that we review the DRG assignment of cases in which surgery is performed to correct obstructive sleep apnea (diagnosis code 780.57). When coded as a principal diagnosis, sleep apnea is assigned to DRGs 34 and 35 (Other Disorders of the Nervous System) ${ }^{1}$ in MDC 1.
Recently, new surgical interventions to correct sl eep apnea have been introduced. The procedures most frequently performed for this condition are the following:
Code and Description
27.69 Other plastic repair of palate 29.4 Plastic operation on pharynx 29.59 Other repair of pharynx

Since none of these surgi cal procedures is assigned to MDC 1, cases of sleep apnea treated with one of these surgeries are assigned to DRG 468 (Extensive OR Procedure Unrelated to Princi pal Diagnosis) in the case of codes 25.59 and 78.49 or to DRG 477 (Nonextensive OR Procedure Unrel ated to Principal Diagnosis) in the case of code 29.4.
We are proposing to address this situation by assigning the three surgi cal procedures to MDC 1. Based on the charges associ ated with these cases and the fact that they are not clinically similar to the other surgical DRGs in MDC 1, we are proposing to include them in DRGs 7 and 8 (Peripheral and Cranial Nerve and Other Nervous System Procedures).

## b. Guillain-Barré Syndrome

Guillain-Barré syndrome (diagnosis code 357.0) is a post-infectious polyneuropathy in which severely affected patients may require ventilatory assistance and long stays in intensive care. In recognition of the high resource consumption associated with this diagnosis, effective with FY 1991, we reassigned code 357.0 from DRGs 18 and 19 (Cranial and Peripheral Nerve Disorders) to DRG 20 (Nervous System Infection Except Viral Meningitis). (See the September 4, 1990 final rule (55 FR 36024).) A commenter stated that al though DRG 20 would provide a higher payment for these cases, it would still be inadequate to cover the costs of

[^0]treating these patients, and we agreed that we would monitor this issue.

We have recently recei ved requests that we again review this assignment. These commenters stated that the treatment for these cases remains very costly and often entails long hospital stays. Therefore, we conducted an analysis of the cases assigned to DRG 20 using the 10 percent random sample of the FY 1995 MedPAR file that we use for anal yzing possi ble classification changes.

Cases coded with 357.0 comprise approximately 20 percent of the cases assigned to DRG 20. As the commenters predicted, the average standardized charges for these cases, approximately $\$ 22,400$, was higher than the average charge for the DRG, approximately $\$ 17,100$. However, the length of stay was only slightly higher, 9.1 days compared to 8.4. We beli ieve that DRG 20 is the appropriate assignment clinically for Guillain-Barré cases and the average charge is well within the variation in charges for this DRG. In addition, DRG 20 is the most resourceintensive, and, thus, the highestweighted medical DRG in MDC 1.

However, in reviewing the other cases assigned to DRG 20, we noted that the average charges for two diagnoses were significantly lower than the overall average charge. These diagnoses, herpes zoster of the nervous system (code 053.10) and herpes zoster of the nervous system, NEC (code 053.19) had average charges of only $\$ 7,700$ and $\$ 7,100$, respectively. They al so had significantly lower average lengths of stay (4.4 and 4.2 days, respectively). Because these two diagnoses al so account for approximately 20 percent of the cases in DRG 20, their low average charge has the effect of significantly lowering the average charge for the DRG. Removing these two codes from DRG 20 increases the average charge to approximately $\$ 20,000$. After reviewing the remaining medical DRGs in MDC 1, we believe that reassigning codes 053.10 and 053.19 to DRGs 18 and 19 is appropriate both clinically and in terms of resource consumption. In the 10 percent MedPAR file, these DRGs had an average charge of approximately $\$ 8,000$ and $\$ 5,300$, respectively. Therefore, we are proposing to make this DRG classification change effective for FY 1997. This change would significantly increase the rel ative weight for DRG 20 and provide higher payment for the Guillain-Barré cases. The proposed weight for DRG 20 is 2.4782, an increase of 17 percent over the FY 1996 weight of 2.1157 .
4. MDC 5 (Diseases and Disorders of the Circulatory System)

Effective for discharges occurring on or after October 1, 1995, we created a new code for insertion of a coronary artery stent (procedure code 36.06). Until creation of the new code, insertion of coronary artery stent had been included in the codes for percutaneous transluminal coronary angioplasty (PTCA ) (procedure codes 36.01, 36.02, and 36.05).

As discussed above in section II.B.2, when a new code is introduced, our longstanding practice is to assign it to the same DRG category as its predecessor code or codes. Therefore, in the June 2, 1995 proposed rule, we assigned procedure code 36.06 to DRG 112 (Percutaneous Cardiovascular Procedures), the DRG to which PTCA is assigned. In response to comments received, in the September 1, 1995 final rule, we explained our policy on DRG assignment of new codes ( 60 FR 45785). We al so stated that the resource use and other data associated with procedure code 36.06 will be available in the FY 1996 Medicare cases which are used for analysis as part of FY 1998 DRG changes. We will evaluate the DRG assignment of coronary artery stent insertion at that time.

Since publication of the September 1, 1995 final rule, we have received data on stent cases provided by the manufacturer of one of the two stent devices currently approved by the Food and Drug Administration (FDA). In addition, the manufacturer has provided us with an analysis of the charges and length of stay of approximately 7,500 Medicare patients who recei ved stents in FY 1995. Because there was no code for the procedure during that year, the manufacturer matched its list of stent recipients with the FY 1995 MedPAR file.

The manufacturer's anal ysis found that the FY 1995 average charge for PTCA cases without stent is approximately $\$ 15,700$ and the average charge for cases with stent is approximately $\$ 21,000$. However, our anal ysis of the data shows that there is wide variation in the hospital standardized charges reported for cases with implant of coronary artery stent. Individual hospital average charges for these cases range from about \$9,000 to over \$45,000.

This inconsistency in the data illustrates why our policy of not reassigning new codes until we have collected an entire year of coded Medicare data for anal ysis is prudent. The uncertainty associated with using incomplete data collected outside the

Medicare program that cannot be verified remains a problem. Therefore, we are not proposing any DRG assignment change for implant of coronary artery stent. As noted above, a full year of coded FY 1996 Medicare data will be avail able in early 1997 for analysis. We will review the data at that time, and any proposed DRG changes will be announced in the FY 1998 proposed rule.
5. MDC 8 (Diseases and Disorders of the Musculoskeletal System and Connective Tissue)
In the September 1, 1995 final rule (60 FR 45790), we responded to a comment we received regarding the DRG assignment in MDC 8 of bipolar hip replacement cases. The commenter requested that cases of bi polar hip replacement be assigned to DRGs 210, 211, and 212 (Hip and Femur Procedures Except Major Joint) rather than to its current assignment, DRG 209 (Major Joint and Limb Reattachment Procedures of Lower Extremity). The commenter stated that the procedure for partial hip replacement (code 81.52) is very similar to the procedure for open reduction of fracture of the femur with internal fixation (code 79.35), which is assigned to DRGs 210, 211, and 212. Further, the commenter bel ieves that partial hip replacement patients are more frail individuals than the population that elects total hip replacement surgery and need longer hospital stays to recover.

In the September 1, 1995 final rule, we stated that we would reexamine this assignment as part of our DRG agenda for FY 1997. Using the FY 1995 MedPAR file, we compared charges and lengths of stay for cases assigned to DRG 209 in which the procedures 81.51 (total hip replacement), 81.52, and 81.53 (revision of hip replacement) were performed with the charges for the entire DRG. The average standardized charges for these cases are very similar to each other as well as the other cases assigned to DRG 209. The average charge was $\$ 18,310$ for partial hip replacement, \$19,924 for total hip replacement, and $\$ 23,094$ for revision of hip replacement. The $\$ 1,278$ difference between the average charge for partial hip replacement cases in DRG 209 and the average charge of $\$ 19,588$ for all cases in DRG 209 is within the normal range of charges for that DRG. However, the average charge for cases in DRG 210 was $\$ 15,119$, or $\$ 2,157$ less than the partial hip replacement charges.
A comparison of lengths of stay yields slightly different results. The partial hip replacement cases in DRG 209 had an average stay of 8.6 days. The overall
average lengths of stay for DRGs 209 and 210 were 6.7 days and 8.5 days, respectively. Based on these data alone, it would seem that the commenter is correct that partial hip replacement patients are more similar to the patients in DRG 210, in terms of hospital length of stay. However, we also must consider these cases' higher average charges. The higher charges of the partial hip replacement cases indicate that they are more resource-intense than the cases in
DRG 210. The proposed rel ative weights for DRG 209 and 210 are 2.2617 and 1.8458, respectively. Therefore, we bel ieve that DRG 209 is the most appropriate assignment for procedure code 81.52 so that payment will most closely rel ate to the costs of care for these patients.

## 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 surgi cal 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 resourceintensive surgical class.

Because the relative resource intensity of surgical classes can shift as a function of DRG reclassification and recal ibration, 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, invol ves 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 lowerweighted DRG (in the highest, most resource-intensi ve surgical class) of the available alternatives. However, gi ven 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 invol ving multiple procedures, this result is unavoidable.

We note that, notwithstanding the foregoing discussion, there are a few instances when a surgi cal 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" surgi cal class is uniformly ordered last in the surgical hierarchy of each MDC in which it occurs, regardless of the fact that the rel ative weight for the DRG or DRGs in that surgi cal 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 M DC 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 higherordered 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 surgi cal hierarchy as set forth bel ow. 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 surgi cal 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 rel ative 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.

At this time, we would revise the surgical hierarchy for the Pre-MDC DRGs, MDC 3 (Diseases and Disorders of the Ear, Nose, Mouth and Throat), and MDC 10 (Endocrine, Nutritional and Metabolic Diseases and Disorders) as follows:

- In the Pre-MDC DRGs, we would reorder Tracheostomy Except for Face, Mouth and Neck Diagnoses (DRG 483) above Liver Transplant (DRG 480).
- In MDC 3, we would reorder Cleft Lip and Palate Repair (DRG 52) and Sinus and Mastoid Procedures (DRGs 53 and 54) above Tonsillectomy and Adenoidectomy, Except Tonsillectomy and/or Adenoidectomy Only (DRGs 57 and 58).
- In MDC 10, we would reorder Adrenal and Pituitary Procedures (DRG 286) above Amputation of Lower Limb for Endocrine, Nutritional , and Metabolic Disorders (DRG 285).


## 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 al ready on the list. At this time, we do not propose to del ete any of the diagnosis codes on the CC list.
In the September 1, 1995 final rule (60 FR 45782), we added diagnosis code 008.49 (Bacterial enteritis) to the CC list. In response to a request from one commenter that we also add diagnosis
code 008.45 (Clostridium difficile), we stated that we would review that request as part of our DRG analysis for FY 1997. We have reeval uated diagnosis code 008.45 as well as the remainder of the "family" of codes assigned to Intestinal infections due to other specified bacteria (008.41, 008.42, 008.43, 008.44, 008.46, and 008.47). Our analysis shows that all of these diagnoses, when present as a secondary condition, do lead to higher resource use. Therefore, we are proposing to add the following diagnosis codes to the CC list:
008.41 Intestinal infections due to staphylococcus
008.42 Intestinal infections due to pseudomonas
008.43 Intestinal infections due to campylobacter
008.44 Intestinal infections due to yersinia enterocolitica
008.45 Intestinal infections due to clostridium difficile
008.46 Intestinal infections due to other anaerobes
008.47 Intestinal infections due to other gram-negative bacteria
These diagnoses would be considered CCs for any principal diagnosis not shown in Table 6f, Additions to the CC
Exclusions List (see discussion of CC Exclusions list in section V of the Addendum below).

This same commenter al so requested that we add the following codes to the CC list:
331.0 Alzheimer's disease
423.9 Unspecified disease of the pericardium
348.5 Cerebral edema
333.4 Huntington's chorea
458.0 Orthostatic hypotension
458.9 Hypotension, not otherwise specified
Our analysis of these codes
demonstrates that their presence as a secondary diagnosis does not
significantly add to the resource use of the case. Therefore, we are not
proposing to add them to the CC list.
Finally, the commenter suggested that the following diagnoses be added as cardiovascular complications for DRG 121 (Circulatory Disorders with AMI and Cardiovascular Complications, Discharged Alive):
434.xx Occlusion of cerebral arteries 436 Acute, but ill-defined, cerebrovascular disease
Using the 10 percent analysis file of the FY 1995 M edPAR data, we analyzed the cases assigned to DRG 121 that had these diagnoses coded as secondary conditions. The charges associated with those cases were indeed comparable to the other cases assigned to DRG 121.

When we sought the advice of our medical specialists (physicians who work directly for or under contract with HCFA), however, they strongly opposed adding these codes to the list of conditions for DRG 121 based on the fact that these are not cardiovascular complications. Therefore, they are not clinically similar to other cases assigned to this DRG.
However, our analysis of this DRG did reveal a large variation in the charges and lengths of stay within this DRG. We believe that a close examination of the list of complicating conditions assigned to DRG 121 is needed. Therefore, we plan to perform a thorough anal ysis of the cases assigned to that DRG as part of our DRG anal ysis agenda for FY 1998. In the meantime, we are not proposing any change to DRG 121.

In the September 1, 1987 final notice concerning changes to the DRG classification system (52 FR 33143), we modified the GROUPER Iogic 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 classifi cation 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 invol ving 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); and the September 1, 1995 rule for the FY 1996 revisions (60 FR 45782).)
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, 1996, as well as the proposed CC changes described above. (See section II.B.8, bel ow, 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 6 g , Additions to the CC Exclusions List, in section $V$ of the Addendum to this proposed rule.

Tables 6 g and 6 h in section $\vee$ 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, 1996. 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 del etions 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 6 g -Additions to the CC Exclusions List. Beginning with discharges on or after October 1, 1996, 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 6h-Del etions from the CC

Exclusions List. Beginning with discharges on or after October 1, 1996, 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 mi crofiche 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, and 1996) and those in Tables 6 g and 6 h 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, 1996.

Alternatively, the complete documentation of the GROUPER logic, including the current CC Exclusions List, is avail able from 3M/Health Information Systems (HIS), which, under contract with HCFA, is responsible for updating and maintai ning the GROUPER program. The current DRG Definitions Manual, Version 13.0, is avai lable for $\$ 195.00$, which includes $\$ 15.00$ for shipping and handling. Version 14.0 of this manual, which will include the final FY 1997 DRG changes, will be available in October 1996 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 Y ear, We Review Cases Assigned to DRG 468
(Extensive OR Procedure Unrel ated 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 nonextensi ve 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 publ ished on September 4, 1990, A ugust 30, 1991, September 1, 1992, September 1, 1993, September 1, 1994, and September 1, 1995, 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, and 60 FR 45783, 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. This year's review did not identify any necessary changes; therefore, we are not proposing
to move any procedures from DRG 468 or DRG 477 to one of the surgical DRGs.
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 anal yze 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 anal yzed 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 one procedureClosed endoscopic biopsy of lung (code 33.27), a needle biopsy-that is significantly less resource intensive than the other procedures assigned to DRG 468. Therefore, we are proposing to move procedure code 33.27 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 . We did, however, identify the following procedures that we believe should be reassigned from an OR to a non-OR designation:
08.81 Linear repair of laceration of eyelid or eyebrow
08.82 Repair of laceration involving lid margin, partial-thickness
08.83 Other repair of Iaceration of eyelid, partial thickness
08.84 Repair of laceration involving lid margin, full-thickness
08.85 Other repair of Iaceration of eyelid, full-thickness
08.86 Lower eyelid rhytidectomy
08.87 Upper eyelid rhytidectomy
08.89 Other eyelid repair

Our anal ysis of the data associated with these eyelid repair procedures leads us to conclude that the procedures are performed following accidental injury or falls, incurred while the patient is in the hospital. These procedures, which are normally performed at bedside and do not necessitate a trip to the operating room, are significantly less resource intensive than other procedures designated as OR procedures. Therefore, we are proposing to change the procedures from OR to non-OR procedures. We note that these
procedures are assigned to surgical
DRGs in MDCs 2, 9, 21, 22, and 24. With this proposed change, cases in which procedure codes 08.81 through 08.89 are the only OR procedure codes listed would no longer be assigned to a surgical DRG.

All of these proposed changes would be effective with discharges occurring on or after October 1, 1996.

## 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 M aintenance Committee was formed. This is a Federal interdepartmental committee charged with the mission of maintaining and updating the ICD-9CM. That mission includes approving coding changes, and developing errata, addenda, and other modifications to the ICD-9-CM to reflect newly devel oped procedures and technologies and newly identified diseases. The Committee is also responsi ble 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 Heal th Statistics (NCHS) and HCFA. The NCHS has lead responsi bility for the ICD-9-CM diagnosis codes included in Volume 1Diseases: Tabular List and Volume 2Diseases: 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 publ ic 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 A merican Health Information Management Association (AHIMA) (formerly American Medical Record Association (AMRA)), the A merican Hospital Association (AHA), and various physician specialty groups as well as physicians, medical record administrators, heal th information management professionals, and other members of the public to contribute ideas on coding matters. After consi dering 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 May 5 and November 30, 1995, and finalized the coding changes after consideration of comments recei ved at the meetings and in writing within 30 days following the November 1995 meeting. The initial meeting for consideration of coding issues for implementation in FY 1998 will be held on June 6, 1996. Copies of the minutes of these meetings may be obtained by writing to one of the co-chairpersons representing NCHS and HCFA. We encourage commenters to address suggestions on coding issues involving diagnosis codes to: Donna Pickett, CoChai rperson; ICD-9-CM Coordination and M ai ntenance Committee; NCHS; Room 1100; 6525 Bel crest Road; Hyattsville, Maryland 20782. Comments may be sent by E-mail to: alb8@nch09a.em.cdc.gov.

Questions and comments concerning the procedure codes should be addressed to: Patricia E. Brooks, CoChai rperson; ICD-9-CM Coordination and Mai ntenance 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, 1996. The new ICD-9-CM codes are listed, al ong 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 del eted are in Table 6c (Invalid Diagnosis Codes). The procedure codes that have been replaced by expanded codes or have been del eted are in Table 6d (Invalid Procedure Codes). These invalid diagnosis and procedure codes will not be recognized by the GROUPER beginning with discharges occurring on or after October 1, 1996. The
corresponding new or expanded codes are included in Tables 6a and 6b. Revisions to diagnosis and procedure code titles are in Tables 6e (Revised Diagnosis Code Titles) and $6 f$ (Revised Procedure Code Titles), which al so include the proposed DRG assignments for these revised codes.

## C. Recalibration of DRG Weights

We are proposing to use the same basic methodology for the FY 1997 recalibration as we did for FY 1996. (See the September 1, 1995 final rule (60 FR 45791).) That is, we would recal ibrate the weights based on charge data for Medicare discharges. However, we would use the most current charge information available, the FY 1995 MedPAR file, rather than the FY 1994 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 1995 MedPAR data, based on bills received by HCFA through December 1995, from all hospitals subject to the prospective payment system and shortterm acute care hospitals in wai ver States. The FY 1995 M edPAR file includes data for approximately 10.6 million Medicare discharges.
The methodology used to cal culate the proposed DRG relative weights from the FY 1995 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 hospital s 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 rel ative 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 rel ative 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 M edicare-approved heart, heartlung, liver, and lung transpl ant centers that have cases in the FY 1995 MedPAR file. (Medicare coverage for heart, heartlung, liver, and lung transplants is limited to those facilities that have recei ved approval from HCFA as transplant centers.)
- A cquisition 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 rel ative 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 1997. Using the FY 1995 MedPAR data set, there are 37 DRGs that contain fewer than 10 cases. We computed the weights for the 37 low-vol ume DRGs by adjusting the FY 1996 weights of these DRGs by the percentage change in the average weight of the cases in the other DRGs. We note that the FY 1996 weights for the lowvolume DRGs were recal culated based on non-M edicare data we acquired from 19 States. This was the first update of the weights since they were initially
cal culated for FY 1984 based on data from Maryland and Michigan. For a complete description of this process, see the September 1, 1995 final rule (60 FR 45781).

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 recal ibration. 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 begi nning 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 achi eve this effect, equating the average case weight after recalibration to the average case weight before recal ibration 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 requi rement 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 (establ ished by the Secretary) reflecting the rel ative 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 by this provision, we currently define hospital Iabor market areas based on the definitions of Metropolitan Statistical Areas (MSAs) (and New England County Metropolitan Areas), issued by the Office of Management and Budget. In addition, as discussed below, we adjust the wage
index to take into account the geographic reclassification of hospitals in accordance with sections 1886(d)(8)(B) and 1886(d)(10) of the Act.

Section 1886(d)(3)(E) of the Act al so requires that the wage index be updated annual ly 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 wagerelated costs incurred in furnishing skilled nursing services.

## B. FY 1997 Wage Index Update

The proposed FY 1997 wage index (effective for hospital discharges occurring on or after October 1, 1996 and before October 1, 1997) is based on the data collected from the M edicare cost reports submitted by hospitals for cost reporting periods beginning in FY 1993 (the FY 1996 wage index is based on FY 1992 wage data). We propose to use the same categories of data that were used in the FY 1996 wage index. Therefore, the proposed FY 1997 wage index reflects the following:

- Total sal aries and hours from shortterm, acute care hospital s.
- Home office costs and hours.
- Fringe benefits associated with hospital and home office sal aries.
- 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 heal th services, or other subprovider components that are not subject to the prospective payment system.

Finally, we are al so proposing to make a minor revision to $\S 412.63$ (s)(1) to state clearly that we update the wage index annual ly as required by section 1886(d)(3)(E) of the Act.

1. Verification of Wage Data From the Medicare Cost Report

The data for the proposed FY 1997 wage index were obtained from Worksheet S-3, Part II of the M edicare cost report. The data file used to construct the proposed wage index includes FY 1993 data submitted to the Hospital Cost Report Information System (HCRIS) file as of the end of January 1996. 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 5,222 hospitals in the data base, 2,814 hospitals had data el ements that failed an initial edit. In midFebruary 1996, intermediaries contacted
hospital s to revise or verify data elements that resulted in the edit failures. 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. The intermediaries were instructed to transmit any revisions in hospitals' wage data made as a result of this second review. As of March 14, 1996, only 21 hospitals still had unresolved data el ements. These unresol ved data elements are included in the cal culation of the proposed FY 1997 wage index pending their resol ution before calculation of the final FY 1997 wage index. We have instructed the intermediaries to compl ete their verification of questionable data elements and to transmit any changes to the wage data (through HCRIS) no later than June 17, 1996. 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 1997 wage index on wage data reported on the FY 1993 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 periods beginning on or after October 1, 1992 and before October 1, 1993. In addition, we included data from a few hospitals that had cost reporting periods beginning in September 1992 and reported a cost reporting period exceeding 52 weeks. The data were included because no other data from these hospital s 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 1993 data.

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

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 sal aries. To make the wage inflation adjustment, we used the percentage change in average hourly earnings for each 30-day increment from October 14, 1992 through September 15, 1994, for hospital industry workers from Standard Industry Classification 806, Bureau of Labor Statistics Employment and Earnings Bulletin. The annual inflation rates used were 4.8 percent for FY 1992, 3.6 percent for FY 1993, and 2.7 percent for $F Y$ 1994. 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 <br> factor |
| $10 / 14 / 92$ | $11 / 15 / 92$ | 1.044482 |
| $11 / 14 / 92$ | $12 / 15 / 92$ | 1.041408 |
| $12 / 14 / 92$ | $01 / 15 / 93$ | 1.038343 |
| $01 / 14 / 93$ | $02 / 15 / 93$ | 1.035287 |
| $02 / 14 / 93$ | $03 / 15 / 93$ | 1.032240 |
| $03 / 14 / 93$ | $04 / 15 / 93$ | 1.029203 |
| $04 / 14 / 93$ | $05 / 15 / 93$ | 1.026174 |
| $05 / 14 / 93$ | $06 / 15 / 93$ | 1.023154 |
| $06 / 14 / 93$ | $07 / 15 / 93$ | 1.020143 |
| $07 / 14 / 93$ | $08 / 15 / 93$ | 1.017141 |
| $08 / 14 / 93$ | $09 / 15 / 93$ | 1.014147 |
| $09 / 14 / 93$ | $10 / 15 / 93$ | 1.011163 |
| $10 / 14 / 93$ | $11 / 15 / 93$ | 1.008920 |
| $11 / 14 / 93$ | $12 / 15 / 93$ | 1.006683 |
| $12 / 14 / 93$ | $01 / 15 / 94$ | 1.004450 |
| $01 / 14 / 94$ | $02 / 15 / 94$ | 1.002223 |
| $02 / 14 / 94$ | $03 / 15 / 94$ | 1.000000 |
| $03 / 14 / 94$ | $04 / 15 / 94$ | 0.997782 |
| $04 / 14 / 94$ | $05 / 15 / 94$ | 0.995570 |
| $05 / 14 / 94$ | $06 / 15 / 94$ | 0.993362 |
| $06 / 14 / 94$ | $07 / 15 / 94$ | 0.991159 |
| $07 / 14 / 94$ | $08 / 15 / 94$ | 0.988961 |
| $08 / 14 / 94$ | $09 / 15 / 94$ | 0.986767 |

For example, the midpoint of a cost reporting period begi nning January 1 , 1993 and ending December 31, 1993 is June 30, 1993. An inflation adjustment factor of 1.020143 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 1993 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. Annual ization 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 I abor hours and home office hours to determine total hours.
Step 5-As part of our editing process, we deleted data for eight hospitals for which we lacked sufficient documentation to verify data that failed edits because the hospitals are no longer participating in the Medi care program or are in bankruptcy status. We retai ned the data for other hospitals that are no Ionger participating in the Medicare program because these hospitals reflected the rel ative wage levels in their labor market areas during their FY 1993 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 sal aries 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 sal aries 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 $\$ 19.5094$.
Step 9-For each urban or rural labor market area, we cal cul ated the hospital wage index value by dividing the area average hourly wage obtai ned in Step 7 by the national average hourly wage computed in Step 8.

## 3. Revisions to the Wage Index Based on Hospital Redesignation <br> 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 Medi care Geographic Classification Review Board (MGCRB) considers applications by hospital s 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
hospital s that were reclassified as a result of the M GCRB 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 hypotheti cal impact that the wage data from these hospitals would have on the wage index value for the area to which they have been redesi gnated. 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 reduces the MSA wage index value by 1 percentage point or less, the MSA 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 hospital s are redesignated by more than 1 percentage point, the hospital s that are redesignated are subject to the wage index value of the area that results from including the wage data of the redesignated hospitals (the "combined" wage index value). However, the wage index value for the redesignated hospital s cannot be reduced bel ow the wage index value for the rural areas of the State in which the hospital s are located.
- If including the wage data for the redesignated hospitals increases the MSA wage index value, the MSA and the redesignated hospitals receive the combined wage index value.
- Rural areas whose wage index values would be reduced by excluding the data for hospitals that have been redesignated to another area continue to have their wage index calculated as if no redesignation had occurred. Those rural areas whose wage index values increase as a result of excluding the wage data for the hospital s that have been redesignated to another area have their wage indexes calculated exclusive of the redesignated hospitals.
- The wage index value for an urban area is cal cul ated exclusive of the wage data for hospitals that have been reclassified to another area. However, geographic reclassification may not reduce the wage index for an urban area bel ow the Statewide rural average, provided the wage index prior to reclassification was greater than the Statewide rural wage index value.
- A change in classification of hospital s from one area to another may not result in the reduction in the wage index for any urban area whose wage index is bel ow the rural wage index for the State. 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 al ready bel ow the rural wage index and would be reduced by redesignations, the wage index value for each area is computed exclusive of the data for hospitals that have been redesignated from the area for purposes of their wage index. As a result, several MSAs listed in Table 4a have no hospitals remaining in the MSA. This is because all the hospitals originally in these MSAs have been reclassified to another area by the M GCRB. These areas receive the prereclassified wage index value. The prereclassified wage index value will apply as long as the MSA remains empty.
The proposed revised wage index values for FY 1997 are shown in Tables $4 a, 4 b$, and $4 c$ in the Addendum to this proposed rule. Hospitals that are redesignated should use the wage index values shown in Table 4c. For some areas, more than one wage index value will be shown in Table 4c. This occurs when hospital s from more than one State are included in the group of redesignated hospitals, and one State has a higher Statewide rural wage index value than the wage index value otherwise applicabl e to the redesi gnated 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 1993 wage data. (We note that in Tables 4a, 4c, and 4d, we have revised several of the titles for urban areas to be consistent with OMB titles. For example, the title for urban area 1123 is changed from Boston-Brockton-Nashua, MA-NH to Boston-Worcester-Lawrence-LowellBrockton, MA-NH. These are nomenclature changes only.) In addition, Table 3C in the Addendum to this proposed rule includes the adjusted average hourly wage for each hospital based on the FY 1993 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 1998. We note that in
adjudi cating these wage reclassification requests during FY 1997, the MGCRB will use the average hourly wages for each hospital and labor market area that are reflected in the final FY 1997 wage index.

At the time this proposed wage index was constructed, the M GCRB had completed its review. The proposed FY 1997 wage index val ues incorporate all 391 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 1997. The final number of recl assifications may be different because some M GCRB 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 al so whether redesi gnated hospital s recei ve the wage index value for the area to which they are redesignated, or a wage index that includes the data for both the hospitals al ready in the area and the redesignated hospitals. Further, the wage index value for the area from which the hospital s are redesi gnated may be affected.

Under § 412.273, hospital s 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 1997 must be received by the MGCRB by July 15, 1996. 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 eval uate the wage data used to construct the proposed FY 1997 hospital wage index, we have made available to the public a diskette containing the FY 1993 hospital wage data. In a memorandum dated March 1, 1996, we instructed all Medicare intermediaries to inform the prospective payment hospitals they serve that the diskette would be available approximately mid-March 1996. The intermediaries were also instructed to advise hospitals of the al ternative availability of these data either through their representative hospital organizations or directly from HCFA (using order forms provided by
the intermediary). Additional details on ordering this data file are discussed bel ow in section VIII.B of this preamble, "Requests for Data from the Public."

In addition, as discussed above 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 (al ong 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 1993 wage data. Moreover, the ultimate responsi bility 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 diskette or Table 3C, a hospital believes that its FY 1993 wage data have been incorrectly reported, the hospital must submit corrections along with complete supporting documentation to its intermediary by May 15, 1996. To be reflected in the final wage index, any wage data corrections must be reviewed by the intermediary and transmitted to HCFA (through HCRIS) on or before June 17, 1996. These deadlines, which correspond to the deadlines we used last year for the FY 1996 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 devel opment of the final prospective payment rates to be published by September 1, 1996. We cannot guarantee that corrections transmitted to HCFA after June 17, 1996, 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 hospital s. 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 bel ieve 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 17 deadline al so applies to these requested changes.

We have created the process described above to resolve all substantive wage data correction disputes before we finalize the wage data for the FY 1997 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 diskette 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 diskette made available in March 1996, HCFA will make the August diskette avai lable to hospital associations and the public. This August diskette, 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 diskette.

If, after reviewing the August diskette, 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 to the intermediary and HCFA should outline why the hospital believes an error exists. These requests must be received by HCFA and the intermediaries no later than September 16, 1996. We have set this year's deadl ine one week earlier than last year's deadl ine because we found the later deadline made it difficult to evaluate the requests and recal culate the wage index values before the start of FY 1997 (that is, October 1, 1996). Requests 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, Maryland 21244-1850. The intermediary will review requests upon receipt, and, if it is determined that an intermediary or HCFA error exists, the fiscal intermediary will notify HCFA immediately.

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 A ugust di skette. 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 the HCRIS system on or before June 17, 1996;
- Requests for correction of errors made by the hospital that were not, but could have been, identified during the hospital's review of the March 1996 data; or,
- Requests to revisit factual determi nations 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 16, 1996) will be effective October 1 , 1996.

Again, we believe the wage data correction process described above provides hospital s with sufficient opportunity to bring errors made during the preparation of the Worksheet S-3 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 1997 wage index on October 1, 1996. 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 1997 (that is, by the September 16, 1996 deadl ine). A s 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. Contract Labor-Costs Included in the Hospital Wage Index

Our policy concerning inclusion of contract labor costs for purposes of calculating the wage index has evolved over the past several years. Primarily, this has occurred as we recognized the role of contract labor in meeting special personnel needs of many hospitals. In addition, improvements in the wage data have allowed us to more accurately identify contract labor costs and hours. As a result, effective with the FY 1994 wage index, we included the costs of direct patient care contract services in the wage index calculation. Effective with the FY 1999 wage index, which will use data from FY 1995 cost reports, we will begin to include the costs and hours of certain management contract services.

In this proposed rule, we are soliciting comments from the public regarding further expansion of the types of contract labor costs included in the wage index. The following background discussion provides a general overview of the issues rel ated to including contract labor costs in the wage index calculation. We al so list nine specific issues for which we are seeking public comment.

In the May 9, 1990 proposed rule (55 FR 19442), we reported the results of the 1988 wage index survey which collected, among other information, data on the costs and hours associated with direct pati ent care contract labor. All prospective payment hospitals completed the wage survey for their cost reporting periods ending in calendar year 1988. The survey data indi cated that hospitals had difficulty in tracking and recording the actual hours worked associated with the contract labor. In addition, there were reporting inconsistencies. For example, some hospitals inappropriately reported patient care services furnished directly by physicians, which are not included in the wage data because they are paid under Medi care Part B rather than Part A.

In the May 9, 1990 proposed rule, we also discussed public comments we recei ved in response to issues we raised rel ated to including contract labor costs in the wage index. Specifically, in the May 8, 1989 proposed rule (54 FR 19647), we requested comment on the following issues:

- Should the wage index include data on contract labor?
- Should the definition of contract services in the wage index survey be expanded to include services indirectly related to patient care, such as billing or housekeeping services?

A majority of the commenters supported the inclusion of contract services, and many argued for the expansion of contract labor services to include indirect pati ent care services. Those opposed to including contract services, in addition to some commenters who supported including contract service costs, were concerned about the difficulty of accurately tracking and recording hours worked for all types of contract labor. Other commenters were al so concerned that if a hospital contracts for services from outside its labor market area, the contract wages could artificially increase or decrease the hospital's area wage index. Based on the comments and the overall poor quality of the 1988 survey data, we decided to exclude all contract labor from the FY 1991 wage index.

We stated that we would continue our anal ysis of contract labor. In addition, we announced that we would develop a new wage index survey with improved instructions and auditing criteria to facilitate the inclusion of contract labor in future wage index updates. The new survey, Worksheet S-3, Part II, was included in the hospital cost report effective with cost reporting periods beginning on or after October 1, 1989.

The Worksheet S-3, Part II consists of detailed information for use in the hospital wage index including contract labor for direct patient care services. In the instructions for completing this worksheet, contract labor costs and hours were limited to labor-rel ated payments and hours attri butable to direct patient care contract services, such as nursing services. Specifically, we instructed hospitals to exclude indirect patient care contract services (for example, management and housekeeping services), nonlaborrelated expenses (for example, equipment and supplies), and any contract services for which labor-rel ated payments and hours could not be accurately determined.
In the September 4, 1990 final rule (55 FR 36036), we discussed additional comments we recei ved on the contract labor issue. Those commenters who supported the inclusion of contract labor stated that some hospitals, especially rural hospitals, are dependent on contract labor for nursing services, and it would be unfair not to include these wage data. Other commenters requested that the definition of contract

Iabor be expanded to include indirect patient care services.
We al so recei ved several comments requesting that we continue to exclude contract labor from the wage index. These commenters stated that the contract labor data are not reliable because of the difficulty in tracking and reporting hours and the lack of consistency in the reporting of contract labor. In addition, inclusion of nonlabor contract costs would inappropriately drive up labor costs, and contract labor brought in from outside the labor market area would artificially increase or decrease the area wage index value. Finally, commenters were concerned that contract labor costs are too variable, temporary, and not reflective of true wage costs. Therefore, some suggested that contract labor should not be included in the wage index.
The FY 1994 wage index, which was based on the data collected on the Worksheet S-3, Part II, was the first to include direct patient care contract labor costs. In making the decision to include these costs, we analyzed hospitals' FY 1990 data to determine if it was sufficiently complete for inclusion in the wage index calculation (see the May 26, 1993 proposed rule (58 FR 30236)). We noted that, in most labor market areas, including contract labor in the wage index computation had little effect on the average hourly wage. We further stated that, based on our anal ysis of the data, including direct patient care contract labor would more accurately and fairly reflect wage levels across hospitals and MSAs. In the September 1, 1993 final rule, we al so responded to comments from the hospital industry expressing concern that we did not recognize the costs of certain contract management services ( 58 FR 46296). In particular, many rural hospitals stated they were either unable to recruit or afford top managers such as hospital administrators and must contract for these services.
In the September 1, 1994 final rule ( 59 FR 45355), we expanded the definition of contract labor for purposes of determining the hospital wage index to include the personnel costs and hours associated with certain contract management personnel. Contract management services would be limited to individuals working in the top four positions in the hospital: the Chief Executive Officer/Hospital
Administrator, Chief Operating Officer, Chief Financial Officer, and Nursing Administrator. We noted that while exact titles may vary, individuals should be performing essentially the same duties as customarily assigned these management positions.

We further noted that, since the cost report did not provide at that time for the collection of management contract data, this revised definition would not be effective until cost reporting periods beginning on or after October 1, 1994 (FY 1995). Hospitals were instructed to continue to exclude all management contract costs and hours until the FY 1995 data were reported (these data will be used to compute the FY 1999 wage index). In addition, we began requiring hospital s to provide descriptions and aggregate totals for all management contracts and complete details on all direct patient care contracts on the Form HCFA-339 (the Provider Cost Report Reimbursement Questionnaire). A hospital must file this form with its corresponding cost report.

We continue to receive requests that we expand our contract labor definition to include more types of contract services in the wage index. In particular, we have been asked to include the costs for pharmacy and laboratory services on the basis that these services are consistent with our definition of direct patient care (see the September 1, 1995 final rule ( 60 FR 45792)). Others have asked that we expand our definition to include all contracted services, both direct and indirect patient care services, in order to more appropriately cal culate rel ative hospital wage costs.

We have limited the contract services that are included in the wage index to direct patient care services and specific management services for several reasons. First, hospitals reported difficulty in accurately tracking the hours associated with contract services, especially for off-site facilities that serve more than one hospital. Second, we are concerned about the contractor's ability to separate nonlabor costs from labor costs. We bel ieve that the generally higher costs for contract labor compared to sal aried labor, due at least in part to the added costs of overhead and supplies not separately identified in most contracts, may distort the wage index. Finally, we are concerned that it is difficult to remove the costs and hours for services such as legal and accounting from total management contracts.

Our goal is to ensure that our wage index policy continues to be responsive to the changing need for contract labor, allowing those hospitals that must depend on contract labor to supply needed services to reflect those costs in their wage data. At the same time, however, we wish to avoid providing an opportunity for hospitals to inflate their average hourly wage inappropriately by including nonl abor contract costs. The advantage of our approach of including
only contract labor costs and hours associated with direct patient care and specific management services is that it minimizes distortions in the wage index that are due to a hospital's inability to identify and exclude nonlabor costs. While changes to the wage index values are made in a budget neutral manner and are not expected to affect aggregate payments, we strive for policies that are equitable for all hospitals.

Finally, due to the 4 -year time lag between the cost reporting period itself and the fiscal year when data for that period are used in calculating the wage index, it is important that we antici pate any need to change our policy on contract labor. Therefore, in order to formulate the most responsive and responsible policy, we are sol iciting comments on the following issues:

- To what extent do hospitals rely on the use of contract services?
- For which services are contracts typically used?
- Can hospitals accurately determine hours related to contract services?
- Can hospitals accurately isol ate labor-related costs from nonl aborrelated costs?
- Should the contract labor definition be expanded to include contract services indirectly related to patient care?
- If contract labor remains limited to direct patient care, what categories of services, if any, in addition to those identified above, should be included?
- Would the wage index more accurately reflect relative wage levels if we did not limit contract labor to di rect patient care (generally high wage) services?
- Would expanding the types of contract labor that are included in the wage index provide less incentive to hospitals to keep their labor costs low, as higher labor costs may result in a higher wage index value for that hospital or allow it to reclassify to a labor market with a higher wage index?
- What other issues should be considered in revising the policy for including contract labor in the wage index?


## E. Puerto Rico Wage Index Values

For several years, hospital s in Puerto Rico have experienced large swings in their wage index values. In the September 1, 1995 final rule, we responded to two comments suggesting changes to the wage index for hospitals in Puerto Rico (60 FR 45796). One suggestion was to establish a floor for the wage index values of the Puerto Rico labor market areas while the other was to eliminate the rural area classification in Puerto Rico and classify the rural
hospitals to the nearest urban area. Although we did not adopt either of these suggestions, we stated that we would continue to study the issue of wage index values in Puerto Rico.
To eval uate the effect that these large changes in wage index values have on hospitals in Puerto Rico, we examined the most recent M edicare cost data for these hospitals. Of the 50 hospitals contained in our data base, 64 percent had improved Medicare operating margins from 1992 to 1993. Of the 26 hospitals with data available for 1994, we found that 65 percent improved financially from 1993 to 1994. Based on this analysis, we do not bel ieve that the wage index changes have had a
detrimental effect on these hospital s as a group. However, there are individual hospital s that are not faring as well.

We recognize that large shifts in the wage index values can cause shifts in the payment levels for a particular MSA. Because three of the six MSA s in Puerto Rico (Aguadilla, A recibo, and Caguas) as well as the rural area have four or fewer hospitals, a large change in one hospital's wage data can cause a large increase or decrease in the wage index value for the entire MSA. One possible method to limit these annual swings in wage index values would be to create a single labor market area encompassing all the hospitals in Puerto Rico. That is, the six MSAs and the rural area would
be combined into one area with one wage index value. A single labor market area would create a much larger set of hospitals to develop aggregate wage amounts and would mitigate situations where a change in the wage data of a single hospital has a large effect on the wage index of an MSA.
Because creating one MSA for Puerto Rico would be implemented in a budget neutral manner, the effect would be to raise wage index values for some hospitals in Puerto Rico and to lower the values for others. Using the FY 1993 wage data, the foll owing table shows the effect this change would have on the proposed wage index levels.

|  | Area | Number of hospitals | Proposed wage index | One area wage index | Percent change |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Rural |  | 4 | 0.4182 | 0.4555 | 8.92 |
| Aguadilla | $\ldots$ | 2 | 0.4430 | 0.4555 | 2.82 |
| Arecibo |  | 2 | 0.4661 | 0.4555 | -2.27 |
| Caguas |  | 4 | 0.4638 | 0.4555 | -1.79 |
| Mayaguez |  | 5 | 0.4186 | 0.4555 | 8.82 |
| Ponce |  | 7 | 0.4500 | 0.4555 | 1.22 |
| San Juan |  | 29 | 0.4616 | 0.4555 | -1.32 |

Because of the negative effects on some hospitals, we are soliciting comment on this approach for mitigating the fluctuations in wage index values for hospitals in Puerto Rico. The potential change would have no impact on hospital s outside Puerto Rico.

## F. Proposed Changes to the MGCRB Composition and Criteria

Under section 1886(d)(10) of the Act, the M GCRB considers applications by hospitals for geographic reclassification for purposes of payment under the prospective payment system. Guidelines concerning the criteria and conditions for hospital reclassification are located at $\S \S 412.230$ through 412.236. The purpose of these criteria is to provide direction, to both the MGCRB and those hospitals seeking geographic reclassification, with respect to the situations that merit an exception to the rules governing the geographic classification of hospitals under the prospective payment system. The composition of the M GCRB and the procedures it follows in making recl assification determinations are set forth in §§ 412.246 through 412.280.
As discussed in detail below, we are proposing to make one change to the MGCRB regulations. In addition, we are soliciting comments on sources of data that could be used to identify the occupational mix in a given MSA.

1. MGCRB Composition (§ 412.246)

Section 1886(d)(10)(B)(i) of the Act provides that the MGCRB is composed of five members appointed by the Secretary. This provision is implemented in regulations at § 412.246(a). Two of the members must be representative of the concerns of rural hospitals and at least one member must be knowledgeable in the field of analyzing costs of providing inpatient hospital services. Under current § 412.246(b), the term of office for an M GCRB member is 3 years, and appointments are limited to two consecutive 3-year terms. This section further provides that to permit staggered terms of office, initial appointments may be for shorter terms. Finally, the Secretary is permitted to terminate a member's tenure before his or her full term has expired.

Since the establishment of the M GCRB 6 years ago, we have never modified the regulations that govern the M GCRB's composition, which were originally modeled after the procedural regulations of the Provider Reimbursement Revi ew Board (PRRB). We believe that it is now appropriate to update the regulations that govern members' terms of office in light of agency experience.

A ppointments to the Board must comply with statutory requirements concerning rural representatives and a hospital cost expert. Since the appointment of the initial Board, the

Secretary has had difficulty recruiting additional, qualified persons to serve on the MGCRB. In addition, we solicited comment in the June 2, 1995 proposed rule ( 60 FR 29218) on the idea of eliminating the M GCRB and transferring its functions back to HCFA. This may have caused qualified members to lose interest in becoming or remaining Board members. We no longer believe that there needs to be a limitation on the number of terms a member may serve. Del eting the term limit requirement would allow for increased flexibility in appointing and recruiting qual ified Board members. Flexibility in this area will allow the Secretary to ensure that Board members are in place to meet the tight statutory deadl ines associated with filing and adjudicating MGCRB applications. (Under sections 1886(d)(10)(C) (ii) and (iii) of the Act, a hospital requesting a change in geographic classification must submit its application to the Board not later than the first day of the preceding fiscal year. Once the application is recei ved the Board must render a decision within 180 days.) Therefore, we are proposing to elimi nate the current requirement at § 412.246(b) that a Board member can serve for only two consecutive 3-year terms.

We al so consi dered eliminating any requirement on the length of an individual term. However, we believe that maintaining a term of office not to exceed 3 years is appropriate. If we
del eted this requirement, then the Secretary could not periodically reeval uate membership of the Board. We would, however, propose that a term of office would not be limited only to a term of exactly 3 years. Specifically, we would revise § 412.246(b) to provide that an appointment to the MGCRB may be for any term not to exceed 3 years. We bel ieve that both of these proposed changes would allow the Secretary maximum flexibility to recruit and retain qualified Board members.
Under the proposed revisions, the Secretary would continue to be able to terminate a member's tenure before his or her full term has expired. This provision was model ed after the provisions of the PRRB under which the Secretary has the authority to terminate a Board member for good cause. We believe that it is appropriate for the Secretary to be able to exercise a similar termination authority over the MGCRB in case a member of the M GCRB fails to carry out his or her duties under the Act and regulations. Therefore, we would retain this provision. We note that the Secretary has not invoked this authority to date with either the PRRB or the MGCRB.

## 2. Occupational Mix Adjustment

Section 1886(d)(10)(D)(i) of the Act requires the Secretary to publ ish guidelines to be utilized by the M GCRB in rendering decisions on applications submitted for geographic
reclassification. Those are to include guidelines for "comparing wages, taking into account (to the extent the Secretary determines appropriate) occupational mix, in the area in which the hospital is classified and the area in which the hospital is applying to be classified."
Section 412.230(e) describes the criteria for hospital recl assification for purposes of the wage index. One of the criteria rel ates to the relationship between the hospital's wages and those of the area to which it seeks reclassification. Specifically, § 412.230(e)(1)(iv) provides that the hospital must demonstrate that its wages are at least 84 percent of the average hourly wage of hospitals in the area to which it seeks reclassification, or that the hospital's average hourly wage weighted for occupational mix is at least 90 percent of the average hourly wage of hospitals in the area to which it seeks recl assification. Under $\S \S 412.232$ (c) and 412.234(b), a group of hospitals seeking to reclassify must demonstrate that its aggregate average hourly wage is at least 85 percent of the average hourly wage of the hospitals in the area to which it seeks reclassification. These sections al so provide that the threshold
for occupational-mix adjusted hourly wage for hospital groups is the same as that for a single hospital, that is, 90 percent.

In the September 6, 1990 interim final rule ( 55 FR 36760 ), we stated that the acceptable sources for occupational mix data were the A meri can Hospital Association (AHA ) or the Bureau of Labor Statistics. Since publication of that document, the Bureau of Labor has discontinued its hospital wage surveys. Thus, the only currently acceptable occupational mix data source is the AHA Survey Data. We have been informed by the AHA that the survey for 1993 will be the last survey to collect information on the Hospital Personnel by Occupational Category. Therefore, requests filed on or before October 1 , 1996 for FY 1998 reclassification, which use FY 1993 wage data, may be the last for which we have an appropriate source of occupational mix data.

As we stated in the June 4, 1991 final rule with comment period ( 56 FR 25458), the reclassification process requires the use of occupational mix data that are comparable across areas and can be consistently applied. We are unaware of any sources other than the AHA data that meet these criteria.

We have not proposed collecting occupational mix data oursel ves in light of past experience. We attempted to collect such data some time ago. In the September 30, 1988 Federal Register (53 FR 38495), we reported on our efforts to collect 1986 occupational mix data as part of the Medi care National Uniform Reporting Demonstration project, to determine the feasibility of devel oping a wage index that would take into account occupational mix. The majority of hospitals (more than 60 percent) failed to complete or submit the survey. A number of surveys that were submitted were not filled out completely and appeared to have numerous errors. M oreover, we beli ieve that collecting occupational mix data from hospitals would be inappropriately burdensome to the hospital s. In the past, we have recei ved several comments from hospital s opposing HCFA's collection of occupational mix data (56 FR 43222), citing the prohibitive cost to hospital s of furnishing occupational mix data. Finally, even if we were to decide now to begin collecting occupational mix data, it would be at least 6 years before the data would be avail able for use.

In order to continue to al low the use of wage data weighted by occupational mix in wage index reclassification, we are seeking suggestions about any occupational mix data sources that are available on a national basis. In addition, we are willing to consider
suggestions about other methods that would account for occupational mix in the wage index reclassification process.

## IV. Rebasing and Revising of the Hospital Market Baskets

## A. Operating Costs

## 1. Background

Effective for cost reporting periods beginning on or after July 1, 1979, we developed and adopted a hospital input price index (that is, the hospital "market basket'") 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 percentage change in the market basket reflects the average change in the price of goods and services hospitals purchase in order to furnish inpatient care. We first used the market basket to adjust hospital cost limits by an amount that reflected the average increase in the prices of the goods and services used to furnish hospital inpatient care. This approach linked the increase in the cost limits to the efficient utilization of resources.
With the inception of the hospital inpatient prospective payment system on October 1, 1983, we continued to use the hospital market basket to update each hospital's 1981 inpatient operating cost per discharge used in establishing the FY 1984 standardized payment amounts. In addition, the projected change in the hospital market basket has been the integral component of the update factor by which the prospective payment rates are updated every year. Under section 1886(b)(3)(B)(i)(XII) of the Act, the prospective payment rates will be updated in FY 1997 by the projected increase in the hospital market basket minus 0.5 percentage points. A detailed explanation of the hospital market basket used to develop the prospective payment rates was published in the
Federal Register on September 3, 1986 (51 FR 31461). For additional background information on general development of hospital input price indexes, we refer the reader to the article by Freeland, Anderson, and Schendler, "National Hospital Input Price Index," Health Care Financing Review, Summer 1979, pp 37-61. We also refer the reader to the September 4, 1990 Federal Register (55 FR 35990) in which we discussed the previous
rebasing of the hospital input price index.

The hospital market basket is a fixedweight, Laspeyres-type price index that is constructed in three steps. First, a base period is selected and total base period expenditures are estimated for mutually excl usi ve and exhaustive spending categories based upon type of expenditure. Then, the proportion of total costs that each category represents is determi ned. These proportions are called cost or expenditure weights. Second, each expenditure category is matched to an appropriate price/wage variable, referred to as a price proxy. These price proxies are price levels derived from a publicly available statistical series published on a consistent schedule, preferably at least on a quarterly basis. Third and finally, the price level for each spending category is multiplied by the expenditure weight for that category. The sum of these products (that is, the expenditure weights multiplied by the price levels) for all cost categories yields the composite index level in the market basket in a given year. Repeating this step for other years produces a series of market basket index levels over time. Dividing one index level by an earlier index level produces rates of growth in the input price index.
The market basket is described as a fixed-weight index because it answers the question of how much it would cost, at another time, to purchase the same mix of goods and services that was purchased in the base period. The effects on total expenditures resulting from changes in the quantity or mix of goods and services purchased subsequent to the base period are not considered. For example, shifting a traditional ly inpatient type of care to an outpatient setting might affect the volume of inpatient goods and services purchased by the hospital, but would not be factored into the price change measured by a fixed weight hospital market basket.
We bel ieve that it is desi rable to rebase the market basket periodically so the cost weights reflect changes in the mix of goods and services that hospitals purchase (hospital inputs) in furnishing inpatient care. We last rebased the
hospital market basket cost weights effective for FY 1991. This market basket, still used through FY 1996, reflected base year data from FY 1987 in the construction of the cost weights.

In its April 1, 1985 report to the Secretary (A ppendix C of the June 10, 1985 proposed rule (50 FR 24446)), ProPAC supported HCFA's position on periodic rebasing, stating that the market basket cost weights should be recal cul ated or "rebased" at least every 5 years, or more frequently if significant changes in the weights occur. We note that there are separate market baskets for prospective payment hospitals and hospitals and hospital units excluded from the prospective payment system. The separate, excluded hospital market basket is set forth in section IV.A. 5 of this preamble.

## 2. Rebasing and Revising the Hospital Market Basket

The terms rebasing and revising, while often used interchangeably, actually denote different activities. Rebasing means moving the base year for the structure of costs of an input price index (for example, we are proposing to move 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.

We are proposing to use a rebased and revised hospital market basket in developing the FY 1997 update factor for the prospective payment rates. The new market basket would be rebased to reflect 1992, rather than 1987, cost data.

In developing the rebased and revised market basket, we reviewed hospital operating expenditure data for the market basket cost categories. In a change from previous methodology, we are relying primarily on Medicare hospital cost report data for the proposed rebasing. For the proposed market baskets, we used data on hospital expenditures for four major expense categories (wages and salaries, employee benefits, pharmaceuticals, and a residual "all other") from hospital cost reporting periods beginning in FY 1992 (that is, periods beginning on or after October 1, 1991 and before October 1, 1992). We refer to these as PPS-9 cost
reports (the 9th year of the prospective payment system (PPS)). The market basket was previously based on 1987 expense data from the 1988 American Hospital Association (AHA) A nnual Survey.

Expenses for wages and salaries, employee benefits, and pharmaceuticals were determined using data from PPS9 cost reports as reported in the Hospital Cost Report Information System (HCRIS) files. We determined total professional fees using AHA Annual Survey data. Total professional fees include medical and nonmedical professional fees. Since the medical professional fees included in the compensation of provider-based physicians is paid under Medicare Part B, we analyzed HCRIS data to determine the professional component of providerbased physician compensation and subtracted it from total professional fees to obtain an estimate of nonmedical professional fees. Mal practice insurance costs were determi ned using the cost share for PPS-6 (cost reporting periods beginning in FY 1989), the last year these costs had to be treated separately from all other administrative and general costs, trended forward to 1992 based on the relative importance of mal practice costs found in the previous market basket. The All Other Expenses category was cal culated in two steps. First, from PPS-9 cost reports, total operating expenses were tabulated by subtracting capital-related expenses, direct medical education expenses, and the medical professional fees from total expenses. Second, we subtracted the total of the five cost category expenses already determined from total operating expenses to obtain the All Other Expenses category.

After total s for these main cost categories (wages and salaries, employee benefits, professional fees,
pharmaceuticals, mal practice insurance, and all other expenses) were cal culated, we then determined the proportion each category represents of the total costs. These proportions represent the major rebased market basket weights. The differences between the six major categories for the proposed 1992-based index and the previous 1987-based index are summarized in Table 1 below.

Table 1.-Comparison of 1992 and 1987 Prospective Payment Hospital Operating Cost Categories and Weights

| Expense categories | Rebased 1992 hospital market basket | 1987-based hospital market basket |
| :---: | :---: | :---: |
| Wages and Salaries | 50.244 | 52.2 |
| Employee Benefits | 11.146 | 9.5 |
| Nonmedical Professional Fees | 2.127 | 1.6 |

## Table 1.-Comparison of 1992 and 1987 Prospective Payment Hospital Operating Cost Categories and Weights-Continued

| Expense categories | Rebased 1992 hospital market basket | 1987-based hospital market basket |
| :---: | :---: | :---: |
| Malpractice Insurance | 1.189 | 1.4 |
| Pharmaceuticals | 4.162 | 3.9 |
| All Other | 31.132 | 31.4 |
| Total | 100.000 | 100.0 |

Note: Although we rounded the weights to the tenths decimal position in the 1987-based market basket as published in the September 4, 1990 final rule, we are presenting the 1992 weights in greater specificity.

Table 2 sets forth the proposed market basket cost categories, weights, and price proxies. Weights for the "Utilities" and the "All Other" cost categories, as well as the subcategories, were determined using the 1987 Department of Commerce's Bureau of Economic Analysis (BEA) Input-Output Table, from which data for the hospital industry were extracted. The BEA InputOutput database, which is updated at 5year intervals, was most recently described in the Survey of Current

Business, "Benchmark Input-Output Accounts for the U.S. Economy, 1987" (A pril 1994). We anticipate that the Department of Commerce will soon rel ease 1992 cost data for use in determining the cost weights. If the data are released in time to be analyzed, we will use them in the final market basket for more refi ned estimates of cost expenditure weights.

We aged the 1987 cost shares to 1992 using historical price changes between 1987 and 1992 for each category. The
aged shares were normalized to be consistent with the 1992 hospital cost report data. Relative weights for the new base year were then cal cul ated for various expenditure categories. This work resulted in the identification of 26 separate cost categories in the rebased hospital market basket, two fewer categories than were included in the 1987-based market basket. Detai led descriptions of each category and respective price proxy are provided in Appendix C to this proposed rule.
table 2.—Proposed 1992-based Prospective Payment Hospital Operating Cost Categories, Weights, and Price Proxies

| Expense categories | Rebased 1992 hospital market basket | Price proxy |
| :---: | :---: | :---: |
| 1. Compensation | 61.390 |  |
| A. Wages and Salaries ${ }^{1}$ | 50.244 | HCFA Occupational Wage Index. |
| B. Employee Benefits ${ }^{1}$ | 11.146 | HCFA Occupational Benefits Index. |
| 2. Professional Fees ${ }^{1}$..... | 2.127 | ECI-Compensation for Professional, Specialty \& Technical. |
| 3. Utilities | 2.469 |  |
| A. Fuel, Oil, and Gasoline | 0.345 | PPI Refined Petroleum Products. |
| B. Electricity | 1.349 | PPI Commercial Electric Power. |
| C. Natural Gas | 0.670 | PPI Commercial Natural Gas. |
| D. Water and Sewerage | 0.106 | CPI-U Water \& Sewerage Maintenance. |
| 4. Professional Liability Insurance | 1.189 | HCFA Professional Liability Insurance Premium Index. |
| 5. All Other | 32.824 |  |
| A. All Other Products | 24.033 |  |
| (1.) Pharmaceuticals | 4.162 | PPI Ethical (Prescription) Drugs. |
| (2.) Food .................. | 3.459 |  |
| a. Direct Purchase | 2.363 | PPI Processed Foods \& Feeds. |
| b. Contract Service | 1.096 | CPI-U Food Away From Home. |
| (3.) Chemicals .... | 3.795 | PPI Industrial Chemicals. |
| (4.) Medical Instruments . | 3.128 | PPI Medical Instruments \& Equipment. |
| (5.) Photographic Supplies | 0.399 | PPI Photographic Supplies. |
| (6.) Rubber and Plastics | 4.868 | PPI Rubber \& Plastic Products. |
| (7.) Paper Products ...... | 2.062 | PPI Converted Paper \& Paperboard Products. |
| (8.) Apparel ................. | 0.875 | PPI Apparel. |
| (9.) Machinery and Equipment | 0.211 | PPI Machinery \& Equipment. |
| (10.) Miscellaneous Products | 1.074 | PPI Finished Goods. |
| B. All Other Services ......... | 8.792 |  |
| (1.) Business Services ${ }^{1}$............. | 3.823 | ECI-Compensation for Private Workers in Business Services. |
| (2.) Computer Services ${ }^{1}$..................... | 1.927 | AHE Computer \& Data Processing Services. |
| (3.) Transportation Services ......................... | 0.188 | CPI-U Transportation. |
| (4.) Telephone Services ....................... | 0.531 | CPI-U Telephone Services. |
| (5.) Postage ${ }^{1}$.................................. | 0.272 | CPI-U Postage. |
| (6.) All Other: Labor Intensive* ...................... | 1.707 | ECI-Compensation for Private Service Occupations. |
| (7.) All Other: Nonlabor Intensive .................... | 0.344 | CPI-U All Items. |
| Total | 100.000 |  |

${ }^{1}$ Labor-related.
NOTE: Due to rounding, weights may not sum to total.

The 1987-based market basket included a separate Blood Services cost category. In the 1992-based market basket, Blood Services is contai ned within the Chemical s cost category. In
addition, the 1987-based cost category for Fuel Oil, Coal, etc. has been combined with the 1987-based M otor Gasoline cost category to form the 1992based Fuel, Oil and Gasol ine cost
category. Both of these changes are based on revised cost categories from BEA. For comparison purposes, the 1987-based cost categories are set forth in Table 3.

Table 3.-1987-Based Prospective Payment Hospital Operating Cost Categories, Weights, and Price Proxies

| Expense categories | 1987 hospital market basket | Price proxy |
| :---: | :---: | :---: |
| 1. Compensation | 61.7 |  |
| A. Wages and Salaries ${ }^{1}$..................................... | 52.2 | HCFA Occupational Wage Index. |
| B. Employee Benefits ${ }^{1}$....................................... | 9.5 | HCFA Occupational Benefits Index. |
| 2. Professional Fees ${ }^{1}$.............................................. | 1.6 | ECI-Wages \& Salaries for Professional, Specialty \& Technical. |
| 3. Utilities | 2.4 |  |
| A. Fuel, Oil, Coal, etc. ........................................ | 0.6 | WPI Light Fuel Oils. |
| B. Electricity | 1.1 | WPI Industrial Power. |
| C. Natural Gas | 0.3 | WPI Natural Gas. |
| D. Motor Gasoline | 0.2 | WPI Gasoline. |
| E. Water and Sewerage | 0.0 | CPI-U Water \& Sewerage Maintenance. |
| 4. Professional Liability Insurance | 1.4 | HCFA Professional Liability Insurance Premiums. |
| 5. All Other | 32.8 |  |
| A. All Other Products | 21.8 |  |
| (1.)Pharmaceuticals | 3.9 | WPI Prescription Drugs. |
| (2.) Food ............ | 3.3 |  |
| a. Direct Purchase | 2.1 | WPI Processed Foods. |
| b. Contract Service | 1.2 | CPI-U Food Away From Home. |
| (3.) Chemicals ......................... | 3.1 | WPI Industrial Chemicals. |
| (4.) Medical Instruments ... | 2.7 | WPI Medical Instruments \& Equipment. |
| (5.) Photographic Supplies ...... | 2.6 | WPI Photographic Supplies. |
| (6.) Rubber and Plastics ........................... | 2.3 | WPI Rubber \& Plastic Products. |
| (7.) Paper Products ................. | 1.4 | PPI Converted Paper \& Paperboard Products. |
| (8.) Apparel ............................................. | 1.1 | WPI Textile House furnishings. |
| (9.) Machinery and Equipment ....................... | 0.4 | WPI Machinery \& Equipment. |
| (10.) Miscellaneous Products ......................... | 0.8 | WPI Finished Goods. |
| B. All Other Services ........................................ | 11.1 |  |
| (1.) Business Services ${ }^{1}$,.................. | 3.8 | AHE Business Services. |
| (2.) Computer Services ${ }^{1}$............................... | 2.0 | AHE Computer \& Data Processing Services. |
| (3.)Transportation Services ........................... | 1.2 | CPI-U Transportation. |
| (4.) Telephone Services .............................. | 1.0 | CPI-U Telephone Services. |
| (5.) Blood Services ${ }^{1}$................................ | 0.6 | WPI Blood \& Derivatives. |
| (6.) Postage ${ }^{1}$............................................ | 0.4 | CPI-U Postage. |
| (7.) All Other: Labor Intensive ${ }^{1}$ <br> (8.) All Other: Nonlabor Intensive | 1.2 0.8 | ECI-Wages and Salaries for Private Service Occupations. CPI-U All Items. |
| Total | 100.0 |  |

${ }^{1}$ Labor-related.
Note: Due to rounding, weights may not sum to total.

In the September 4, 1990 final rule, for purposes of determining the laborrelated portion of the standardized amounts, we summed the percentages of the labor-related items (that is, wages and salaries, employee benefits, professional fees, business services, computer and data processing, blood services, postage, and all other laborintensive services) in the hospital market basket. This summation resulted in a labor-related portion of the hospital market basket of 71.4 percent and nonlabor-rel ated portion of 28.6 percent. 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 payments that are

I abor-rel ated. Since October 1, 1990, then, we have considered 71.4 percent of costs to be labor-related for purposes of the prospective payment system.

In connection with the rebasing of the hospital market basket, we have reestimated the labor-rel ated share of the standardized amounts. Based on the relative weights described in Table 2, the labor-related portion that is subject to hospital wage index adjustments (based on wages and sal aries, employee benefits, professional fees, business services, computer and data processing, postage, and all other labor-intensive services) is 71.246 percent and the nonlabor-related portion is 28.754 percent. To implement this change, effective with discharges occurring on
or after October 1, 1996, we are proposing to recompute the laborrelated and nonlabor-rel ated shares of the large urban and other areas' standardized amounts used to establ ish the prospective payment rates.

The amounts in Table 4 reflect the revised labor-related and nonlaborrelated portions. Due to the Bureau of Economic Analysis' reclassification of Blood Services to Chemicals, we now allocate Blood Services to a nonlabor cost category. We note that, al though there are revisions of the labor and nonlabor portions, due to both weight changes and the Blood Services category change, the labor-related portions of the rates published in Table 4 have remained essentially the same. The
labor-related portion has decreased by 0.146 percentage points.

Table 4.-Labor-Related Share

| Cost category | Weight |
| :---: | :---: |
| Wages and Salaries | 50.244 |
| Employee Benefits | 11.146 |
| Professional Fees | 2.127 |
| Business Services | 3.823 |
| Computer Services | 1.927 |
| Postal Services | 0.272 |
| All Other Labor Intensive .. | 1.707 |
| Total Labor-Related | 71.246 |
| Total Nonlabor Related ....... | 28.754 |

## 3. Selection of Price Proxies

After computing the 1992 cost weights for the rebased hospital market basket, it is necessary to select appropriate wage and price proxies to monitor the rate of increase for each expenditure category. Most of the indi cators are based on Bureau of Labor Statistics (BLS) data and are grouped into one of the following BLS categories:

- Producer Price Indexes-Producer Price Indexes (PPIs) measure price changes for goods sold in other than retail markets. For example, we used the PPI for ethical drugs, rather than the Consumer Price Index (CPI) for prescription drugs. PPIs are preferable price proxies for goods that hospitals purchase as inputs in producing their outputs. The PPIs we used measure price change at the final stage of production.
- Consumer Price IndexesConsumer Price Indexes (CPIs) measure change in the prices of final goods and services bought by the typical consumer. Because they may not represent the price faced by the producer, the consumer price indexes were used if no appropriate PPI was available, or if the expenditure was more similar to that of retail consumers in general rather than a purchase at the whol esale level. For example, the CPI for food purchased away from home was used as a proxy for contracted food services.
- Employment Cost IndexesEmployment Cost Indexes (ECls) measure the rate of change in employee wage rates and employer costs for employee benefits per hour worked. These indexes are fixed-weight indexes and strictly measure the change in wage rates and employee benefits per hour. They are not affected by shifts in employment mix.
- A verage Hourly Earnings-A verage Hourly Earnings (AHEs) measure the rate of change of hourly earnings for various occupations within a given industry, and, therefore, reflect a weighted occupational mix within a particular industry. The AHE series is calculated by dividing gross payrolls by total hours and measures actual earnings rather than pure wage rates. It is a current-weight series rather than a fixed-weight index and thus reflects shifts in employment mix. An AHE rather than an ECI is used when there is no corresponding ECI category that is an appropriate measure of growth for a given labor category or when the ECI does not have sufficient length of history to be useful for our purpose.

Our proposed price proxies for the rebased prospective payment hospital market basket are shown in Table 2 above and are summarized in A ppendix C to this proposed rule.

## 4. The HCFA Blended Compensation Index

Compensation includes the two I argest categories of the rebased hospital market basket. Wages and salaries account for 50.244 percent and employee benefits account for 11.146 percent of the total weight in the prospective payment hospital market basket.

The proposed HCFA Blended Compensation Index groups hospital occupations into nine broad categories. For eight of those occupational groups, we believe that hospital s compete for labor generally with employers outside the heal th care sector. Accordingly, we use economy-wide employment cost indexes (ECl) as price proxies for these eight occupational groups. In the case of compensation for nurses, as well as for certain other heal th care technicians
and professionals, the hospital Iabor market may be predomi nant. However, hospitals do compete with other industries to obtain certain skilled professional and technical staff (for example, computer programmers). Therefore, for professional and technical workers, we believe a price proxy that reflects an equal blend of internal and external compensation variables is appropriate.

Similar to the methodol ogy used for the previous rebasing, the weights for the nine cost categories in the occupational blend index were derived from the 1992 Current Population Survey (CPS) produced by BLS. Using the CPS, private hospital workers were classified into the nine occupational categories. Private hospitals better reflect the mix of occupations used to produce acute care services for the prospective payment hospital input price index. Government hospitals were excluded because their occupational mix reflects the subset of nonacute care hospitals. Once private hospital workers were sorted by occupation into one of the nine occupational groups, weights were estimated using the share of wages and salaries for each of the nine occupations. These shares formed the basis of the weights that were used for the market basket of occupational categories.

An additional adjustment was made for contract labor costs. Rather than treat contract labor as a distinct noncompensation cost category, it was integrated into the occupational blend as a component of hospitals' compensation costs for purposes of the market basket index. Thus, contract labor is treated the same as other labor expenses. Contract Iabor was allocated to the professional and technical and service occupation categories. After adjusting the professional and technical and service workers' shares to account for contract labor, the weights for the nine occupational blend categories were renormalized to equal 100.00 percent. The weights and proxies for the nine cost categories of the HCFA Blended Wages and Salaries Index are shown in Table 5.

Table 5.—hCFA Blended Wages and Salaries Index (Wages and Salaries Component of the 1992-Based MARKET BASKET)

| Cost category | Weight | Price proxy |
| :---: | :---: | :---: |
| Professional and Technical | 65.729 | Equal blend of ECI for wages and salaries of civilian hospital workers and ECI for wages and salaries of professional, specialty and technical workers. |
| Managers and Administrators | 9.554 | ECI for wages and salaries for executive, administrative and managerial workers. |
| Sales | 0.402 | ECI for wages and salaries for sales workers. |
| Clerical Workers | 12.379 | ECI for wages and salaries for administrative support including clerical workers. |
| Craft and Kindred ......................................... | 1.689 | ECI for wages and salaries for precision production, craft and repair workers. |

Table 5.-hCFA Blended Wages and Salaries Index (Wages and Salaries Component of the 1992-Based Market Basket)-Continued

| Cost category | Weight | Price proxy |
| :---: | :---: | :---: |
| Operatives Except Transport | 0.437 | ECI for wages and salaries for machine operators, assemblers and inspectors. |
| Transport Equipment Operatives | 0.122 | ECI for wages and salaries for transportation and material moving workers. |
| Nonfarm Laborers ........... | 0.084 | ECI for wages and salaries for handlers, equipment cleaners, helpers and laborers. |
| Service Workers | 9.606 | ECI for wages and salaries for service occupations. |
| Total Wages and Salaries ................................. | 100.000 | Total Weight for Wages and Salaries is 50.2. |

Note: Due to rounding, weights may not sum to total.
5. Separate M arket Basket for Hospital s and Hospital Units Excluded From the Prospective Payment System
In its March 1, 1990 report, ProPAC recommended that we establish a separate market basket for hospitals and hospital units excluded from the prospective payment system. Effective with FY 1991, HCFA adopted ProPAC's recommendation to implement separate market baskets. (See the September 4, 1990 final rule (55 FR 36044).) Prospective payment and excluded hospitals tend to have different case mixes, practice patterns, and composition of inputs. The fact that these hospitals are not included under the prospective payment system in part reflects these differences.
Studies completed by HCFA, ProPAC, and the hospital industry have documented different weights for excluded hospitals and prospective payment hospital s. Table 7 compares major weights in the rebased 1992 market basket for excluded hospitals with weights in the rebased 1992 market basket for prospective payment system hospitals. Wages and salaries are 52.152 percent of total operating costs for excluded hospitals compared to 50.244 percent for prospective payment hospitals. Empl oyee benefits are 11.569 percent for excluded hospitals compared to 11.146 percent for prospective payment hospitals. As a result, compensation costs (wages and sal aries plus empl oyee benefits) for excluded hospitals are 63.721 percent of costs compared to 61.390 percent for prospective payment hospitals. Noncompensation costs are 36.279 percent for excluded hospitals and 38.610 of costs for prospective payment hospitals.

Two significant differences in the category weights occur in Pharmaceuticals and Business Services. Pharmaceuticals represent 4.162 percent of costs for prospective payment hospital s and 3.070 percent for excluded hospitals. Business services represent 3.823 percent of costs for prospective payment hospitals and 2.337 percent for excluded hospitals. The weights for the excluded hospital market basket were derived using the same data sources and methods as for the prospective payment market basket (see A ppendix C to this proposed rule).

Differences in weights between the proposed excluded hospital and prospective payment hospital market baskets do not necessarily lead to signifi cant differences in the rate of price growth for the two market baskets. If the individual wages and prices move at the approximately same annual rate, both market baskets may have about the same price growth even though weights may differ substantially because both market baskets use the same wages and prices. Also, offsetting price increases for various cost components can result in similar composite price growth in both market baskets.

The wage and price proxies are the same for the excluded hospital and prospective payment hospital market baskets. As discussed in section IV.A. 2 of this preamble, all of the cost expenditure weights for both the prospective payment and excluded hospital market baskets are subject to refinement if the U.S. Department of Commerce data are released in time to be anal yzed and incorporated in the final market basket.

The excluded hospital market basket is a composite set of weights for

Medicare partici pating psychiatric, long-term care, rehabilitation, and children's hospitals. We are proposing to use cost report data for excluded hospitals and units whose Medicare average length of stay is within 15 percent (that is, 15 percent higher or lower) of the total facility average length of stay. This is a change from the 1987based market basket, for which data for all excluded hospitals and units were used. We bel ieve that limiting our sample to hospitals with a Medicare average length of stay within 15 percent of the total facility average length of stay provides a more accurate reflection of the structure of costs for Medicare. We note that the proposed forecast for FY 1997 would be the same even if we had included all excluded hospitals in the cal culation of weights. The forecast for both the limited and full set of excluded hospitals yields a rate of change for FY 1997 of 2.7 percent.

Table 6.-Comparison of SigniflCANT WEIGHTS FOR 1992-BASED Excluded Hospital and Prospective Payment Hospital Market BASKETS

| Category | Excluded <br> hospitals | Prospective <br> payment <br> hospitals |
| :---: | ---: | ---: |
| Wages and Sal- <br> aries ............. | 52.152 | 50.244 |
| Employee Bene- <br> fits ............... | 11.569 | 11.146 |
| Professional <br> Fees ............. | 2.098 | 2.127 |
| Pharmaceuticals | 3.070 | 4.162 |
| All Other ........... | 31.111 | 32.321 |
| Total ........... | 100.000 | 100.000 |

Table 7.-Proposed 1992-Based Excluded Hospital Operating Cost Categories, Weights, and Price Proxies

| Expense categories | Rebased 1992 excluded hospital market basket | Price proxy |
| :---: | :---: | :---: |
| 1. Compensation | 63.721 |  |
| A. Wages and Salaries | 52.152 | HCFA Occupational Wage Index. |
| B. Employee Benefits | 11.569 | HCFA Occupational Benefits Index. |
| 2. Professional Fees .............................................. | 2.098 | ECI-Compensation for Professional, Specialty \& Technical. |
| 3. Utilities | 2.557 |  |
| A. Fuel, Oil, and Gasoline | 0.357 | PPI Refined Petroleum Products. |
| B. Electricity | 1.396 | PPI Commercial Electric Power. |
| C. Natural Gas | 0.694 | PPI Commercial Natural Gas. |
| D. Water and Sewerage | 0.110 | CPI-U Water \& Sewerage Maintenance. |
| 4. Professional Liability Insurance | 1.081 | HCFA Professional Liability Insurance Premiums Index. |
| 5. All Other | 30.543 |  |
| A. All Other Products ..... | 23.642 |  |
| (1.) Pharmaceuticals | 3.070 | PPI Ethical (Prescription) Drugs. |
| (2.) Food ................. | 3.581 |  |
| a. Direct Purchase | 2.446 | PPI Processed Foods \& Feeds. |
| b. Contract Service | 1.135 | CPI-U Food Away From Home. |
| (3.) Chemicals | 3.929 | PPI Industrial Chemicals. |
| (4.) Medical Instruments ............................ | 3.238 | PPI Medical Instruments \& Equipment. |
| (5.) Photographic Supplies ........................ | 0.413 | PPI Photographic Supplies. |
| (6.) Rubber and Plastics .............................. | 5.039 | PPI Rubber \& Plastic Products. |
| (7.) Paper Products | 2.134 | PPI Converted Paper \& Paperboard Products. |
| (8.) Apparel ...... | 0.906 | PPI Apparel. |
| (9.) Machinery and Equipment | 0.218 | PPI Machinery \& Equipment. |
| (10.) Miscellaneous Products ......................... | 1.112 | PPI Finished Goods. |
| B. All Other Services .......................................... | 6.901 |  |
| (1.) Business Services ............................... | 2.337 | ECI-Compensation for Private Workers in Business Services. |
| (2.) Computer Services | 1.415 | AHE Computer \& Data Processing Services. |
| (3.) Transportation Services . | 0.195 | CPI-U Transportation. |
| (4.) Telephone Services ............................... | 0.549 | CPI-U Telephone Services. |
| (5.) Postage ................. | 0.282 | CPI-U Postage. |
| (6.) All Other: Labor Intensive ....................... | 1.767 | ECI-Compensation for Private Service Occupations. |
| (7.) All Other: Nonlabor Intensive ................... | 0.356 | CPI-U All Items. |
| Total .................................................... | 100.000 |  |

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

Table 8, below, shows what the excluded hospital weights would be if
cost data for all excluded hospitals had been used.

TABLE 8.-1992 EXCLUDED HOSPITAL OPERATING COST CATEGORIES, WEIGHTS, AND PROXIES USING DATA FROM ALL EXCLUDED HOSPITALS

| Expense categories | Rebased 1992 excluded hospital market basket | Price proxy |
| :---: | :---: | :---: |
| 1. Compensation | 68.074 |  |
| A. Wages and Salaries .................................... | 55.714 | HCFA Occupational Wage Index. |
| B. Employee Benefits .. | 12.360 | HCFA Occupational Benefits Index. |
| 2. Professional Fees ........................................... | 2.073 | ECI-Compensation for Professional, Specialty \& Technical. |
| 3. Utilities ........................................................ | 2.191 |  |
| A. Fuel, Oil, and Gasoline ................................ | 0.306 | PPI Refined Petroleum Products. |
| B. Electricity .................................................. | 1.196 | PPI Commercial Electric Power. |
| C. Natural Gas | 0.595 | PPI Commercial Natural Gas. |
| D. Water and Sewerage | 0.094 | CPI-U Water \& Sewerage Maintenance. |
| 4. Professional Liability Insurance ............................. | 1.081 | HCFA Professional Liability Insurance Premiums Index. |
| 5. All Other ..................... | 26.582 |  |
| A. All Other Products | 20.333 |  |
| (1.) Pharmaceuticals .................................. | 2.704 | PPI Ethical (Prescription) Drugs. |
| (2.) Food ................................................. | 3.069 |  |
| a. Direct Purchase .............................. | 2.096 | PPI Processed Foods \& Feeds. |
| b. Contract Service .............................. | 0.973 | CPI-U Food Away From Home. |
| (3.) Chemicals <br> (4.) Medical Instruments | 3.367 2.775 | PPI Industrial Chemicals. PPI Medical Instruments \& Equipment. |

TAble 8.-1992 EXCluded hospital operating cost Categories, weights, and proxies using data from all EXCLUDED HOSPITALS—Continued

| Expense categories | Rebased 1992 excluded hospital market basket | Price proxy |
| :---: | :---: | :---: |
| (5.) Photographic Supplies . | 0.354 | PPI Photographic Supplies. |
| (6.) Rubber and Plastics .............................. | 4.319 | PPI Rubber \& Plastic Products. |
| (7.) Paper Products ................................ | 1.829 | PPI Converted Paper \& Paperboard Products. |
| (8.) Apparel ............................................ | 0.777 | PPI Apparel. |
| (9.) Machinery and Equipment ................... | 0.187 | PPI Machinery \& Equipment. |
| (10.) Miscellaneous Products ..................... | 0.953 | PPI Finished Goods. |
| B. All Other Services ...................................... | 6.248 |  |
| (1.) Business Services ......................................................... | 2.337 | ECI-Compensation for Private Workers in Business Services. |
| (2.) Computer Services | 1.213 | AHE Computer \& Data Processing Services. |
| (3.) Transportation Services ............................................... | 0.167 | CPI-U Transportation. |
| (4.) Telephone Services ............................. | 0.471 | CPI-U Telephone Services. |
| (5.) Postage . | 0.242 | CPI-U Postage. |
| (6.) All Other: Labor Intensive ..................... | 1.514 | ECl-Compensation for Private Service Occupations. |
| (7.) All Other: Nonlabor Intensive .................. | 0.305 | CPI-U All Items. |
| Total | 100.000 |  |

The relatively small differences in weights between the proposed excluded hospital market basket data from excluded hospitals that have a Medicare length of stay within 15 percent of the total facility average length of stay and the excluded hospital market basket using data from all excluded hospitals do not lead to significant changes in the rate of price growth for these two market baskets. If all individual wages and prices move at about the same annual rate, both market baskets could have about the same price growth even if weights are somewhat different. Also, offsetting price increases for various costs components can result in the price growth being the same.
To examine the sensitivity of the change to the limited set of excluded hospitals, we developed a comparison for the period 1988-1998. Using historical data and forecasts for the market baskets, we compared limited and full sets of excluded hospitals.

Table 9.-A Comparison of the Proposed Excluded Hospital Market Basket and the Excluded Hospital Market Basket Rebased Using All Excluded hospitals, Percent Change, 1988-1998

| Federal fiscal year | Proposed excluded (+/ $-15 \%)$ hospital market basket1992 base | Excluded hospital market basket using all excluded hos-pitals1992 base | Difference |
| :---: | :---: | :---: | :---: |
| Historical: |  |  |  |
| 1988 | 4.8 | 4.8 | 0.0 |
| 1989 ........... | 5.5 | 5.5 | 0.0 |
| 1990 ........... | 4.5 | 4.6 | (0.1) |
| 1991 ............ | 4.3 | 4.4 | (0.1) |
| 1992 ........... | 3.1 | 3.2 | (0.1) |
| 1993 | 3.1 | 3.2 | (0.1) |
| 1994 | 2.6 | 2.7 | (0.1) |
| 1995 ........... | 3.3 | 3.2 | 0.1 |
| Forecasted: |  |  |  |
| 1996 ... | 2.6 | 2.6 | 0.0 |
| 1997 ........... | 2.7 | 2.7 | 0.0 |
| 1998 ........... | 2.9 | 2.9 | 0.0 |
| Historical average: 1988-1995 | 3.9 | 4.0 | (0.1) |
| Forecasted average: 1996-1998 | 2.7 | 2.7 | 0.0 |

Note that the historical average rate of growth for 1988-1995 for the proposed excluded hospital market basket including only excluded hospitals with Medicare average length of stay within 15 percent of total facility average length of stay is virtually identical to that for the excluded hospital market basket with all excluded hospitals. The
rates of growth using the two methodologies are identical for FY 1996, 1997, and 1998.

## B. Capital Costs

## Rebasing the Capital Input Price Index

## 1. Background

Effective for cost reporting periods beginning on or after October 1, 1995, the Capital Input Price Index (CIPI) is used to determine the price increase associated with prospective payment hospital capital-rel ated expenses. Capital-related expenses are defined as depreciation expenses, capital-related interest expenses, and other capitalrelated expenses, such as insurance and taxes. The CIPI measures the input price change of these capital-related expenses, and is included in the capital prospective payment update framework to determine a rate of increase in capital prospective payments.

Like the prospective payment hospital operating input price index, the CIPI is a fixed-weight price index. A fixedweight 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 indexes, the base period is selected and cost category weights are determined using avai lable data on hospitals. Next, appropriate price proxy indexes 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 called 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 devel oped to capture the vintage nature of capital by using a wei ghtedaverage 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 devel oped to measure price increases associated with capital expenses. The most recent discussion on the CIPI and methodological background was publ ished in the September 1, 1995 final rule ( 60 FR 45817). The following Federal Register documents describe devel opment 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).
We periodi cally 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 to FY 1987. We are proposing that the base year cost structure be updated to FY 1992, the most recent year with rel atively compl ete data for purposes of rebasing. We explain the process of rebasing the cost structure weights for the CIPI below.
2. Rebasing the Capital Input Price Index

We are proposing to use a rebased capital input price index (CIPI) in developing the FY 1997 capital update factor for capital prospective payment rates. The new CIPI would be rebased to reflect the 1992, rather than the 1987, structure of capital costs. In developing the rebased CIPI, we reviewed hospital capital expenditure data for capital cost categories (depreciation, interest, and other). Two sets of weights had to be developed in order to compute the rebased CIPI: (1) cost category weights which identify the proportion of total hospital capital expenditures attributable to each capital expenditure category, and (2) rel ative vintage weights for depreciation and interest which identify the proportion of capital expenditures within a cost category that are attributable to each year over the life of capital assets in that category. Because capital expense data in the Medicare Cost Reports is not avai Iable prior to 1980 for use in computing vintage weights, the two sets of weights are measured using the best data sources available as explained bel ow and in A ppendix $C$ to this proposed rule. The computations involved with rebasing the CIPI are explained for each of these sets of weights.
a. Capital Cost Category Weights. The capital cost category weights in Table 1 bel ow were computed using a combination of the FY 1992 Medicare Cost Reports and 1992 AHA Annual Survey data. Fiscal Year 1992 marked the first year for expanded capital data avail able in the M edi care Cost Reports. After reviewing the data, we determined that much of the data had been reclassified into different expense categories. Therefore, we removed reports that appeared to have reclassified data, and matched the remaining reports to the corresponding reports in the AHA Annual Survey data set. These remai ning 2724 reports were used to compute capital cost category weights and the expected life of capital, which is used in determining vintage weights for depreciation and interest.

In reviewing the data, we determined that the M edi care Cost Reports provided accurate data for depreciation and other capital expenses, but had reclassified interest data. We determined that AHA A nnual Survey data more accurately
reflected interest expense, based on past trends in interest rates. Therefore, we used the AHA A nnual Survey interest levels al ong with the Medicare Cost Report levels for depreciation and other capital expenses to devel op a more robust capital cost data base.

After removing depreciation, interest, and other capital expenses from total capital expenses, the remainder constitutes lease expenses. Lease expenses are not a separate cost category in the CIPI. They are distributed to the other cost categories (depreciation, interest, other), refl ecting an assumption that the underlying cost structure of leases is similar to capital costs in general. We assigned 10 percent of lease expenses to the other capital expenses cost category as overhead, and the remaining lease expenses were distributed to the three cost categories based on the weights of depreciation, interest, and other capital expenses not including lease expenses. (We base this assignment of 10 percent of lease expenses to overhead on the common assumption that overhead is 10 percent of costs.)

We al so used the 1992 Medicare Cost Reports to determine weights for the building and fixed equipment category and the movable equipment category. Expenses for building and fixed equipment and for movable equipment were determined using the same sample of reports as was used to compute the major cost category weights. The split between building and fixed equipment and movable equipment was al so used to compute the vintage weights described bel ow. Table 10 presents a comparison of the rebased 1992 capital cost weights and the 1987 capital cost weights.

We only used those hospital reports which we considered to have capital data that was not reclassified. Because we did not use all hospital reports, we were concerned that the hospital s used may not be representative of the universe. Therefore, we compared the distribution of costs for the hospitals used with the data re-weighted to reflect the characteristics of the total universe of hospital s. From this anal ysis we validated that the cost weights derived from the subset we used were representative of the cost weights for the entire universe of hospitals.

Table 10—Comparison of 1987 and 1992 Cost Category Weights

| Expense categories | FY1987 | Rebased FY1992 | Price proxy |
| :---: | :---: | :---: | :---: |
| Total .................................................................................. | 1.0000 | 1.0000 |  |
|  | . 6510 | . 6484 |  |
| 1. Building and fixed equipment depreciation ......................... | . 3054 | . 3009 | Boeckh Institutional Construction Index—vintage weighted (22 yrs) |
| 2. Movable equipment depreciation ...................................... | . 3456 | . 3475 | PPI for Machinery and Equipment-vintage weighted (10 yrs) |
| Total interest .......................................................................... | . 3274 | . 3184 |  |
| 1. Government/Non Profit Interest .......................................... | . 2783 | . 2706 | Average Yield on Domestic Municipal Bonds (Bond Buyer 20 bonds)-vintage weighted (22 yrs) |
| 2. For-Profit Interest | . 0491 | . 0478 | Average Yield on Moody's AAA Bonds-vintage weighted (22 yrs) |
| Other ..................................................................................... | . 0216 | . 0332 | CPI (U) for Residential Rent |

Source: 1992 Medicare Cost Reports, PPS year 9; 1992 AHA Annual Survey.
Note: Due to rounding, weights may not sum to totals.

We had planned to incorporate the 1992 data from the Department of Commerce for devel oping capital cost category weights. However, these data were not avail able when we devel oped this proposed rule. If the data become avail lable in time to for us to analyze it, we plan to incorporate it as a data input for the final rule.
b. Relative Vintage Weights for Prices. As we have explained in previous Federal Register documents (September 1, 1995, 60 FR 45817), the CIPI was devel oped to capture the vintage nature of capital; that is, because capital is acquired and consumed over time, the capital expenses in any given year are determi ned by past and current purchases of physical and financial capital. Therefore, a vintage-weighted CIPI was developed which used vintage weights for depreciation (physical capital) and interest (financial capital) to capture the long-term consumption of capital. These vintage weights reflect the purchase patterns of building and fixed equipment and movable equipment over time. Because depreciation and interest expenses are determined by the amount of past and current capital purchases, we use the vintage weights to compute vintageweighted price changes associated with depreciation and interest expense, which is the purpose of the CIPI.

To compute the vintage weights for depreciation and interest expenses, we used a time series of capital purchases for building and fixed equipment and movable equipment. We found no single source that provides the best time series of capital purchases by hospitals for all of the above components of capital purchases. The Medicare Cost Reports did not have sufficient capital data to meet this need. The AHA Panel Survey provides a consistent database back to 1963. While the AHA Panel Survey data does not provide annual capital purchases, it does provide a time series of depreciation and interest expenses, which can be used to infer capital purchases over time. The process of using the AHA data to estimate a time
series of capital purchases, and eventually vintage weights, is explained in detail below.

In order to estimate capital purchases from AHA data on depreciation and interest expenses, the expected life for building and fixed equipment, for movable equipment, and for debt instruments is needed. The expected life is used in the cal culation of vintage weights for building and fixed equipment, movable equipment, and debt instruments as we explain bel ow.

We used the same sample of hospitals from FY 1992 Medicare Cost Reports and the 1992 AHA Annual Survey explained above in computing cost category weights to compute the expected life of building and fixed equipment and movable equipment. (The AHA Panel Survey is a monthly survey of a sample of hospitals, while the AHA A nnual Survey is a more detailed survey of all hospitals.) The expected life of any piece of equipment can be determined by dividing the historical asset cost (excluding fully depreciated assets) by the current year depreciation amount. This calculation yields the estimated useful life of an asset if depreciation continued at current year levels, assuming straightline depreciation, which is the only depreciation method all owed under Medicare. From the FY 1992 costs reports, the expected life of building and fixed equipment was determined to be 22 years, and the expected life of movable equipment was determined to be 10 years. By comparison, the expected life using FY 1987 data was 25 years for building and fixed equipment and 10 years for movable equipment.

It was also necessary to compute the expected life of debt instruments held by hospitals. As in prior exercises, we used hospital issuances of municipal and commercial bonds from Securities Data Corporation to determine the expected life of hospital debt instruments, which is used in the estimation of vintage weights for interest expense. This data source produced a weighted average life for the two types of bonds of 22 years for FY

1992, the same expected life as was computed for the 1987-based CIPI.
An annual series of total expenses and depreciation expenses was obtained from the AHA Panel Survey. For the cal culation of vintage weights, this expense data was needed back to 1963. However, the depreciation expense data in the AHA Panel survey was available only back to 1976. We noticed an increasing trend in depreciation expenses as a percentage of total expenses. We performed a regression on this percentage, and used the regression equation to estimate depreciation expenses back to 1963. We then used the fixed and movable weights derived from the FY 1992 Medicare Cost Reports to partition the AHA Panel Survey depreciation expenses into annual amounts of building and fixed depreciation and movable depreciation.

Multiplying the annual depreciation amounts by the expected life cal culations from the FY 1992 Medicare cost reports, year-end asset costs for building and fixed equipment and movable equipment were determined. Then by subtracting the previous year asset costs from the current year asset costs, annual purchases of building and fixed equipment and movable equipment were estimated back to 1963. This capital purchase time series is then used to compute the vintage weights for building and fixed equipment, movable equipment, and debt instruments. Each of these sets of vintage weights is explained in detail below.

For building and fixed equipment vintage weights, the real annual capital purchase amounts for building and fixed equipment derived from the A HA Panel Survey were used. The real annual purchase amount was used to capture the actual amount of the physical acquisition, net of the effect of price inflation. This real annual purchase amount for building and fixed equipment was produced by deflating
the nominal annual purchase amount by the building and fixed equipment price proxy, the Boeckh institutional construction index. Because building and fixed equipment has an expected life of 22 years, the vintage weights for building and fixed equipment were deemed to represent the average purchase pattern of building and fixed equipment over 22-year periods. With real building and fixed equipment purchase estimates available back to 1963, nine 22-year periods could be averaged to determine the average vintage weights for building and fixed equipment. A veraging different periods produces vintage weights that are representative of average building and fixed equipment purchase patterns over time. Vintage weights for each 22-year period are cal culated by dividing the real building and fixed capital purchase amount in any given year by the total amount of purchases in the 22-year period. For example, for the 22-year period of 1964-1985, the vintage weight for year 1 is calculated by dividing the real annual capital purchase amount of building and fixed equipment in 1964 into the total amount of real annual capital purchases of building and fixed equipment over the entire 1964-1985 period. This cal culation is done for each year in the 22-year period, and for each of the nine 22 -year periods. An average is taken of the nine 22-year periods to determine the FY 1992 average building and fixed equipment vintage weights, presented in Table 11 with the FY 1987 vintage weights.

For movable equipment vintage weights, the real annual capital purchase amounts for movable
equipment derived from the AHA Panel Survey were used. The real annual purchase amount was used to capture the actual amount of the physical acquisition, net of price inflation. This real annual purchase amount for movable equipment was produced by deflating the nominal annual purchase amount by the movable equipment price proxy, the Producer Price Index for machinery and equipment. Because movable equipment has an expected life of 10 years, the vintage weights for movable equipment were deemed to represent the average purchase pattern of movable equipment over 10-year periods. With real movable equipment purchase estimates avail able back to 1963, 21 10-year periods could be averaged to determine the average vintage weights for movable equipment. A veraging different periods produces vintage weights which are representative of average movable equi pment purchase patterns over time. Vintage weights for each 10-year period are cal culated by dividing the real movable capital purchase amount for any given year by the total amount of purchases in the 10-year period. For example, for the 10-year period of 19761985, the vintage weight for year 1 is calculated by dividing the real annual capital purchase amount of movable equipment in 1976 into the total amount of real annual capital purchases of movable equipment over the entire 1976-1985 period. This cal culation is done for each year in the 10-year period, and for each of the 21 10-year periods. The average of the 21 10-year periods is used to determine the FY 1992 average
movable equi pment vintage weights, presented in Table 11 with the FY 1987 vintage weights.

For interest vintage weights, the nominal annual capital purchase amounts for total equipment (buil ding and fixed, and movable) derived from the AHA Panel Survey were used. Nominal annual purchase amounts were used to capture the val ue of the debt instrument. Because debt instruments have an expected life of 22 years, the vintage weights for interest were deemed to represent the average purchase pattern of total equipment over 22-year periods. With nominal total equipment purchase estimates available back to 1963, nine 22 -year periods could be averaged to determine the average vintage weights for interest. A veraging different periods produces vintage weights which are representative of average capital purchase patterns over time. Vintage weights for each 22-year period are cal culated by dividing the nominal total capital purchase amount for any given year by the total amount of purchases in the 22-year period. For example, for the 22-year period of 19641985, the vintage weight for year 1 is cal culated by dividing the nominal annual capital purchase amount of total equipment in 1964 into the total amount of nominal annual capital purchases of total equipment over the entire 19641985 period. This calculation is done for each year in the 22-year period, and for each of the nine 22-year periods. The average of the nine 22 -year periods is used to determine the FY 1992 average interest vintage weights, presented in Table 11 with the FY 1987 weights.

Table 11.—Vintage Weights for Capital-Related Price Proxies

| Year |  | Building and fixed equipment |  | Movable equipment |  | Interest |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { FY1987 } \\ 25 \text { yrs } \end{gathered}$ | $\begin{aligned} & \text { Rebased } \\ & \text { FY1992 } \\ & 22 \text { yrs } \end{aligned}$ | $\begin{aligned} & \text { FY1987 } \\ & 10 \mathrm{yrs} \end{aligned}$ | Rebased FY1992 10 yrs | $\begin{aligned} & \text { FY1987 } \\ & 22 \text { yrs } \end{aligned}$ | Rebased FY1992 22 yrs |
| 1 |  | . 015 | . 019 | . 064 | . 069 | . 007 | . 007 |
| 2 |  | . 019 | . 020 | . 072 | . 075 | . 009 | . 008 |
| 3 |  | . 022 | . 023 | . 077 | . 083 | . 010 | . 010 |
| 4 |  | . 024 | . 026 | . 085 | . 091 | . 011 | . 012 |
| 5 |  | . 023 | . 028 | . 095 | . 097 | . 013 | . 014 |
| 6 |  | . 022 | . 030 | . 101 | . 103 | . 015 | . 016 |
| 7 |  | . 020 | . 031 | . 109 | . 109 | . 017 | . 018 |
| 8 |  | . 021 | . 032 | . 122 | . 115 | . 020 | . 021 |
| 9 |  | . 025 | . 036 | . 132 | . 124 | . 023 | . 024 |
| 10 |  | . 030 | . 039 | . 142 | . 133 | . 027 | . 029 |
| 11 |  | . 033 | . 043 | .............. | . | . 032 | . 035 |
| 12 |  | . 034 | . 047 | ... | ............... | . 038 | . 041 |
| 13 |  | . 034 | . 050 | .............. | ................ | . 043 | . 047 |
| 14 |  | . 035 | . 052 | ............... | ................ | . 050 | . 052 |
| 15 |  | . 038 | . 055 | ...... | .................. | . 057 | . 059 |
| 16 |  | . 043 | . 059 | .............. | ............... | . 064 | . 067 |
| 17 |  | . 049 | . 062 | ....... | ............... | . 074 | . 074 |
| 18 |  | . 053 | . 065 | .... |  | . 083 | . 081 |
| 19 |  | . 056 | . 067 |  |  | . 090 | . 088 |

Table 11.-Vintage Weights for Capital-Related Price Proxies-Continued


Sources: AHA Panel Survey, 1963-1993; 1992 Medicare Cost Reports; Securities Data Corporation.

## 3. Selection of Price Proxies

After the 1992 capital cost category weights were computed, it was necessary to select appropriate price proxies to monitor the rate of increase for each expenditure category. Our proposed price proxies for the FY 1992 based CIPI are the same as those for the FY 1987 based CIPI. The rationale for
selecting the price proxies is explained in the June 2, 1995 proposed rule ( 60 FR 29227) and the September 1, 1995 final rule (60 FR 45817). The proposed price proxies are presented in Table 10.
4. Forecast of the CIPI for Federal Fiscal Y ear 1997

DRI forecasts a 1.0 percent increase in the rebased 1992 CIPI for FY 1997, as
indicated in Table 12. This is the outcome of a 2.5 percent increase in projected depreciation prices (building and fixed equipment, and movable equipment) and a 2.3 percent increase in other capital expense prices in FY 1997, partially offset by a 3.0 percent decline in vintage-weighted interest rates in FY 1997.

Table 12.—HCFA Capital Input Price Index Percent Changes, Total and Components, Fiscal Years 1979 to 2000

| Fiscal Year | Total | Depreciation |  |  | Interest | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Building and fixed equipment | Movable equipment |  |  |
| Weights (FY92) ..... | 1.0000 | 0.6484 | 0.3009 | 0.3475 | 0.3184 | 0.0332 |

Price Changes

| 1979 | 5.4 | 7.4 | 7.0 | 7.7 | 2.7 | 7.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1980 | 6.9 | 8.0 | 7.3 | 8.5 | 5.4 | 8.6 |
| 1981 | 8.7 | 8.5 | 7.7 | 9.1 | 9.1 | 8.8 |
| 1982 | 9.2 | 8.5 | 8.0 | 9.0 | 10.2 | 8.0 |
| 1983 | 6.7 | 8.1 | 7.9 | 8.2 | 4.8 | 6.3 |
| 1984 | 6.3 | 7.3 | 7.6 | 7.1 | 4.9 | 5.0 |
| 1985 | 5.2 | 6.3 | 7.0 | 5.8 | 3.5 | 5.9 |
| 1986 | 3.7 | 5.7 | 6.4 | 5.1 | 0.7 | 6.2 |
| 1987 | 3.1 | 5.1 | 5.9 | 4.5 | -0.1 | 4.5 |
| 1988 | 3.0 | 4.6 | 5.4 | 4.0 | 0.3 | 3.8 |
| 1989 | 2.6 | 4.4 | 5.2 | 3.7 | -0.5 | 3.8 |
| 1990 | 2.3 | 4.0 | 4.9 | 3.2 | -0.7 | 4.2 |
| 1991 | 2.0 | 3.6 | 4.6 | 2.7 | -1.1 | 3.9 |
| 1992 | 1.5 | 3.2 | 4.4 | 2.1 | -2.0 | 2.6 |
| 1993 | 1.1 | 2.9 | 4.1 | 1.8 | -2.8 | 2.4 |
| 1994 | 1.1 | 2.7 | 3.9 | 1.7 | -2.7 | 2.3 |
| 1995 | 1.3 | 2.6 | 3.8 | 1.6 | -2.0 | 2.5 |
| 1996 | 0.9 | 2.5 | 3.7 | 1.5 | -3.1 | 2.4 |
| 1997 | 1.0 | 2.5 | 3.5 | 1.5 | -3.0 | 2.3 |
| 1998 | 1.0 | 2.5 | 3.4 | 1.5 | -3.1 | 3.0 |
| 1999 | 1.0 | 2.4 | 3.4 | 1.5 | -3.1 | 2.4 |
| 2000 | 1.1 | 2.4 | 3.4 | 1.5 | -3.2 | 2.8 |

Source: DRI/McGraw-Hill HCC, 1st Qtr 1996; @USSIM/TREND25YR0296 @CISSIM/CONTROL961.
Released By: HCFA, OACT, Office of National Health Statistics.
5. Compari son of Percent Changes in the FY 1992 Based CIPI and the FY 1987 Based CIPI
Rebasing the CIPI from 1987 to 1992 decreased the percent change in the FY 1997 forecast by only 0.2 percentage points, from 1.2 to 1.0 as indicated in Table 4. The effect of rebasing is anal yzed by comparing the 1992-based CIPI forecasted percent changes to the 1987-based CIPI forecasted percent changes using the same DRI forecast of component prices. As shown in Table 13 , there is only a 0.2 percentage point difference between the percent changes in the 1992-based CIPI and the 1987based CIPI using the first quarter 1996 forecast. The difference is caused by changes to: (1) cost category weights, (2) expected life, and (3) vintage weights. The changes to cost category weights coupled with the wide disparity in price changes between the different cost categories contributed to lowering the CIPI percent change in the FY 1997 forecast. This was the case with fixed depreciation, which has faster price growth than the other cost categories and now has a lower weight by nearly one-half of a percentage point because of rebasing to 1992. Also contributing to the 0.2 percentage point difference in FY 1997 forecast is the change in the expected life of building and fixed equipment and the change in the vintage weights for all three components: building and fixed equipment, movable equipment, and interest. The shorter expected life (22 years in 1992 versus 25 years in 1987) of building and fixed equipment slightly decreased the FY 1997 forecast CIPI percent change because years with higher price increases were not included as they had been before. The change in vintage weights also tended to decrease the FY 1997 CIPI percent change because vintage weights in all cases changed to be spread more evenly over the life of the asset, decreasing the weight of more recent years and increasing the weight of past years. In the years around FY 1997, prices for depreciation and interest are projected to increase slightly faster than prices in earlier years.

TABLE 13.-COMPARISON OF 1987 and 1992 Based Capital Input Price Index Using the Same DRI Forecast, Percent Change, 1979-1997

| Federal fiscal year | CIPI |  |
| :---: | ---: | ---: |
|  | 1987 | Rebased <br> 1992 |
| $1979 \ldots \ldots \ldots \ldots \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . ~$ | 5.6 | 5.4 |

TABLE 13.-COMPARISON OF 1987 and 1992 Based Capital Input Price Index Using the Same DRI Forecast, Percent Change, 1979-1997-Continued

| Federal fiscal year | CIPI |  |
| :---: | :---: | :---: |
|  | 1987 | $\begin{aligned} & \text { Rebased } \\ & 1992 \end{aligned}$ |
| 1980 ........................... | 7.1 | 6.9 |
| 1981 | 8.8 | 8.7 |
| 1982 | 9.3 | 9.2 |
| 1983 | 6.7 | 6.7 |
| 1984 | 6.3 | 6.3 |
| 1985 | 5.1 | 5.2 |
| 1986 | 3.7 | 3.7 |
| 1987 ........................... | 3.1 | 3.1 |
| 1988 ........................... | 3.0 | 3.0 |
| 1989 | 2.7 | 2.6 |
| 1990 ........................... | 2.4 | 2.3 |
| 1991 | 2.1 | 2.0 |
| 1992 .......................... | 1.7 | 1.5 |
| 1993 ........................... | 1.3 | 1.1 |
| 1994 ........................... | 1.3 | 1.1 |
| 1995 ........................... | 1.5 | 1.3 |
| 1996 .......................... | 1.2 | 0.9 |
| 1997 ........................... | 1.2 | 1.0 |

Source: DRI/McGraw-Hill HCC, 1st Qtr 1996; @USSIM/TREND25YR0296 @CISSIM/ CONTROL961

Released by: HCFA, OACT, Office of National Health Statistics.
6. Comparison of Percent Changes in the FY 1997 CIPI Forecast in the September 1, 1995 Federal Register and the current FY 1997 CIPI Forecast

The previously published CIPI forecast for FY 1997 of 1.7 percent has been revised to 1.0 percent in this proposed rule. As explained above in section IV.B.5, 0.2 percentage points of the decl ine was the result of rebasing the CIPI from 1987 to 1992. The remaining 0.5 percentage point difference in FY 1997 between the 1992based CIPI and the 1987-based CIPI previously published is the result of revised projections by DRI. Since making a forecast in the second quarter of 1995 for the September 1, 1995
Federal Register, DRI has revised their projections of price changes downward for every cost category in the CIPI. This revised projection accounts for 0.5 of the 0.7 difference between the 1992based CIPI percent changes and the 1987-based CIPI percent changes previously published.

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

A. Sole Community Hospital Criteria (§ 412.92)

Under the prospective payment system, special payment protections are provided to hospitals that, by reason of factors such as isolated location,
weather conditions, travel conditions, or absence of other hospitals, are the sole source of hospital inpatient services reasonably available to Medicare beneficiaries. The criteria a hospital must meet to be classified as a sole community hospital (SCH) as well as the special payment adjustments available are set forth in the regulations at § 412.92.

One of the ways in which a hospital can qualify for sole community status is to be located between 25 and 35 miles from other like hospitals and prove that no more than 25 percent of residents who become inpatients or no more than 25 percent of the Medicare beneficiaries who become inpatients in the hospital's "service area" are admitted to other like hospitals located within a $35-$ mile radius of the hospital (or its service area, if larger).
In the rulemaking process for FY 1989, we addressed the criteria for qualification as a sol e community hospital. ProPAC had recommended that we issue guidelines before the beginning of FY 1989 to promote greater uniformity in the criteria applied by regional offices to designate sole community hospital s. In the final rule published on September 30, 1988, we stated: "A hospital may delineate its service area by identifying the zip codes of all its inpatients for the cost reporting period ending before the date it applies for SCH status. The lowest number of zip codes accounting for at least 75 percent of its inpatients would then constitute its service area." (53 FR 35810-11).
In March 1990, we issued a revised manual which inadvertently reflected policy prior to October 1, 1988; specifically, section 2810 A.2.c of the Medicare Provider Reimbursement Manual, Part 1 (HCFA Pub. 15-1) stated, "'A hospital may define its service area as the lowest number of contiguous zip codes from which the hospital draws at least 75 percent of its inpatients." (Emphasis added.) This revision does not accurately reflect the definition of "service area" that we set forth in the FY 1989 final rule in response to ProPAC's recommendation that we address the criteria for SCH status. It has come to our attention that, accordingly, some hospitals have raised questions about the definition of service area. In this proposed rule, we are clarifying that, consistent with the language in the September 30, 1988 final rule, our definition of "service area" for purposes of determining SCH status does not require contiguous zip code areas. We have applied this definition since October 1, 1988 (the effective date of the September 30, 1988 final rule). The
current manual inadvertently reflects previous policy, and does not reflect our current policy as set forth in the Federal Register and applied since October 1, 1988. We intend to revise the current manual accordingly at our earliest opportunity.
B. Rural Referral Centers (§ 412.96)

Under the authority of section 1886(d)(5)(C)(i) of the Act, § 412.96 sets forth the criteria a hospital must meet in order to receive special treatment under the prospective payment system as a rural referral center. For discharges occurring before October 1, 1994, rural referral centers recei ved the benefit of payment based on the other urban rather than the rural standardized amount. As of that date, 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 criteria under which a rural hospital may qualify as a referral center is to have 275 or more beds avai lable for use. A rural hospital that does not meet the bed size criterion can qualify as a rural referral center if the hospital meets two mandatory criteria (number of discharges and case-mix index) 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 casemix 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.)


## 1. 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 1995 (October 1, 1994 through September 30, 1995) and include bills posted to HCFA's records through December 1995. Therefore, in addition to meeting other criteria, we are proposing that to qual ify for initial rural referral center status or to meet the triennial review standards for cost reporting periods beginning on or after October 1, 1996, a hospital's case-mix index value for FY 1995 would have to be at least-

- 1.3332; or
- Equal to the median casemix 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 | Casemix index value |
| :---: | :---: |
| 1. New England (CT, ME, MA, NH, RI, VT) | 1.2292 |
| 2. Middle Atlantic (PA, NJ, NY) ...... | 1.2224 |
| 3. South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV) | 1.3375 |
| 4. East North Central (IL, IN, MI, $\mathrm{OH}, \mathrm{WI})$ | 1.2450 |
| 5. East South Central (AL, KY, MS, TN) | 1.2911 |
| 6. West North Central (IA, KS, MN, MO, NE, ND, SD) $\qquad$ | 1.2178 |
| 7. West South Central (AR, LA, OK, TX) | 1.3080 |
| 8. Mountain (AZ, CO, ID, MT, NV, NM, UT, WY) | 1.3284 |
| 9. Pacific (AK, CA, HI, OR, WA) .... | 1.3333 |

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 recei ved for discharges through September 30, 1995.

For the benefit of hospital seeking to qual ify 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 1995 case-mix index value in Table 3C in section $V$ of the $A$ ddendum to this proposed rule. In keeping with our policy on discharges, these case-mix index val ues are computed based on all

Medi care patient di scharges subject to DRG-based payment.

## 2. 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 regi onal standards. The proposed regional standards are based on discharges for urban hospitals' cost reporting periods that began during FY 1994 (that is, October 1, 1993 through September 30, 1994). 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, 1996, the number of discharges a hospital must have for its cost reporting period that began during FY 1995 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) | 6812 |
| 2. Middle Atlantic (PA, NJ, NY) | 9067 |
| 3. South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV) | 6972 |
| 4. East North Central (IL, IN, MI, OH, WI) $\qquad$ | 6958 |
| 5. East South Central (AL, KY, MS, TN) | 5007 |
| 6. West North Central (IA, KS, MN, MO, NE, ND, SD) | 4216 |
| 7. West South Central (AR, LA, OK, TX) | 4002 |
| 8. Mountain (AZ, CO, ID, MT, NV, NM, UT, WY) $\qquad$ | 6992 |
| 9. Pacific (AK, CA, HI, OR, WA) .... | 5669 |

We reiterate that, to qual ify for rural referral center status for cost reporting periods beginning on or after October 1, 1996, an osteopathic hospital 's number of discharges for its cost reporting period that began during FY 1995 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 revi ewed 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 classifi cation 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 $\S 412.96$ (b)(1) or § 412.96(b)(2) or § 412.96(c). For example, if a hospital meets the casemix 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 1997 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 3year extension effective with cost reporting periods beginning in FY 1997, a hospital must meet the criteria in § 412.96(c) for FY 1997 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 |
| :---: | :---: | :---: | :---: |
| 1996 .............................................. | 1994 ............................................. | 1994 | September 1, 1995. |
| 1995 | 1993 ............................................ | 1993 | September 1, 1994. |
| 1994 .......................................... | 1992 ............................................ | 1992 ............................................. | September 1, 1993. |

Example: A hospital with a cost reporting period beginningJuly 1 qualified as a referral center effective July 1,1994 . The hospital has fewer than 275 beds. Its 3 -year status as a referral center is protected through June 30, 1997 (the end of its cost reporting period beginning July 1, 1996). 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, 1994, July 1, 1995, and July 1, 1996. The hospital must meet the criteria in effect either for its cost reporting period beginning July 1, 1997, 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 , 1995, the hospital 's case-mix index value during FY 1993 must have equal ed or exceeded the lower of the national or the appropriate regional standard as published in the September 1, 1994 final rule with comment period. The hospital's total number of discharges during its cost reporting year beginning July 1,1993 , must have equal ed or exceeded 5,000 or the regional standard as published in the September 1, 1994 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 § $412.105(\mathrm{~b})$ ) 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. Disproportionate Share Adjustment

 (§ 412.106)Section 1886(d)(5)(F) of the Act provides for additional payments for hospitals that serve a disproportionate share of low income patients. The di sproportionate share adjustment, which was added to the prospective payment system by section 9105 of the Consolidated Omni bus Budget Reconciliation Act of 1985 (Public Law 99-272), was intended to address the higher Medicare costs associated with treating a large number of low-income patients. Under this provision, patients who are eligible for Medicaid and Supplemental Security Income (SSI) benefits were used as a proxy measure of the proportion of low-income patients.

A hospital's disproportionate share adjustment is determined by cal culating the sum of two patient percentages (Medicare Part A/Supplemental Security Income (SSI) covered days to total Medicare Part A covered days, and Medicaid but not Medicare Part A covered days to total inpatient hospital days). Based on the location and size of
the hospital, a formula determines if the hospital's patient percentage qualifies the hospital for an adjustment and how much that adjustment will be.

With respect to the Medicare-SSI cal culation, hospitals have expressed dissatisfaction with these proxy measures, and have challenged HCFA's implementation of them in recent litigation. Since SSI beneficiary information is confidential, hospitals do not have access to lists of patients who are eligible for both Medicare Part A and SSI benefits. Hospital s are increasingly frustrated by their inability to monitor these data.
With respect to the Medicaid fraction, hospitals have complained that, because of Medicaid coverage restrictions, Medi caid covered days may not be a consistent measure of indigent care across States. Medi cai d reforms under consideration by the President and Congress may further interfere with the utility of Medicaid covered days as a measure of the proportion of lowincome patients.
Because of these concerns, we have been examining al ternative measures of indigent care. Some of the measures we have explored using are estimates of patient income in a hospital's service area, hospital levels of bad debt, and proportion of emergency room admissions in a hospital. Because of data and other limitations, however, we have yet to find an alternative that appears promising as a replacement to
the present measure. We are, therefore, soliciting comments from the industry on better and more direct measures of indigent care than the present measure that relies on SSI and Medicaid data. Our preference would be to use data that are al ready available. We would, however, be open to considering measures that require new data collection if we were convinced that the result would be beneficial to hospitals and HCFA. We note that since HCFA is bound by the current statutory provisions, we cannot revise the disproportionate share adjustment without legislative action.

We note that ProPAC is al so concerned with these issues. In its March 1, 1996 report, ProPAC recommended that the structure of the disproportionate share adjustment be reviewed to make certain that available funds are distributed equitably among the hospital s most in need of assistance. (Recommendation 18.) The Commission believes that Medicaid utilization has never been an optimal measure of service to low-income patients and is al so concerned with the impact of possible reform in the structure of Medicaid. Thus, ProPAC recommends that a comprehensive review of the disproportionate share adjustment be
undertaken, including assessment of the objectives of this payment and defining the population and scope of care to be covered. Alternati ve measures of lowincome patient care could then be considered, including any data collection necessary. As discussed above, we agree with ProPAC that new measures should be explored. We bel ieve that this is a first step in reforming the payment formula for the disproportionate share adjustment. We also recognize that the devel opment of a better measure of the services hospitals provide to indigent patients may require the collection of new data.

In addition, ProPAC is concerned about the potential impact of reductions in the disproportionate share payments. (Recommendation 17.) The Commission bel ieves that hospitals that treat a large number of the uninsured could be particularly vulnerable because of recent changes in the health care environment. ProPAC cautions against large reductions in disproportionate share payments that would threaten the continued ability of many hospitals to serve populations who depend on them for access to care. We note that the President's FY 1997 budget does not include any reduction in payment for disproportionate share hospital s.
D. Direct Graduate Medical Education (§ 413.86)

## 1. Initial Residency Period Limitations

We are updating the Initial Residency Period Limitations for direct graduate medical education (GME), originally published in the Federal Register on September 29, 1989 (54 FR 40286). The regulations in § $413.86(\mathrm{~g})(1)$ state that, " $[e] f f e c t i v e J u l y ~ 1, ~ 1995, ~ a n ~ i n i t i a l ~$ residency period is defined as the minimum number of years required for board eligibility."
The update reflects the following:

- Effective July 1, 1995, section 1886(h)(5)(F) of the Act, as amended by Public Law 103-66, defines an initial residency period as the minimum number of years required for initial board eligibility. Previously, this period had been defined as minimum number of years "plus one." The prior listing had included the additional year, not to exceed five years.
- Changes in curriculum requirements regarding the number of years needed for board eligibility for previously approved programs.
- Addition of newly approved graduate medical education programs.
initial Residency Period Limitations

| Residency type | Initial Residency Period Limitation (No. of years) |
| :---: | :---: |
| Allopathy |  |
| ANESTHESIOLOGY | 4 |
| Critical Care Medicine | 4 |
| Pain Management | 4 |
| COLON AND RECTAL SURGERY | 5 |
| DERMATOLOGY | 4 |
| Dermatopathology | 4 |
| Clinical \& Laboratory Dermatological Immunology | 4 |
| EMERGENCY MEDICINE ....................................... | 3/4 |
| Sports Medicine | 3 |
| FAMILY PRACTICE | 3 |
| Geriatric Medicine | 5 |
| Sports Medicine | 3 |
| INTERNAL MEDICINE | 3 |
| Adolescent Medicine | 3 |
| Cardiovascular Disease | 3 |
| Clinical Cardiac Electrophysiology | 3 |
| Clinic \& Laboratory Immunology | 3 |
| Critical Care Medicine | 3 |
| Endocrinology, Diabetes, and Metabolism | 3 |
| Gastroenterology | 3 |
| Geriatric Medicine | 5 |
| Hematology | 3 |
| Hematology and Oncology | 3 |
| Infectious Disease | 3 |
| Medical Oncology | 3 |
| Nephrology | 3 |
| Pulmonary Disease | 3 |
| Pulmonary Disease and Critical Care Medicine | 3 |
| Rheumatology | 3 |
| Sports Medicine | 3 |
| MEDICAL GENETICS | 4 |

## Initial Residency Period Limitations-Continued



## Initial Residency Period Limitations-Continued



## Initial Residency Period Limitations-Continued

| Residency type | Initial Residency Period Limitation (No. of years) |
| :---: | :---: |
| Pediatric Hematology/Oncology | 3 |
| Pediatric Infectious Diseases .. | 3 |
| Pediatric Intensive Care .... | 3 |
| Pediatric Nephrology | 3 |
| Pediatric Pulmonology | 3 |
| Pediatric Sports Medicine | 3 |
| PREVENTATIVE MEDICINE | 4 |
| PROCTOLOGY | 3 |
| RADIATION ONCOLOGY | 4 |
| RADIOLOGY, DIAGNOSTIC | 5 |
| Angiography and Interventional Radiology | 5 |
| Diagnostic Ultrasound | 5 |
| Neuroradiology .. | 5 |
| Nuclear Radiology | 5 |
| Radiological Imaging | 5 |
| Pediatric Radiology | 5 |
| REHABILITATION MEDICINE | 4 |
| Sports Medicine | 4 |
| GENERAL SURGERY | 5 |
| NEUROSURGERY | 5 |
| PLASTIC AND RECONSTRUCTIVE SURGERY | 5 |
| THORACIC CARDIOVASCULAR SURGERY | 5 |
| UROLOGICAL SURGERY | 5 |
| GENERAL VASCULAR SURGERY | 5 |
| CRITICAL CARE SURGERY | 5 |
| OSTEOPATHIC MANIPULATIVE MEDICINE | 3 |
| Podiatry |  |
| ROTATING PODIATRIC RESIDENCY (PRIMARY CARE) | 2 |
| PODIATRIC ORTHOPEDIC RESIDENCY | 2 |
| PODIATRIC SURGICAL RESIDENCY | 2 |
| Dentistry |  |
| DENTAL PUBLIC HEALTH | 1 |
| ENDODONTICS | 2 |
| ORAL PATHOLOGY | 3 |
| ORAL AND MAXILLOFACIAL SURGERY | 4 |
| ORTHODONTICS | 2 |
| PEDIATRIC DENTISTRY | 2 |
| PERIODONTICS | 3 |
| PROSTHODONTICS | 3 |
| PROSTHODONTICS/MAXILLOFACIAL | 3 |
| GENERAL DENTISTRY | 1 |
| ADVANCED GENERAL DENTISTRY | 2 |
| Allopathy Combined Programs* |  |
| FAMILY PRACTICE(3) AND PSYCHIATRY(4) | 4 |
| INTERNAL MEDICINE (3) \& EMERGENCY MEDICINE $(3)$ | 3 |
| INTERNAL MEDICINE (3) \& FAMILY PRACTICE(3) | 3 |
| INTERNAL MEDICINE(3) \& NEUROLOGY(4) | 4 |
| INTERNAL MEDICINE(3) \& PEDIATRICS(3) | 3 |
| INTERNAL MED (3) \& PHYS MED \& REHABILITATION(4) | 4 |
| INTERNAL MEDICINE(3) \& PREVENTIVE MEDICINE (3) | 3 |
| INTERNAL MEDICINE (3) \& PSYCHIATRY(4) | 4 |
| NEUROLOGY(4) \& PHYS MEDICINE AND REHAB(4) | 4 |
| PEDIATRICS(3) \& EMERGENCY MEDICINE(3) | 3 |
| PEDIATRICS(3) \& PHYSICAL MEDICINE AND REHAB(4) | 4 |
| PEDIATRICS(3)/PSYCHIATRY(4)/CHILD \& ADOL PSYCH(4) | 4 |
| PSYCHIATRY(4) AND NEUROLOGY(4) | 4 |

* For residents participating in combined programs, Medicare limits the initial residency period to the time required for individual certification in the longer of the two programs.


## 2. Combined Residency Programs

While updating the listing of the Initial Residency Period Limitations for GME, we noted many new programs were combined specialty residency programs. The combined programs run concurrently for a period of time that is
longer than the required time for certification in either specialty, but shorter than would be required if the programs were taken sequentially. Residents completing these programs are eligible for board certification in both specialties.

We use the Internal Medicine and Pediatrics combined program as an example: Taken individually, Internal Medicine is a 3-year program and Pediatrics is al so a 3-year program. However, taken as a combined program, Internal Medicine and Pediatrics is a 4-
year program, with certification in both specialties.

Currently, we are aware of 13 combined programs, including Internal Medicine/Pediatrics, Pediatrics/ Emergency Medicine, Family Practice/ Psychiatry, and Neurology/Physi cal Medicine and Rehabilitation.

Due to the increasing prevalence of combined residency programs since our September 29, 1989 final rule, we propose to clarify how the definition of initial residency period applies in such cases. While the combined programs may have advantages from an educational standpoint, the statutory limitation on payment for GME still applies. In the initial legislation for a per resident payment to hospitals for GME, Congress limited Medicare's liability for those payments to residents in their initial residency period plus one year. The plus-one-year provision allowed for payment for an additional year as a full FTE for residents who continued on in a second approved program after completing their initial certification. However, regardless of the number of additional years the second program required for certification, at most only the first year could be paid as a full FTE. All subsequent years are paid at a 0.5 FTE rate. When Congress revised section 1886(h) of the Act to remove the plus-one-year provision, Congress further restricted payment to allow payment as a full FTE for the first resi dency program only. All years of a subsequent program are now limited to the 0.5 FTE rate. Congress clearly wanted to further limit Medi care's payment obligations. Accordingly, we believe that the initial residency period limitation is designed to allow full Medicare payment only for the period required to train in one specialty.

For residents enrolled in combined programs, we are therefore proposing to define the initial residency period as the time required for individual certifi cation in the longer of the two programs. Continuing to use Internal Medicine and Pediatrics as an example, we would define the initial residency for Internal Medicine and Pediatrics as 3 years. The remaining year of the combined program would be treated as 0.5 FTE, in accordance with the regulations at § 413.86(g)(3).
E. Distribution of an "Important Message from Medicare"' (§ 489.27)

Under § 489.27 of our provider agreement regulations, all hospitals that participate in Medicare (including those not paid under the prospective payment system) must agree to furnish each Medicare beneficiary with a notice, at or about the time of admission, that
explains the patient's discharge rights. This statement, entitled "An Important M essage from Medi care," advises a beneficiary of his or her rights to be fully informed about decisi ons affecting Medicare coverage or payment and about his or her appeal rights in response to any hospital 's notice to the effect that Medicare will no longer cover the patient's care. The "Important Message" also advises the patient of what to do when he or she recei ves such a hospital statement and how to elicit more information.

In November 1993, the M edi care Technical Advisory Group (M-TAG) established the Beneficiary Protection and Documentation Issues Task Force. The task force consists of HCFA staff as well as representatives from health care industry organizations, beneficiary advocate groups, fiscal intermediaries, and peer review organizations (PROs). The task force was charged with reviewing various issues that impact benefi ciaries and the health care community, including how to improve the effectiveness of "A $n$ Important M essage from Medicare."

We are proposing to adopt a recommendation of this task force that would respond to numerous requests for clarification on the timing of the written notice of discharge rights that must be given to hospital inpatients. As noted above, existing § 489.27 speci fies that a hospital must distribute the statement "at or about the time of admission." We understand that for monitoring purposes some PROs have interpreted this requirement to mean "within 24 hours preceding or following the admission." However, we agree with the task force's determination that the PRO's interpretation is unnecessarily narrow. We believe that during the first 24 hours of a patient's admission, the hospital is primarily concerned with ensuring appropriate treatment of the patient's illness or injury. Therefore, we are proposing to change $\S 489.27$ to specify that the hospital must provide timely notice during the course of the hospital stay.

For purposes of this requi rement, we would consider the course of the hospital stay to begin when the hospital provides the individual with a package of information regarding scheduled preadmission testing and registration for a planned hospital admission. This would give hospitals more flexibility in meeting the requi rement, as well as encourage the distribution of the "Important Message" at a time when the benefi ciary is better able to receive and more likely to understand its contents. In complying with the requi rement to provide timely notice during the course
of the patient's hospital stay, the hospital must give the patient the "Important M essage" far enough in advance of the hospital's written notice regarding continued stay to provide the beneficiary time to appeal the hospital's decision. Finally, "timely notice" would also include adherence to any State requirements on the provision of patient rights notices.

The current version of the "Important Message" has been in use since 1988. As part of our effort to improve communication with Medicare beneficiaries, we will continue to evaluate the effectiveness of the "Important M essage" and welcome suggestions for its improvement.

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

A. Consistent Cost Finding During the Capital Transition Period (§ 412.302(d))

Section 412.302(d) of the regulations requires that, during the transition period to full prospective payment for capital-rel ated costs, a hospital must follow consistent cost-finding methods for classifying and allocating capitalrelated costs. Specifically, the regulation requires that unless there is a change of ownership, a hospital must continue the same cost-finding methods for old capital costs, including its practices for direct assignment of costs and its costallocation bases, that were in effect in the hospital 's last cost-reporting period before becoming subject to payment under the capital prospective payment transition system. A hospital may request a change in its cost-finding methods for new capital, provided that the request is made in a timely fashion as provided in the regulation, the hospital provides justification for the change, and the intermediary determines that the justification is reasonable.
It is important to note that, while the regulation does permit changes in costfinding methods for new capital, such changes are only permitted where they do not involve any changes in costfinding for old capital. In practice, this means that if a hospital claims any old capital, the intermediary cannot permit a change in any of the allocation bases on Worksheet B-1 of the cost report from the bases used in the last cost reporting period prior to the capital prospective payment system transition period. Otherwise, the consistency rule governing old capital cost-finding would be violated.
As we discussed in the preamble to the August 30, 1991 final rule for the capital prospective payment system (56

FR 43396), our primary reason for establishing this consistency rule was to prevent hospitals from using changes in cost-finding methodologies to shift costs to areas where payment continues to be made on a reasonable cost basis. Allowing changes in cost-finding methodologies to accomplish such costshifting would obviously defeat the purpose of adopting a prospective payment system.
In response to concerns expressed by the hospital industry about the costs of the recordkeeping required under the cost-reporting rules, HCFA has devel oped new cost reporting instructions, which will be released Iater this year, that permit hospitals to voluntarily adopt a simplified cost al location methodology. This methodology reduces the number of statistical bases that a hospital is required to maintain. Under the new instructions for HCFA Form 2552-96 (the cost report instructions for FY 1996 cost reporting periods), hospitals may request the simplified cost allocation methodology. However, hospitals that elect this methodology must employ a prescribed list of statistical bases with no deviations. Hospitals may not pick and choose among the prescribed statistics for the combination that is most advantageous. Furthermore, a hospital that elects the simplified methodology must continue to use it for at least 3 years, unless a change of ownership occurs. We expect that, while election of the simplified method will al ways result in reduced recordkeeping costs for the hospital, it will al so result frequently in reduced Medicare payment for the hospital. In fact, the instructions for HCFA Form 2552-96 will caution hospitals to compare the reduced costs of program compliance with the reduced costs of the simplified recordkeeping before el ecting the simplified method.
We bel ieve this proposal to permit election of the simplified cost al location methodology, as provided in the instructions for HCFA Form 2552-96, reasonably reconciles concerns about recordkeeping costs with the requirement of consistent cost-finding during the transition. Specifically, we propose to add a new paragraph (d)(4) to §412.302, to provide that, hospital s may elect to adopt the simplified cost al location methodology, as will be provided in the instructions for HCFA Form 2552-96.
B. Possible Adjustments to the Capital Prospective Payment System Federal Rate and Hospital-Specific Rates (§§ 412.308(b) and 412.328)

In the proposed and final rules for $F Y$ 1996 (60 FR 29238-29239 and 60 FR 45830-45831), we discussed the effects of the expiration of the statutory budget neutral ity provision on rates and aggregate payments under the capital prospective payment system. Under the budget neutrality provision, we set the capital-prospective payment system rates during FY 1992 through FY 1995 so that payments were projected to equal 90 percent of Medicare payments that would have been made on a reasonable cost basis for each fiscal year. As a result of the provision's expiration in FY 1996, the capitalprospective payment system rates and payments under the transition system increased significantly. The FY 1996 Federal rate is 22.59 percent higher than the FY 1995 Federal rate. We now estimate that aggregate capital payments will increase 27.7 percent in FY 1996 rel ative to FY 1995, and that payments will exceed capital costs by 9.6 percent in FY 1996. Under current law and regulations, we estimate that aggregate payments will further increase by 7.3 percent in FY 1997, for an increase of 37.0 percent over 2 years. We do not bel ieve that such large increases in capital payments are necessary or warranted.

During the FY 1996 rulemaking process, we solicited comments on possible revisions to the capital prospective payment rates that would have moderated these substantial increases in payments. At that time, we noted that section 1886(g) of the Act gives the Secretary broad discretion in the determination of the appropriate level of rates and payments. However, we decided not to implement any reduction to the capital rates at that time, in the expectation that Congress would be considering revisions to rates and payments under the capital prospective payment system within more comprehensive legislation dealing with Medicare and the Federal budget.

In its March 1, 1996 Report to Congress, the Prospective Payment A ssessment Commission (ProPAC) observed that the base capital rate was reduced during the first 4 years of the transition to full prospective payment for capital to meet the statutory budget neutrality requirement. In the light of the large increase in rates and payments as a result of that provision's expiration in FY 1996, ProPAC recommends (Recommendation 11) that the capital payment rates should be set by
developing an appropriate base payment rate and applying an annual update. The Commission notes that there are several ways to determi ne an appropriate base capital payment rate.

We agree with ProPAC that the large increase in rates and payments caused by the expiration of the statutory budget neutrality provision raises an issue concerning the proper level for future rates and payments. We also agree that there are several possible approaches to establishing an appropriate level for the rates. We considered a range of options in developing this proposed rule. For example, we considered proposing to freeze the inflation updates for the rates in FY 1997, on the grounds that such an update was unnecessary and unwarranted in light of the large increase in the rates for FY 1996. Alternatively, we considered proposing actual reductions in the base rates. For example, we considered proposing to implement the provision contai ned in the Administration's budget plan. The Administration's FY 1997 budget includes a provision to reduce the base Federal and hospital-specific rates by 15.7 percent. Such a reduction would build the budget neutral ity adjustment for FY 1995 (0.8432, or -15.68 percent) permanently into the base rates, effectively using the FY 1995 base payment rate as the base for future years. The actual payment rates for future years would then be determined by applying the analytical update framework that we adopted in the final rule for FY 1996 (60 FR 45815-45829). We also considered proposing to implement a part of the Administration's proposal, that is, to reduce the standard Federal rate by 7.38 percent and the hospital-specific rates by 9.48 percent. The rational e for each of these options to reduce the base rate derives from an analysis of current data compared to data on which the rate was originally based.

Under § 412.308, HCFA determined the standard Federal rate, which is used to determine the Federal rate for each fiscal year, on the basis of an estimate of the FY 1992 national average Medicare capital cost per discharge. The FY 1992 national average Medicare capital cost per discharge was estimated by updating the FY 1989 national average M edi care capital cost per discharge by the estimated increase in Medicare inpatient capital cost per discharge. As we discussed in the preamble to the August 30, 1991 capital prospective payment system final rule (56 FR 43366-43384), HCFA used the July 1991 update of HCRIS data to estimate an FY 1989 national average Medicare cost per case of $\$ 527.22$.

HCFA then updated that amount to FY 1992 by using an actuarial projection of a 31.3 percent increase in Medicare capital cost per discharge from FY 1989 to FY 1992. The standard Federal rate was thus based on an estimated FY 1992 national average Medicare capital cost per discharge of $\$ 692.24$ (before the application of a transfer adjustment and a payment parameter adjustment).
Section 13501(a)(3) of Public Law 103-66 amended section 1886(g)(1)(A) of the Social Security Act to require that, for discharges occurring after September 30, 1993, the unadjusted standard Federal rate be reduced by 7.4 percent. As we discussed in the September 1, 1993 final rule for FY 1994 (58 FR 46316ff.), the purpose of that reduction was to reflect revised inflation estimates, as of May 1993, for the increases in Medi care capital costs per discharge during FY 1989 through FY 1992. By that time, the estimate of increases in Medicare inpatient capital costs per discharge from FY 1989 through FY 1992 had declined from 31.3 percent to 21.57 percent. The 7.4 percent reduction to the Federal rate was calculated to account for these revised estimates ( $1.2157 / 1.313=0.926$, a 7.4 percent decrease). That provision of Public Law 103-66 also required that, for cost reporting periods beginning on or after October 1, 1993, the Secretary redetermine which hospital payment methodology should be applied under the capital prospective payment system transition rules to take into account the 7.4 percent reduction to the Federal rate.
As a result of the reduction required by Public Law 103-66, the standard Federal rate is now based on an estimated FY 1992 M edicare inpatient capital cost per case of $\$ 641.01$ (\$692.24×0.926). At the time of the Public Law 103-66 reduction to the Federal rate, actual cost report data on the FY 1992 Medicare capital cost per discharge were not yet avai lable. The reduction was based on cost report data for FY 1990 and FY 1991, and a revised projection of the rate of increase in Medicare capital costs per discharge during FY 1992. We now have extensive cost report data for FY 1992. The March 1996 update of HCRIS data shows an audit-adjusted FY 1992 Medicare inpatient capital cost per discharge of $\$ 593.72$, or an additional 7.38 percent lower than the estimate on which the Federal rate is currently based.
Under § 412.328 , HCFA determined the FY 1992 hospital-specific rate by using a process similar to the process for determining the FY 1992 Federal rate. The intermediary determined each hospital's allowable Medicare inpatient
capital cost per discharge for the hospital 's latest cost reporting period ending on or before December 31, 1990. The intermediary then updated each hospital's FY 1990 allowable M edicare capital cost per discharge to FY 1992 based on the estimated increase in Medicare inpatient capital cost per case. As with the Federal rate updates, current data demonstrate that the estimates used to update the hospital specific rates from FY 1990 to FY 1992 were overstated. Specifically, the hospital-specific rates are 9.48 percent higher than they would have been if the rates of increase had reflected actual data. Thus, revising the Federal and the hospital-specific rates only for the known overestimations in the actual costs on which rates were based would call for reductions of 7.38 percent and 9.48 percent, respectively.

The proposal in the Administration's budget to reduce the rates 15.7 percent reflects the preceding factors, as well as analysis of capital cost increases before the implementation of the prospective payment system for capital-rel ated costs. That analysis suggests that the Federal and hospital-specific rates may reflect levels of cost in excess of what can be accounted for by the rate of inflation in capital input prices, quality enhancing intensity increases, and real case mix growth. Economic theory suggests that an industry with a guaranteed return on capital (such as the hospital industry prior to prospective payment for capital-related costs) would have a tendency to be overly capitalized rel ative to more competitive industries. This is because the incentive for firms in such an industry is to compete on the basis of more capital-intensive production processes than firms in other industries. As a result, capital costs per case, and therefore base year prospective capital rates, may be higher than would have been consistent with capital acquisition policy in more efficiency-oriented markets.

To examine this issue, in our June 2 , 1995 proposed rule (60 FR 29237) we analyzed the change in actual Medicare capital cost per case for FY 1986 through FY 1992 in relation to the change in the capital input price index (which accounts for change in the input prices for capital-rel ated costs), and the other adjustment factors that we were then proposing to include in the framework. (The other adjustment factors are the increase in real case mix and the increase in intensity due to qual ity-enhancing technol ogical change and within-DRG complexity.) We found rates of increase in actual spending per case that exceeded the rate of increase
attributable to inflation in capital input prices, quality-enhancing intensity increases, and real case-mix growth. Our Iast anal ysis (60 FR 45826-45829) suggested that the FY 1992 capital costs used to set the Federal and hospitalspecific capital rates exceeded by approximately 28 percent the level that could be accounted for by known factors.

We seriously considered proposing one of these options-reducing the standard (base) Federal rate either 7.38 percent to address overstated inflation estimates or 15.7 percent, as reflected in the Administration's budget proposal in this proposed rule. We believe that either of these options is well justified on the basis of current data and anal ysis. As ProPAC has observed, hospitals do not seem to have been adversely affected by the level of the rates during the years in which the statutory budget neutrality provision was in effect. However, we still believe that Congress and the Administration may be able to reach an agreement on budget issues, including Medi care savings, in the near future. Therefore, as discussed in section III of the Addendum to this proposed rule, at this time we are proposing to update the capital rates in accordance with the capital update framework, without implementing any of the reductions discussed above. Our hope is that the legislative process will produce an appropriate adjustment to the rate level in time for implementation in the final rule. In the event that no such agreement is reached before the final rule for FY 1997, we may implement one of the above-described options at that time. We invite public comment on the merits of these options, and on the advisability of implementing one or the other in the final rule, in the absence of legislative action. We will reconsider all the options in the light of public comments.
C. 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 capitalrelated payments under its payment methodology (i.e., fully prospective or hold-harmless) are less than a minimum percentage of its al lowable Medicare inpatient capital-related costs. The minimum payment levels are established by class of hospital s under § 412.348(c). The minimum payment
levels for portions of cost reporting periods occurring in FY 1996 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 § $412.348(\mathrm{~d})$, 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(h) further provides that total estimated exceptions payments under the exceptions process may not exceed 10 percent of the total estimated capital prospective payments (exclusive of hold-harml ess payments for old capital ) for the same fiscal year. In the final rule implementing the prospective payment system for capital rel ated 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 1997 Federal and hospital-specific rates. In particular, we discuss the FY 1997 exceptions payment reduction factor. This factor adjusts the annual payment rates for the estimated amount of additional payments for exceptions in FY 1997. In this proposed rule, we estimate that exceptions will equal 6.07 percent of aggregate payments based on the Federal rate and the hospitalspecific rate. We will devel op a new estimate of the level of exceptions payments in FY 1997, and revise the exceptions payment adjustment factor accordingly, on the basis of the data that becomes avail lable to us in time for devel oping the final rule for FY 1997. 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 al most certainly be necessary to adjust the minimum payment levels for FY 1998. We are therefore providing public notification that adjustments to the minimum payment levels are possible in the final rule, and almost certain for FY 1998.

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 (i.e., 90 percent for sole community hospitals, 80 percent for large urban DSH hospitals, and 70 percent for all other hospitals) 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 I arge urban DSH hospitals, and 65 percent for all other hospitals, provided that aggregate exceptions payments at those minimum payment levels were projected to be no more than 10 percent of total rate-based payments. If aggregate exceptions payments at those minimum payment levels still exceeded 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 $\S 412.348(\mathrm{~h})$ 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 invite public comment on this matter, and will consider those comments fully whenever it becomes necessary to adjust the minimum payment level s in accordance with § 412.348(h).

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

Application of Ceiling in Calculating Payment for Hospital Inpatient Operating Costs (§ 413.40 (d) and (g))

Section 1886(b)(1)(B) of the Act provides for an additional payment to a hospital excluded from the prospective payment system when the hospital 's reasonable operating costs exceed its target amount. The additional payment is based on the lesser of 50 percent of the amount by which the operating costs exceed the target amount, or 10 percent of the target amount. The M edicare statute further provides that this comparison is made "after any exceptions or adjustments are made to such target amount for any cost reporting period." The regulations, at 42 CFR § 413.40(d)(3), state that the total
payment to the hospital for inpatient operating costs (including the additional payment described above) is based on the lesser of the following: the "ceiling" (target amount multiplied by the number of Medicare discharges) plus 50 percent of the allowable net inpatient operating costs in excess of the ceiling, or 110 percent of the ceiling. However, the regulations do not explicitly include the additional statutory requirement regarding the effect of exceptions or adjustments.

It is our understanding that there are questions about the calculation of the additional payment under the regulations, which require comparison of two amounts: the "ceiling" plus 50 percent of the difference between allowable costs and the ceiling, and 110 percent of the "ceiling." Specifically, where a hospital has received an adjustment to the target amount under $\S 413.40(\mathrm{~g})$, there has been confusion as to whether the "ceiling" used for purposes of cal culating the additional payment under § 413.40(d) is the unadjusted ceiling (the amount determined without consideration of any adjustments granted to the hospital) or the adjusted ceiling.

We believe that the amount of the additional payment should be determined using the adjusted ceiling when hospital s receive adjustments to the ceiling. That is, the calculation of the amounts compared- 50 percent of the al lowable net inpatient operating costs in excess of the ceiling, or 10 percent of the ceiling-should reflect the adjusted target amount (and adjusted ceiling). To address any confusion about these issues, we propose to revise § 413.40 (d)(3) to specifically indicate that cal culation of payments for hospital inpatient operating costs under that provision reflects the adjusted ceiling amount (the amount determined after an adjustment under § 413.40(g)). This would apply to all adjustments, including adjustments based on a longer average length of stay in the hospital's rate year as compared to the base year and adjustments for increased routine services.
We note that an adjusted ceiling is not used to adjust permanently the hospital's target amount or ceiling on the hospital 's cost report. Instead, it is used only for purposes of calculating payments for the year the adjustment is granted. We also note that, depending on the specifics of the data in a particular case, use of an adjusted ceiling can result in either an increase or decrease in the additional payment to a hospital relative to use of an unadjusted ceiling. If the additional payment to a hospital is 50 percent of
the allowable net inpati ent operating costs in excess of the ceiling, the additional payment would be lower using an adjusted ceiling (as under proposed § 413.40(d)(3)) than an unadjusted ceiling. This would occur because an adjusted ceiling reduces the difference between the hospital 's costs and the ceiling. However, if the additional payment to the hospital is 10 percent of the ceiling, the additional payment would be higher using an adjusted ceiling than an unadjusted ceiling.

## VIII. ProPAC Recommendations

We have reviewed the March 1, 1996 report submitted by ProPAC to Congress and have given its recommendations careful consideration in conjunction with the proposals set forth in this document. Recommendations 10 and 12, concerning the update factors for inpatient operating costs, and the update factor for hospitals excluded from the prospective payment system and distinct-part units, are discussed in Appendix F to this proposed rule. Recommendation 11, on the setting of capital payment rates, is discussed in section VI of this proposed rule. Recommendations 17 and 18, concerning di sproportionate share hospitals, are discussed in section V of this proposed rule. The remaining recommendations are discussed below.

## A. Slowing the Rise in Medicare Spending (Recommendation 1)

Recommendation: The Commission supports the efforts of the Congress and the President to reduce the growth in Medicare expenditures. Over time, spending for services furnished to Medicare enrollees should increase at rates comparable to those in a cost- and quality-conscious private sector.
Response: We agree with ProPAC about the importance of slowing the growth in Medicare spending. We support ProPAC's assertion that the experience in the private sector with market forces that encourage cost containment represents a useful factor in considering appropriate growth in Medicare. We also agree with those factors upon which ProPAC urges this comparison: spending growth on a perperson basis and recognizing the health care needs of an aged and disabled Medicare population. We caution, however, that while it may be appropriate to compare growth service by service, aggregate comparisons would not be meaningful due to differences in the mix of services.
Medicare and private heal th insurance provide a different array of services. Medicare covers more long-
term care services, such as home heal th visits and skilled nursing facility (SNF) stays, than private insurance. Although their share of total Medicare spending is small, SNF and home health services are growing more quickly than other services within Medicare, and therefore spending for these services has been growing at a much faster rate than for other services. Data from 1992 and 1993 indicate that payments increased for SNF and home heal th services by 40.6 percent and 35.2 percent, respectively, whereas the growth in physician and hospital payments were only 4.5 percent and 8.3 percent, respectively. In order for Medicare and private health insurance to grow, in aggregate, at the same rate, spending for hospital and physician services would have to be growing more slowly in Medicare than in private health insurance to offset differences in long-term care growth. Due to these differences in mix of services, meaningful comparisons between Medicare and the private sector can only be made on a service-byservice basis.

## B. The Failsafe Budget Mechanism (Recommendation 2)

Recommendation: Any failsafe budget mechanism should include a more effective risk adjustment factor to ensure payment equity between the Medicare capitation and traditional fee-for-service programs. In addition, changes in inflation that differ substantially from Congressional Budget Office (CBO) forecasts could require modifications to the M edi care benefit budget over time. Revisions to the proposed fee-for-service sector budget al locations could al so be needed as medical practices change.

Response: We believe that using a fail lsafe budget mechanism (that is, an arbitrary cap on spending) to achieve targeted spending levels would be bad public policy. A failsafe mechanism would fundamentally change the nature of the Medicare program by breaking the link between benefits and payments. To meet the cap, benefits might have to be reduced, beneficiaries might have to pay more, and payments to providers might have to be reduced, all of which would impede access. A fail safe mechanism would encourage cost shifting to beneficiaries and other payers in order to achieve the targeted goal in government spending.

These arbitrary reductions in payments would make government an unrel iable business partner. As M edicare moves toward a more marketoriented approach to setting payments, arbitrary reductions imposed by the government, after providers have negotiated in good faith, would sour
relations and threaten the market pricing process.

The fai Isafe mechanism is a substitute for policy choices to achieve the desired level of spending. This arbitrary Medicare budget cap could potentially have adverse effects on the Medicare program.

We note that, while ProPAC recommends using a more effective risk adjustment factor to ensure payment equity between Medicare capitated and fee-for-service programs, no adequate case-mix measure currently exists that could serve this purpose.

## C. Expanding Medicare's Capitation Program (Recommendation 3)

Recommendation: The Commission supports reforming the Medicare capitation program to control spending while expanding beneficiary choice.
Response: HCFA agrees with this recommendation and has specifically developed legislation to allow for Preferred Provider Organizations (PPOs) and Provider Sponsored Organizations (PSOs) to contract with the Medicare program. Furthermore, in October 1995, HCFA issued guidel ines that notified HMOS that they were permitted to develop Point of Service (POS) Programs, which allow beneficiaries to go out of network for services. HCFA is currently conducting the Choices Demonstration, through which it is sol iciting applications for the above types of provider arrangements.

## D. Setting and Updating the Capitation

 Rates (Recommendation 4)Recommendation: Geographic variation in the capitation rates and the volatility of the rates from year to year should be reduced. The Secretary should develop and test al ternative payment methods that would allow the payment rates to reflect changes in local market conditions.
Response: We agree that geographic variations in HCFA's payment rates should be reduced. Some of the current legislative proposals would reduce the degree of variation over time.
We have been looking at ways to reduce these variations. Several demonstrations that should provide information needed to develop alternative payment methods are either currently being run or in the process of getting started. We have devel oped and are conducting several research and demonstration projects to review additional risk adjustors, which would modify current payment rates to reflect the health status of the members of managed care organizations. A nother project would pay, from a separate pool of funds being shared by several
organizations in an area, for enrollees who have high Medicare costs. Also, HCFA is in the process of starting another project that would incorporate the payment principles associated with competitive bidding.
E. Improving Risk Adjustment Methods (Recommendation 5)

Recommendation: The risk adjustment methods used to set Medicare capitation payments should better reflect variation in the likely use of services. Even as research on the devel opment of new methods continues, the Secretary should implement interim improvements as soon as possible.
Response: We plan to test heal th status risk adjusters, such as Diagnostic Cost Groups or Ambulatory Care Groups, as part of the Choices Demonstration. Furthermore, in this demonstration, we will test reinsurance and partial capitation arrangements. We are al so considering demonstrations which use heal th status measures as part of the Adjusted Community Rate Determination, as well as part of the payment formula.

## F. Medical Savings Accounts (MSAs)

 (Recommendation 6)Recommendation: The Congress' high deductible/MSA option would provide an additional choice for Medi care enrollees. However, ProPAC is concerned that the current M edi care risk adjustment method is not sufficient to protect the program from adverse selection and resulting excess spending. The likelihood that rates would better reflect risk would be enhanced if Medicare enrollees were required to remain in the MSA option at least for several years.

Response: As ProPAC states, the Congressional Budget Office estimated that the MSA option would cost the Medicare program $\$ 4.6$ billion over 7 years, in part because of the current state-of-the-art in risk adjustment methods (discussed in recommendation 5, above). The CBO estimate of the cost of the MSA option is consistent with the cost estimates of other reputable organizations. We fail to see the rational e for including an option that provides no new benefits but is expected to result in increased costs, particularly at a time when the public and Congress are concerned about the long-term financial viability of the Medicare program.
G. The Medicare Plus Fee-for-Service Option (Recommendation 7)

Recommendation: Enrollees choosing the fee-for-service option under the proposed Medicare Plus program could
be responsible for substantially higher fees than what their plans would pay. The Secretary should monitor the impact of this option on beneficiary liability and on possi ble reductions in physician and other provider participation in traditional Medicare.

Response: We agree with ProPAC that beneficiaries could be responsible for substantially higher fees. We al so agree that, as suggested in this recommendation, al lowing physicians and other providers to elect to serve Medicare beneficiaries through private fee-for-service plans that place no limits on extra-billing amounts may well result in (1) increases in beneficiary liability and (2) reductions in physicians and other providers participating in traditional Medicare. Further, as the payment methods contained in pending legislation described in H.R. 2491 are structured, the payment increases for MedicarePlus plans, relative to those in fee-for-service Medicare, mean that MedicarePlus plans would be able to pay physicians and other providers more than fee-for-service Medicare. These higher payments would create additional incentives for physicians and other providers to cease participation in traditional Medicare. Finally, while managed care plans potentially provide value added because their organizational structure facilitates coordination of care, it is not clear what, if any, value is added by creating a private fee-for-service plan option, under which the private plans receive higher payments relative to fee-forservice Medicare and physicians and providers are permitted to charge unlimited extra-billing amounts.
H. Information for Beneficiary Health Plan Choices (Recommendation 8)

Recommendation: Medicare should make avail able to beneficiaries information about the performance of plans and local providers. The Secretary should identify the information beneficiaries need to make appropriate choices and develop innovative ways to improve access to it.

Response: Current HCFA initiatives to improve beneficiary information about health insurance options, which are summarized below, are consistent with ProPAC's recommendation.
Development of Prototype Materials and Strategies

We are currently engaged in two projects that will develop prototype beneficiary information strategies rel ated to heal th insurance options.

The first project, which focuses mostly on managed care issues, is examining through Medicare and

Medicaid beneficiary focus groups, the types of information and dissemination media that beneficiaries would find most useful in selecting health insurance plans. Based on this information, and case studies, the project will produce and test a range of prototype beneficiary information materials, including beneficiary health plan comparison booklets and charts, and informational videos. Draft prototype materials (for Medicare, preMedicare and Medicaid beneficiaries) are nearing completion and are scheduled for beneficiary testing in Spring 1996.

The second project will design beneficiary information and education materials and dissemination strategies to support the Medicare Open Enrollment/Competitive Pricing demonstration. This project will develop printed materials that explain the experimental open enrollment process; printed general informational materials on Medicare health insurance options; and booklets outlining the specific Medicare fee-for-service and managed care options available to beneficiaries in their area. A plan comparison chart template, which would include information on specific benefits and premiums, will al so be developed, as will other information and educational approaches (including educational seminars, public service announcements (PSAs), informational videos, and a toll-free counsel ing phone line, all sponsored by HCFA). In addition, a dissemination strategy for HCFA and its partners in the demonstration sites will be developed (for example, Insurance Counseling and Assistance (ICA) programs and beneficiary advocacy groups).

Draft materials and strategies were tested on Medicare beneficiaries in April 1996. Final products should be available for adaptation to specific demonstration sites by Summer 1996.

## Medicare Program Activities

We have currently outlined a strategy to produce and disseminate a managed care plan comparison chart to Medicare beneficiaries, initially through the HCFA Regional Offices and HCFAsponsored ICA programs. We will use comparison chart prototypes developed (under both of the projects discussed above) as models for the comparison chart. Prototypes will be available by Spring 1996. We plan to begin dissemination of the basic comparability charts in 1996.
We may also choose to adapt some of the prototype materials for application to the Medicare program, depending on feedback and eval uations from
beneficiaries in the Open Enrollment Demonstration. These new materials could ultimately supplement or replace current materials, such as the Medicare Handbook. New prototype materials could also be provided and adapted individual ly by the State ICA programs. We have contributed recommendations during the devel opment of these projects and will continue to do so.
Many of the Regional Offices have devel oped area specific informational materi als related to M edi care managed care. The Regional Offices typically use these materials to assist in their responsibilities as the local HCFA contact for beneficiaries.

## Related Major Initiatives

While current activities have centered on efforts to provide better information on heal th insurance options (such as focusing on comparisons of benefits, premi ums, and locations), the next major steps in improving information and educational strategies will likely be in the area of qual ity or performance indicators.
The prototypes discussed above will include templates for eventual dissemination of quality/performance indicators for heal th plans. In addition, strategies for introducing the concept of indi cators to Medicare and Medicaid beneficiaries will be produced. One project, short Medicare and Medicaid focused video tapes describing quality indi cators using a "grocery shopping" anal ogy, has al ready been completed.
A final version of a set of Medicaidspecific National Committee on Quality Assurance (NCQA) Heal th Plan Employer Data and Information Set (HEDIS) quality indi cators is nearly completed. We are currently sponsoring the revision (with NCQA) of HEDIS version 3.0 to include Medicarespecific measures. Once both Medicareand Medicaid-specific measures are avai lable, HCFA will have avai lable the basic tools necessary to report comparative qual ity indicators to beneficiaries. A specific dissemination strategy will then be determined.
We are currently in the devel opmental stages of a proposed plan-specific Medicare beneficiary satisfaction survey. When completed, we would have comparative satisfaction information on all Medicare managed care plans, which could then be dissemi nated to beneficiaries as a companion to plan benefit/premium comparison charts.
Based on these initiatives, HCFA should be well prepared to expand and improve both the level and types of heal th insurance information resources avai labl e to Medi care beneficiaries.
I. Health Plan Accountability (Recommendation 9)
Recommendation: Medicare must hold heal th plans accountable for the appropriate use of Medicare funds. In addition, standards must be devel oped and enforced to ensure that Medicare beneficiaries will receive services of appropriate qual ity.

Response: We agree with these recommendations and have several plans for implementing them. First, we are working with the National Committee for Qual ity Assurance to develop HEDIS 3.0 for the Medicare program. Second, we plan to conduct beneficiary satisfaction surveys for a significant sample of beneficiaries from each health plan participating in the Medicare HMO program. Third, we are working with the Foundation of A ccountability to develop conditionspecific outcome measures. Finally, we are working with Peer Review Organizations to develop several condition-specific outcome measures that will be risk adjusted.
J. Broadening Financial Support to Teaching Hospitals (Recommendation 13)

Recommendation: Explicit financial support for graduate medical education activities should not be limited to the Medicare program. Mechanisms to broaden financial support for teachingrelated activities in hospitals and other locations should be developed.

Response: The Commission is concerned that Medicare is the only payer that provides explicit financial support for teaching activities. Even though private payers provide implicit support through higher prices for patient care services, funding is unrel ated to the amount of actual teaching activity.
While we would agree that all payers should contribute their fair share toward physician training and particularly for the patient care services that are provided in the course of this training, we wish to emphasize that Medicare's support for graduate medical education is limited only to Medi care's share of the total cost of graduate medi cal education. That is, although we believe the current level of the indirect medical education adjustment is higher than necessary to compensate for the indirect costs associated with residents'
involvement in patient care, it is set at a level that at one time was thought to equal those costs. Furthermore, because this adjustment is made only for Medicare prospective payment system discharges, it is inherently only associated with Medicare's share of the
indirect costs of graduate medical education. In addition, the direct graduate medical education payment is cal culated based on Medicare's inpatient utilization rate, thereby ensuring that it, too, reflects only Medicare's share of direct graduate medical education. In that vein, we would support a mechanism to broaden support for physician training that did not result in Medicare contributing more than its fair share, relative to the Medicare utilization rate.
We note al so that some Medicaid programs explicitly pay hospitals for the indirect and direct costs of graduate medical education similar to Medicare. In addition, some States (for example, New York, through its Prospective Hospital Reimbursement Methodology) provide explicit support for teaching hospitals through private payers. Nevertheless, we join ProPAC in calling for more uniform support across all payers.
We would note that although the President's health care reform bill attempted to invol ve 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 payments to HMOs include Medi care's costs for medical education. The President's FY 1997 budget would revise Medicare's payments to HMOs so as not to include the portion associated with medical education and paying these funds directly to teaching hospitals and to managed care plans with teaching programs. This change would benefit teaching hospitals, as well as more appropriatel y target Medi care funds designated for medical education.
K. Medicare Payments for Graduate Medical Education Costs
(Recommendation 14)
Recommendation: ProPAC supports changes in Medi care teaching payments that would encourage an appropriate distribution of residents across specialties and discourage inappropriate growth in the total number of residents.
Response: The Commission states that both the proposals of Congress and the President's budgets would move Medi care direct graduate medi cal education payments in the direction of
encouraging appropriate distribution of residents across specialties and discourage inappropriate growth in the total number of residents.

The Administration is very concerned with the issue of Medicare payments to hospitals for graduate medical education. Consistent with numerous reports that the nation has an excess of specialty physicians, and that the growth of managed care is increasing the demand for primary care physicians relative to other specialties, the focus of the President's graduate medical education proposal is to encourage greater hospital participation in primary care residencies and less in special ty residencies. In addition, a significant amount of training of residents in primary care is more appropriately done in non-hospital settings. Accordingly, the President's budget includes a cap on the total number of residents and on the number of nonprimary care residents for whom Medicare will make graduate medical education payments. We would al so encourage ambulatory training by including residents who rotate to nonhospital settings in the hospital's FTE count for IME purposes. We would further encourage ambulatory training by providing direct medical education payments to facilities that are not hospitals (for example, federally qualified health centers) for residents, when the residents' salaries are not paid by hospitals.

The Administration has also proposed to create a Commission on Medical Education and Workforce Priorities within HHS to develop and recommend policies to address the preservation of academic health centers' research and educational capacity and the supply of the future heal th care workforce. This commission would also make recommendations regarding the most effective al location of trai ning resources to ensure that the numbers and competencies of heal th care professionals are responsive to national needs.
L. Medicare Indirect Medical Education Payments (Recommendation 15)
Recommendation: The Medicare indirect medical education adjustment should be reduced from its current 7.7 percent level to 7.0 percent.

Response: As we've said in response to similar ProPAC recommendations in previous years, we agree with ProPAC that the current level of payment for the indirect costs of medical education is too high. The President's FY 1997 budget would reduce the adjustment over 3 years to a final level of 6.0 percent effective for FY 1999. In addition, residents working in
nonhospital settings could be counted in a hospital's resident count for indirect medical education purposes if the hospital incurs all, or substantially all, of the costs for the training program in that setting. Finally, the President's budget would cap the number of residents that could be included in the count, with an exception provided for primary care residents and those in the specialties of obstetrics or gynecology.

The Commission also supported the provision in the President's FY 1996 budget that would apply the direct graduate medical education resident count and weighting rules to the indirect medical education count. However, ProPAC recommended proceeding with caution as additional analysis would be needed to examine the effect of this policy on individual teaching hospital s. We note that this provision is not contained in the FY 1997 budget proposal. Therefore, residents would continue to be counted for IME as long as they are enrolled in an approved program.
M. Distributing Additional TeachingRelated Payments (Recommendation 16)

Recommendation: Funds that provide broader financial support for graduate medical education should be distributed in a way that corresponds to the additional costs incurred by teaching facilities. Providers that treat enrollees in capitation plans should receive teaching-related payments for those patients as well as for the other patients they serve.

Response: This recommendation is rel ated to Congress' proposal to create new trust funds to provide broader support for educational activities. Congress would create new trust funds that include accounts for general direct medical education, general indirect medical education, and a Medicare Plus Incentive Account financed by new appropriations. This funding would be in addition to payments currently being made by Medicare for direct and indirect medical education. The Commission is concerned that the new funding would be distributed based on previous Medicare payment levels even though general revenues will fund the newly establ ished trust funds. With regard to the Medicare Plus Incentive A ccount, ProPAC is concerned that payments should give Medicare's managed care participants an incentive to use teaching hospitals and pay providers appropriately for serving patients in capitation plans.

Like the Commission, we are concerned about appropriating general revenues to finance medical education, particularly given our concern that the
indirect medical education adjustment al ready overcompensates hospitals and Medicare al ready pays its share of costs of direct medical education. The President's original proposal was to create an all payer fund to finance graduate medical education. However, this proposal was made in the context of overall heal th care reform. We continue to remain concerned that medical education should be supported to a greater extent by payers other than Medicare but have reservations about financing of medical education with additional Federal money.
As we explai ned above in Recommendation 13, under the President's FY 1997 budget, we would revise payments made through our managed care programs to ensure that teaching programs are supported more appropriately by existing Medicare resources designated for medical education. Under the President's FY 1997 budget, payments for medical education would be eliminated from HMO rates and redistributed to teaching hospitals and managed care plans with teaching programs.

## N. Discharges from Hospitals to Other

 Facilities (Recommendation 19)Recommendation: Medicare payments should be modified to account for the shift in services from acute to postacute settings. Broadening the definition of transfer cases, however, is not an appropriate approach.
Response: In both the September 1, 1994 and September 1, 1995 final rules, we expressed our concern that the current trend of declining average lengths of stay as hospitals discharge Medi care patients into alternative health care settings (other than acute care prospective payment hospitals) in less time may result in a misalignment of payments and costs under our existing payment systems (59 FR 45362; 60 FR 29221). In particular, we expressed concern over the potential for hospitals paid under the prospective payment system to shift costs (for which they are compensated through the DRG payments) to alternative settings, which are in turn paid on a cost basis. Although we sol icited comments on possible solutions to this problem, we did not propose any change in policy.

The President's FY 1997 budget includes a proposal to redefine discharges from acute care hospital s to excluded hospitals and units and skilled nursing facilities as transfers for payment purposes. Currently, for cases transferred from one acute care hospital paid under the prospective payment system to another like hospital, the sending hospital is paid a per diem rate
instead of the full DRG amount. For cases transferred to an excluded hospital or unit or to a skilled nursing facility (as well as cases discharged home or home with home health care), hospitals recei ve the full DRG payment amount, regardless of the length of stay in the hospital. Under the per diem transfer payment methodology, hospitals receive a per diem amount (doubled for the first day of the stay) until the full DRG amount is reached. Therefore, under the President's budget proposal, hospitals transferring patients to excluded facilities or skilled nursing facilities prior to the geometric mean length of stay for the DRG, minus one day (to account for the double per diem on the first day), would receive less than the full DRG amount for that case.
The basis for ProPAC's opposition to this proposal is that it " $* * *$ thinks this policy would discourage the use of postacute providers. Moreover, it could result in longer inpatient stays, which may not be desirable or cost effective in the long run." We acknowledge that the change in the definition of a transfer is not the ultimate solution to this heal th care trend. In response to immediate concerns about overpaying hospital s for the reduced services they are providing and the rate of increase in expenditures for postacute care services, however, we believe this is an appropriate interim measure while we continue to explore long-term policy alternatives that will better integrate our payment systems for care provided to Medicare beneficiaries across the acute and postacute care settings.
O. Prospective Payment for PostA cute Care (Recommendation 20)
Recommendation: Prospective payment systems should be implemented for all postacute services. The payment method for each service should be consistent across deli very sites. The Secretary should explore methods to control volume of postacute service use, such as bundling services for a single payment.
Response: We agree that HCFA should devel op prospective payment systems for all postacute services, and we have made significant progress in this area. As we discuss in our responses to Recommendations 22 and 23, we have devel oped detailed implementation plans for interim prospective payment systems for skilled nursing facilities (SNFs) and home health agencies (HHAs) that do not require patient classification systems. Execution of these plans will, of course, require legi slative action.

Beyond our interim plan, we have devel oped a strategy for developing a
full-fledged prospective payment system for SNFs. In the absence of legislation, we have been pursuing data that could be used to support a case-mix prospective payment system through our Multi-State Case Mix Demonstration Project. This demonstration project, now in its operational phase, is collecting data on patient case mix using a modified version of the minimum data set, the assessment tool SNFs use in devel oping patient care plans. Through the course of the demonstration, we hope to gather data on the full range of SNF resources needed for each resource utilization group. We are proceeding to require by regulation that all facilities provide resident assessment data. Consolidated billing of SNF services (that is, requiring SNFs to bill for all services furnished to their patients) and uniform coding of SNF services are also prerequisites for a SNF prospective payment system. Consolidated billing and uniform coding are needed to determine the appropriate payment for the ancillary services component of SNF services and to provide useful data on the range of services SNFs furnish.

We have al so been working on a strategy to develop a full-fledged prospective payment system for HHAs. We have funded a project to develop outcome measures for home care that can be used for an outcome-based qual ity improvement system. These measures will be based largely on a core standard assessment data set that includes items measuring sociodemographic, environmental, support system, heal th status, functional status, and health service utilization characteristics of patients. Many of these data items included in the core standard assessment data set are not only essential for assessing patient outcomes but are also critical for designing an adequate case-mix system for payment purposes. To test and refine Medicare's approach to outcome based qual ity improvement for home heal th care, HCFA is currently sponsoring the Medicare Quality Assurance and Improvement Demonstration, which uses this instrument. We plan to publish regulations identifying the required data elements and addressing the collection of information from the core standard assessment data set. We also plan to sponsor additional research that would lead to an appropriate case-mix adjuster that can be used in a national prospective payment system.

In addition to the devel opmental work underway on SNF and HHA prospective payment systems, we have begun work on the preliminary steps necessary for the development of a
prospective payment system for hospital inpatient rehabilitation services. The biggest obstacle we have faced in this effort is the lack of appropriate patient classification systems for the types of patients treated by rehabilitation hospitals. We have recently contracted with the Rand Corporation to evaluate a rehabilitation coding system known as the Functional Impai rment M easure (FIM), which is a scoring system that measures the degree of functional independence of rehabilitation patients. These researchers will also evaluate the patient classification system known as functional related groups (FRGs), which are based on FIM, as a possible basis for a Medicare prospective payment system for rehabilitation services. If the research confirms functional status measures can be used to develop an appropriate pati ent classification system, we will begin the additional work necessary to put a prospective payment system into place. This would require collecting patient assessment data from Medicare rehabilitation hospitals and units and developing all the necessary components of the new payment system. It will take at least 3 years to design and implement such a system. To facilitate implementation, we are considering initiating collection of patient assessment data in advance of legislation establishing a prospective payment system. We will be seeking public input on whether to proceed with a requirement for patient assessment data in the absence of legislation and what data elements should be included in a core data set that could be used not only as the basis for a patient classification system but also to assess outcomes.
We recognize that there are advantages to a coordinated approach in devel oping prospective payment systems for postacute services and we will be evaluating how to make them as consistent as possible. We also recognize that the demand for implementation of prospective payment systems for post-acute services is sufficiently immediate so that there may not be time for the broad study, data collection, and research needed to develop a "unified" system using similar resource grouping principles. Most of the current legislative proposals, including the Administration's proposals, would require implementation dates within the next several years. It may not be feasi ble to develop a "unified" system within the time frames contemplated by the current legi slative proposals. Trade-offs may be required between continuation of the interim payment systems versus
the full-blown prospective payment systems on one hand, and the separate versus "unified" prospective payment systems on the other hand.
P. Case-Mix Measures for PostAcute Services (Recommendation 21)

Recommendation: Reliable case-mix measurement is important in prospective payment systems to account for resource use and to analyze treatment patterns and costs across sites. The Secretary should coordinate casemix research across postacute care settings, using consistent methods for measuring patient acuity and resource use.
Response: We are attempting to coordinate our work on case-mix adjustment for home heal th care, longterm and SNF care, and rehabilitative services. To develop a case-mix adjustment system for SNF care, time studies were conducted in order to measure resource utilization. Similarly, as noted above in response to
Recommendation 20, we plan to fund research to identify a home health casemix adjuster.
In addition, in the case-mix work to date for both home heal th care and SNF care, dependence in activities of daily living is the biggest predictor of resource utilization. Some of the other predictors differ across SNF care and home health care due to differences in the treatment settings and the availability of information for a classification system.
As al so noted above in the preceding response, researchers at the University of Pennsylvania have devel oped a classification system based on FIMs called Function Related Groups (FIMFRGs). This system appears promising for use in a case-mix adjusted prospective payment system for rehabilitation and long-term care facilities, and we are working with the Rand Corporation on a research project to evaluate the suitability of FIM-FRGs for this purpose.

We agree that a compatible crossprovider measure of resource use would be the best multiplier in any universal postacute system. We al so beli eve that such measures do not now exist and to produce them would require the program to incur significant costs and impose significant data reporting and collection requirements on providers. We would prefer to obtain explicit legislative direction before we incur these costs and impose these burdens. Even so, we bel ieve several years would be required to gather the data and devel op the case-mix measures. For these reasons, we believe that interim prospective payment systems of the
types contained in the President's FY 1997 budget should be put in place.
Q. Interim Fee-for-Service Payment Method for Skilled Nursing Facility Services (Recommendation 22)

Recommendation: An interim payment method should be implemented to control the growth in M edicare payments for SNF services until a comprehensive prospective payment system is establ ished. A system based on historical data and facility-specific limits, however, may not allow facilities to respond appropriately to changes in a dynamic environment.

Response: We agree with ProPAC's recommendation that an interim payment system should be devel oped until a permanent system is established. Both the interim and permanent payment systems could better promote the goals of quality care, maximum access to care, and cost containment. A payment system that incorporates these goals is essential as the nursing home industry evolves toward a more eclectic mix of care levels and delivery models. In addition, the need exists for a payment system that is simpler to administer for both providers and HCFA. In order to maximize these goals, a permanent prospective payment system for SNFs should include payment for all costs (that is, routine operating, ancillary, and capital costs) and take into account actual facility case mix. However, thecase-mix and ancillary cost data necessary to accomplish this goal are not yet available.

In the interim, based on current data resources, a prospective payment system could be implemented. It would apply solely to routi ne costs (including routine capital costs) and utilize facilityspecific payment rates subject to cost limits. We are studying various cost limit designs, such as regional limits versus national limits, to account for geographical cost differences. In addition, methodologies to ease the transition from the current payment system would be incorporated into an interim prospective payment system.

While there is agreement that a need exists to implement an interim prospective payment system for SNFs, the Commission bel ieves that a system based on historical data and facilityspecific limits may not allow facilities to respond appropriately to changes in a dynamic environment. However, we believe that a facility-specific interim prospective payment system would provide a number of advantages over the current system, and could be constructed to accommodate changes in
a facility's case mix. The system would provide for greater cost containment and admi nistrative simplicity, through predetermined pricing. In addition, the potential to earn a profit under the interim system, by hol ding down costs, would provide an incentive for nursing homes to participate in Medicare, or certify more beds if al ready participating. This would provide greater access for beneficiaries. This same incentive would produce greater efficiency in nursing home operations and would support the provision of quality care. When compared to a flat rate system, a facility-specific system would maintain an appropriate distribution of payments, since the basis of payments under the system is the nursing homes' own cost history. As a nursing home case-mix classification system is finalized and tested, and further analysis is completed on ancillary payment, these el ements would be incorporated into the payment system.

In addition, we are anal yzing some features of an interim system that would result in savings for the Medicare program. Specifically, in developing providers' facility-specific payment rates for routine services, the system would incorporate one set of cost limits based on freestanding costs only. The current system provides for separate (higher) limits for hospital-based facilities. Consequently, savings would result from holding down payments to these hospital-based SNFs. In addition, savings would result through the elimination of routine cost limit exemptions granted to new providers of skilled nursing services. The current system of cost limit exceptions for "atypical nursing services" would be eliminated as well. Finally, the Medi care Part B carrier fee schedules could be utilized for Part A SNF services as a limit on the reasonable costs of certain ancillary services. Currently, there are no limits or reasonable cost guidelines for many of these services.
We support the ProPAC view that a per-episode payment system be developed. We have noted above, however, that there are great obstacles to developing both (1) prospective payment systems that are consistent across provider types with respect to the method of measuring resource use, and (2) classifications systems for episodes of postacute care (either by provider type or in general) that account for a sufficient degree of the variability among different types of patients. Thus, our inclination would be to pursue our current plans for the prospective payment systems with the thought that
further refinements could be made when data are available.
R. Interim Fee-for-Service Payment Method for Home Health Care (Recommendation 23)

Recommendation: Until a fully prospective payment system for home heal th care is developed, the Commission supports adopting episodebased payment limits. In addition, beneficiary copayments, subject to an annual limit, should be introduced.

Response: There is agreement between ProPAC and HCFA that an interim cost control mechanism should be establ ished prior to implementing a prospective payment system for home heal th care. We would like to highlight significant differences between the prospective payment systems proposed by the Congress and the Administration.

The congressional proposal would limit payment to 120 days of service with certain exceptions for up to 165 days of care. This provision has the potential of serious financial impact on some agencies, as well as reduced access to services for some patients with the greatest needs. The proposal al so assumes the avai lability of data and systems to categorize and assign patients to one of the 18 "case-mix categories" established in Phase II of HCFA's HHA prospective payment system demonstration. Neither the data nor the systems are currently in existence, and the implementation of such a system would entail a major increase in the reporting burden on agencies. Were we able to implement such a system, we estimate that the system would be able to explain less than 10 percent of the variation in cost per episode, at best.
The Admi nistration's interim proposal entails no increased reporting burden, as it uses data currently reported by agencies. Although that budget proposal does not provide for per-episode payments, its aggregate payment caps effectively create a perepisode cap on costs. Given the uncertainty about the resource composition of individual types of episodes, the use of an aggregate cap gives agencies an incentive to provide services in a cost effective manner by sharing savings with agencies whose costs are bel ow their per beneficiary limitation. We note that ProPAC was al so concerned that the interim proposal utilizes regional cost experience, which the Commission feels may not be appropriate. The President's FY 1997 budget includes a provision to use average national or regional cost experience in constructing the per beneficiary limitation. We agree with

ProPAC that, should we find unjustified differences in regional cost experience, we would support a move to national cost experience as the basis for the per beneficiary limit.

It may be necessary to use regi onal rates to move individual HHAs toward a national norm over time. This would avoid major displacements. We are considering both regional and national blending.

We do not agree with the ProPAC recommendation that beneficiary copayments be introduced. Our proposed interim system of limits should adequately control the growth in service use. We do not agree with shifting costs to beneficiaries, however limited, as a method of controlling the growth in utilization.

As HCFA moves forward in designing a prospective payment system for home health care, we will consider ProPAC's recommendations to look at more uniformly defined units of services.
S. Update to the Composite Rate for Dialysis Services (Recommendation 24)

Recommendation: The Secretary should develop methods to control total Medicare per capita expenditures for end stage renal disease (ESRD) beneficiaries. In the meantime, the composite rate should be updated by 2.7 percent for hospital-based dialysis facilities and by 2.0 percent for freestanding facilities for fiscal year 1997. The Secretary should al so devel op reliable measures of patient severity and outcomes to analyze the relationships among treatment processes, patient outcomes, and costs. These factors should be considered in evaluating the need for and the level of future payment updates.

Response: One of ProPAC's suggestions is that HCFA consider opening enrol Iment for ESRD beneficiaries to participate in Medicare risk programs. The reason for this recommendation is the rapid growth in total Medicare spending for ESRD beneficiaries. A large part of this increase is attri butable to the expanding ESRD population, especially older patients who require more services. These beneficiaries are using more acute inpatient, skilled nursing and other dial ysis-related services than ever before. ProPAC suggests that to control these expenditures, Medi care examine the possi bility of adopting a capitation payment system for ESRD services, since capitation rates have been successful in controlling expenditure growth for other populations. At a minimum, they are recommending that utilization review or other managed care techniques be used to control the total
volume of services provided to ESRD beneficiaries across all sites of care.

Section 1876(d) of the Act currently prevents an individual with ESRD from enrolling in an HMO or a competitive medical plan. However, an individual who is enrolled in a prepaid heal th plan when he or she is determined to have ESRD may continue enrollment in that plan. A prepaid heal th plan may only disenroll a beneficiary as provided by regulations at 417.460.

Congress addressed the issue of paying for ESRD services in a capitation setting in legislation. Section 13567(b) of the Omni bus Budget Reconciliation Act of 1993 (Public Law 103-66) (A ugust 10, 1993) amended section 2355 of Public Law 98-369 by requiring the Secretary to include the integration of acute and chronic care management for patients with ESRD through expanded community care case management services in a social heal th maintenance organization (SHMO). Initial legislation required the Secretary to grant demonstration wai vers for SHMOs that provide for the integration of heal th and social services at a fixed annual prepaid capitation rate. In the January 26, 1996
Federal Register, we published a notice informing interested parties of the opportunity to apply for funds for a cooperative agreement to operate an ESRD M anaged Care Demonstration (61 FR 2516). Two of the demonstration's purposes would be to test whether ESRD beneficiaries can and should be given access to HM Os during open enrol Iment and whether the statewide capitation rate can and should be adjusted. The demonstration would adjust rates for treatment status (such as dialysis, transplant, or a functioning graft), age groups and the cause of renal failure (for example, diabetes). As the legislation requires, rates would be based on 100 percent of the adjusted average per capita costs (AAPCC); additional non-Medicare-covered benefits would be offered by the provider to justify the additional 5 percent beyond the 95 percent of the AA PCC paid to Medicare riskcontracting HM Os on behalf of ESRD enrollees. Based on the results of this demonstration, we would make recommendations to Congress concerning the appropriateness of paying for dialysis services in a capitation setting.
To improve the quality of care ESRD patients are receiving, we are in the process of devel oping proposed rules for ESRD conditions for coverage. The essence of the regulation is patientcentered and outcome-oriented. The proposed conditions for coverage will focus on facilities achieving an optimal
level of heal th and well-being for all dialysis patients. The proposed rules will be published in Spring 1996 with expected implementation in Iate fiscal year 1997.
While we share ProPAC's concern that payment rates be sufficient to assure quality care for ESRD patients, we do not bel ieve there is sufficient evidence at this point to conclude that more money is needed to provide appropriate care. Currently, the Uni versity of Michigan, as part of a National Institute of Health grant, is examining the relationship between facilities' costs and the level of KT/V. Also the National Institute of Diabetes and Digestive and Kidney Diseases is sponsoring a study on the impact of increasing dialysis as measured by KT/ $V$ and the use of high-flux-dialysis on ESRD patients. The results of these studies should help us analyze the relationship between patient outcomes and costs, and thus provide us with a basis for recommending an appropriate payment rate increase.
While we acknowledge that an increase in the composite rate may be appropriate in the next few years, we believe that any rate increase should be linked to implementation of the revised conditions for coverage. Moreover, any ESRD rate increase must be considered within the context of M edicare budgetary concerns and should have a direct link to improved patient outcomes. We will continue to monitor ESRD facility costs, and, if appropriate, we may recommend an update to the ESRD composite rate for FY 1998.

We note that ProPAC's recommendation provides for an across-the-board rate increase for all renal facilities. However, data show that high volume independent facilities (over 6,000 treatments per year) account for about 85 percent of independent dialysis treatments. These high volume facilities report margins between Medicare payments and costs that are higher than average. Therefore, in proposing a future rate increase, we would want to examine the need to adjust payment increases for volume. In addition, we believe that any update to the composite rate should include an update to the wage index currently used to adjust the labor portion of the rate. We are currently using an outdated wage index which is a blend of 1980 Bureau of Labor Statistics (BLS) and 1984 prospective payment system wage data and does not reflect the MSA revisions resulting from the 1990 census.

The Commission's final recommendation is that the Secretary closely monitor treatment patterns and
patient outcomes to ensure that facilities use the payment increase to improve qual ity of care. The proposed ESRD conditions for coverage should address this issue. We expect the proposed rule to be published in the Federal Register before Summer 1996. Between the publication of the proposed and final rules, HCFA is planning 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 eval uate the quality of dialysis services furnished by individual facilities. Of course, this is a long-term project. In the short term, we are exploring the possibility of collecting limited patient outcome data such as KT/V and URR.
T. Prospective Payment for Hospital Outpatient Services (Recommendation 25)

Recommendation: A comprehensive prospective payment system should be developed for hospital outpatient services. Such a system should include a strategy for controlling the volume of ambulatory services.

Response: We agree with the need to implement a comprehensive prospective payment system for outpatient services. While we aw ait legisl ative authority, we continue to develop and refine the Medicare-specific factors of the A mbulatory Patient Group (APG) system that we recommend using. We plan to analyze the payments that would be made across sites, for example in A mbulatory 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 increase 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 monitoring of patterns of care. For example, we could track whether Medicare beneficiaries recei ved more clinic visits per patient under APGs than they did under cost-based reimbursement. If so, we could take corrective action either systemi cally or on a hospital-specific basis. This issue clearly requires study. We wel come suggestions in this area.
U. Beneficiary Liability for Hospital Outpatient Services (Recommendation 26)

Recommendation: The growing financial burden for Medicare enrollees who recei ve services in hospital
outpatient departments should be alleviated immediately. Beneficiary coinsurance for these services should be limited to 20 percent of the M edicareallowed payment, as it is in other settings. For services not paid on a prospective basis, the Secretary should establish a new method for determining beneficiary copayments based on estimated allowed payments since they cannot be cal culated precisely when services are delivered.

Response: We agree that the issue of beneficiary coinsurance should be addressed. In the context of the monies available to the Medi care program, we doubt that Congress would authorize that Medi care immediately assume the full cost of paying 80 percent of the cost of outpatient services. Among the approaches that could be used are: (1) Applying the savings achieved by eliminating the formula-driven overpayment to offset the beneficiaries' responsibility; (2) requiring copayments in other areas of the program, such as for home heal th services or laboratory services; and/or (3) moving gradually to reduce the ratio of copayments to total payments. One issue that must be considered at the same time is the rise in the Part B premium that would accompany any signifi cant increase in program payments. This would have the effect of distributing costs over the entire range of beneficiaries, rather than having it focused only on those patients who actual ly use outpatient services, as it is now. We are eager to have this issue addressed and resolved, but know that it must be examined in light of broader budget decisions.

## IX. Other Required Information

## A. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 provides for notice and comment when a collection of information requirement is submitted to the Office of Management and Budget (OMB) for review and approval. In order to fai rly evaluate whether an information collection should be approved by OMB, section 3506(c)(2)(A ) of the Paperwork Reduction Act of 1995 requires that we sol icit comment on the following issues:

- Whether the information collection is necessary and useful to carry out the proper functions of the agency;
- The accuracy of the agency's estimate of the information collection burden;
- The quality, utility, and clarity of the information to be collected; and
- Recommendations to minimize the information collection burden on the affected public, including automated collection techniques.

Therefore, we are soliciting public comment on each of these issues for the information collection requirement discussed below.
The only information collection or paperwork burden item contained in this proposed rule involves the requirement under § 489.27 that a hospital furnish each Medicare beneficiary with a notice of discharge rights supplied by HCFA, that is, 'An Important Message from M edi care.'
As discussed in section V.F of this preamble, we are revising the current requirement that a hospital must distribute the 'Important M essage' to each Medicare beneficiary at or about the time of admission. In order to permit hospitals more flexibility, but still ensure that benficiaries are aware of their discharge rights, we are proposing to revise § 489.27 to specify that a hospital must provide the notice of discharge rights 'during the course of the hospital stay.' We estimate that the paperwork burden associated with the requirement that hospital personnel distribute the 'Important Message' to each Medicare beneficiary is approximately 1 minute per admission. Based on our most recent avai lable data (1995 Data Compendium, HCFA Pub. No. 03364), there are roughly 11 million Medicare beneficiaries admitted to hospitals each year, resulting in an annual burden of approximately 183,000 hours.

This paperwork burden is not effective until it has been approved by OMB. A notice will be published in the
Federal Register when approval is obtained. Organizations and individuals desiring to comment on this paperwork burden requirement should submit comments by July 30, 1996 to the Office of Management and Budget, Human Resources and Housing Branch, Room 10235, New Executive Office Building, Washington, D.C., 20503, Attention: Allison Herron Eydt, HCFA Desk Officer.

## B. Requests for Data from the Public

In order to respond promptly to public requests for data rel ated 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 avai lable 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 bel ow 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: Heal th 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 MEDPARHospital (National)

The Medicare Provider Analysis and Review (MEDPAR) file contains records for 100 percent of M edicare 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 qual ifying 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 rel ease agreement must be signed by the purchaser before rel ease of these data. For all files requiring a signed data rel ease 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 1995

2. Expanded Modified MedPARHospital (State)

The State M edPAR file contains records for 100 percent of M edicare 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 rel ease must be signed by the purchaser before rel ease 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 (Junefile).
Media: Tape/Cartridge
File Cost: \$1,050.00 per State per year Periods Available: FY 1988 through FY 1995

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 1993 used to create the proposed FY 1997 prospective payment system wage indexes; (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 FY 1997 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 1997 PPS Update
We note that the files al so 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 Hospital s by Provider Only
Media: Diskette/Internet
File cost: $\$ 145.00$ per file

4. PPS-IV to PPS-XII Minimum Data Sets

The Minimum Data Set contai ns cost, statistical, financial, and other information 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 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 begin- <br> ning on or <br> after | and before |
| :--- | ---: | ---: |
| PPS IV $\ldots \ldots$. | $10 / 01 / 86$ | $10 / 01 / 87$ |
| PPS V $\ldots \ldots$. | $10 / 01 / 87$ | $10 / 01 / 88$ |
| PPS VI $\ldots .$. | $10 / 01 / 88$ | $10 / 01 / 89$ |
| PPS VII $\ldots .$. | $10 / 01 / 89$ | $10 / 01 / 90$ |
| PPS VIII $\ldots$. | $10 / 01 / 90$ | $10 / 01 / 91$ |
| PPS IX $\ldots \ldots$. | $10 / 01 / 91$ | $10 / 01 / 92$ |
| PPS X $\ldots \ldots$. | $10 / 01 / 92$ | $10 / 01 / 93$ |
| PPS XI $\ldots .$. | $10 / 01 / 93$ | $10 / 01 / 94$ |
| PPS XII $\ldots .$. | $10 / 01 / 94$ | $10 / 01 / 95$ |

[^1]The Capital Data Set contains selected data for capital-related costs, interest expense and related information and complete bal ance sheet data from the Medicare hospital cost report. The data set includes only the most current cost report (as submitted, fi nal 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 begin- <br> ning on or <br> after | and before |
| :--- | ---: | ---: |
| PPS IX $\ldots \ldots$. | $10 / 01 / 91$ | $10 / 01 / 92$ |
| PPS X $\ldots \ldots$. | $10 / 01 / 92$ | $10 / 01 / 93$ |
| PPS XI $\ldots .$. | $10 / 01 / 93$ | $10 / 01 / 94$ |
| PPS XII $\ldots .$. | $10 / 01 / 94$ | $10 / 01 / 95$ |

(Note: The PPS XII Capital Data Set covering 1994 will not be available until July 31, 1996.)

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 el igible hospitals, including hospitals in wai ver 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
1996 (December updates)
Media: Diskette/Internet
File Cost: $\$ 265.00$
Periods Available: FY 1996 PPS Update
7. HCFA Medicare Case-Mix Index File

This file contains the Medicare casemix 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 costl iness of cases treated by a hospital relative to the cost of the national average of all M edicare 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
1995 (Internet-FY 1995)

## 8. Table 5 DRG File

This file contains a listing of DRGs, DRG narrative description, relative weight, geometric mean, length of stay, and day outlier trim points 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 1997 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 rel ease 1 month after the proposed and final rules are published in the Federal Register.
Media: Diskette/Internet
File Cost: \$145.00
Periods Available: FY 1997 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 1997 PPS Update

11. HCFA FY 1992 Capital-Related Tax File
This file contai ns data used to develop a special property tax adjustment to the capital prospective payment system for capital-related costs. 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 qual ified hospitals who pay capitalrelated property taxes. The add-on was 10. 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.

## C. Public Comments

Because of the large number of items of correspondence we normal ly 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 recei ve 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, gi ven the statutory requirement under section 1886(e)(5) of the Act that our final rule for FY 1997 be published by September 1, 1996, we will consider only those comments that deal specifically with the matters discussed in this proposed rule.

## List of Subjects

## 42 CFR Part 412

Administrative practice and procedure, Heal th facilities, Medicare, Puerto Rico, Reporting and recordkeeping requi rements.

## 42 CFR Part 413

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

## 42 CFR Part 489

Health facilities, Medicare.
42 CFR chapter IV would be amended as set forth bel ow:
A. Part 412 would be 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).

## Subpart D—Basic Methodology for Determining Prospective Payment Federal Rates for Inpatient Operating Costs

2. In § 412.63(s)(1), a new sentence is added at the end to read as follows:
[^2]
## Subpart L-The Medicare Geographic

 Classification Review Board3. In 412.246, paragraph (b) is revised to read as follows:
§412.246 MGCRB members.

*     *         *             *                 * 

(b) Term of office. The term of office for an MGCRB member may not exceed 3 years. A member may serve more than one term. The Secretary may terminate a member's tenure prior to its full term.

## Subpart M—Prospective Payment System for Inpatient Hospital Capital Costs

4. In § 412.302, a new paragraph (d)(4) is added to read as follows:
§412.302 Introduction to capital costs.
(d) * * *
(4) Hospital s may elect the simplified cost allocation methodology under the terms and conditions provided in the instructions for HCFA Form 2552.
B. Part 413 would be amended as follows:

## 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).

## Subpart C—Limits on Cost Reimbursement

2. In § 413.40, paragraph (d)(3) is revised to read as follows:
§413.40 Ceiling on the rate of increase in hospital inpatient costs.

*     *         *             *                 * 

(d) $* * *$
(3) Net inpatient operating costs are greater than the ceiling. For cost reporting periods beginning on or after October 1, 1991, if a hospital's allowable net inpatient operating costs exceed the hospital 's ceiling (or the adjusted ceiling, if applicable), payment will be based on the lower of the-
(i) Ceiling (or the adjusted ceiling, if applicable) plus 50 percent of the allowable net inpatient operating costs in excess of the ceiling (or the adjusted ceiling, if applicable); or
(ii) One hundred-ten percent of the ceiling (or the adjusted ceiling, if applicable).

## Subpart F-Specific Categories of Costs

3. In § 413.86, a new sentence is added at the end of paragraph (g)(1) introductory text to read as follows:
§413.86 Direct graduate medical education payments.
(g) * * *
(1) $* * *$ For combined residency programs, an inital residency period is defined as the time required for individual certification in the longer of the two programs.
C. Part 489 would be amended as follows:

## PART 489—PROVIDER AGREEMENTS AND SUPPLIER APPROVAL

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

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

## Subpart B—Essentials of Provider Agreements

2. Section 489.27 is revised to read as follows:
§489.27 Beneficiary notice of discharge rights.

A hospital that participates in the Medicare program must furnish each Medicare beneficiary, or an individual acting on his or her behal $f$, the notice of discharge rights HCFA supplies to the hospital to implement section 1886(a)(1)(M) of the Act. The hospital must provide timely notice during the course of the hospital stay. For purposes of this paragraph, the course of the hospital stay may begin with the provision of a package of information regarding scheduled preadmission testing and registration for a planned hospital admission. The hospital must be able to demonstrate compliance with this requirement.
(Catal og of Federal Domestic Assistance Program No. 93.773, Medicare-Hospital Insurance; and Program No. 93.774, Medicare-Supplementary Medical Insurance Program)

Dated: May 13, 1996.
Bruce C. Vladeck,
Administrator, Health CareFinancing Administration.
Dated: May 24, 1996.

## 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 on or After October 1, 1996 and Update Factors and Rate-ofIncrease Percentages Effective With Cost Reporting Periods Beginning on or After October 1, 1996

## 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 Medi care inpatient capital-rel ated costs. We are al so setting forth proposed rate-of-i 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, 1996, 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 yiel ds 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 Medi care 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-rel ated costs. Section IV sets forth our proposed changes for determining the rate-of-increase limits for hospital s 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 1997

The basic methodology for determining prospective payment rates for inpatient operating costs is set forth at $\S 412.63$ for hospitals located outside of Puerto Rico. The basic methodology for determining the prospective payment rates for inpati ent operating costs for hospital s located in Puerto Rico is set forth at $\S \S 412.210$ 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, will be effective with discharges occurring on or after October 1, 1996. As required by section 1886(d)(4)(C) of the Act, we must al so adjust the DRG classifications and weighting factors for discharges in FY 1997.

In summary, the proposed standardized amounts set forth in Tables 1 a and 1 c of section V of this addendum reflect-

- Updates of 2.2 percent for all areas (that is, the market basket percentage increase of 2.7 percent minus 0.5 percentage points);
- An adjustment to ensure budget neutral ity 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 neutral ity as provided for in section 1886(d)(8)(D) of the Act by removing the FY 1996 budget neutral ity factor and applying a revised factor; and
- An adjustment to apply the revised outl ier offset by removing the FY 1996 outlier offsets and applying a new offset.
A. Calculation of Adjusted Standardized Amounts

1. Standardization of Base-Y ear Costs or Target Amounts

Section 1886(d)(2)(A) of the Act required the establishment of base-year cost data containing al lowable operating costs per discharge of inpati ent hospital services for each hospital. The preamble to the September 1, 1983 interim final rule (48 FR 39763) contains a detai led 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)(C) and (d)(9)(B)(ii) of the Act required that the updated base-year per discharge costs and, for Puerto Rico, the updated target amounts, respectively, be 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.

Since the standardized amounts have al ready been adjusted for differences in case mix, wages, cost-of-living, indirect medical education costs, and payments to hospital s serving a disproportionate share of low-income patients, no additional adjustments for these factors for FY 1997 were made. That is, the standardization adjustments reflected in the FY 1997 standardized amounts are the same as those reflected in the FY 1996 standardized amounts.

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-rel ated costs. Since October 1, 1990, when the market basket was last rebased, we have considered 71.4 percent of costs to be labor-rel ated for purposes of the prospective payment system. As discussed in section IV of the preamble, we are proposing to use a rebased market basket effective for FY 1997. Based on the proposed rebased market basket, we are revising the labor and nonlabor proportions of the standardized amounts. Effective with discharges occurring on or after October 1, 1996, we are proposing a labor-rel ated proportion of 71.2 percent and a nonlabor-related proportion of 28.8 percent. The standardized amounts in Table la of section V of this addendum have been recomputed to reflect the revised labor-related and nonlaborrelated proportions. (We are revising the Puerto Rico standardized amounts by the average labor share in Puerto Rico of 82.8 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 1995 MedPAR file.)
2. Computing Large Urban and Other A verages Within Geographic A reas

Section 1886(d)(3) of the Act requires 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. Hospital s 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 areas" 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 MSA s are considered "rural areas" under section 1886(d)(2)(D). 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 1997. These areas are identified by an asterisk in Table 4a.
Table la contains the two national standardized amounts that we are proposing be applicable to all hospitals, except for sole community hospitals and hospitals in Puerto Rico. For a number of years, Table $1 b$ had been used to set forth the 18 regi onal standardized amounts applicable for hospitals located in census areas subject to the regional floor. However, as provided in section 1886(d)(1)(A)(iii)(II) of the Act, the regional floor expires effective with
discharges occurring on or after October 1, 1996. Therefore, all hospitals (except sole community hospitals and hospitals in Puerto Rico) will be paid solely on the basis of the national standardized amounts. Under section
1886(d)(9)(A )(ii) of the Act, the national standardized payment amount applicable to hospital s in Puerto Rico consists of the discharge-weighted average of the national large urban standardized amount and the national other standardized amount (as set forth in Table 1a). The national average standardized amount for Puerto Rico is now set forth in Table 1b. This table also includes the two standardized amounts that would be applicable to most hospital s in Puerto Rico.

## 3. Updating the A verage Standardized A mounts

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 1997 using the applicable percentage increases specified in section 1886(b)(3)(B)(i) of the Act. Section 1886(b)(3)(B)(i)(XII) of the Act specifies that, for hospitals in all areas, the update factor for the standardized amounts for FY 1997 is the market basket percentage increase minus 0.5 percentage points.

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 rebased hospital market basket increase for FY 1997 is 2.7 percent. For FY 1997, this yields an update to the average standardized amounts of 2.2 percent ( 2.7 percent minus 0.5 percent). (See section IV of this preamble of this proposed rule for a discussion of the market basket rebasing.)

As in the past, we are adjusting the FY 1996 standardized amounts to remove the effects of the FY 1996 geographic reclassifications and outlier payments before applying the FY 1997 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 actual increase of 2.3 percent to the large urban and other area standardized amounts.

Although the update factor for FY 1997 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 1997 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 A verage Standardized A mounts

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 rel ative 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 al so 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 recal ibration of the rel ative wei ghts be budget neutral, and the requirement in section 1886(d)(3)(E) of the Act that the updated wage index be budget neutral, we compared aggregate payments using the FY 1996 relative weights and wage index to aggregate payments using the proposed FY 1997 relative weights and wage index. The same methodology was used for the FY 1996 budget neutral ity 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 0.998509 . This budget neutral ity adjustment factor is applied to the standardized amounts without removing the effects of the FY 1996 budget neutrality adjustment. 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 1997 adjustment factor to the hospitalspecific rates that are effective for cost reporting periods beginning on or after October 1, 1996, in order to ensure that we meet the statutory requi rement that aggregate payments neither increase nor decrease as a result of the
implementation of the FY 1997 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 recl assification 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 recl assifications. We are applying an adjustment factor of 0.994059 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 1996 budget neutrality adjustment factor. We note that the proposed FY 1997 adjustment reflects wage index and standardized amount reclassifications approved by the MGCRB or the Administrator as of March 14, 1996. The effects of any additional reclassification changes resulting from appeal s and reviews of the MGCRB decisions for FY 1997 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 1997.
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 outl iers). 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 by the same factor 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. We estimated the FY 1994 proportion of day outlier payments to total outlier payments at 31.3 percent in our September 1, 1993 final rule (58 FR 46348). Thus, the proportion of day outlier payments to total outlier payments in FY 1997 will be approximately 8 percent ( 25 percent of 31.3 percent). 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 1997 Outlier Payment Policies, Including Outlier Thresholds. For FY 1996, the day outlier threshold is the geometric mean length of stay for each DRG plus the lesser of 23 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 44 percent for FY 1996. The fixed loss cost outlier threshold is equal to the prospective payment for the DRG plus $\$ 15,150$ (\$13,800 for hospitals that have not yet entered the prospective payment system for capital-rel ated 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 1996 standardized amounts of 0.949054 for the large urban and other areas rates and 0.9526 for the capital Federal rate.

For FY 1997, we propose to set the day outl ier threshold at the geometric mean length of stay for each DRG plus the lesser of 24 days or 3.0 standard deviations. Section 1886(d)(5)(A)(iii) of the Act, as amended by section 13501(c)(3) of Public Law 103-66, provides that additional payments for day outlier cases may be reduced below the marginal cost of care to meet the requirements of section 1886(d)(5)(A)(v) of the Act. We are proposing to reduce the marginal cost factor for each outlier day from 44 percent to 35 percent in FY 1997. We estimate that our proposed policies will reduce the proportion of outlier payments paid as day outliers in FY 1997 to approximately 8 percent, in accordance with section 1886(d)(5)(A ) of the Act.

We are al so proposing a fixed loss cost outlier threshold in FY 1997 equal to the prospective payment rate for the DRG plus $\$ 11,050$ ( $\$ 10,075$ for hospitals that have not yet entered the prospective payment system for capitalrel ated 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 cal culated 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 1997 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-rel ated costs than for operating costs. We project that the proposed thresholds for FY 1997 will result in outlier payments equal to 5.1 percent of operating DRG payments and 5.2 percent of capital payments based on the Federal rate.

Thus, the proposed outlier adjustment factors applied to the standardized amounts and the capital Federal rate for FY 1997 are as follows:

| Operating Standardized Amounts | Capital <br> Federal <br> Rate |
| :--- | :--- |
| 0.948968 .................................... | 0.9476 |

We would apply the proposed outlier adjustment factors after removing the effects of the FY 1996 outlier adjustment factors on the standardized amounts and the capital Federal rate.
ii. Other Changes Concerning Outliers. Table 5 of section $V$ of this addendum contains the DRG relative weights, geometric and arithmetic mean lengths of stay, as well as the day outlier threshold for each DRG. When we recalibrate DRG weights, we set a threshold of 10 cases as the minimum number of cases required to compute a reasonable weight and geometric mean length of stay. DRGs that do not have at least 10 cases are considered to be low volume DRGs. For the low volume DRGs, we use the origi nal geometric mean lengths of stay, because no arithmetic mean length of stay was calculated based on the original data.
Table 8a in section V of this addendum contains the updated Statewide average operating cost-tocharge 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 publ ished in the September 1, 1995 final rule ( 60 FR 45922), effective October 1, 1996. Table 8b contains comparable Statewi de average capital cost-to-charge ratios. These average ratios would be used to calcul ate cost outlier payments for those hospitals for which the intermediary computes operating cost-to-charge ratios lower than 0.24345 or greater than 1.30392 and capital cost-to-charge ratios lower than 0.013297 or greater than 0.19968 . This range represents 3.0 standard deviations (plus or minus) from the mean of the log distribution of cost-tocharge ratios for all hospitals. We note that the cost-to-charge ratios in Tables 8 a and 8 b would be used for all cost reports settled during FY 1997 (regardless of the actual cost reporting period) when hospital-specific cost-tocharge ratios are either not avai lable or outside the three standard deviations range.
iii. FY 1995 and FY 1996 Outlier Payments. In the September 1, 1995 final rule (59 FR 45408), we stated that, based on available data, we estimated that actual FY 1995 outl ier payments would be approximately 4.0 percent of actual total DRG payments. This
percentage was computed by simulating payments using actual FY 1994 bill data avail able at the time. That is, the estimate of actual outlier payments did not reflect actual FY 1995 bills but instead reflected the application of FY 1995 rates and policies to available FY 1994 bills. Our current estimate, using available FY 1995 bills, is that actual outlier payments for FY 1995 were approximately 3.7 percent of actual total DRG payments (lower than the 5.1 percent we projected in setting outlier policies for FY 1995). We note that the MedPAR file for FY 1995 discharges continues to be updated.

We currently estimate that actual outlier payments for FY 1996 will be approximately 4.2 percent of actual total DRG payments (lower than the 5.1 percent we projected in setting outlier policies for FY 1996). This estimate is based on simulations using the December 1995 update of the providerspecific file and the December 1995 update of the FY 1995 MedPAR file (discharge data for FY 1995 bills). We used these data to calculate an estimate of the actual outlier percentage for FY 1996 by applying FY 1996 rates and policies to available FY 1995 bills.

The following discussion addresses the methodology we use to set outlier thresholds for an upcoming fiscal year and al so addresses possible expl anations for the difference between projected and actual outlier payment percentages in recent years.
iv. Methodology for Setting Outlier Thresholds. In previous rulemaking documents, we have discussed the methodology for setting outlier thresholds as well as our periodic refinements to that methodology. In this document, we once again describe our methodology and anal yze it to suggest some possible explanations for the recent differences between projected and actual outlier percentages. We invite comments and suggestions for further refinements to the methodology.

In General. In accordance with section 1886(d)(5)(A )(iv) of the Act, we set outlier thresholds so that outlier payments are expected (projected) to equal 5.1 percent of total payments based on DRG prospective payment rates. The databases used to cal culate thresholds for an upcoming fiscal year include data on discharges from a previous fiscal year as well as hospitalspecific data. We update the data every year. In setting the proposed FY 1997 outlier thresholds, we used the December 1995 update of the FY 1995 MedPAR file, which contains data on FY 1995 hospital inpatient discharges, and the December 1995 update of the provider-specific file, which contains
information on hospital-specific payment parameters (such as cost-tocharge ratios).
The methodology for setting outlier thresholds for an upcoming fiscal year involves anal yzing the set of hospital inpatient cases in the MedPAR file and simulating payments for those cases by using the payment rates and policies that would apply in the upcoming fiscal year. For example, in cal culating the proposed thresholds for FY 1997, we used the proposed payment rates and policies for FY 1997 and simulated payments for the set of cases in the FY 1995 MedPAR file.
The computer simulation cal culates "payments"-outlier payments and total payments-for all discharges for a gi ven set of outlier thresholds. In order to achieve established objectives (for example, the projected percentage of outlier payments rel ative to total DRG payments is 5.1 percent, and the projected percentage of outlier payments attributable to day outliers is 8 percent for FY 1997), the methodol ogy invol ves an iterative process, that is, numerous successive simulations using alternative sets of outlier thresholds. In short, then, the outlier estimation methodology involves anal yzing historical discharge data, simulating payments for the discharges in the database by using the payment rates that would apply in the upcoming fiscal year, and testing alternative sets of outlier thresholds until the simulations are consistent with established objectives.

Cost Inflation Factors. In setting outlier thresholds for an upcoming fiscal year, we need to cal culate the "costs" for each case in our database. In the payment simulations, this "cost" for each case is used to determine, for a given cost outlier threshold, whether a case qual ifies for additional outlier payments and the amount of any such payments. (A s explained above, we test alternative sets of thresholds.)

The MedPAR file includes data on billed charges, and as part of the estimation methodology, we make adjustments to convert the charges to costs, including adjusting the data for inflation. In setting the proposed outlier thresholds for FY 1997, we anal yzed data for FY 1995 discharges.

As we explai ned in the September 1, 1993 final rule ( 58 FR 46347), prior to FY 1994, we used a charge inflation factor to adjust charges to costs; for example, in setting outlier thresholds for FY 1993, we adjusted the FY 1991 MedPAR file charge data by a charge inflation factor for 2 years in order to estimate FY 1993 charges and then applied the applicable cost-to-charge
ratio. Beginning with FY 1994, we have used a cost inflation factor to esti mate "costs"; that is, we adjust the charges by the cost-to-charge ratio and then adjust the resulting costs for 2 years of cost inflation. This adjustment automatically accounts for any changes in the cost-tocharge ratios that may occur, since the rel evant variable is the esti mated "costs" for a gi ven case.
In setting the final outlier thresholds for recent years immediately prior to FY 1995, we determined cost inflation factors by anal yzing cost report information to cal culate moving averages of cost inflation for prior periods. (For example, in setting the FY 1994 outlier thresholds, we analyzed cost reports for cost reporting periods beginning in FY 1988 through FY 1991 to cal culate a cost inflation factor, that is, the average annual increase in cost per case, of 8.3 percent.) In doing so, we made an audit adjustment for any cost report that had not been settled, based on the average ratio of submitted to final cost report data. In setting the final outlier thresholds for FYs 1995 and 1996, we determined cost inflation factors by anal yzing cost report information and calculating the change in cost per case for one year, rather than the average change in cost per case over more than one year.
In setting the proposed FY 1997 outlier threshol ds, we used a cost inflation factor of 0.0 percent, because it is uncl ear whether FY 1997 "costs" will be higher or lower than costs reflected in the FY 1995 MedPAR file. Analysis of recent cost report information shows that cost per case increased slightly for cost reporting periods beginning in FY 1993 relative to those beginning in FY 1992, but decreased slightly in the following year (that is, for cost reporting periods beginning in FY 1994 relative to those beginning in FY 1993). We will reeval uate this factor when we develop the final rule for FY 1997. At that time, more recent data should be available for analysis, specifically, cost report data for cost reporting periods beginning in FY 1995.

Differences Between Projected and Actual Outlier Percentages. As explained above, the cost inflation factor is an important aspect of the methodology for setting outlier thresholds, and we believe the cost inflation factor is a major reason that in recent years the actual outlier percentages (the proportion of actual outlier payments to actual total DRG payments) have been lower than projected.

In determining the cost inflation factor, we anal yze historical hospital cost report information, and there is
necessarily a time lag of 2 to 3 years between the cost reporting period itself and the time when data for that cost reporting period become available. For example, in setting the FY 1994 outlier thresholds, we used a cost inflation factor of 8.3 percent, derived from cost reports for cost reporting periods beginning in FY 1988 through FY 1991. We adjusted the charges from the FY 1992 M edPAR bills by the cost-to-charge ratio and then adjusted the resulting FY 1992 costs for 2 years of cost inflation (costs multiplied by 1.083 multiplied by 1.083) to estimate "FY 1994 costs."

However, analysis of more recent cost report information shows that cost per case increased at a much lower rate of 0.97 percent in cost reporting periods between FY 1992 and FY 1993 and actually decreased 1.77 percent in cost reporting periods between FY 1993 and FY 1994. In effect, we "overestimated" costs by approximately 15.4 percent. Since costs did not increase at nearly the rate we expected, actual costs in FY 1994 proved to be lower than those reflected in the simulations used to set the thresholds for FY 1994; accordingly, the proportion of outlier payments was lower than expected.

A nother aspect of the outlier methodology that may have contributed to the difference between projected and actual outlier percentages concerns the payment adjustments for indirect medical education (IME) and disproportionate share hospitals (DSH). As indicated in previous rulemaking documents, for purposes of determining outlier payments, we standardize a hospital 's costs for IME and DSH adjustments; that is, we reduce the hospital 's costs for a given discharge to account for IME and DSH payments. The "standardized" $\geq$ cost for a discharge is cal culated by taking total costs for the discharge and dividing it by the sum of one plus the hospital's DSH factor plus the hospital's IME factor. Therefore, the higher the IME and DSH factors, the more costs are reduced by standardization.

The factors used for purposes of setting thresholds are taken from the most recent provider-specific file. In setting the proposed FY 1997 outlier thresholds, we used information from the December 1995 update of the provider-specific file. We standardized the costs for each discharge in our database to account for IME and DSH adjustments. The proposed outlier thresholds reflect these standardized costs.

While we use the latest, most up-todate sources of information, the "projected" IME and DSH factors (the factors used to set thresholds for a fiscal
year) may differ from the actual IME and DSH factors used to make payments in that fiscal year. If the "projected" factors used to standardize costs for a given discharge are "too low," then standardization does not "sufficiently" reduce the costs for that discharge and the resulting standardized cost is "too high." If the standardized costs for the discharges analyzed to set outlier thresholds are general ly "too high," then in turn the threshol ds would be too high; consequently, this might result in a lower than expected proportion of outlier payments. Analysis shows that, for FY 1994 for example, the "projected" IME and DSH factors were on average lower than the actual factors.
Conclusion. As we have done since the inception of the prospective payment system, we determine outlier thresholds based on estimates before the beginning of each fiscal year. The methodology we use involves analysis of the best data available at the time thresholds are establ ished; however, by their nature, projections are imprecise and may differ from actual payment data for any number of reasons. We discussed above some of the numerous factors that affect payment and why these particular factors may have contributed to the difference between projected and actual outlier payments in recent years. (See also, for example, the discussion in the September 1, 1995 final rule ( 60 FR 45855).) We note that any difference between projected and actual outlier payment percentages in a given year does not affect standardized amounts in future years.

We continue to explore refinements to the methodol ogy for setting outlier thresholds. We wel come comments and suggestions regarding these issues.
B. Adjustments for Area Wage Levels and Cost of Living

The adjusted standardized amounts are divided into labor and nonlabor portions. Tables la and 1c, as set forth in this addendum, contain the actual labor-related and nonlabor-rel ated shares that will 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 laborrelated 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. This index is set forth in Tables 4a through 4 e 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-rel ated costs for these two States are taken into account in the adjustment for area wages described above. For FY 1997, 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 bel ow. If the Office of Personnel Management releases revised cost-of-living adjustment factors before August 1, 1996, we will publish them in the final rule and use them in determining FY 1997 payments.

Table of Cost-OF-Living Adjustment Factors, Alaska and Hawail Hospitals

| Alaska-All areas | 1.25 |
| :---: | :---: |
| Hawaii: |  |
| County of Honolulu | 1.225 |
| County of Hawaii | 1.15 |
| County of Kauai | 1.20 |
| 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, assi gning them into DRGs, and have devel oped relative weights for each DRG that reflect the resource utilization of cases in each DRG relative to Medi care cases in other DRGs. Table 5 of section V of this addendum contains the rel ative weights that we propose to use for discharges occurring in FY 1997. These factors have been recalibrated as explained in section II of the preamble.
D. Calculation of Prospective Payment Rates for FY 1997
General Formula for Cal culation of Prospective Payment Rates for FY 1997
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 foll owing rates yiel ds 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 Iarge urban standardized amount and the national other standardized amount.

## 1. Federal Rate

For discharges occurring on or after October 1, 1996 and before October 1, 1997, except for sol e community hospitals and hospital s 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, 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, 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 fol lowing 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 cal culation 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 A pril 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 1997. We are proposing to increase the hospitalspecific rates by 2.2 percent (the hospital market basket percentage increase minus 0.5 percentage points) for sole community hospitals located in all areas in FY 1997. Section
1886(b)(3)(C)(ii) of the Act provides that the update factor applicable to the hospital-specific rates for sole community hospital s equals the update factor provided under section 1886(b)(3)(B)(ii) of the Act, which, for FY 1997, is the market basket rate of increase mi nus 0.5 percentage points.
b. Calculation of Hospital-Specific Rate. For sole community hospitals, the applicable FY 1997 hospital-specific rate would be calculated by multiplying a hospital's hospital-specific rate for the preceding fiscal year by the applicable update factor ( 2.2 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, 0.998509) 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 begi nning on or after October 1, 1996, based on the formula set forth above.
3. General Formula for Cal culation of Prospective Payment Rates for Hospitals Located in Puerto Rico Beginning On or After October 1, 1996 and Before October 1, 1997.
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 $1 b$, section $V$ of the addendum).
Step 2-Multiply the labor-related portion of the standardized amount by the appropriate wage index (see Tables 4 a and 4 b , 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 rel ative weight (see Table 5, section V of the addendum).
b. National Rate. The national prospective payment rate is determi ned as follows:
Step 1-Multiply the labor-rel ated portion of the national average standardized amount (see Table 1b, section V of the addendum) by the appropriate wage index.
Step 2—Add the amount from Step 1 and the nonlabor-rel ated 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, section V of the addendum).
The sum of the Puerto Rico rate and the national rate computed above equals the prospective payment for a gi ven discharge for a hospital located in Puerto Rico.

## III. Proposed Changes to Payment Rates for Inpatient Capital-R elated Costs for FY 1997

The prospective payment system for hospital inpatient capital-rel ated 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 methodol ogy for determining Federal capital prospective rates is set forth at $\S \S 412.308$ through 412.352. Bel ow we discuss the factors that we used to determine the proposed Federal rate and the hospital-specific rates for FY 1997. The rates will be effective for discharges occurring on or after October 1, 1996.

For FY 1992, we computed the standard Federal payment rate for capital-rel ated 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, $\S 412.308$ (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. Section 412.308(c)(3) further requires that the Federal rate be reduced by an adjustment factor equal to the estimated proportion of payments
for exceptions under § 412.348, and § 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 FY 1992 through FY 1995, § 412.352 required that the Federal rate al so be adjusted by a budget neutral ity factor so that aggregate payments for inpati ent hospital capital costs were projected to equal 90 percent of the payments that would have been made for capitalrel ated costs on a reasonable cost basis during the fiscal year. That provision expired in FY 1996.
The hospital-specific rate for each hospital was cal culated by dividing the hospital's Medicare inpatient capitalrel ated costs for a specified base year by its Medicare discharges (adjusted for transfers), and dividing the result by the hospital 's case mix index (al so 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. The hospital-specific rate is updated each year after FY 1992 for inflation and for changes in the exceptions payment adjustment factor. For FY 1992 through FY 1995, the hospital-specific rate was al so adjusted by a budget neutral ity adjustment factor.

To determine the appropriate budget neutral ity adjustment factors and the exceptions payment adjustment factor, we devel oped a dynamic model of Medicare inpati ent capital-related costs, that is, a model that projects changes in Medicare inpati ent capital-rel ated costs over time. With the expiration of the budget neutral ity provision, the model is still used to estimate the exceptions payment adjustment and other factors. The model and its application are described more fully 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-rel ated 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 1996, the Federal rate is $\$ 461.96$. With the changes we are proposing to the factors used to establish the Federal rate, the proposed FY 1997 Federal rate is \$441.84.

In the discussion that follows, we explain the factors that were used to determine the proposed FY 1997 Federal rate. In particular, we explain why the FY 1997 Federal rate has decreased 4.36 percent compared to the FY 1996 Federal rate. Nevertheless, as explained in section VII of Appendix A, capital payments per case are estimated to increase 4.45 percent. Taking into account the effects of increases in projected discharges, we al so estimate that aggregate capital payments will increase 7.28 percent.

The major factor contri buting to the decrease in the proposed FY 1997 rate in comparison to the FY 1996 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 insensitive to 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. A ggregate payments under the capital prospective payment transition system are estimated to increase in FY 1997 compared to FY 1996. Specifically, we estimate that aggregate payments in FY 1997 will be 7.28 percent higher than they were in FY 1996. 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-rel ated costs, payments per discharge (or case) are estimated to increase 4.45 percent in FY 1997 compared to FY 1996.

## 1. Standard Federal Rate Update

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 1997 under that framework is 1.0 percent. This proposal is based on a projected 1.0 percent increase in the CIPI, and on policy adjustment factors of zero. We explain the basis for the FY 1997 CIPI projection in section IV.B of the preamble to this proposed rule. Here we describe the policy adjustments that have been applied.
The case-mix index (CMI) is the measure of the average DRG weight for cases paid under the prospective payment system. Because the DRG wei ght determines the prospective payment for each case, any percentage increase in the CMI corresponds to an equal percentage increase in hospital payments.
The CMI can change for any of several reasons: because the average resource use of Medi care patients changes ("real" case-mix change); because changes in hospital coding of patient records result in higher weight DRG assignments ("coding effects"); and because 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 CMI. We also remove the effect on total payments of prior changes to the DRG classifications and rel ative weights, in order to retain budget neutrality for all CMI-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 recl assification and recalibration changes. We have adopted
this CMI adjustment in the capital update framework as well.

For FY 1997, we are projecting a 1.6 percent increase in the case-mix index. We estimate that real case-mix increase will equal projected case-mix increase in FY 1997. We do not anticipate any changes in coding behavior in our projected case-mix change. We explain the basis for this determination in A ppendix $D$ to this proposed rule. The proposed net adjustment for case-mix change in FY 1997 is therefore 0.0 percentage points.

We estimate that DRG recl assification 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 recl assification 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 rel ationships ascertainable at the time the update factor is establ ished 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 cal culating 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.

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 cal culate 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 cal culation of the proposed intensity factor makes it a total intensity factor, that is, charges for capital services are al ready built into the cal culation of the factor. We have therefore incorporated the intensity adjustment from the operating update framework into the capital update framework. In the absence of reliable estimates of the proportions of the overall annual intensity increases that are due, respectively, to ineffective practice patterns and to the combination of qual ity-enhancing new technologies and within-DRG complexity, we assume, as in the revised operating update framework, that one-hal f 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 1997, we have devel oped a Medicare-specific intensity measure based on a five-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 $F Y$ 1992, 0.9 percent in FY 1993, 0.8 percent in FY 1994, and 1.6 percent in FY 1995. For FY 1991 and FY 1992, 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 fai rly 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. As discussed above, we have determined that all of the observed case-mix increase for FY 1995 is real.

Given estimates of real case-mix increase of 1.0 percent for FY 1991 and FY 1992, 0.9 percent for FY 1993, 0.8 percent for FY 1994, and 1.6 percent for FY 1995, we estimate that case-mix constant intensity declined by an
average 1.1 percent during FY 1991 through FY 1995, for a cumulative decrease of 5.6 percent. If we assume that real case-mix increase was 1.4 percent for FY 1991 and FY 1992, 0.9 percent for FY 1993, 0.8 percent for $F Y$ 1994, and 1.6 percent for FY 1995, we estimate that case-mix constant intensity declined by an average 1.2 percent during FY 1991 through FY 1995, for a cumulative decrease of 5.9 percent. Since we estimate that intensity has declined during that period, we are recommending a 0.0 percent intensity adjustment for FY 1997.

## 2. Outlier Payment Adjustment Factor

Section 412.312(c) establishes a unified outlier methodol ogy for inpatient operating and inpatient capital-rel ated 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 cal cul ate the hospital's inpatient capital-rel ated payments (for example, 60 percent for cost reporting periods begi nning in FY 1997 for hospital s paid under the fully prospective methodology). Section 412.308(c)(2) provides that the standard Federal rate for inpatient capital-rel ated 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 cal cul ating the outl ier thresholds and the outlier reduction factor, we model all hospitals as if 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-rel ated payments.
In the September 1, 1995 final rule, we estimated that outl ier payments for capital in FY 1996 would equal 4.64 percent of inpatient capital-rel ated payments based on the Federal rate. Accordingly, we applied an outlier adjustment factor of 0.9536 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 5.24 percent of inpatient capital-rel ated payments based on the Federal rate in

FY 1997. We are, therefore, proposing an outlier adjustment factor of 0.9476 to the Federal rate. Thus, estimated capital outlier payments for FY 1997 represent a higher percentage of total capital standard payments than in FY 1996.

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 1997 is 0.9937 ( $0.9476 / 0.9536$ ). Thus, the outlier adjustment decreases the FY 1997 Federal rate by 0.63 percent (0.9937-1) compared with the FY 1996 outlier adjustment.
3. Budget Neutral ity Adjustment F actor 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 geographic adjustment factor 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 esti mate 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 geographic adjustment factor. 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 geographic adjustment factor.

For FY 1996, we cal culated a GAF/ DRG budget neutrality factor of 0.9994 . For FY 1997, we are proposing a GAF/ DRG budget neutrality factor of 0.9992. 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 recal ibration and changes in the geographic adjustment factor. The proposed incremental change in the adjustment from FY 1996 to FY 1997 is 0.9992 . The proposed cumulative change in the rate due to this adjustment is 1.0017 (the product of the incremental factors for FY 1993, FY 1994, FY 1995, FY 1996 and the proposed incremental factor for FY

1997:
$0.9980 \times 1.0053 \times 0.9998 \times 0.9994 \times 0.9992=$ 1.0017).

This factor accounts for DRG recl assifications and recalibration and for changes in the geographic adjustment factor. It also incorporates the effects on the geographic adjustment factor of FY 1997 geographic reclassification decisions made by the MGCRB compared to FY 1996 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-rel ated costs be reduced by an adjustment factor equal to the estimated proportion of additional payments for exceptions under $\S 412.348$ rel ative to total payments under the hospital specific rate and Federal rate. We use the model originally developed for determining the budget neutral ity adjustment factor to determine the exceptions payment adjustment factor. We describe that model in Appendix B to this proposed rule.

For FY 1996, we estimated that exceptions payments would equal 1.51 percent of aggregate payments based on the Federal rate and the hospitalspecific rate. Therefore, we applied an exceptions reduction factor of 0.9849 (1-0.0151) in determi ning the Federal rate. For this proposed rule, we estimate that exceptions payments for FY 1997 will equal 6.07 percent of aggregate payments based on the Federal rate and the hospital-specific rate. We are, therefore, proposing an exceptions payment reduction factor of 0.9393 to the Federal rate for FY 1997.

The proposed exceptions reduction factor for FY 1997 is thus 4.63 percent lower than the factor for FY 1996. We have expected the number and amount of exceptions payments general ly 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 1997 Federal rate is 0.9393/0.9849, or 0.9537.
5. Standard Capital Federal Rate for FY 1997

For FY 1996, the capital Federal rate was $\$ 461.96$. With the changes we are proposing to the factors used to establish the Federal rate, the FY 1997

Federal rate would be $\$ 441.84$. The proposed Federal rate for FY 1997 was calculated as follows:

- The proposed FY 1997 update factor is 1.0100, that is, the proposed update is 1.00 percent.
- The proposed FY 1997 budget neutrality adjustment factor that is applied to the standard Federal payment rate for changes in the DRG rel ative weights and in the geographic adjustment factor is 0.9992 .
- The proposed FY 1997 outlier adjustment factor is 0.9476 .
- The proposed FY 1997 exceptions payments adjustment factor is 0.9393 .
Since the Federal rate has al ready been adjusted for differences in case
mix, wages, cost of living, indirect medical education costs, and payments to hospitals serving a di sproportionate share of low-income patients, we propose to make no additional adjustments in the standard Federal rate for these factors other than the budget neutral ity factor for changes in the DRG relative weights and the geographic adjustment factor.

We are providing a chart that shows how each of the factors and adjustments for FY 1997 affected the computation of the proposed FY 1997 Federal rate in comparison to the FY 1996 Federal rate. The proposed FY 1997 update factor has the effect of increasing the Federal rate
by 1.00 percent compared to the rate in FY 1996, while the proposed geographic and DRG budget neutrality factor has the effect of decreasing the Federal rate by 0.08 percent. The proposed FY 1997 outlier adjustment factor has the effect of decreasing the Federal rate by 0.63 percent compared to FY 1996. The proposed FY 1997 exceptions reduction factor has the effect of decreasing the Federal rate by 4.63 percent compared to the exceptions reduction for FY 1996. The combined effect of all the proposed changes is to decrease the proposed Federal rate by 4.36 percent compared to the Federal rate for FY 1996.

Comparison of Factors and Adjustments: FY 1996 Federal Rate and Proposed FY 1997 Federal Rate

|  |  | Change | Percent change |
| :---: | :---: | :---: | :---: |
| Update factor: ${ }^{1}$ |  |  |  |
| FY 1996 | 1.0120 | ............... | .... |
| Proposed FY 1997 | 1.0100 | 1.0100 | 1.00 |
| GAF/DRG adjustment factor ${ }^{1}$ |  |  |  |
| FY 1996 | 0.9994 | ............... |  |
| Proposed FY 1997 | 0.9992 | 0.9992 | -0.08 |
| Outlier adjustment factor: ${ }^{2}$ |  |  |  |
| FY 1996 | 0.9536 | .............. | ....... |
| Proposed FY 1997 | 0.9476 | 0.9937 | -0.63 |
| Exceptions adjustment factor: ${ }^{2}$ |  |  |  |
| FY 1996 | 0.9849 |  |  |
| Proposed FY 1997 | 0.9393 | 0.9537 | -4.63 |
| Federal Rate: |  |  |  |
| FY 1996 | \$461.96 | .............. | ............... |
| Proposed FY 1997 | \$441.84 | 0.9564 | -4.36 |

[^3]6. Special Rate for Puerto Rico Hospitals

For FY 1996, the special rate for
Puerto Rico hospitals was $\$ 355.35$. With the changes we are proposing to the factors used to determine the rate, the proposed FY 1997 special rate for Puerto Rico would be $\$ 339.87$.

## B. Determination of Hospital-Specific

 Rate UpdateSection 412.328(e) of the regulations provides that the hospital-specific rate for FY 1997 be determined by adjusting the FY 1996 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 1997, we
are proposing that the hospital-specific rate be updated by a factor of 1.0100 .
2. Exceptions Payment Adjustment Factor

For FY 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 $\S 412.348$, determined as a proportion of the total amount of payments under the hospital-specific rate and the Federal rate. For FY 1997, we estimate that exceptions payments will be 6.07 percent of aggregate payments based on the Federal rate and the hospitalspecific rate. We therefore propose that the updated hospital-specific rate be reduced by a factor of 0.9393 . 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 1997 hospitalspecific rate is $0.9393 / 0.9849$, or 0.9537 .

## 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 1996 and FY 1997 and the net adjustment for each factor. It al so shows that the proposed cumulative net adjustment from FY 1996 to FY 1997 is 0.9632 , which represents a proposed decrease of 3.68 percent to the hospital-specific rate. The proposed FY 1997 hospitalspecific rate for each hospital is determined by multiplying the FY 1996 hospital-specific rate by the cumulative net adjustment of 0.9632 .

Proposed FY 1997 Update and Adjustments to Hospital-Specific Rates

|  |  | Net adjustment | Percent change |
| :---: | :---: | :---: | :---: |
| Update factor: |  |  |  |
| FY 1996 | 1.0120 | .............. |  |
| Proposed FY 1997 | 1.0100 | 1.0100 | 1.00 |
| Exceptions payment adjustment factor: |  |  |  |
| FY 1996 | 0.9849 |  |  |
| Proposed FY 1997 | 0.9393 | 0.9537 | -4.63 |
| Cumulative adjustments: |  |  |  |
| FY 1996 | 0.9967 |  | .......... |
| Proposed FY 1997 | 0.9601 | 0.9632 | -3.68 |

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 1996 to FY 1997 is 1.0100 . In contrast, the exceptions payment adjustment factor is not applied cumulatively. Thus, for example, the incremental increase in the exceptions reduction factor from FY 1996 to $F Y 1997$ is $0.9393 / 0.9849$, or 0.9537.

## C. Calculation of Inpatient CapitalRelated Prospective Payments for FY 1997

During the capital prospective payment system transition period, a hospital is paid for the inpatient capitalrelated costs under one of two al ternative payment methodol ogies: 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 geographic adjustment factor, 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 appli cable Federal rate, the hospital is paid under the fully prospective methodology.
For purposes of cal culating payments for each discharge under both the holdharml ess payment methodology and the fully prospective payment methodology, the standard Federal rate is adjusted as follows: (Standard Federal Rate) $\times$ (DRG weight) $\times$ (Geographic Adjustment Factor) $\times($ Large Urban Add-on, if applicable) $\times$ (COLA adjustment for hospitals located in Alaska and Hawaii)×(1+Disproportionate Share Adjustment Factor+Hndirect Medical Education Adjustment Factor, if
applicable). The result is termed the adjusted Federal rate.

Payments under the hold-harml ess 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 M edicare 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 equal s the ratio of the hospital's al Iowable M edi care new capital costs to its total Medicare inpatient capital-rel ated 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 $\S 412.302$ (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 1997 are 60 percent of the adjusted Federal rate and 40 percent of the hospital specific rate.

Hospital s may also recei ve 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 threshol ds 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 cal culate the hospital's inpatient capital-related payments. For fully prospective hospitals, that portion is 60 percent of the Federal rate for discharges occurring in cost reporting periods beginning during FY 1997. Thus, a fully prospective hospital will receive 60 percent of the capital-related outlier payment calculated for the case for discharges occurring in cost reporting periods begi nning in FY 1997. 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 Medi care 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 1997 are published in section II.A.4.c of this Addendum. For FY 1997, a case qual ifies 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 $\$ 11,050$. A case qualifies as a day outlier for FY 1997 if the length of stay is greater than the geometric mean length of stay for the DRG plus the lesser of 24 days or three standard deviations of the length of stay.

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 1997 are:

- Sol e 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 cumul ative 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-harml ess methodology. If the hold-harml ess methodology is applicable, the hold-harmless payment for assets in use during the base period would extend for 8 years, even if the hold-harml ess payments extend beyond the normal transition period.

## 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, 5, 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H, $7 \mathrm{~A}, 7 \mathrm{~B}, 8 \mathrm{~A}$, and 8 B are presented below. The tables presented bel ow 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 1995 and Hospital A verage Hourly Wage for Federal Fiscal Y ear 1997 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
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Table 5-List of Diagnosis Rel ated Groups (DRGs), Relative Weighting Factors, Geometric Mean Length of Stay, and Length of Stay Outlier Cutoff Points Used in the Prospective Payment System
Table 6A—New Diagnosis Codes
Table 6B-New Procedure Codes
Table 6C-Invalid Diagnosis Codes
Table 6D-Invalid Procedure Codes
Table 6E-Revised Diagnosis Code Titles
Table 6F-Revised Procedure CodeTitles
Table 6G-Additions to the CC Exclusions List
Table 6H—Deletions to the CC Exclusions List
Table 7A-M edicare Prospective Payment System Selected Percentile Lengths of Stay FY 95 MEDPAR Update 12/95 GROUPER V13.0
Table 7B-M edicare Prospective Payment System Selected Percentile Lengths of Stay FY 95 MEDPAR Update 12/95 GROUPER V14.0
Table 8A-Statewide A verage Operating Cost-to-Charge Ratios for Urban and Rural Hospitals (Case Weighted) A pril 1996
Table 8B-Statewide A verage Capital Cost-toCharge Ratios (Case Weighted) A pril 1996

Table 1A.-National Adjusted Operating Standardized Amounts, Labor/Nonlabor

| Large urban areas |  | Other areas |  |
| :---: | :---: | :---: | :---: |
| Labor-related | Non-labor <br> related | 1131.23 | 2752.39 |
| 2796.66 | Labor-related | Non-labor related |  |

Table 1c.-Adjusted Operating Standardized Amounts for Puerto Rico, Labor/Nonlabor

|  | Large urban areas |  | Other areas |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Labor- <br> related | Non-labor related | Labor- <br> related | Non-labor related |
| National | \$2772.89 | \$1121.62 | \$2772.89 | \$1121.62 |
| Puerto Rico | 2501.07 | 521.22 | 2461.47 | 512.97 |

Table 1d.-Capital Standard Federal Payment Rate

|  | Rate |
| :---: | :---: |
| National | \$441.84 |
| Puerto Rico | 339.87 |

Table 3c.-Hospital Case Mix Indexes for Discharges Occurring in Federal Fiscal Year 1995
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| der |  | Avg. hour wage | rovider |  |  | Provider | Case mix index |  | rovider |  | Avg. hour wage | Provider | Case mix index | Avg. hour wage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 010001 | 01.4400 | 14 | 010095 | 00.9230 |  | 03 | 00.9824 | 49 | 040004 | 01.4485 | 14.83 | 040107 | 01.1923 | 14.95 |
| 010004 | 00.9600 | 11. | 010097 | 00.9405 | 15.20 | 030006 | 01.5576 | 17.52 | 040005 | 01.0380 | 11.59 | 040109 | 01.1692 | 12.69 |
| 010005 | 01.1609 | 15 | 010098 | 01.1941 | 11 | 030007 | 01.3158 | 16.41 | 04000 | 01.876 | 18.12 | 040 | 01.8513 | 64 |
| 010006 | 01.4752 | 15 | 010099 | 01.1210 | 15 | 030008 | 02.1095 | 20.42 | 040008 | 01.0325 | 10.77 | 040116 | 01.3895 | . 25 |
| 010007 | 01.0986 | 13 | 010100 | 01.1688 | 1 | 030009 | 01.2993 | 15.58 | 040010 | 01.2298 | 13.78 | 040118 | 01.1313 | 14.29 |
| 010008 | 01.1366 | 09.5 | 010101 | 01.1127 | 21 | 030010 | 01.4160 | 17.75 | 040011 | 00.9298 | 10.75 | 040119 | 01.0914 | 14.34 |
| 010009 | 01.1 | 14.8 | 010102 | 00.9529 | 13.63 | 0300 | 01.4747 | 6 | 04001 | 01.1929 | 16.07 | 040124 | 01.2238 | . 30 |
| 010010 | 01.1330 | 14 | 010103 | 01.7534 | 17.01 | 0300 | 01.2246 | 15.81 | 040015 | 01.1 | 12. | 040126 | 00.9617 | 11.74 |
| 010011 | 01.6185 | 18 | 010104 | 01.6892 | 17.87 | 030013 | 01.2459 | 18.99 | 040016 | 01.7330 | 16.43 | 050002 | 01.5554 | 25.91 |
| 010012 | 01.2666 | 16 | 010108 | 01.1189 | 13.68 | 030014 | 01.4394 | 17.86 | 040017 | 01.2569 | 11 | 050006 | 01.3983 | . 15 |
| 010015 | 01.05 | 15.63 | 010109 | 01.0527 | 11 | 030016 | 01.2462 | . 99 | 040018 | 01.1686 | 16 | 050007 | 01.5848 | 25.29 |
| 010016 | 01.2643 | 16 | 010110 | 01.0168 | 13.44 | 030017 | 01.4929 | 18.98 | 040019 | 01.1618 | 13. | 050008 | 01.4998 | 25.48 |
| 010018 | 00.9017 | 16 | 010112 | 01.1253 | 14.09 | 030018 | 01.7989 | 19 | 040020 | 01.5987 | 14. | 050009 | 01.7211 | 31.63 |
| 010019 | 01.2868 | 14 | 010113 | 01.6374 | 13 | 030019 | 01.1962 | 19.31 | 040021 | 01.2277 | 14 | 050013 | 01.8099 | 22.05 |
| 010021 | 01.2388 | 12 | 010114 | 01.3 |  | 030022 | 01.5055 | 17.41 | 040022 | 01.6951 | 14. | 05001 | 01.174 | 22.55 |
| 010022 | 01.0109 | 16 | 010115 | 00.8385 | 11.98 | 030023 | 01.2640 |  | 040024 | 01.1709 | 12.16 | 050015 | 01.3882 | 22.18 |
| 010023 | 01.4760 | 14 | 010117 | 00.7880 | 13 | 030024 | 01.7809 | 21.04 | 040025 | 00.9214 | 11.8 | 050016 | 01.1598 | . 51 |
| 010024 | 01.4014 | 15 | 010118 | 01.2475 | 15.07 | 030025 | 01.1633 | 12.76 | 040026 | 01.5547 | 16.35 | 050017 | 02.0618 | 24.39 |
| 010025 | 01.4390 | 13 | 010119 | 01.5429 | 16 | 030027 | 01.0875 | 14.69 | 040027 | 01.2889 | 12.56 | 050018 | 01.3434 | 8.49 |
| 010027 | 00.8352 |  | 010120 | 00.9668 | 14.32 | 030030 | 01.6651 |  | 040028 | 01.0903 | 11.40 | 05002 | 01.4146 | 23.75 |
| 010029 | 01.4957 |  | 010121 | 69 | 12.92 | 030033 | 01.2475 |  | 040029 | 01.2557 | 14.12 | 050022 | 01.4601 | . 63 |
| 010031 | 01.1808 | 14 | 010123 | 01.2421 | 17.47 | 030034 | 01.0430 | 15.89 | 040030 | 00.8925 | 11.09 | 050024 | 01.3952 | 21.31 |
| 010032 | 00.9478 | 12 | 010124 | 01.2927 | 16.15 | 030035 | 01.3403 | 20.7 | 040032 | 01.0056 | 11.18 | 050025 | 01.8000 | 22.00 |
| 010033 | 01.9143 |  | 010125 | 01.0247 | 12.86 | 030036 | 01.1393 | 18.23 | 040035 | 01.0240 | 10. | 050026 | 01.4525 | . 79 |
| 010034 | 01.0751 |  | 010126 | 1.1 | 13.13 | 030037 | 02.0161 |  | 040036 | 01.4976 | 16 | 050028 | 01.4395 | 15.33 |
| 010035 | 01.2397 | 15 | 010127 | 01.2999 | 16.29 | 030038 | 01.6125 | 18.82 | 040037 | 01.1101 | 11.55 | 050029 | 01.3830 | 25.55 |
| 010036 | 01.1252 | 15 | 010128 | 00.9565 | 12.34 | 030040 | 01.1885 | 15.88 | 040039 | 01.2411 | 12.23 | 050030 | 01.3324 | 19.24 |
| 010038 | 01.3397 | 16 | 010129 | 01.0795 | 13 | 030041 | 00.9963 | 13.68 | 040040 | 00.9953 | 15.7 | 050032 | 01.2735 | 22.76 |
| 010039 | 01.7029 | 16 | 010130 | 1.0352 | 15.28 | 030043 | 01.1937 | 25 | 040041 | 01.3946 | 13.95 | 050033 | 01.4136 | 25.47 |
| 010040 | 01.5335 | 18 | 010131 | 01.3636 | 17.75 | 030044 | 01.0291 | 13.19 | 040042 | 01.2978 | . 03 | 050036 | 01.6162 | 18.61 |
| 010043 | 01.1036 | 10 | 010134 | 00.9206 | 36 | 030046 | 00.9134 | 16.38 | 040044 | 00.9622 | 10 | 050038 | 01.4553 | 29.05 |
| 010044 | 01.0919 | 11 | 010137 | 01.2516 | 16.36 | 030047 | 00.9 | 19 | 040045 | 01.0301 | 14.28 | 050039 | 01.6127 | 21.04 |
| 010045 | 01.2121 | 10 | 010138 | 00.9485 | 09.85 | 030049 | 00.9741 | 30 | 040047 | 01.0939 | 14.78 | 050040 | 01.0842 | 22.92 |
| 010046 | 01.5291 | 15 | 010139 | 01.6592 | 1 | 030054 | 00.8723 | 12.63 | 040048 | 01.2149 | 48 | 050041 | 02.8656 | 22.21 |
| 010047 | 01.0243 | 10 | 010143 | 01.192 | 15 | 030055 | 01.2014 | 16.85 | 040050 | 01.1013 | 11.66 | 050042 | 01.3081 | 20.20 |
| 010049 | 01.1121 | 15 | 010144 | 01 | 18 | 03005 | 01.2776 | 19.95 | 04005 | 01.0923 | 12.64 | 050043 | 01.5723 | 0.15 |
| 010050 | 01.0635 | 13 | 010145 | 01.3376 | 14.59 | 030060 | 01.2095 | 13.90 | 040053 | 01.1093 | 11. | 050045 | 01.2649 | . 1 |
| 010051 | 00.8549 |  | 010146 | 01. |  | 030061 | 01.6462 |  | 040054 | 01.0301 | 12.44 | 050046 | 01.1888 | 23.81 |
| 010052 | 00.9858 | 12 | 010148 | 00.9969 | 12.83 | 030062 | 01.2267 | 15 | 040055 | 01.4506 | 14.51 | 050047 | 01.6388 | . 15 |
| 010053 | 01.0653 | 12 | 010149 | 01. |  | 03006 | 01.6191 | 16.92 | 04005 | 01.0 | 13 | 5005 | 01.1104 | 6.63 |
| 010054 | 01.1726 | 16 | 010150 | 01.047 | 16 | 030065 | 01.6407 | 18.87 | 040060 | 00.9896 | 09.85 | 05005 | 01.196 | 20.55 |
| 010055 | 01.4846 | 16 | 010152 | 01.4762 |  | 030067 | 01.0515 | 15.92 | 040062 | 01.6181 | 16.66 | 050055 | 01.3742 | . 54 |
| 010056 | 01.3970 |  | 010155 | 00. |  | 030068 | 00 | 14 | 040063 | 01.4673 | 15. | 050056 | 01.3374 | 25.23 |
| 010058 | 01.0881 | 12 | 020001 | 01.47 | 25 | 030069 | 01.3 | 19.11 | 04006 | 01.0523 | 10 | 050057 | 01.4835 | 20.22 |
| 010059 | 01.0165 | 14 | 020002 | 01.0281 | 24.16 | 030071 | 00.9488 |  | 040066 | 01.1537 | 14.63 | 050058 | 01.466 | 22.78 |
| 010061 | 01.0127 |  | 020004 | 01.1028 | 25.46 | 030072 | 00.9090 |  | 040067 | 01.0801 | 11. | 050060 | 01.5897 | 24.25 |
| 010062 | 01.0042 |  | 020005 | 00 |  | 030073 | 2 |  | 040069 | 01.1 |  | 0061 | 01.4258 | 22.12 |
| 010064 | 01.7890 | 17 | 020006 | 01.1 |  | 030074 | 00.85 |  | 040070 | 00.9433 | 14 | 050063 | 01.4029 | 21.44 |
| 010065 | 01.3668 |  | 020007 |  |  | 030075 | 00.8660 |  | 40071 | 01.5932 | 15.42 | 050065 | 01.606 | . 37 |
| 010066 | 00.9789 |  | 020008 | 01 |  | 030076 | 9802 |  | 040072 | 01.0871 | 40 | 0066 | 01.2689 | . 33 |
| 010068 | 01.2370 | 18 | 020009 | 00.9255 |  | 030077 | 00.8761 |  | 040074 | 01.2566 | 14. | 050067 | 01.3777 | 21.09 |
| 010069 | 01.1589 | 13 | 020010 | 00. | 22 | 030078 | 01.1027 |  | 040075 | 01.0668 | 11.57 | 050068 | 01.0839 | 19.05 |
| 010072 | 01.2161 | 12.72 | 020011 | 01.0488 | 22.27 | 030079 | 00.7787 |  | 040076 | 01.0273 | 14.71 | 050069 | 01.6183 | 23.15 |
| 010073 | 00.9701 | 09 | 020012 | 01.3062 | 23.99 | 030080 | 01.6 |  | 040077 | 00.9196 | 10.72 | 050070 | 01.290 | 30.80 |
| 010078 | 01.1795 |  | 020013 | 1.0055 |  | 030083 | 01.3106 | 21.70 | 040078 | 01.4945 | 17.29 | 050071 | 01.3159 | 30.70 |
| 010079 | 01.2807 |  | 020014 | 01. |  | 030084 | 00.9358 |  | 040080 | 01.0752 | 15.45 | 050072 | 01.3053 | 31.00 |
| 010080 | 01.0389 | 12 | 020017 | 01.5181 | 26.83 | 030085 | 01.5045 | 21 | 040081 | 00.9285 | 09.91 | 050073 | 01.3239 | 31.41 |
| 010081 | 01.9832 | 16.16 | 020018 | 00.8963 |  | 030086 | 01.3209 | 76 | 040082 | 01.2156 | 13.69 | 050074 | 01.2314 | 32.96 |
| 010083 | 01.0377 |  | 020019 | 00.8718 |  | 030087 | 01.6153 | 18.77 | 040084 | 01.0963 | 14.83 | 050075 | 01.4037 | 30.72 |
| 010084 | 01.4816 | 16 | 020020 | 00.8398 |  | 030088 | 01.3513 | 19.90 | 040085 | 01.2493 | 15.18 | 050076 | 01.7756 | 29.65 |
| 010085 | 01.3233 | 17 | 020021 | 00.8478 |  | 030089 | 01.5736 | 18.66 | 040088 | 01.3091 | 13.73 | 050077 | 01.6152 | 22.83 |
| 010086 | 01.0507 | 13 | 020024 | 01.0693 |  | 030092 | 01.5590 | 20.62 | 040090 | 00.8983 | 13.78 | 050078 | 01.3591 | 24.44 |
| 010087 | 01.6243 | 16 | 020025 | 01.0046 | 24 | 030093 | 01.3791 | . 08 | 040091 | 01.2930 | 18.25 | 050079 | 01.5938 | 28.30 |
| 010089 | 01.1934 | 14.91 | 020026 | 01.3340 |  | 030094 | 01.2494 | 18.57 | 040093 | 00.9598 | 10.98 | 050080 | 01.2183 | 22.05 |
| 010090 | 01.5725 | 16.40 | 020027 | 00.9975 |  | 030095 | 01.2183 | 13.09 | 040095 | 00.9069 | 10.56 | 050081 | 01.6564 | 24.01 |
| 010091 | 00.9195 | 13.43 | 030001 | 1.3076 | 28 | 040001 | 01.1308 | 12.37 | 040100 | 01.2465 | 12.81 | 050082 | 01.4989 | 21.34 |
| 010092 | 01.4209 | 15.17 | 030002 | 01.7918 | 20.25 | 040002 | 01.1644 | 13.07 | 040105 | 01.0068 | 11.90 | 050084 | 01.5611 | 22.33 |
| 010094 | 01.1410 | 16.76 | 030003 | 01.8923 | 21.05 | 040003 | 01.0704 | 13.19 | 040106 | 01.2448 | 12.84 | 050088 | 01.1538 | 21.94 |

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| 050089 | 01.3485 | 19.92 | 050189 | 00.9777 | 21.50 | 050296 | 01.2071 | 22.69 | 050420 | 01.4424 | 25.15 | 050545 | 00.8420 | 20.39 |
| 050090 | 01.2755 | 21.75 | 050191 | 01.5032 | 20.64 | 050298 | 01.3081 | 20.18 | 050421 | 01.4112 | 24.62 | 050546 | 00.7212 | 21.10 |
| 050091 | 01.1984 | 24.42 | 050192 | 01.1071 | 18.74 | 050299 | 01.3607 | 22.49 | 050423 | 00.9821 | 19.25 | 050547 | 00.9602 | 20.65 |
| 050092 | 00.8504 | 16.19 | 050193 | 01.3631 | 22.56 | 050300 | 01.3100 | 18.87 | 050424 | 01.8316 | 22.16 | 050549 | 01.7182 | 25.86 |
| 050093 | 01.5917 | 22.35 | 050194 | 01.2409 | 25.03 | 050301 | 01.3825 | 21.54 | 050425 | 01.2719 | 30.41 | 050550 | 02.3168 | 23.34 |
| 050096 | 01.1244 | 12.95 | 050195 | 01.5876 | 31.29 | 050302 | 01.4049 | 24.31 | 050426 | 01.3055 | 23.89 | 050551 | 01.3473 | 24.20 |
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| 050099 | 01.4660 | 22.91 | 050197 | 01.8278 | 29.07 | 050307 | 01.4439 | 20.51 | 050431 | 01.0836 | 22.58 | 050557 | 01.4928 | 21.08 |
| 050100 | 01.6910 | 29.38 | 050199 | 00.8980 | 19.48 | 050308 | 01.5797 | 29.77 | 050432 | 01.5774 | 23.69 | 050559 | 01.3672 | 24.18 |
| 050101 | 01.3999 | 25.12 | 050204 | 01.4910 | 23.12 | 050309 | 01.3306 | 23.63 | 050433 | 01.0327 | 17.37 | 050560 | 01.1894 |  |
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| 050104 | 01.3906 | 21.73 | 050208 | 00.9572 | 27.63 | 050313 | 01.1891 | 20.90 | 050436 | 01.0099 | 15.77 | 050565 | 01.1456 | 21.26 |
| 050107 | 01.4355 | 22.92 | 050211 | 01.3142 | 29.60 | 050315 | 01.1826 | 20.75 | 050438 | 01.6261 | 23.33 | 050566 | 00.8791 | 19.75 |
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| 050110 | 01.2436 | 18.72 | 050215 | 01.5216 | 27.75 | 050324 | 01.8339 | 25.93 | 050443 | 00.9533 | 15.95 | 050569 | 01.3545 | 22.93 |
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| 050126 | 01.4704 | 23.23 | 050235 | 01.5105 | 25.00 | 050348 | 01.6030 | 22.83 | 050469 | 01.0879 | 17.33 | 050586 | 01.3647 | 21.76 |
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| 050136 | 01.3772 | 22.75 | 050245 | 01.3837 | 21.74 | 050359 | 01.2172 | 18.78 | 050483 | 01.1666 | 23.89 | 050597 | 01.2786 | 21.91 |
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| 050150 | 01.2565 | 23.23 | 050264 | 01.3732 | 26.01 | 050382 | 01.4511 | 20.97 | 050502 | 01.6551 | 23.61 | 050616 | 01.2953 | 20.68 |
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| 050168 | 01.6003 | 24.83 | 050278 | 01.5174 | 23.01 | 050394 | 01.5428 | 20.71 | 050517 | 01.2879 | 19.15 | 050635 | 01.4145 | 31.17 |
| 050169 | 01.5891 | 24.53 | 050279 | 01.2461 | 20.58 | 050396 | 01.6157 | 21.89 | 050522 | 01.3128 | 30.40 | 050636 | 01.4311 | 20.28 |
| 050170 | 01.5175 | 21.58 | 050280 | 01.6551 | 22.80 | 050397 | 01.0118 | 19.97 | 050523 | 01.2703 | 27.65 | 050638 | 01.1002 | 24.28 |
| 050172 | 01.2609 | 19.96 | 050281 | 01.4519 | 22.74 | 050401 | 01.1174 | 19.09 | 050526 | 01.3687 | 24.28 | 050641 | 01.2473 | 12.26 |
| 050173 | 01.2203 | 23.70 | 050282 | 01.3433 | 21.42 | 050404 | 01.1443 | 16.51 | 050528 | 01.3542 | 16.46 | 050643 | 00.7832 |  |
| 050174 | 01.6873 | 27.89 | 050283 | 01.1267 | 27.59 | 050406 | 01.1263 | 15.29 | 050531 | 01.3012 | 23.60 | 050644 | 00.9053 | 26.86 |
| 050175 | 01.3926 | 21.97 | 050286 | 01.0350 | 17.99 | 050407 | 01.3254 | 27.06 | 050534 | 01.3853 | 23.83 | 050660 | 01.3428 |  |
| 050177 | 01.2994 | 18.76 | 050289 | 01.7845 | 27.38 | 050410 | 01.0706 | 17.45 | 050535 | 01.3827 | 22.46 | 050661 | 00.8831 | 20.21 |
| 050179 | 01.2600 | 17.29 | 050290 | 01.6330 | 32.31 | 050411 | 01.4042 | 29.35 | 050537 | 01.2622 | 21.30 | 050662 | 00.8549 | 21.17 |
| 050180 | 01.5539 | 30.12 | 050291 | 01.2553 | 24.46 | 050414 | 01.2846 | 24.32 | 050539 | 01.2184 | 21.90 | 050663 | 01.0604 | 23.51 |
| 050183 | 01.1940 | 19.09 | 050292 | 01.0963 | 21.20 | 050417 | 01.3037 | 19.65 | 050541 | 01.5870 | 31.06 | 050666 | 00.7423 | 23.76 |
| 050186 | 01.2694 | 24.12 | 050293 | 01.1312 | 19.93 | 050418 | 01.4191 | 24.24 | 050542 | 01.2270 | 13.79 | 050667 | 01.0672 | 24.88 |
| 050188 | 01.3467 | 25.25 | 050295 | 01.4144 | 20.86 | 050419 | 01.3136 | 18.88 | 050543 | 00.9214 | 21.68 | 050668 | 01.1532 | 28.20 |

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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 <br> mix <br> index | Avg. hour wage | Provider | Case mix index | Avg. hour wage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 050670 | 00.7582 | 20.12 | 060046 | 01.1205 | 16.56 | 080005 | 01.3363 | 16.82 | 100071 | 01.3024 | 16.98 | 100167 | 01.3944 | 20.55 |
| 050672 | 00.6267 | 23.77 | 060047 | 00.9606 | 11.40 | 080006 | 01.3822 | 20.49 | 100072 | 01.2515 | 17.24 | 100168 | 01.3799 | 19.35 |
| 050674 | 01.2111 | 29.18 | 060049 | 01.3511 | 17.47 | 080007 | 01.3620 | 17.99 | 100073 | 01.7938 | 20.61 | 100169 | 01.8590 | 18.29 |
| 050675 | 01.7056 | 16.32 | 060050 | 01.1719 | 14.62 | 090001 | 01.4216 | 19.65 | 100075 | 01.6403 | 17.85 | 100170 | 01.4917 | 16.50 |
| 050676 | 00.9864 | 13.83 | 060052 | 01.0999 | 18.38 | 090002 | 01.3022 | 20.51 | 100076 | 01.3869 | 17.15 | 100172 | 01.3694 | 13.38 |
| 050677 | 01.4253 | 32.99 | 060053 | 00.9988 | 13.73 | 090003 | 01.3041 | 24.74 | 100077 | 01.3153 | 16.78 | 100173 | 01.6691 | 16.33 |
| 050678 | 01.0713 | 24.07 | 060054 | 01.3361 | 16.74 | 090004 | 01.7168 | 23.49 | 100078 | 01.1683 | 15.14 | 100174 | 01.5295 | 18.20 |
| 050680 | 01.2114 | 26.13 | 060056 | 00.9577 | 13.37 | 090005 | 01.3431 | 27.07 | 100079 | 01.7501 | 16.01 | 100175 | 01.2130 | 16.18 |
| 050682 | 00.8558 | 14.98 | 060057 | 01.0356 | 21.11 | 090006 | 01.3749 | 19.52 | 100080 | 01.6306 | 19.40 | 100176 | 02.0431 | 21.95 |
| 050684 | 01.2074 | 21.30 | 060058 | 00.9237 | 12.54 | 090007 | 01.3832 | 19.58 | 100081 | 01.1202 | 13.33 | 100177 | 01.3403 | 18.55 |
| 050685 | 01.2219 | 26.94 | 060060 | 00.9651 | 12.21 | 090008 | 01.5276 | 24.06 | 100082 | 01.5459 | 17.93 | 100179 | 01.6520 | 19.03 |
| 050686 | 01.3503 | 30.96 | 060062 | 00.9518 | 15.85 | 090010 | 01.0013 | 21.70 | 100083 | 01.3240 | 17.30 | 100180 | 01.4188 | 17.49 |
| 050688 | 01.2730 | 27.89 | 060063 | 01.0264 | 11.12 | 090011 | 01.9804 | 24.77 | 100084 | 01.5314 | 16.53 | 100181 | 01.2846 | 17.59 |
| 050689 | 01.3988 | 29.12 | 060064 | 01.4325 | 20.21 | 090015 | 01.3306 |  | 100085 | 01.4349 | 19.50 | 100183 | 01.3710 | 19.18 |
| 050690 | 01.4363 | 30.39 | 060065 | 01.3463 | 19.98 | 100001 | 01.5247 | 18.83 | 100086 | 01.3328 | 21.32 | 100186 | 01.4758 | 16.70 |
| 050693 | 01.9152 | 28.80 | 060066 | 00.9950 | 13.10 | 100002 | 01.4789 | 19.71 | 100087 | 01.8071 | 20.71 | 100187 | 01.4501 | 18.35 |
| 050694 | 01.3678 | 21.20 | 060068 | 01.2760 | 14.00 | 100004 | 01.0274 | 11.81 | 100088 | 01.6730 | 17.32 | 100189 | 01.3707 | 23.13 |
| 050695 | 01.1808 | 24.30 | 060070 | 01.0357 | 14.99 | 100005 | 01.0178 | 16.26 | 100090 | 01.4256 | 16.07 | 100191 | 01.3315 | 19.19 |
| 050696 | 02.0076 | 27.85 | 060071 | 01.2259 | 14.69 | 100006 | 01.5531 | 18.99 | 100092 | 01.4411 | 16.20 | 100199 | 01.4473 | 21.29 |
| 050697 | 01.1093 | 17.93 | 060073 | 01.0017 | 14.32 | 100007 | 01.8477 | 19.61 | 100093 | 01.5156 | 14.28 | 100200 | 01.3972 | 21.35 |
| 050698 | 01.1189 | 22.83 | 060075 | 01.3472 | 20.27 | 100008 | 01.7361 | 19.80 | 100098 | 01.1482 | 17.43 | 100203 | 01.2603 | 19.34 |
| 050699 | 00.5855 | 23.13 | 060076 | 01.3675 | 15.97 | 100009 | 01.5641 | 17.89 | 100099 | 01.2518 | 13.09 | 100204 | 01.6232 | 19.95 |
| 050700 | 01.4412 | 32.46 | 060085 | 00.9819 | 10.94 | 100010 | 01.5475 | 20.58 | 100102 | 01.1033 | 16.44 | 100206 | 01.3458 | 19.47 |
| 050701 | 01.3170 | 27.13 | 060087 | 01.6558 | 18.67 | 100012 | 01.6776 | 16.91 | 100103 | 01.1730 | 14.46 | 100207 | 01.4710 | 19.86 |
| 050702 | 00.8637 | 16.98 | 060088 | 01.0388 | 15.38 | 100014 | 01.4272 | 18.57 | 100105 | 01.4697 | 18.08 | 100208 | 01.6409 | 21.14 |
| 050704 | 01.2140 | 20.48 | 060090 | 00.9518 | 14.23 | 100015 | 01.2444 | 17.60 | 100106 | 01.0395 | 15.46 | 100209 | 01.6671 |  |
| 050706 | 00.9234 | 16.16 | 060096 | 00.9724 | 21.69 | 100017 | 01.6489 | 17.18 | 100107 | 01.4676 | 18.26 | 100210 | 01.6647 | 16.51 |
| 050707 | 01.2237 | 25.62 | 060100 | 01.4045 | 20.95 | 100018 | 01.2869 | 19.94 | 100108 | 01.1017 | 15.45 | 100211 | 01.3441 | 19.17 |
| 050708 | 00.9493 | 15.13 | 060103 | 01.2269 | 21.10 | 100019 | 01.4930 | 18.81 | 100109 | 01.3522 | 16.81 | 100212 | 01.6646 | 18.54 |
| 050709 | 01.3030 |  | 060104 | 01.3213 | 20.32 | 100020 | 01.3365 | 18.31 | 100110 | 01.4128 | 18.91 | 100213 | 01.5438 | 20.00 |
| 050710 | 01.4014 |  | 070001 | 01.7582 | 24.78 | 100022 | 01.8009 | 23.05 | 100112 | 00.9738 | 10.84 | 100217 | 01.3055 | 17.06 |
| 050711 | 02.3868 |  | 070002 | 01.8728 | 24.78 | 100023 | 01.3489 | 15.88 | 100113 | 02.0848 | 18.19 | 100220 | 01.9563 | 19.66 |
| 050712 | 02.1147 |  | 070003 | 01.1239 | 24.50 | 100024 | 01.3583 | 19.54 | 100114 | 01.4930 | 17.73 | 100221 | 01.5644 | 20.68 |
| 060001 | 01.5550 | 18.95 | 070004 | 01.1696 | 23.70 | 100025 | 01.8825 | 16.22 | 100117 | 01.3334 | 18.18 | 100222 | 01.3723 | 18.80 |
| 060003 | 01.2961 | 15.85 | 070005 | 01.3792 | 25.45 | 100026 | 01.6477 | 15.52 | 100118 | 01.2737 | 16.03 | 100223 | 01.4892 | 18.53 |
| 060004 | 01.2624 | 19.46 | 070006 | 01.3529 | 26.73 | 100027 | 00.9736 | 11.53 | 100121 | 01.3068 | 15.44 | 100224 | 01.4648 | 19.77 |
| 060006 | 01.1955 | 16.19 | 070007 | 01.3475 | 24.08 | 100028 | 01.2678 | 16.38 | 100122 | 01.4565 | 16.39 | 100225 | 01.3368 | 19.52 |
| 060007 | 01.1900 | 13.06 | 070008 | 01.3124 | 23.47 | 100029 | 01.4029 | 18.94 | 100124 | 01.3643 | 19.41 | 100226 | 01.3383 | 16.58 |
| 060008 | 01.0198 | 14.31 | 070009 | 01.2830 | 25.01 | 100030 | 01.2690 | 18.25 | 100125 | 01.1630 | 17.77 | 100228 | 01.2947 | 21.09 |
| 060009 | 01.4621 | 19.88 | 070010 | 01.5535 | 22.46 | 100032 | 01.9188 | 17.39 | 100126 | 01.4954 | 18.74 | 100229 | 01.3211 | 16.27 |
| 060010 | 01.5276 | 21.10 | 070011 | 01.3259 | 22.80 | 100034 | 01.7338 | 18.34 | 100127 | 01.6870 | 17.42 | 100230 | 01.5471 | 18.97 |
| 060011 | 01.3023 | 20.75 | 070012 | 01.2576 | 23.38 | 100035 | 01.6138 | 16.46 | 100128 | 02.2417 | 20.13 | 100231 | 01.6613 | 17.46 |
| 060012 | 01.3852 | 15.79 | 070013 | 01.2822 | 24.01 | 100038 | 01.5951 | 21.18 | 100129 | 01.2509 | 17.45 | 100232 | 01.2675 | 17.64 |
| 060013 | 01.2654 | 18.83 | 070015 | 01.3569 | 23.82 | 100039 | 01.7158 | 21.15 | 100130 | 01.2008 | 17.45 | 100234 | 01.5324 | 19.03 |
| 060014 | 01.6915 | 20.52 | 070016 | 01.3194 | 25.46 | 100040 | 01.6731 | 16.31 | 100131 | 01.3922 | 18.44 | 100235 | 01.4827 | 17.51 |
| 060015 | 01.5657 | 19.33 | 070017 | 01.3781 | 23.54 | 100043 | 01.4570 | 17.78 | 100132 | 01.4189 | 15.67 | 100236 | 01.4442 | 13.79 |
| 060016 | 01.0954 | 11.42 | 070018 | 01.3719 | 27.83 | 100044 | 01.5045 | 19.01 | 100134 | 01.0741 | 14.50 | 100237 | 02.1446 | 22.65 |
| 060018 | 01.2199 | 16.36 | 070019 | 01.2169 | 24.04 | 100045 | 01.4032 | 17.12 | 100135 | 01.5224 | 16.11 | 100238 | 01.4858 | 18.68 |
| 060020 | 01.5176 | 16.73 | 070020 | 01.3709 | 24.32 | 100046 | 01.5110 | 18.53 | 100137 | 01.3279 | 18.42 | 100239 | 01.4622 | 19.34 |
| 060022 | 01.6695 | 17.89 | 070021 | 01.2987 | 25.47 | 100047 | 01.9163 | 18.62 | 100138 | 00.9478 | 13.00 | 100240 | 00.8437 | 15.06 |
| 060023 | 01.6463 | 16.65 | 070022 | 01.7641 | 24.30 | 100048 | 01.0025 | 11.69 | 100139 | 01.0496 | 14.54 | 100241 | 00.9433 | 12.47 |
| 060024 | 01.8181 | 22.01 | 070024 | 01.3541 | 23.81 | 100049 | 01.3263 | 18.03 | 100140 | 01.2518 | 16.87 | 100242 | 01.4135 | 16.29 |
| 060026 | 01.4223 | 19.44 | 070025 | 01.7842 | 24.06 | 100050 | 01.2227 | 15.06 | 100142 | 01.2004 | 16.68 | 100243 | 01.4119 | 18.82 |
| 060027 | 01.6577 | 19.01 | 070026 | 01.2223 | 23.07 | 100051 | 01.1532 | 16.60 | 100144 | 01.1466 | 13.65 | 100244 | 01.4339 | 17.32 |
| 060028 | 01.4947 | 21.29 | 070027 | 01.2599 | 24.31 | 100052 | 01.3772 | 15.60 | 100145 | 01.3481 | 14.87 | 100246 | 01.3465 | 20.92 |
| 060029 | 00.9485 | 13.93 | 070028 | 01.4783 | 24.67 | 100053 | 01.2886 | 17.36 | 100146 | 01.2770 | 14.27 | 100248 | 01.6989 | 17.88 |
| 060030 | 01.3165 | 20.36 | 070029 | 01.3524 | 21.65 | 100054 | 01.2923 | 17.44 | 100147 | 01.0996 | 13.43 | 100249 | 01.3543 | 18.87 |
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| 060032 | 01.5777 | 19.35 | 070031 | 01.2706 | 22.24 | 100056 | 01.4655 | 19.83 | 100151 | 01.8572 | 18.63 | 100253 | 01.4755 | 20.60 |
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| 060034 | 01.4958 | 16.90 | 070034 | 01.3752 | 24.74 | 100060 | 01.8491 | 17.71 | 100156 | 01.2204 | 18.65 | 100255 | 01.3322 | 19.00 |
| 060036 | 01.1712 | 14.37 | 070035 | 01.3469 | 24.31 | 100061 | 01.5100 | 20.88 | 100157 | 01.6134 | 19.31 | 100256 | 01.8955 | 19.32 |
| 060037 | 01.0382 | 13.22 | 070036 | 01.4320 | 26.98 | 100062 | 01.7185 | 16.94 | 100159 | 00.9856 | 12.76 | 100258 | 01.6509 | 21.12 |
| 060038 | 01.0192 | 12.25 | 070039 | 00.9213 |  | 100063 | 01.3423 | 16.12 | 100160 | 01.1059 | 18.07 | 100259 | 01.4493 | 16.36 |
| 060041 | 00.9203 | 16.53 | 080001 | 01.6101 | 23.66 | 100067 | 01.4267 | 16.38 | 100161 | 01.5194 | 19.76 | 100260 | 01.4016 | 20.44 |
| 060042 | 01.0532 | 18.49 | 080002 | 01.1904 | 17.32 | 100068 | 01.3880 | 17.42 | 100162 | 01.3924 | 14.53 | 100262 | 01.4109 | 19.32 |
| 060043 | 00.9506 | 11.78 | 080003 | 01.3137 | 19.32 | 100069 | 01.3653 | 17.29 | 100165 | 01.2958 | 13.45 | 100263 | 01.3896 | 15.44 |
| 060044 | 01.2631 | 17.32 | 080004 | 01.2871 | 17.59 | 100070 | 01.4420 | 17.56 | 100166 | 01.4618 | 20.31 | 100264 | 01.3958 | 18.24 |

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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 |
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| 100265 | 01.3686 | 17.4 | 110063 | 01.0768 | 11.44 | 110 | 01.0003 | 68 | 130011 | 01.2386 | 16 | 140045 | 1.0555 | 14.21 |
| 100266 | 01.2337 | 15.64 | 110064 | 01.2883 | 15.87 | 110161 | 01.3328 | 20.79 | 130012 | 01.0233 | 18.53 | 140046 | 01.3023 | 14.83 |
| 100267 | 01.3092 | 16.39 | 110065 | 01.0143 | 12.00 | 110162 | 00.8588 |  | 130013 | 01.2416 | 17.21 | 140047 | 01.1406 | 13.20 |
| 100268 | 01.1990 | 22.00 | 110066 | 01.4374 | 16.30 | 110163 | 01.4549 | 18.52 | 130014 | 01.3094 | 16.43 | 140048 | 01.2744 | 21.50 |
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| 100271 | 01.6614 | 19.27 | 110071 | 01.0308 | 10.29 | 110166 | 01.4995 | 16.67 | 130017 | 01.3710 | 13.03 | 140052 | 01.3150 | 16.77 |
| 100273 | 00.5356 | 19.72 | 110072 | 01.0243 | 11.53 | 110168 | 01.6538 | 19.22 | 130018 | 01.7015 | 17.60 | 140053 | 01.8914 | 17.88 |
| 100275 | 01.4206 | 21.96 | 110073 | 01.2050 | 12.67 | 110169 | 00.7308 | 19.70 | 130019 | 01.1172 | 13.74 | 140054 | 01.3616 | 26.25 |
| 100276 | 01.3027 | 21.94 | 110074 | 01.4803 | 18.11 | 110171 | 01.4451 | 21.21 | 130021 | 01.0324 | 11.96 | 140055 | 00.9382 | 13.00 |
| 100277 | 01.0093 | 12.71 | 110075 | 01.2149 | 15.29 | 110172 | 01.3290 | 22.83 | 130022 | 01.1917 | 15.44 | 140058 | 01.2318 | 15.26 |
| 100279 | 01.3786 | 18.35 | 110076 | 01.3902 | 18.01 | 110174 | 01.0473 | 17.57 | 130024 | 01.0580 | 15.25 | 140059 | 01.1334 | 13.52 |
| 100280 | 01.3831 | 16.93 | 110078 | 01.6637 | 20.46 | 110176 | 01.1251 | 19.42 | 130025 | 01.1537 | 15.21 | 140061 | 01.0878 | 13.80 |
| 100281 | 01.2517 | 20.85 | 110079 | 01.3869 | 21.08 | 110177 | 01.4857 | 19.21 | 130026 | 01.1747 | 17.89 | 140062 | 01.2451 | 23.10 |
| 100282 | 01.0482 | 16.99 | 110080 | 01.1544 | 16.86 | 110178 | 01.3702 | 16.78 | 130027 | 00.9528 | 17.18 | 140063 | 01.3960 | 22.48 |
| 100283 | 01.5478 |  | 110082 | 02.0163 | 20.36 | 110179 | 01.2381 | 21.56 | 130028 | 01.2515 | 16.08 | 140064 | 01.2951 | 16.15 |
| 110001 | 01.2914 | 17.40 | 110083 | 01.7255 | 20.66 | 110181 | 00.9860 | 12.59 | 130029 | 01.0268 | 17.07 | 140065 | 01.4926 | 23.68 |
| 110002 | 01.2397 | 14.83 | 110086 | 01.2253 | 13.74 | 110183 | 01.3704 | 19.70 | 130030 | 01.0243 | 16.20 | 140066 | 01.3711 | 13.39 |
| 110003 | 01.3129 | 15.41 | 110087 | 01.3386 | 19.17 | 110184 | 01.1715 | 17.58 | 130031 | 01.0201 | 13.26 | 140067 | 01.8194 | 18.24 |
| 110004 | 01.3118 | 16.17 | 110088 | 00.9740 | 11.17 | 110185 | 01.0833 | 12.23 | 130034 | 01.0393 | 16.38 | 140068 | 01.3583 | 19.00 |
| 110005 | 01.1872 | 21.40 | 110089 | 01.2146 | 15.37 | 110186 | 01.3060 | 15.97 | 130035 | 01.0736 | 15.37 | 140069 | 01.0029 | 14.23 |
| 110006 | 01.3597 | 18.00 | 110091 | 01.3449 | 19.15 | 110187 | 01.2469 | 17.19 | 130036 | 01.2609 | 12.50 | 140070 | 01.2830 | 16.18 |
| 110007 | 01.4425 | 15.69 | 110092 | 01.1821 | 12.55 | 110188 | 01.4186 | 18.00 | 130037 | 01.2616 | 14.58 | 140074 | 00.9704 | 14.60 |
| 110008 | 01.2405 | 15.47 | 110093 | 01.0096 | 09.81 | 110189 | 01.1327 | 19.78 | 130043 | 00.9469 | 14.61 | 140075 | 01.4685 | 21.53 |
| 110009 | 01.0377 | 15.71 | 110094 | 00.9542 | 12.06 | 110190 | 01.0859 | 14.41 | 130044 | 01.1660 | 12.37 | 140077 | 01.1503 | 17.05 |
| 110010 | 02.1503 | 21.39 | 110095 | 01.2750 | 13.86 | 110191 | 01.3482 | 18.06 | 130045 | 01.0284 | 12.15 | 140079 | 01.2410 | 20.90 |
| 110011 | 01.2868 | 16.01 | 110096 | 01.1414 | 14.30 | 110192 | 01.3977 | 22.17 | 130048 | 01.0663 | 11.90 | 140080 | 01.5779 | 19.60 |
| 110013 | 01.1312 | 14.36 | 110097 | 01.0166 | 15.58 | 110193 | 01.2300 | 16.16 | 130049 | 01.2960 | 17.55 | 140081 | 01.0821 | 13.92 |
| 110014 | 01.0340 | 14.48 | 110098 | 01.0881 | 11.76 | 110194 | 00.9644 | 11.77 | 130054 | 00.9683 | 17.12 | 140082 | 01.5059 | 22.10 |
| 110015 | 01.3622 | 16.52 | 110100 | 01.0968 | 12.27 | 110195 | 01.0844 | 10.50 | 130056 | 00.8652 | 09.45 | 140083 | 01.2600 | 16.51 |
| 110016 | 01.2991 | 14.21 | 110101 | 01.1035 | 09.24 | 110198 | 01.3316 | 22.58 | 130058 | 01.0150 | 12.87 | 140084 | 01.2248 | 17.94 |
| 110017 | 00.8897 | 11.01 | 110103 | 00.9630 | 10.35 | 110200 | 01.9437 | 15.79 | 130060 | 01.1458 | 18.38 | 140086 | 01.1464 | 13.93 |
| 110018 | 01.1357 | 17.20 | 110104 | 01.1073 | 13.28 | 110201 | 01.4531 | 16.13 | 130061 | 00.9513 |  | 140087 | 01.3852 | 17.10 |
| 110020 | 01.2352 | 17.30 | 110105 | 01.1304 | 15.17 | 110203 | 00.9692 | 14.94 | 140001 | 01.2958 | 14.63 | 140088 | 01.6480 | 23.33 |
| 110023 | 01.2361 | 17.53 | 110107 | 01.8146 | 17.59 | 110204 | 00.7960 | 13.48 | 140002 | 01.2776 | 17.04 | 140089 | 01.2253 | 15.85 |
| 110024 | 01.4802 | 18.74 | 110108 | 00.9720 | 11.27 | 110205 | 01.1080 | 11.84 | 140003 | 01.0184 | 13.14 | 140090 | 01.5101 | 23.62 |
| 110025 | 01.4157 | 16.85 | 110109 | 01.1115 | 12.14 | 110207 | 01.1008 | 15.59 | 140004 | 01.0799 | 13.75 | 140091 | 01.8655 | 17.70 |
| 110026 | 01.1891 | 13.87 | 110111 | 01.1934 | 14.70 | 110208 | 00.9734 | 14.94 | 140005 | 00.9511 | 09.98 | 140093 | 01.1961 | 17.17 |
| 110027 | 01.1013 | 14.56 | 110112 | 01.1522 | 15.06 | 110209 | 00.8222 |  | 140007 | 01.4675 | 20.56 | 140094 | 01.2905 | 18.81 |
| 110028 | 01.5984 | 17.75 | 110113 | 01.1384 | 12.86 | 120001 | 01.7331 | 22 | 140008 | 01.4859 | 20.57 | 140095 | 01.3991 |  |
| 110029 | 01.3374 | 17.71 | 110114 | 01.0749 | 13.75 | 120002 | 01.1971 | 21.46 | 140010 | 01.3888 | 22.14 | 140097 | 00.9102 | 14.15 |
| 110030 | 01.2807 | 16.60 | 110115 | 01.6188 | 21.82 | 120003 | 01.1450 | 21.82 | 140011 | 01.1465 | 15.31 | 140100 | 01.2229 | 17.62 |
| 110031 | 01.3367 | 19.58 | 110118 | 01.0422 | 13.18 | 120004 | 01.2653 | 20.56 | 140012 | 01.2840 | 17.59 | 140101 | 01.2108 | 18.04 |
| 110032 | 01.2298 | 15.31 | 110120 | 01.0800 | 13.35 | 120005 | 01.2656 | 18.34 | 140013 | 01.6579 | 16.49 | 140102 | 01.0422 | 14.09 |
| 110033 | 01.5204 | 20.32 | 110121 | 01.1802 | 11.84 | 120006 | 01.2116 | 22.75 | 140014 | 01.0745 | 16.31 | 140103 | 01.3357 | 16.66 |
| 110034 | 01.5019 | 16.64 | 110122 | 01.3550 | 16.03 | 120007 | 01.6278 | 20.27 | 140015 | 01.2937 | 13.45 | 140105 | 01.3085 | 18.25 |
| 110035 | 01.3991 | 18.53 | 110124 | 01.0703 | 15.32 | 120009 | 01.0061 | 18.05 | 140016 | 00.9317 | 11.59 | 140107 | 01.0869 | 11.63 |
| 110036 | 01.6840 | 22.81 | 110125 | 01.2217 | 15.97 | 120010 | 01.8369 | 22.11 | 140018 | 01.4564 | 18.85 | 140108 | 01.3663 | 20.00 |
| 110037 | 01.0904 | 10.18 | 110127 | 00.9066 | 14.43 | 120011 | 01.2382 | 30.31 | 140019 | 00.9926 | 11.80 | 140109 | 01.1410 | 12.95 |
| 110038 | 01.4674 | 15.04 | 110128 | 01.1920 | 17.54 | 120012 | 01.0209 | 20.30 | 140024 | 01.0178 | 13.59 | 140110 | 01.2359 | 14.51 |
| 110039 | 01.3709 | 17.93 | 110129 | 01.6749 | 13.01 | 120014 | 01.3556 | 21.25 | 140025 | 01.0795 | 15.88 | 140112 | 01.0953 | 13.55 |
| 110040 | 01.0270 | 16.26 | 110130 | 01.0721 | 10.57 | 120015 | 00.8375 | 21.01 | 140026 | 01.1409 | 15.58 | 140113 | 01.4647 | 19.21 |
| 110041 | 01.2250 | 16.43 | 110132 | 01.1433 | 12.87 | 120016 | 00.8558 | 21.94 | 140027 | 01.3182 | 15.96 | 140114 | 01.3202 | 18.95 |
| 110042 | 01.2103 | 14.63 | 110134 | 00.8944 | 11.65 | 120018 | 01.0071 | 21.16 | 140029 | 01.3782 | 19.62 | 140115 | 01.2339 | 19.32 |
| 110043 | 01.7167 | 15.17 | 110135 | 01.1981 | 13.83 | 120019 | 01.1834 | 19.48 | 140030 | 01.6711 | 21.46 | 140116 | 01.2862 | 19.68 |
| 110044 | 01.0960 | 14.31 | 110136 | 01.1213 | 13.57 | 120021 | 00.9888 | 19.68 | 140031 | 01.1749 | 13.02 | 140117 | 01.4895 | 17.63 |
| 110045 | 01.2388 | 22.04 | 110140 | 00.8182 | 15.03 | 120022 | 01.7240 | 17.83 | 140032 | 01.2531 | 16.44 | 140118 | 01.6767 | 22.66 |
| 110046 | 01.1993 | 15.07 | 110141 | 00.9067 | 11.65 | 120026 | 01.2802 | 22.30 | 140033 | 01.2640 | 19.10 | 140119 | 01.6872 | 19.58 |
| 110048 | 01.3128 | 12.97 | 110142 | 00.9806 | 11.15 | 120027 | 01.5395 | 21.16 | 140034 | 01.1800 | 16.74 | 140120 | 01.5073 | 14.72 |
| 110049 | 01.0704 | 13.71 | 110143 | 01.3994 | 20.07 | 130001 | 01.0424 | 17.21 | 140035 | 01.0305 | 10.70 | 140121 | 01.5215 | 10.91 |
| 110050 | 01.0669 | 14.00 | 110144 | 01.1678 | 16.44 | 130002 | 01.3774 | 14.66 | 140036 | 01.2388 | 15.03 | 140122 | 01.5566 | 21.02 |
| 110051 | 00.9865 | 16.35 | 110146 | 01.0299 | 09.43 | 130003 | 01.3112 | 18.11 | 140037 | 00.9794 | 12.24 | 140124 | 01.1139 | 23.06 |
| 110052 | 00.9774 | 09.11 | 110149 | 01.1319 | 12.17 | 130005 | 01.4396 | 18.19 | 140038 | 01.1510 | 15.00 | 140125 | 01.3450 | 15.60 |
| 110054 | 01.2816 | 16.57 | 110150 | 01.3658 | 16.56 | 130006 | 01.8983 | 18.19 | 140039 | 00.9224 | 11.51 | 140127 | 01.3522 | 16.83 |
| 110056 | 00.9765 | 12.61 | 110152 | 01.1295 | 13.06 | 130007 | 01.6434 | 18.60 | 140040 | 01.3093 | 14.34 | 140128 | 01.0595 | 16.10 |
| 110059 | 01.2900 | 14.39 | 110153 | 01.0212 | 15.33 | 130008 | 00.9857 | 10.28 | 140041 | 01.2320 | 15.01 | 140129 | 01.0555 | 13.18 |
| 110061 | 01.0143 | 10.61 | 110154 | 00.8337 | 12.68 | 130009 | 00.9627 | 14.78 | 140042 | 01.0524 | 13.30 | 140130 | 01.2738 | 21.67 |
| 110062 | 00.9181 | 09.73 | 110155 | 01.2376 | 12.27 | 130010 | 00.9403 | 15.04 | 140043 | 01.1790 | 16.37 | 140132 | 01.4146 | 18.58 |

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| rov | 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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| 140135 | 01.3146 | 14.29 | 140231 | 01.6272 | 19.79 | 150044 | 01.2634 | 17.63 | 150128 | 01.2340 | 18.59 | 160070 | 01.0255 | 13.84 |
| 140137 | 01.0354 | 13.61 | 140233 | 01.7471 | 16.57 | 150045 | 01.0913 | 15.00 | 150129 | 01.1915 | 20.35 | 160072 | 01.0688 | 12.08 |
| 140138 | 00.9661 | 12.15 | 140234 | 01.1838 | 15.82 | 150046 | 01.5896 | 16.06 | 150130 | 01.1496 | 15.90 | 160073 | 01.0070 | 11.50 |
| 140139 | 01.0792 | 13.46 | 140236 | 01.0311 | 12.82 | 150047 | 01.6212 | 17.74 | 150132 | 01.3365 | 19.17 | 160074 | 01.1069 | 12.89 |
| 140140 | 01.1317 | 13.05 | 140239 | 01.5856 | 18.81 | 150048 | 01.1679 | 16.18 | 150133 | 01.2095 | 14.96 | 160075 | 01.1112 | 13.84 |
| 140141 | 00.8984 | 13.30 | 140240 | 01.5048 | 20.90 | 150049 | 01.0776 | 13.72 | 150134 | 01.2828 | 16.61 | 160076 | 01.0692 | 16.28 |
| 140143 | 01.0643 | 15.85 | 140242 | 01.5726 | 22.51 | 150050 | 01.1998 | 14.50 | 150136 | 00.9472 | 18.69 | 160077 | 01.1216 | 10.97 |
| 140144 | 00.9856 | 16.57 | 140245 | 01.1273 | 13.55 | 150051 | 01.3841 | 16.82 | 150138 | 01.1623 |  | 160079 | 01.4245 | 15.22 |
| 140145 | 01.2030 | 14.31 | 140246 | 01.0570 | 12.03 | 150052 | 01.0743 | 12.93 | 150139 | 01.4806 |  | 160080 | 01.2082 | 15.41 |
| 140146 | 00.9666 | 14.85 | 140250 | 01.3165 | 21.35 | 150053 | 01.0618 | 16.69 | 150141 | 01.0859 |  | 160081 | 01.0672 | 14.36 |
| 140147 | 01.1866 | 13.37 | 140251 | 01.3066 | 18.25 | 150054 | 01.1376 | 12.39 | 150142 | 02.4300 |  | 160082 | 01.7545 | 17.09 |
| 140148 | 01.8018 | 16.51 | 140252 | 01.4201 | 21.25 | 150056 | 01.6228 | 21.59 | 150897 | 04.9892 |  | 160083 | 01.5789 | 17.49 |
| 140150 | 01.5561 | 26.00 | 140253 | 01.4456 |  | 150057 | 02.3179 | 15.06 | 160001 | 01.2719 | 16.39 | 160085 | 01.0916 | 12.79 |
| 140151 | 01.1119 | 17.61 | 140258 | 01.5345 | 21 | 150058 | 01.6930 | 18.64 | 160002 | 01.1888 | 13.13 | 160086 | 01.0283 | 12.56 |
| 140152 | 01.0750 | 22.48 | 140271 | 01.0260 | 13.54 | 150059 | 01.3218 | 18.91 | 160003 | 01.0221 | 11.87 | 160088 | 01.0017 | 13.10 |
| 140155 | 01.1854 | 16.91 | 140275 | 01.2294 | 18.20 | 150060 | 01.1281 | 12.79 | 160005 | 01.1072 | 12.93 | 160089 | 01.1591 | 14.12 |
| 140158 | 01.2597 | 21.41 | 140276 | 01.9589 | 20.48 | 150061 | 01.2957 | 15.86 | 160007 | 01.0085 | 12.02 | 160090 | 01.0066 | 13.98 |
| 140160 | 01.2326 | 15.34 | 140280 | 01.2769 | 16.16 | 150062 | 01.0670 | 15.20 | 160008 | 01.1043 | 13.93 | 160091 | 01.0987 | 10.56 |
| 140161 | 01.1373 | 17.05 | 140281 | 01.6388 | 20.19 | 150063 | 01.0538 | 18.88 | 160009 | 01.1577 | 13.54 | 160092 | 00.9736 | 12.93 |
| 140162 | 01.7778 | 18.38 | 140285 | 01.2063 | 14.75 | 150064 | 01.2100 | 16.48 | 160012 | 01.0588 | 14.05 | 160093 | 01.1351 | 15.20 |
| 140164 | 01.2855 | 16.01 | 140286 | 01.1491 | 17.59 | 150065 | 01.1505 | 15.94 | 160013 | 01.2189 | 16.64 | 160094 | 01.2168 | 14.79 |
| 140165 | 01.1085 | 13.06 | 140288 | 01.7781 | 22.47 | 150066 | 01.0021 | 13.75 | 160014 | 01.0459 | 12.72 | 160095 | 01.0266 | 12.30 |
| 140166 | 01.2889 | 16.62 | 140289 | 01.3089 | 15.67 | 150067 | 01.1221 | 14.35 | 160016 | 01.2911 | 15.68 | 160097 | 01.0785 | 13.47 |
| 140167 | 01.1636 | 14.64 | 140290 | 01.3385 | 19.21 | 150069 | 01.2347 | 16.53 | 160018 | 00.9429 | 13.19 | 160098 | 01.0760 | 13.90 |
| 140168 | 01.1840 | 15.02 | 140291 | 01.2645 | 22.64 | 150070 | 01.0350 | 16.16 | 160020 | 01.0963 | 12.11 | 160099 | 00.9737 | 12.80 |
| 140170 | 01.1280 | 12.39 | 140292 | 01.1678 | 19.04 | 150071 | 01.1562 | 12.69 | 160021 | 01.0439 | 13.85 | 160101 | 01.1220 | 17.71 |
| 140171 | 00.9149 | 12.53 | 140294 | 01.1864 | 16.10 | 150072 | 01.1914 | 15.32 | 160023 | 01.1458 | 13.66 | 160102 | 01.3668 | 14.31 |
| 140172 | 01.5065 | 18.29 | 140297 | 01.2589 | 21.42 | 150073 | 01.0044 | 15.49 | 160024 | 01.5710 | 17.39 | 160103 | 01.0113 | 12.95 |
| 140173 | 00.9721 | 13.11 | 140300 | 01.6785 | 25.11 | 150074 | 01.5934 | 19.00 | 160026 | 01.0986 | 15.21 | 160104 | 01.2335 | 19.21 |
| 140174 | 01.4333 | 18.89 | 150001 | 01.0846 | 16.95 | 150075 | 01.2247 | 13.82 | 160027 | 01.1671 | 13.22 | 160106 | 01.0829 | 14.18 |
| 140176 | 01.2617 | 18.83 | 150002 | 01.4319 | 19.23 | 150076 | 01.1512 | 19.89 | 160028 | 01.3407 | 17.78 | 160107 | 01.1437 | 13.78 |
| 140177 | 01.2945 | 16.44 | 150003 | 01.7075 | 18.32 | 150077 | 01.2659 | 16.21 | 160029 | 01.4962 | 17.46 | 160108 | 01.1602 | 14.09 |
| 140179 | 01.3297 | 19.51 | 150004 | 01.4226 | 19.99 | 150078 | 01.0834 | 17.20 | 160030 | 01.2338 | 16.67 | 160109 | 01.1631 | 12.01 |
| 140180 | 01.5189 | 20.22 | 150005 | 01.1932 | 17.16 | 150079 | 01.1390 | 13.01 | 160031 | 01.1797 | 13.26 | 160110 | 01.4994 | 17.76 |
| 140181 | 01.3046 | 18.82 | 150006 | 01.2074 | 16.72 | 150082 | 01.4965 | 18.33 | 160032 | 01.1573 | 14.66 | 160111 | 01.1019 | 10.75 |
| 140182 | 01.3248 | 19.11 | 150007 | 01.2302 | 17.95 | 150084 | 01.8737 | 21.80 | 160033 | 01.7246 | 15.82 | 160112 | 01.4123 | 14.45 |
| 140184 | 01.1967 | 14.20 | 150008 | 01.3398 | 18.38 | 150086 | 01.3006 | 15.72 | 160034 | 01.0681 | 13.81 | 160113 | 00.9561 | 11.39 |
| 140185 | 01.4505 | 16.35 | 150009 | 01.3365 | 16.97 | 150088 | 01.1917 | 16.71 | 160035 | 00.9375 | 11.91 | 160114 | 01.0697 | 14.13 |
| 140186 | 01.3274 | 18.01 | 150010 | 01.2041 | 16.10 | 150089 | 01.3985 | 18.99 | 160036 | 01.0756 | 12.83 | 160115 | 01.0280 | 13.87 |
| 140187 | 01.4861 | 16.33 | 150011 | 01.2190 | 16.76 | 150090 | 01.2596 | 19.34 | 160037 | 01.1621 | 14.80 | 160116 | 01.1691 | 15.46 |
| 140188 | 00.9575 | 10.54 | 150012 | 01.6875 | 20.57 | 150091 | 01.0611 | 15.60 | 160039 | 01.0670 | 15.23 | 160117 | 01.3337 | 15.63 |
| 140189 | 01.1712 | 15.74 | 150013 | 01.1675 | 13.09 | 150092 | 01.0673 | 12.44 | 160040 | 01.3537 | 16.04 | 160118 | 01.0360 | 12.42 |
| 140190 | 01.1195 | 13.36 | 150014 | 01.4216 | 18.85 | 150094 | 01.0035 | 16.65 | 160041 | 01.0646 | 12.88 | 160120 | 01.0091 | 09.94 |
| 140191 | 01.3775 | 23.16 | 150015 | 01.2264 | 17.85 | 150095 | 01.1144 | 15.78 | 160043 | 01.0338 | 13.38 | 160122 | 01.1669 | 14.96 |
| 140192 | 01.1869 | 16.51 | 150017 | 01.8448 | 17.26 | 150096 | 01.0971 | 17.15 | 160044 | 01.1574 | 13.36 | 160123 | 01.1780 | 12.18 |
| 140193 | 01.0112 | 12.24 | 150018 | 01.2919 | 17.47 | 150097 | 01.1277 | 16.53 | 160045 | 01.6987 | 17.48 | 160124 | 01.2526 | 15.35 |
| 140197 | 01.2709 | 16.05 | 150019 | 01.1266 | 13.09 | 150098 | 01.1300 | 11.81 | 160046 | 01.0369 | 11.92 | 160126 | 01.1504 | 13.82 |
| 140199 | 01.0139 | 15.13 | 150020 | 01.1554 | 13.19 | 150099 | 01.3115 | 17.10 | 160047 | 01.3602 | 15.87 | 160129 | 01.0228 | 13.07 |
| 140200 | 01.4295 | 20.12 | 150021 | 01.6718 | 18.22 | 150100 | 01.6839 | 18.15 | 160048 | 01.0179 | 11.76 | 160130 | 01.1652 | 13.04 |
| 140202 | 01.3141 | 20.09 | 150022 | 01.1381 | 17.62 | 150101 | 01.0868 | 14.46 | 160049 | 00.9842 | 12.04 | 160131 | 01.1087 | 12.63 |
| 140203 | 01.1570 | 19.02 | 150023 | 01.4914 | 17.81 | 150102 | 01.0903 | 14.61 | 160050 | 01.0246 | 14.12 | 160134 | 00.9843 | 11.37 |
| 140205 | 00.9221 | 13.88 | 150024 | 01.4448 | 16.96 | 150103 | 01.0416 | 17.63 | 160051 | 00.9907 | 12.90 | 160135 | 01.0019 | 13.24 |
| 140206 | 01.0864 | 19.58 | 150025 | 01.4616 | 16.32 | 150104 | 01.1413 | 15.09 | 160052 | 01.0589 | 14.80 | 160138 | 01.0588 | 13.48 |
| 140207 | 01.3743 | 26.85 | 150026 | 01.1878 | 16.69 | 150105 | 01.4085 | 16.61 | 160054 | 01.0231 | 10.82 | 160140 | 01.0939 | 14.86 |
| 140208 | 01.6111 | 23.73 | 150027 | 01.0647 | 16.04 | 150106 | 01.1373 | 15.58 | 160055 | 01.0477 | 11.48 | 160142 | 01.0237 | 13.60 |
| 140209 | 01.7011 | 17.46 | 150029 | 01.2733 | 20.57 | 150109 | 01.4583 | 16.04 | 160056 | 01.0409 | 13.16 | 160143 | 01.1324 | 13.03 |
| 140210 | 01.0690 | 12.87 | 150030 | 01.1956 | 16.20 | 150110 | 00.9896 | 14.72 | 160057 | 01.3309 | 15.92 | 160145 | 01.0880 | 13.74 |
| 140211 | 01.2233 | 20.44 | 150031 | 01.0590 | 15.93 | 150111 | 01.2056 | 12.88 | 160058 | 01.6642 | 18.42 | 160146 | 01.4124 | 15.32 |
| 140212 | 01.3189 | 22.65 | 150032 | 01.7894 | 18.85 | 150112 | 01.2207 | 16.78 | 160060 | 01.0892 | 13.82 | 160147 | 01.2670 | 15.41 |
| 140213 | 01.2806 | 20.44 | 150033 | 01.6083 | 20.07 | 150113 | 01.1860 | 16.78 | 160061 | 01.0020 | 14.19 | 160151 | 01.0767 | 12.75 |
| 140215 | 01.1642 | 13.22 | 150034 | 01.3961 | 18.15 | 150114 | 01.0330 | 13.44 | 160062 | 00.9619 | 11.95 | 160152 | 01.0085 | 13.30 |
| 140217 | 01.2322 | 20.90 | 150035 | 01.4087 | 17.90 | 150115 | 01.3933 | 17.31 | 160063 | 01.2910 | 14.24 | 160153 | 01.7014 | 17.05 |
| 140218 . | 01.0541 | 13.64 | 150036 | 01.0486 | 17.35 | 150122 | 01.1412 | 15.83 | 160064 | 01.6406 | 16.37 | 170001 | 01.2028 | 15.90 |
| 140220 | 01.1056 | 14.22 | 150037 | 01.2673 | 17.06 | 150123 | 01.1642 | 12.81 | 160065 ..... | 01.0735 | 14.51 | 170004 | 01.0851 | 13.18 |
| 140223 | 01.5438 |  | 150038 | 01.2744 | 16.27 | 150124 | 01.1229 | 15.00 | 160066 | 01.1266 | 14.06 | 170006 | 01.2031 | 13.48 |
| 140224 . | 01.3604 | 22.10 | 150039 | 01.0121 | 14.51 | 150125 | 01.4243 | 18.09 | 160067 | 01.3705 | 16.70 | 170008 | 00.9823 | 13.35 |
| 140228 | 01.7003 | 17.36 | 150042 | 01.2850 | 15.47 | 150126 | 01.5058 | 19.24 | 160068 . | 01.1116 | 13.30 | 170009 | 01.1211 | 16.81 |

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| 170010 | 01.2608 | 16.38 | 170090 | 01.1085 | 09.58 | 18 | 01.3389 | 17.14 | 18 | 01.5043 | 16.55 | 190 | 1.5583 | 17.46 |
| 170011 | 01.4071 | 14.59 | 170092 | 00.8754 | 11.45 | 180013 | 01.4998 | 17.38 | 180105 | 00.9304 | 12.23 | 190065 | 01.4754 | 15.75 |
| 170012 | 01.4843 | 15.48 | 170093 | 00.9342 | 11.58 | 180014 | 01.6064 | 18.86 | 180106 | 00.9106 | 12.65 | 190071 | 00.8641 | 11.38 |
| 170013 | 01.3169 | 13.27 | 170094 | 01.0452 | 12.81 | 180015 | 01.2489 | 14.91 | 180108 | 00.8486 | 12.49 | 190077 | 00.9246 | 13.41 |
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| 170016 | 01.6627 | 21.80 | 170098 | 01.0817 | 16.21 | 180018 | 01.2192 | 15.73 | 180117 | 01.1619 | 16.14 | 190081 | 00.8838 | 09.89 |
| 170017 | 01.1657 | 14.73 | 170099 | 01.3324 | 11.00 | 180019 | 01.3403 | 17.22 | 180118 | 01.0536 | 11.72 | 190083 | 00.9429 | 12.45 |
| 170018 | 01.0727 | 12.23 | 170100 | 01.0203 | 14.63 | 180020 | 01.0315 | 15.37 | 180120 | 01.0378 | 12.49 | 190086 | 01.3598 | 14.02 |
| 170019 | 01.1696 | 15.13 | 170101 | 00.9101 | 14.13 | 180021 | 01.1795 | 13.25 | 180121 | 01.2234 | 13.09 | 190088 | 01.1892 | 16.01 |
| 170020 | 01.3199 | 14.54 | 170102 | 01.0187 | 12.78 | 180023 | 00.8295 | 11.27 | 180122 | 01.0373 | 14.67 | 190089 | 01.1201 | 09.60 |
| 170022 | 01.1704 | 14.15 | 170103 | 01.2458 | 15.28 | 180024 | 01.3845 | 15.69 | 180123 | 01.4607 | 19.39 | 190090 | 01.0660 | 15.75 |
| 170023 | 01.4044 | 15.57 | 170104 | 01.4205 | 19.52 | 180025 | 01.1284 | 16.18 | 180124 | 01.4836 | 16.00 | 190092 | 01.3355 | 20.14 |
| 170024 | 01.1640 | 12.71 | 170105 | 01.0303 | 14.45 | 180026 | 01.1086 | 13.66 | 180125 | 00.9440 | 16.23 | 190095 | 00.9950 | 14.04 |
| 170025 | 01.1596 | 18.37 | 170106 | 00.8419 | 12.54 | 180027 | 01.2742 | 14.17 | 180126 | 01.1707 | 11.90 | 190098 | 01.5272 | 17.56 |
| 170026 | 01.0181 | 16.38 | 170108 | 00.9468 | 10.88 | 180028 | 01.0014 | 16.19 | 180127 | 01.2444 | 16.63 | 190099 | 01.1506 | 17.31 |
| 170027 | 01.3677 | 15.02 | 170109 | 01.0506 | 14.67 | 180029 | 01.2273 | 15.99 | 180128 | 01.1902 | 15.40 | 190102 | 01.5823 | 16.15 |
| 170030 | 01.0391 | 13.61 | 170110 | 01.0039 | 13.62 | 180030 | 01.1759 | 12.89 | 180129 | 01.0293 | 13.93 | 190103 | 00.8416 | 09.66 |
| 170031 | 00.9148 | 12.36 | 170112 | 00.9127 | 13.44 | 180031 | 01.0226 | 12.38 | 180130 | 01.4291 | 17.87 | 190106 | 01.1367 | 17.27 |
| 170032 | 01.1156 | 14.18 | 170113 | 01.1547 | 13.43 | 180032 | 00.9954 | 15.30 | 180132 | 01.2480 | 15.19 | 190109 | 01.2092 | 13.68 |
| 170033 | 01.3483 | 14.08 | 170114 | 00.9562 | 12.96 | 180033 | 01.1235 | 12.57 | 180133 | 01.2433 | 20.73 | 190110 | 00.9491 | 11.96 |
| 170034 | 00.9541 | 13.74 | 170115 | 00.9903 | 11.01 | 180034 | 01.0753 | 13.61 | 180134 | 01.0116 | 13.71 | 190111 | 01.5215 | 17.24 |
| 170035 | 00.9390 | 12.37 | 170116 | 01.0372 | 13.94 | 180035 | 01.5699 | 18.26 | 180136 | 01.5878 | 16.63 | 190112 | 01.5163 | 20.35 |
| 170036 | 00.8720 | 12.31 | 170117 | 01.0112 | 12.63 | 180036 | 01.2440 | 17.36 | 180137 | 01.6535 | 16.82 | 190113 | 01.3665 | 17.85 |
| 170037 | 01.1255 | 15.02 | 170119 | 00.9561 | 11.32 | 180037 | 01.2889 | 20.29 | 180138 | 01.2129 | 17.02 | 190114 | 01.0055 | 11.51 |
| 170038 | 00.9185 | 10.94 | 170120 | 01.2849 | 14.66 | 180038 | 01.4243 | 14.73 | 180139 | 01.0726 | 16.41 | 190115 | 01.2502 | 16.88 |
| 170039 | 01.1367 | 11.69 | 170122 | 01.8944 | 19.69 | 180040 | 02.0334 | 19.04 | 180140 | 01.0095 |  | 190116 | 01.3017 | 14.97 |
| 170040 | 01.5625 | 18.21 | 170123 | 01.7747 | 17.69 | 180041 | 01.0945 | 13.03 | 190001 | 00.9375 | 16.35 | 190118 | 01.0495 | 11.87 |
| 170041 | 00.9823 | 11.41 | 170124 | 00.9503 | 11.92 | 180042 | 01.1163 | 13.43 | 190002 | 01.6513 | 16.28 | 190120 | 00.9247 | 12.89 |
| 170043 | 00.9081 | 13.41 | 170126 | 00.9191 | 11.07 | 180043 | 01.0156 | 15.31 | 190003 | 01.4519 | 17.16 | 190122 | 01.2572 | 13.85 |
| 170044 | 01.1101 | 14.73 | 170128 | 01.0769 | 14.31 | 180044 | 01.0359 | 14.68 | 190004 | 01.3759 | 14.75 | 190124 | 01.5739 | 18.80 |
| 170045 | 01.0299 | 10.95 | 170131 | 01.0980 | 10.54 | 180045 | 01.2057 | 16.78 | 190005 | 01.6645 | 14.94 | 190125 | 01.5811 | 16.74 |
| 170049 | 01.3313 | 18.05 | 170133 | 01.1443 | 14.09 | 180046 | 01.2012 | 16.81 | 190006 | 01.2072 | 14.50 | 190128 | 01.2060 | 17.04 |
| 170050 | 00.8380 | 09.63 | 170134 | 00.9114 | 12.10 | 180047 | 01.0191 | 13.79 | 190007 | 01.0078 | 12.79 | 190130 | 00.9913 | 11.74 |
| 170051 | 00.9598 | 13.31 | 170137 | 01.1842 | 16.81 | 180048 | 01.1403 | 15.53 | 190008 | 01.6528 | 17.79 | 190131 | 01.2797 | 17.33 |
| 170052 | 01.0682 | 13.31 | 170139 | 00.9877 | 11.66 | 180049 | 01.3563 | 14.47 | 190009 | 01.2058 | 13.40 | 190133 | 01.0482 | 15.09 |
| 170053 | 01.0069 | 13.09 | 170140 | 01.0533 | 11.17 | 180050 | 01.2697 | 15.58 | 190010 | 01.0884 | 14.69 | 190134 | 00.9967 | 12.16 |
| 170054 | 01.0848 | 12.86 | 170142 | 01.2641 | 16.10 | 180051 | 01.4187 | 14.35 | 190011 | 01.1233 | 14.08 | 190135 | 01.4063 | 21.99 |
| 170055 | 01.0698 | 17.05 | 170143 | 01.1251 | 12.53 | 180053 | 01.1091 | 14.22 | 190013 | 01.4220 | 15.27 | 190136 | 01.1262 | 10.66 |
| 170056 | 00.9402 | 10.99 | 170144 | 01.6112 | 18.74 | 180054 | 01.1611 | 14.02 | 190014 | 01.0578 | 15.36 | 190138 | 00.6897 | 15.62 |
| 170057 | 01.0566 | 13.75 | 170145 | 01.1694 | 17.02 | 180055 | 01.0370 | 13.61 | 190015 | 01.2421 | 16.38 | 190140 | 00.9431 | 11.60 |
| 170058 | 01.1738 | 17.54 | 170146 | 01.4168 | 17.58 | 180056 | 01.1099 | 16.68 | 190017 | 01.3736 | 17.22 | 190142 | 00.9421 | 12.20 |
| 170060 | 01.1313 | 12.73 | 170147 | 01.2245 | 18.33 | 180058 | 01.0090 | 12.85 | 190018 | 01.1816 | 13.78 | 190144 | 01.2097 | 18.82 |
| 170061 | 01.1593 | 12.59 | 170148 | 01.4763 | 18.35 | 180059 | 00.9670 | 11.98 | 190019 | 01.5042 | 17.57 | 190145 | 00.9824 | 13.77 |
| 170062 | 00.9501 | 10.45 | 170150 | 01.0726 | 13.13 | 180060 | 00.7427 | 13.48 | 190020 | 01.2002 | 15.83 | 190146 | 01.5901 | 18.99 |
| 170063 | 00.8965 | 09.30 | 170151 | 01.0012 | 11.69 | 180063 | 00.9649 | 10.28 | 190025 | 01.2859 | 12.36 | 190147 | 00.9911 | 13.30 |
| 170064 | 00.9513 | 11.38 | 170152 | 00.9801 | 13.27 | 180064 | 01.2906 | 14.40 | 190026 | 01.4470 | 15.65 | 190148 | 00.8975 | 11.81 |
| 170066 | 00.9908 | 12.26 | 170160 | 01.0468 | 11.25 | 180065 | 00.9809 | 09.05 | 190027 | 01.4852 | 15.62 | 190149 | 00.9959 | 11.02 |
| 170067 | 01.0357 | 11.05 | 170164 | 01.0426 | 13.87 | 180066 | 01.2068 | 16.87 | 190029 | 01.1320 | 14.09 | 190151 | 01.1518 | 12.30 |
| 170068 | 01.3949 | 14.01 | 170166 | 01.1504 | 13.49 | 180067 | 01.8783 | 15.96 | 190033 | 00.9721 | 09.64 | 190152 | 01.4522 | 20.50 |
| 170069 | 01.1769 | 13.20 | 170168 | 00.9486 | 09.97 | 180069 | 01.0397 | 16.08 | 190034 | 01.2434 | 14.93 | 190155 | 00.9203 | 10.54 |
| 170070 | 01.0225 | 11.83 | 170171 | 01.0889 | 11.15 | 180070 | 01.0977 | 14.86 | 190035 | 01.4128 | 20.27 | 190156 | 00.8945 | 11.89 |
| 170072 | 00.9565 | 11.53 | 170172 | 00.9841 | 11.07 | 180072 | 01.0513 | 13.80 | 190036 | 01.6475 | 18.96 | 190158 | 01.2308 | 20.36 |
| 170073 | 01.0984 | 12.66 | 170174 | 01.0890 | 11.58 | 180075 | 00.9736 | 13.08 | 190037 | 00.9653 | 11.05 | 190160 | 01.2187 | 15.56 |
| 170074 | 01.1552 | 12.86 | 170175 | 01.2928 | 16.30 | 180078 | 01.1230 | 17.35 | 190039 | 01.4080 | 16.41 | 190161 | 01.0441 | 12.98 |
| 170075 | 00.8720 | 10.55 | 170176 | 01.5021 | 18.40 | 180079 | 01.2486 | 13.22 | 190040 | 01.3863 | 19.03 | 190162 | 01.1806 | 21.04 |
| 170076 | 01.0770 | 11.15 | 170181 | 01.1668 |  | 180080 | 01.0636 | 15.16 | 190041 | 01.4973 | 19.72 | 190164 | 01.2246 | 16.86 |
| 170077 | 00.9689 | 11.12 | 170182 | 00.8647 |  | 180085 | 01.2892 | 17.49 | 190043 | 01.1348 | 12.38 | 190166 | 01.0758 | 14.81 |
| 170079 | 01.0810 | 11.81 | 170183 | 02.1585 |  | 180087 | 01.0887 | 13.72 | 190044 | 01.1634 | 18.27 | 190167 | 01.2058 | 16.09 |
| 170080 | 00.9459 | 11.05 | 180001 | 01.2246 | 16.18 | 180088 | 01.5722 | 19.42 | 190045 | 01.3672 | 19.09 | 190170 | 00.9592 | 12.34 |
| 170081 | 00.9294 | 10.42 | 180002 | 01.0070 | 17.16 | 180092 | 01.0482 | 14.43 | 190046 | 01.4814 | 17.16 | 190173 | 01.4578 | 19.47 |
| 170082 | 01.0577 | 10.60 | 180004 | 01.0888 | 13.51 | 180093 | 01.3617 | 14.72 | 190048 | 01.0669 | 14.55 | 190175 | 01.2835 |  |
| 170084 | 00.9862 | 11.06 | 180005 | 01.0390 | 17.40 | 180094 | 01.0163 | 11.93 | 190049 | 00.9644 | 14.74 | 190176 | 01.7028 | 18.06 |
| 170085 | 00.9109 | 12.01 | 180006 | 00.9063 | 08.63 | 180095 | 01.1664 | 12.78 | 190050 | 01.0420 | 13.90 | 190177 | 01.6125 | 22.02 |
| 170086 | 01.7190 | 18.04 | 180007 | 01.5485 | 14.17 | 180099 | 01.1988 | 11.72 | 190053 | 01.0567 | 11.98 | 190178 | 00.9868 | 11.20 |
| 170087 | 01.4582 | 18.87 | 180009 | 01.3310 | 17.70 | 180101 | 01.3486 | 18.84 | 190054 | 01.4052 | 13.67 | 190182 | 01.1720 | 20.12 |
| 170088 | 00.9139 | 10.59 | 180010 | 01.8382 | 16.91 | 180102 | 01.5215 | 15.95 | 190059 | 00.9447 | 13.58 | 190183 | 01.1294 | 13.43 |
| 170089 | 01.0037 | 14.21 | 180011 | 01.1737 | 15.71 | 180103 | 02.0850 | 18.62 | 190060 | 01.4907 | 16.51 | 190184 | 01.0550 | 12.13 |

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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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 190185 | 01.3116 | 19.03 | 210004 | 01.3245 | 20.30 | 220030 | 01.0852 | 16.42 | 220 | 01.6972 | 22.55 | 230103 | 01.0124 | 17.37 |
| 190186 | 00.9539 | 11.69 | 210005 | 01.2407 | 17.70 | 220031 | 01.8518 | 27.21 | 220897 | 04.8084 |  | 230104 | 01.6163 | 20.32 |
| 190187 | 00.7801 | 14.05 | 210006 | 01.1291 | 16.84 | 220033 | 01.3898 | 19.40 | 230001 | 01.2015 | 15.98 | 230105 | 01.6088 | 19.46 |
| 190189 | 00.9445 | 14.54 | 210007 | 01.6215 | 18.82 | 220035 | 01.2698 | 19.72 | 230002 | 01.2238 | 19.28 | 230106 | 01.1784 | 18.07 |
| 190190 | 00.9291 | 18.74 | 210008 | 01.3146 | 21.21 | 220036 | 01.6218 | 23.26 | 230003 | 01.0945 | 18.07 | 230107 | 00.8964 | 12.56 |
| 190191 | 01.3068 | 18.47 | 210009 | 01.7134 | 18.57 | 220038 | 01.2841 | 21.85 | 230004 | 01.6105 | 20.95 | 230108 | 01.2432 | 16.64 |
| 190194 | 01.1471 | 19.16 | 210010 | 01.1960 | 17.00 | 220041 | 01.2492 | 20.87 | 230005 | 01.2825 | 18.02 | 230110 | 01.3309 | 17.10 |
| 190196 | 00.9097 | 16.46 | 210011 | 01.2110 | 20.12 | 220042 | 01.2078 | 24.10 | 230006 | 01.1303 | 16.19 | 230111 | 00.9772 | 15.13 |
| 190197 | 01.2655 | 18.80 | 210012 | 01.4840 | 21.27 | 220046 | 01.3942 | 21.48 | 230007 | 01.0869 | 16.51 | 230113 | 00.9511 | 17.66 |
| 190199 | 01.3623 |  | 210013 | 01.2780 | 20.65 | 220049 | 01.2664 | 21.58 | 230013 | 01.2659 | 20.70 | 230114 | 00.6368 | 23.27 |
| 190200 | 01.5241 | 21.33 | 210015 | 01.2720 | 18.48 | 220050 | 01.0888 | 17.45 | 230015 | 01.1338 | 18.01 | 230115 | 01.0164 | 15.14 |
| 190201 | 01.2315 | 18.24 | 210016 | 01.7279 | 20.37 | 220051 | 01.2702 | 19.70 | 230017 | 01.5125 | 20.40 | 230116 | 00.9155 | 15.58 |
| 190202 | 01.4459 | 18.34 | 210017 | 01.1256 | 15.35 | 220052 | 01.2994 | 22.76 | 230019 | 01.5077 | 20.50 | 230117 | 01.9674 | 23.81 |
| 190203 | 01.6074 | 19.50 | 210018 | 01.2414 | 20.93 | 220053 | 01.2564 | 18.86 | 230020 | 01.7180 | 21.17 | 230118 | 01.2419 | 17.25 |
| 190204 | 01.5314 | 20.12 | 210019 | 01.4011 | 17.42 | 220055 | 01.3486 | 20.61 | 230021 | 01.6010 | 17.25 | 230119 | 01.3145 | 21.13 |
| 190205 | 01.8790 | 17.63 | 210022 | 01.4536 | 20.07 | 220057 | 01.4381 | 20.91 | 230022 | 01.2422 | 17.62 | 230120 | 01.2315 | 19.00 |
| 190206 | 01.4995 | 21.17 | 210023 | 01.2956 | 20.31 | 220058 | 01.0650 | 17.55 | 230024 | 01.4216 | 21.79 | 230121 | 01.2320 | 19.67 |
| 190207 | 01.1825 | 19.43 | 210024 | 01.5336 | 18.06 | 220060 | 01.2565 | 24.78 | 230027 | 01.0587 | 16.25 | 230122 | 01.3296 | 18.32 |
| 190208 | 00.8198 | 10.36 | 210025 | 01.3227 | 17.84 | 220062 | 00.6021 | 19.30 | 230029 | 01.5998 | 20.91 | 230124 | 01.1555 | 16.49 |
| 190218 | 01.1389 | 15.05 | 210026 | 01.3187 | 24.54 | 220063 | 01.2909 | 18.42 | 230030 | 01.2415 | 16.55 | 230125 | 01.3676 | 12.83 |
| 190223 | 00.5039 | 09.72 | 210027 | 01.2046 | 17.10 | 220064 | 01.2167 | 20.66 | 230031 | 01.4660 | 18.32 | 230128 | 01.3700 | 19.33 |
| 190227 | 00.8050 | 30.01 | 210028 | 01.2256 | 16.66 | 220065 | 01.2182 | 20.00 | 230032 | 01.7444 | 18.97 | 230129 | 01.8923 | 19.07 |
| 190230 | 00.8737 |  | 210029 | 01.3064 | 20.04 | 220066 | 01.2760 | 19.39 | 230034 | 01.1948 | 16.64 | 230130 | 01.6884 | 22.37 |
| 190231 | 01.2825 |  | 210030 | 01.0993 | 15.77 | 220067 | 01.2944 | 22.82 | 230035 | 01.1377 | 15.84 | 230132 | 01.5373 | 22.92 |
| 190232 | 01.6623 |  | 210031 | 01.6370 | 16.97 | 220068 | 00.5244 | 15.95 | 230036 | 01.2807 | 19.78 | 230133 | 01.2350 | 14.06 |
| 190233 | 01.0997 |  | 210032 | 01.2096 | 18.42 | 220070 | 01.2635 | 17.77 | 230037 | 01.1606 | 16.96 | 230134 | 01.1081 | 15.87 |
| 200001 | 01.2712 | 15.74 | 210033 | 01.1818 | 17.38 | 220071 | 01.8550 | 24.38 | 230038 | 01.6451 | 21.18 | 230135 | 01.1885 | 19.88 |
| 200002 | 01.0212 | 16.15 | 210034 | 01.3996 | 20.29 | 220073 | 01.3882 | 25.34 | 230040 | 01.1976 | 18.35 | 230137 | 01.1691 | 17.78 |
| 200003 | 01.1264 | 15.90 | 210035 | 01.1952 | 17.25 | 220074 | 01.2614 | 21.18 | 230041 | 01.2085 | 18.20 | 230141 | 01.6883 | 20.84 |
| 200006 | 01.0731 | 14.95 | 210037 | 01.2887 | 16.14 | 220075 | 01.3228 | 20.09 | 230042 | 01.1542 | 19.03 | 230142 | 01.2092 | 18.71 |
| 200007 | 01.0066 | 15.63 | 210038 | 01.3413 | 19.90 | 220076 | 01.1851 | 22.47 | 230046 | 01.8239 | 24.65 | 230143 | 01.1481 | 15.23 |
| 200008 | 01.2497 | 18.34 | 210039 | 01.1613 | 15.25 | 220077 | 01.7122 | 22.32 | 230047 | 01.3070 | 19.61 | 230144 | 01.1092 | 21.06 |
| 200009 | 01.7602 | 19.84 | 210040 | 01.2993 | 20.32 | 220079 | 01.1880 | 21.28 | 230053 | 01.5387 | 23.82 | 230145 | 01.1742 | 15.41 |
| 200012 | 01.1641 | 16.11 | 210043 | 01.2569 | 20.04 | 220080 | 01.2773 | 17.77 | 230054 | 01.8228 | 19.74 | 230146 | 01.2845 | 19.49 |
| 200013 | 01.1401 | 15.32 | 210044 | 01.2000 | 20.28 | 220081 | 00.9446 | 23.55 | 230055 | 01.1760 | 17.36 | 230147 | 01.4742 | 19.34 |
| 200015 | 01.2358 | 17.15 | 210045 | 01.0148 | 11.73 | 220082 | 01.2902 | 19.28 | 230056 | 00.9776 | 14.17 | 230149 | 01.2419 | 14.92 |
| 200016 | 01.0350 | 16.10 | 210046 | 01.1079 | 12.34 | 220083 | 01.1831 | 19.80 | 230058 | 01.0786 | 17.42 | 230151 | 01.3631 | 21.32 |
| 200017 | 01.2447 | 16.86 | 210048 | 01.1746 | 22.47 | 220084 | 01.2425 | 22.24 | 230059 | 01.4842 | 19.00 | 230153 | 01.1118 | 15.61 |
| 200018 | 01.1602 | 14.27 | 210049 | 01.1517 | 16.57 | 220086 | 01.5483 | 24.60 | 230060 | 01.2882 | 16.90 | 230154 | 00.9493 | 12.09 |
| 200019 | 01.2486 | 18.01 | 210051 | 01.4541 | 13.94 | 220088 | 01.5778 | 21.76 | 230062 | 01.0291 | 10.93 | 230155 | 00.9752 | 13.80 |
| 200020 | 01.1930 | 19.86 | 210054 | 01.2790 | 20.17 | 220089 | 01.3304 | 22.99 | 230063 | 01.3106 | 18.41 | 230156 | 01.6989 | 21.57 |
| 200021 | 01.1723 | 17.66 | 210055 | 01.2914 | 22.48 | 220090 | 01.2260 | 20.78 | 230065 | 01.4805 | 18.63 | 230157 | 01.2084 | 19.67 |
| 200023 | 00.8814 | 14.61 | 210056 | 01.4132 | 16.51 | 220092 | 01.2533 | 20.86 | 230066 | 01.3629 | 17.55 | 230159 | 01.3614 | 18.93 |
| 200024 | 01.2940 | 19.16 | 210057 | 01.3587 |  | 220094 | 01.2679 | 19.76 | 230068 | 01.4269 | 22.29 | 230162 | 00.9841 | 13.73 |
| 200025 | 01.2732 | 18.81 | 210058 | 01.6842 | 18.09 | 220095 | 01.2234 | 17.77 | 230069 | 01.1751 | 18.86 | 230165 | 01.8763 | 20.92 |
| 200026 | 01.0896 | 15.20 | 210059 | 01.2581 | 21.91 | 220098 | 01.2884 | 19.81 | 230070 | 01.4926 | 19.30 | 230167 | 01.3662 | 19.18 |
| 200027 | 01.1423 | 16.51 | 210060 | 01.1731 | 25.28 | 220099 | 01.1644 | 15.97 | 230071 | 01.1363 | 20.78 | 230169 | 01.4366 | 21.16 |
| 200028 | 00.9339 | 14.83 | 210061 | 01.0980 | 14.25 | 220100 | 01.2619 | 23.48 | 230072 | 01.2879 | 18.87 | 230171 | 00.9849 | 14.18 |
| 200031 | 01.2965 | 14.96 | 220001 | 01.1636 | 20.98 | 220101 | 01.5059 | 22.58 | 230075 | 01.5257 | 19.29 | 230172 | 01.3176 | 17.85 |
| 200032 | 01.3588 | 17.72 | 220002 | 01.5368 | 21.62 | 220104 | 01.2419 | 23.12 | 230076 | 01.3128 | 21.53 | 230174 | 01.3016 | 19.11 |
| 200033 | 01.7105 | 19.57 | 220003 | 01.0806 | 16.92 | 220105 | 01.2111 | 21.97 | 230077 | 01.9772 | 18.44 | 230176 | 01.2388 | 20.89 |
| 200034 | 01.1962 | 17.19 | 220004 | 01.1812 | 18.85 | 220106 | 01.2458 | 21.83 | 230078 | 01.0869 | 14.76 | 230178 | 01.0320 | 16.02 |
| 200037 | 01.2193 | 15.53 | 220006 | 01.4332 | 21.79 | 220107 | 01.1742 | 18.46 | 230080 | 01.1933 | 20.41 | 230180 | 01.0676 | 15.03 |
| 200038 | 01.1145 | 17.66 | 220008 | 01.2523 | 19.26 | 220108 | 01.1503 | 20.96 | 230081 | 01.2191 | 16.55 | 230184 | 01.2246 | 16.99 |
| 200039 | 01.2494 | 18.06 | 220010 | 01.2949 | 20.94 | 220110 | 01.9520 | 30.07 | 230082 | 01.1643 | 14.88 | 230186 | 01.3835 | 15.81 |
| 200040 | 01.0969 | 16.12 | 220011 | 01.1570 | 27.95 | 220111 | 01.2612 | 21.21 | 230085 | 01.1115 | 17.10 | 230188 | 01.1787 | 15.49 |
| 200041 | 01.2255 | 17.37 | 220012 | 01.3654 | 27.84 | 220116 | 01.9484 | 23.95 | 230086 | 00.9885 | 14.03 | 230189 | 00.8927 | 14.50 |
| 200043 | 00.5362 | 16.96 | 220015 | 01.1767 | 20.35 | 220118 | 02.0446 | 26.47 | 230087 | 01.0641 | 13.65 | 230190 | 01.0483 | 22.66 |
| 200050 | 01.2051 | 16.71 | 220016 | 01.3547 | 20.16 | 220119 | 01.3255 | 24.40 | 230089 | 01.3379 | 21.55 | 230191 | 00.8947 | 14.99 |
| 200051 | 00.9656 | 17.70 | 220017 | 01.4233 | 23.78 | 220123 | 01.0371 | 23.85 | 230092 | 01.3295 | 17.77 | 230193 | 01.2340 | 16.03 |
| 200052 | 00.9605 | 13.07 | 220019 | 01.1716 | 17.06 | 220126 | 01.3077 | 19.39 | 230093 | 01.2320 | 17.37 | 230194 | 01.2090 | 14.37 |
| 200055 | 01.1609 | 14.56 | 220020 | 01.2174 | 18.47 | 220128 | 01.1494 | 20.85 | 230095 | 01.2251 | 15.53 | 230195 | 01.2803 | 19.80 |
| 200062 | 00.9155 | 14.64 | 220021 | 01.3823 | 23.21 | 220133 .... | 00.8435 | 30.53 | 230096 | 01.1954 | 19.85 | 230197 | 01.2564 | 22.00 |
| 200063 | 01.1630 | 16.63 | 220023 | 01.1522 | 19.37 | 220135 | 01.2581 | 23.97 | 230097 | 01.5433 | 17.75 | 230199 | 01.1386 | 17.72 |
| 200066 | 01.1762 | 14.34 | 220024 | 01.1696 | 20.14 | 220153 | 01.0459 | 19.74 | 230099 | 01.2223 | 19.06 | 230201 | 01.2166 | 14.02 |
| 210001 | 01.4081 | 17.94 | 220025 | 01.1948 | 18.87 | 220154 | 00.8972 | 18.96 | 230100 | 01.1604 | 15.19 | 230204 | 01.3584 | 19.78 |
| 210002 | 01.9534 | 16.84 | 220028 | 01.4680 | 22.20 | 220162 | 01.0891 |  | 230101 | 01.0566 | 16.79 | 230205 | 01.0607 | 14.54 |
| 210003 | 01.5503 | 22.97 | 220029 | 01.1933 | 22.25 | 220163 | 02.0719 | 24.73 | 230102 | 01.1047 |  | 230207 | 01.2544 | 19.85 |

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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 | $\begin{aligned} & \text { Case } \\ & \text { mix } \\ & \text { index } \end{aligned}$ | Avg. hour wage | Provider | $\begin{aligned} & \text { Case } \\ & \text { mix } \end{aligned}$ index | Avg. hour wage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 230208 | 01.1783 | 16.10 | 240047 | 01.5215 | 18.27 | 240132 | 01.2422 | 20.49 | 250034 | 01.5418 | 12.99 | 250138 | 01.3553 | 16.91 |
| 230211 | 00.9786 | 13.86 | 240048 | 01.2786 | 20.43 | 240133 | 01.1715 | 16.16 | 250035 | 00.9041 | 11.82 | 250140 | 00.9213 | 09.37 |
| 230212 | 01.0964 | 21.13 | 240049 | 01.7763 | 20.33 | 240135 | 00.8386 | 11.38 | 250036 | 00.9863 | 11.34 | 250141 | 01.2142 | 15.50 |
| 230213 | 01.0251 | 12.69 | 240050 | 01.1234 | 19.89 | 240137 | 01.2521 | 15.40 | 250037 | 00.8717 | 09.53 | 250144 | 00.9383 | 11.18 |
| 230216 | 01.5363 | 17.91 | 240051 | 00.9749 | 15.97 | 240138 | 00.8953 | 13.09 | 250038 | 00.9909 | 12.52 | 250145 | 00.9362 |  |
| 230217 | 01.2142 | 18.06 | 240052 | 01.2480 | 17.21 | 240139 | 00.9551 | 14.24 | 250039 | 01.0004 | 11.71 | 250146 | 01.0020 | 12.89 |
| 230219 | 01.0153 | 15.18 | 240053 | 01.5190 | 19.67 | 240141 | 01.0836 | 19.12 | 250040 | 01.2911 | 15.65 | 250148 | 01.1589 |  |
| 230221 | 01.1831 | 18.15 | 240056 | 01.2490 | 20.13 | 240142 | 01.1491 | 15.16 | 250042 | 01.1491 | 13.78 | 250149 | 00.9157 |  |
| 230222 | 01.3602 | 18.98 | 240057 | 01.7418 | 22.04 | 240143 | 01.0673 | 12.48 | 250043 | 01.0303 | 10.49 | 260001 | 01.6548 | 15.06 |
| 230223 | 01.3164 | 19.85 | 240058 | 00.9730 | 09.64 | 240144 | 00.9419 | 13.39 | 250044 | 00.9825 | 13.98 | 260002 | 01.4785 | 20.05 |
| 230227 | 01.5246 | 22.00 | 240059 | 01.1011 | 17.98 | 240145 | 00.9681 | 12.37 | 250045 | 01.1454 | 17.17 | 260003 | 00.9487 | 12.45 |
| 230228 | 01.2133 | 17.29 | 240061 | 01.7409 | 20.93 | 240146 | 00.9270 | 17.20 | 250047 | 00.9527 | 09.12 | 260004 | 01.0315 | 11.86 |
| 230230 | 01.5449 | 20.38 | 240063 | 01.4559 | 20.88 | 240148 | 00.9433 | 11.34 | 250048 | 01.4527 | 13.51 | 260005 | 01.6121 | 19.68 |
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| 230235 | 01.1141 | 14.65 | 240065 | 01.1480 | 11.14 | 240152 | 01.0177 | 17.85 | 250050 | 01.2448 | 12.30 | 260007 | 01.4659 | 16.03 |
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| 230239 | 01.1697 | 16.07 | 240069 | 01.1596 | 18.31 | 240154 | 01.0138 | 13.15 | 250057 | 01.1766 | 14.06 | 260009 | 01.2372 | 15.63 |
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| 230244 | 01.3177 | 20.14 | 240072 | 01.0272 | 16.08 | 240157 | 01.1265 | 13.92 | 250059 | 01.0322 | 12.16 | 260012 | 01.0505 | 11.96 |
| 230253 | 01.0740 | 17.39 | 240073 | 00.9172 | 15.13 | 240160 | 00.9997 | 14.65 | 250060 | 00.8084 | 12.19 | 260013 | 01.1491 | 12.68 |
| 230254 | 01.2799 | 22.64 | 240075 | 01.2180 | 18.79 | 240161 | 00.9389 | 14.56 | 250061 | 00.8634 | 10.75 | 260014 | 01.7751 | 17.84 |
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| 230259 | 01.1982 | 19.06 | 240077 | 01.0463 | 14.15 | 240163 | 00.9330 | 14.10 | 250065 | 00.8907 | 11.72 | 260017 | 01.2286 | 13.94 |
| 230264 | 00.9438 | 16.74 | 240078 | 01.4536 | 21.46 | 240166 | 01.1669 | 14.67 | 250066 | 00.9404 | 12.17 | 260018 | 00.9652 | 09.56 |
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| 230270 | 01.2162 | 20.08 | 240080 | 01.3774 | 20.87 | 240170 | 01.1564 | 14.42 | 250068 | 00.8556 | 11.19 | 260020 | 01.7259 | 18.73 |
| 230273 | 01.6607 | 22.11 | 240082 | 01.1194 | 14.55 | 240171 | 00.9950 | 14.02 | 250069 | 01.1870 | 13.42 | 260021 | 01.5153 | 17.51 |
| 230275 | 00.5787 | 16.53 | 240083 | 01.3925 | 16.60 | 240172 | 01.0869 | 14.50 | 250071 | 00.9541 | 08.06 | 260022 | 01.3501 | 18.69 |
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| 230277 | 01.2425 | 21.76 | 240085 | 00.9247 | 14.90 | 240179 | 01.0022 | 14.30 | 250076 | 00.9579 | 10.32 | 260024 | 01.0210 | 12.28 |
| 230278 | 02.0914 | 19.50 | 240086 | 01.0520 | 15.23 | 240180 | 01.0157 | 10.51 | 250077 | 00.9505 | 11.08 | 260025 | 01.3121 | 13.61 |
| 230279 | 00.6989 |  | 240087 | 01.0824 | 15.69 | 240184 | 01.0424 | 11.31 | 250078 | 01.4419 | 14.21 | 260027 | 01.5941 | 18.92 |
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| 240004 | 01.4661 | 20.16 | 240094 | 01.0543 | 17.26 | 240205 | 00.9014 |  | 250084 | 01.0930 | 13.92 | 260034 | 00.9785 | 14.22 |
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| 240006 | 01.1385 | 19.75 | 240097 | 01.1270 | 17.05 | 240207 | 01.2326 | 21.47 | 250088 | 00.9591 | 15.56 | 260036 | 01.0628 | 15.72 |
| 240007 | 01.1171 | 15.15 | 240098 | 00.9677 | 16.41 | 240210 | 01.2588 | 21.44 | 250089 | 01.0276 | 11.77 | 260037 | 01.4003 | 15.17 |
| 240008 | 01.0569 | 15.22 | 240099 | 01.1143 | 11.00 | 240211 | 00.9532 | 11.18 | 250093 | 01.1064 | 12.17 | 260039 | 01.1432 | 11.17 |
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| 240011 | 01.1400 | 15.69 | 240102 | 00.8915 | 12.27 | 250002 | 00.7926 | 13.34 | 250096 | 01.2945 | 16.48 | 260044 | 01.0361 | 14.29 |
| 240013 | 01.3150 | 15.90 | 240103 | 01.0772 | 14.10 | 250003 | 01.0305 | 14.13 | 250097 | 01.1910 | 13.83 | 260047 | 01.3634 | 14.19 |
| 240014 | 01.0820 | 17.79 | 240104 | 01.2345 | 21.68 | 250004 | 01.4613 | 15.12 | 250098 | 00.8668 | 13.73 | 260048 | 01.2847 | 18.05 |
| 240016 | 01.3076 | 15.46 | 240105 | 01.0028 | 12.70 | 250005 | 00.9643 | 09.15 | 250099 | 01.2680 | 12.73 | 260050 | 01.0968 | 14.71 |
| 240017 | 01.1439 | 15.15 | 240106 | 01.3245 | 23.78 | 250006 | 00.9651 | 12.27 | 250100 | 01.2315 | 14.53 | 260052 | 01.3337 | 15.95 |
| 240018 | 01.2866 | 15.82 | 240107 | 00.9788 | 15.07 | 250007 | 01.2618 | 16.88 | 250101 | 00.9408 | 09.89 | 260053 | 01.1331 | 09.46 |
| 240019 | 01.2275 | 19.58 | 240108 | 00.9539 | 11.64 | 250008 | 00.8996 | 11.36 | 250102 | 01.5414 | 14.80 | 260054 | 01.3206 | 15.14 |
| 240020 | 01.1482 | 18.11 | 240109 | 00.9922 | 13.59 | 250009 | 01.1809 | 15.04 | 250104 | 01.3619 | 15.58 | 260055 | 01.0378 | 13.67 |
| 240021 | 00.9369 | 12.49 | 240110 | 01.0305 | 15.18 | 250010 | 01.0381 | 11.07 | 250105 | 00.9206 | 13.13 | 260057 | 01.1548 | 13.85 |
| 240022 | 01.1174 | 17.33 | 240111 | 00.9867 | 13.06 | 250012 | 00.9568 | 13.77 | 250107 | 00.9087 | 14.16 | 260059 | 01.1275 | 14.17 |
| 240023 | 01.0074 | 15.86 | 240112 | 01.0531 | 13.30 | 250015 | 01.0942 | 09.75 | 250109 | 00.9352 | 11.54 | 260061 | 01.1793 | 10.87 |
| 240025 | 01.1734 | 15.02 | 240114 | 00.9888 | 11.13 | 250017 | 01.0107 | 13.77 | 250112 | 00.9947 | 14.22 | 260062 | 01.1602 | 19.89 |
| 240027 | 01.0011 | 12.60 | 240115 | 01.6063 | 22.30 | 250018 | 00.9603 | 09.81 | 250117 | 01.0705 | 13.28 | 260063 | 01.1913 | 14.82 |
| 240028 | 01.1386 | 16.50 | 240116 | 00.9465 | 12.43 | 250019 | 01.4259 | 17.43 | 250119 | 01.2047 | 10.80 | 260064 | 01.3295 | 15.38 |
| 240029 | 01.1610 | 15.70 | 240117 | 01.0697 | 16.21 | 250020 | 01.0082 | 10.70 | 250120 | 01.0645 | 12.04 | 260065 | 01.7778 | 15.31 |
| 240030 | 01.3037 | 16.78 | 240119 | 00.8486 | 16.93 | 250021 | 00.8579 | 07.74 | 250122 | 01.2735 | 15.87 | 260066 | 01.0927 | 13.19 |
| 240031 | 00.9361 | 13.50 | 240121 | 00.9008 | 16.90 | 250023 | 00.8647 | 11.22 | 250123 | 01.3262 | 17.72 | 260067 | 00.9820 | 10.43 |
| 240036 | 01.5543 | 19.05 | 240122 | 01.0504 | 16.80 | 250024 | 00.9894 | 08.25 | 250124 | 00.9137 | 10.69 | 260068 | 01.6715 | 18.49 |
| 240037 | 01.0408 | 16.40 | 240123 | 01.0498 | 13.30 | 250025 | 01.1455 | 13.58 | 250125 | 01.3231 | 18.35 | 260070 | 01.0862 | 11.09 |
| 240038 | 01.4454 | 22.37 | 240124 | 01.0139 | 15.71 | 250027 | 01.0256 | 10.40 | 250126 | 00.9923 | 10.22 | 260073 | 00.9681 | 11.58 |
| 240040 | 01.2251 | 17.67 | 240125 | 00.9399 | 10.75 | 250029 ..... | 00.8872 | 11.87 | 250127 | 00.7630 |  | 260074 | 01.2427 | 14.81 |
| 240041 | 01.2877 | 14.43 | 240127 | 01.0142 | 12.51 | 250030 | 00.9688 | 11.39 | 250128 | 01.1010 | 12.64 | 260077 | 01.7271 | 16.15 |
| 240043 | 01.1990 | 16.83 | 240128 | 01.1180 | 14.55 | 250031 | 01.3157 | 17.20 | 250131 | 01.0539 | 09.36 | 260078 | 01.1782 | 12.39 |
| 240044 | 01.2046 | 16.02 | 240129 | 01.0153 | 12.18 | 250032 | 01.2551 | 15.70 | 250134 | 00.9795 | 12.70 | 260079 | 00.9824 | 11.78 |
| 240045 | 01.0655 | 18.49 | 240130 | 01.0151 | 14.54 | 250033 | 00.9921 | 11.57 | 250136 | 00.7871 | 16.84 | 260080 | 00.9654 | 09.77 |

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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 <br> mix <br> index | Avg. hour wage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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| 260097 | 01.1913 | 15.82 | 270017 | 01.2275 | 18.32 | 280037 | 01.0146 | 13.55 | 290006 | 01.2170 | 16.54 | 310027 | 01.3646 | 18.17 |
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| 260129 | 01.2124 | 13.51 | 270050 | 01.0380 | 15.96 | 280061 | 01.4628 | 14.76 | 300005 | 01.2620 | 18.65 | 310052 | 01.2545 | 20.53 |
| 260131 | 01.2940 | 16.32 | 270051 | 01.2980 | 17.65 | 280062 | 01.2187 | 11.92 | 300006 | 01.1221 | 16.24 | 310054 | 01.2880 | 23.19 |
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| 260162 | 01.7006 | 17.70 | 270075 | 00.8610 |  | 280080 | 01.0860 | 11.34 | 300018 | 01.2397 | 18.85 | 310072 | 01.3053 | 20.74 |
| 260163 | 01.3037 | 14.11 | 270076 | 00.8395 |  | 280081 | 01.5614 | 17.24 | 300019 | 01.2613 | 18.43 | 310073 | 01.5567 | 22.31 |
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| 260172 | 01.0176 | 12.07 | 270081 | 01.0780 | 09.77 | 280084 | 01.0314 | 10.92 | 300022 | 01.0939 | 17.08 | 310076 | 01.3883 | 28.16 |
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| 260175 | 01.1270 | 14.60 | 270083 | 01.1179 | 10.96 | 280088 | 01.8180 | 17.33 | 300024 | 01.2662 | 16.56 | 310078 | 01.3399 | 22.70 |
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| 260191 | 01.1707 | 19.44 | 280017 | 01.1537 | 13.42 | 280105 | 01.2920 | 16.46 | 310009 | 01.2782 | 21.35 | 310096 | 01.9004 | 21.19 |
| 260193 | 01.2240 | 19.13 | 280018 | 01.1931 | 12.25 | 280106 | 00.9402 | 13.23 | 310010 | 01.2912 | 21.05 | 310105 | 01.1999 | 22.41 |
| 260195 | 01.1660 |  | 280020 | 01.5257 | 18.97 | 280107 | 01.0294 | 12.36 | 310011 | 01.3017 | 21.71 | 310108 | 01.3824 | 21.08 |
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| 260198 | 01.2213 | 14.98 | 280022 | 00.9770 | 11.07 | 280109 | 00.9501 | 10.61 | 310013 | 01.2768 | 19.91 | 310111 | 01.2557 | 19.70 |
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| 270002 | 01.1911 | 13.92 | 280024 | 01.0114 | 13.22 | 280111 | 01.2372 | 16.06 | 310015 | 01.7776 | 24.34 | 310113 | 01.2089 | 20.70 |
| 270003 | 01.2465 | 18.65 | 280025 | 00.9810 | 11.07 | 280114 | 00.9353 | 10.26 | 310016 | 01.2225 | 22.93 | 310115 | 01.1943 | 19.78 |

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| ovider | Case mix index | Avg. hour wage | Provider |  | Avg. hour wage | Provider | Case mix index | Avg. hour wage | Provider | Case mix index | Avg. hour wage | Provider | Case mix index | Avg. hour wage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 310116 | 01.2919 | 21.67 | 330028 | 01.3448 | 23.76 | 330132 | 01.1620 | 13.74 | 330233 | 01.5441 | 29.08 | 330399 | 01.3239 | 29.65 |
| 310118 | 01.1849 | 21.86 | 330029 | 01.1111 | 17.36 | 330133 | 01.3428 | 28.31 | 330234 | 02.1918 | 24.17 | 340001 | 01.4951 | 19.39 |
| 310119 | 01.5594 | 27.27 | 330030 | 01.2349 | 14.89 | 330135 | 01.2563 | 16.25 | 330235 | 01.1332 | 17.37 | 340002 | 01.8825 | 18.53 |
| 310120 | 01.0603 | 17.24 | 330033 | 01.2846 | 13.46 | 330136 | 01.2637 | 20.45 | 330236 | 01.3832 | 26.18 | 340003 | 01.1188 | 16.56 |
| 310121 | 01.0460 | 16.61 | 330034 | 00.7718 | 36.61 | 330140 | 01.7132 | 17.19 | 330238 | 01.1820 | 14.53 | 340004 | 01.4966 | 17.21 |
| 320001 | 01.4620 | 16.76 | 330036 | 01.3298 | 21.00 | 330141 | 01.3504 | 23.17 | 330239 | 01.2013 | 15.44 | 340005 | 01.2221 | 14.57 |
| 320002 | 01.4159 | 21.55 | 330037 | 01.1242 | 15.17 | 330144 | 00.9758 | 13.17 | 330240 | 01.3354 | 26.47 | 340006 | 01.2338 | 14.56 |
| 320003 | 01.1576 | 15.57 | 330038 | 01.2140 | 14.91 | 330148 | 01.0784 | 14.39 | 330241 | 01.8652 | 20.92 | 340007 | 01.1848 | 14.81 |
| 320004 | 01.2677 | 17.86 | 330039 | 00.8486 | 13.18 | 330151 | 01.0421 | 13.73 | 330242 | 01.3516 | 18.35 | 340008 | 01.1458 | 16.48 |
| 320005 | 01.3217 | 17.80 | 330041 | 01.3912 | 27.81 | 330152 | 01.4273 | 27.77 | 330245 | 01.2716 | 17.15 | 340009 | 01.4043 | 18.58 |
| 320006 | 01.3699 | 15.02 | 330043 | 01.2400 | 25.15 | 330153 | 01.6522 | 17.44 | 330246 | 01.2502 | 22.99 | 340010 | 01.3129 | 16.41 |
| 320009 | 01.5348 | 16.75 | 330044 | 01.2405 | 16.99 | 330154 | 01.5884 |  | 330247 | 00.7071 | 26.49 | 340011 | 01.1134 | 13.98 |
| 320011 | 00.9939 | 17.79 | 330045 | 01.4167 | 24.83 | 330157 | 01.3091 | 18.41 | 330249 | 01.2314 | 15.89 | 340012 | 01.2605 | 15.82 |
| 320012 | 01.0231 | 16.57 | 330046 | 01.5105 | 28.39 | 330158 | 01.3668 | 24.33 | 330250 | 01.3166 | 16.01 | 340013 | 01.2719 | 16.58 |
| 320013 | 01.2225 | 18.28 | 330047 | 01.2265 | 16.63 | 330159 | 01.3291 | 17.35 | 330252 | 00.9141 | 15.40 | 340014 | 01.5921 | 22.15 |
| 320014 | 01.0141 | 08.42 | 330048 | 01.2888 | 16.10 | 330160 | 01.4618 | 26.09 | 330254 | 01.0327 | 15.52 | 340015 | 01.2388 | 16.44 |
| 320016 | 01.1571 | 12.00 | 330049 | 01.2436 | 17.52 | 330161 | 00.7163 | 16.00 | 330258 | 01.4234 | 25.28 | 340016 | 01.1961 | 15.18 |
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| 320019 | 01.4799 | 19.01 | 330056 | 01.4367 | 28.30 | 330164 | 01.3999 | 18.96 | 330263 | 00.9948 | 17.00 | 340019 | 01.0453 | 13.69 |
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| 320022 | 01.1678 | 16.34 | 330058 | 01.3255 | 15.69 | 330167 | 01.6419 | 27.45 | 330265 | 01.3114 | 15.78 | 340021 | 01.2221 | 15.08 |
| 320023 | 01.0224 | 13.29 | 330059 | 01.6149 | 29.66 | 330169 | 01.4285 | 31.70 | 330267 | 01.2789 | 22.78 | 340022 | 01.0451 | 14.56 |
| 320030 | 00.9845 | 16.54 | 330061 | 01.2961 | 23.38 | 330171 | 01.2758 | 21.15 | 330268 | 00.9689 | 15.79 | 340023 | 01.3842 | 18.44 |
| 320031 | 00.8961 | 14.78 | 330062 | 01.1834 | 14.99 | 330175 | 01.1250 | 14.28 | 330270 | 01.9667 | 30.33 | 340024 | 01.2260 | 15.05 |
| 320032 | 01.0053 | 16.66 | 330064 | 01.3837 | 28.38 | 330177 | 01.0204 | 12.46 | 330273 | 01.2909 | 21.36 | 340025 | 01.1908 | 14.15 |
| 320033 | 01.1561 | 19.23 | 330065 | 01.1753 | 17.14 | 330179 | 00.8644 | 14.09 | 330275 | 01.2168 | 18.19 | 340027 | 01.2025 | 15.46 |
| 320035 | 01.0000 | 14.82 | 330066 | 01.2326 | 17.26 | 330180 | 01.1942 | 16.09 | 330276 | 01.1889 | 16.58 | 340028 | 01.5288 | 17.48 |
| 320037 | 01.2063 | 15.17 | 330067 | 01.3792 | 19.68 | 330181 | 01.3113 | 28.32 | 330277 | 01.1317 | 16.35 | 340030 | 02.0064 | 19.06 |
| 320038 | 01.1613 | 15.62 | 330072 | 01.3367 | 26.92 | 330182 | 02.5604 | 26.92 | 330279 | 01.2905 | 17.24 | 340031 | 00.9382 | 12.56 |
| 320046 | 01.1938 | 18.23 | 330073 | 01.1865 | 14.20 | 330183 | 01.4402 | 18.88 | 330285 | 01.8179 | 21.81 | 340032 | 01.3951 | 17.87 |
| 320048 | 01.3453 | 13.90 | 330074 | 01.1952 | 16.89 | 330184 | 01.3357 | 25.83 | 330286 | 01.3134 | 22.59 | 340035 | 01.1716 | 14.97 |
| 320056 | 00.9819 |  | 330075 | 01.0925 | 16.48 | 330185 | 01.2303 | 24.23 | 330290 | 01.7595 | 28.28 | 340036 | 01.1656 | 17.04 |
| 320057 | 01.0612 |  | 330078 | 01.4429 | 16.90 | 330186 | 00.9205 | 18.79 | 330293 | 01.1658 | 13.72 | 340037 | 01.1731 | 15.50 |
| 320058 | 00.9103 |  | 330079 | 01.3056 | 16.60 | 330188 | 01.1826 | 17.75 | 330304 | 01.2716 | 25.62 | 340038 | 01.1099 | 14.52 |
| 320059 | 00.9799 |  | 330080 | 01.4028 | 24.95 | 330189 | 01.3836 | 16.20 | 330306 | 01.4564 | 26.59 | 340039 | 01.2731 | 19.18 |
| 320060 | 00.9135 |  | 330082 | 01.1164 | 16.29 | 330191 | 01.2642 | 17.14 | 330307 | 01.2198 | 18.33 | 340040 | 01.7730 | 17.75 |
| 320061 | 01.0790 |  | 330084 | 00.9954 | 15.59 | 330193 | 01.2990 | 27.34 | 330308 | 01.1771 | 28.68 | 340041 | 01.2428 | 15.99 |
| 320062 | 00.9353 |  | 330085 | 01.3139 | 18.66 | 330194 | 01.8175 | 26.07 | 330309 | 01.2301 | 24.67 | 340042 | 01.1875 | 13.80 |
| 320063 | 01.3344 | 15.84 | 330086 | 01.2522 | 24.13 | 330195 | 01.6251 | 29.02 | 330314 | 01.3625 | 21.07 | 340044 | 01.1061 | 13.26 |
| 320065 | 01.2800 | 16.76 | 330088 | 01.1053 | 24.41 | 330196 | 01.3279 | 25.53 | 330315 | 01.2528 | 24.58 | 340045 | 01.0396 | 10.95 |
| 320067 | 00.8183 | 09.19 | 330090 | 01.5574 | 16.86 | 330197 | 01.0999 | 14.43 | 330316 | 01.3007 | 26.23 | 340047 | 01.8881 | 17.90 |
| 320068 | 00.9221 | 17.98 | 330091 | 01.3825 | 17.64 | 330198 | 01.3312 | 22.17 | 330327 | 00.9294 | 15.30 | 340048 | 00.9055 | 09.39 |
| 320069 | 01.0367 | 09.08 | 330092 | 01.1062 | 13.64 | 330199 | 01.4730 | 24.90 | 330331 | 01.2281 | 27.78 | 340049 | 00.6394 | 15.10 |
| 320070 | 01.0220 |  | 330094 | 01.2285 | 15.57 | 330201 | 01.5327 | 27.38 | 330332 | 01.2569 | 24.30 | 340050 | 01.1927 | 14.69 |
| 320074 | 01.1134 | 17.15 | 330095 | 01.2586 | 16.43 | 330202 | 01.4667 | 25.07 | 330333 | 01.3666 | 22.00 | 340051 | 01.2724 | 16.23 |
| 320079 | 01.1977 | 17.41 | 330096 | 01.0690 | 14.47 | 330203 | 01.4028 | 19.16 | 330336 | 01.3373 | 27.39 | 340052 | 01.0387 | 18.62 |
| 330001 | 01.1965 | 24.84 | 330097 | 01.1645 | 14.51 | 330204 | 01.4276 | 24.90 | 330338 | 01.1337 | 22.52 | 340053 | 01.6979 | 18.94 |
| 330002 | 01.4946 | 24.26 | 330100 | 00.6809 | 25.95 | 330205 | 01.1548 | 19.46 | 330339 | 00.8047 | 18.09 | 340054 | 01.0903 | 12.68 |
| 330003 | 01.3431 | 19.29 | 330101 | 01.7909 | 33.09 | 330208 | 01.2046 | 23.16 | 330340 | 01.2007 | 23.91 | 340055 | 01.2066 | 16.69 |
| 330004 | 01.2765 | 19.10 | 330102 | 01.2998 | 16.32 | 330209 | 01.1899 | 21.17 | 330350 | 01.8078 | 27.96 | 340060 | 01.1317 | 16.38 |
| 330005 | 01.8086 | 19.53 | 330103 | 01.2457 | 15.94 | 330211 | 01.2056 | 16.31 | 330353 | 01.3988 | 27.49 | 340061 | 01.7130 | 19.20 |
| 330006 | 01.3140 | 24.11 | 330104 | 01.3533 | 25.44 | 330212 | 01.1780 | 20.25 | 330354 | 01.3850 |  | 340063 | 01.0618 | 13.01 |
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| 330008 | 01.1201 | 15.74 | 330107 | 01.2581 | 24.38 | 330214 | 01.7374 | 28.82 | 330359 | 00.9481 | 23.70 | 340065 | 01.3093 | 12.82 |
| 330009 | 01.3524 | 28.08 | 330108 | 01.2108 | 15.85 | 330215 | 01.2093 | 15.65 | 330372 | 01.2689 | 22.53 | 340067 | 01.1980 | 12.84 |
| 330010 | 01.1699 | 15.34 | 330111 | 01.0835 | 14.62 | 330218 | 01.1561 | 17.16 | 330381 | 01.1775 | 26.80 | 340068 | 01.2347 | 14.09 |
| 330011 | 01.2484 | 17.22 | 330114 | 00.8917 | 15.48 | 330219 | 01.6451 | 18.39 | 330385 | 01.1714 | 29.27 | 340069 | 01.7147 | 18.31 |
| 330012 | 01.6092 | 27.82 | 330115 | 01.2026 | 14.46 | 330221 | 01.3287 | 26.57 | 330386 | 01.1388 | 20.82 | 340070 | 01.3855 | 16.89 |
| 330013 | 02.0610 | 16.84 | 330116 | 00.9205 | 13.82 | 330222 | 01.2641 | 15.28 | 330387 | 00.8466 | 23.28 | 340071 | 01.0722 | 14.30 |
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| 330016 | 01.0259 | 14.55 | 330119 | 01.7361 | 29.88 | 330224 | 01.2693 | 18.85 | 330390 | 01.2508 | 28.38 | 340073 | 01.4620 | 20.47 |
| 330019 | 01.1269 | 23.60 | 330121 | 01.0046 | 14.35 | 330225 | 01.1710 | 23.34 | 330393 | 01.7066 | 25.24 | 340075 | 01.1488 | 15.98 |
| 330020 | 01.0498 | 14.20 | 330122 | 01.2006 | 20.92 | 330226 | 01.2690 | 16.53 | 330394 | 01.5060 | 17.27 | 340080 | 01.1232 | 13.55 |
| 330023 | 01.2458 | 22.76 | 330125 | 01.8084 | 19.69 | 330229 | 01.3174 | 14.90 | 330395 | 01.3465 | 30.16 | 340084 | 01.0577 | 14.51 |
| 330024 | 01.9139 | 30.03 | 330126 | 01.2271 | 20.35 | 330230 | 01.5132 | 26.44 | 330396 | 01.2729 | 26.86 | 340085 | 01.2634 | 15.46 |
| 330025 | 01.1935 | 13.80 | 330127 | 01.3930 | 25.99 | 330231 | 01.1306 | 27.57 | 330397 | 01.2901 | 23.98 | 340087 | 01.1402 | 16.80 |
| 330027 | 01.4632 | 28.56 | 330128 | 01.3068 | 25.26 | 330232 | 01.2194 | 15.46 | 330398 | 01.2229 | 26.59 | 340088 | 01.1242 | 16.32 |

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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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| 340090 | 01.1324 | 15.49 | 350012 | 01.1423 | 12.36 | 360037 | 02.1403 | 20.14 | 360114 | 01.1471 | 16.05 | 360210 | 01.2281 | 19.23 |
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| 340097 | 01.1584 | 16.04 | 350017 | 01.4595 | 14.52 | 360042 | 01.1088 | 16.74 | 360122 | 01.3802 | 17.77 | 360230 | 01.3282 | 20.27 |
| 340098 | 01.6790 | 19.05 | 350018 | 01.1672 | 10.67 | 360044 | 01.1425 | 15.79 | 360123 | 01.2539 | 17.50 | 360231 | 01.1364 | 12.45 |
| 340099 | 01.0973 | 13.36 | 350019 | 01.6119 | 18.69 | 360045 | 01.4898 | 19.25 | 360124 | 01.2571 | 17.08 | 360234 | 01.3614 | 17.90 |
| 340101 | 01.0284 | 11.11 | 350020 | 01.4933 | 17.82 | 360046 | 01.1375 | 18.60 | 360125 | 01.1173 | 16.87 | 360236 | 01.1885 | 18.56 |
| 340104 | 00.9509 | 10.60 | 350021 | 01.0719 | 10.94 | 360047 | 01.2246 | 13.85 | 360126 | 01.2013 | 18.97 | 360239 | 01.2445 | 18.70 |
| 340105 | 01.3875 | 17.75 | 350023 | 00.8794 | 15.59 | 360048 | 01.7427 | 21.00 | 360127 | 01.1556 | 16.28 | 360241 | 00.5303 | 17.69 |
| 340106 | 01.1119 | 17.79 | 350024 | 01.1055 | 13.69 | 360049 | 01.2627 | 17.36 | 360128 | 01.1296 | 13.85 | 360242 | 01.6927 |  |
| 340107 | 01.3175 | 16.17 | 350025 | 01.0584 | 12.60 | 360050 | 01.1772 | 12.43 | 360129 | 01.0407 | 14.06 | 360243 | 00.7499 | 14.35 |
| 340109 | 01.3284 | 15.91 | 350027 | 00.9693 | 12.57 | 360051 | 01.5377 | 21.83 | 360130 | 01.1314 | 15.16 | 360244 | 00.7183 | 16.77 |
| 340111 | 01.1696 | 13.78 | 350029 | 01.0052 | 12.34 | 360052 | 01.7099 | 17.88 | 360131 | 01.4113 | 16.27 | 360245 | 00.8026 | 12.10 |
| 340112 | 01.2281 | 14.03 | 350030 | 01.0850 | 16.04 | 360054 | 01.2577 | 15.55 | 360132 | 01.2353 | 20.78 | 360246 | 00.8761 | 15.05 |
| 340113 | 01.9956 | 19.50 | 350033 | 00.9626 | 13.23 | 360055 | 01.2369 | 18.92 | 360133 | 01.4730 | 17.61 | 360247 | 00.4357 |  |
| 340114 | 01.5144 | 19.16 | 350034 | 01.0422 | 13.58 | 360056 | 01.3471 | 16.92 | 360134 | 01.5906 | 18.25 | 370001 | 01.6940 | 18.41 |
| 340115 | 01.5599 | 17.23 | 350035 | 00.9058 | 10.11 | 360057 | 01.0323 | 13.04 | 360135 | 01.1609 | 17.12 | 370002 | 01.2409 | 13.60 |
| 340116 | 01.9326 | 20.30 | 350038 | 01.0433 | 13.26 | 360058 | 01.2713 | 15.35 | 360136 | 01.0537 | 14.73 | 370004 | 01.2787 | 15.30 |
| 340119 | 01.2864 | 15.21 | 350039 | 00.9735 | 13.53 | 360059 | 01.5326 | 20.00 | 360137 | 01.5595 | 18.98 | 370005 | 01.0310 | 14.12 |
| 340120 | 01.1407 | 12.33 | 350041 | 01.0473 | 13.05 | 360062 | 01.4664 | 18.40 | 360140 | 01.0061 | 15.47 | 370006 | 01.3098 | 14.88 |
| 340121 | 01.0454 | 14.52 | 350042 | 01.0545 | 12.39 | 360063 | 01.1442 | 17.19 | 360141 | 01.4435 | 19.84 | 370007 | 01.1454 | 12.80 |
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| 340123 | 01.1301 | 14.07 | 350044 | 00.9167 | 10.01 | 360065 | 01.2285 | 16.97 | 360143 | 01.2936 | 17.74 | 370011 | 01.0535 | 12.51 |
| 340124 | 01.0290 | 12.27 | 350047 | 01.2270 | 16.64 | 360066 | 01.3888 | 17.16 | 360144 | 01.3153 | 20.19 | 370012 | 00.8431 | 09.22 |
| 340125 | 01.4128 | 16.94 | 350049 | 01.2236 | 10.38 | 360067 | 01.2739 | 12.11 | 360145 | 01.6266 | 16.84 | 370013 | 01.7649 | 18.61 |
| 340126 | 01.4341 | 16.23 | 350050 | 00.9361 | 10.25 | 360068 | 01.6561 | 21.91 | 360147 | 01.2668 | 15.55 | 370014 | 01.3220 | 17.14 |
| 340127 | 01.3124 | 16.30 | 350051 | 00.9479 | 14.13 | 360069 | 01.1403 | 16.38 | 360148 | 01.0725 | 16.50 | 370015 | 01.2733 | 13.84 |
| 340129 | 01.3428 | 18.65 | 350053 | 01.0745 | 09.47 | 360070 | 01.6756 | 16.57 | 360149 | 01.1481 | 20.33 | 370016 | 01.3805 | 14.25 |
| 340130 | 01.3270 | 16.03 | 350055 | 00.9216 | 11.50 | 360071 | 01.2663 | 15.42 | 360150 | 01.2805 | 17.70 | 370017 | 01.1032 | 12.14 |
| 340131 | 01.4309 | 15.77 | 350056 | 00.9559 | 12.92 | 360072 | 01.1415 | 16.29 | 360151 | 01.3134 | 16.55 | 370018 | 01.2603 | 14.06 |
| 340132 | 01.3108 | 12.41 | 350058 | 00.9358 | 12.18 | 360074 | 01.3554 | 19.15 | 360152 | 01.4800 | 17.65 | 370019 | 01.3065 | 11.91 |
| 340133 | 01.0442 | 13.87 | 350060 | 00.7458 | 07.59 | 360075 | 01.4959 | 20.80 | 360153 | 01.1489 | 13.64 | 370020 | 01.2921 | 12.53 |
| 340136 | 00.7885 | 24.45 | 350061 | 01.0638 | 13.77 | 360076 | 01.3053 | 18.84 | 360154 | 01.0301 | 12.39 | 370021 | 00.9804 | 10.01 |
| 340137 | 01.2184 | 12.68 | 350063 | 00.8926 |  | 360077 | 01.4743 | 18.59 | 360155 | 01.3265 | 18.75 | 370022 | 01.2770 | 15.09 |
| 340138 | 01.1777 | 17.60 | 350064 | 00.9587 |  | 360078 | 01.2792 | 18.97 | 360156 | 01.3473 | 16.47 | 370023 | 01.3268 | 14.95 |
| 340141 | 01.6350 | 18.27 | 350066 | 00.7912 |  | 360079 | 01.7583 | 19.31 | 360159 | 01.1944 | 18.50 | 370025 | 01.3983 | 15.37 |
| 340142 | 01.2013 | 14.94 | 360001 | 01.3143 | 17.88 | 360080 | 01.1127 | 14.39 | 360161 | 01.2723 | 18.78 | 370026 | 01.4214 | 16.08 |
| 340143 | 01.3902 | 18.50 | 360002 | 01.1965 | 15.17 | 360081 | 01.3567 | 17.92 | 360162 | 01.2555 | 17.27 | 370028 | 01.8667 | 17.67 |
| 340144 | 01.4374 | 14.85 | 360003 | 01.7521 | 19.64 | 360082 | 01.3134 | 19.81 | 360163 | 01.8595 | 19.87 | 370029 | 01.2233 | 12.79 |
| 340145 | 01.3310 | 16.80 | 360006 | 01.7493 | 19.53 | 360083 | 01.2570 | 15.49 | 360164 | 00.8555 | 13.98 | 370030 | 01.2426 | 12.05 |
| 340146 | 01.0146 | 15.42 | 360007 | 01.0552 | 15.41 | 360084 | 01.6203 | 18.16 | 360165 | 01.2257 | 14.31 | 370032 | 01.5278 | 14.28 |
| 340147 | 01.2935 | 17.80 | 360008 | 01.2985 | 16.20 | 360085 | 01.8174 | 19.63 | 360166 | 01.1556 | 15.83 | 370033 | 01.0835 | 11.23 |
| 340148 | 01.4339 | 18.28 | 360009 | 01.3946 | 17.35 | 360086 | 01.4601 | 16.75 | 360169 | 00.9799 | 16.99 | 370034 | 01.2667 | 12.80 |
| 340151 | 01.1224 | 14.05 | 360010 | 01.2275 | 15.38 | 360087 | 01.4074 | 17.32 | 360170 | 01.2837 | 16.07 | 370035 | 01.6190 | 15.21 |
| 340153 | 01.9701 | 21.08 | 360011 | 01.2285 | 17.83 | 360088 | 01.2127 | 15.48 | 360172 | 01.3763 | 16.62 | 370036 | 01.0290 |  |
| 340155 | 01.3926 | 20.91 | 360012 | 01.3020 | 17.61 | 360089 | 01.1680 | 16.92 | 360174 | 01.2365 | 19.24 | 370037 | 01.7236 | 17.83 |
| 340156 | 00.8066 |  | 360013 | 01.0836 | 16.71 | 360090 | 01.2316 | 17.90 | 360175 | 01.2401 | 17.61 | 370038 | 00.9187 | 12.01 |
| 340158 | 01.1738 | 16.16 | 360014 | 01.1219 | 17.57 | 360091 | 01.2648 | 18.90 | 360176 | 01.1559 | 15.53 | 370039 | 01.4573 | 17.22 |
| 340159 | 01.1571 | 16.88 | 360016 | 01.6012 | 17.81 | 360092 | 01.2659 | 17.85 | 360177 | 01.2581 | 16.30 | 370040 | 01.1051 | 10.89 |
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| 340168 | 00.5085 | 14.78 | 360021 | 01.2770 | 18.04 | 360098 | 01.4006 | 18.00 | 360185 | 01.2493 | 17.09 | 370046 | 00.9827 | 09.22 |
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| 350002 | 01.7678 | 16.04 | 360026 | 01.1897 | 15.59 | 360101 | 01.7334 | 19.71 | 360188 | 00.9998 | 14.77 | 370049 | 01.3566 | 15.60 |
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| 350005 | 01.0670 | 13.14 | 360029 | 01.1611 | 16.41 | 360104 | 01.8950 | 20.28 | 360193 | 01.3104 | 16.77 | 370056 | 01.5609 | 15.41 |
| 350006 | 01.3958 | 16.16 | 360030 | 01.1326 | 14.82 | 360106 | 01.0509 | 13.89 | 360194 | 01.1180 | 16.14 | 370057 | 01.1711 | 15.05 |
| 350007 | 00.9510 | 12.20 | 360031 | 01.3534 | 18.42 | 360107 | 01.2373 | 16.98 | 360195 | 01.1319 | 17.72 | 370059 | 01.1178 | 13.53 |
| 350008 | 01.0408 | 15.15 | 360032 | 01.0876 | 16.18 | 360108 | 01.0371 | 15.08 | 360197 | 01.2030 | 16.76 | 370060 | 01.0787 | 12.88 |
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| 350010 | 01.1768 | 12.30 | 360035 | 01.5734 | 19.90 | 360112 | 01.7594 | 21.61 | 360203 | 01.1502 | 15.55 | 370064 | 01.0006 | 10.14 |

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| rovider | 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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| 370077 | 01.2244 | 16.30 | 380004 | 01.6835 | 22.89 | 390008 | 01.1329 | 15.08 | 390086 | 01.1338 | 16.87 | 390173 | 01.1970 | 17.08 |
| 370078 | 01.7096 | 14.58 | 380005 | 01.1844 | 19.47 | 390009 | 01.6076 | 17.97 | 390088 | 01.3128 | 18.42 | 390174 | 01.7084 | 24.17 |
| 370079 | 00.9596 | 11.98 | 380006 | 01.3941 | 18.29 | 390010 | 01.1788 | 16.58 | 390090 | 01.7984 | 19.42 | 390176 | 01.1554 | 16.79 |
| 370080 | 00.9895 | 11.12 | 380007 | 01.5747 | 22.66 | 390011 | 01.2486 | 16.49 | 390091 | 01.1719 | 17.09 | 390178 | 01.2863 | 17.63 |
| 370082 | 00.9026 | 12.48 | 380008 | 01.0694 | 18.69 | 390012 | 01.1879 | 19.15 | 390093 | 01.1483 | 15.20 | 390179 | 01.2723 | 22.80 |
| 370083 | 00.9519 | 10.95 | 380009 | 01.8168 | 22.17 | 390013 | 01.2292 | 16.77 | 390095 | 01.1706 | 13.95 | 390180 | 01.5471 | 22.83 |
| 370084 | 01.0346 | 08.88 | 380010 | 01.0963 | 24.15 | 390014 | 01.6409 | 16.42 | 390096 | 01.2685 | 16.88 | 390181 | 01.0604 | 17.80 |
| 370085 | 00.8099 | 12.94 | 380011 | 01.0945 | 14.95 | 390015 | 01.1953 | 13.06 | 390097 | 01.3276 | 20.91 | 390183 | 01.1832 | 17.16 |
| 370086 | 01.1956 | 09.89 | 380013 | 01.2681 | 21.54 | 390016 | 01.2237 | 15.58 | 390098 | 01.7625 | 20.06 | 390184 | 01.1052 | 17.69 |
| 370089 | 01.2826 | 14.01 | 380014 | 01.4140 | 18.89 | 390017 | 01.1682 | 14.20 | 390100 | 01.6300 | 19.30 | 390185 | 01.2228 | 16.12 |
| 370091 | 01.6822 | 16.13 | 380017 | 01.7069 | 21.77 | 390018 | 01.2273 | 19.41 | 390101 | 01.1992 | 15.70 | 390189 | 01.0395 | 17.78 |
| 370092 | 01.0705 | 12.73 | 380018 | 01.8382 | 19.21 | 390019 | 01.1151 | 14.53 | 390102 | 01.3664 | 20.34 | 390191 | 01.0524 | 13.91 |
| 370093 | 01.8611 | 18.67 | 380019 | 01.2076 | 18.88 | 390022 | 01.3923 | 21.81 | 390103 | 01.0990 | 17.17 | 390192 | 01.1238 | 17.15 |
| 370094 | 01.4135 | 16.67 | 380020 | 01.4350 | 20.06 | 390023 | 01.2514 | 19.71 | 390104 | 01.0557 | 15.15 | 390193 | 01.1950 | 15.39 |
| 370095 | 00.9154 | 11.62 | 380021 | 01.2873 | 19.10 | 390024 | 00.8646 | 22.54 | 390106 | 01.0122 | 14.85 | 390194 | 01.1560 | 18.97 |
| 370097 | 01.3691 | 18.65 | 380022 | 01.1702 | 19.92 | 390025 | 00.6443 | 16.64 | 390107 | 01.2482 | 18.52 | 390195 | 01.8265 | 22.08 |
| 370099 | 01.1663 | 13.22 | 380023 | 01.2350 | 17.76 | 390026 | 01.2687 | 20.58 | 390108 | 01.4077 | 19.97 | 390196 | 01.4066 |  |
| 370100 | 01.0423 | 13.02 | 380025 | 01.2670 | 21.81 | 390027 | 01.9708 | 23.48 | 390109 | 01.1523 | 14.44 | 390197 | 01.3091 | 18.40 |
| 370103 | 00.9024 | 11.77 | 380026 | 01.1899 | 16.87 | 390028 | 01.7871 | 18.54 | 390110 | 01.6465 | 17.36 | 390198 | 01.1942 | 15.21 |
| 370105 | 02.0043 | 17.06 | 380027 | 01.2587 | 20.25 | 390029 | 01.9395 | 18.73 | 390111 | 01.8583 | 26.22 | 390199 | 01.2016 | 14.89 |
| 370106 | 01.5411 | 16.96 | 380029 | 01.1474 | 17.29 | 390030 | 01.2365 | 16.29 | 390112 | 01.1488 | 12.16 | 390200 | 01.0147 | 14.67 |
| 370108 | 01.0551 | 10.82 | 380031 | 01.0329 | 15.92 | 390031 | 01.1587 | 16.93 | 390113 | 01.2113 | 16.04 | 390201 | 01.2666 | 18.75 |
| 370112 | 01.0769 | 12.33 | 380033 | 01.7783 | 22.97 | 390032 | 01.2498 | 17.80 | 390114 | 01.1217 | 21.07 | 390203 | 01.3102 | 20.45 |
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| 370114 | 01.6305 | 14.69 | 380036 | 01.1305 | 17.27 | 390036 | 01.3337 | 17.63 | 390116 | 01.2237 | 19.91 | 390205 | 01.3479 | 22.42 |
| 370121 | 01.1729 | 15.78 | 380037 | 01.2063 | 18.24 | 390037 | 01.3426 | 18.07 | 390117 | 01.1636 | 15.65 | 390206 | 01.3349 | 19.91 |
| 370122 | 01.1291 | 09.78 | 380038 | 01.3425 | 21.15 | 390039 | 01.0948 | 15.60 | 390118 | 01.1524 | 16.29 | 390209 | 01.0438 | 15.48 |
| 370123 | 01.2098 | 14.12 | 380039 | 01.3082 | 18.89 | 390040 | 01.0024 | 12.71 | 390119 | 01.3475 | 17.17 | 390211 | 01.1929 | 16.47 |
| 370125 | 01.0284 | 11.90 | 380040 | 01.2507 | 19.23 | 390041 | 01.2475 | 16.82 | 390121 | 01.3363 | 18.95 | 390213 | 00.9476 | 14.55 |
| 370126 | 00.9483 | 10.66 | 380042 | 01.1550 | 18.06 | 390042 | 01.4374 | 20.74 | 390122 | 01.0719 | 16.06 | 390215 | 01.1565 | 20.69 |
| 370131 | 01.0232 | 12.93 | 380047 | 01.6960 | 19.84 | 390043 | 01.0988 | 15.65 | 390123 | 01.3041 | 20.58 | 390217 | 01.2781 | 17.92 |
| 370133 | 01.1213 | 09.82 | 380048 | 01.0936 | 13.92 | 390044 | 01.5993 | 18.80 | 390125 | 01.2255 | 15.08 | 390219 | 01.3149 | 18.57 |
| 370138 | 01.1138 | 14.40 | 380050 | 01.3349 | 16.37 | 390045 | 01.7321 | 17.35 | 390126 | 01.3266 | 20.07 | 390220 | 01.2126 | 19.33 |
| 370139 | 01.0944 | 10.62 | 380051 | 01.5217 | 19.13 | 390046 | 01.5446 | 18.49 | 390127 | 01.2319 | 20.26 | 390222 | 01.3083 | 20.42 |
| 370140 | 01.0059 | 11.71 | 380052 | 01.1764 | 16.70 | 390047 | 01.6845 | 18.24 | 390128 | 01.2014 | 17.96 | 390223 | 01.6376 | 23.15 |
| 370141 | 01.3883 | 19.17 | 380055 | 01.2275 | 23.88 | 390048 | 01.1857 | 16.26 | 390130 | 01.1480 | 16.62 | 390224 | 00.9314 | 13.04 |
| 370146 | 01.0486 | 12.03 | 380056 | 01.0753 | 15.78 | 390049 | 01.5514 | 19.82 | 390131 | 01.2704 | 16.06 | 390225 | 01.2124 | 15.42 |
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| 370149 | 01.2373 | 15.19 | 380061 | 01.5190 | 22.00 | 390051 | 02.1828 | 24.98 | 390133 | 01.7790 | 20.57 | 390228 | 01.2071 | 18.67 |
| 370153 | 01.0915 | 13.17 | 380062 | 01.1039 | 15.07 | 390052 | 01.1846 | 16.68 | 390135 | 01.2913 | 19.73 | 390231 | 01.3122 | 21.89 |
| 370154 | 01.0164 | 12.31 | 380063 | 01.3354 | 21.48 | 390054 | 01.2245 | 14.56 | 390136 | 01.2338 | 15.66 | 390233 | 01.3268 | 16.71 |
| 370156 | 01.1022 | 13.37 | 380064 | 01.4398 | 18.47 | 390055 | 01.7751 | 21.82 | 390137 | 01.2962 | 17.80 | 390235 | 01.5635 | 23.94 |
| 370158 | 01.0538 | 12.08 | 380065 | 01.0680 | 19.24 | 390056 | 01.1222 | 15.73 | 390138 | 01.3365 | 17.41 | 390236 | 01.1643 | 15.90 |
| 370159 | 01.3427 | 13.95 | 380066 | 01.3162 | 17.60 | 390057 | 01.3263 | 18.94 | 390139 | 01.4984 | 23.50 | 390237 | 01.6149 | 20.17 |
| 370163 | 00.8558 | 10.99 | 380068 | 01.0655 | 19.31 | 390058 | 01.3239 | 17.46 | 390142 | 01.6716 | 22.64 | 390238 | 01.3009 | 16.12 |
| 370165 | 01.0872 | 11.74 | 380069 | 01.1328 | 17.51 | 390060 | 01.1432 | 16.68 | 390145 | 01.3596 | 18.64 | 390242 | 01.2772 | 18.69 |
| 370166 | 01.0886 | 15.48 | 380070 | 01.3924 | 21.21 | 390061 | 01.4426 | 20.47 | 390146 | 01.3088 | 16.19 | 390244 | 00.9339 | 13.32 |
| 370169 | 01.1024 | 10.66 | 380071 | 01.2894 | 18.06 | 390062 | 01.1400 | 15.76 | 390147 | 01.2505 | 19.22 | 390245 | 01.3465 | 23.15 |
| 370170 | 00.9792 |  | 380072 | 00.9714 | 14.15 | 390063 | 01.7324 | 19.20 | 390149 | 01.2579 | 19.59 | 390246 | 01.2349 | 15.91 |
| 370171 | 01.0341 |  | 380075 | 01.4281 | 20.90 | 390064 | 01.5561 | 16.25 | 390150 | 01.1065 | 17.50 | 390247 | 01.0497 | 17.22 |
| 370172 | 00.8587 |  | 380078 | 01.1638 | 16.95 | 390065 | 01.2903 | 18.85 | 390151 | 01.2927 | 18.26 | 390249 | 01.0291 | 10.81 |
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| 370174 | 00.9656 |  | 380082 | 01.2906 | 20.35 | 390067 | 01.8083 | 18.03 | 390153 | 01.2473 | 21.93 | 390258 | 01.2502 | 19.78 |
| 370176 | 01.1495 | 16.48 | 380083 | 01.2487 | 18.93 | 390068 | 01.3245 | 18.13 | 390154 | 01.1877 | 13.93 | 390260 | 01.1823 | 15.95 |
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| 370178 | 01.0015 | 12.17 | 380087 | 01.0083 | 12.30 | 390070 | 01.2898 | 19.49 | 390156 | 01.4337 | 22.61 | 390263 | 01.4331 | 18.66 |
| 370179 | 00.8966 | 14.28 | 380088 | 01.0059 | 15.71 | 390071 | 01.1154 | 13.36 | 390157 | 01.3427 | 17.97 | 390265 | 01.3123 | 17.72 |
| 370180 | 01.0716 |  | 380089 | 01.2909 | 21.87 | 390072 | 01.1133 | 15.76 | 390158 | 01.5891 |  | 390266 | 01.2098 | 16.69 |
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| 370186 | 01.0206 | 12.72 | 380091 | 01.2113 | 23.79 | 390074 | 01.2369 | 16.26 | 390161 | 01.0981 | 14.87 | 390268 | 01.3884 | 19.94 |
| 370189 | 00.9754 | 10.13 | 380897 | 04.9268 |  | 390075 | 01.2410 | 15.92 | 390162 | 01.4238 | 19.03 | 390270 | 01.3090 | 15.89 |
| 370190 | 01.5480 | 17.49 | 390001 | 01.3578 | 18.16 | 390076 ..... | 01.3094 | 20.45 | 390163 | 01.2248 | 16.55 | 390272 | 00.4549 |  |
| 370192 | 01.1656 |  | 390002 | 01.3668 | 17.03 | 390078 ... | 01.0633 | 15.98 | 390164 | 01.9412 | 19.14 | 390277 | 00.5643 | 20.34 |
| 370194 | 01.1343 |  | 390003 | 01.2571 | 15.57 | 390079 ..... | 01.7083 | 16.83 | 390166 | 01.1041 | 17.40 | 390278 | 00.7673 | 17.52 |

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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 | $\begin{aligned} & \text { Case } \\ & \text { mix } \\ & \text { index } \end{aligned}$ | Avg. hour wage | Provider | $\begin{aligned} & \text { Case } \\ & \text { mix } \end{aligned}$ index | Avg. hour wage |
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| 400003 | 01.2378 | 07.14 | 420010 | 01.1070 | 14.35 | 430018 | 00.9882 | 14.06 | 440033 | 01.0675 | 14.84 | 440152 | 01.5616 | 16.91 |
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| 400006 | 01.2005 | 08.16 | 420015 | 01.3145 | 15.96 | 430024 | 00.9117 | 12.28 | 440039 | 01.6355 | 16.76 | 440157 | 01.0913 | 13.64 |
| 400007 | 01.2599 | 07.55 | 420016 | 01.0635 | 14.39 | 430026 | 01.0798 | 11.36 | 440040 | 00.9697 | 17.03 | 440159 | 01.2358 | 14.83 |
| 400009 | 01.0253 | 07.68 | 420018 | 01.7204 | 18.94 | 430027 | 01.8117 | 16.54 | 440041 | 01.0374 | 12.35 | 440161 | 01.6916 | 20.58 |
| 400010 | 00.9067 | 07.94 | 420019 | 01.2221 | 14.90 | 430028 | 01.0938 | 13.68 | 440046 | 01.3271 | 13.59 | 440166 | 01.4407 | 17.80 |
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| 400012 | 01.2156 | 07.09 | 420023 | 01.4241 | 18.07 | 430031 | 00.9673 | 11.31 | 440048 | 01.7988 | 16.64 | 440173 | 01.5155 | 16.91 |
| 400013 | 01.2969 | 08.96 | 420026 | 01.9266 | 18.05 | 430033 | 01.0218 | 11.90 | 440049 | 01.6566 | 15.62 | 440174 | 00.9837 | 13.30 |
| 400014 | 01.3613 | 07.51 | 420027 | 01.3790 | 15.50 | 430034 | 01.0752 | 11.58 | 440050 | 01.2035 | 15.14 | 440175 | 01.2366 | 18.06 |
| 400015 | 01.2211 | 10.88 | 420030 | 01.2885 | 15.83 | 430036 | 01.0398 | 10.11 | 440051 | 00.9285 | 13.29 | 440176 | 01.2916 | 18.36 |
| 400016 | 01.3614 | 10.48 | 420031 | 00.9586 | 12.15 | 430037 | 00.9784 | 12.89 | 440052 | 01.2226 | 14.15 | 440178 | 01.1880 | 20.20 |
| 400017 | 01.2405 | 06.27 | 420033 | 01.2216 | 19.24 | 430038 | 01.0179 | 10.77 | 440053 | 01.3071 | 15.64 | 440180 | 01.1517 | 16.68 |
| 400018 | 01.3516 | 09.35 | 420035 | 00.7985 | 12.43 | 430039 | 01.0871 | 11.53 | 440054 | 01.2182 | 13.84 | 440181 | 01.0190 | 11.75 |
| 400019 | 01.6737 | 09.48 | 420036 | 01.2011 | 15.38 | 430040 | 00.9098 | 12.17 | 440056 | 01.0857 | 13.45 | 440182 | 00.9568 | 15.33 |
| 400021 | 01.4421 | 07.62 | 420037 | 01.2778 | 19.65 | 430041 | 00.9376 | 11.91 | 440057 | 01.0155 | 10.77 | 440183 | 01.5296 | 15.06 |
| 400022 | 01.3098 | 09.79 | 420038 | 01.2852 | 14.43 | 430042 | 00.9807 | 10.63 | 440058 | 01.3158 | 14.95 | 440184 | 01.3494 | 18.63 |
| 400024 | 01.0265 | 08.62 | 420039 | 01.1511 | 14.52 | 430043 | 01.1938 | 11.97 | 440059 | 01.3336 | 15.98 | 440185 | 01.1231 | 14.24 |
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| 400027 | 01.1317 | 08.32 | 420043 | 01.1800 | 18.82 | 430047 | 01.1381 | 12.24 | 440061 | 01.2121 | 15.46 | 440187 | 01.1952 | 14.85 |
| 400028 | 01.0328 | 07.14 | 420048 | 01.1376 | 14.26 | 430048 | 01.2063 | 15.01 | 440063 | 01.6136 | 17.43 | 440189 | 01.4819 | 18.81 |
| 400029 | 01.1287 | 06.64 | 420049 | 01.1769 | 14.55 | 430049 | 00.9360 | 12.66 | 440064 | 01.1860 | 15.05 | 440192 | 01.1489 | 13.99 |
| 400031 | 01.1446 | 08.00 | 420051 | 01.5568 | 17.99 | 430051 | 01.0355 | 13.48 | 440065 | 01.2301 | 16.18 | 440193 | 01.2852 | 17.88 |
| 400032 | 01.1257 | 07.75 | 420053 | 01.1378 | 14.03 | 430054 | 01.0034 | 13.13 | 440067 | 01.1879 | 15.54 | 440194 | 01.4249 | 16.89 |
| 400044 | 01.2430 | 09.09 | 420054 | 01.3709 | 16.39 | 430056 | 00.8479 | 08.93 | 440068 | 01.2130 | 16.43 | 440196 | 00.9475 | 13.32 |
| 400048 | 01.1320 | 07.91 | 420055 | 01.0623 | 12.51 | 430057 | 00.9205 | 10.47 | 440069 | 01.1874 | 14.17 | 440197 | 01.4007 | 19.15 |
| 400061 | 01.7050 | 13.68 | 420056 | 01.1625 | 13.41 | 430060 | 01.1594 | 08.46 | 440070 | 01.1257 | 12.52 | 440200 | 01.1917 | 15.41 |
| 400079 | 01.2488 | 08.95 | 420057 | 01.1395 | 14.96 | 430062 | 00.8739 | 10.31 | 440071 | 01.3946 | 14.87 | 440203 | 00.9346 | 13.17 |
| 400087 | 01.3761 | 08.90 | 420059 | 00.9844 | 13.96 | 430064 | 01.1205 | 11.89 | 440072 | 01.5118 | 13.92 | 440205 | 01.0962 | 15.86 |
| 400094 | 01.0405 | 07.41 | 420061 | 01.1517 | 16.16 | 430065 | 00.9527 | 09.93 | 440073 | 01.3464 | 16.95 | 440206 | 01.0340 | 13.82 |
| 400098 | 01.2435 | 07.17 | 420062 | 01.4444 | 15.65 | 430066 | 00.9685 | 10.93 | 440078 | 01.0260 | 13.28 | 440208 | 02.0269 |  |
| 400102 | 01.1413 | 08.65 | 420064 | 01.1161 | 13.45 | 430073 | 01.0814 |  | 440081 | 01.1575 | 15.31 | 450002 | 01.4623 | 19.35 |
| 400103 | 01.3671 | 08.80 | 420065 | 01.3051 | 16.72 | 430076 | 00.9768 | 09.41 | 440082 | 01.9905 | 20.54 | 450004 | 01.1684 | 12.38 |
| 400104 | 01.3703 | 08.97 | 420066 | 00.9099 | 14.40 | 430077 | 01.5832 | 16.53 | 440083 | 01.1099 | 10.96 | 450005 | 01.1503 | 13.79 |
| 400105 | 01.1725 | 08.37 | 420067 | 01.2333 | 16.24 | 430079 | 00.9628 | 11.47 | 440084 | 01.1544 | 11.41 | 450007 | 01.2442 | 13.73 |
| 400106 | 01.2084 | 08.12 | 420068 | 01.2885 | 16.08 | 430080 | 01.1317 | 08.89 | 440087 | 00.9572 | 14.44 | 450008 | 01.3624 | 14.96 |
| 400109 | 01.5298 | 09.13 | 420069 | 01.1002 | 13.71 | 430081 | 01.0452 |  | 440090 | 00.9308 | 13.29 | 450010 | 01.3415 | 15.37 |
| 400110 | 01.1119 | 07.87 | 420070 | 01.2639 | 15.05 | 430082 | 00.8001 |  | 440091 | 01.5472 | 16.53 | 450011 | 01.5000 | 17.43 |
| 400111 | 01.1553 | 07.98 | 420071 | 01.3110 | 16.13 | 430083 | 00.8672 |  | 440100 | 01.0273 | 12.82 | 450014 | 01.0699 | 13.84 |
| 400112 | 01.2298 | 09.26 | 420072 | 01.0735 | 10.64 | 430084 | 00.9280 |  | 440102 | 01.0695 | 12.26 | 450015 | 01.5543 | 14.96 |
| 400113 | 01.2400 | 07.57 | 420073 | 01.3095 | 18.10 | 430085 | 00.8385 |  | 440103 | 01.2284 | 17.24 | 450016 | 01.6256 | 17.57 |
| 400114 | 01.0377 | 06.50 | 420074 | 00.8992 | 11.72 | 430087 | 00.9105 | 09.29 | 440104 | 01.6509 | 17.68 | 450018 | 01.6091 | 21.75 |
| 400115 | 01.0054 | 07.56 | 420075 | 00.9719 | 12.66 | 440001 | 01.1227 | 12.18 | 440105 | 01.3723 | 16.69 | 450020 | 01.0171 | 15.47 |
| 400117 | 01.1773 | 09.23 | 420078 | 01.8088 | 18.59 | 440002 | 01.5965 | 15.80 | 440109 | 01.1308 | 12.28 | 450021 | 01.8117 | 21.11 |
| 400118 | 01.1900 | 08.14 | 420079 | 01.5669 | 16.94 | 440003 | 01.0714 | 15.23 | 440110 | 00.9687 | 16.06 | 450023 | 01.4846 | 15.80 |
| 400120 | 01.3084 | 09.14 | 420080 | 01.2589 | 19.18 | 440006 | 01.6500 | 17.60 | 440111 | 01.3613 | 18.00 | 450024 | 01.3672 | 16.45 |
| 400121 | 01.0121 | 06.51 | 420082 | 01.3946 | 19.13 | 440007 | 01.0148 | 11.83 | 440114 | 01.0474 | 12.68 | 450025 | 01.5058 | 16.27 |
| 400122 | 01.0009 | 05.88 | 420083 | 01.2042 | 18.36 | 440008 | 00.9878 | 13.50 | 440115 | 01.1172 | 14.66 | 450028 | 01.6335 | 17.17 |
| 400123 | 01.1728 | 08.05 | 420084 | 00.7413 | 13.56 | 440009 | 01.1753 | 13.22 | 440120 | 01.5385 | 16.14 | 450029 | 01.3991 | 12.98 |
| 400124 | 02.6604 | 09.27 | 420085 | 01.3970 | 16.86 | 440010 | 00.9235 | 08.75 | 440125 | 01.4408 | 16.09 | 450031 | 01.5830 | 18.72 |
| 410001 | 01.3246 | 23.02 | 420086 | 01.3613 | 16.90 | 440011 | 01.2901 | 16.28 | 440130 | 01.1687 | 14.16 | 450032 | 01.2715 | 13.63 |
| 410004 | 01.3655 | 21.15 | 420087 | 01.5946 | 16.53 | 440012 | 01.4699 | 17.72 | 440131 | 01.1317 | 13.44 | 450033 | 01.6308 | 16.84 |
| 410005 | 01.3492 | 21.90 | 420088 | 01.1349 | 15.05 | 440014 | 01.0615 | 09.06 | 440132 | 01.1116 | 14.01 | 450034 | 01.6445 | 16.28 |
| 410006 | 01.2670 | 21.40 | 420089 | 01.2336 | 19.40 | 440015 | 01.6051 | 16.42 | 440133 | 01.5494 | 17.78 | 450035 | 01.4519 | 18.91 |
| 410007 | 01.6550 | 20.96 | 420091 | 01.2147 | 13.16 | 440016 | 01.0116 | 11.35 | 440135 | 01.3062 | 14.03 | 450037 | 01.6279 | 17.69 |
| 410008 | 01.1691 | 21.05 | 430004 | 01.0955 | 17.25 | 440017 | 01.6136 | 18.42 | 440137 | 00.9770 | 12.14 | 450039 | 01.3345 | 18.70 |
| 410009 | 01.2968 | 20.66 | 430005 | 01.3167 | 14.06 | 440018 | 01.4675 | 16.10 | 440141 | 01.0771 | 13.59 | 450040 | 01.5518 | 17.75 |
| 410010 | 01.0160 | 25.40 | 430007 | 01.0540 | 12.52 | 440019 | 01.6253 | 19.06 | 440142 | 01.0311 | 10.75 | 450042 | 01.6646 | 15.75 |
| 410011 | 01.2110 | 22.25 | 430008 | 01.1248 | 14.01 | 440020 ..... | 01.2392 | 15.43 | 440143 | 01.1020 | 17.21 | 450043 | 01.4473 | 20.40 |
| 410012 | 01.7208 | 19.51 | 430009 | 01.0939 | 12.21 | 440022 | 01.2040 | 13.72 | 440144 | 01.3327 | 18.35 | 450044 | 01.6182 | 20.04 |
| 410013 | 01.3105 | 24.63 | 430010 .. | 01.1273 | 09.23 | 440023 | 00.9963 | 11.58 | 440145 | 01.0439 | 10.99 | 450046 | 01.3724 | 14.67 |
| 420002 | 01.3794 | 18.80 | 430011 | 01.3139 | 14.33 | 440024 | 01.3302 | 16.61 | 440146 | 01.0036 | 12.98 | 450047 | 01.1155 | 13.43 |
| 420004 | 01.8612 | 18.35 | 430012 | 01.3055 | 14.97 | 440025 | 01.1317 | 13.01 | 440147 | 01.1079 | 17.06 | 450050 | 01.0582 | 16.00 |

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| der | Case mix index | Avg. hour wage | Provider | $\begin{aligned} & \text { Case } \\ & \text { mix } \\ & \text { index } \end{aligned}$ | Avg. hour wage | Provider | $\begin{aligned} & \text { Case } \\ & \text { mix } \\ & \text { index } \end{aligned}$ | Avg. hour wage | Provider | Case mix index | Avg. hour wage | Provider | Case mix index | Avg. hour wage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 450051 | 01.5923 | 18.22 | 45015 | 01.2004 | 12.23 | 450296 | 01.3139 | 16.46 | 450484 | 01.4849 | 18.53 | 450651 | 01.8166 | 21.92 |
| 450052 | 01.0171 | 13.13 | 450155 | 01.0191 | 12.61 | 450297 | 01.0190 | 12.01 | 450488 | 01.2528 | 14.98 | 450652 | 00.9114 | 13.44 |
| 450053 | 01.1479 | 13.11 | 450157 | 01.0041 | 12.97 | 450299 | 01.3455 | 16.28 | 450489 | 00.9859 | 11.56 | 450653 | 01.2485 | 17.98 |
| 450054 | 01.7181 | 21.32 | 450160 | 00.9838 | 17.50 | 450303 | 00.9458 | 09.97 | 450497 | 01.1299 | 12.05 | 450654 | 01.0034 | 11.11 |
| 50055 | 01.1238 | 12.92 | 450162 | 01.1851 | 16.63 | 450306 | 01.0878 | 12.50 | 450498 | 01.2653 | 13.88 | 450656 | 01.4908 | 16.48 |
| 450056 | 01.6174 | 18.26 | 450163 | 01.0364 | 15.34 | 450307 | 00.9041 | 13.62 | 450508 | 01.5582 | 16.37 | 450658 | 00.9746 | 14.01 |
| 50058 | 01.5774 | 14.76 | 450164 | 01.0684 | 12.56 | 450309 | 01.0677 | 12.74 | 450514 | 01.2163 | 18.78 | 450659 | 01.5762 | 22.12 |
| 450059 | 01.2421 | 13.21 | 450165 | 00.9569 | 14.34 | 450315 | 01.1137 | 19.65 | 450517 | 01.0029 | 10.94 | 450660 | 01.5698 | 21.85 |
| 450060 | 01.3622 | 22.17 | 450166 | 00.9672 | 10.06 | 450320 | 01.3364 | 18.20 | 450518 | 01.5325 | 16.84 | 450661 | 01.1378 | 18.94 |
| 450063 | 00.9758 | 11.51 | 450169 | 00.9171 | 13.82 | 450321 | 00.9661 | 12.45 | 450523 | 01.5243 | 21.18 | 450662 | 01.6712 | 16.53 |
| 450064 | 01.5083 | 15.34 | 450170 | 00.9792 | 11.32 | 450322 | 00.7151 | 15.40 | 450530 | 01.4505 | 21.64 | 450665 | 00.9334 | 11.45 |
| 450065 | 01.1393 | 14.75 | 450176 | 01.2241 | 15.23 | 450324 | 01.6484 | 15.19 | 450534 | 00.9542 | 20.29 | 450666 | 01.2708 | 19.05 |
| 450068 | 01.7951 | 20.31 | 450177 | 01.0967 | 13.18 | 450325 | 01.2279 | 11.93 | 450535 | 01.2557 | 14.12 | 450668 | 01.5484 | 18.90 |
| 450070 | 01.2671 | 15.46 | 450178 | 01.0123 | 14.64 | 450327 | 00.9734 | 12.11 | 450537 | 01.3698 | 17.80 | 450669 | 01.2923 | 19.10 |
| 450072 | 01.2351 | 18.19 | 450181 | 01.0065 | 15.15 | 450330 | 01.2256 | 16.86 | 450538 | 01.3931 | 21.17 | 450670 | 01.2960 | 19.44 |
| 450073 | 01.1202 | 12.84 | 450184 | 01.5429 | 17.74 | 450334 | 01.0568 | 11.65 | 450539 | 01.2925 | 13.27 | 450672 | 01.6578 | 18.91 |
| 450076 | 01.5802 |  | 450185 | 01.1137 | 08.47 | 450337 | 01.2313 | 17.14 | 450544 | 01.4408 | 22.65 | 450673 | 01.1428 | 11.38 |
| 450078 | 00.9949 | 11.17 | 450187 | 01.2789 | 16.44 | 450340 | 01.3177 | 14.54 | 450545 | 01.2710 | 14.13 | 450674 | 01.0203 | 22.09 |
| 450079 | 01.4395 | 19.03 | 450188 | 01.0085 | 12.46 | 450341 | 01.0264 | 16.26 | 450546 | 01.8365 | 18.37 | 450675 | 01.5171 | 17.78 |
| 450080 | 01.2966 | 15.79 | 450190 | 01.1841 | 19.53 | 450346 | 01.3443 | 16.27 | 450547 | 01.1613 | 15.09 | 450677 | 01.4324 | 19.18 |
| 450081 | 01.1087 | 12.87 | 450191 | 01.0864 | 15.75 | 450347 | 01.1430 | 15.48 | 450550 | 00.9800 | 17.01 | 450678 | 01.4776 | 20.45 |
| 450082 | 00.9627 | 12.75 | 450192 | 01.2403 | 15.49 | 450348 | 00.9975 | 10.99 | 450551 | 01.1957 | 13.75 | 450681 | 03.0551 | 17.29 |
| 450083 | 01.7142 | 17.21 | 450193 | 01.8944 | 21.32 | 450351 | 01.1727 | 18.76 | 450558 | 01.7767 | 17.17 | 450683 | 01.3083 | 20.17 |
| 450085 | 01.0903 | 14.38 | 450194 | 01.2291 | 18.11 | 450352 | 01.1141 | 16.21 | 450559 | 00.9811 | 12.75 | 450684 | 01.2695 | 18.53 |
| 450087 | 01.4141 | 19.35 | 450196 | 01.5101 | 17.34 | 450353 | 01.3226 | 16.13 | 450561 | 01.6522 | 17.65 | 450686 | 01.5555 | 14.30 |
| 450090 | 01.2144 | 12.40 | 450197 | 01.0544 | 19.66 | 450355 | 01.1121 | 11.18 | 450563 | 01.2306 | 21.98 | 450688 | 01.2802 | 18.65 |
| 450092 | 01.2129 | 13.12 | 450200 | 01.3827 | 16.35 | 450358 | 02.0930 | 20.57 | 450565 | 01.2925 | 15.63 | 450690 | 01.4169 | 21.31 |
| 450094 | 01.2531 | 19.39 | 450201 | 01.0233 | 15.38 | 450362 | 01.1896 | 17.62 | 450570 | 01.0316 | 11.23 | 450691 | 01.1089 | 14.91 |
| 450096 | 01.5315 | 19.25 | 450203 | 01.1919 | 16.13 | 450369 | 01.0842 | 10.21 | 450571 | 01.4989 | 14.52 | 450694 | 01.2338 | 15.91 |
| 450097 | 01.4577 | 18.33 | 450209 | 01.5494 | 16.26 | 450370 | 01.1269 | 13.02 | 450573 | 01.0008 | 13.58 | 450696 | 01.6701 | 23.37 |
| 450098 | 01.1683 | 13.75 | 450210 | 01.1950 | 12.03 | 450371 | 01.1487 | 11.02 | 450574 | 00.9382 | 13.41 | 450697 | 01.5431 | 16.28 |
| 450099 | 01.2816 | 17.70 | 450211 | 01.3861 | 14.13 | 450372 | 01.2680 | 20.49 | 450575 | 01.0572 | 16.98 | 450698 | 00.9742 | 11.66 |
| 450101 | 01.4848 | 15.03 | 450213 | 01.5055 | 16.27 | 450373 | 01.1462 | 13.68 | 450578 | 00.9224 | 12.94 | 450700 | 00.9302 | 12.68 |
| 450102 | 01.7093 | 21.87 | 450214 | 01.3721 | 18.61 | 450374 | 00.9541 | 12.20 | 450580 | 01.1076 | 12.59 | 450702 | 01.6063 | 17.58 |
| 450104 | 01.2182 | 13.74 | 450217 | 01.0508 | 12.61 | 450376 | 01.5102 | 16.26 | 450583 | 01.0094 | 12.24 | 450703 | 01.5299 | 20.96 |
| 450107 | 01.6171 | 18.75 | 450219 | 01.1346 | 14.22 | 450378 | 01.0973 | 21.56 | 450584 | 01.2257 | 12.86 | 450704 | 01.3719 | 17.86 |
| 450108 | 00.9967 | 14.4 | 450221 | 01.0814 | 05 | 450379 | 01.5198 | 21.28 | 450586 | 00.9987 | 11.26 | 450705 | 01.0246 | 16.80 |
| 450109 | 00.9911 | 15.36 | 450222 | 01.6508 | 17.32 | 450381 | 01.0567 | 12.56 | 450587 | 01.2266 | 16.93 | 450706 | 01.2165 | 21.90 |
| 50110 | 01.2522 | 19.34 | 450224 | 01.3702 | 15.85 | 450388 | 01.7602 | 17.41 | 450591 | 01.1417 | 16.28 | 450709 | 01.2281 | 20.05 |
| 450111 | 01.2466 | 18.63 | 450229 | 01.5708 | 14.82 | 450389 | 01.2066 | 16.74 | 450596 | 01.3150 | 17.29 | 450711 | 01.6431 | 17.88 |
| 50112 | 01.3508 | 13.87 | 450231 | 01.5945 | 16.94 | 450393 | 01.3320 | 20.94 | 450597 | 01.0561 | 14.23 | 450712 | 00.7387 | 15.03 |
| 450113 | 01.2359 | 16.99 | 450234 | 00.9823 | 11.27 | 450395 | 01.0348 | 14.68 | 450603 | 00.8332 | 16.27 | 450713 | 01.4783 | 18.10 |
| 50118 | 01.5629 | 20.94 | 450235 | 01.0563 | 13.47 | 450399 | 00.9957 | 13.37 | 450604 | 01.3817 | 13.57 | 450715 | 01.4531 | 17.40 |
| 450119 | 01.2958 | 16.37 | 450236 | 01.0665 | 14.17 | 450400 | 01.1526 | 13.70 | 450605 | 01.4745 | 17.91 | 450716 | 01.2682 | 19.64 |
| 450121 | 01.4393 | 18.70 | 450237 | 01.5510 | 16.60 | 450403 | 01.3684 | 19.90 | 450609 | 00.8790 | 12.25 | 450717 | 01.3585 | 22.95 |
| 450123 | 01.1554 | 17.47 | 450239 | 01.1977 | 12.35 | 450411 | 00.9524 | 11.46 | 450610 | 01.4506 | 15.52 | 450718 | 01.2381 | 19.18 |
| 450124 | 01.5864 | 19.48 | 450241 | 01.0458 | 15.67 | 450417 | 01.0539 | 12.95 | 450614 | 01.0471 | 12.43 | 450723 | 01.3474 | 18.17 |
| 450126 | 01.3845 | 11.95 | 450243 | 00.8395 | 11.57 | 450418 | 01.3370 | 17.42 | 450615 | 01.0767 | 11.70 | 450724 | 01.2905 | 16.59 |
| 450128 | 01.2434 | 14.78 | 450246 | 00.9676 | 15.02 | 450419 | 01.2738 | 22.40 | 450617 | 01.2885 | 20.82 | 450725 | 00.9969 | 20.18 |
| 450130 | 01.5025 | 15.17 | 450249 | 00.9712 | 10.70 | 450422 | 00.8075 | 23.47 | 450620 | 01.0455 | 12.48 | 450726 | 00.8676 | 14.54 |
| 450131 | 01.3707 | 19.58 | 450250 | 00.9532 | 09.93 | 450423 | 01.4394 | 21.03 | 450623 | 01.1429 | 17.62 | 450727 | 00.9596 | 09.78 |
| 450132 | 01.6610 | 16.45 | 450253 | 01.3163 | 13.51 | 450424 | 01.2047 | 16.33 | 450626 | 01.0877 | 14.09 | 450728 | 00.9627 | 14.31 |
| 450133 | 01.5384 | 16.49 | 450258 | 01.0962 | 11.17 | 450429 | 01.1242 | 13.35 | 450628 | 00.9420 | 15.48 | 450730 | 01.3579 | 21.14 |
| 450135 | 01.7273 | 21.81 | 450259 | 01.2084 | 17.44 | 450431 | 01.6589 | 17.28 | 450630 | 01.6424 | 20.60 | 450733 | 01.3470 | 16.91 |
| 450137 | 01.5099 | 24.28 | 450264 | 00.8643 | 11.94 | 450438 | 01.1793 | 14.39 | 450631 | 01.7535 | 18.05 | 450735 | 00.8720 | 11.91 |
| 450140 | 00.8414 | 16.46 | 450269 | 01.1388 | 12.62 | 450446 | 00.8625 | 13.07 | 450632 | 01.0125 | 11.17 | 450742 | 01.3448 | 21.43 |
| 450142 | 01.4366 | 19.50 | 450270 | 01.1746 | 10.16 | 450447 | 01.3505 | 17.69 | 450633 | 01.5938 | 19.18 | 450743 | 01.4622 | 18.40 |
| 450143 | 01.0982 | 12.23 | 450271 | 01.2762 | 14.41 | 450450 | 01.0872 |  | 450634 | 01.6943 | 21.57 | 450746 | 01.0500 | 13.39 |
| 450144 | 01.1175 | 16.23 | 450272 | 01.2923 | 16.29 | 450451 | 01.1254 | 20.23 | 450637 | 01.3647 | 18.24 | 450747 | 01.3619 | 16.51 |
| 450145 | 00.8692 | 12.46 | 450276 | 01.0996 | 10.44 | 450457 | 01.7832 | 17.14 | 450638 | 01.5844 | 22.52 | 450749 | 01.0128 | 12.35 |
| 450146 | 00.9881 | 16.53 | 450278 | 00.8495 | 18.12 | 450460 | 01.0299 | 12.06 | 450639 | 01.4141 | 21.41 | 450750 | 01.0228 | 11.86 |
| 450147 | 01.4175 | 17.66 | 450280 | 01.5286 | 20.58 | 450462 | 01.8354 | 17.99 | 450641 | 01.0224 | 12.60 | 450751 | 01.3246 | 21.80 |
| 450148 | 01.3079 | 19.02 | 450283 | 01.0519 | 12.09 | 450464 | 00.9825 | 13.41 | 450643 | 01.2796 | 17.60 | 450754 | 00.8884 | 13.19 |
| 450149 | 01.3501 | 19.33 | 450286 | 01.0373 | 14.54 | 450465 | 01.3178 | 14.66 | 450644 | 01.4715 | 20.30 | 450755 | 01.1540 | 13.66 |
| 450150 | 00.8919 | 13.62 | 450288 | 01.2105 | 12.58 | 450467 | 00.9653 | 14.39 | 450646 | 01.6143 | 19.59 | 450757 | 00.9784 | 13.32 |
| 450151 | 01.1057 | 13.27 | 450289 | 01.4907 | 17.37 | 450469 | 01.3736 | 16.94 | 450647 | 02.0240 | 19.98 | 450758 | 01.2423 |  |
| 450152 | 01.2645 | 16.04 | 450292 | 01.2051 | 20.15 | 450473 | 01.0047 | 17.83 | 450648 | 01.0382 | 11.36 | 450760 | 01.2068 | 16.97 |
| 450153 | 01.5803 | 17.10 | 450293 | 00.9746 | 13.55 | 450475 | 01.1363 | 14.13 | 450649 | 01.0756 | 14.64 | 450761 | 01.0642 | 09.63 |

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| Provider | Case mix index | Avg. hour wage | Provider | Case <br> mix <br> index | Avg. hour wage | Provider | Case <br> mix <br> index | Avg. hour wage | Provider | Case mix index | Avg. hour wage | Provider | Case mix index | Avg. hour wage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 450763 | 01.0163 | 15.68 | 460047 | 01.7740 | 19.49 | 490067 | 01.2062 | 14.95 | 500029 | 00.9339 | 14.30 | 500141 | 01.3258 | 21.93 |
| 450766 | 02.3234 | 14.24 | 460049 | 01.9207 | 17.05 | 490069 | 01.3990 | 15.10 | 500030 | 01.4753 | 22.13 | 500143 | 00.7662 | 14.92 |
| 450769 | 01.0378 | 13.28 | 460050 | 01.3106 | 20.35 | 490071 | 01.4398 | 17.56 | 500031 | 01.2905 | 20.19 | 500146 | 01.0318 |  |
| 450770 | 00.9496 | 13.59 | 460051 | 01.1901 |  | 490073 | 01.3538 | 21.49 | 500033 | 01.2047 | 18.05 | 510001 | 01.7139 | 17.08 |
| 450771 | 01.9690 | 17.01 | 470001 | 01.2043 | 17.11 | 490074 | 01.3343 | 16.00 | 500036 | 01.3185 | 19.11 | 510002 | 01.2708 | 16.31 |
| 450774 | 00.9708 | 23.99 | 470003 | 01.8136 | 17.82 | 490075 | 01.3332 | 16.62 | 500037 | 01.1216 | 17.63 | 510004 | 00.9183 | 12.62 |
| 450775 | 01.1940 | 19.26 | 470004 | 01.1118 | 14.18 | 490077 | 01.1636 | 16.87 | 500039 | 01.3772 | 21.32 | 510005 | 01.0028 | 13.71 |
| 450776 | 00.9251 |  | 470005 | 01.2608 | 18.71 | 490079 | 01.3187 | 14.30 | 500041 | 01.2872 | 22.09 | 510006 | 01.2565 | 17.08 |
| 450777 | 01.0014 | 15.01 | 470006 | 01.1898 | 17.05 | 490083 | 00.6451 | 14.63 | 500042 | 01.3735 | 20.95 | 510007 | 01.4707 | 17.81 |
| 450779 | 01.3450 | 20.59 | 470008 | 01.2516 | 15.41 | 490084 | 01.2535 | 15.96 | 500043 | 01.2939 | 16.56 | 510008 | 01.1226 | 15.33 |
| 450780 | 01.6140 | 19.78 | 470010 | 01.1804 | 18.58 | 490085 | 01.2071 | 13.36 | 500044 | 01.8920 | 20.56 | 510012 | 01.0670 | 14.26 |
| 450781 | 01.4783 | 16.23 | 470011 | 01.1610 | 19.30 | 490088 | 01.2024 | 13.97 | 500045 | 01.1167 | 20.65 | 510013 | 01.1365 | 15.10 |
| 450785 | 01.0516 | 26.08 | 470012 | 01.2651 | 17.52 | 490089 | 01.0748 | 14.37 | 500048 | 00.9122 | 16.01 | 510015 | 00.9706 | 12.51 |
| 450788 | 01.4208 |  | 470013 | 01.1682 | 18.28 | 490090 | 01.1783 | 14.25 | 500049 | 01.4708 | 19.34 | 510016 | 00.9917 | 11.27 |
| 450792 | 01.3306 |  | 470015 | 01.0806 | 16.29 | 490091 | 01.2045 | 20.14 | 500050 | 01.4079 | 20.41 | 510018 | 01.1351 | 14.40 |
| 450793 | 01.6623 |  | 470018 | 01.1930 | 17.37 | 490092 | 01.2038 | 14.32 | 500051 | 01.6292 | 22.71 | 510020 | 01.0494 | 10.16 |
| 450794 | 01.4602 |  | 470020 | 00.9884 | 14.50 | 490093 | 01.2927 | 15.31 | 500052 | 01.2781 |  | 510022 | 01.7998 | 19.52 |
| 450795 | 00.8520 |  | 470023 | 01.2947 | 17.20 | 490094 | 01.0700 | 14.57 | 500053 | 01.2686 | 20.10 | 510023 | 01.1454 | 15.14 |
| 450797 | 00.6382 |  | 470024 | 01.1136 | 17.08 | 490095 | 01.4745 | 16.13 | 500054 | 01.8788 | 20.41 | 510024 | 01.4093 | 17.94 |
| 450798 | 00.8871 |  | 490001 | 01.0799 | 19.41 | 490097 | 01.1333 | 13.69 | 500055 | 01.0886 | 20.32 | 510026 | 00.9392 | 12.19 |
| 450799 | 01.3895 |  | 490002 | 01.0625 | 13.61 | 490098 | 01.3132 | 11.69 | 500057 | 01.3490 | 16.24 | 510027 | 00.9669 | 13.86 |
| 450800 | 01.3919 |  | 490003 | 00.6018 | 17.55 | 490099 | 00.9348 | 15.29 | 500058 | 01.5095 | 19.82 | 510028 | 01.0731 | 14.90 |
| 450801 | 01.4818 |  | 490004 | 01.2303 | 16.67 | 490100 | 01.3757 | 16.69 | 500059 | 01.1588 | 20.02 | 510029 | 01.2953 | 16.69 |
| 450802 | 01.2487 |  | 490005 | 01.5364 | 16.10 | 490101 | 01.1933 | 23.64 | 500060 | 01.4869 | 20.70 | 510030 | 01.0968 | 14.87 |
| 450803 | 00.8537 |  | 490006 | 01.1569 | 13.27 | 490104 | 00.9110 | 14.46 | 500061 | 00.9842 | 17.95 | 510031 | 01.3367 | 16.27 |
| 450804 | 01.5293 |  | 490007 | 02.0310 | 17.19 | 490105 | 00.7427 | 16.55 | 500062 | 01.0856 | 17.16 | 510033 | 01.2624 | 14.42 |
| 450805 | 01.1693 |  | 490009 | 01.8204 | 18.08 | 490106 | 00.9047 | 14.86 | 500064 | 01.5371 | 21.69 | 510035 | 01.1467 | 16.46 |
| 450807 | 00.9104 |  | 490010 | 01.0912 | 17.08 | 490107 | 01.3155 | 22.64 | 500065 | 01.3049 | 17.67 | 510036 | 01.0129 | 09.34 |
| 450809 | 01.6570 |  | 490011 | 01.4170 | 17.03 | 490108 | 00.8737 | 13.78 | 500068 | 01.0186 | 17.17 | 510038 | 01.1610 | 13.71 |
| 450897 | 04.8548 |  | 490012 | 01.1990 | 15.55 | 490109 | 00.9185 | 14.09 | 500069 | 01.1665 | 18.62 | 510039 | 01.3580 | 15.02 |
| 460001 | 01.7866 | 19.82 | 490013 | 01.2514 | 14.82 | 490110 | 01.3986 | 15.90 | 500071 | 01.3666 | 19.46 | 510043 | 00.9310 | 11.33 |
| 460003 | 01.7210 | 18.38 | 490014 | 01.3584 | 21.04 | 490111 | 01.2348 | 16.79 | 500072 | 01.1952 | 21.19 | 510046 | 01.2605 | 15.26 |
| 460004 | 01.7712 | 20.68 | 490015 | 01.4630 | 17.30 | 490112 | 01.7326 | 19.07 | 500073 | 01.0859 | 16.85 | 510047 | 01.2074 | 17.37 |
| 460005 | 01.5499 | 18.80 | 490017 | 01.3623 | 16.44 | 490113 | 01.3003 | 20.96 | 500074 | 01.1671 | 14.80 | 510048 | 01.0733 | 17.39 |
| 460006 | 01.4322 | 18.21 | 490018 | 01.2580 | 16.83 | 490114 | 01.0988 | 15.00 | 500075 | 03.7376 | 20.25 | 510050 | 01.4642 | 15.34 |
| 460007 | 01.5450 | 19.27 | 490019 | 01.2006 | 15.60 | 490115 | 01.2451 | 14.25 | 500077 | 01.3913 | 21.63 | 510053 | 01.0396 | 13.50 |
| 460008 | 01.3609 | 16.02 | 490020 | 01.1565 | 14.16 | 490116 | 01.2251 | 15.61 | 500079 | 01.4055 | 19.87 | 510055 | 01.2246 | 19.41 |
| 460009 | 01.8852 | 18.11 | 490021 | 01.1505 | 17.11 | 490117 | 01.1729 | 13.62 | 500080 | 00.8427 | 11.56 | 510058 | 01.2002 | 16.23 |
| 460010 | 01.9161 | 20.15 | 490022 | 01.4063 | 17.59 | 490118 | 01.7642 | 21.32 | 500084 | 01.1439 | 20.05 | 510059 | 01.2290 | 13.65 |
| 460011 | 01.3884 | 16.16 | 490023 | 01.2234 | 17.03 | 490119 | 01.3467 | 16.41 | 500085 | 01.0619 | 17.19 | 510060 | 01.1538 | 15.36 |
| 460013 | 01.5056 | 18.54 | 490024 | 01.7803 | 17.06 | 490120 | 01.3270 | 16.88 | 500086 | 01.4244 | 18.48 | 510061 | 01.0749 | 12.59 |
| 460014 | 01.0358 | 15.38 | 490027 | 01.1310 | 13.11 | 490122 | 01.5152 | 20.86 | 500088 | 01.3586 | 22.86 | 510062 | 01.1797 | 15.38 |
| 460015 | 01.2592 | 19.75 | 490028 | 01.3516 | 18.42 | 490123 | 01.1414 | 14.80 | 500089 | 00.9469 | 13.99 | 510063 | 01.0126 | 10.63 |
| 460016 | 00.8970 | 13.58 | 490030 | 01.1033 | 11.16 | 490124 | 01.1521 | 16.99 | 500090 | 01.1042 | 12.60 | 510065 | 01.0089 | 12.04 |
| 460017 | 01.4549 | 16.52 | 490031 | 01.1369 | 12.61 | 490126 | 01.3837 | 14.72 | 500092 | 01.0798 | 15.65 | 510066 | 01.1288 | 12.02 |
| 460018 | 00.9760 | 13.59 | 490032 | 01.7249 | 19.08 | 490127 | 01.0179 | 14.44 | 500094 | 00.9177 | 15.53 | 510067 | 01.2496 | 15.91 |
| 460019 | 01.1515 | 12.90 | 490033 | 01.1854 | 15.21 | 490130 | 01.3118 | 16.58 | 500096 | 01.0950 | 17.13 | 510068 | 01.1196 | 14.01 |
| 460020 | 01.0589 | 14.21 | 490035 | 01.2179 | 09.64 | 490131 | 01.0427 | 14.06 | 500097 | 01.1371 | 16.12 | 510070 | 01.2210 | 16.05 |
| 460021 | 01.3873 | 19.20 | 490037 | 01.1278 | 13.27 | 500001 | 01.3342 | 20.92 | 500098 | 00.9192 | 13.66 | 510071 | 01.2767 | 14.49 |
| 460022 | 00.9374 | 19.41 | 490038 | 01.2195 | 12.54 | 500002 | 01.4828 | 18.75 | 500101 | 01.0080 | 17.84 | 510072 | 01.0650 | 13.50 |
| 460023 | 01.1831 | 20.75 | 490040 | 01.4100 |  | 500003 | 01.4073 | 21.28 | 500102 | 00.9391 | 18.43 | 510077 | 01.1079 | 14.36 |
| 460024 . | 00.8662 | 13.51 | 490041 | 01.3633 | 16.88 | 500005 | 01.8398 | 22.52 | 500104 | 01.2622 | 18.71 | 510080 | 01.1530 | 09.35 |
| 460025 | 00.8105 | 12.63 | 490042 | 01.3475 | 15.18 | 500007 | 01.4207 | 20.14 | 500106 | 00.9247 | 15.53 | 510081 | 01.0320 | 13.19 |
| 460026 | 01.0881 | 16.98 | 490043 | 01.3704 | 16.74 | 500008 | 01.8411 | 22.88 | 500107 | 01.1321 | 15.58 | 510082 | 01.0578 | 12.08 |
| 460027 | 00.9430 | 18.61 | 490044 | 01.3658 | 16.65 | 500009 | 01.2857 | 21.07 | 500108 | 01.6669 | 21.40 | 510084 | 00.9741 | 12.87 |
| 460029 | 01.0255 | 15.71 | 490045 | 01.1319 | 18.60 | 500011 | 01.3718 | 21.44 | 500110 | 01.2887 | 18.75 | 510085 | 01.2422 | 17.99 |
| 460030 | 01.2141 | 15.78 | 490046 | 01.4645 | 17.24 | 500012 | 01.5217 | 20.94 | 500118 | 01.1240 | 20.88 | 510086 | 01.0448 | 15.65 |
| 460032 | 01.0120 | 19.00 | 490047 | 01.0663 | 16.34 | 500014 | 01.5715 | 22.36 | 500119 | 01.3333 | 20.48 | 520002 | 01.2873 | 17.24 |
| 460033 | 00.9450 | 18.22 | 490048 | 01.4906 | 17.53 | 500015 | 01.3714 | 20.92 | 500122 | 01.1925 | 20.27 | 520003 | 01.1635 | 15.19 |
| 460035 | 00.9610 | 10.93 | 490050 | 01.4363 | 20.06 | 500016 | 01.4877 | 22.76 | 500123 | 00.8543 | 14.78 | 520004 | 01.1581 | 16.53 |
| 460036 | 00.9397 | 19.41 | 490052 | 01.6013 | 15.06 | 500019 | 01.3295 | 19.82 | 500124 | 01.3292 | 22.39 | 520006 | 01.0583 | 18.05 |
| 460037 | 01.0502 | 15.92 | 490053 | 01.2501 | 14.14 | 500021 | 01.5380 | 20.77 | 500125 | 00.9834 | 10.72 | 520007 | 01.2469 | 14.14 |
| 460039 . | 01.0976 | 21.08 | 490054 | 01.1101 | 13.91 | 500023 | 01.1763 | 19.09 | 500129 | 01.7339 | 22.41 | 520008 | 01.5546 | 20.54 |
| 460041 | 01.2179 | 18.29 | 490057 | 01.5486 | 17.02 | 500024 | 01.6324 | 21.06 | 500132 | 01.0006 | 19.79 | 520009 | 01.5961 | 16.88 |
| 460042 | 01.4657 | 16.14 | 490059 | 01.5727 | 18.24 | 500025 | 01.8715 | 21.69 | 500134 | 00.7903 | 15.75 | 520010 | 01.1768 | 19.39 |
| 460043 | 00.9888 | 20.44 | 490060 | 01.0661 | 16.72 | 500026 | 01.4324 | 22.42 | 500137 | 00.7110 | 19.99 | 520011 | 01.2031 | 16.46 |
| 460044 | 01.2018 | 19.41 | 490063 | 01.6611 | 22.34 | 500027 | 01.5334 | 23.68 | 500138 | 03.4209 |  | 520013 | 01.2909 | 17.88 |
| 460046 | 00.7432 | 10.23 | 490066 | 01.2178 | 17.42 | 500028 | 01.0839 | 14.76 | 500139 | 01.4763 | 21.33 | 520014 | 01.2083 | 15.55 |

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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 | $\begin{aligned} & \text { Case } \\ & \text { mix } \\ & \text { index } \end{aligned}$ | Avg. hour wage | Provider | Case mix index | Avg. hour wage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 520015 ..... | 01.1174 | 16.65 | 520107 ..... | 01.2599 | 17.46 | 530026 .... | 01.0473 | 14.63 |  |  |  |  |  |  |
| 520016 ..... | 01.0872 | 12.75 | 520109 | 00.9937 | 17.25 | 530027 ..... | 00.8416 | 09.56 |  |  |  |  |  |  |
| 520017 | 01.1927 | 16.87 | 520110 | 01.1756 | 16.47 | 530029 | 00.9590 | 13.49 |  |  |  |  |  |  |
| 520018 | 01.0801 | 15.88 | 520111 ..... | 00.9841 | 14.44 | 530031 .... | 00.8745 | 10.95 |  |  |  |  |  |  |
| 520019 | 01.2873 | 16.65 | 520112 | 01.0805 | 18.15 | 530032 | 01.1558 | 17.33 |  |  |  |  |  |  |
| 520021 . | 01.3538 | 19.16 | 520113 . | 01.1645 | 17.80 |  |  |  |  |  |  |  |  |  |
| 520024 | 01.0377 | 13.33 | 520114 | 01.1037 | 12.61 |  |  |  |  |  |  |  |  |  |
| 520025 | 01.1242 | 15.19 | 520115 .. | 01.3222 | 15.89 |  |  |  |  |  |  |  |  |  |
| 520026 ..... | 01.1051 | 17.48 | 520116 ..... | 01.2576 | 17.66 |  |  |  |  |  |  |  |  |  |
| 520027 | 01.2244 | 19.22 | 520117. | 01.0303 | 15.40 |  |  |  |  |  |  |  |  |  |
| 520028 | 01.3261 | 17.60 | 520118 .. | 00.9469 | 10.95 |  |  |  |  |  |  |  |  |  |
| 520029 | 00.9657 | 16.70 | 520120. | 00.8647 | 11.95 |  |  |  |  |  |  |  |  |  |
| 520030 | 01.6772 | 20.19 | 520121 ..... | 00.9763 | 14.18 |  |  |  |  |  |  |  |  |  |
| 520031 ..... | 01.1054 | 16.11 | 520122 ..... | 00.9894 | 13.96 |  |  |  |  |  |  |  |  |  |
| 520032 | 01.1683 | 14.56 | 520123 ..... | 01.1427 | 16.55 |  |  |  |  |  |  |  |  |  |
| 520033 ..... | 01.1820 | 15.91 | 520124 ..... | 01.1255 | 14.34 |  |  |  |  |  |  |  |  |  |
| 520034 | 01.1271 | 17.17 | 520130 ..... | 01.0776 | 12.60 |  |  |  |  |  |  |  |  |  |
| 520035 | 01.2587 | 14.67 | 520131 ..... | 01.0620 | 15.82 |  |  |  |  |  |  |  |  |  |
| 520037 | 01.6518 | 18.23 | 520132 | 01.1878 | 14.31 |  |  |  |  |  |  |  |  |  |
| 520038 | 01.4916 | 17.14 | 520134 | 01.0269 | 15.14 |  |  |  |  |  |  |  |  |  |
| 520039 | 00.9998 | 16.24 | 520135 | 00.9427 | 13.84 |  |  |  |  |  |  |  |  |  |
| 520040 ..... | 01.4327 | 20.05 | 520136 .. | 01.4778 | 18.87 |  |  |  |  |  |  |  |  |  |
| 520041 ..... | 01.1487 | 14.54 | 520138 ..... | 01.8773 | 18.18 |  |  |  |  |  |  |  |  |  |
| 520042 | 01.0742 | 16.25 | 520139 | 01.2893 | 18.50 |  |  |  |  |  |  |  |  |  |
| 520044 ..... | 01.3803 | 16.09 | 520140 ..... | 01.6143 | 19.31 |  |  |  |  |  |  |  |  |  |
| 520045 | 01.6794 | 17.97 | 520141 ... | 01.1223 | 15.63 |  |  |  |  |  |  |  |  |  |
| 520047 | 01.0211 | 14.50 | 520142 ..... | 00.9152 | 12.48 |  |  |  |  |  |  |  |  |  |
| 520048 | 01.4410 | 17.67 | 520144 ..... | 01.0302 | 16.10 |  |  |  |  |  |  |  |  |  |
| 520049 .. | 01.9925 | 17.97 | 520145 ..... | 00.9155 | 16.57 |  |  |  |  |  |  |  |  |  |
| 520051 ..... | 02.0296 | 19.41 | 520146 | 01.0749 | 13.71 |  |  |  |  |  |  |  |  |  |
| 520053 | 01.1007 | 14.78 | 520148 ..... | 01.1668 | 15.34 |  |  |  |  |  |  |  |  |  |
| 520054 | 01.0919 | 16.40 | 520149 ..... | 00.9581 | 13.31 |  |  |  |  |  |  |  |  |  |
| 520056 ..... | 01.3164 | 17.77 | 520151 ..... | 01.0803 | 14.43 |  |  |  |  |  |  |  |  |  |
| 520057 ..... | 01.1308 | 16.08 | 520152 ..... | 01.1177 | 16.38 |  |  |  |  |  |  |  |  |  |
| 520058 | 01.0511 | 17.87 | 520153 | 00.9775 | 13.19 |  |  |  |  |  |  |  |  |  |
| 520059 ..... | 01.3130 | 18.17 | 520154 ..... | 01.1520 | 16.15 |  |  |  |  |  |  |  |  |  |
| 520060 ..... | 01.2970 | 15.15 | 520156 .. | 01.1216 | 16.37 |  |  |  |  |  |  |  |  |  |
| 520062 ..... | 01.2707 | 16.18 | 520157 | 00.9447 | 13.70 |  |  |  |  |  |  |  |  |  |
| 520063 ..... | 01.2571 | 17.61 | 520159 ..... | 00.9412 | 16.25 |  |  |  |  |  |  |  |  |  |
| 520064 ..... | 01.7132 | 18.60 | 520160 ..... | 01.7643 | 17.77 |  |  |  |  |  |  |  |  |  |
| 520066 ..... | 01.4169 | 17.73 | 520161 ..... | 01.0283 | 14.76 |  |  |  |  |  |  |  |  |  |
| 520068 | 00.8891 | 15.82 | 520170 | 01.2367 | 18.51 |  |  |  |  |  |  |  |  |  |
| 520069 ..... | 01.1915 | 16.75 | $520171 \ldots .$. | 00.9904 | 13.69 |  |  |  |  |  |  |  |  |  |
| 520070 ..... | 01.6012 | 16.93 | 520173 ..... | 01.1609 | 17.36 |  |  |  |  |  |  |  |  |  |
| 520071 ..... | 01.1175 | 17.71 | 520174 ..... | 01.3641 | 20.57 |  |  |  |  |  |  |  |  |  |
| 520074 ..... | 01.1086 | 14.96 | 520177 ..... | 01.6458 | 20.33 |  |  |  |  |  |  |  |  |  |
| 520075 ..... | 01.4753 | 17.44 | 520178 .. | 01.0634 | 14.61 |  |  |  |  |  |  |  |  |  |
| 520076 ..... | 01.1296 | 14.40 | 520186 ..... | 02.5906 |  |  |  |  |  |  |  |  |  |  |
| 520077 | 01.0286 | 14.50 | 530002 .. | 01.1932 | 18.07 |  |  |  |  |  |  |  |  |  |
| 520078 ..... | 01.5021 | 17.89 | 530003 ..... | 00.9310 | 12.59 |  |  |  |  |  |  |  |  |  |
| 520082 ..... | 01.3454 | 15.25 | 530004 ..... | 01.0270 | 13.17 |  |  |  |  |  |  |  |  |  |
| 520083 ..... | 01.5871 | 21.59 | 530005 ..... | 01.1389 | 13.19 |  |  |  |  |  |  |  |  |  |
| 520084 ..... | 01.0883 | 15.73 | 530006 ..... | 01.1268 | 16.83 |  |  |  |  |  |  |  |  |  |
| 520087 ..... | 01.6162 | 17.16 | 530007 ..... | 01.0516 | 11.52 |  |  |  |  |  |  |  |  |  |
| 520088 ..... | 01.2469 | 17.56 | 530008 ..... | 01.2810 | 17.75 |  |  |  |  |  |  |  |  |  |
| 520089 ..... | 01.5230 | 18.79 | 530009 ..... | 00.9688 | 20.60 |  |  |  |  |  |  |  |  |  |
| 520090 ..... | 01.2710 | 16.16 | 530010 ..... | 01.2195 | 16.30 |  |  |  |  |  |  |  |  |  |
| 520091 ..... | 01.3709 | 17.25 | 530011 ..... | 01.0899 | 15.27 |  |  |  |  |  |  |  |  |  |
| 520092 ..... | 01.1124 | 15.11 | 530012 ..... | 01.5874 | 17.25 |  |  |  |  |  |  |  |  |  |
| 520094 ..... | 01.0158 | 16.07 | $530014 \ldots$ | 01.3289 | 15.01 |  |  |  |  |  |  |  |  |  |
| 520095 ..... | 01.3510 | 18.56 | 530015 ..... | 01.1500 | 19.22 |  |  |  |  |  |  |  |  |  |
| 520096 ..... | 01.4979 | 17.78 | 530016 ..... | 01.2060 | 11.87 |  |  |  |  |  |  |  |  |  |
| 520097 ..... | 01.3308 | 17.90 | 530017 ..... | 01.0038 | 16.09 |  |  |  |  |  |  |  |  |  |
| 520098 ..... | 01.7143 | 19.40 | 530018 ..... | 01.0645 | 14.57 |  |  |  |  |  |  |  |  |  |
| 520100 ..... | 01.2350 | 15.91 | 530019 ..... | 00.9449 | 14.32 |  |  |  |  |  |  |  |  |  |
| 520101 .... | 01.0947 | 15.75 | 530022 ..... | 01.1147 | 15.94 |  |  |  |  |  |  |  |  |  |
| 520102 ..... | 01.2141 | 19.00 | 530023 ..... | 00.8514 | 17.76 |  |  |  |  |  |  |  |  |  |
| 520103 ..... | 01.3242 | 17.70 | 530025 ..... | 01.3686 | 18.12 |  |  |  |  |  |  |  |  |  |

Note: Case mix indexes do not include discharges from PPS-exempt units. Case mix indexes include cases received in HCFA central office through December 1995.

Table 4A.-Wage Index and Capital Geographic Adjustment Factor (GAF) for Urban Areas

| Urban area (constituent <br> counties or county <br> equivalents) |
| :--- |
| 0040 Abilene, TX ........ |
| Taylor, TX |
| 0060 Aguadilla, PR ..... |
| Aguada, PR |
| Aguadilla, PR |
| Moca, PR |
| 0080 Akron, OH .......... |
| Portage, OH |
| Summit, OH |
| 0120 Albany, GA ........ |
| Dougherty, GA |
| Lee, GA |
| 0160 Albany-Schenec- |
| tady-Troy, NY .......... |
| Albany, NY |
| Montgomery, NY |
| Rensselaer, NY |
| Saratoga, NY |
| Schenectady, NY |
| Schoharie, NY |
| 0200 Albuquerque, NM | Bernalillo, NM Sandoval, NM Valencia, NM

0220 Alexandria, LA ...
Rapides, LA
0240 Allentown-Beth-lehem-Easton, PA ...
Carbon, PA
Lehigh, PA
Northampton, PA
0280 Altoona, PA ....... Blair, PA
0320 Amarillo, TX ...
Potter, TX
Randall, TX
0380 Anchorage, AK Anchorage, AK
0440 Ann Arbor, MI .... Lenawee, MI Livingston, MI Washtenaw, MI
0450 Anniston, AL ......
Calhoun, AL
0460 Appleton-Osh-kosh-Neenah, WI .......
Calumet, WI Outagamie, WI Winnebago, WI
0470 Arecibo, PR .......
Arecibo, PR
Camuy, PR
Hatillo, PR
0480 Asheville, NC ....
Buncombe, NC
Madison, NC
0500 Athens, GA .......
Clarke, GA
Madison, GA
Oconee, GA
0520 *Atlanta, GA .......
Barrow, GA
Bartow, GA
Carroll, GA
Cherokee, GA
Clayton, GA
Cobb, GA
Coweta, GA
$0.9531 \quad 0.967$
0.8557
1.3285
1.1688
0.7848
0.8910
0.4631
0.9365
0.9259
1.0089

Table 4a.-Wage Index and Capital Geographic Adjustment Factor (GAF) for Urban Areas-Continued

| Urban area (constituent <br> counties or county <br> equivalents) | Wage <br> index | GAF |
| :--- | :--- | :--- |
| DeKalb, GA |  |  |
| Douglas, GA |  |  |
| Fayette, GA |  |  |
| Forsyth, GA |  |  |
| Fulton, GA |  |  |
| Gwinnett, GA |  |  |
| Henry, GA |  |  |
| Newton, GA |  |  |
| Paulding, GA |  |  |
| Pickens, GA |  |  |
| Rockdale, GA |  |  |
| Spalding, GA |  |  |
| Walton, GA |  |  |
| 0560 Atlantic-Cape |  |  |


| 0560 Atlantic-Cape |  |  |
| :--- | :--- | :--- | :--- |
| May, NJ ..................... | 1.1102 | 1.0742 |

Atlantic, NJ
Cape May, NJ
0600 Augusta-Aiken, GA-SC
ia, GA
McDuffie, GA
Richmond, GA
Aiken, SC
Edgefield, SC
0640 Austin-San Marcos, TX Bastrop, TX Caldwell, TX Hays, TX
Travis, TX

Table 4A.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN AREAS-Continued

| Urban area (constituent counties or county equivalents) | Wage index | GAF |
| :---: | :---: | :---: |
| Yellowstone, MT |  |  |
| 0920 Biloxi-Gulfport- |  |  |
| Pascagoula, MS .. | 0.8573 | 0.8999 |
| Hancock, MS |  |  |
| Harrison, MS |  |  |
| Jackson, MS |  |  |
| 0960 Binghamton, NY | 0.8842 | 0.9192 |
| Broome, NY Tioga, NY |  |  |
| 1000 Birmingham, AL | 0.9047 | 0.9337 |
| Blount, AL |  |  |
| Jefferson, AL |  |  |
| St. Clair, AL |  |  |
| Shelby, AL |  |  |
| 1010 Bismarck, ND | 0.7976 | 0.8565 |
| Burleigh, ND |  |  |
| Morton, ND |  |  |
| 1020 Bloomington, IN | 0.8619 | 0.9303 |
| Monroe, IN |  |  |
| 1040 Bloomington-Nor- |  |  |
| mal, IL ...................... | 0.8921 | 0.9248 |
| McLean, IL |  |  |
| 1080 Boise City, ID .... | 0.9269 | 0.9493 |

Table 4a.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN AREAS-Continued

| Urban area (constituent counties or county equivalents) |
| :---: |
| 1320 Canton- |
|  |  |
|  |
| Stark, OH |
| Natrona, WY |
| 1360 Cedar Rapids, IA Linn, IA |
|  |  |
|  |
| Champaign, IL |
| 1440 Charleston-North |
| Charleston, SC |
| Berkeley, SC |
| Charleston, SC |
| Dorchester, SC |
| 1480 Charleston, WV Kanawha, WV |
|  |  |
|  |
|  |
|  |
| Cabarrus, NC |
| Gaston, NC |
| Lincoln, NC |
| Mecklenburg, NC |
| Rowan, NC |
| Union, NC |
| York, SC |
| 1540 Ch .................... |
|  |  |
|  |
| Charlottesville City, |
| VA |
| Fluvanna, VA |
| Greene, VA |
| 1560 Chattanooga, |
| TN-GA |
| Catoosa, GA |
| Dade, GA |
| Walker, GA |
| Hamilton, TN |
| Marion, TN |
| 1580 Cheyenne, WY Laramie, WY |
|  |  |
|  |
| Cook, IL |
| DeKalb, IL |
| DuPage, IL |
| Grundy, IL |
| Kane, IL |
| Kendall, IL |
| Lake, IL |
| McHenry, IL |
| Will, IL |
| 1620 Chico-Paradise, |
| CA $\qquad$ <br> Butte CA |
|  |  |
|  |
| KY-IN |
| Dearborn, IN |
| Ohio, IN |
| Boone, KY |
| Campbell, KY |
| Gallatin, KY |
| Grant, KY |
| Kenton, KY |
| Pendleton, KY |

Table 4a.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN Areas-Continued

| Urban area (constituent <br> counties or county <br> equivalents) | Wage <br> index | GAF |
| :---: | :---: | :---: |
| Brown, OH <br> Clermont, OH |  |  |
| Hamilton, OH <br> Warren, OH <br> 1660 Clarksville-Hop- <br> kinsville, TN-KY ....... | 0.7733 | 0.8386 |

Richland, SC
1800 Columbus, GA-
Russell, AL
Chattanoochee, GA Harris, GA Muscogee, GA
1840 *Columbus, OH
Delaware, OH
Fairfield, OH
Franklin, OH
Licking, OH
Madison, OH
Pickaway, OH
1880 Corpus Christi,
TX .............
San Patricio, TX
1900 Cumberland, MD-WV

MD Mineral, WV
1920 *Dallas, TX .
0.9530

Collin, TX
Dallas, TX
Denton, TX
Ellis, TX
Henderson, TX
Hunt, TX
Kaufman, TX
Rockwall, TX
1950 Danville, VA ....... Danville City, VA Pittsylvania, VA
1960 Davenport-Mo-line-Rock Island, IA-
Scott, IA Henry, IL Rock Island, IL
2000 Dayton-Springfield, OH Clark, OH Greene, OH
$\left.\begin{array}{c|c|c}\text { Urban area (constituent } \\ \text { counties or county } \\ \text { equivalents) }\end{array} \quad \begin{array}{c}\text { Wage } \\ \text { index }\end{array}\right)$ GAF

Table 4a.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN AREAS-Continued

Table 4A.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN Areas-Continued

| Urban area (constitue <br> counties or county <br> equivalents) |
| :---: |
| Clay, MN |
| Cass, ND |
| 2560 Fayetteville, NC |
| Cumberland, NC |
| 2580 Fayetteville- |

Springdale-Rogers,
AR
Benton, AR
Washington, AR
2620 Flagstaff, AZ-UT
Coconino, AZ
Kane, UT
2640 Flint, MI
2650 Florence Colbert, AL
Lauderdale, AL
2655 Florence, SC ... Florence, SC
2670 Fort CollinsLoveland, CO
Larimer, CO
2680 *Ft. Lauderdale,
Broward, FL
2700 Fort Myers-Cape Coral, FL
Lee, FL
2710 Fort Pierce-Port
St. Lucie, FL
Martin, FL
St. Lucie, FL
2720 Fort Smith, AR-
OK
Crawford, AR
Sebastian, AR
Sequoyah, OK
2750 Fort Walton
Beach, FL
FL
2760 Fort Wayne, IN
Adams, IN
Allen, IN
DeKalb, IN
Huntington, IN
Wells, IN
Whitley, IN
2800 *Forth Worth-Ar-
lington, TX
Hood, TX
Johnson, TX
Parker, TX
Tarrant, TX
2840 Fresno, CA $\qquad$
Fresno, CA
Madera, CA
2880 Gadsden, AL ..... Etowah, AL
2900 Gainesville, FL ...
Alachua, FL
2920 Galveston-Texas
City, TX
Galveston, TX
2960 Gary, IN $\qquad$
Lake, IN
Porter, IN
2975 Glens Falls, NY

| Wage <br> index | GAF |
| :--- | :--- | :--- |

$0.9039 \quad 0.9331$
$0.8614 \quad 0.9029$

Table 4a.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN Areas-Continued

Urb Urban
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equ
countie
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area equiva
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br coun
lents)

Warren, NY
Washington, NY
2980 Goldsboro, Wayne, NC
2985 Grand Forks, ND-MN $\qquad$ Grand Forks, ND
2995 Grand Junction,
CO ...
Mesa, CO
3000 Grand Rapids-Muskegon-Holland, MI Allegan, MI Kent, MI Muskegon, M Ottawa, MI
3040 Great Falls, MT Cascade, MT
3060 Greeley, CO ......
Weld, CO
3080 Green Bay, WI ... Brown, WI
3120 *Greensboro-Winston-Salem-High Point, NC

NC Alamance, NC
Davidson, NC Davie, NC Forsyth, NC Guilford, NC Randolph, NC Stokes, NC Yadkin, NC
3150 Greenville, NC ... Pitt, NC
3160 Greenville-Spartanburg-Anderson, SC ........
Cherokee, SC Greenville, SC Pickens, SC Spartanburg, SC
3180 Hagerstown, MD Washington, MD
3200 Hamilton-Middletown, OH

3240 Harrisburg-Leb-anon-Carlisle, PA Cumberland, PA Dauphin, PA Lebanon, PA Perry, PA
3283 *Hartford, CT .....
Hartford, CT
Litchfield, CT
Middlesex, CT Tolland, CT
3285 Hattiesburg, MS
Forrest, MS
Lamar, MS
3290 Hickory-Morgan-ton-Lenoir, NC Alexander, NC Burke, NC

Table 4a.-Wage Index and Capital Geographic Adjustment Factor (GAF) for Urban Areas-Continued

| Urban area (constituent counties or county equivalents) | Wage index | GAF |
| :---: | :---: | :---: |
| Caldwell, NC <br> Catawba, NC |  |  |
| 3320 Honolulu, HI ....... | 1.1487 | 1.1776 |
| 3350 Houma, LA $\qquad$ Lafourche, LA Terrebonne, LA | 0.7843 | 0.8518 |
| 3360 *Houston, TX ..... <br> Chambers, TX <br> Fort Bend, TX Harris, TX Liberty, TX Montgomery, TX Waller, TX | 0.9790 | 1.0151 |
| 3400 Huntington-Ash- <br> land, WV-KY-OH ...... <br> Boyd, KY <br> Carter, KY <br> Greenup, KY <br> Lawrence, OH <br> Cabell, WV <br> Wayne, WV | 0.9194 | 0.9441 |
| 3440 Huntsville, AL .... <br> Limestone, AL Madison, AL | 0.8145 | 0.8689 |
| 3480 *Indianapolis, IN | 0.9950 | 1.0265 |

Table 4a.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN AREAS-Continued

| Urban area (constitu <br> counties or county <br> equivalents) |
| :---: |
| Bristol City, VA |
| Scott, VA |
| Washington, VA |
| 3680 Johnstown, PA |
| Cambria, PA |
| Somerset, PA |
| 3710 Joplin, MO |
| Jasper, MO |
| Newton, MO |
| 3720 Kalamazoo- |
| Battlecreek, MI .. |
| Calhoun, MI |
| Kalamazoo, MI |
| Van Buren, MI |
| 3740 Kankakee, IL |
| Kankakee, IL |
| 3760 *Kansas City, |
| KS-MO .......... |
| Johnson, KS |
| Leavenworth, KS |
| Miami, KS |
| Wyandotte, KS |

Wyandotte, KS
Cass, MO
Clay, MO
Clinton, MO
Jackson, MO
Lafayette, MO
Platte, MO
Ray, MO
3800 Kenosha, WI ......
Kenosha, WI
3810 Killeen-Temple, TX ...... Bell, TX
Coryell, TX
3840 Knoxville, Anderson, TN Blount, TN
Knox, TN
Loudon, TN
Sevier, TN
Union, TN
3850 Kokomo, IN $\qquad$ 0.8609 Howard, IN Tipton, IN
3870 La Crosse, WIMN
...............
La Crosse, WI
3880 Lafayette, LA ..... Acadia, LA Lafayette, LA St. Landry, LA St. Martin, LA
3920 Lafayette, IN ...... Clinton, IN
Tippecanoe, IN
3960 Lake Charles, LA Calcasieu, LA
3980 Lakeland-Winter Haven, FL Polk, FL
4000 Lancaster, PA .... Lancaster, PA
4040 Lansing-East Lansing, MI Clinton, MI
$0.9166 \quad 0.9421$
$1.0415 \quad 1.0282$
0.8520
0.868
0.8638
0.8183
0.8824
0.8052
0.8677
0.9605
$1.0016 \quad 1.0011$

| Wage <br> index | GAF |  |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |

0.9025

Table 4a.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN AREAS-Continued

| Urban area (constituent <br> counties or county <br> equivalents) | Wage <br> index | GAF |
| :---: | :---: | :---: |
| Eaton, MI <br> Ingham, MI |  |  |
| 4080 Laredo, TX ........ <br> Webb, TX | 0.7092 | 0.7903 |
| 4100 Las Cruces, NM | 0.8516 | 0.8958 |


| Dona Ana, NM |  |  |
| :---: | :---: | :---: |
| 4120 *Las Vegas, NV- | 1.0894 | 1.0922 |


| 4150 Lawrence, KS .... | 0.8616 | 0.9301 |
| :---: | :--- | :--- |
| Douglas, KS |  |  |

4200 Lawton, OK ........
Comanche, OK

4280 Lexington, KY .... $0.8387 \quad 0.8865$
Bourbon, KY
Clark, KY
Fayette, KY
Jessamine, KY
Madison, KY
Scott, KY
Woodford, KY
4320 Lima, OH Allen, OH
Auglaize, OH
4360 Lincoln, NE
NE ........
4400 Little Rock-North
Little Rock, AR
Faulkner, AR Lonoke, AR
Pulaski, AR Saline, AR
4420 Longview-Marshall, TX
Gregg, TX
Harrison, TX Upshur, TX
4480 *Los AngelesLong Beach, CA Los Angeles, CA
4520 Louisville, KY-IN


Floyd, IN Harrison, IN Scott, IN Bullitt, KY Jefferson, KY Oldham, KY
4600 Lubbock, TX ......
4640 Lynchburg, VA ... Amherst, VA
Bedford, VA Bedford City, VA Campbell, VA 0.9074 Lynchburg City, VA

4680 Macon, GA

## Bibb, GA

 Houston, GA Jones, GAPeach, GA

| Urban area (constituent <br> counties or county <br> equivalents) | Wage <br> index | GAF |
| :---: | :---: | :---: |
| 4720 Madison, WI ..... <br> Dane, WI | 1.0048 | 1.0033 |
| 4800 Mansfield, OH .... <br> Crawford, OH | 0.8543 | 0.8978 |
| Richland, OH <br> 4840 Mayaguez, PR ... <br> Anasco, PR | 0.4186 | 0.5508 |
| Cabo Rojo, PR <br> Hormigueros, PR <br> Mayaguez, PR |  |  |
| Sabana Grande, PR <br> San German, PR <br> 4880 McAllen-Edin- <br> burg-Mission, TX ....... | 0.8502 | 0.8948 |

## 4890 Medford-Ash-

 land, OR . Jackson, OR4900 Melbourne-Titusville-Palm Bay, FL Brevard, FL
4920 *Memphis, TN-AR-MS
0.8185

Crittenden, AR DeSoto, MS Fayette, TN Shelby, TN
Tipton, TN
$0.8616 \quad 0.9301$
$0.9431 \quad 0.9607$
$0.9193 \quad 0.9440$
$0.8616 \quad 0.9030$
0.8525
0.8836

Table 4a.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN AREAS-Continued
494 Merced, CA Dade, FL
5015 *Middlesex-Som-erset-Hunterdon, NJ Hunterdon, NJ Middlesex, NJ Somerset, NJ
0.8633

5080 *MilwaukeeWaukesha, WI $\qquad$ 0.9667

Milwaukee, WI Ozaukee, WI
Washington, WI 5120 *Minneapolis-St.
Paul, MN-WI .. 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 ......... 0.7999
Baldwin, AL

| Mobile, AL <br> 5170 Modesto, CA ...... |
| :--- | :--- |

Stanislaus, CA
5190 *Monmouth-

| Ocean, NJ ................ 1.0842 | 1.0569 |
| :--- | :--- | :--- | Twiggs, GA

Table 4A.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN Areas-Continued

| Urban area (constituent <br> counties or county <br> equivalents) |
| :--- |
| Ocean, NJ |
| 5200 Monroe, LA ........ |
| Ouachita, LA |
| 5240 Montgomery, AL |
| Autauga, AL |
| Elmore, AL |
| Montgomery, AL |
| 5280 Muncie, IN ......... |
| Delaware, , |
| 5330 Myrtle Beach, |
| SC ...................... |
| Horry, SC |
| 5345 Naples, FL ......... |
| Collier, FL |
| 5360 *Nashville, TN .... |
| Cheatham, TN |
| Davidson, TN |
| Dickson, TN |
| Robertson, TN |
| Rutherford TN |
| Sumner, TN |
| Williamson, TN |
| Wilson, TN |
| 5380 *Nassau-Suffolk, |
| NY ......................... |
| Nassau, NY |
| Suffolk, NY |
| 5483 *New Haven- |
| Bridgeport Stamford | Bridgeport-Stamford-

Waterbury-
Danbury, CT
Fairfield, CT New Haven, CT
5523 New LondonNorwich, CT ........
New London, CT 5560 *New Orleans, 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
Bronx, NY
Kings, NY
New York, NY
Putnam, NY
Queens, NY
Richmond, NY
Rockland, NY
Westchester, NY
5640 *Newark, NJ ......
Essex, NJ
Morris, NJ
Sussex, NJ
Union, NJ
Warren, NJ
5660 Newburgh, NY-
PA..
Orange, NY
Pike, PA
1.2852
1.2778
$1.2345 \quad 1.1898$
$0.9434 \quad 0.9897$
1.4041
1.1057
1.0829

Table 4a.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN Areas-Continued

| Urban area (constituent <br> counties or county <br> equivalents) | Wage <br> index | GAF |
| :---: | :---: | :---: |
| 5720 *Norfolk-Virginia |  |  |
| Beach-Newport News, | 0.8326 | 0.9086 |
| VA-NC ................ |  |  |
| 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 CCity, VA |  |  |
| Suffolk City, VA |  |  |
| Virginia Beach City, |  |  |
| VA |  |  |
| Williamsburg City, VA |  |  |
| York, VA |  |  |
| 5775 *Oakland, CA ..... | 1.5113 | 1.3666 |
| Alameda, CA |  |  |
| Contra Costa, CA |  |  |
| 5790 Ocala, FL .......... | 0.8999 | 0.9303 |

5910 Olympia, WA .....
Thurston, WA
5920 Omaha, NE-IA
Pottawattamie, IA
Cass, NE
Douglas, NE
Sarpy, NE
Washington, NE
5945 *Orange County,
CA.
Orange, CA

Table 4a.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN AREAS-Continued

| Urban area (constituent counties or county equivalents) | Wage index | GAF |
| :---: | :---: | :---: |
| Woodford, IL | 1.1197 | 1.1129 |
| 6160 *Philadelphia, |  |  |
| PA-NJ ................ |  |  |
| Burlington, NJ |  |  |
| Camden, NJ |  |  |
| Gloucester, NJ |  |  |
| Salem, NJ |  |  |
| Bucks, PA |  |  |
| Chester, PA |  |  |
| Delaware, PA |  |  |
| Montgomery, PA |  |  |
| Philadelphia, PA |  |  |
| 6200 *Phoenix-Mesa, |  |  |
| AZ ............... | 0.9832 | 1.0181 |
| Maricopa, AZ |  |  |
| Pinal, AZ |  |  |
| 6240 Pine Bluff, AR .... | 0.7904 | 0.8512 |
| Jefferson, AR |  |  |
| 6280 *Pittsburgh, PA | 0.9726 | 1.0106 |

Table 4a.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URbAN AREAS-Continued

| Urban area (constituent <br> counties or county <br> equivalents) |
| :--- |
| Orange, NC |
| Wake, NC |
| 6660 Rapid City, SD ... |
| Pennington, SD |
| 6680 Reading, PA ...... |
| Berks, PA |
| 6690 Redding, CA ...... |
| Shasta, CA |
| 670 Reno, NV ........... |
| Washoe, NV |
| 6740 Richland- |
| Kennewick-Pasco, |
| WA .............................. |
| Benton, WA |
| Franklin, WA |
| 6760 Richmond-Pe- |
| tersburg, VA ............ |

Charles City County, VA
Chesterfield, VA Colonial Heights City, VA
Dinwiddie, VA
Goochland, VA
Hanover, VA
Henrico, VA
Hopewell City, VA
New Kent, VA
Petersburg City, VA
Powhatan, VA
Prince George, VA
Richmond City, VA
6780 *Riverside-San
Bernardino, CA
Riverside, CA San Bernardino, CA
6800 Roanoke, VA .....
Botetourt, VA
Roanoke, VA
Roanoke City, VA
Salem City, VA
6820 Rochester, MN Olmsted, MN
6840 *Rochester, NY Genesee, NY Livingston, NY
Monroe, NY
Ontario, NY
Orleans, NY
Wayne, NY
6880 Rockford, IL .......
Boone, IL
Ogle, IL
Winnebago, IL
6895 Rocky Mount, NC
Edgecombe, NC
Nash, NC
6920 *Sacramento, CA El Dorado, CA
Placer, CA
Sacramento, CA
6960 Saginaw-Bay
City-Midland, MI
0.9605

Bay, MI
Midland, MI
Saginaw, MI
0.9015
0.9315

Table 4a.-Wage Index and Capital Geographic Adjustment Factor (GAF) for Urban Areas-Continued

| Urban area (constituent counties or county equivalents) | Wage index | GAF |
| :---: | :---: | :---: |
| 6980 St. Cloud, MN .... <br> Benton, MN <br> Stearns, MN | 0.9478 | 0.9640 |
| 7000 St. Joseph, MO Andrews, MO Buchanan, MO | 0.8570 | 0.8997 |
| 7040 *St. Louis, MO- | 0.8926 | 0.9529 |

1.1791 San Diego, CA
7360 *San Francisco,
CA ..........
San Francisco, CA San Mateo, CA
7400 *San Jose, CA ... Santa Clara, CA
7440 *San Juan-Bayamon, PR
Aguas Buenas, PR
Barceloneta, 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

| Urban area (constituent counties or county equivalents) | Wage index | GAF |
| :---: | :---: | :---: |
| Morovis, PR <br> Naguabo, PR <br> Naranjito, PR <br> Rio Grande, PR <br> San Juan, PR <br> Toa Alta, PR <br> Toa Baja, PR <br> Trujillo Alto, PR <br> Vega Alta, PR <br> Vega Baja, PR <br> Yabuco PR |  |  |
| 7460 San Luis Obispo-Atascadero-Paso Robles, CA $\qquad$ San Luis Obispo, CA | 1.1587 | 1.1061 |
| 7480 Santa BarbaraSanta Maria-Lompoc, CA $\qquad$ | 1.1267 | 1.0851 |
| Santa Barbara, CA 7485 Santa CruzWatsonville, CA Santa Cruz, CA | 1.3551 | 1.2313 |
| 7490 Santa Fe, NM .... Los Alamos, NM Santa Fe , NM | 1.0847 | 1.0573 |
| 7500 Santa Rosa, CA Sonoma, CA | 1.2558 | 1.1688 |
| 7510 Sarasota-Bradenton, FL Manatee, FL Sarasota, FL | 0.9770 | 0.9842 |
| 7520 Savannah, GA ... <br> Bryan, GA <br> Chatham, GA <br> Effingham, GA | 1.0089 | 1.0061 |
| 7560 Scranton-Wilkes-Barre-Hazleton, PA .. | 0.8767 | 0.9138 |

Bryan, GA
Chatham, GA
Effingham, GA
7560 Scranton-Wilkes-Barre-Hazleton, PA ...
0.8767

Table 4A.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN AREAS-Continued

Table 4A.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN Areas-Continued

Urban area (constituent | $\begin{array}{c}\text { counties or county } \\ \text { equivalents) }\end{array}$ |
| :---: |

7840 Spokane,
Spokane, WA
7880 Springfield, IL .... Menard, IL
Sangamon, IL
7920 Springfield, MO
Christian, MO
Greene, MO
Webster, MO
8003 Springfield, MA
Hampden, MA Hampshire, MA
8050 State College, PA
Centre, PA
8080 SteubenvilleWeirton, OH-WV
Jefferson, OH
Brooke, WV
Hancock, WV
8120 Stockton-Lodi,
CA ......................
8140 Sumter, SC Sumter, SC
8160 Syracuse, NY . Cayuga, NY
Madison, NY Onondaga, NY Oswego, NY
8200 Tacoma, WA ...... Pierce, WA
8240 Tallahassee, FL Gadsden, FL Leon, FL
8280 *Tampa-St. Pe-tersburg-Clearwater, FL
Hernando, FL
Hillsborough, FL
Pasco, FL
Pinellas, FL
8320 Terre Haute, IN Clay, IN Vermillion, IN Vigo, IN
8360 Texarkana, ARTexarkana, TX .
Miller, AR
Bowie, TX
8400 Toledo, OH ........ Fulton, OH
Lucas, OH
Wood, OH
8440 Topeka, KS ........ 1.0108
Shawnee, KS
8480 Trenton
Mercer, NJ
8520 Tucson, AZ ........
Pima, AZ
8560 Tulsa, OK $\qquad$
Creek, OK
Osage, OK
Rogers, OK
Tulsa, OK
Wagoner, OK
8600 Tuscaloosa, AL

Table 4a.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR URBAN Areas-Continued

| Urban area (constituent counties or county equivalents) | Wage index | GAF |
| :---: | :---: | :---: |
| Tuscaloosa, AL |  |  |
| 8640 Tyler, TX . | 1.0158 | 1.0108 |
| Smith, TX |  |  |
| 8680 Utica-Rome, NY | 0.8421 | 0.8890 |
| Herkimer, NY |  |  |
| Oneida, NY |  |  |
| 8720 Vallejo-Fairfield- |  |  |
| Napa, CA ..... | 1.3483 | 1.2271 |
| Napa, CA |  |  |
| Solano, CA |  |  |
| 8735 Ventura, CA | 1.1169 | 1.0786 |
| Ventura, CA |  |  |
| 8750 Victoria, TX Victoria, TX | 0.8478 | 0.8931 |
| 8760 Vineland |  |  |
| Bridgeton, NJ ...... | 1.0015 | 1.0010 |
| Cumberland, NJ |  |  |
| 8780 Visalia-Tulare- |  |  |
| Porterville, CA | 1.0174 | 1.0119 |
| Tulare, CA |  |  |
| 8800 Waco, TX | 0.7789 | 0.8427 |
| McLennan, TX |  |  |
| 8840 *Washington, |  |  |
| DC-MD-VA-WV | 1.0842 | 1.0886 |
| District of Columbia, |  |  |


| Urban area (constituent counties or county equivalents) | Wage index | GAF |
| :---: | :---: | :---: |
| Butler, KS Harvey, KS Sedgwick, KS |  |  |
| 9080 Wichita Falls, TX Archer, TX Wichita, TX | 0.8070 | 0.8634 |
| 9140 Williamsport, PA Lycoming, PA | 0.8487 | 0.8937 |
| 9160 Wilmington-Newark, DE-MD New Castle, DE Cecil, MD | 1.1341 | 1.1063 |
| 9200 Wilmington, NC New Hanover, NC Brunswick, NC | 0.9072 | 0.9355 |
| 9260 Yakima, WA ..... Yakima, WA | 1.0049 | 1.0034 |
| 9270 Yolo, CA ............ Yolo, CA | 1.1470 | 1.0985 |
| 9280 York, PA $\qquad$ York, PA | 0.9124 | 0.9391 |
| 9320 Youngstown- <br> Warren, OH | 0.9764 | 0.9838 |
| Columbiana, OH Mahoning, OH Trumbull, OH |  |  |
| 9340 Yuba City, CA .... <br> Sutter, CA <br> Yuba, CA | 1.0437 | 1.0297 |
| $\begin{aligned} & 9360 \text { Yuma, AZ ..... } \\ & \text { Yuma, AZ } \end{aligned}$ | 0.9518 | 0.9667 |

*Large Urban Area
Table 4b.-Wage Index and Capital Geographic Adjustment Factor (GAF) for Rural Areas

| Nonurban area | Wage index | GAF |
| :---: | :---: | :---: |
| Alabama | 0.7160 | 0.7955 |
| Alaska | 1.2472 | 1.2550 |
| Arizona | 0.7946 | 0.8543 |
| Arkansas | 0.7000 | 0.7833 |
| California | 0.9991 | 1.0010 |
| Colorado | 0.8156 | 0.8697 |
| Connecticut | 1.2788 | 1.2189 |
| Delaware | 0.9464 | 0.9630 |
| Florida | 0.8677 | 0.9084 |
| Georgia | 0.7659 | 0.8331 |
| Hawaii | 1.0268 | 1.0771 |
| Idaho | 0.8356 | 0.8843 |
| Illinois | 0.7567 | 0.8286 |
| Indiana | 0.8119 | 0.8718 |
| Iowa | 0.7394 | 0.8132 |
| Kansas | 0.7113 | 0.7922 |
| Kentucky | 0.7772 | 0.8419 |
| Louisiana | 0.7284 | 0.8055 |
| Maine | 0.8335 | 0.8827 |
| Maryland | 0.8446 | 0.8908 |
| Massachusetts | 1.0794 | 1.0537 |
| Michigan | 0.8837 | 0.9188 |
| Minnesota | 0.8161 | 0.8704 |
| Mississippi | 0.6808 | 0.7685 |
| Missouri | 0.7249 | 0.8044 |

Table 4b.-Wage Index and Capital Geographic Adjustment Factor (GAF) FOR RURAL AREAS-Continued

| Nonurban area | Wage index | GAF |
| :---: | :---: | :---: |
| Montana | 0.8137 | 0.8683 |
| Nebraska | 0.7245 | 0.8020 |
| Nevada | 0.8795 | 0.9158 |
| New Hampshire | 0.9776 | 0.9895 |
| New Jersey ${ }^{1}$.... |  |  |
| New Mexico | 0.7873 | 0.8489 |
| New York | 0.8565 | 0.8994 |
| North Carolina | 0.7945 | 0.8565 |
| North Dakota | 0.7370 | 0.8114 |
| Ohio | 0.8349 | 0.8909 |
| Oklahoma | 0.6963 | 0.7805 |
| Oregon | 0.9715 | 0.9813 |
| Pennsylvania | 0.8480 | 0.8939 |
| Puerto Rico | 0.4182 | 0.5505 |
| Rhode Island ${ }^{1}$ |  |  |
| South Carolina | 0.7679 | 0.8356 |
| South Dakota | 0.7085 | 0.7898 |
| Tennessee | 0.7372 | 0.8116 |
| Texas | 0.7430 | 0.8166 |
| Utah | 0.8854 | 0.9200 |
| Vermont | 0.8941 | 0.9287 |
| Virginia | 0.7760 | 0.8422 |
| Washington | 0.9956 | 0.9978 |
| West Virginia | 0.7943 | 0.8541 |
| Wisconsin | 0.8449 | 0.8914 |
| Wyoming ..................... | 0.8202 | 0.8731 |

Table 4c.-Wage Index and Capital Geographic Adjustment Factor (GAF) for Hospitals That are Reclassified

| Area reclassified to | Wage index | GAF |
| :---: | :---: | :---: |
| Abilene, TX | 0.8055 | 0.8623 |
| Albuquerque, NM | 0.9390 | 0.9578 |
| Alexandria, LA | 0.8213 | 0.8739 |
| Amarillo, TX | 0.8557 | 0.8988 |
| Anchorage, AK | 1.3285 | 1.2147 |
| Asheville, NC | 0.9365 | 0.9561 |
| Atlanta, GA | 0.9986 | 0.9990 |
| Bangor, ME | 0.9412 | 0.9594 |
| Baton Rouge, LA | 0.8442 | 0.8905 |
| Benton Harbor, MI | 0.8553 | 0.8985 |
| Benton Harbor, MI (Rural Michigan Hosp.) $\qquad$ | 0.8837 | 0.9188 |
| Billings, MT | 0.8903 | 0.9235 |
| Birmingham, AL | 0.9047 | 0.9337 |
| Bismarck, ND | 0.7976 | 0.8565 |
| Boise City, ID | 0.9269 | 0.9493 |
| Boston-Worcester-Law-rence-Lowell-Brockton, MA-NH $\qquad$ | 1.1639 | 1.1095 |
| Caguas, PR | 0.4661 | 0.5929 |
| Champaign-Urbana, IL | 0.8999 | 0.9303 |
| Charleston-North Charleston, SC | 0.8984 | 0.9293 |
| Charlotte-Gastonia-Rock Hill, NC-SC $\qquad$ | 0.9631 | 0.9746 |
| Charlottesville, VA .... | 0.9006 | 0.9308 |
| Chattanooga, TN-GA ... | 0.8867 | 0.9210 |
| Chicago, IL ................. | 1.0653 | 1.0443 |

Table 4c.-Wage Index and Capital Geographic Adjustment Factor (GAF) for Hospitals That are RECLASSIFIED-Continued

| Area reclassified to | Wage index | GAF | Area reclassified to | Wage index | GAF |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cincinnati, OH-KY-IN | 0.9477 | 0.9639 | Louisville, KY-IN | 0.9445 | 0.9617 |
| Cleveland-Lorain-Elyria, |  |  | Macon, GA | 0.8460 | 0.8918 |
|  | 0.9908 | 0.9937 | Madison, WI | 1.0048 | 1.0033 |
| Columbia, MO | 0.8919 | 0.9246 | Mansfield, OH | 0.8543 | 0.8978 |
| Columbus, OH | 0.9699 | 0.9793 | Medford-Ashland, OR | 1.0213 | 1.0145 |
| Dallas, TX | 0.9530 | 0.9676 | Memphis, TN-AR-MS | 0.8185 | 0.8718 |
| Davenport-Moline-Rock Island, IA-IL $\qquad$ | 0.8407 | 0.8880 | Middlesex-SomersetHunterdon, NJ ...... | 1.0777 | 1.0526 |
| Denver, CO .................. | 1.0291 | 1.0198 | Milwaukee-Waukesha, |  |  |
| Des Moines, IA | 0.8772 | 0.9142 | WI | 0.9667 | 0.9771 |
| Duluth-Superior, MN-WI | 0.9437 | 0.9611 | Minneapolis-St. Paul, |  |  |
| Dutchess County, NY ... | 1.0309 | 1.0211 | MN-WI ............... | 1.0785 | 1.0531 |
| Elkhart-Goshen, IN | 0.8820 | 0.9176 | Modesto, CA | 1.0135 | 1.0092 |
| Eugene-Springfield, OR | 1.1503 | 1.1006 | Monmouth-Ocean, NJ | 1.0572 | 1.0388 |
| Fargo-Moorhead, ND- |  |  | Montgomery, AL | 0.7949 | 0.8545 |
|  | 0.8860 | 0.9205 | Nashville, TN | 0.9065 | 0.9350 |
| Fayetteville, NC | 0.8658 | 0.9060 | New Haven-Bridgeport- |  |  |
| Flagstaff, AR-UT | 0.8848 | 0.9196 | Stamford-Waterbury- |  |  |
| Flint, MI | 1.1273 | 1.0855 | Danbury, CT ........... | 1.2778 | 1.1828 |
| Florence, AL | 0.8157 | 0.8698 | New London-Norwich, |  |  |
| Florence, SC | 0.8614 | 0.9029 | CT | 1.2345 | 1.1552 |
| Fort Lauderdale, FL | 1.0968 | 1.0653 | New Orleans, LA | 0.9434 | 0.9609 |
| Fort Pierce-Port St. Lucie, FL |  |  | New York, NY | 1.4041 | 1.2616 |
| Fort Smith, AR-OK | 1.0049 | 1.0034 0.8498 | Newark, NJ | 1.0956 | 1.0645 |
| Fort Walton Beach, FL | 0.8978 | 0.9288 | Oakland, CA | 1.5113 | 1.3268 |
| Fort Worth-Arlington, TX | 1.0095 | 1.0065 | Odessa-Midland, TX | 0.8 | 0.8984 |
| Gadsden, AL | 0.8901 | 0.9234 | Oklahoma City, OK | 0.8463 | 0.8920 0.9603 |
| Gary, IN | 0.9176 | 0.9428 | Omaha, NE-IA ...... | 0.9425 | 0.9603 |
| Grand Forks, ND-MN | 0.9228 | 0.9465 | Orange County, CA | 1.1929 | 1.1284 |
| Grand Junction, CO .. | 0.8847 | 0.9195 | , IL | 1.1197 | 1.9249 1.0805 |
| Grand Rapids-Muske-gon-Holland, MI | 1.0088 | 1.0060 | Pittsburgh, PA ........ | 0.9564 | 0.9699 |
| Great Falls, MT .. | 0.9007 | 0.9309 | Portland, ME | 0.9615 | 0.9735 |
| Greeley, CO .... | 0.9409 | 0.9591 | Portland-Vancouve |  |  |
| Green Bay, WI | 0.9387 | 0.9576 | Provo | 1.1267 1.0139 | 1.0851 1.0095 |
| Greensboro-Winston-Salem-High Point, NC | 0.9327 | 0.9534 | Raleigh-Durham-Chapel | 1.0139 | 1.0095 |
| Greenville-Spartanburg- |  |  | Hill, NC ...... Rapid City, | 0.9615 0.8493 | 0.9735 0.8942 |
| Anderson, SC | 0.8947 | 0.9266 | Rapid City, SD Roanoke, VA | 0.8493 | 0.8942 |
| Hartford, CT | 1.2218 | 1.1470 | Roanoke, VA .... | 1.0452 | 1.0307 |
| Honolulu, HI | 1.1487 | 1.0996 | Rochester, MN |  | 1.0307 0.9315 |
| Houston, TX | 0.9790 | 0.9856 | Rockford, IL ....... | 0.9015 | 0.9315 |
| Huntington-Ashl WV-KY-OH |  | 0.9441 | Sacramento, CA Saginaw-Bay City- | 1.2382 | 1.1576 |
| Huntsville, AL | 0.8040 | 0.8612 | land, MI | 0.9605 | 0.9728 |
| Indianapolis, IN | 0.9833 | 0.9885 | St. Cloud, MN | 0.9478 | 0.9640 |
| Jackson, MS ... | 0.7906 | 0.8514 | St. Louis, MO-IL | 0.8926 | 0.9251 |
| Jacksonville, FL | 0.9018 | 0.9317 | Salt Lake City-Ogd |  |  |
| Johnson City-Kingsp |  |  | UT | 0.9677 | 0.9778 |
| Bristol, TN-VA | 0.8921 | 0.9248 | San Diego, CA | 1.2183 | 1.1448 |
| Joplin, MO | 0.7409 | 0.8144 | San Francisco, CA | 1.4210 | 1.2720 |
| Kalamazoo-Battlecreek |  |  | San Jose, CA | 1.4435 | 1.2858 |
| MI ....... | 1.0462 | 1.0314 | Santa Rosa, CA | 1.2430 | 1.1606 |
| Kansas City, KS-MO | 0.9522 | 0.9670 | Sarasota-Bradenton, FL | 0.9770 | 0.9842 |
| Knoxville, TN .. | 0.8520 | 0.8961 | Seattle-Bellevue-Everett, |  |  |
| Lafayette, LA .. | 0.8183 | 0.8717 | WA | 1.1410 | 1.0945 |
| Lansing-East Lansing, |  |  | Sharon, PA | 0.8764 | 0.9136 |
| MI | 1.0016 | 1.0011 | Sherman-Denison, TX | 0.8650 | 0.9055 |
| Las Vegas, NV-AZ | 1.0894 | 1.0604 | Sioux Falls, SD | 0.8606 | 0.9023 |
| Lexington, KY | 0.8387 | 0.8865 | South Bend, IN | 0.9957 | 0.9971 |
| Lima, OH | 0.8752 | 0.9128 | Springfield, IL | 0.8783 | 0.9150 |
| Lincoln, NE | 0.9059 | 0.9346 | Springfield, MO | 0.7840 | 0.8465 |
| Little Rock-North Little |  |  | Stockton-Lodi, CA | 1.1417 | 1.0950 |
| Rock, AR | 0.8616 | 0.9030 | Syracuse, NY | 0.9406 | 0.9589 |
| Longview-Marshall, TX | 0.8495 | 0.8943 | Tacoma, WA | 1.0891 | 1.0602 |
| Los Angeles-Long |  |  | Tampa-St. Petersburg- |  |  |
| Beach, CA ... | 1.2396 | 1.1585 | Clearwater, FL | 0.932 | 0.95 |

Table 4c.-Wage Index and Capital Geographic Adjustment Factor (GAF) for Hospitals That are RECLASSIFIED-Continued

| Area reclassified to | Wage index | GAF |
| :---: | :---: | :---: |
| Texarkana, AR-Texarkana, TX $\qquad$ | 0.8484 | 0.8935 |
| Toledo, OH | 1.0383 | 1.0261 |
| Topeka, KS | 0.9817 | 0.9874 |
| Tucson, AZ | 0.9050 | 0.9339 |
| Tulsa, OK | 0.8113 | 0.8666 |
| Tyler, TX | 0.9717 | 0.9805 |
| Victoria, TX | 0.8259 | 0.8772 |
| Washington, DC-MD-VA-WV $\qquad$ | 1.0842 | 1.0569 |
| Waterloo-Cedar Falls, IA | 0.8601 | 0.9019 |
| Wausau, WI | 0.9720 | 0.9807 |
| Wichita, KS | 0.9282 | 0.9503 |
| Rural Alabama | 0.7160 | 0.7955 |
| Rural Florida | 0.8677 | 0.9074 |
| Rural Kentucky | 0.7772 | 0.8415 |
| Rural Louisiana | 0.7284 | 0.8049 |
| Rural Michigan | 0.8837 | 0.9188 |
| Rural Minnesota | 0.8161 | 0.8701 |
| Rural New Hampshire ... | 0.9776 | 0.9846 |
| Rural North Carolina ..... | 0.7945 | 0.8542 |
| Rural Virginia | 0.7760 | 0.8406 |
| Rural Washington | 0.9956 | 0.9970 |
| Rural West Virginia ....... | 0.7943 | 0.8541 |
| Rural Wyoming ............ | 0.8202 | 0.8731 |

## Table 4d.-Average Hourly Wage for Urban Areas

| Urban area | Average hourly wage |
| :---: | :---: |
| Abilene, TX | 15.4795 |
| Aguadilla, PR | 8.6418 |
| Akron, OH | 19.2662 |
| Albany, GA | 16.2968 |
| Albany-Schenectady-Troy, NY ..... | 16.6016 |
| Albuquerque, NM | 18.3100 |
| Alexandria, LA | 15.8746 |
| Allentown-Bethlehem-Easton, PA | 19.5376 |
| Altoona, PA | 18.5951 |
| Amarillo, TX | 16.6936 |
| Anchorage, AK | 25.8567 |
| Ann Arbor, MI | 22.8035 |
| Anniston, AL | 15.3104 |
| Appleton-Oshkosh-Neenah, WI | 17.3835 |
| Arecibo, PR | 9.0343 |
| Asheville, NC | 18.2517 |
| Athens, GA | 18.0640 |
| Atlanta, GA | 19.6832 |
| Atlantic-Cape May, NJ | 21.6594 |
| Augusta-Aiken, GA-SC | 17.2642 |
| Austin-San Marcos, TX | 18.0500 |
| Bakersfield, CA | 19.9031 |
| Baltimore, MD | 19.1581 |
| Bangor, ME | 18.3630 |
| Barnstable-Yarmouth, MA | 26.6928 |
| Baton Rouge, LA | 16.4700 |
| Beaumont-Port Arthur, TX ........... | 16.7355 |
| Bellingham, WA | 22.1285 |
| Benton Harbor, MI | 16.5971 |
| Bergen-Passaic, NJ | 22.8591 |
| Billings, MT | 17.3702 |
| Biloxi-Gulfport-Pascagoula, MS | 16.7252 |
| Binghamton, NY | 17.2505 |
| Birmingham, AL | 17.6503 |


\section*{Table 4d.-Average Hourly Wage for Urban Areas-Continued} | Urban area | $\begin{array}{c}\text { Average } \\ \text { hourly }\end{array}$ |
| :--- | :--- |

Bismarck ND

Bloomington
Bloomington-Normal,
Boise City, ID
Boston-Worcester-Lawrence-Low-
ell-Brockton, MA-NH
Boulder-Longmont, CO
Brazoria, TX
Bremerton, WA
Brownsville-Harlingen-San Benito,

## TX

Bryan-College Station, TX
Buffalo-Niagara Falls, NY
Burlington, VT
Caguas, PR
Canton-Massillon, OH .
Casper, WY
Cedar Rapids, IA
Champaign-Urbana, IL
Charleston-North Charleston, SC
Charleston, WV
Charlotte-Gastonia-Rock Hill, NC-

## SC

Sarlesville, VA
Chattanooga, TN-GA
Cheyenne, WY
Chicago, IL
Chico-Paradise, CA
Cincinnati, OH-KY-IN
Clarksville-Hopkinsville, TN-KY
Cleveland-Lorain-Elyria, OH
Colorado Springs, CO
Columbia, MO
Columbia, SC
Columbus, GA-AL
Columbus, OH
Corpus Christi, TX
Cumberland, MD-WV
Dallas, TX
Danville, VA
Davenport-Moline-Rock Island,
IA-IL
Dayton-Springfield, OH
Daytona Beach, FL
Decatur, AL
Decatur, IL
Denver, CO
Des Moines, IA
Detroit, MI
Dothan, AL
Dover, DE
Dubuque, IA
Duluth-Superior, MN-WI
Dutchess County, NY
Eau Claire, WI
El Paso, TX
Elkhart-Goshen, IN
Elmira, NY
Enid, OK
Erie, PA
Eugene-Springfield, OR
Evansville, Henderson, IN-KY
Fargo-Moorhead, ND-MN
Fayetteville, NC
Fayetteville-Springdale-Rogers, AR
Flagstaff, AZ-UT
Flint, MI
Florence, AL

Table 4d.-Average Hourly Wage for Urban Areas-Continued

| Urban area | Average hourly wage |
| :---: | :---: |
| Florence, SC | 16.80 |
| Fort Collins-Loveland, CO ... | 20.7345 |
| Fort Lauderdale, FL | 20.5796 |
| Fort Myers-Cape Coral, FL | 17.7400 |
| Fort Pierce-Port St. Lucie, FL ....... | 19.8836 |
| Fort Smith, AR-OK | 15.3772 |
| Fort Walton Beach, FL | 17.9217 |
| Fort Wayne, IN | 17.2046 |
| Fort Worth-Arlington, TX | 19.6953 |
| Fresno, CA | 21.8549 |
| Gadsden, AL | 17.3656 |
| Gainesville, FL | 18.4465 |
| Galveston-Texas City, TX | 21.5032 |
| Gary, IN | 18.8135 |
| Glens Falls, NY | 16.6999 |
| Goldsboro, NC | 16.4109 |
| Grand Forks, ND-MN | 17.6200 |
| Grand Junction, CO | 16.2899 |
| Grand Rapids-Muskegon-Holland, <br> MI | .6810 |
| Great Falls, MT | 16.9748 |
| Greeley, CO | 48 |
| Green Bay, WI | 17.6730 |
| Greensboro-Winston-Salem-High Point, NC $\qquad$ | 18.1974 |
| Greenville, NC | 17.7503 |
| Greenville-Spartanburg-Anderson, SC ........................................ | 17.4547 |
| Hagerstown, MD | 17.9394 |
| Hamilton-Middletown, OH | 18.5631 |
| Harrisburg-Lebanon-Carlisle, PA | 19.8630 |
| Hartford, CT | 24.1823 |
| Hattiesburg, MS | 14.1809 |
| Hickory-Morganton-Lenoir, NC | 16.8672 |
| Honolulu, HI | 22.4099 |
| Houma, LA | 15.3009 |
| Houston, TX | 19.1004 |
| Huntington-Ashland, WV-KY-OH | 17.9378 |
| Huntsville, AL | 15.8903 |
| Indianapolis, IN | 19.4109 |
| Iowa City, IA .. | 18.3037 |
| Jackson, MI | 17.6864 |
| Jackson, MS | 15.3259 |
| Jackson, TN | 16.2704 |
| Jacksonville, FL | 17.5917 |
| Jacksonville, NC | 13.7955 |
| Jamestown, NY | 14.9815 |
| Janesville-Beloit, WI | 16.9030 |
| Jersey City, NJ | 22.256 |

17.3717
16.4213
14.3989
20.6127
17.5542
18.5772
17.8819
20.3189
16.6222
16.7962
16.8513
15.9607
17.1635
15.7084
17.1559
18.7384
19.5408
13.8360
16.6145

Table 4d.-Average Hourly Wage for Urban Areas-Continued

| Urban area | Average hourly wage |
| :---: | :---: |
| Las Vegas, NV-AZ | 21.2545 |
| Lawrence, KS | 16.8098 |
| Lawton, OK | 16.2681 |
| Lewiston-Auburn, ME | 18.3998 |
| Lexington, KY | 16.3501 |
| Lima, OH | 17.0746 |
| Lincoln, NE | 17.9352 |
| Little Rock-North Little Rock, AR | 16.8095 |
| Longview-Marshall, TX | 16.8433 |
| Los Angeles-Long Beach, CA | 24.1067 |
| Louisville, KY-IN | 18.4271 |
| Lubbock, TX | 16.6316 |
| Lynchburg, VA | 15.6776 |
| Macon, GA | 17.2388 |
| Madison, WI | 19.6027 |
| Mansfield, OH | 16.6677 |
| Mayaguez, PR | 8.1673 |
| McAllen-Edinburg-Mission, TX | 16.5870 |
| Medford-Ashland, OR | 19.6857 |
| Melbourne-Titusville-Palm Bay, FL | 17.7314 |
| Memphis, TN-AR-MS | 15.9681 |
| Merced, CA | 20.8439 |
| Miami, FL | 34 |
| Middlesex-Somerset-Hunterdon, <br> NJ $\qquad$ | 21.0732 |
| Milwaukee-Waukesha, WI | 18.8591 |
| Minneapolis-St. Paul, MN-WI | 21.0411 |
| Mobile, AL | 15.6052 |
| Modesto, CA | 20.7262 |
| Monmouth-Ocean, NJ | 21.1523 |
| Monroe, LA | 16.0633 |
| Montgomery, AL | 15.5087 |
| Muncie, IN | 18.9936 |
| Myrtle Beach, SC | 5.2138 |
| Naples, FL | 9423 |
| Nashville, TN | 17.6844 |
| Nassau-Suffolk, NY | 26.4295 |
| New Haven-Bridgeport-Stamford-Waterbury-Danbury, CT | 24.8405 |
| New London-Norwich, CT | 23.9754 |
| New Orleans, LA .... | 18.4047 |
| New York, NY | 27.3928 |
| Newark, NJ | 22.9650 |
| Newburgh, NY-PA | 21.1274 |
| Norfolk-Virginia Beach-Newport News, VA-NC | 16.2433 |
| Oakland, CA | 29.3295 |
| Ocala, FL | 17.5573 |
| Odessa-Midland, TX | 16.5854 |
| Oklahoma City, OK | 16.5112 |
| Olympia, WA | 20.9003 |
| Omaha, NE-IA | 18.3867 |
| Orange County, CA | 23.3969 |
| Orlando, FL | 18.5157 |
| Owensboro, KY | 14.7838 |
| Panama City, FL | 15.7629 |
| Parkersburg-Marietta, WV-OH . | 15.4018 |
| Pensacola, FL | 16.0203 |
| Peoria-Pekin, IL | 17.4092 |
| Philadelphia, PA-NJ | 21.8450 |
| Phoenix-Mesa, AZ | 19.1821 |
| Pine Bluff, AR | 15.4205 |
| Pittsburgh, PA | 18.9757 |
| Pittsfield, MA | 20.6216 |
| Ponce, PR . | 8.7784 |
| Portland, ME | 18.7580 |
| Portland-Vancouver, OR-WA | 21.9821 |
| Providence-Warwick, RI | 21.6876 |
| Provo-Orem, UT | 19.7809 |

Table 4d.-Average Hourly Wage for Urban Areas-Continued
-
Average

Table 4d.-Average Hourly Wage

San Juan-Bayamon, PR ............... 9.0059
San Luis Obispo-Atascadero-Paso Robles, CA
Santa Barbara-Santa MariaLompoc, CA
Santa Cruz-Watsonville, CA
Santa Fe , NM
Santa Rosa, CA
Sarasota-Bradenton, FL ...............
Savannah, GA
Scranton-Wilkes Barre-Hazleton, PA
Seattle-Bellevue-Everett, WA
Sharon, PA
Sheboygan, WI
Sherman-Denison, TX
Shreveport-Bossier City, LA
Sioux City, IA-NE
Sioux Falls, SD
South Bend, IN
Spokane, WA
Springfield, IL
Springfield, MO
Springfield, MA
State College, PA
Steubenville-Weirton, OH-WV
Stockton-Lodi, CA
Sumter, SC
Syracuse, NY
Tacoma, WA
Tallahassee, FL
Tampa-St. Petersburg-Clearwater,
FL
Terre Haute, IN
Texarkana, AR-Texarkana, TX ..
Toledo, OH
Topeka, KS
Trenton, NJ
Tucson, AZ
Tulsa, OK
hourly 16.1970
16.1612
17.2751
19.0031
16.5325
18.4690
22.6922
21.5443
19.4956
17.9271
22.2324
17.0151
20.3908
18.7505
17.5872
17.4626
24.1558
18.5818
18.4907
16.7196
17.4144
19.0205
26.9904
18.8799
14.8158
16.3206
23.7299
27.8220
28.2911
22.6053
21.9816
26.4364
21.1622
24.4999
19.0607
19.6834
17.1047
22.2595
17.0979
15.1817
16.8423
18.2987
16.2539
16.7892
19.4248
20.5788
17.1355
15.2957
20.6983
17.3139
16.0839
22.1532
15.0540
18.3462
21.2353
16.2555
18.0837
16.7989
16.5261
20.2562
19.7210
20.6250
17.6383
15.8281
for Urban Areas-Continued

| Urban area | Average hourly wage |
| :---: | :---: |
| Tuscaloosa, AL | 15.0679 |
| Tyler, TX | 19.8177 |
| Utica-Rome, NY | 16.4296 |
| Vallejo-Fairfield-Napa, CA | 27.2883 |
| Ventura, CA | 22.5369 |
| Victoria, TX | 16.5405 |
| Vineland-Millville-Bridgeton, NJ .... | 19.5394 |
| Visalia-Tulare-Porterville, CA ........ | 19.8483 |
| Waco, TX | 15.1959 |
| Washington, DC-MD-VA-WV .... | 21.1518 |
| Waterloo-Cedar Falls, IA | 17.0208 |
| Wausau, WI | 20.1856 |
| West Palm Beach-Boca Raton, FL | 19.9482 |
| Wheeling, OH-WV ...................... | 14.7877 |
| Wichita, KS | 18.4305 |
| Wichita Falls, TX | 15.7442 |
| Williamsport, PA | 16.5567 |
| Wilmington-Newark, DE-MD ....... | 22.1249 |
| Wilmington, NC | 17.6987 |
| Yakima, WA | 19.6049 |
| Yolo, CA .................................... | 22.3769 |
| York, PA | 17.8006 |
| Youngstown-Warren, OH | 19.0484 |
| Yuba City, CA | 20.3622 |
| Yuma, AZ | 18.5693 |

## Table 4e.-Average Hourly Wage for Rural Areas

- Average
wage
15.0679
16.4296
27.2883

5369
19.5394
19.8483
21.1518
17.0208
20.1856
14.7877
18.4305
16.5567
22.1249
19.6049
22.3769
17.8006
20.3622
18.5693

| Nonurban area | Average <br> hourly <br> wage |
| :---: | :---: |


| Alabama ................................................ | 13.9126 |
| :--- | :--- |
| Alaska |  |

24.3314
15.5017
13.6566
19.4927
15.9126
24.9480
18.4636
16.9290
14.9414
20.0330
16.3016
14.7630
15.8402
14.4246
13.8771
15.1633
14.1714
16.2618
16.4778
21.0582
17.2254
15.9225
13.2817
14.1433
15.8750
14.1342
17.1588
19.0608
15.3596
16.7103
15.4962
14.3775
16.2883

Table 4e.-Average Hourly Wage for Rural Areas-Continued

| Nonurban area | Average hourly wage |
| :---: | :---: |
| Oklahoma | 13.5853 |
| Oregon | 18.9527 |
| Pennsylvania | 16.5230 |
| Puerto Rico | 8.1591 |
| Rhode Island ${ }^{1}$ |  |
| South Carolina | 14.9812 |

Table 4e.-Average Hourly Wage for Rural Areas-Continued

| Nonurban area | Average hourly wage |
| :---: | :---: |
| South Dakota | 13.8219 |
| Tennessee | 14.3822 |
| Texas | 14.4957 |
| Utah | 17.2737 |
| Vermont | 17.4440 |
| Virginia | 15.1073 |

Table 4e.-Average Hourly Wage for Rural Areas-Continued


Table 5.-List of Diagnosis Related Groups (DRGS), Relative Weighting Factors, Geometric Mean Length of Stay, and Length of Stay Outlier Cutoff Points Used in the Prospective Payment System

|  |  |  |  | Relative weights | Geometric mean LOS | Arithmetic mean LOS | Outlier threshold |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 01 | SURG | CRANIOTOMY AGE >17 EXCEPT FOR TRAUMA | 3.0445 | 7.7 | 11.1 | 32 |
| 2 ....... | 01 | SURG | CRANIOTOMY FOR TRAUMA AGE >17 | 3.0241 | 8.4 | 11.5 | 32 |
|  | 01 | SURG | *CRANIOTOMY AGE 0-17 | 1.9159 | 12.7 | 12.7 | 37 |
| 4 | 01 | SURG | SPINAL PROCEDURES | 2.3330 | 5.9 | 9.1 | 30 |
|  | 01 | SURG | EXTRACRANIAL VASCULAR PROCEDURES | 1.5149 | 3.3 | 4.4 | 26 |
| 6 ...... | 01 | SURG | CARPAL TUNNEL RELEASE | . 7359 | 2.4 | 3.4 | 25 |
| 7 ....... | 01 | SURG | PERIPH \& CRANIAL NERVE \& OTHER NERV SYST PROC W CC. | 2.4935 | 8.2 | 12.6 | 32 |
| 8 ....... | 01 | SURG | PERIPH \& CRANIAL NERVE \& OTHER NERV SYST PROC W/O CC. | 1.1419 | 2.8 | 4.1 | 27 |
|  | 01 | MED | SPINAL DISORDERS \& INJURIES ................................. | 1.2522 | 5.4 | 7.7 | 29 |
| 10 | 01 | MED | NERVOUS SYSTEM NEOPLASMS W CC | 1.2209 | 5.7 | 8.1 | 30 |
| 11 | 01 | MED | NERVOUS SYSTEM NEOPLASMS W/O CC | . 8020 | 3.5 | 5.0 | 28 |
| 12 | 01 | MED | DEGENERATIVE NERVOUS SYSTEM DISORDERS .......... | . 9435 | 5.4 | 7.6 | 29 |
| 13 | 01 | MED | MULTIPLE SCLEROSIS \& CEREBELLAR ATAXIA | . 7799 | 5.0 | 6.3 | 29 |
| 14 ... | 01 | MED | SPECIFIC CEREBROVASCULAR DISORDERS EXCEPT TIA. | 1.2003 | 5.5 | 7.5 | 30 |
| $15 . . .$. | 01 | MED | TRANSIENT ISCHEMIC ATTACK \& PRECEREBRAL OCCLUSIONS. | . 7232 | 3.5 | 4.4 | 27 |
| 16 | 01 | MED | NONSPECIFIC CEREBROVASCULAR DISORDERS W CC | 1.0390 | 4.9 | 6.6 | 29 |
| $17 . . .$. | 01 | MED | NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC. | . 6308 | 3.0 | 4.0 | 26 |
| 18 | 01 | MED | CRANIAL \& PERIPHERAL NERVE DISORDERS W CC ..... | . 9345 | 4.8 | 6.4 | 29 |
| 19 | 01 | MED | CRANIAL \& PERIPHERAL NERVE DISORDERS W/O CC | . 6258 | 3.4 | 4.5 | 27 |
| $20 . . .$. | 01 | MED | NERVOUS SYSTEM INFECTION EXCEPT VIRAL MENingitis. | 2.4782 | 8.5 | 11.5 | 33 |
| 21 | 01 | MED | VIRAL MENINGITIS | 1.4972 | 5.8 | 7.9 | 30 |
| 22 | 01 | MED | HYPERTENSIVE ENCEPHALOPATHY | . 8356 | 3.8 | 4.9 | 28 |
| 23 | 01 | MED | NONTRAUMATIC STUPOR \& COMA | . 8053 | 3.6 | 5.1 | 28 |
| 24 | 01 | MED | SEIZURE \& HEADACHE AGE >17 W CC | . 9707 | 4.2 | 5.8 | 28 |
| 25 | 01 | MED | SEIZURE \& HEADACHE AGE >17 W/O CC | . 5791 | 3.0 | 3.9 | 24 |
| 26 | 01 | MED | SEIZURE \& HEADACHE AGE 0-17 | . 7381 | 3.3 | 4.6 | 27 |
| 27 | 01 | MED | TRAUMATIC STUPOR \& COMA, COMA $>1 \mathrm{HR}$ | 1.3186 | 3.7 | 6.3 | 28 |
| 28 ..... | 01 | MED | TRAUMATIC STUPOR \& COMA, COMA <1 HR AGE >17 W CC. | 1.2075 | 4.8 | 7.2 | 29 |
| $29 . . .$. | 01 | MED | TRAUMATIC STUPOR \& COMA, COMA <1 HR AGE >17 W/O CC. | . 6382 | 3.0 | 4.1 | 27 |
| 30 | 01 | MED | *TRAUMATIC STUPOR \& COMA, COMA <1 HR AGE 0-17 | . 3240 | 2.0 | 2.0 | 17 |
| 31 | 01 | MED | CONCUSSION AGE >17 W CC | . 8367 | 3.7 | 5.4 | 28 |
| 32 | 01 | MED | CONCUSSION AGE >17 W/O CC | . 4887 | 2.3 | 3.2 | 21 |
| 33 | 01 | MED | *CONCUSSION AGE 0-17 | . 2036 | 1.6 | 1.6 | 9 |
| 34 ... | 01 | MED | OTHER DISORDERS OF NERVOUS SYSTEM W CC ........ | 1.0639 | 4.6 | 6.5 | 29 |
| $35 . . .$. | 01 | MED | OTHER DISORDERS OF NERVOUS SYSTEM <br> W/O CC | . 6112 | 3.2 | 4.3 | 27 |
| 36 | 02 | SURG | RETINAL PROCEDURES | . 6156 | 1.3 | 1.6 | 6 |
| 37 | 02 | SURG | ORBITAL PROCEDURES | . 9280 | 2.7 | 4.0 | 27 |
| 38 | 02 | SURG | PRIMARY IRIS PROCEDURES | . 4217 | 1.8 | 2.5 | 16 |
| 39 | 02 | SURG | LENS PROCEDURES WITH OR WITHOUT VITRECTOMY | . 5162 | 1.5 | 2.0 | 10 |
| 40 ..... | 02 | SURG | EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17. | . 7094 | 2.2 | 3.4 | 26 |
| 41 ..... | 02 | SURG | *EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE 017. | . 3298 | 1.6 | 1.6 | 7 |
|  | 02 | SURG | INTRAOCULAR PROCEDURES EXCEPT RETINA, IRIS \& LENS. | . 5821 | 1.6 | 2.2 | 13 |
| 43 ..... | 02 | MED | HYPHEMA | . 4448 | 3.2 | 4.1 | 27 |

Table 5.-List of Diagnosis Related Groups (DRGS), Relative Weighting Factors, Geometric Mean Length of Stay, and Length of Stay Outlier Cutoff Points Used in the Prospective Payment System-Continued

|  |  |  |  | Relative weights | Geometric mean LOS | Arithmetic mean LOS | Outlier threshold |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 44 ..... | 02 | MED | ACUTE MAJOR EYE INFECTIONS | . 6234 | 4.7 | 5.7 | 29 |
| 45 ..... | 02 | MED | NEUROLOGICAL EYE DISORDERS | . 6514 | 3.1 | 3.8 | 22 |
| 46 ..... | 02 | MED | OTHER DISORDERS OF THE EYE AGE >17 W CC .......... | . 7595 | 4.0 | 5.5 | 28 |
| 47 ..... | 02 | MED | OTHER DISORDERS OF THE EYE AGE >17 W/O CC ...... | . 4703 | 2.8 | 3.8 | 27 |
| 48. | 02 | MED | *OTHER DISORDERS OF THE EYE AGE 0-17 ................. | . 2906 | 2.9 | 2.9 | 27 |
| 49 | 03 | SURG | MAJOR HEAD \& NECK PROCEDURES | 1.7253 | 4.1 | 5.6 | 28 |
| 50 | 03 | SURG | SIALOADENECTOMY | . 7677 | 1.7 | 2.1 |  |
| 51 ..... | 03 | SURG | SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY. | . 7358 | 1.9 | 3.0 | 21 |
|  | 03 | SURG | CLEFT LIP \& PALATE REPAIR | 1.0971 | 2.1 | 3.6 | 26 |
|  | 03 | SURG | SINUS \& MASTOID PROCEDURES AGE $>17$ | 1.0116 | 2.2 | 3.6 | 26 |
| $54 . .$. | 03 | SURG | *SINUS \& MASTOID PROCEDURES AGE 0-17 | . 4711 | 3.2 | 3.2 | 22 |
| 55 ..... | 03 | SURG | MISCELLANEOUS EAR, NOSE, MOUTH \& THROAT PROCEDURES. | . 7844 | 1.9 | 3.0 | 22 |
|  | 03 | SURG | RHINOPLASTY | . 8247 | 2.1 | 2.8 | 18 |
| 57 ..... | 03 | SURG | T\&A PROC, EXCEPT TONSILLECTOMY \&/OR ADENOIDECTOMY ONLY, AGE $>17$. | . 9413 | 2.7 | 4.1 | 27 |
| 58 ..... | 03 | SURG | *T\&A PROC, EXCEPT TONSILLECTOMY \&/OR ADENOIDECTOMY ONLY, AGE 0-17. | . 2674 | 1.5 | 1.5 |  |
|  | 03 | SURG | TONSILLECTOMY \&/OR ADENOIDECTOMY ONLY, AGE >17. | . 7521 | 2.3 | 3.7 | 26 |
| 60 ..... | 03 | SURG | *TONSILLECTOMY \&/OR ADENOIDECTOMY ONLY, AGE 0-17. | . 2037 | 1.5 | 1.5 |  |
| 61 ..... | 03 | SURG | MYRINGOTOMY W TUBE INSERTION AGE >17 | 1.2155 | 2.7 | 5.3 | 27 |
| 62 ..... | 03 | SURG | *MYRINGOTOMY W TUBE INSERTION AGE 0-17 | . 2884 | 1.3 | 1.3 |  |
| 63 ..... | 03 | SURG | OTHER EAR, NOSE, MOUTH \& THROAT O.R. PROCEDURES. | 1.2217 | 3.2 | 4.7 | 27 |
| 64 | 03 | MED | EAR, NOSE, MOUTH \& THROAT MALIGNANCY ............... | 1.1699 | 4.7 | 7.5 | 29 |
| 65 ..... | 03 | MED | DYSEQUILIBRIUM | . 5192 | 2.7 | 3.4 | 20 |
| 66 ..... | 03 | MED | EPISTAXIS | . 5358 | 2.9 | 3.6 | 21 |
| 67 ..... | 03 | MED | EPIGLOTTITIS | . 8452 | 3.4 | 4.2 | 24 |
| 68 ..... | 03 | MED | OTITIS MEDIA \& URI AGE >17 W CC .............................. | . 7075 | 3.8 | 4.8 | 27 |
| 69 ..... | 03 | MED | OTITIS MEDIA \& URI AGE >17 W/O CC ........................... | . 5244 | 3.1 | 3.8 | 20 |
| 70 ..... | 03 | MED | OTITIS MEDIA \& URI AGE 0-17 .................................... | . 3839 | 2.6 | 3.1 | 15 |
| 71 ..... | 03 | MED | LARYNGOTRACHEITIS | . 7959 | 3.1 | 4.2 | 27 |
| $72 \ldots$ | 03 | MED | NASAL TRAUMA \& DEFORMITY | . 6466 | 3.1 | 4.4 | 27 |
| 73 ..... | 03 | MED | OTHER EAR, NOSE, MOUTH \& THROAT DIAGNOSES AGE >17. | . 7483 | 3.7 | 5.0 | 28 |
| 74 ..... | 03 | MED | *OTHER EAR, NOSE, MOUTH \& THROAT DIAGNOSES AGE 0-17. | . 3276 | 2.1 | 2.1 | 20 |
| 75 ..... | 04 | SURG | MAJOR CHEST PROCEDURES ..................................... | 3.1904 | 8.8 | 11.1 | 33 |
| 76 | 04 | SURG | OTHER RESP SYSTEM O.R. PROCEDURES W CC .......... | 2.6018 | 9.1 | 12.5 | 33 |
|  | 04 | SURG | OTHER RESP SYSTEM O.R. PROCEDURES W/O CC | 1.1577 | 3.8 | 5.5 | 28 |
| 78 ... | 04 | MED | PULMONARY EMBOLISM | 1.4291 | 7.0 | 8.3 | 31 |
| 79 ..... | 04 | MED | RESPIRATORY INFECTIONS \& INFLAMMATIONS AGE $>17 \mathrm{WCC}$. | 1.6310 | 7.2 | 9.3 | 31 |
| 80 ..... | 04 | MED | RESPIRATORY INFECTIONS \& INFLAMMATIONS AGE $>17$ W/O CC. | . 9481 | 5.4 | 6.6 | 29 |
| 81 ..... | 04 | MED | *RESPIRATORY INFECTIONS \& INFLAMMATIONS AGE | . 9716 | 6.1 | 6.1 | 30 |
| 82. | 04 | MED | RESPIRATORY NEOPLASMS | 1.3347 | 5.7 | 7.9 | 30 |
| 83 ..... | 04 | MED | MAJOR CHEST TRAUMA W CC | . 9738 | 4.9 | 6.4 | 29 |
| 84 ..... | 04 | MED | MAJOR CHEST TRAUMA W/O CC | . 5335 | 2.9 | 3.7 | 24 |
| 85 ..... | 04 | MED | PLEURAL EFFUSION W CC | 1.2229 | 5.6 | 7.4 | 30 |
| 86 ..... | 04 | MED | PLEURAL EFFUSION W/O CC | . 7175 | 3.4 | 4.5 | 27 |
| 87 ..... | 04 | MED | PULMONARY EDEMA \& RESPIRATORY FAILURE | 1.3587 | 5.1 | 6.8 | 29 |
| 88 ..... | 04 | MED | CHRONIC OBSTRUCTIVE PULMONARY DISEASE .......... | . 9831 | 4.9 | 6.1 | 29 |
| 89 ..... | 04 | MED | SIMPLE PNEUMONIA \& PLEURISY AGE >17 W CC .......... | 1.1158 | 5.8 | 7.1 | 30 |
| 90 ..... | 04 | MED | SIMPLE PNEUMONIA \& PLEURISY AGE >17 W/O CC ...... | . 6995 | 4.3 | 5.1 | 24 |
| 91 ..... | 04 | MED | SIMPLE PNEUMONIA \& PLEURISY AGE 0-17 ................. | . 7883 | 3.7 | 4.7 | 28 |
| 92 ..... | 04 | MED | INTERSTITIAL LUNG DISEASE W CC ............................. | 1.2053 | 5.6 | 7.3 | 30 |
| 93 ..... | 04 | MED | INTERSTITIAL LUNG DISEASE W/O CC ......................... | . 7551 | 4.0 | 5.0 | 28 |
| 94 ..... | 04 | MED | PNEUMOTHORAX W CC .............................................. | 1.1764 | 5.3 | 7.1 | 29 |
| 95 ..... | 04 | MED | PNEUMOTHORAX W/O CC ........................................... | . 6035 | 3.3 | 4.1 | 25 |
| 96 ..... | 04 | MED | BRONCHITIS \& ASTHMA AGE >17 W CC ........................ | . 8254 | 4.5 | 5.5 | 29 |
| 97 ..... | 04 | MED | BRONCHITIS \& ASTHMA AGE >17 W/O CC ...................... | . 6013 | 3.6 | 4.3 | 22 |
| 98 ..... | 04 | MED | BRONCHITIS \& ASTHMA AGE 0-17 | . 8036 | 3.1 | 4.5 | 27 |
| 99 | 04 | MED | RESPIRATORY SIGNS \& SYMPTOMS W CC ................... | . 6868 | 2.7 | 3.5 | 22 |
| 100 ... | 04 | MED | RESPIRATORY SIGNS \& SYMPTOMS W/O CC ......... | . 5126 | 2.0 | 2.4 | 12 |
| 101 ... | 04 | MED | OTHER RESPIRATORY SYSTEM DIAGNOSES W CC ...... | . 8735 | 3.8 | 5.2 |  |

Table 5.-List of Diagnosis Related Groups (DRGS), Relative Weighting Factors, Geometric Mean Length of Stay, and Length of Stay Outlier Cutoff Points Used in the Prospective Payment System-Continued

|  |  |  |  | Relative weights | Geometric mean LOS | Arithmetic mean LOS | Outlier threshold |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 102 | 04 | MED | OTHER RESPIRATORY SYSTEM DIAGNOSES W/O CC | . 5330 | 2.4 | 3.1 | 20 |
| 103 ... | 05 | SURG | HEART TRANSPLANT | 15.2952 | 28.1 | 39.4 | 52 |
| 104 ... | 05 | SURG | CARDIAC VALVE PROCEDURES W CARDIAC CATH | 7.3389 | 12.0 | 14.6 | 36 |
| 105 ... | 05 | SURG | CARDIAC VALVE PROCEDURES W/O CARDIAC CATH | 5.6012 | 9.0 | 10.9 | 33 |
| 106 ... | 05 | SURG | CORONARY BYPASS W CARDIAC CATH ....................... | 5.5599 | 10.3 | 11.7 | 34 |
| 107 ... | 05 | SURG | CORONARY BYPASS W/O CARDIAC CATH | 4.0741 | 7.8 | 8.8 | 32 |
| 108 ... | 05 | SURG | OTHER CARDIOTHORACIC PROCEDURES | 5.9226 | 9.8 | 12.6 | 34 |
| 109 ... |  |  | NO LONGER VALID | . 0000 | . 0 | . 0 |  |
| 110 ... | 05 | SURG | MAJOR CARDIOVASCULAR PROCEDURES W CC .......... | 4.1674 | 8.2 | 10.9 | 32 |
| 111 ... | 05 | SURG | MAJOR CARDIOVASCULAR PROCEDURES W/O CC | 2.2863 | 5.9 | 6.7 | 30 |
| 112 | 05 | SURG | PERCUTANEOUS CARDIOVASCULAR PROCEDURES | 2.0962 | 3.5 | 4.7 | 27 |
| 113 ... | 05 | SURG | AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB \& TOE. | 2.6919 | 10.6 | 14.4 | 35 |
| 114 ... | 05 | SURG | UPPER LIMB \& TOE AMPUTATION FOR CIRC SYSTEM DISORDERS. | 1.5122 | 6.8 | 9.5 | 31 |
| 115 ... | 05 | SURG | PERM CARDIAC PACEMAKER IMPLANT W AMI, HEART FAILURE OR SHOCK. | 3.6844 | 9.1 | 11.4 | 33 |
| 116 ... | 05 | SURG | OTH PERM CARDIAC PACEMAKER IMPLANT OR AICD LEAD OR GENERATOR PROC. | 2.4158 | 3.9 | 5.4 | 28 |
| 117 ... | 05 | SURG | CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT. | 1.1774 | 2.7 | 4.1 | 27 |
| 118 | 05 | SURG | CARDIAC PACEMAKER DEVICE REPLACEMENT ............ | 1.5782 | 2.1 | 3.2 | 25 |
| 119 ... | 05 | SURG | VEIN LIGATION \& STRIPPING | 1.1378 | 3.3 | 5.5 | 27 |
| 120 ... | 05 | SURG | OTHER CIRCULATORY SYSTEM O.R. PROCEDURES | 1.9321 | 5.4 | 9.2 | 29 |
| 121 ... | 05 | MED | CIRCULATORY DISORDERS W AMI \& C.V. COMP DISCH ALIVE. | 1.6473 | 6.4 | 7.8 | 30 |
| 122 ... | 05 | MED | CIRCULATORY DISORDERS W AMI W/O C.V. COMP DISCH ALIVE. | 1.1617 | 4.4 | 5.3 | 28 |
| 123 | 05 | MED | CIRCULATORY DISORDERS W AMI, EXPIRED | 1.4519 | 2.7 | 4.7 | 27 |
| 124 ... | 05 | MED | CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH \& COMPLEX DIAG. | 1.3264 | 3.8 | 5.0 | 28 |
| 125 | 05 | MED | CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O COMPLEX DIAG. | . 9259 | 2.3 | 3.1 | 20 |
| 126 ... | 05 | MED | ACUTE \& SUBACUTE ENDOCARDITIS .... | 2.5380 | 11.0 | 14.3 | 35 |
| 127 ... | 05 | MED | HEART FAILURE \& SHOCK | 1.0268 | 4.8 | 6.2 | 29 |
| 128 ... | 05 | MED | DEEP VEIN THROMBOPHLEBITIS | . 7861 | 5.9 | 6.7 | 27 |
| 129 ... | 05 | MED | CARDIAC ARREST, UNEXPLAINED | 1.1239 | 2.0 | 3.4 | 26 |
| 130 ... | 05 | MED | PERIPHERAL VASCULAR DISORDERS W CC ................. | . 9357 | 5.3 | 6.7 | 29 |
| $131 .$. | 05 | MED | PERIPHERAL VASCULAR DISORDERS W/O CC ..... | . 6045 | 4.3 | 5.2 | 28 |
| 132 ... | 05 | MED | ATHEROSCLEROSIS W CC ... | . 6834 | 2.9 | 3.6 | 20 |
| 133 ... | 05 | MED | ATHEROSCLEROSIS W/O CC | . 5543 | 2.3 | 2.9 | 16 |
| $134 .$. | 05 | MED | HYPERTENSION | . 5799 | 3.0 | 3.9 | 23 |
| 135 ... | 05 | MED | CARDIAC CONGENITAL \& VALVULAR DISORDERS AGE $>17 \mathrm{WCC}$. | . 8797 | 3.7 | 5.0 | 28 |
| 136 ... | 05 | MED | CARDIAC CONGENITAL \& VALVULAR DISORDERS AGE $>17$ W/O CC. | . 5597 | 2.6 | 3.2 | 18 |
| 137 | 05 | MED | *CARDIAC CONGENITAL \& VALVULAR DISORDERS AGE 0-17. | . 7996 | 3.3 | 3.3 | 27 |
| 138 | 05 | MED | CARDIAC ARRHYTHMIA \& CONDUCTION DISORDERS w cc. | . 8009 | 3.5 | 4.6 | 27 |
| 139 | 05 | MED | CARDIAC ARRHYTHMIA \& CONDUCTION DISORDERS w/O CC. | . 4975 | 2.4 | 2.9 | 16 |
| 140 ... | 05 | MED | ANGINA PECTORIS | . 6210 | 2.8 | 3.5 | 20 |
| 141 ... | 05 | MED | SYNCOPE \& COLLAPSE W CC | . 7129 | 3.4 | 4.5 | 27 |
| 142 ... | 05 | MED | SYNCOPE \& COLLAPSE W/O CC | . 5289 | 2.5 | 3.2 | 18 |
| 143 ... | 05 | MED | CHEST PAIN | . 5233 | 2.1 | 2.6 | 14 |
| 144 ... | 05 | MED | OTHER CIRCULATORY SYSTEM DIAGNOSES W CC | 1.0850 | 4.1 | 5.7 | 28 |
| 145 ... | 05 | MED | OTHER CIRCULATORY SYSTEM DIAGNOSES W/O CC ... | . 6217 | 2.5 | 3.3 | 20 |
| 146 ... | 06 | SURG | RECTAL RESECTION W CC | 2.6401 | 9.8 | 11.3 | 34 |
| 147 ... | 06 | SURG | RECTAL RESECTION W/O CC | 1.6115 | 6.7 | 7.4 | 27 |
| 148 ... | 06 | SURG | MAJOR SMALL \& LARGE BOWEL PROCEDURES W CC | 3.3693 | 11.2 | 13.4 | 35 |
| 149 ... | 06 | SURG | MAJOR SMALL \& LARGE BOWEL PROCEDURES W/O CC. | 1.6038 | 7.1 | 7.7 | 25 |
| 150 ... | 06 | SURG | PERITONEAL ADHESIOLYSIS W CC .............................. | 2.6786 | 9.5 | 11.7 | 34 |
| 151 ... | 06 | SURG | PERITONEAL ADHESIOLYSIS W/O CC | 1.2959 | 5.2 | 6.5 | 29 |
| 152 ... | 06 | SURG | MINOR SMALL \& LARGE BOWEL PROCEDURES W CC | 1.9381 | 7.6 | 9.0 | 32 |
| 153 ... | 06 | SURG | MINOR SMALL \& LARGE BOWEL PROCEDURES W/O CC. | 1.1550 | 5.6 | 6.2 |  |
| 154 ... | 06 | SURG | STOMACH, ESOPHAGEAL \& DUODENAL PROCEDURES AGE >17 W CC. | 4.1880 | 11.6 | 15.0 | 36 |

Table 5.-List of Diagnosis Related Groups (DRGS), Relative Weighting Factors, Geometric Mean Length of Stay, and Length of Stay Outlier Cutoff Points Used in the Prospective Payment System-Continued

|  |  |  |  | Relative weights | Geometric mean LOS | Arithmetic mean LOS | Outlier threshold |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 155 | 06 | SURG | STOMACH, ESOPHAGEAL \& DUODENAL PROCEDURES AGE >17 W/O CC. | 1.4070 | 4.6 | 5.9 | 29 |
| 156 ... | 06 | SURG | *STOMACH, ESOPHAGEAL \& DUODENAL PROCEDURES AGE 0-17. | . 8235 | 6.0 | 6.0 | 30 |
| 157. | 06 | SURG | ANAL \& STOMAL PROCEDURES W CC .......................... | 1.1331 | 4.2 | 5.8 | 28 |
| 158 ... | 06 | SURG | ANAL \& STOMAL PROCEDURES W/O CC | . 6106 | 2.3 | 2.9 | 18 |
| 159 ... | 06 | SURG | HERNIA PROCEDURES EXCEPT INGUINAL \& FEMORAL AGE >17 W CC. | 1.2263 | 4.0 | 5.3 | 28 |
| 160 ... | 06 | SURG | HERNIA PROCEDURES EXCEPT INGUINAL \& FEMORAL AGE >17 W/O CC. | . 7032 | 2.4 | 3.0 | 16 |
| 161 ... | 06 | SURG | INGUINAL \& FEMORAL HERNIA PROCEDURES AGE $>17$ W CC. | 1.0089 | 3.0 | 4.4 | 27 |
| 162 ... | 06 | SURG | INGUINAL \& FEMORAL HERNIA PROCEDURES AGE $>17$ W/O CC. | . 5710 | 1.7 | 2.2 | 11 |
| 163. | 06 | SURG | *HERNIA PROCEDURES AGE 0-17 | . 7703 | 2.1 | 2.1 | 11 |
| 164 ... | 06 | SURG | APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC. | 2.3299 | 8.0 | 9.3 | 32 |
| 165 ... | 06 | SURG | APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC. | 1.2576 | 5.1 | 5.8 | 25 |
| 166 ... | 06 | SURG | APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC. | 1.4512 | 4.5 | 5.7 | 29 |
| 167 ... | 06 | SURG | APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O cc. | . 8496 | 2.8 | 3.2 | 15 |
| 168 ... | 03 | SURG | MOUTH PROCEDURES W CC | 1.0951 | 3.2 | 4.9 | 27 |
| 169 ... | 03 | SURG | MOUTH PROCEDURES W/O CC | . 6828 | 2.0 | 2.6 | 15 |
| 170 ... | 06 | SURG | OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W CC | 2.7448 | 8.5 | 12.5 | 33 |
| 171 ... | 06 | SURG | OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC. | 1.1297 | 4.0 | 5.4 | 28 |
| 172 ... | 06 | MED | DIGESTIVE MALIGNANCY W CC | 1.2934 | 5.7 | 8.2 | 30 |
| 173 ... | 06 | MED | DIGESTIVE MALIGNANCY W/O CC | . 6736 | 3.0 | 4.3 | 27 |
| $174 .$. | 06 | MED | G.I. HEMORRHAGE W CC | . 9962 | 4.4 | 5.6 | 28 |
| 175 ... | 06 | MED | G.I. HEMORRHAGE W/O CC | . 5492 | 2.9 | 3.5 | 17 |
| 176 ... | 06 | MED | COMPLICATED PEPTIC ULCER | 1.0874 | 4.7 | 6.2 | 29 |
| 177 ... | 06 | MED | UNCOMPLICATED PEPTIC ULCER W CC | . 8353 | 4.0 | 5.0 | 28 |
| 178 ... | 06 | MED | UNCOMPLICATED PEPTIC ULCER W/O CC .................... | . 6122 | 3.0 | 3.6 | 19 |
| 179 ... | 06 | MED | INFLAMMATORY BOWEL DISEASE ................................ | 1.1219 | 5.5 | 7.2 | 30 |
| 180 ... | 06 | MED | G.I. OBSTRUCTION W CC .............. | . 9202 | 4.7 | 6.1 | 29 |
| 181 ... | 06 | MED | G.I. OBSTRUCTION W/O CC | . 5346 | 3.3 | 4.0 | 22 |
| 182 ... | 06 | MED | ESOPHAGITIS, GASTROENT \& MISC DIGEST DISORDERS AGE >17 W CC. | . 7791 | 3.8 | 5.0 | 28 |
| 183 ... | 06 | MED | ESOPHAGITIS, GASTROENT \& MISC DIGEST DISORDERS AGE >17 W/O CC. | . 5570 | 2.8 | 3.5 | 20 |
| 184 ... | 06 | MED | ESOPHAGITIS, GASTROENT \& MISC DIGEST DISORDERS AGE 0-17. | . 5366 | 2.7 | 3.8 | 26 |
| 185 ... | 03 | MED | DENTAL \& ORAL DIS EXCEPT EXTRACTIONS \& RESTORATIONS, AGE >17. | . 8467 | 3.7 | 5.2 | 28 |
| 186 ... | 03 | MED | *DENTAL \& ORAL DIS EXCEPT EXTRACTIONS \& RESTORATIONS, AGE 0-17. | . 3139 | 2.9 | 2.9 | 23 |
| 187 | 03 | MED | DENTAL EXTRACTIONS \& RESTORATIONS ................... | . 7211 | 3.1 | 4.3 | 27 |
| 188 ... | 06 | MED | OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W CC. | 1.0593 | 4.5 | 6.1 | 28 |
| 189 ... | 06 | MED | OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W/O CC. | . 5629 | 2.7 | 3.7 | 27 |
| 190. | 06 | MED | OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 0-17 ...... | . 8364 | 3.9 | 4.9 | 28 |
| $191 .$. | 07 | SURG | PANCREAS, LIVER \& SHUNT PROCEDURES W CC ........ | 4.4227 | 12.0 | 16.2 | 36 |
| 192 ... | 07 | SURG | PANCREAS, LIVER \& SHUNT PROCEDURES W/O CC | 1.8016 | 6.2 | 8.0 | 30 |
| 193 ... | 07 | SURG | BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W CC. | 3.2582 | 11.4 | 13.9 | 35 |
| 194 ... | 07 | SURG | BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W/O CC. | 1.7596 | 6.8 | 8.4 | 31 |
| 195 ... | 07 | SURG | CHOLECYSTECTOMY W C.D.E. W CC | 2.6806 | 8.8 | 10.5 | 33 |
| 196 ... | 07 | SURG | CHOLECYSTECTOMY W C.D.E. W/O CC | 1.6252 | 5.9 | 6.8 | 30 |
| 197 ... | 07 | SURG | CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W CC. | 2.2636 | 7.5 | 9.1 | 31 |
| 198 ... | 07 | SURG | CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W/O CC. | 1.1769 | 4.3 | 5.0 | 23 |
|  | 07 | SURG | HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY. | 2.3744 | 8.3 | 11.1 | 32 |
| 200 .. | 07 | SURG | HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR NONMALIGNANCY. | 2.9783 | 7.6 | 11.9 | 32 |

Table 5.-List of Diagnosis Related Groups (DRGS), Relative Weighting Factors, Geometric Mean Length of Stay, and Length of Stay Outlier Cutoff Points Used in the Prospective Payment System-Continued

|  |  |  |  | Relative weights | Geometric mean LOS | Arithmetic mean LOS | Outlier threshold |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 201 | 07 | SURG | OTHER HEPATOBILIARY OR PANCREAS O.R. PROCEDURES. | 3.6216 | 12.1 | 16.6 | 36 |
| 202 | 07 | MED | CIRRHOSIS \& ALCOHOLIC HEPATITIS | 1.3286 | 5.7 | 7.7 | 30 |
| 203 ... | 07 | MED | MALIGNANCY OF HEPATOBILIARY SYSTEM OR PANCREAS. | 1.2511 | 5.5 | 7.7 | 30 |
| 204 | 07 | MED | DISORDERS OF PANCREAS EXCEPT MALIGNANCY | 1.2003 | 5.1 | 6.7 | 29 |
| 205 ... | 07 | MED | DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA W CC. | 1.2099 | 5.3 | 7.3 | 29 |
| 206 ... | 07 | MED | DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA W/O cc. | . 7211 | 3.6 | 4.8 | 28 |
| 207 | 07 | MED | DISORDERS OF THE BILIARY TRACT W CC | 1.0500 | 4.4 | 5.8 | 8 |
| 208 | 07 | MED | DISORDERS OF THE BILIARY TRACT W/O CC | . 6053 | 2.6 | 3.5 | 1 |
| 209 ... | 08 | SURG | MAJOR JOINT \& LIMB REATTACHMENT PROCEDURES OF LOWER EXTREMITY. | 2.2617 | 5.9 | 6.7 | 23 |
| 210 ... | 08 | SURG | HIP \& FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 WCC. | 1.8458 | 7.2 | 8.5 | 31 |
| 211 ... | 08 | SURG | HIP \& FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W/O CC. | 1.2747 | 5.6 | 6.3 | 23 |
| 212 ... | 08 | SURG | *HIP \& FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 0-17. | 1.1483 | 11.1 | 11.1 | 35 |
| 213 ... | 08 | SURG | AMPUTATION FOR MUSCULOSKELETAL SYSTEM \& CONN TISSUE DISORDERS. | 1.7045 | 7.0 | 9.6 | 31 |
| 214 | 08 | SURG | BACK \& NECK PROCEDURES W CC ............................. | 1.9259 | 4.9 | 6.5 | 29 |
| 215. | 08 | SURG | BACK \& NECK PROCEDURES W/O CC | 1.1135 | 3.0 | 3.7 | 20 |
| 216 ... | 08 | SURG | BIOPSIES OF MUSCULOSKELETAL SYSTEM \& CONNECTIVE TISSUE. | 2.0775 | 7.9 | 11.1 | 32 |
| 217 ... | 08 | SURG | WND DEBRID \& SKN GRFT EXCEPT HAND,FOR MUSCSKELET \& CONN TISS DIS. | 2.8715 | 10.2 | 15.3 | 34 |
| 218 ... | 08 | SURG | LOWER EXTREM \& HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W CC. | 1.4562 | 4.8 | 6.2 | 29 |
| 219 | 08 | SURG | LOWER EXTREM \& HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W/O CC. | . 9560 | 3.1 | 3.8 | 19 |
| 220 ... | 08 | SURG | *LOWER EXTREM \& HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE 0-17. | . 5704 | 5.3 | 5.3 | 29 |
| 221 | 08 | SURG | KNEE PROCEDURES W CC | 1.8379 | 5.8 | 8.2 | 30 |
| 222 | 08 | SURG | KNEE PROCEDURES W/O CC | 1.0223 | 3.1 | 4.1 | 27 |
| 223 ... | 08 | SURG | MAJOR SHOULDER/ELBOW PROC, OR OTHER UPPER EXTREMITY PROC W CC. | . 8726 | 2.2 | 2.9 | 16 |
| 224 ... | 08 | SURG | SHOULDER,ELBOW OR FOREARM PROC,EXC MAJOR JOINT PROC, W/O CC. | . 7418 | 1.9 | 2.3 | 10 |
| 225 ... | 08 | SURG | FOOT PROCEDURES | 1.0019 | 3.3 | 5.0 | 27 |
| 226 | 08 | SURG | SOFT TISSUE PROCEDURES W CC | 1.3708 | 4.4 | 6.7 | 28 |
| 227 | 08 | SURG | SOFT TISSUE PROCEDURES W/O CC | . 7458 | 2.3 | 3.0 | 18 |
| 228 | 08 | SURG | MAJOR THUMB OR JOINT PROC, OR OTH HAND OR WRIST PROC W CC. | . 9381 | 2.3 | 3.6 | 26 |
| 229 | 08 | SURG | HAND OR WRIST PROC, EXCEPT MAJOR JOINT PROC, W/O cc. | . 6495 | 1.8 | 2.4 | 14 |
| 230 ... | 08 | SURG | LOCAL EXCISION \& REMOVAL OF INT FIX DEVICES OF HIP \& FEMUR. | 1.0592 | 3.3 | 5.2 | 27 |
| 231 ... | 08 | SURG | LOCAL EXCISION \& REMOVAL OF INT FIX DEVICES EXCEPT HIP \& FEMUR. | 1.2285 | 3.3 | 5.1 | 27 |
| 232 | 08 | SURG | ARTHROSCOPY | 1.0901 | 2.6 | 4.5 | 27 |
| 233 | 08 | SURG | OTHER MUSCULOSKELET SYS \& CONN TISS O.R. PROC W CC. | 1.9951 | 6.4 | 9.0 | 30 |
| 234 ... | 08 | SURG | OTHER MUSCULOSKELET SYS \& CONN TISS O.R. PROC W/O CC. | 1.0684 | 3.1 | 4.2 | 27 |
| 235 ... | 08 | MED | FRACTURES OF FEMUR | . 8353 | 4.6 | 6.9 | 29 |
| 236 ... | 08 | MED | FRACTURES OF HIP \& PELVIS | . 7613 | 4.7 | 6.4 | 29 |
| 237 ... | 08 | MED | SPRAINS, STRAINS, \& DISLOCATIONS OF HIP, PELVIS \& THIGH. | . 5622 | 3.3 | 4.4 | 27 |
| 238 ... | 08 | MED | OSTEOMYELITIS | 1.3857 | 7.6 | 10.1 | 32 |
| 239 ... | 08 | MED | PATHOLOGICAL FRACTURES \& MUSCULOSKELETAL \& CONN TISS MALIGNANCY. | 1.0096 | 5.8 | 7.6 | 30 |
| 240 ... | 08 | MED | CONNECTIVE TISSUE DISORDERS W CC ....................... | 1.2107 | 5.5 | 7.5 | 30 |
| 241 ... | 08 | MED | CONNECTIVE TISSUE DISORDERS W/O CC .................. | . 6063 | 3.5 | 4.6 | 28 |
| 242 ... | 08 | MED | SEPTIC ARTHRITIS ..................................................... | 1.0535 | 5.8 | 7.7 | 30 |
| 243 ... | 08 | MED | MEDICAL BACK PROBLEMS | . 7241 | 4.3 | 5.6 | 28 |
| 244 ... | 08 | MED | BONE DISEASES \& SPECIFIC ARTHROPATHIES W CC | . 7221 | 4.3 | 5.8 | 28 |
| 245 ... | 08 | MED | BONE DISEASES \& SPECIFIC ARTHROPATHIES W/O CC. | . 4965 | 3.2 | 4.2 | 27 |

Table 5.-List of Diagnosis Related Groups (DRGS), Relative Weighting Factors, Geometric Mean Length of Stay, and Length of Stay Outlier Cutoff Points Used in the Prospective Payment System-Continued

|  |  |  |  | Relative weights | Geometric mean LOS | Arithmetic mean LOS | Outlier threshold |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 246 | 08 | MED | NON-SPECIFIC ARTHROPATHIES | . 5901 | 3.6 | 4.6 | 28 |
| 247 | 08 | MED | SIGNS \& SYMPTOMS OF MUSCULOSKELETAL SYSTEM \& CONN TISSUE. | . 5539 | 2.9 | 4.0 | 27 |
| 248 ... | 08 | MED | TENDONITIS, MYOSITIS \& BURSITIS | . 7363 | 3.9 | 5.3 | 28 |
| 249 ... | 08 | MED | AFTERCARE, MUSCULOSKELETAL SYSTEM \& CONNECTIVE TISSUE. | . 6514 | 2.9 | 4.3 | 27 |
| 250 ... | 08 | MED | FX, SPRN, STRN \& DISL OF FOREARM, HAND, FOOT AGE >17 W CC. | . 6808 | 3.5 | 4.9 | 28 |
| 251 ... | 08 | MED | FX, SPRN, STRN \& DISL OF FOREARM, HAND, FOOT AGE >17 W/O CC. | . 4625 | 2.5 | 3.3 | 22 |
| 252 ... | 08 | MED | *FX, SPRN, STRN \& DISL OF FOREARM, HAND, FOOT AGE 0-17. | . 2478 | 1.8 | 1.8 | 15 |
| 253 ... | 08 | MED | FX, SPRN, STRN \& DISL OF UPARM, LOWLEG EX FOOT AGE $>17 \mathrm{WCC}$. | . 7438 | 4.3 | 5.8 | 28 |
| 254 ... | 08 | MED | FX, SPRN, STRN \& DISL OF UPARM, LOWLEG EX FOOT AGE >17 W/O CC. | . 4433 | 2.9 | 3.9 | 25 |
| 255 ... | 08 | MED | *FX, SPRN, STRN \& DISL OF UPARM, LOWLEG EX FOOT AGE 0-17. | . 2885 | 2.9 | 2.9 | 27 |
| 256 ... | 08 | MED | OTHER MUSCULOSKELETAL SYSTEM \& CONNECTIVE TISSUE DIAGNOSES. | . 7724 | 4.0 | 5.7 | 28 |
| 257 ... | 09 | SURG | TOTAL MASTECTOMY FOR MALIGNANCY W CC ............ | . 9021 | 2.8 | 3.4 | 17 |
| 258 ... | 09 | SURG | TOTAL MASTECTOMY FOR MALIGNANCY W/O CC | . 7099 | 2.2 | 2.5 | 10 |
| 259 ... | 09 | SURG | SUBTOTAL MASTECTOMY FOR MALIGNANCY W CC ..... | . 8673 | 2.3 | 3.5 | 26 |
| 260 ... | 09 | SURG | SUBTOTAL MASTECTOMY FOR MALIGNANCY W/O CC | . 6083 | 1.6 | 1.9 |  |
| 261 ... | 09 | SURG | BREAST PROC FOR NON-MALIGNANCY EXCEPT BIOPSY \& LOCAL EXCISION. | . 8342 | 1.9 | 2.4 | 12 |
| 262 ... | 09 | SURG | BREAST BIOPSY \& LOCAL EXCISION FOR NON-MALIGNANCY. | . 7694 | 2.7 | 3.9 | 27 |
| 263 ... | 09 | SURG | SKIN GRAFT \&/OR DEBRID FOR SKN ULCER OR CELLULITIS W CC. | 2.1157 | 9.8 | 13.9 | 34 |
| 264 ... | 09 | SURG | Skin graft \&/OR Debrid for skn ulcer or CELLULITIS W/O CC. | 1.1308 | 6.0 | 8.4 | 30 |
| 265 ... | 09 | SURG | SKIN GRAFT \&/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W CC. | 1.4949 | 4.8 | 7.7 | 29 |
| 266 ... | 09 | SURG | SKIN GRAFT \&/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W/O CC. | . 7650 | 2.6 | 3.7 | 27 |
| 267 | 09 | SURG | PERIANAL \& PILONIDAL PROCEDURES | . 8086 | 2.7 | 4.1 | 27 |
| 268 ... | 09 | SURG | SKIN, SUBCUTANEOUS TISSUE \& BREAST PLASTIC PROCEDURES. | . 9935 | 2.5 | 4.0 | 27 |
| 269 ... | 09 | SURG | OTHER SKIN, SUBCUT TISS \& BREAST PROC W CC ..... | 1.6361 | 6.2 | 9.1 | 30 |
| 270 ... | 09 | SURG | OTHER SKIN, SUBCUT TISS \& BREAST PROC W/O CC | . 7016 | 2.4 | 3.4 | 26 |
| 271 ... | 09 | MED | SKIN ULCERS | 1.0791 | 6.6 | 8.5 | 31 |
| 272 ... | 09 | MED | MAJOR SKIN DISORDERS W CC . | 1.0212 | 5.6 | 7.5 | 30 |
| 273 ... | 09 | MED | MAJOR SKIN DISORDERS W/O CC | . 6358 | 4.1 | 5.5 | 28 |
| $274 \ldots$ | 09 | MED | MALIGNANT BREAST DISORDERS W CC ...... | 1.0713 | 5.3 | 7.8 | 29 |
| 275 ... | 09 | MED | MALIGNANT BREAST DISORDERS W/O CC .... | . 4984 | 2.5 | 3.6 | 27 |
| 276 ... | 09 | MED | NON-MALIGANT BREAST DISORDERS | . 6443 | 3.9 | 5.1 | 28 |
| 277 ... | 09 | MED | CELLULITIS AGE >17 W CC | . 8532 | 5.5 | 6.7 | 29 |
| 278 ... | 09 | MED | CELLULITIS AGE > $17 \mathrm{~W} / \mathrm{O}$ CC | . 5775 | 4.3 | 5.1 | 25 |
| 279 ... | 09 | MED | *CELLULITIS AGE 0-17 | . 7187 | 4.2 | 4.2 | 24 |
| 280 ... | 09 | MED | TRAUMA TO THE SKIN, SUBCUT TISS \& BREAST AGE $>17 \mathrm{WCC}$. | . 6765 | 3.7 | 5.1 | 28 |
| 281 ... | 09 | MED | TRAUMA TO THE SKIN, SUBCUT TISS \& BREAST AGE $>17$ W/O CC. | . 4566 | 2.7 | 3.7 | 24 |
| 282 ... | 09 | MED | *TRAUMA TO THE SKIN, SUBCUT TISS \& BREAST AGE 0-17. | . 2508 | 2.2 | 2.2 | 19 |
| 283 ... | 09 | MED | MINOR SKIN DISORDERS W CC | . 7034 | 4.1 | 5.5 | 28 |
| 284 ... | 09 | MED | MINOR SKIN DISORDERS W/O CC | . 4375 | 2.9 | 3.9 | 27 |
| 285 ... | 10 | SURG | AMPUTAT OF LOWER LIMB FOR ENDOCRINE, NUTRIT, \& METABOL DISORDERS. | 2.1948 | 9.5 | 13.5 | 34 |
| 286 ... | 10 | SURG | ADRENAL \& PITUITARY PROCEDURES | 2.3858 | 6.6 | 8.7 | 31 |
| 287 ... | 10 | SURG | SKIN GRAFTS \& WOUND DEBRID FOR ENDOC, NUTRIT \& METAB DISORDERS. | 1.9722 | 9.4 | 13.4 | 33 |
| 288 ... | 10 | SURG | O.R. PROCEDURES FOR OBESITY | 2.0537 | 5.3 | 7.0 | 29 |
| 289 ... | 10 | SURG | PARATHYROID PROCEDURES | 1.0231 | 2.7 | 3.9 | 27 |
| 290 ... | 10 | SURG | THYROID PROCEDURES | . 8827 | 2.1 | 2.8 | 15 |
| $291 .$. | 10 | SURG | THYROGLOSSAL PROCEDURES | . 5221 | 1.4 | 1.8 |  |
| 292 ... | 10 | SURG | OTHER ENDOCRINE, NUTRIT \& METAB O.R. PROC W CC. | 2.6435 | 8.4 | 12.7 | 2 |

Table 5.-List of Diagnosis Related Groups (DRGS), Relative Weighting Factors, Geometric Mean Length of Stay, and Length of Stay Outlier Cutoff Points Used in the Prospective Payment System-Continued

|  |  |  |  | Relative weights | Geometric mean LOS | Arithmetic mean LOS | Outlier threshold |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 293 | 10 | SURG | OTHER ENDOCRINE, NUTRIT \& METAB O.R. PROC W/O CC. | 1.2415 | 4.4 | 6.4 | 28 |
| 294 ... | 10 | MED | DIABETES AGE >35 | . 7604 | 4.3 | 5.7 | 28 |
| 295 | 10 | MED | DIABETES AGE 0-35 | . 7171 | 3.3 | 4.3 | 27 |
| 296 ... | 10 | MED | NUTRITIONAL \& MISC METABOLIC DISORDERS AGE $>17 \mathrm{WCC}$. | . 8939 | 4.7 | 6.4 | 29 |
| 297 ... | 10 | MED | NUTRITIONAL \& MISC METABOLIC DISORDERS AGE $>17$ W/O CC. | . 5374 | 3.3 | 4.3 | 26 |
| 298 ... | 10 | MED | NUTRITIONAL \& MISC METABOLIC DISORDERS AGE 017. | . 5036 | 2.3 | 3.0 | 19 |
| 299 ... | 10 | MED | INBORN ERRORS OF METABOLISM .............................. | . 8211 | 3.8 | 5.4 | 28 |
| 300 ... | 10 | MED | ENDOCRINE DISORDERS W CC | 1.1005 | 5.5 | 7.3 | 30 |
| 301 ... | 10 | MED | ENDOCRINE DISORDERS W/O CC | . 6193 | 3.4 | 4.4 | 27 |
| 302 ... | 11 | SURG | KIDNEY TRANSPLANT | 3.9210 | 10.4 | 12.3 | 34 |
| 303 ... | 11 | SURG | KIDNEY, URETER \& MAJOR BLADDER PROCEDURES FOR NEOPLASM. | 2.6364 | 8.4 | 10.2 | 32 |
| 304 ... | 11 | SURG | KIDNEY, URETER \& MAJOR BLADDER PROC FOR NONNEOPL W CC. | 2.3744 | 7.5 | 10.3 | 31 |
| 305 ... | 11 | SURG | KIDNEY, URETER \& MAJOR BLADDER PROC FOR NONNEOPL W/O CC. | 1.1797 | 3.9 | 4.9 | 28 |
| 306 | 11 | SURG | PROSTATECTOMY W CC | 1.2243 | 4.3 | 6.2 | 28 |
| 307 | 11 | SURG | PROSTATECTOMY W/O CC | . 6709 | 2.4 | 3.0 | 15 |
| 308 ... | 11 | SURG | MINOR BLADDER PROCEDURES W CC | 1.5260 | 4.6 | 7.0 | 29 |
| 309 ... | 11 | SURG | MINOR BLADDER PROCEDURES W/O CC | . 8858 | 2.3 | 3.0 | 18 |
| 310 ... | 11 | SURG | TRANSURETHRAL PROCEDURES W CC | 1.0013 | 3.1 | 4.6 | 27 |
| 311 ... | 11 | SURG | TRANSURETHRAL PROCEDURES W/O CC | . 5663 | 1.8 | 2.2 | 11 |
| 312 ... | 11 | SURG | URETHRAL PROCEDURES, AGE >17 W CC | . 9118 | 3.1 | 4.8 | 27 |
| 313 ... | 11 | SURG | URETHRAL PROCEDURES, AGE > $17 \mathrm{~W} / \mathrm{O} C \mathrm{C}$ | . 5211 | 1.7 | 2.3 | 13 |
| $314 \ldots$ | 11 | SURG | *URETHRAL PROCEDURES, AGE 0-17 | .4835 | 2.3 | 2.3 | 26 |
| 315 ... | 11 | SURG | OTHER KIDNEY \& URINARY TRACT O.R. PROCEDURES | 2.0606 | 5.3 | 9.3 | 29 |
| 316 ... | 11 | MED | RENAL FAILURE | 1.3066 | 5.4 | 7.6 | 29 |
| 317 ... | 11 | MED | ADMIT FOR RENAL DIALYSIS | . 4837 | 2.0 | 2.8 | 19 |
| 318 ... | 11 | MED | KIDNEY \& URINARY TRACT NEOPLASMS W CC | 1.1233 | 5.0 | 7.2 | 29 |
| 319 ... | 11 | MED | KIDNEY \& URINARY TRACT NEOPLASMS W/O CC | . 5801 | 2.3 | 3.2 | 24 |
| 320 ... | 11 | MED | KIDNEY \& URINARY TRACT INFECTIONS AGE >17 W CC. | . 9052 | 5.1 | 6.4 | 29 |
| 321 ... | 11 | MED | KIDNEY \& URINARY TRACT INFECTIONS AGE >17 W/O CC. | . 6094 | 3.9 | 4.7 | 24 |
| $322 \ldots$ | 11 | MED | KIDNEY \& URINARY TRACT INFECTIONS AGE 0-17 ....... | . 5265 | 3.6 | 4.4 | 24 |
| 323 ... | 11 | MED | URINARY STONES W CC, \&/OR ESW LITHOTRIPSY ....... | . 7490 | 2.7 | 3.6 | 24 |
| $324 \ldots$ | 11 | MED | URINARY STONES W/O CC .......... | . 4161 | 1.7 | 2.1 | 10 |
| 325 ... | 11 | MED | KIDNEY \& URINARY TRACT SIGNS \& SYMPTOMS AGE $>17 \mathrm{WCC}$. | . 6397 | 3.4 | 4.6 | 27 |
| 326 ... | 11 | MED | KIDNEY \& URINARY TRACT SIGNS \& SYMPTOMS AGE $>17$ W/O CC. | . 4346 | 2.4 | 3.5 | 19 |
| 327 ... | 11 | MED | *KIDNEY \& URINARY TRACT SIGNS \& SYMPTOMS AGE 0-17. | . 2340 | 3.1 | 3.1 | 27 |
| 328 ... | 11 | MED | URETHRAL STRICTURE AGE $>17 \mathrm{~W}$ CC ....................... | . 6929 | 3.1 | 4.3 | 27 |
| $329 \ldots$ | 11 | MED | URETHRAL STRICTURE AGE $>17 \mathrm{~W} / \mathrm{O}$ CC | . 4536 | 2.1 | 2.8 | 16 |
| $330 \ldots$ | 11 | MED | *URETHRAL STRICTURE AGE 0-17 | . 3114 | 1.6 | 1.6 | 9 |
| 331 ... | 11 | MED | OTHER KIDNEY \& URINARY TRACT DIAGNOSES AGE $>17 \mathrm{WCC}$. | . 9926 | 4.6 | 6.2 | 29 |
| 332 ... | 11 | MED | OTHER KIDNEY \& URINARY TRACT DIAGNOSES AGE $>17 \mathrm{~W} / \mathrm{O} \mathrm{CC}$. | . 6170 | 2.8 | 3.9 | 27 |
| 333 ... | 11 | MED | OTHER KIDNEY \& URINARY TRACT DIAGNOSES AGE 0-17. | . 8641 | 4.3 | 5.9 | 28 |
| 334. | 12 | SURG | MAJOR MALE PELVIC PROCEDURES W CC | 1.6656 | 5.3 | 6.0 | 23 |
| 335 ... | 12 | SURG | MAJOR MALE PELVIC PROCEDURES W/O CC ................ | 1.2596 | 4.1 | 4.6 | 17 |
| 336 ... | 12 | SURG | TRANSURETHRAL PROSTATECTOMY W CC | . 8859 | 3.2 | 4.1 | 24 |
| 337 | 12 | SURG | TRANSURETHRAL PROSTATECTOMY W/O CC . | . 6149 | 2.3 | 2.7 | 11 |
| 338 ... | 12 | SURG | TESTES PROCEDURES, FOR MALIGNANCY | 1.0534 | 3.5 | 5.3 | 27 |
| 339 ... | 12 | SURG | TESTES PROCEDURES, NON-MALIGNANCY AGE >17 | 1.0213 | 3.1 | 4.9 | 27 |
| 340 ... | 12 | SURG | *TESTES PROCEDURES, NON-MALIGNANCY AGE 0-17 | . 2768 | 2.4 | 2.4 | 13 |
| 341 ... | 12 | SURG | PENIS PROCEDURES | 1.0701 | 2.3 | 3.2 | 21 |
| $342 \ldots$ | 12 | SURG | CIRCUMCISION AGE > 17 | . 7579 | 2.6 | 4.0 | 27 |
| 343 ... | 12 | SURG | *CIRCUMCISION AGE 0-17 | . 1503 | 1.7 | 1.7 | 6 |
| 344 ... | 12 | SURG | OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY. | 1.0086 | 2.3 | 3.5 | 25 |
| 345 ... | 12 | SURG | OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIGNANCY. | . 8396 | 2.7 | 4.0 | 27 |

Table 5.-List of Diagnosis Related Groups (DRGS), Relative Weighting Factors, Geometric Mean Length of Stay, and Length of Stay Outlier Cutoff Points Used in the Prospective Payment System-Continued

|  |  |  |  | Relative weights | Geometric mean LOS | Arithmetic mean LOS | Outlier threshold |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 346 | 12 | MED | MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W CC | . 9564 | 4.8 | 6.8 | 29 |
| 347 ... | 12 | MED | mALIGNANCY, MALE REPRODUCTIVE SYSTEM, W/O CC. | . 5161 | 2.4 | 3.4 | 26 |
| 348 ... | 12 | MED | BENIGN PROSTATIC HYPERTROPHY W CC .................. | . 7102 | 3.5 | 4.9 | 28 |
| 349 ... | 12 | MED | BENIGN PROSTATIC HYPERTROPHY W/O CC | . 4048 | 2.2 | 3.0 | 21 |
| 350 ... | 12 | MED | INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM. | . 6631 | 3.9 | 4.8 | 24 |
| 351 ... | 12 | MED | *STERILIZATION, MALE | . 2309 | 1.3 | 1.3 | 5 |
| $352 \ldots$ | 12 | MED | OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES | . 5889 | 2.8 | 4.0 | 27 |
| 353 ... | 13 | SURG | PELVIC EVISCERATION, RADICAL HYSTERECTOMY \& RADICAL VULVECTOMY. | 1.9266 | 6.7 | 8.4 | 31 |
| 354 ... | 13 | SURG | UTERINE, ADNEXA PROC FOR NON-OVARIAN/ ADNEXAL MALIG W CC. | 1.4646 | 5.2 | 6.3 | 28 |
| 355 ... | 13 | SURG | UTERINE, ADNEXA PROC FOR NON-OVARIAN/ ADNEXAL MALIG W/O CC. | . 9065 | 3.6 | 3.9 | 11 |
| 356 ... | 13 | SURG | FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES. | . 7377 | 2.6 | 3.0 | 12 |
| 357 ... | 13 | SURG | UTERINE \& ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY. | 2.3847 | 8.0 | 9.8 | 32 |
| 358 ... | 13 | SURG | UTERINE \& ADNEXA PROC FOR NON-MALIGNANCY W CC. | 1.1713 | 4.0 | 4.7 | 19 |
| 359 ... | 13 | SURG | UTERINE \& ADNEXA PROC FOR NON-MALIGNANCY W/ O CC. | . 8289 | 3.0 | 3.3 | 10 |
| 360 ... | 13 | SURG | VAGINA, CERVIX \& VULVA PROCEDURES .................... | . 8470 | 2.9 | 3.5 | 17 |
| 361 ... | 13 | SURG | LAPAROSCOPY \& INCISIONAL TUBAL INTERRUPTION | 1.1284 | 2.5 | 3.5 | 23 |
| 362 ... | 13 | SURG | *ENDOSCOPIC TUBAL INTERRUPTION | . 2950 | 1.4 | 1.4 | 5 |
| 363 ... | 13 | SURG | D\&C, CONIZATION \& RADIO-IMPLANT, FOR MALIGNANCY. | . 6887 | 2.6 | 3.5 | 20 |
| 364 | 13 | SURG | D\&C, CONIZATION EXCEPT FOR MALIGNANCY | . 6823 | 2.6 | 3.6 | 27 |
| 365 ... | 13 | SURG | OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES. | 1.7253 | 5.3 | 8.1 | 29 |
| 366 | 13 | MED | MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W CC | 1.1948 | 5.3 | 7.7 | 29 |
| 367 ... | 13 | MED | MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC. | . 5173 | 2.3 | 3.3 | 24 |
| 368. | 13 | MED | INFECTIONS, FEMALE REPRODUCTIVE SYSTEM ..... | 1.0303 | 5.3 | 6.9 | 29 |
| 369 ... | 13 | MED | MENSTRUAL \& OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS. | . 5504 | 2.6 | 3.8 | 27 |
| 370 ... | 14 | SURG | CESAREAN SECTION W CC ......................................... | 1.0444 | 4.3 | 5.6 | 26 |
| 371 ... | 14 | SURG | CESAREAN SECTION W/O CC ...................................... | . 6865 | 3.2 | 3.6 | 11 |
| 372 ... | 14 | MED | VAGINAL DELIVERY W COMPLICATING DIAGNOSES ..... | . 5471 | 2.4 | 3.3 | 19 |
| 373 ... | 14 | MED | VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES | . 3584 | 1.6 | 1.9 | 7 |
| 374 ... | 14 | SURG | VAGINAL DELIVERY W STERILIZATION \&/OR D\&C .... | . 6083 | 2.0 | 2.4 | 9 |
| 375 ... | 14 | SURG | *VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL \&/ OR D\&C. | . 6696 | 4.4 | 4.4 | 28 |
| 376 ... | 14 | MED | POSTPARTUM \& POST ABORTION DIAGNOSES W/O O.R. PROCEDURE. | . 5972 | 2.4 | 3.5 | 26 |
| 377 ... | 14 | SURG | POSTPARTUM \& POST ABORTION DIAGNOSES W O.R. PROCEDURE. | . 8078 | 2.0 | 3.2 | 26 |
| 378 ... | 14 | MED | ECTOPIC PREGNANCY ............................................... | . 8157 | 2.5 | 3.0 | 15 |
| 379 ... | 14 | MED | THREATENED ABORTION | . 3573 | 2.0 | 2.9 | 20 |
| 380 ... | 14 | MED | ABORTION W/O D\&C | . 4988 | 1.8 | 2.3 | 13 |
| 381 ... | 14 | SURG | ABORTION W D\&C, ASPIRATION CURETTAGE OR HYSTEROTOMY. | . 5212 | 1.6 | 2.3 | 14 |
| 382 ... | 14 | MED | FALSE LABOR | . 2100 | 1.3 | 1.7 | 7 |
| 383 ... | 14 | MED | OTHER ANTEPARTUM DIAGNOSES W MEDICAL COMPLICATIONS. | . 4672 | 2.8 | 4.1 | 27 |
| 384 ... | 14 | MED | OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS. | . 4140 | 1.9 | 3.3 | 24 |
| 385 ... | 15 |  | *NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY. | 1.3437 | 1.8 | 1.8 | 26 |
| 386 ... | 15 |  | *EXTREME IMMATURITY OR RESPIRATORY DISTRESS SYNDROME, NEONATE. | 4.4311 | 17.9 | 17.9 | 42 |
| 387 ... | 15 |  | *PREMATURITY W MAJOR PROBLEMS .......................... | 3.0264 | 13.3 | 13.3 | 37 |
| 388 | 15 |  | *PREMATURITY W/O MAJOR PROBLEMS | 1.8261 | 8.6 | 8.6 | 33 |
| 389 ... | 15 |  | FULL TERM NEONATE W MAJOR PROBLEMS | 2.2247 | 8.0 | 10.7 | 32 |
| 390 ... | 15 |  | NEONATE W OTHER SIGNIFICANT PROBLEMS | 1.4188 | 3.8 | 5.0 | 28 |
| 391 ... | 15 |  | *NORMAL NEWBORN | . 1489 | 3.1 | 3.1 | 11 |
| 392 ... | 16 | SURG | SPLENECTOMY AGE > 17 | 3.2602 | 8.9 | 11.7 | 33 |
| 393 ... | 16 | SURG | *SPLENECTOMY AGE 0-17 | 1.3163 | 9.1 | 9.1 | 33 |

Table 5.-List of Diagnosis Related Groups (DRGS), Relative Weighting Factors, Geometric Mean Length of Stay, and Length of Stay Outlier Cutoff Points Used in the Prospective Payment System-Continued

|  |  |  |  | Relative weights | Geometric mean LOS | Arithmetic mean LOS | Outlier threshold |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 394 | 16 | SURG | OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS. | 1.5902 | 4.5 | 7.9 | 28 |
| 395 | 16 | MED | RED BLOOD CELL DISORDERS AGE >17 ...................... | . 8360 | 3.9 | 5.4 | 28 |
| 396 ... | 16 | MED | RED BLOOD CELL DISORDERS AGE 0-17 | . 7226 | 2.8 | 3.9 | 27 |
| 397 .. | 16 | MED | COAGULATION DISORDERS | 1.2574 | 4.4 | 6.1 | 28 |
| 398 ... | 16 | MED | RETICULOENDOTHELIAL \& IMMUNITY DISORDERS W CC. | 1.2106 | 5.2 | 6.6 | 29 |
| 399 ... | 16 | MED | RETICULOENDOTHELIAL \& IMMUNITY DISORDERS W/O CC. | . 7061 | 3.5 | 4.4 | 27 |
| 400 ... | 17 | SURG | LYMPHOMA \& LEUKEMIA W MAJOR O.R. PROCEDURE | 2.5606 | 6.6 | 10.3 | 31 |
| 401 ... | 17 | SURG | LYMPHOMA \& NON-ACUTE LEUKEMIA W OTHER O.R. PROC W CC. | 2.4945 | 8.5 | 12.4 | 32 |
| 402 ... | 17 | SURG | LYMPHOMA \& NON-ACUTE LEUKEMIA W OTHER O.R. PROC W/O CC. | 1.0299 | 3.1 | 4.7 | 27 |
| 403 | 17 | MED | LYMPHOMA \& NON-ACUTE LEUKEMIA W CC ................ | 1.6925 | 6.5 | 9.3 | 30 |
| 404 ... | 17 | MED | LYMPHOMA \& NON-ACUTE LEUKEMIA W/O CC | . 8070 | 3.7 | 5.1 | 28 |
| 405 ... | 17 |  | *ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE 0-17. | 1.8661 | 4.9 | 4.9 | 29 |
| 406 | 17 | SURG | MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W CC. | 2.6923 | 8.1 | 11.2 | 32 |
| 407 | 17 | SURG | MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W/O CC. | 1.1822 | 3.8 | 4.9 | 28 |
| 408 ... | 17 | SURG | MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R. PROC. | 1.7412 | 5.0 | 8.2 | 29 |
| 409. | 17 | MED | RADIOTHERAPY | . 9708 | 4.7 | 6.7 | 29 |
| 410 ... | 17 | MED | CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS. | . 7524 | 2.6 | 3.4 | 20 |
| 411 | 17 | MED | HISTORY OF MALIGNANCY W/O ENDOSCOPY ..... | . 3780 | 2.1 | 2.6 | 14 |
| 412 | 17 | MED | HISTORY OF MALIGNANCY W ENDOSCOPY | . 4133 | 2.2 | 3.1 | 24 |
| 413. | 17 | MED | OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W CC. | 1.3263 | 5.9 | 8.3 | 30 |
| 414 ... | 17 | MED | OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC. | . 7442 | 3.8 | 5.2 | 28 |
| 415 ... | 18 | SURG | O.R. PROCEDURE FOR INFECTIOUS \& PARASITIC DISEASES. | 3.4473 | 11.4 | 15.7 | 35 |
| 416 ... | 18 | MED | SEPTICEMIA AGE > 17 | 1.4862 | 6.2 | 8.2 | 30 |
| 417 ... | 18 | MED | SEPTICEMIA AGE 0-17 | . 7936 | 3.7 | 4.7 | 28 |
| 418 ... | 18 | MED | POSTOPERATIVE \& POST-TRAUMATIC INFECTIONS ..... | . 9678 | 5.3 | 6.8 | 29 |
| 419 ... | 18 | MED | FEVER OF UNKNOWN ORIGIN AGE >17 W CC ............... | . 8993 | 4.4 | 5.7 | 28 |
| 420 ... | 18 | MED | FEVER OF UNKNOWN ORIGIN AGE >17 W/O CC ............ | . 6253 | 3.5 | 4.3 | 24 |
| 421 ... | 18 | MED | VIRAL ILLNESS AGE >17 ............ | . 7157 | 3.6 | 4.6 | 28 |
| 422 ... | 18 | MED | VIRAL ILLNESS \& FEVER OF UNKNOWN ORIGIN AGE 0-17. | . 5217 | 2.9 | 3.7 | 23 |
| 423 | 18 | MED | OTHER INFECTIOUS \& PARASITIC DISEASES DIAGNOSES. | 1.5864 | 6.3 | 8.7 | 30 |
| 424 | 19 | SURG | O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS. | 2.3596 | 10.9 | 17.8 | 35 |
| 425 ... | 19 | MED | ACUTE ADJUST REACT \& DISTURBANCES OF PSYCHOSOCIAL DYSFUNCTION. | . 7078 | 3.5 | 4.9 | 27 |
| 426 ... | 19 | MED | DEPRESSIVE NEUROSES ....................................... | . 5715 | 4.0 | 5.5 | 28 |
| 427 | 19 | MED | NEUROSES EXCEPT DEPRESSIVE | . 5544 | 3.7 | 5.3 | 28 |
| 428 | 19 | MED | DISORDERS OF PERSONALITY \& IMPULSE CONTROL | . 7352 | 5.2 | 8.5 | 29 |
| 429 | 19 | MED | ORGANIC DISTURBANCES \& MENTAL RETARDATION | . 9063 | 5.9 | 8.9 | 30 |
| 430 | 19 | MED | PSYCHOSES | . 8422 | 6.9 | 9.8 | 31 |
| 431 | 19 | MED | CHILDHOOD MENTAL DISORDERS ............................... | . 6694 | 5.0 | 7.5 | 29 |
| 432 ... | 19 | MED | OTHER MENTAL DISORDER DIAGNOSES | . 7228 | 3.9 | 6.3 | 28 |
| 433 ... | 20 |  | ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA | . 3007 | 2.5 | 3.4 | 24 |
| 434 ... | 20 |  | ALC/DRUG ABUSE OR DEPEND, DETOX OR OTH SYMPT TREAT W CC. | . 7152 | 4.4 | 5.8 | 28 |
| 435 | 20 |  | ALC/DRUG ABUSE OR DEPEND, DETOX OR OTH SYMPT TREAT W/O CC. | . 4178 | 3.8 | 4.8 | 28 |
| 436 | 20 |  | ALC/DRUG DEPENDENCE W REHABILITATION THERAPY. | . 8199 | 12.1 | 14.8 | 36 |
| 437 ... | 20 |  | ALC/DRUG DEPENDENCE, COMBINED REHAB \& DETOX THERAPY. | . 7714 | 9.2 | 10.9 | 33 |
| 438 ... |  |  | NO LONGER VALID .................................................. | . 0000 | . 0 | . 0 | 0 |
| 439 ... | 21 | SURG | SKIN GRAFTS FOR INJURIES | 1.6153 | 5.8 | 8.9 | 30 |
| 440 ... | 21 | SURG | WOUND DEBRIDEMENTS FOR INJURIES | 1.7631 | 6.3 | 9.8 | 30 |
| 441 ... | 21 | SURG | HAND PROCEDURES FOR INJURIES | . 9344 | 2.4 | 4.4 | 26 |
| 442 ... | 21 | SURG | OTHER O.R. PROCEDURES FOR INJURIES W CC ........ | 2.1659 | 5.6 | 8.7 | 30 |

Table 5.-List of Diagnosis Related Groups (DRGS), Relative Weighting Factors, Geometric Mean Length of Stay, and Length of Stay Outlier Cutoff Points Used in the Prospective Payment System-Continued

|  |  |  |  | Relative weights | Geometric mean LOS | Arithmetic mean LOS | Outlier threshold |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 443 ... | 21 | SURG | OTHER O.R. PROCEDURES FOR INJURIES W/O CC ..... | . 8851 | 2.5 | 3.5 | 26 |
| 444 | 21 | MED | TRAUMATIC INJURY AGE >17 W CC | . 7310 | 4.0 | 5.3 | 28 |
| 445 | 21 | MED | TRAUMATIC INJURY AGE >17 W/O CC | . 4754 | 2.8 | 3.8 | 24 |
| 446 | 21 | MED | *TRAUMATIC INJURY AGE 0-17 | . 2893 | 2.4 | 2.4 | 22 |
| 447 | 21 | MED | ALLERGIC REACTIONS AGE >17 | . 4908 | 2.1 | 2.8 | 17 |
| 448 | 21 | MED | ALLERGIC REACTIONS AGE 0-17 | . 0759 | 1.0 | 1.0 |  |
| 449 ... | 21 | MED | POISONING \& TOXIC EFFECTS OF DRUGS AGE $>17 \mathrm{~W}$ CC. | . 7907 | 3.0 | 4.4 | 27 |
| 450 ... | 21 | MED | POISONING \& TOXIC EFFECTS OF DRUGS AGE >17 W/ O CC. | . 4276 | 1.8 | 2.3 | 13 |
| 451 | 21 | MED | *POISONING \& TOXIC EFFECTS OF DRUGS AGE 0-17 | . 2569 | 2.1 | 2.1 | 17 |
| 452 | 21 | MED | COMPLICATIONS OF TREATMENT W CC | . 9448 | 3.8 | 5.4 | 28 |
| 453 | 21 | MED | COMPLICATIONS OF TREATMENT W/O CC | . 4853 | 2.4 | 3.2 | 20 |
| 454 ... | 21 | MED | OTHER INJURY, POISONING \& TOXIC EFFECT DIAG W CC. | . 8536 | 3.4 | 5.1 | 27 |
| 455 | 21 | MED | OTHER INJURY, POISONING \& TOXIC EFFECT DIAG W/ O CC. | . 4445 | 2.1 | 2.8 | 18 |
| 456 ... | 22 |  | BURNS, TRANSFERRED TO ANOTHER ACUTE CARE FACILITY. | 1.8816 | 4.0 | 8.4 | 28 |
| 457 | 22 | MED | EXTENSIVE BURNS W/O O.R. PROCEDURE .................. | 1.4446 | 2.4 | 4.8 | 26 |
| 458 | 22 | SURG | NON-EXTENSIVE BURNS W SKIN GRAFT | 3.5465 | 12.0 | 17.0 | 36 |
| 459 ... | 22 | SURG | NON-EXTENSIVE BURNS W WOUND DEBRIDEMENT OR OTHER O.R. PROC. | 1.6693 | 6.7 | 10.3 | 31 |
| 460 ... | 22 | MED | NON-EXTENSIVE BURNS W/O O.R. PROCEDURE .......... | . 9554 | 4.6 | 6.6 | 29 |
| 461 ... | 23 | SURG | O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES. | . 9981 | 2.5 | 4.9 | 27 |
| 462 ... | 23 | MED | REHABILITATION | 1.4294 | 11.0 | 14.0 | 35 |
| 463 ... | 23 | MED | SIGNS \& SYMPTOMS W CC | . 7074 | 3.8 | 5.2 | 28 |
| 464. | 23 | MED | SIGNS \& SYMPTOMS W/O CC | . 5040 | 2.8 | 3.7 | 24 |
| 465 | 23 | MED | AFTERCARE W HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS. | . 5611 | 2.3 | 3.9 | 26 |
| 466 ... | 23 | MED | AFTERCARE W/O HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS. | . 5728 | 2.5 | 4.7 | 27 |
| 467 | 23 | MED | OTHER FACTORS INFLUENCING HEALTH STATUS ........ | . 4588 | 2.4 | 4.1 | 26 |
| 468 .. |  |  | EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS. | 3.5858 | 10.6 | 15.3 | 35 |
| 469 |  |  | **PRINCIPAL DIAGNOSIS INVALID AS DISCHARGE DIAGNOSIS. | . 0000 | . 0 | . 0 | 0 |
| 470 ... |  |  | **UNGROUPABLE .......... | . 0000 | . 0 | . 0 |  |
| 471 ... | 08 | SURG | BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY. | 3.6043 | 6.8 | 8.0 | 31 |
| 472 | 22 | SURG | EXTENSIVE BURNS W O.R. PROCEDURE ..................... | 11.1357 | 17.3 | 30.7 | 41 |
| 473 | 17 |  | aCUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE $>17$. | 3.5669 | 8.5 | 14.7 | 32 |
| 474 |  |  | NO LONGER VALID | . 0000 | . 0 | . 0 |  |
| 475 ... | 04 | MED | RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT. | 3.6736 | 8.6 | 12.3 | 33 |
| 476 .. |  | SURG | PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS. | 2.2362 | 10.3 | 13.8 | 34 |
| 477 |  | SURG | NON-EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS. | 1.7153 | 5.8 | 9.2 | 30 |
| 478 | 05 | SURG | OTHER VASCULAR PROCEDURES W CC | 2.2890 | 5.6 | 8.3 | 30 |
| 479 ... | 05 | SURG | OTHER VASCULAR PROCEDURES W/O CC .................. | 1.4113 | 3.5 | 4.6 | 27 |
| 480 ... |  | SURG | LIVER TRANSPLANT | 12.8388 | 22.5 | 29.7 | 47 |
| 481 ... |  | SURG | BONE MARROW TRANSPLANT | 11.2985 | 29.1 | 32.1 | 53 |
| 482 ... |  | SURG | TRACHEOSTOMY FOR FACE, MOUTH \& NECK DIAGNOSES. | 3.6598 | 11.4 | 15.0 | 35 |
| 483 |  | SURG | TRACHEOSTOMY EXCEPT FOR FACE, MOUTH \& NECK DIAGNOSES. | 16.0114 | 35.9 | 46.2 | 60 |
| 484 ... | 24 | SURG | CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA ... | 5.5711 | 10.4 | 15.5 | 34 |
| 485 ... | 24 | SURG | LIMB REATTACHMENT, HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TR. | 3.1619 | 9.1 | 11.6 | 33 |
| 486 ... | 24 | SURG | OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA. | 4.8009 | 9.0 | 13.5 | 33 |
| 487 ... | 24 | MED | OTHER MULTIPLE SIGNIFICANT TRAUMA ..................... | 1.9999 | 6.1 | 9.0 | 30 |
| 488 | 25 | SURG | HIV W EXTENSIVE O.R. PROCEDURE ..... | 4.2773 | 12.9 | 17.6 | 37 |
| 489 | 25 | MED | HIV W MAJOR RELATED CONDITION | 1.7436 | 7.0 | 10.4 | 31 |
| 490 ... | 25 | MED | HIV W OR W/O OTHER RELATED CONDITION | 1.0106 | 4.4 | 6.6 | 28 |
| 491 ... | 08 | SURG | MAJOR JOINT \& LIMB REATTACHMENT PROCEDURES OF UPPER EXTREMITY. | 1.6358 | 3.6 | 4.3 | 19 |

Table 5.-List of Diagnosis Related Groups (DRGS), Relative Weighting Factors, Geometric Mean Length of Stay, and Length of Stay Outlier Cutoff Points Used in the Prospective Payment System-Continued

|  |  |  |  | Relative weights | Geometric mean LOS | Arithmetic mean LOS | Outlier threshold |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 492 ... | 17 | MED | CHEMOTHERAPY W ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS | 4.0624 | 11.2 | 17.4 | 35 |
| 493 ... | 07 | SURG | LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W CC. | 1.7085 | 4.2 | 5.9 | 28 |
| 494 ... | 07 | SURG | LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC. | . 9186 | 1.8 | 2.4 | 15 |
| 495 ... |  | SURG | LUNG TRANSPLANT | 9.8070 | 18.4 | 23.8 | 42 |

*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 |
| :---: | :---: | :---: | :---: | :---: |
| 079.6 | Respiratory syncytial virus (RSV) ............................................................... | N | 15 | $\begin{aligned} & 3871,3891 \\ & 421,422 \end{aligned}$ |
| 291.81 | Alcohol withdrawal | Y | 20 | 434, 435, 436, 437 |
| 291.89 | Other specified alcoholic psychosis, not elsewhere classified | Y | 20 | 434, 435, 436, 437 |
| 293.84 | Organic anxiety syndrome | Y | 19 | 429 |
| 300.82 | Undifferentiated somatoform disorder | N | 19 | 427 |
| 315.32 | Receptive language disorder (mixed) | N | 19 | 431 |
| 414.04 | Coronary atherosclerosis of artery bypass graft | N | 5 | 132, 133 |
| 414.05 | Coronary atherosclerosis of unspecified type of bypass graft | N | 5 | 132, 133 |
| 466.11 | Acute bronchiolitis due to respiratory syncytial virus (RSV) ............................ | N | 4 | 96, 97, 98 |
| 466.19 | Acute bronchiolitis due to other infectious organisms | N | 4 | 96, 97, 98 |
| 483.1 | Pneumonia due to Chlamydia .................................................................... | Y | 4 15 | $\begin{aligned} & 89,90,91 \\ & 387,{ }^{1} 389^{1} \end{aligned}$ |
| 574.60 | Calculus of gallbladder and bile duct with acute cholecystitis without mention of obstruction. | Y | 7 | $\text { 207, } 208$ |
| 574.61 | Calculus of gallbladder and bile duct with acute cholecystitis with obstruction | Y | 7 | 207, 208 |
| 574.70 | Calculus of gallbladder and bile duct with other cholecystitis without mention of obstruction. | Y | 7 | 207, 208 |
| 574.71 | Calculus of gallbladder and bile duct with other cholecystitis with obstruction | Y | 7 | 207, 208 |
| 574.80 | Calculus of gallbladder and bile duct with acute and chronic cholecystitis without mention of obstruction. | Y | 7 | 207, 208 |
| 574.81 | Calculus of gallbladder and bile duct with acute and chronic cholecystitis with obstruction. | Y | 7 | 207, 208 |
| 574.90 | Calculus of gallbladder and bile duct without cholecystitis without mention of obstruction. | Y | 7 | 207, 208 |
| 574.91 | Calculus of gallbladder and bile duct without cholecystitis with obstruction ....... | Y | 7 | 207, 208 |
| 575.10 | Cholecystitis, unspecified ........................................................................... | N | 7 | 207, 208 |
| 575.11 | Chronic cholecystitis ...... | N | 7 | 207, 208 |
| 575.12 | Acute and chronic cholecystitis | Y | 7 | 207, 208 |
| 752.51 | Undescended testis | N | 12 | 352 |
| 752.52 | Retractile testis | N | 12 | 352 |
| 752.61 | Hypospadias .......................................................................................... | N | 12 | 352 |
| 752.62 | Epispadias ............................................................................................... | N | 12 | 352 |
| 752.63 | Congenital chordee .................................................................................. | N | 12 | 352 |
| 752.64 | Micropenis | N | 12 | 352 |
| 752.65 | Hidden penis | N | 12 | 352 |
| 752.69 | Other penile anomalies | N | 12 | 352 |
| 753.20 | Unspecified obstructive defect of renal pelvis and ureter ............................... | N | 11 | 331, 332, 333 |
| 753.21 | Congenital obstruction of ureteropelvic junction ............................................ | N | 11 | 331, 332, 333 |
| 753.22 | Congenital obstruction of ureterovesical junction ........................................... | N | 11 | 331, 332, 333 |
| 753.23 | Congenital ureterocele ............................................................................... | N | 11 | 331, 332, 333 |
| 753.29 | Obstructive defects of renal pelvis and ureter, not elsewhere classifed ............ | N | 11 | 331, 332, 333 |
| 758.81 | Other conditions due to sex chromosome anomalies ..................................... | N | 12 | 352 358, 359, 369 |
| 758.89 | Other conditions due to chromosome anomalies, not elsewhere classified ...... | N | 12 | $\begin{aligned} & 352 \\ & 358,359,369 \end{aligned}$ |
| 922.31 | Back contusion ........................................................................................ | N | 9 | 280, 281, 282 |
| 922.32 | Buttock contusion ..................................................................................... | N | 9 | 280, 281, 282 |
| 922.33 | Interscapular region contusion .................................................................... | N | 9 | 280, 281, 282 |
| 995.50 | Child abuse, unspecified ......................................................................... | N | 21 | 454, 455 |
| 995.51 | Child emotional/psychological abuse ........................................................... | N | 21 | 454, 455 |

Table 6A.-New Diagnosis Codes-Continued

| Diagnosis code | Description | CC | MDC | DRG |
| :---: | :---: | :---: | :---: | :---: |
| 995.52 | Child neglect (nutritional) ........................................................................... | N | 21 | 454, 455 |
| 995.53 | Child sexual abuse | N | 21 | 454, 455 |
| 995.54 | Child physical abuse | N | 21 | 454, 455 |
| 995.55 | Shaken infant syndrome | N | 21 | 454, 455 |
| 995.59 | Child maltreatment syndrome, not elsewhere classified | N | 21 | 454, 455 |
| 995.80 | Adult maltreatment, unspecified .................................................................. | N | 21 | 454, 455 |
| 995.82 | Adult emotional/psychological abuse | N | 21 | 454, 455 |
| 995.83 | Adult sexual abuse ........... | N | 21 | 454, 455 |
| 995.84 | Adult neglect (nutritional) ........................................................................... | N | 21 | 454, 455 |
| 995.85 | Other adult abuse and neglect .................................................................. | N | 21 | 454, 455 |
| 998.11 | Hemorrhage complicating a procedure | Y | 21 | 452, 453 |
| 998.12 | Hematoma complicating a procedure | Y | 21 | 452, 453 |
| 998.13 | Seroma complicating a procedure ............................................................... | Y | 21 | 452, 453 |
| 998.51 | Infected postoperative seroma ................................................................... | Y | 18 | 418 |
| 998.59 | Other postoperative infection ..................................................................... | Y | 18 | 418 |
| 998.83 | Non-healing surgical wound ....................................................................... | Y | 21 | 452, 453 |
| V15.41 | History of physical abuse ........................................................................... | N | 23 | 467 |
| V15.42 | History of emotional abuse ......................................................................... | N | 23 | 467 |
| V15.49 | Psychological trauma, not elsewhere classified ............................................. | N | 23 | 467 |
| V61.10 | Counseling for marital and partner problems, unspecified ............................... | N | 23 | 467 |
| V61.11 | Counseling for victim of spousal and partner abuse ....... | N | 23 | 467 |
| V61.12 | Counseling for perpetrator of spousal and partner abuse .............................. | N | 23 | 467 |
| V61.22 | Counseling for perpetrator of parental child abuse ......... | N | 23 | 467 |
| V62.83 | Counseling for perpetrator of physical/sexual abuse ...................................... | N | 23 | 467 |
| V66.7 | Encounter for palliative care ...................................................................... | N | 23 | 467 |

${ }^{1}$ Diagnosis code is classified as a "major problem" in these DRGs.
Table 6b.-New Procedure Codes

| Procedure code | Description | OR | MDC | DRG |
| :---: | :---: | :---: | :---: | :---: |
| 36.17 | Abdominal-coronary artery bypass ............................................................... | Y | 5 | 106, 107 |
| 39.90 | Insertion of non-coronary artery stent or stents | N | . |  |
| 47.01 | Laparoscopic appendectomy ....................................................................... | Y | 6 | 164, 165, 166, 167 |
| 47.09 | Other appendectomy .................................................................................. | Y | 6 | 164, 165, 166, 167 |
| 47.11 | Laparoscopic incidental appendectomy | Y | 13 | 365 |
|  |  |  | 21 | 442, 443 |
|  |  |  | 24 | 486 |
| 47.19 | Other incidental appendectomy | Y | 13 | 365 |
|  |  |  | 21 | 442, 443 |
|  |  |  | 24 | 486 |
| 51.21 | Other partial cholecystectomy | Y | 7 | 193, 194 |
|  |  |  | 17 | 400, 406, |
|  |  |  | 17 | 407 |
|  |  |  | 21 | 442, 443 |
|  |  |  | 24 | 486 |
| 51.24 | Laparoscopic partial cholecystectomy | Y | 7 | 193, 194 |
|  |  |  | 17 | 400, 406, |
|  |  |  | 17 | 407, |
|  |  |  | 21 | 442, 443 |
|  |  |  | 24 | 486 |
| 52.84 | Autotransplantation of cells of Islets of Langerhans ......................................... | $N$ | ........ |  |
| 52.85 | Allotransplantation of cells of Islets of Langerhans .......................................... | N | ................. |  |
| 52.86 | Transplantation of cells of Islets of Langerhans, not otherwise specified | N |  |  |
| 54.51 | Laparoscopic lysis of peritoneal adhesions .................................................... | Y | 6 | $150,151$ |
|  |  |  | 7 | $201$ |
|  |  |  | 13 | 365 |
|  |  |  | 21 | 442, 443 |
|  |  |  | 24 | 486 |
| 54.59 | Other lysis of peritoneal adhesions | Y | 6 | 150, 151 |
|  |  |  | 7 | 201 |
|  |  |  | 13 | 365 |
|  |  |  | 21 | 442, 443 |
|  |  |  | 24 | 486 |
| 59.03 | Laparoscopic lysis of perirenal or periureteral adhesions ................................ | Y | 11 | 303, 304, 305 |
|  |  |  | 12 | 344, 345 |
|  |  |  | 13 | 365 |
|  |  |  | 17 | 400 |
|  |  |  | 17 | 406, 407 |

Table 6b.-New Procedure Codes-Continued

| Procedure code | Description | OR | MDC | DRG |
| :---: | :---: | :---: | :---: | :---: |
| 59.12 | Laparoscopic lysis of perivesical adhesions | Y | 21 | 442, 443 |
|  |  |  | 24 | 486 |
|  |  |  | 11 | 308, 309 |
|  |  |  | 12 | 344, 345 |
|  |  |  | 13 | 365 |
|  |  |  | 17 | 400 |
|  |  |  | 17 | 406, 407 |
|  |  |  | 21 | 442, 443 |
|  |  |  | 24 | 486 |
| 65.01 | Laparoscopic oophorotomy ........................................................................ | Y | 13 | $\begin{aligned} & 354,355,357,358, \\ & 359 \end{aligned}$ |
| 65.09 | Other oophorotomy .................................................................................... | Y | 13 | $\begin{aligned} & 354,355,357,358, \\ & 359 \end{aligned}$ |
| 65.13 | Laparoscopic biopsy of ovary ...................................................................... | Y | 13 | $\begin{aligned} & 354,355,357,358, \\ & 359 \end{aligned}$ |
| 65.14 | Other laparoscopic diagnostic procedures on ovaries ...................................... | Y | 13 | $\begin{aligned} & 354,355,357,358, \\ & 359 \end{aligned}$ |
| 65.23 | Laparoscopic marsupialization of ovarian cyst ................................................ | Y | 13 | $\begin{gathered} 354,355,357,358, \\ 359 \end{gathered}$ |
| 65.24 | Laparoscopic wedge resection of ovary | Y |  | 292, 293 |
|  |  |  | 13 | $\begin{aligned} & 354,355,357,358 \text {, } \\ & 359 \end{aligned}$ |
| 65.25 | Other laparoscopic local excision or destruction of ovary ................................ | Y | 13 | $\begin{aligned} & 354,355,357,358, \\ & 359 \end{aligned}$ |
| 65.31 | Laparoscopic unilateral oophorectomy .......................................................... | Y | 13 | $\begin{aligned} & 354,355,357,358, \\ & 359 \end{aligned}$ |
| 65.39 | Other unilateral oophorectomy ..................................................................... | Y | 13 | $\begin{aligned} & 354,355,357,358, \\ & 359 \end{aligned}$ |
| 65.41 | Laparoscopic unilateral salpingo-oophorectomy ............................................. | Y | 13 | $\begin{aligned} & 354,355,357,358, \\ & 359 \end{aligned}$ |
| 65.49 | Other unilateral salpingo-oophorectomy ........................................................ | Y | 13 | $\begin{aligned} & 354,355,357,358, \\ & 359 \end{aligned}$ |
| 65.53 | Laparoscopic removal of both ovaries at same operative episode .................... | Y | 9 |   <br> 9 269,270 <br> 3 354,355, <br> 3 $357,358,359$ |
|  |  |  | 13 13 |  |
| 65.54 | Laparoscopic removal of remaining ovary | Y | 9 | $357,358,359$269,270354,355,$357,358,359$ |
|  |  |  | 13 |  |
|  |  |  | 13 |  |
| 65.63 | Laparoscopic removal of both ovaries and tubes at same operative episode ..... | Y | 9 | 357, 358, 359 269,270 |
|  |  |  | 13 | $\begin{aligned} & 354,355, \\ & 357,358,359 \end{aligned}$ |
| 65.64 | Laparoscopic removal of remaining ovary and tube ....................................... | Y | 13 | $\begin{aligned} & 354,355,357,358 \text {, } \\ & 359 \end{aligned}$ |
| 65.74 | Laparoscopic simple suture of ovary ............................................................ | Y | 13 | $\begin{aligned} & 354,355, \\ & 357,358, \\ & 359 \end{aligned}$ |
|  |  |  | 13 |  |
|  |  |  | 21 |  |
|  |  |  | 24 | 442, 443, 486 |
| 65.75 | Laparoscopic reimplantation of ovary .............................................................. | Y | 13 | 354, 355, |
|  |  |  | 13 | $\begin{aligned} & 357,358, \\ & 359 \end{aligned}$ |
|  |  |  | 24 | $442,443,486$354,355 |
| 65.76 | Laparoscopic salpingo-oophoroplasty .......................................................... | Y | 13 |  |
|  |  |  | 13 | 357, 358, |
|  |  |  | 21 |  |
|  |  |  | 24 | 442, 443, 486 |
| 65.81 | Laparoscopic lysis of adhesions of ovary and fallopian tube ........................... | Y | 13 | $354,355$ |
|  |  |  | 13 | 357, 358, |
|  |  |  | 21 | 359 |
|  |  |  | 24 | 442, 443, 486 |
| 65.89 | Other lysis of adhesions of ovary and fallopian tube ....................................... | Y | 13 | $\begin{aligned} & 354,355, \\ & 357,358, \\ & 359 \end{aligned}$ |
|  |  |  | 13 |  |
|  |  |  | 21 |  |
|  |  |  | 24 | 442, 443, 486 |
| 68.23 | Endometrial ablation ................................................................................ | Y | 13 | $\begin{aligned} & 354,355,357,358, \\ & 359 \end{aligned}$ |
| 68.51 | Laparoscopically assisted vaginal hysterectomy (LAVH) .................................. | Y | 13 | $\begin{aligned} & 354,355, \\ & 357,358, \end{aligned}$ |
|  |  |  | 13 |  |
|  |  |  | 14 | 359, 375 |
|  | Other vaginal hysterectomy ......................................................................... | Y | 13 | 354, 355, |
|  |  |  | 13 | 357, 358, |
|  |  |  | 14 | 359, 375 |

Table 6c.-Table Diagnosis Codes

| Diagnosis code | Description | CC | MDC | DRG |
| :---: | :---: | :---: | :---: | :---: |
| 291.8 | Other specified alcoholic psychosis | Y | 20 | 434, 435, 436, 437 |
| 466.1 | Acute bronchiolitis | N | 4 | 96, 97, 98 |
| 575.1 | Other cholecystitis | N | 7 | 207, 208 |
| 752.5 | Undescended testicle ............................................................................ | N | 12 | 352 |
| 752.6 | Hypospadias and epispadias .................................................................. | N | 12 | 352 |
| 753.2 | Obstructive defects of renal pelvis and ureter | N | 11 | 331, 332, 333 |
| 758.8 | Other conditions due to sex chromosome anomalies ................................. | N | 12 | 352 |
|  |  |  | 13 | 358, 359, 369 |
| 922.3 | Contusion of back | N | 9 | 280, 281, |
|  |  |  | 9 | 282 |
|  |  |  | 24 | 484, 486, 487 |
| 995.5 | Child maltreatment syndrome ................................................................ | N | 21 | 454, 455 |
| 998.1 | Hemorrhage or hematoma complicating a procedure ................................. | Y | 15 | $387{ }^{1}, 389{ }^{1}$ |
|  |  |  | 21 | 452, 453 |
| 998.5 | Postoperative infection .......................................................................... | Y | 15 | $387{ }^{1}, 389{ }^{1}$ |
|  |  |  | 18 | 418 |
| V15.4 | Psychological trauma ............................................................................. | N | 23 | 467 |
| V61.1 | Marital problems .................................................................................. | N | 23 | 467 |

${ }^{1}$ Diagnosis code is classified as a "major problem" in these DRGs.
Table 6d.-Invalid Procedure Codes

| Procedure code | Description | OR | MDC | DRG |
| :---: | :---: | :---: | :---: | :---: |
| 47.0 | Appendectomy ...................................................................................... | Y | 6 | 164, 165, 166, 167 |
| 47.1 | Incidental appendectomy | Y | 13 | 365, |
|  |  |  | 21 | 442, 443, |
|  |  |  | 24 | 486 |
| 54.5 | Lysis of peritoneal adhesions | Y | 6 | 150, 151 |
|  |  |  | 7 | 201 |
|  |  |  | 13 | 365 |
|  |  |  | 21 | 442, 443 |
|  |  |  | 24 | 486 |
| 59.01 | Ureterolysis with freeing or repositioning of ureter for retroperitoneal fibrosis | Y | 11 | 303, 304, |
|  |  |  | 11 | 305 |
|  |  |  | 12 | 344, 345 |
|  |  |  | 13 | 365 |
|  |  |  | 17 | 400, 406, |
|  |  |  | 17 | $407$ |
|  |  |  | 21 | 442, 443 |
|  |  |  | 24 | 486 |
| 65.0 | Oophorotomy ....................................................................................... | Y | 13 | $\begin{aligned} & 354,355,357,358, \\ & 359 \end{aligned}$ |
| 65.3 | Unilateral oophorectomy ....................................................................... | Y | 13 | $\begin{gathered} 354,355,357,358, \\ 359 \end{gathered}$ |
| 65.4 | Unilateral salpingo-oophorectomy ........................................................... | Y | 13 | $\begin{aligned} & 354,355,357,358, \\ & 359 \end{aligned}$ |
| 65.8 | Lysis of adhesions of ovary and fallopian tube ......................................... | Y | 13 | 354, 355, |
|  |  |  | 13 | 357, 358, |
|  |  |  | 21 | 359 |
|  |  |  | 24 | 442, 443, 486 |
| 68.5 | Vaginal hysterectomy | Y | 13 | 354, 355, |
|  |  |  | 13 | 357, 358, |
|  |  |  | 13 | 359 |
|  |  |  | 14 | 375 |

Table 6e.-Revised Diagnosis Code Titles

| Diagnosis code | Description | CC | MDC | DRG |
| :---: | :---: | :---: | :---: | :---: |
| 414.00 | Coronary atherosclerosis of unspecified type of vessel, native or graft | N | 5 | 132, 133 |
| 995.81 | Adult physical abuse ...................................................................... | N | 21 | 454, 455 |
| 997.60 | Amputation stump complication, unspecified complication | N | 8 | 256 |
| 997.61 | Amputation stump complication, neuroma of amputation stump | N | 8 | 256 |
| 997.62 | Amputation stump complication, infection (chronic) .... | Y | 8 | 256 |
| 997.69 | Amputation stump complication, not elsewhere classified | N | 8 | 256 |

Table 6e.-Revised Diagnosis Code Titles-Continued

| Diagnosis code | Description | CC | MDC | DRG |
| :---: | :---: | :---: | :---: | :---: |
| V61.20 | Counseling for parent-child problem, unspecified ............................................... | N | 23 | 467 |
| V61.21 | Counseling for victim of child abuse .................................................................. | N | 23 | 467 |
| V67.4 | Follow-up examination, following treatment of healed fracture .............................. | N | 23 | 465, 466 |

Table 6f.-Revised Procedure Code Titles

| Procedure code | Description | OR | MDC | DRG |
| :---: | :---: | :---: | :---: | :---: |
| 59.11 | Other lysis of perivesical adhesions ............................................................. | Y | 11 | 308, 309 |
|  |  |  | 12 | 344, 345 |
|  |  |  | 13 | 365 |
|  |  |  | 17 | 400, 406, |
|  |  |  | 17 | 407 |
|  |  |  | 21 | 442, 443 |
|  |  |  | 24 | 486 |
| 65.51 | Other removal of both ovaries at same operative episode ............................... | Y | 9 | 269, 270 |
|  |  |  | 13 | 354, 355 |
|  |  |  | 13 | 357, 358, 359 |
| 65.52 | Other removal of remaining ovary ................................................................ | Y | 9 | 269, 270 |
|  |  |  | 13 | 354, 355 |
|  |  |  | 13 | 357, 358, 359 |
| 65.61 | Other removal of both ovaries and tubes at same operative episode ................ | Y | 9 | 269, 270 |
|  |  |  | 13 | 354, 355, |
|  |  |  | 13 | 357, 358, 359 |
| 65.62 | Other removal of remaining ovary and tube .................................................. | Y | 13 | $\begin{gathered} 354,355,357,358, \\ 359 \end{gathered}$ |
| 65.71 | Other simple suture of ovary | Y | 13 | 354, 355, |
|  |  |  | 13 | 357, 358, |
|  |  |  | 13 | $359$ |
|  |  |  | 21 | 442, 443 |
|  |  |  | 24 | 486 |
| 65.72 | Other reimplantation of ovary | Y | 13 | $354,355,$ |
|  |  |  | 13 | 357, 358, |
|  |  |  | 21 | 359 |
|  |  |  | 24 | 442, 443, 486 |
| 65.73 | Other salpingo-oophoroplasty ...................................................................... | Y | 11 | 308, 309, |
|  |  |  | 12 | 344, 345 |
|  |  |  | 13 | 365 |
|  |  |  | 17 | 400, 406, |
|  |  |  | 17 | 407 |
|  |  |  | 21 | 442, 443 |
|  |  |  | 24 | 486 |

Table 6G.-Additions to the CC Exclusions List
Page 1 of 5 Pages
CCs that are added to the list are in Table 6G-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.

| *0011 | 00844 | *00800 | 00844 | *0085 | 00844 | *01133 | *01182 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 00841 | 00845 | 00841 | 00845 | 00841 | 00845 | 4831 | 4831 |
| 00842 | 00846 | 00842 | 00846 | 00842 | 00846 | *01134 | *01183 |
| 00843 | 00847 | 00843 | 00847 | 00843 | 00847 | 4831 | 4831 |
| 00844 | *0061 | 00844 | *00841 | 00844 | *0088 | *01135 | *01184 |
| 00845 | 00841 | 00845 | 00841 | 00845 | 00841 | 4831 | 4831 |
| 00846 | 00842 | 00846 | 00842 | 00846 | 00842 | *01136 | *01185 |
| 00847 | 00843 | 00847 | 00843 | 00847 | 00843 | 4831 | 4831 |
| *0020 | 00844 | *00801 | 00844 | *00861 | 00844 | *01140 | *01186 |
| 00841 | 00845 | 00841 | 00845 | 00841 | 00845 | 4831 | 4831 |
| 00842 | 00846 | 00842 | 00846 | 00842 | 00846 | *01141 | *01190 |
| 00843 | 00847 | 00843 | 00847 | 00843 | 00847 | 4831 | 4831 |
| 00844 | *0062 | 00844 | *00842 | 00844 | *0090 | *01142 | *01191 |
| 00845 | 00841 | 00845 | 00841 | 00845 | 00841 | 4831 | 4831 |
| 00846 | 00842 | 00846 | 00842 | 00846 | 00842 | *01143 | *01192 |
| 00847 | 00843 | 00847 | 00843 | 00847 | 00843 | 4831 | 4831 |
| *0029 | 00844 | *00802 | 00844 | *00862 | 00844 | *01144 | *01193 |
| 00841 | 00845 | 00841 | 00845 | 00841 | 00845 | 4831 | 4831 |
| 00842 | 00846 | 00842 | 00846 | 00842 | 00846 | *01145 | *01194 |
| 00843 | 00847 | 00843 | 00847 | 00843 | 00847 | 4831 | 4831 |
| 00844 | *0069 | 00844 | *00843 | 00844 | *01100 | *01146 | *01195 |
| 00845 | 00841 | 00845 | 00841 | 00845 | 4831 | 4831 | 4831 |
| 00846 | 00842 | 00846 | 00842 | 00846 | *01101 | *01150 | *01196 |
| 00847 | 00843 | 00847 | 00843 | 00847 | 4831 | 4831 | 4831 |
| *0030 | 00844 | *00803 | 00844 | *00863 | *01102 | *01151 | *01200 |
| 00841 | 00845 | 00841 | 00845 | 00841 | 4831 | 4831 | 4831 |
| 00842 | 00846 | 00842 | 00846 | 00842 | *01103 | *01152 | *01201 |
| 00843 | 00847 | 00843 | 00847 | 00843 | 4831 | 4831 | 4831 |
| 00844 | *0071 | 00844 | *00844 | 00844 | *01104 | *01153 | *01202 |
| 00845 | 00841 | 00845 | 00841 | 00845 | 4831 | 4831 | 4831 |
| 00846 | 00842 | 00846 | 00842 | 00846 | *01105 | *01154 | *01203 |
| 00847 | 00843 | 00847 | 00843 | 00847 | 4831 | 4831 | 4831 |
| *0049 | 00844 | *00804 | 00844 | *00864 | *01106 | *01155 | *01204 |
| 00841 | 00845 | 00841 | 00845 | 00841 | 4831 | 4831 | 4831 |
| 00842 | 00846 | 00842 | 00846 | 00842 | *01110 | *01156 | *01205 |
| 00843 | 00847 | 00843 | 00847 | 00843 | 4831 | 4831 | 4831 |
| 00844 | *0072 | 00844 | *00845 | 00844 | *01111 | *01160 | *01206 |
| 00845 | 00841 | 00845 | 00841 | 00845 | 4831 | 4831 | 4831 |
| 00846 | 00842 | 00846 | 00842 | 00846 | *01112 | *01161 | *01210 |
| 00847 | 00843 | 00847 | 00843 | 00847 | 4831 | 4831 | 4831 |
| *0050 | 00844 | *00809 | 00844 | *00865 | *01113 | *01162 | *01211 |
| 00841 | 00845 | 00841 | 00845 | 00841 | 4831 | 4831 | 4831 |
| 00842 | 00846 | 00842 | 00846 | 00842 | *01114 | *01163 | *01212 |
| 00843 | 00847 | 00843 | 00847 | 00843 | 4831 | 4831 | 4831 |
| 00844 | *0073 | 00844 | *00846 | 00844 | *01115 | *01164 | *01213 |
| 00845 | 00841 | 00845 | 00841 | 00845 | 4831 | 4831 | 4831 |
| 00846 | 00842 | 00846 | 00842 | 00846 | *01116 | *01165 | *01214 |
| 00847 | 00843 | 00847 | 00843 | 00847 | 4831 | 4831 | 4831 |
| *0051 | 00844 | *0081 | 00844 | *00866 | *01120 | *01166 | *01215 |
| 00841 | 00845 | 00841 | 00845 | 00841 | 4831 | 4831 | 4831 |
| 00842 | 00846 | 00842 | 00846 | 00842 | *01121 | *01170 | *01216 |
| 00843 | 00847 | 00843 | 00847 | 00843 | 4831 | 4831 | 4831 |
| 00844 | *0078 | 00844 | *00847 | 00844 | *01122 | *01171 | *01280 |
| 00845 | 00841 | 00845 | 00841 | 00845 | 4831 | 4831 | 4831 |
| 00846 | 00842 | 00846 | 00842 | 00846 | *01123 | *01172 | *01281 |
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| 585 | 00846 | 99851 | 99673 |  |
| 5996 | 00847 | 99859 | 99674 |  |
| 78820 | *7755 | 99883 | 99675 |  |
| 78829 | 00841 | *9980 | 99676 |  |
| *75322 | 00842 | 99811 | 99677 |  |
| 5845 | 00843 | 99812 | 99678 |  |
| 5846 | 00844 | 99813 | 99679 |  |
| 5847 | 00845 | *99811 | 99690 |  |
| 5849 | 00846 | 9585 | 99691 |  |
| 585 | 00847 | 9954 | 99692 |  |
| 5996 | *7756 | 9980 | 99693 |  |
| 78820 | 00841 | 99811 | 99694 |  |
| 78829 | 00842 | 99812 | 99695 |  |
| *75323 | 00843 | 99813 | 99696 |  |
| 5845 | 00844 | *99812 | 99699 |  |
| 5846 | 00845 | 9585 | 99700 |  |
| 5847 | 00846 | 9954 | 99701 |  |
| 5849 | 00847 | 9980 | 99702 |  |
| 585 | *7757 | 99811 | 99709 |  |

Table 6h.-Deletions to the CC Exclusions List
Page 1 of 1 Page
CCs that are deleted from the list are in Table 6H-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.

| *2910 | 30502 | 2918 | 2918 | 2918 | 9981 | 57421 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2918 | 30530 | *30303 | *30471 | *30563 | *53261 | 57430 |
| *2911 | 30531 | 2918 | 2918 | 2918 | 9981 | 57431 |
| 2918 | 30532 | *30390 | *30472 | *30570 | *53300 | 57440 |
| *2912 | 30540 | 2918 | 2918 | 2918 | 9981 | 57441 |
| 2918 | 30541 | *30391 | *30473 | *30571 | *53301 | 57450 |
| *2913 | 30542 | 2918 | 2918 | 2918 | 9981 | 57451 |
| 2918 | 30550 | *30392 | *30480 | *30572 | *53320 | 5750 |
| *2914 | 30551 | 2918 | 2918 | 2918 | 9981 | *5780 |
| 2918 | 30552 | *30393 | *30481 | *30573 | *53321 | 9981 |
| *2915 | 30560 | 2918 | 2918 | 2918 | 9981 | *5781 |
| 2918 | 30561 | *30400 | *30482 | *30580 | *53340 | 9981 |
| *2918 | 30562 | 2918 | 2918 | 2918 | 9981 | *5789 |
| 2910 | 30570 | *30401 | *30483 | *30581 | *53341 | 9981 |
| 2911 | 30571 | 2918 | 2918 | 2918 | 9981 | *7526 |
| 2912 | 30572 | *30402 | *30490 | *30582 | *53360 | 5970 |
| 2913 | 30590 | 2918 | 2918 | 2918 | 9981 | 5981 |
| 2914 | 30591 | *30403 | *30491 | *30583 | *53361 | 5982 |
| 2918 | 30592 | 2918 | 2918 | 2918 | 9981 | 5994 |
| 2919 | *2919 | *30410 | *30492 | *30590 | *53400 | *7532 |
| 2920 | 2918 | 2918 | 2918 | 2918 | 9981 | 5845 |
| 29211 | *2920 | *30411 | *30493 | *30591 | *53401 | 5846 |
| 29212 | 2918 | 2918 | 2918 | 2918 | 9981 | 5847 |
| 2922 | *29211 | *30412 | *30500 | *30592 | *53420 | 5849 |
| 29281 | 2918 | 2918 | 2918 | 2918 | 9981 | 585 |
| 29282 | *29212 | *30413 | *30501 | *30593 | *53421 | 5996 |
| 29283 | 2918 | 2918 | 2918 | 2918 | 9981 | 78820 |
| 29284 | *2922 | *30420 | *30502 | *4560 | *53440 | 78829 |
| 29289 | 2918 | 2918 | 2918 | 9981 | 9981 | *7724 |
| 2929 | *29281 | *30421 | *30503 | *45620 | *53441 | 9981 |
| 29381 | 2918 | 2918 | 2918 | 9981 | 9981 | *7903 |
| 29382 | *29282 | *30422 | *30520 | *53081 | *53460 | 2918 |
| 29383 | 2918 | 2918 | 2918 | 9981 | 9981 | *99791 |
| 30300 | *29283 | *30423 | *30521 | *53082 | *53461 | 9981 |
| 30301 | 2918 | 2918 | 2918 | 9981 | 9981 | 9985 |
| 30302 | *29284 | *30430 | *30522 | *53083 | *53501 | *99799 |
| 30390 | 2918 | 2918 | 2918 | 9981 | 9981 | 9981 |
| 30391 | *29289 | *30431 | *30523 | *53089 | *53511 | 9985 |
| 30392 | 2918 | 2918 | 2918 | 9981 | 9981 | *9980 |
| 30400 | *2929 | *30432 | *30530 | *53100 | *53521 | 9981 |
| 30401 | 2918 | 2918 | 2918 | 9981 | 9981 | *9981 |
| 30402 | *2930 | *30433 | *30531 | *53101 | *53531 | 9585 |
| 30410 | 2918 | 2918 | 2918 | 9981 | 9981 | 9954 |
| 30411 | *2931 | *30440 | *30532 | *53120 | *53541 | 9980 |
| 30412 | 2918 | 2918 | 2918 | 9981 | 9981 | 9981 |
| 30420 | *29381 | *30441 | *30533 | *53121 | *53551 | *9985 |
| 30421 | 2918 | 2918 | 2918 | 9981 | 9981 | 9985 |
| 30422 | *29382 | *30442 | *30540 | *53140 | *53561 | *99881 |
| 30440 | 2918 | 2918 | 2918 | 9981 | 9981 | 9981 |
| 30441 | *29383 | *30443 | *30541 | *53141 | *53783 | 9985 |
| 30442 | 2918 | 2918 | 2918 | 9981 | 9981 | *99889 |
| 30450 | *29389 | *30450 | *30542 | *53160 | *56202 | 9981 |
| 30451 | 2918 | 2918 | 2918 | 9981 | 9981 | 9985 |
| 30452 | *2939 | *30451 | *30543 | *53161 | *56203 | *9989 |
| 30460 | 2918 | 2918 | 2918 | 9981 | 9981 | 9981 |
| 30461 | *2940 | *30452 | *30550 | *53200 | *56212 | 9985 |
| 30462 | 2918 | 2918 | 2918 | 9981 | 9981 |  |
| 30470 | *2941 | 30453 | *30551 | *53201 | *56213 |  |
| 30471 | 2918 | 2918 | 2918 | 9981 | 9981 |  |
| 30472 | *2948 | *30460 | *30552 | *53220 | *5693 |  |
| 30480 | 2918 | 2918 | 2918 | 9981 | 9981 |  |
| 30481 | *2949 | *30461 | *30553 | *53221 | *56985 |  |
| 30482 | 2918 | 2918 | 2918 | 9981 | 9981 |  |
| 30490 | *30300 | *30462 | *30560 | *53240 | *5751 |  |
| 30491 | 2918 | 2918 | 2918 | 9981 | 57400 |  |
| 30492 | *30301 | *30463 | *30561 | *53241 | 57401 |  |
| 30500 | 2918 | 2918 | 2918 | 9981 | 57410 |  |
| 30501 | *30302 | *30470 | *30562 | *53260 | 57411 |  |

Table 7a.-Medicare Prospective Payment System Selected Percentile Lengths of Stay
[FY95 MEDPAR Update 12/95 Grouper V13.0]

|  | DRG | Number discharges | Arithmetic mean LOS | $\begin{aligned} & \text { 10th } \\ & \text { percentile } \end{aligned}$ | $\begin{gathered} \text { 25th } \\ \text { percentile } \end{gathered}$ | 50th percentile | 75th percentile | 90th percentile |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\ldots$ | 32723 | 11.0372 | 3 | 4 | 8 | 14 | 23 |
| 2 | .................... | 6165 | 11.5178 | 3 | 5 | 8 | 14 | 23 |
| 3 | .................... | 1 | 10.0000 | 10 | 10 | 10 | 10 | 10 |
| 4 | ......... | 5866 | 9.1202 | 2 | 3 | 6 | 11 | 20 |
| 5 | . | 95896 | 4.4060 | 2 | 2 | 3 | 5 | 9 |
| 6 | ............ | 444 | 3.3581 | 1 | 1 | 2 | 4 | 7 |
| 7 | .............. | 10526 | 12.5752 | 3 | 5 | 8 | 14 | 25 |
| 8 | ..... | 2248 | 4.1348 | 1 | 1 | 3 | 5 | 9 |
| 9 | $\ldots$ | 1655 | 7.5287 | 2 | 3 | 5 | 9 | 16 |
| 10 | ........ | 19194 | 7.9610 | 2 | 3 | 6 | 10 | 16 |
| 11 | $\ldots$ | 2866 | 4.9215 | 1 | 2 | 4 | 6 | 10 |
| 12 | ............... | 23355 | 7.5868 | 2 | 3 | 5 | 9 | 14 |
| 13 |  | 5969 | 6.2406 | 2 | 4 | 5 | 7 | 11 |
| 14 | ..... | 351205 | 7.4178 | 2 | 3 | 6 | 9 | 14 |
| 15 | ...... | 138882 | 4.4367 | 1 | 2 | 3 | 5 | 8 |
| 16 |  | 11877 | 6.5858 | 2 | 3 | 5 | 8 | 12 |
| 17 | .... | 3217 | 4.0258 | 1 | 2 | 3 | 5 | 7 |
| 18 | ........ | 22783 | 6.3682 | 2 | 3 | 5 | 8 | 12 |
| 19 |  | 7433 | 4.5271 | 1 | 2 | 4 | 6 | 8 |
| 20 |  | 5990 | 11.2129 | 3 | 5 | 9 | 15 | 22 |
| 21 | ........ | 1114 | 7.8905 | 2 | 3 | 6 | 10 | 16 |
| 22 |  | 2585 | 4.8584 | 2 | 2 | 4 | 6 | 9 |
| 23 |  | 5720 | 5.0336 | 1 | 2 | 4 | 6 | 10 |
| 24 | .... | 53620 | 5.8059 | 2 | 3 | 4 | 7 | 11 |
| 25 | . | 21830 | 3.8592 | 1 | 2 | 3 | 5 | 7 |
| 26 |  | 46 | 4.6087 | 1 | 2 | 3 | 6 | 10 |
| 27 | $\ldots$ | 3475 | 6.2774 | 1 | 1 | 4 | 7 | 15 |
| 28 |  | 11179 | 7.0945 | 1 | 3 | 5 | 9 | 14 |
| 29 | $\ldots$ | 3684 | 4.0581 | 1 | 2 | 3 | 5 | 8 |
| 31 | ..... | 3167 | 5.4436 | 1 | 2 | 4 | 6 | 10 |
| 32 | ... | 1723 | 3.1573 | 1 | 1 | 2 | 4 | 6 |
| 34 |  | 16272 | 6.4700 | 2 | 3 | 5 | 8 | 12 |
| 35 | ..... | 3648 | 4.2928 | 1 | 2 | 3 | 5 | 8 |
| 36 | ... | 9010 | 1.5970 | 1 | 1 | 1 | 2 | 3 |
| 37 |  | 1878 | 4.0213 | 1 | 1 | 3 | 5 | 8 |
| 38 |  | 234 | 2.5385 | 1 | 1 | 2 | 3 | 5 |
| 39 | ..... | 3289 | 1.9663 | 1 | 1 | 1 | 2 | 4 |
| 40 |  | 2779 | 3.3843 | 1 | 1 | 2 | 4 | 7 |
| 42 |  | 7351 | 2.2049 | 1 | 1 | 1 | 2 | 5 |
| 43 | ... | 97 | 4.0928 | 1 | 2 | 3 | 5 | 8 |
| 44 |  | 1614 | 5.7038 | 2 | 3 | 5 | 7 | 10 |
| 45 |  | 2412 | 3.8163 | 1 | 2 | 3 | 5 | 7 |
| 46 |  | 2952 | 5.4814 | 1 | 2 | 4 | 7 | 10 |
| 47 |  | 1333 | 3.7802 | 1 | 2 | 3 | 5 | 7 |
| 49 |  | 2139 | 5.6396 | 1 | 2 | 4 | 7 | 11 |
| 50 |  | 3347 | 2.1138 | 1 | 1 | 2 | 2 | 3 |
| 51 |  | 308 | 2.9870 | 1 | 1 | 1 | 3 | 7 |
| 52 |  | 78 | 3.6282 | 1 | 1 | 2 | 3 | 8 |
| 53 |  | 3340 | 3.5548 | 1 | 1 | 2 | 4 | 8 |
| 54 |  | 1 | 1.0000 | 1 | 1 | 1 | 1 | 1 |
| 55 |  | 1924 | 2.9569 | 1 | 1 | 2 | 3 | 6 |
| 56 |  | 704 | 2.7514 | 1 | 1 | 2 | 3 | 6 |
| 57 |  | 637 | 4.0973 | 1 | 1 | 3 | 5 | 8 |
| 59 |  | 88 | 3.7045 | 1 | 1 | 2 | 4 | 7 |
| 60 |  | 3 | 1.0000 | 1 | 1 | 1 | 1 | 1 |
| 61 |  | 217 | 5.2535 | 1 | 1 | 2 | 7 | 14 |
| 62 |  | 1 | 2.0000 | 2 | 2 | 2 | 2 | 2 |
| 63 | ............ | 3996 | 4.6652 | 1 | 2 | 3 | 5 | 10 |
| 64 |  | 3351 | 7.5067 | 1 | 2 | 5 | 9 | 16 |
| 65 |  | 29525 | 3.4147 | 1 | 2 | 3 | 4 | 6 |
| 66 | $\ldots$ | 6479 | 3.5658 | 1 | 2 | 3 | 4 | 6 |
| 67 |  | 510 | 4.2039 | 2 | 2 | 3 | 5 | 8 |
| 68 | ............. | 9443 | 4.7605 | 2 | 3 | 4 | 6 | 9 |
| 69 | ... | 3062 | 3.7606 | 1 | 2 | 3 | 5 | 7 |
| 70 | ................... | 30 | 3.0667 | 1 | 2 | 3 | 3 | 5 |
| 71 | ..................... | 90 | 4.1556 | 1 | 2 | 3 | 5 | 8 |
| 72 | ... | 561 | 4.3529 | 1 | 2 | 3 | 5 | 9 |
| 73 | $\ldots$ | 6017 | 4.9493 | 1 | 2 | 4 | 6 | 9 |
| 75 |  | 39401 | 11.1088 | 4 | 6 | 8 | 14 | 21 |
| 76 | ................... | 38785 | 12.4555 | 3 | 6 | 10 | 15 | 24 |

Table 7a.-Medicare Prospective Payment System Selected Percentile Lengths of Stay—Continued
[FY95 MEDPAR Update 12/95 Grouper V13.0]

|  | DRG | Number discharges | Arithmetic mean LOS | 10th percentile | $\begin{aligned} & \text { 25th } \\ & \text { percentile } \end{aligned}$ | 50th percentile | 75th percentile | 90th percentile |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 77 | $\ldots$ | 2331 | 5.5268 | 1 | 2 | 4 | 8 | 12 |
| 78 | ........ | 28979 | 8.2306 | 4 | 5 | 7 | 10 | 13 |
| 79 | .......... | 207606 | 9.2488 | 3 | 5 | 7 | 11 | 17 |
| 80 | ..... | 8932 | 6.6160 | 2 | 4 | 5 | 8 | 12 |
| 81 | ..... | 9 | 7.2222 | 1 | 2 | 6 | 11 | 12 |
| 82 | .... | 68573 | 7.8881 | 2 | 3 | 6 | 10 | 16 |
| 83 | $\ldots$ | 6976 | 6.3817 | 2 | 3 | 5 | 8 | 12 |
| 84 | .... | 1430 | 3.7217 | 1 | 2 | 3 | 5 | 7 |
| 85 |  | 18398 | 7.3317 | 2 | 3 | 6 | 9 | 14 |
| 86 |  | 1372 | 4.5117 | 1 | 2 | 4 | 6 | 9 |
| 87 | ....... | 58612 | 6.7959 | 1 | 3 | 6 | 9 | 13 |
| 88 | .... | 345365 | 6.0658 | 2 | 3 | 5 | 7 | 11 |
| 89 |  | 415072 | 7.0754 | 3 | 4 | 6 | 9 | 12 |
| 90 | .... | 40306 | 5.1392 | 2 | 3 | 4 | 6 | 9 |
| 91 | ......... | 50 | 4.5800 | 2 | 2 | 3 | 6 | 8 |
| 92 | $\ldots$ | 11849 | 7.2524 | 2 | 4 | 6 | 9 | 13 |
| 93 | $\ldots$ | 1262 | 4.9374 | 1 | 3 | 4 | 6 | 9 |
| 94 | ....... | 12531 | 7.0527 | 2 | 3 | 5 | 9 | 14 |
| 95 | ..... | 1365 | 4.1341 | 1 | 2 | 3 | 5 | 8 |
| 96 | $\ldots$ | 60887 | 5.5101 | 2 | 3 | 5 | 7 | 10 |
| 97 | ......... | 25835 | 4.2614 | 2 | 2 | 4 | 5 | 7 |
| 98 | $\ldots$ | 19 | 4.4737 | 1 | 1 | 3 | 6 | 10 |
| 99 | ....... | 25241 | 3.4914 | 1 | 2 | 3 | 4 | 7 |
| 100 |  | 10191 | 2.4244 | 1 | 1 | 2 | 3 | 4 |
| 101 | ..... | 19810 | 5.1725 | 1 | 2 | 4 | 7 | 10 |
| 102 | .... | 4399 | 3.1298 | 1 | 1 | 2 | 4 | 6 |
| 103 | $\ldots . .$. | 445 | 39.3528 | 10 | 15 | 29 | 53 | 80 |
| 104 | ..... | 22854 | 14.5510 | 6 | 8 | 12 | 18 | 26 |
| 105 | ..... | 19821 | 10.9286 | 5 | 7 | 9 | 13 | 19 |
| 106 | $\ldots .$. | 96166 | 11.7202 | 6 | 8 | 10 | 14 | 19 |
| 107 | .... | 61255 | 8.8314 | 5 | 6 | 7 | 10 | 14 |
| 108 | $\ldots$ | 6560 | 12.5834 | 4 | 7 | 10 | 15 | 23 |
| 110 | ....... | 59173 | 10.7795 | 3 | 6 | 9 | 13 | 20 |
| 111 | ..... | 5800 | 6.6512 | 3 | 5 | 6 | 8 | 10 |
| 112 | .... | 191511 | 4.6987 | 1 | 2 | 4 | 6 | 9 |
| 113 | ..... | 45003 | 14.3320 | 4 | 6 | 10 | 17 | 28 |
| 114 | ..... | 8788 | 9.4467 | 2 | 4 | 7 | 12 | 18 |
| 115 |  | 10395 | 11.3715 | 4 | 6 | 9 | 14 | 20 |
| 116 | .... | 81298 | 5.4177 | 1 | 2 | 4 | 7 | 11 |
| 117 | .... | 4482 | 4.1142 | 1 | 1 | 2 | 5 | 8 |
| 118 |  | 6687 | 3.1952 | 1 | 1 | 2 | 4 | 7 |
| 119 | .................... | 1705 | 5.4985 | 1 | 1 | 3 | 7 | 13 |
| 120 | ... | 40465 | 9.1860 | 1 | 2 | 6 | 12 | 21 |
| 121 |  | 158928 | 7.4120 | 2 | 4 | 6 | 9 | 13 |
| 122 |  | 87089 | 5.0036 | 1 | 3 | 5 | 6 | 9 |
| 123 | $\ldots$ | 46281 | 4.6510 | 1 | 1 | 2 | 6 | 11 |
| 124 |  | 138564 | 4.8885 | 1 | 2 | 4 | 6 | 9 |
| 125 |  | 59232 | 3.0694 | 1 | 1 | 2 | 4 | 6 |
| 126 | ................... | 4619 | 13.9985 | 4 | 7 | 11 | 17 | 29 |
| 127 |  | 670461 | 6.2113 | 2 | 3 | 5 | 8 | 12 |
| 128 | ............ | 19612 | 6.7259 | 3 | 4 | 6 | 8 | 11 |
| 129 | ....... | 4584 | 3.4271 | 1 | 1 | 1 | 4 | 9 |
| 130 | ............ | 91826 | 6.6818 | 2 | 4 | 6 | 8 | 12 |
| 131 | ........... | 25592 | 5.1808 | 1 | 3 | 5 | 7 | 8 |
| 132 | .................... | 127274 | 3.5716 | 1 | 2 | 3 | 4 | 6 |
| 133 | .................... | 5813 | 2.9696 | 1 | 1 | 2 | 4 | 5 |
| 134 | $\ldots$ | 28493 | 3.9142 | 1 | 2 | 3 | 5 | 7 |
| 135 | ........... | 7141 | 4.9779 | 1 | 2 | 4 | 6 | 9 |
| 136 | ............ | 1014 | 3.2209 | 1 | 2 | 3 | 4 | 6 |
| 138 | $\ldots$ | 195932 | 4.5466 | 1 | 2 | 3 | 6 | 8 |
| 139 | $\ldots$ | 67345 | 2.9337 | 1 | 1 | 2 | 4 | 5 |
| 140 | .................... | 175930 | 3.4831 | 1 | 2 | 3 | 4 | 6 |
| 141 | $\ldots$ | 76111 | 4.4923 | 1 | 2 | 3 | 5 | 8 |
| 142 | $\ldots$ | 35701 | 3.1999 | 1 | 2 | 2 | 4 | 6 |
| 143 | ............. | 132318 | 2.6077 | 1 | 1 | 2 | 3 | 5 |
| 144 | $\ldots$ | 66761 | 5.6816 | 1 | 2 | 4 | 7 | 11 |
| 145 | ..................... | 6735 | 3.2413 | 1 | 1 | 2 | 4 | 6 |
| 146 | .................... | 8626 | 11.2570 | 6 | 7 | 9 | 13 | 18 |
| 147 | ........... | 1624 | 7.3651 | 4 | 6 | 7 | 9 | 11 |
| 148 | .................... | 140141 | 13.4097 | 6 | 8 | 11 | 16 | 24 |

Table 7a.—Medicare Prospective Payment System Selected Percentile Lengths of Stay—Continued
[FY95 MEDPAR Update 12/95 Grouper V13.0]

|  | DRG | Number discharges | Arithmetic mean LOS | 10th percentile | $\begin{gathered} 25 \text { th } \\ \text { percentile } \end{gathered}$ | 50th percentile | 75th percentile | 90th percentile |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 149 | ......................... | 15769 | 7.7194 | 4 | 6 | 7 | 9 | 11 |
| 150 | ........ | 22516 | 11.6884 | 4 | 7 | 10 | 14 | 21 |
| 151 | ..... | 4518 | 6.4748 | 2 | 4 | 6 | 8 | 11 |
| 152 | ......................... | 4469 | 9.0257 | 4 | 6 | 8 | 10 | 15 |
| 153 | ......................... | 1710 | 6.1655 | 3 | 4 | 6 | 8 | 9 |
| 154 | ......................... | 35661 | 14.9524 | 5 | 8 | 12 | 18 | 28 |
| 155 | ......................... | 4557 | 5.8824 | 2 | 3 | 5 | 8 | 10 |
| 156 | ........... | 4 | 15.7500 | 4 | 4 | 10 | 22 | 27 |
| 157 | ........................ | 11419 | 5.7824 | 1 | 2 | 4 | 7 | 11 |
| 158 | ......................... | 5082 | 2.9124 | 1 | 1 | 2 | 4 | 6 |
| 159 | ......................... | 17132 | 5.3155 | 1 | 2 | 4 | 7 | 10 |
| 160 | ........................... | 9971 | 2.9553 | 1 | 1 | 2 | 4 | 5 |
| 161 | ......................... | 14786 | 4.3655 | 1 | 2 | 3 | 5 | 9 |
| 162 | ....................... | 7990 | 2.1914 | 1 | 1 | 2 | 3 | 4 |
| 163 | ......................... | 5 | 2.2000 | 1 | 1 | 1 | 3 | 5 |
| 164 | ......................... | 4995 | 9.2993 | 4 | 6 | 8 | 11 | 16 |
| 165 | ........................ | 1674 | 5.7575 | 3 | 4 | 5 | 7 | 9 |
| 166 | ........................ | 3283 | 5.7286 | 2 | 3 | 4 | 7 | 10 |
| 167 | ......................... | 2284 | 3.2439 | 1 | 2 | 3 | 4 | 6 |
| 168 | ......................... | 1739 | 4.8562 | 1 | 2 | 3 | 6 | 10 |
| 169 | ......................... | 1025 | 2.5473 | 1 | 1 | 2 | 3 | 5 |
| 170 | ......................... | 12463 | 12.4436 | 2 | 5 | 9 | 15 | 25 |
| 171 | ......................... | 1157 | 5.4105 | 1 | 2 | 4 | 7 | 11 |
| 172 | ..... | 30820 | 8.1481 | 2 | 3 | 6 | 10 | 16 |
| 173 | .......................... | 2188 | 4.2870 | 1 | 2 | 3 | 5 | 9 |
| 174 | ......................... | 231782 | 5.5456 | 2 | 3 | 4 | 7 | 10 |
| 175 | .......................... | 23071 | 3.5073 | 1 | 2 | 3 | 4 | 6 |
| 176 | ........................... | 16011 | 6.1346 | 2 | 3 | 5 | 7 | 11 |
| 177 | .......................... | 11991 | 4.9873 | 2 | 3 | 4 | 6 | 9 |
| 178 | .......................... | 4174 | 3.6195 | 1 | 2 | 3 | 5 | 7 |
| 179 | ........................ | 11198 | 7.1657 | 2 | 4 | 6 | 9 | 14 |
| 180 | ........................ | 79145 | 6.0471 | 2 | 3 | 5 | 7 | 11 |
| 181 | ......................... | 22152 | 3.9606 | 1 | 2 | 3 | 5 | 7 |
| 182 | .......................... | 226099 | 4.9591 | 2 | 2 | 4 | 6 | 9 |
| 183 | ......................... | 72147 | 3.4552 | 1 | 2 | 3 | 4 | 6 |
| 184 | ......................... | 67 | 3.7463 | 1 | 2 | 2 | 4 | 6 |
| 185 | ......................... | 3804 | 5.1966 | 1 | 2 | 4 | 6 | 10 |
| 186 | ......................... | 1 | 2.0000 | 2 | 2 | 2 | 2 | 2 |
| 187 | ......................... | 832 | 4.2524 | 1 | 2 | 3 | 6 | 8 |
| 188 | ...................... | 61112 | 6.1262 | 2 | 3 | 5 | 8 | 12 |
| 189 | ........................ | 7787 | 3.6773 | 1 | 1 | 3 | 5 | 7 |
| 190 | ......................... | 62 | 4.8548 | 1 | 3 | 4 | 6 | 10 |
| 191 |  | 10459 | 16.1606 | 5 | 8 | 12 | 20 | 32 |
| 192 | ...................... | 880 | 7.9625 | 2 | 4 | 7 | 9 | 14 |
| 193 | ............. | 8477 | 13.8662 | 5 | 8 | 11 | 17 | 25 |
| 194 | ......................... | 805 | 8.4348 | 3 | 5 | 7 | 10 | 15 |
| 195 | .......................... | 9196 | 10.4533 | 4 | 6 | 9 | 12 | 18 |
| 196 | ......................... | 796 | 6.7651 | 3 | 4 | 6 | 8 | 11 |
| 197 | .......................... | 28016 | 9.1380 | 4 | 5 | 7 | 11 | 16 |
| 198 | .......................... | 7906 | 4.9586 | 2 | 3 | 4 | 6 | 8 |
| 199 | ......................... | 2208 | 11.1005 | 3 | 5 | 9 | 14 | 22 |
| 200 | .......................... | 1525 | 11.8413 | 2 | 4 | 8 | 14 | 25 |
| 201 | ......................... | 1466 | 16.5750 | 4 | 7 | 13 | 21 | 34 |
| 202 | ..... | 25094 | 7.6794 | 2 | 3 | 6 | 9 | 15 |
| 203 | ........... | 28743 | 7.6566 | 2 | 3 | 6 | 10 | 15 |
| 204 | ......................... | 49035 | 6.6942 | 2 | 3 | 5 | 8 | 13 |
| 205 | .......................... | 21512 | 7.2152 | 2 | 3 | 5 | 9 | 14 |
| 206 | ........ | 1692 | 4.7305 | 1 | 2 | 4 | 6 | 10 |
| 207 | ... | 35330 | 5.7193 | 2 | 3 | 4 | 7 | 11 |
| 208 | ... | 10251 | 3.4474 | 1 | 2 | 3 | 4 | 6 |
| 209 | .......................... | 328015 | 6.6569 | 3 | 4 | 6 | 7 | 10 |
| 210 | ....................... | 131592 | 8.5557 | 4 | 5 | 7 | 10 | 14 |
| 211 | .......................... | 25325 | 6.2610 | 3 | 4 | 6 | 7 | 10 |
| 212 | ...... | 9 | 5.0000 | 2 | 3 | 4 | 5 | 8 |
| 213 | ...... | 6788 | 9.6117 | 3 | 4 | 7 | 12 | 19 |
| 214 | ............ | 51282 | 6.4551 | 2 | 3 | 5 | 8 | 12 |
| 215 | ........................ | 41115 | 3.6816 | 1 | 2 | 3 | 5 | 7 |
| 216 | ............. | 6435 | 11.0449 | 2 | 5 | 8 | 14 | 22 |
| 217 | ................... | 19341 | 15.2991 | 3 | 6 | 10 | 18 | 31 |
| 218 | ........................... | 21844 | 6.2064 | 2 | 3 | 5 | 7 | 11 |

Table 7a.—Medicare Prospective Payment System Selected Percentile Lengths of Stay—Continued
[FY95 MEDPAR Update 12/95 Grouper V13.0]


Table 7a.-Medicare Prospective Payment System Selected Percentile Lengths of Stay—Continued
[FY95 MEDPAR Update 12/95 Grouper V13.0]


Table 7a.-Medicare Prospective Payment System Selected Percentile Lengths of Stay—Continued
[FY95 MEDPAR Update 12/95 Grouper V13.0]

|  | DRG | Number discharges | Arithmetic mean LOS | 10th percentile | $\begin{aligned} & \text { 25th } \\ & \text { percentile } \end{aligned}$ | 50th percentile | 75th percentile | 90th percentile |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 363 | .................. | 4355 | 3.4953 | 1 | 2 | 2 | 3 | 6 |
| 364 | .................... | 1778 | 3.6310 | 1 | 1 | 2 | 5 | 8 |
| 365 | ........... | 2396 | 8.1123 | 2 | 3 | 5 | 10 | 18 |
| 366 | $\ldots$ | 4470 | 7.6707 | 2 | 3 | 5 | 10 | 16 |
| 367 | ........ | 544 | 3.3107 | 1 | 1 | 2 | 4 | 7 |
| 368 | ....... | 2285 | 6.9190 | 2 | 3 | 5 | 9 | 13 |
| 369 | ....... | 2409 | 3.7410 | 1 | 1 | 3 | 5 | 7 |
| 370 | ..... | 1083 | 5.5568 | 3 | 3 | 4 | 5 | 9 |
| 371 | $\ldots$ | 950 | 3.5874 | 2 | 3 | 3 | 4 | 5 |
| 372 |  | 809 | 3.3498 | 1 | 2 | 2 | 3 | 6 |
| 373 | ..... | 3637 | 1.9249 | 1 | 1 | 2 | 2 | 3 |
| 374 | $\ldots$ | 116 | 2.3621 | 1 | 2 | 2 | 2 | 3 |
| 375 |  | 5 | 2.2000 | 1 | 1 | 2 | 3 | 4 |
| 376 |  | 151 | 3.4834 | 1 | 1 | 2 | 4 | 8 |
| 377 | ....... | 26 | 3.2308 | 1 | 1 | 1 | 3 | 8 |
| 378 |  | 163 | 2.9755 | 1 | 2 | 3 | 3 | 5 |
| 379 |  | 309 | 2.9256 | 1 | 1 | 2 | 3 | 5 |
| 380 | ........ | 71 | 2.3239 | 1 | 1 | 2 | 3 | 4 |
| 381 |  | 194 | 2.2835 | 1 | 1 | 1 | 2 | 5 |
| 382 |  | 47 | 1.6596 | 1 | 1 | 1 | 1 | 3 |
| 383 | $\ldots$ | 1455 | 4.0460 | 1 | 2 | 3 | 5 | 8 |
| 384 |  | 123 | 3.3496 | 1 | 1 | 1 | 3 | 7 |
| 385 |  | 3 | 17.0000 | 1 | 1 | 1 | 49 | 49 |
| 389 | ..... | 24 | 10.6667 | 3 | 4 | 8 | 10 | 18 |
| 390 |  | 10 | 5.0000 | 1 | 2 | 3 | 6 | 9 |
| 392 |  | 2467 | 11.6700 | 4 | 6 | 8 | 15 | 24 |
| 394 | ..... | 1642 | 7.8831 | 1 | 2 | 5 | 9 | 16 |
| 395 | ..... | 65671 | 5.3672 | 1 | 2 | 4 | 7 | 10 |
| 396 |  | 18 | 3.9444 | 1 | 1 | 3 | 7 | 8 |
| 397 |  | 15421 | 6.0683 | 2 | 3 | 4 | 7 | 12 |
| 398 | ...... | 16602 | 6.5798 | 2 | 3 | 5 | 8 | 12 |
| 399 |  | 1424 | 4.4347 | 1 | 2 | 4 | 6 | 8 |
| 400 | $\ldots$ | 7470 | 10.3424 | 2 | 4 | 7 | 13 | 23 |
| 401 | ... | 6368 | 12.3990 | 2 | 5 | 9 | 16 | 25 |
| 402 |  | 1542 | 4.6984 | 1 | 1 | 3 | 6 | 10 |
| 403 |  | 34812 | 9.2838 | 2 | 4 | 7 | 12 | 19 |
| 404 | $\ldots$ | 3946 | 5.0867 | 1 | 2 | 4 | 7 | 10 |
| 406 |  | 3264 | 11.1468 | 3 | 5 | 8 | 14 | 23 |
| 407 |  | 723 | 4.9267 | 1 | 2 | 4 | 6 | 9 |
| 408 |  | 2949 | 8.2035 | 1 | 2 | 5 | 10 | 18 |
| 409 |  | 5649 | 6.6516 | 2 | 3 | 4 | 6 | 14 |
| 410 |  | 85873 | 3.3544 | 1 | 2 | 3 | 4 | 5 |
| 411 | ... | 50 | 2.5600 | 1 | 1 | 2 | 3 | 7 |
| 412 |  | 35 | 3.0857 | 1 | 1 | 2 | 4 | 8 |
| 413 |  | 8421 | 8.2956 | 2 | 3 | 6 | 10 | 17 |
| 414 |  | 797 | 5.2070 | 1 | 2 | 4 | 7 | 11 |
| 415 |  | 38804 | 15.6974 | 4 | 7 | 12 | 19 | 31 |
| 416 |  | 192133 | 8.2122 | 2 | 4 | 7 | 10 | 15 |
| 417 |  | 45 | 4.6222 | 1 | 2 | 4 | 7 | 10 |
| 418 |  | 18663 | 6.7433 | 2 | 3 | 5 | 8 | 13 |
| 419 |  | 15677 | 5.6580 | 2 | 3 | 4 | 7 | 10 |
| 420 | $\ldots$ | 2871 | 4.3006 | 2 | 2 | 4 | 5 | 8 |
| 421 |  | 11386 | 4.6473 | 2 | 2 | 4 | 6 | 8 |
| 422 |  | 89 | 3.6854 | 1 | 2 | 3 | 4 | 7 |
| 423 | $\ldots$ | 9118 | 8.6534 | 2 | 4 | 6 | 10 | 18 |
| 424 | ...... | 1990 | 17.7397 | 3 | 6 | 12 | 20 | 34 |
| 425 |  | 15247 | 4.8955 | 1 | 2 | 3 | 6 | 10 |
| 426 | ............ | 4721 | 5.4938 | 1 | 2 | 4 | 7 | 11 |
| 427 | ......... | 1773 | 5.2775 | 1 | 2 | 4 | 7 | 11 |
| 428 |  | 904 | 8.4303 | 1 | 3 | 5 | 10 | 18 |
| 429 | ..... | 38861 | 8.9079 | 2 | 3 | 6 | 10 | 17 |
| 430 | ............. | 53430 | 9.7495 | 2 | 4 | 7 | 12 | 19 |
| 431 | .................... | 190 | 7.4632 | 1 | 3 | 5 | 9 | 14 |
| 432 | .................... | 430 | 6.3395 | 1 | 2 | 4 | 6 | 11 |
| 433 | ................... | 7843 | 3.4051 | 1 | 1 | 2 | 4 | 7 |
| 434 | ..................... | 20810 | 5.8148 | 2 | 3 | 4 | 7 | 11 |
| 435 | $\ldots$ | 15477 | 4.8166 | 1 | 3 | 4 | 6 | 8 |
| 436 | $\ldots$ | 2915 | 14.5413 | 4 | 8 | 14 | 21 | 28 |
| 437 | ..................... | 14205 | 10.8943 | 4 | 6 | 10 | 14 | 20 |
| 439 | ................... | 867 | 8.9262 | 2 | 3 | 6 | 11 | 18 |

Table 7a.-Medicare Prospective Payment System Selected Percentile Lengths of Stay-Continued
[FY95 MEDPAR Update 12/95 Grouper V13.0]


Table 7b.-Medicare Prospective Payment System Selected Percentile Lengths of Stay
[FY95 MEDPAR Update 12/95 Grouper V14.0]

| DRG | Number discharges | Arithmetic mean LOS | 10th percentile | $\begin{aligned} & \text { 25th } \\ & \text { percentile } \end{aligned}$ | 50th percentile | 75th percentile | 90th percentile |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 32723 | 11.0372 | 3 | 4 | 8 | 14 | 23 |
| 2 | 6165 | 11.5178 | 3 | 5 | 8 | 14 | 23 |
| 3 | 1 | 10.0000 | 10 | 10 | 10 | 10 | 10 |
| 4 | 5866 | 9.1202 | 2 | 3 | 6 | 11 | 20 |
| 5 | 95896 | 4.4060 | 2 | 2 | 3 | 5 | 9 |
| 6 | 444 | 3.3581 | 1 | 1 | 2 | 4 | 7 |
| 7 .......... | 10526 | 12.5752 | 3 | 5 | 8 | 14 | 25 |

Table 7b.-Medicare Prospective Payment System Selected Percentile Lengths of Stay-Continued
[FY95 MEDPAR Update 12/95 Grouper V14.0]


Table 7b.-Medicare Prospective Payment System Selected Percentile Lengths of Stay-Continued
[FY95 MEDPAR Update $12 / 95$ Grouper V14.0]


Table 7b.—Medicare Prospective Payment System Selected Percentile Lengths of Stay—Continued
[FY95 MEDPAR Update 12/95 Grouper V14.0]

|  | DRG | Number discharges | Arithmetic mean LOS | 10th percentile | 25th percentile | 50th percentile | 75th percentile | 90th percentile |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 156 |  | 4 | 15.7500 | 4 | 4 | 10 | 22 | 27 |
| 157 | ............................ | 11419 | 5.7824 | 1 | 2 | 4 | 7 | 11 |
| 158 | ............................ | 5082 | 2.9124 | 1 | 1 | 2 | 4 | 6 |
| 159 | .......................... | 17132 | 5.3155 | 1 | 2 | 4 | 7 | 10 |
| 160 | ............................. | 9971 | 2.9553 | 1 | 1 | 2 | 4 | 5 |
| 161 | ............................. | 14786 | 4.3655 | 1 | 2 | 3 | 5 | 9 |
| 162 | ............................ | 7990 | 2.1914 | 1 | 1 | 2 | 3 | 4 |
| 163 |  | 5 | 2.2000 | 1 | 1 | 1 | 3 | 5 |
| 164 | ............................. | 4995 | 9.2993 | 4 | 6 | 8 | 11 | 16 |
| 165 |  | 1674 | 5.7575 | 3 | 4 | 5 | 7 | 9 |
| 166 |  | 3283 | 5.7286 | 2 | 3 | 4 | 7 | 10 |
| 167 | ............................. | 2284 | 3.2439 | 1 | 2 | 3 | 4 | 6 |
| 168 | ............................. | 1739 | 4.8562 | 1 | 2 | 3 | 6 | 10 |
| 169 |  | 1025 | 2.5473 | 1 | 1 | 2 | 3 | 5 |
| 170 | ............................ | 12463 | 12.4436 | 2 | 5 | 9 | 15 | 25 |
| 171 |  | 1157 | 5.4105 | 1 | 2 | 4 | 7 | 11 |
| 172 |  | 30820 | 8.1481 | 2 | 3 | 6 | 10 | 16 |
| 173 | ........................... | 2188 | 4.2870 | 1 | 2 | 3 | 5 | 9 |
| 174 | ..... | 231782 | 5.5456 | 2 | 3 | 4 | 7 | 10 |
| 175 |  | 23071 | 3.5073 | 1 | 2 | 3 | 4 | 6 |
| 176 | ............................ | 16011 | 6.1346 | 2 | 3 | 5 | 7 | 11 |
| 177 | ............................. | 11991 | 4.9873 | 2 | 3 | 4 | 6 | 9 |
| 178 |  | 4174 | 3.6195 | 1 | 2 | 3 | 5 | 7 |
| 179 | ........................... | 11198 | 7.1657 | 2 | 4 | 6 | 9 | 14 |
| 180 | $\ldots$ | 79145 | 6.0471 | 2 | 3 | 5 | 7 | 11 |
| 181 | ............................ | 22152 | 3.9606 | 1 | 2 | 3 | 5 | 7 |
| 182 | ............................ | 226099 | 4.9591 | 2 | 2 | 4 | 6 | 9 |
| 183 | ............................. | 72147 | 3.4552 | 1 | 2 | 3 | 4 | 6 |
| 184 | ............................. | 67 | 3.7463 | 1 | 2 | 2 | 4 | 6 |
| 185 | ............................. | 3804 | 5.1966 | 1 | 2 | 4 | 6 | 10 |
| 186 | ............................. | 1 | 2.0000 | 2 | 2 | 2 | 2 | 2 |
| 187 |  | 832 | 4.2524 | 1 | 2 | 3 | 6 | 8 |
| 188 | ............................ | 61112 | 6.1262 | 2 | 3 | 5 | 8 | 12 |
| 189 | ............................. | 7787 | 3.6773 | 1 | 1 | 3 | 5 | 7 |
| 190 |  | 62 | 4.8548 | 1 | 3 | 4 | 6 | 10 |
| 191 | ............................. | 10459 | 16.1606 | 5 | 8 | 12 | 20 | 32 |
| 192 | ............................. | 880 | 7.9625 | 2 | 4 | 7 | 9 | 14 |
| 193 | ............................. | 8477 | 13.8662 | 5 | 8 | 11 | 17 | 25 |
| 194 | ............................ | 805 | 8.4348 | 3 | 5 | 7 | 10 | 15 |
| 195 | ............................. | 9196 | 10.4533 | 4 | 6 | 9 | 12 | 18 |
| 196 | ............................. | 796 | 6.7651 | 3 | 4 | 6 | 8 | 11 |
| 197 | ............................. | 28016 | 9.1380 | 4 | 5 | 7 | 11 | 16 |
| 198 | ............................. | 7906 | 4.9586 | 2 | 3 | 4 | 6 | 8 |
| 199 | ............................ | 2208 | 11.1005 | 3 | 5 | 9 | 14 | 22 |
| 200 |  | 1525 | 11.8413 | 2 | 4 | 8 | 14 | 25 |
| 201 | ............................. | 1466 | 16.5750 | 4 | 7 | 13 | 21 | 34 |
| 202 | $\ldots$ | 25094 | 7.6794 | 2 | 3 | 6 | 9 | 15 |
| 203 | ............................. | 28743 | 7.6566 | 2 | 3 | 6 | 10 | 15 |
| 204 | ............................. | 49035 | 6.6942 | 2 | 3 | 5 | 8 | 13 |
| 205 | ........................... | 21512 | 7.2152 | 2 | 3 | 5 | 9 | 14 |
| 206 |  | 1692 | 4.7305 | 1 | 2 | 4 | 6 | 10 |
| 207 | ............................ | 35330 | 5.7193 | 2 | 3 | 4 | 7 | 11 |
| 208 | $\ldots . .$. | 10251 | 3.4474 | 1 | 2 | 3 | 4 | 6 |
| 209 | ............................ | 328015 | 6.6569 | 3 | 4 | 6 | 7 | 10 |
| 210 | $\ldots$ | 131592 | 8.5557 | 4 | 5 | 7 | 10 | 14 |
| 211 | ........................... | 25325 | 6.2610 | 3 | 4 | 6 | 7 | 10 |
| 212 | ............................ | 9 | 5.0000 | 2 | 3 | 4 | 5 | 8 |
| 213 | ............................ | 6789 | 9.6170 | 3 | 4 | 7 | 12 | 19 |
| 214 | ........................... | 51282 | 6.4551 | 2 | 3 | 5 | 8 | 12 |
| 215 | ............................. | 41115 | 3.6816 | 1 | 2 | 3 | 5 | 7 |
| 216 | ............................. | 6435 | 11.0449 | 2 | 5 | 8 | 14 | 22 |
| 217 | ... | 19341 | 15.2991 | 3 | 6 | 10 | 18 | 31 |
| 218 | ... | 21844 | 6.2064 | 2 | 3 | 5 | 7 | 11 |
| 219 | ............................ | 17973 | 3.7492 | 1 | 2 | 3 | 5 | 6 |
| 220 | ........................... | 2 | 5.5000 | 5 | 5 | 6 | 6 | 6 |
| 221 | ... | 4962 | 8.1475 | 2 | 4 | 6 | 10 | 16 |
| 222 | ............................ | 3560 | 4.0573 | 1 | 2 | 3 | 5 | 8 |
| 223 | ............................. | 18306 | 2.8650 | 1 | 1 | 2 | 3 | 5 |
| 224 | ............................. | 7946 | 2.2699 | 1 | 1 | 2 | 3 | 4 |
| 225 | .......................... | 6199 | 5.0045 | 1 | 2 | 3 | 6 | 11 |

Table 7b.—Medicare Prospective Payment System Selected Percentile Lengths of Stay—Continued
[FY95 MEDPAR Update 12/95 Grouper V14.0]

|  | DRG | Number discharges | Arithmetic mean LOS | 10th percentile | $\begin{gathered} \text { 25th } \\ \text { percentile } \end{gathered}$ | 50th percentile | 75th percentile | 90th percentile |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 226 | ......................... | 5349 | 6.7080 | 1 | 2 | 4 | 8 | 14 |
| 227 | ............................ | 4604 | 2.9622 | 1 | 1 | 2 | 4 | 6 |
| 228 | ........................... | 3014 | 3.5551 | 1 | 1 | 2 | 4 | 7 |
| 229 |  | 1345 | 2.4007 | 1 | 1 | 2 | 3 | 5 |
| 230 | ............................ | 2455 | 5.1548 | 1 | 2 | 3 | 6 | 11 |
| 231 | ........................... | 10331 | 5.0624 | 1 | 2 | 3 | 6 | 11 |
| 232 | ............................ | 576 | 4.5017 | 1 | 1 | 2 | 5 | 10 |
| 233 | ............................. | 4538 | 8.9595 | 2 | 4 | 7 | 11 | 18 |
| 234 | ............................ | 2220 | 4.1730 | 1 | 2 | 3 | 5 | 8 |
| 235 | .......................... | 5543 | 6.7231 | 1 | 3 | 4 | 7 | 13 |
| 236 | ............................ | 37803 | 6.2862 | 2 | 3 | 5 | 7 | 12 |
| 237 | ............................ | 1510 | 4.4139 | 1 | 2 | 3 | 5 | 8 |
| 238 | ............................. | 7538 | 10.0649 | 3 | 5 | 7 | 12 | 19 |
| 239 | ............................. | 59580 | 7.6024 | 2 | 4 | 6 | 9 | 14 |
| 240 | ............................. | 12047 | 7.4987 | 2 | 3 | 5 | 9 | 15 |
| 241 | ............................ | 3019 | 4.6277 | 1 | 2 | 4 | 6 | 9 |
| 242 | ............................. | 2528 | 7.6606 | 2 | 4 | 6 | 9 | 15 |
| 243 | ............................. | 79979 | 5.6107 | 2 | 3 | 4 | 7 | 10 |
| 244 | ............................. | 11456 | 5.8092 | 2 | 3 | 4 | 7 | 11 |
| 245 |  | 4259 | 4.2158 | 1 | 2 | 3 | 5 | 8 |
| 246 | ............................. | 1312 | 4.5899 | 1 | 2 | 4 | 6 | 9 |
| 247 | ........................... | 10591 | 3.9716 | 1 | 2 | 3 | 5 | 8 |
| 248 | ............................. | 6767 | 5.2815 | 1 | 2 | 4 | 6 | 10 |
| 249 | ............................ | 10077 | 4.2995 | 1 | 2 | 3 | 5 | 9 |
| 250 | ............................ | 3178 | 4.9091 | 1 | 2 | 3 | 6 | 9 |
| 251 |  | 2090 | 3.2933 | 1 | 1 | 3 | 4 | 6 |
| 252 | ........................... | 1 | 1.0000 | 1 | 1 | 1 | 1 | 1 |
| 253 | ............................. | 17469 | 5.8164 | 2 | 3 | 4 | 7 | 11 |
| 254 | ............................ | 9208 | 3.8588 | 1 | 2 | 3 | 5 | 7 |
| 255 | ........................... | 1 | 2.0000 | 2 | 2 | 2 | 2 | 2 |
| 256 | ............................ | 4600 | 5.7178 | 1 | 2 | 4 | 7 | 11 |
| 257 |  | 23640 | 3.4239 | 1 | 2 | 3 | 4 | 6 |
| 258 | ............................. | 18784 | 2.4905 | 1 | 2 | 2 | 3 | 4 |
| 259 | $\ldots$ | 4010 | 3.5077 | 1 | 1 | 2 | 3 | 7 |
| 260 | ............................. | 4868 | 1.8683 | 1 | 1 | 1 | 2 | 3 |
| 261 | ............................. | 2334 | 2.3500 | 1 | 1 | 2 | 3 | 4 |
| 262 | ............................ | 712 | 3.9284 | 1 | 1 | 2 | 5 | 8 |
| 263 | ............................ | 29088 | 13.8669 | 4 | 6 | 10 | 16 | 28 |
| 264 | ............................. | 3559 | 8.3442 | 2 | 4 | 6 | 10 | 17 |
| 265 | ............................. | 4274 | 7.6467 | 1 | 2 | 5 | 9 | 16 |
| 266 | ............................. | 2712 | 3.6855 | 1 | 1 | 3 | 5 | 7 |
| 267 |  | 222 | 4.0811 | 1 | 1 | 3 | 5 | 9 |
| 268 | ............................. | 891 | 4.0000 | 1 | 1 | 2 | 4 | 9 |
| 269 |  | 10174 | 9.1235 | 2 | 3 | 7 | 12 | 18 |
| 270 | $\ldots$ | 3456 | 3.3958 | 1 | 1 | 2 | 4 | 8 |
| 271 | ............................. | 21515 | 8.4984 | 3 | 4 | 7 | 10 | 15 |
| 272 | ............................. | 5863 | 7.4481 | 2 | 3 | 6 | 9 | 14 |
| 273 |  | 1426 | 5.5035 | 2 | 2 | 4 | 7 | 11 |
| 274 | ............................. | 2526 | 7.7458 | 2 | 3 | 5 | 9 | 15 |
| 275 | ............................ | 250 | 3.5040 | 1 | 1 | 2 | 4 | 8 |
| 276 | ............................. | 889 | 5.0472 | 1 | 2 | 4 | 6 | 9 |
| 277 | ............................. | 79054 | 6.7240 | 3 | 4 | 5 | 8 | 12 |
| 278 | $\ldots$ | 26008 | 5.1420 | 2 | 3 | 4 | 6 | 9 |
| 279 | ............................. | 5 | 4.8000 | 2 | 2 | 3 | 4 | 12 |
| 280 | . | 13098 | 5.1142 | 1 | 2 | 4 | 6 | 9 |
| 281 | ........................... | 5890 | 3.6448 | 1 | 2 | 3 | 4 | 7 |
| 283 | ............................. | 5233 | 5.4888 | 2 | 2 | 4 | 7 | 10 |
| 284 | ............................. | 1755 | 3.8632 | 1 | 2 | 3 | 5 | 7 |
| 285 | ......... | 4886 | 13.5014 | 3 | 6 | 10 | 16 | 26 |
| 286 | ............................ | 1918 | 8.7195 | 3 | 4 | 6 | 9 | 16 |
| 287 | ............................. | 6284 | 13.3908 | 3 | 6 | 9 | 16 | 26 |
| 288 | .. | 957 | 7.0449 | 2 | 4 | 5 | 7 | 11 |
| 289 | ............................. | 4992 | 3.9732 | 1 | 2 | 2 | 4 | 8 |
| 290 | ............................ | 8514 | 2.8404 | 1 | 1 | 2 | 3 | 5 |
| 291 | ........................... | 86 | 1.7558 | 1 | 1 | 1 | 2 | 3 |
| 292 | $\ldots$ | 5046 | 12.6958 | 2 | 5 | 9 | 16 | 25 |
| 293 | ........................... | 294 | 6.4456 | 1 | 3 | 5 | 8 | 14 |
| 294 | ........................... | 86024 | 5.6681 | 2 | 3 | 4 | 7 | 10 |
| 295 | ............................. | 3712 | 4.2826 | 1 | 2 | 3 | 5 | 8 |
| 296 | ................ | 218940 | 6.3561 | 2 | 3 | 5 | 8 | 12 |

Table 7b.-Medicare Prospective Payment System Selected Percentile Lengths of Stay-Continued
[FY95 MEDPAR Update 12/95 Grouper V14.0]

|  | DRG | Number discharges | Arithmetic mean LOS | 10th percentile | $\begin{aligned} & \text { 25th } \\ & \text { percentile } \end{aligned}$ | 50th percentile | 75th percentile | 90th percentile |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 297 | .................... | 31455 | 4.2781 | 1 | 2 | 3 | 5 | 8 |
| 298 | ..................... | 95 | 3.0211 | 1 | 1 | 2 | 4 | 5 |
| 299 | .......... | 868 | 5.3652 | 1 | 2 | 4 | 7 | 10 |
| 300 | ...... | 14115 | 7.3032 | 2 | 3 | 6 | 9 | 14 |
| 301 | ......... | 2146 | 4.3877 | 1 | 2 | 3 | 6 | 9 |
| 302 | $\ldots$ | 7567 | 12.3190 | 6 | 7 | 9 | 14 | 21 |
| 303 | ............. | 18462 | 10.1938 | 4 | 6 | 8 | 12 | 18 |
| 304 | ..... | 12867 | 10.2970 | 3 | 5 | 7 | 13 | 21 |
| 305 | ..... | 2526 | 4.9097 | 1 | 3 | 4 | 6 | 9 |
| 306 |  | 11305 | 6.2204 | 2 | 2 | 4 | 8 | 13 |
| 307 | .... | 2596 | 2.9819 | 1 | 2 | 2 | 3 | 5 |
| 308 | ............. | 9137 | 7.0113 | 1 | 2 | 5 | 9 | 15 |
| 309 | ......... | 3371 | 3.0009 | 1 | 1 | 2 | 4 | 6 |
| 310 |  | 28549 | 4.6077 | 1 | 2 | 3 | 6 | 9 |
| 311 | .......... | 9697 | 2.1734 | 1 | 1 | 2 | 3 | 4 |
| 312 | ....... | 1995 | 4.7895 | 1 | 2 | 3 | 6 | 10 |
| 313 |  | 745 | 2.2644 | 1 | 1 | 2 | 3 | 5 |
| 314 | ...... | 1 | 5.0000 | 5 | 5 | 5 | 5 | 5 |
| 315 | ............ | 27722 | 9.2695 | 1 | 2 | 6 | 12 | 20 |
| 316 | ......... | 69941 | 7.4958 | 2 | 3 | 6 | 9 | 15 |
| 317 | ......... | 779 | 2.8434 | 1 | 1 | 2 | 3 | 6 |
| 318 | ........ | 5981 | 7.1195 | 2 | 3 | 5 | 9 | 14 |
| 319 |  | 506 | 3.2174 | 1 | 1 | 2 | 4 | 7 |
| 320 | ........ | 169078 | 6.4297 | 2 | 3 | 5 | 8 | 11 |
| 321 | ..... | 25512 | 4.7020 | 2 | 3 | 4 | 6 | 8 |
| 322 |  | 81 | 4.3580 | 2 | 2 | 4 | 6 | 8 |
| 323 | $\ldots$ | 17690 | 3.5573 | 1 | 2 | 3 | 4 | 7 |
| 324 | .... | 8755 | 2.0870 | 1 | 1 | 2 | 3 | 4 |
| 325 |  | 7381 | 4.5898 | 1 | 2 | 3 | 5 | 9 |
| 326 | ...... | 2186 | 3.4492 | 1 | 1 | 2 | 4 | 6 |
| 327 |  | 8 | 3.1250 | 1 | 2 | 2 | 2 | 4 |
| 328 |  | 817 | 4.2742 | 1 | 2 | 3 | 5 | 9 |
| 329 | .... | 109 | 2.7523 | 1 | 1 | 2 | 3 | 5 |
| 330 | . | 1 | 1.0000 | 1 | 1 | 1 | 1 | 1 |
| 331 |  | 38181 | 6.1753 | 2 | 3 | 5 | 8 | 12 |
| 332 |  | 4687 | 3.8835 | 1 | 2 | 3 | 5 | 8 |
| 333 | ...... | 357 | 5.8319 | 1 | 3 | 4 | 7 | 13 |
| 334 |  | 19011 | 6.0503 | 3 | 4 | 5 | 7 | 9 |
| 335 |  | 9821 | 4.5786 | 2 | 3 | 4 | 6 | 7 |
| 336 |  | 60748 | 4.1251 | 1 | 2 | 3 | 5 | 8 |
| 337 |  | 38538 | 2.6717 | 1 | 2 | 2 | 3 | 4 |
| 338 |  | 4813 | 5.2703 | 1 | 2 | 3 | 6 | 11 |
| 339 | ........ | 2302 | 4.9392 | 1 | 2 | 3 | 6 | 10 |
| 340 |  | 2 | 3.0000 | 1 | 1 | 5 | 5 | 5 |
| 341 |  | 6427 | 3.2367 | 1 | 1 | 2 | 4 | 6 |
| 342 |  | 224 | 4.0089 | 1 | 1 | 2 | 5 | 8 |
| 344 |  | 3820 | 3.4652 | 1 | 1 | 2 | 4 | 7 |
| 345 |  | 1355 | 3.9734 | 1 | 2 | 3 | 4 | 9 |
| 346 |  | 5344 | 6.7500 | 1 | 3 | 5 | 8 | 14 |
| 347 | ........ | 418 | 3.3349 | 1 | 1 | 2 | 4 | 7 |
| 348 |  | 3021 | 4.8875 | 1 | 2 | 4 | 6 | 9 |
| 349 | ................ | 684 | 2.9956 | 1 | 1 | 2 | 4 | 6 |
| 350 |  | 6884 | 4.7451 | 2 | 3 | 4 | 6 | 8 |
| 352 |  | 576 | 3.9392 | 1 | 2 | 3 | 5 | 8 |
| 353 |  | 2621 | 8.3564 | 3 | 5 | 6 | 10 | 15 |
| 354 | .......... | 9693 | 6.3330 | 3 | 4 | 5 | 7 | 11 |
| 355 | ................ | 5607 | 3.8639 | 2 | 3 | 4 | 4 | 6 |
| 356 |  | 28647 | 3.0247 | 1 | 2 | 3 | 4 | 5 |
| 357 | ............ | 6526 | 9.8462 | 4 | 5 | 8 | 12 | 18 |
| 358 | ................ | 26797 | 4.7425 | 2 | 3 | 4 | 5 | 8 |
| 359 | ... | 27392 | 3.2715 | 2 | 3 | 3 | 4 | 5 |
| 360 | $\ldots$ | 16717 | 3.5393 | 1 | 2 | 3 | 4 | 6 |
| 361 | ................. | 618 | 3.4644 | 1 | 1 | 2 | 4 | 7 |
| 363 | $\ldots$ | 4355 | 3.4953 | 1 | 2 | 2 | 3 | 6 |
| 364 | ................... | 1778 | 3.6310 | 1 | 1 | 2 | 5 | 8 |
| 365 | $\ldots$ | 2396 | 8.1123 | 2 | 3 | 5 | 10 | 18 |
| 366 | $\ldots$ | 4471 | 7.6741 | 2 | 3 | 5 | 10 | 16 |
| 367 | ....... | 545 | 3.3266 | 1 | 1 | 2 | 4 | 7 |
| 368 |  | 2285 | 6.9190 | 2 | 3 | 5 | 9 | 13 |
| 369 | ................. | 2409 | 3.7410 | 1 | 1 | 3 | 5 | 7 |

Table 7b.—Medicare Prospective Payment System Selected Percentile Lengths of Stay—Continued
[FY95 MEDPAR Update 12/95 Grouper V14.0]

|  | DRG | Number discharges | Arithmetic mean LOS | 10th percentile | 25th percentile | 50th percentile | 75th percentile | 90th percentile |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 370 | ............................ | 1083 | 5.5568 | 3 | 3 | 4 | 5 | 9 |
| 371 | ............................ | 950 | 3.5874 | 2 | 3 | 3 | 4 | 5 |
| 372 | ............................ | 809 | 3.3498 | 1 | 2 | 2 | 3 | 6 |
| 373 | .......................... | 3637 | 1.9249 | 1 | 1 | 2 | 2 | 3 |
| 374 | ............................. | 116 | 2.3621 | 1 | 2 | 2 | 2 | 3 |
| 375 | ............................. | 5 | 2.2000 | 1 | 1 | 2 | 3 | 4 |
| 376 | ............................. | 151 | 3.4834 | 1 | 1 | 2 | 4 | 8 |
| 377 |  | 26 | 3.2308 | 1 | 1 | 1 | 3 | 8 |
| 378 | ............................. | 163 | 2.9755 | 1 | 2 | 3 | 3 | 5 |
| 379 |  | 309 | 2.9256 | 1 | 1 | 2 | 3 | 5 |
| 380 |  | 71 | 2.3239 | 1 | 1 | 2 | 3 | 4 |
| 381 | ............................. | 194 | 2.2835 | 1 | 1 | 1 | 2 | 5 |
| 382 | ............................. | 47 | 1.6596 | 1 | 1 | 1 | 1 | 3 |
| 383 |  | 1455 | 4.0460 | 1 | 2 | 3 | 5 | 8 |
| 384 | ........................... | 123 | 3.3496 | 1 | 1 | 1 | 3 | 7 |
| 385 |  | 3 | 17.0000 | 1 | 1 | 1 | 49 | 49 |
| 389 |  | 24 | 10.6667 | 3 | 4 | 8 | 10 | 18 |
| 390 | ............................. | 10 | 5.0000 | 1 | 2 | 3 | 6 | 9 |
| 392 | .... | 2467 | 11.6700 | 4 | 6 | 8 | 15 | 24 |
| 394 |  | 1642 | 7.8831 | 1 | 2 | 5 | 9 | 16 |
| 395 | ............................ | 65671 | 5.3672 | 1 | 2 | 4 | 7 | 10 |
| 396 | ............................. | 18 | 3.9444 | 1 | 1 | 3 | 7 | 8 |
| 397 |  | 15421 | 6.0683 | 2 | 3 | 4 | 7 | 12 |
| 398 | ........................... | 16601 | 6.5794 | 2 | 3 | 5 | 8 | 12 |
| 399 | ............................. | 1424 | 4.4347 | 1 | 2 | 4 | 6 | 8 |
| 400 |  | 7468 | 10.3293 | 2 | 4 | 7 | 13 | 23 |
| 401 |  | 6365 | 12.3829 | 2 | 5 | 9 | 16 | 25 |
| 402 | ............................. | 1542 | 4.6984 | 1 | 1 | 3 | 6 | 10 |
| 403 |  | 34765 | 9.2628 | 2 | 4 | 7 | 12 | 19 |
| 404 | ............................ | 3944 | 5.0822 | 1 | 2 | 4 | 7 | 10 |
| 406 | ............................. | 3264 | 11.1468 | 3 | 5 | 8 | 14 | 23 |
| 407 |  | 723 | 4.9267 | 1 | 2 | 4 | 6 | 9 |
| 408 | ............................. | 2949 | 8.2035 | 1 | 2 | 5 | 10 | 18 |
| 409 | ............................. | 5649 | 6.6516 | 2 | 3 | 4 | 6 | 14 |
| 410 | ............................. | 85871 | 3.3540 | 1 | 2 | 3 | 4 | 5 |
| 411 | ............................. | 50 | 2.5600 | 1 | 1 | 2 | 3 | 7 |
| 412 | ............................. | 35 | 3.0857 | 1 | 1 | 2 | 4 | 8 |
| 413 |  | 8422 | 8.2992 | 2 | 3 | 6 | 10 | 17 |
| 414 |  | 797 | 5.2070 | 1 | 2 | 4 | 7 | 11 |
| 415 | ............................. | 38804 | 15.6974 | 4 | 7 | 12 | 19 | 31 |
| 416 | ... | 192133 | 8.2122 | 2 | 4 | 7 | 10 | 15 |
| 417 | $\ldots$ | 45 | 4.6222 | 1 | 2 | 4 | 7 | 10 |
| 418 | ............................. | 18663 | 6.7433 | 2 | 3 | 5 | 8 | 13 |
| 419 | ............................. | 15677 | 5.6580 | 2 | 3 | 4 | 7 | 10 |
| 420 |  | 2871 | 4.3006 | 2 | 2 | 4 | 5 | 8 |
| 421 | ............................. | 11386 | 4.6473 | 2 | 2 | 4 | 6 | 8 |
| 422 | $\cdots$ | 89 | 3.6854 | 1 | 2 | 3 | 4 | 7 |
| 423 | ............................. | 9118 | 8.6534 | 2 | 4 | 6 | 10 | 18 |
| 424 | ............................. | 1990 | 17.7397 | 3 | 6 | 12 | 20 | 34 |
| 425 | ............................ | 15247 | 4.8955 | 1 | 2 | 3 | 6 | 10 |
| 426 | ............................. | 4721 | 5.4938 | 1 | 2 | 4 | 7 | 11 |
| 427 | ............................ | 1773 | 5.2775 | 1 | 2 | 4 | 7 | 11 |
| 428 | ....... | 904 | 8.4303 | 1 | 3 | 5 | 10 | 18 |
| 429 | ............................ | 38861 | 8.9079 | 2 | 3 | 6 | 10 | 17 |
| 430 | ............................ | 53430 | 9.7495 | 2 | 4 | 7 | 12 | 19 |
| 431 | ........................... | 190 | 7.4632 | 1 | 3 | 5 | 9 | 14 |
| 432 | ............................ | 430 | 6.3395 | 1 | 2 | 4 | 6 | 11 |
| 433 | ............................ | 7843 | 3.4051 | 1 | 1 | 2 | 4 | 7 |
| 434 | ........................... | 20810 | 5.8148 | 2 | 3 | 4 | 7 | 11 |
| 435 | ............................. | 15477 | 4.8166 | 1 | 3 | 4 | 6 | 8 |
| 436 | ............................. | 2915 | 14.5413 | 4 | 8 | 14 | 21 | 28 |
| 437 | ........................... | 14205 | 10.8943 | 4 | 6 | 10 | 14 | 20 |
| 439 | .... | 867 | 8.9262 | 2 | 3 | 6 | 11 | 18 |
| 440 | ............................ | 4751 | 9.7838 | 2 | 3 | 6 | 12 | 21 |
| 441 | ........................... | 611 | 4.4386 | 1 | 1 | 2 | 4 | 7 |
| 442 | ............................ | 13818 | 8.7372 | 1 | 3 | 6 | 11 | 18 |
| 443 | ............................ | 3299 | 3.5335 | 1 | 1 | 2 | 5 | 7 |
| 444 | ............................ | 3319 | 5.3203 | 1 | 3 | 4 | 6 | 10 |
| 445 | .......................... | 1321 | 3.7858 | 1 | 2 | 3 | 5 | 7 |
| 446 | .......................... | 1 | 1.0000 | 1 | 1 | 1 | 1 | 1 |

Table 7b.—Medicare Prospective Payment System Selected Percentile Lengths of Stay—Continued
[FY95 MEDPAR Update $12 / 95$ Grouper V14.0]

|  | DRG | Number discharges | Arithmetic mean LOS | 10th percentile | $\begin{gathered} \text { 25th } \\ \text { percentile } \end{gathered}$ | 50th percentile | 75th percentile | 90th percentile |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 447 | ...... | 3816 | 2.7953 | 1 | 1 | 2 | 3 | 5 |
| 448 | .................... | 84 | 1.0000 | 1 | 1 | 1 | 1 | 1 |
| 449 | ....... | 28775 | 4.4101 | 1 | 2 | 3 | 5 | 9 |
| 450 |  | 6807 | 2.3364 | 1 | 1 | 2 | 3 | 5 |
| 451 | $\ldots$ | 7 | 6.1429 | 2 | 3 | 4 | 5 | 7 |
| 452 |  | 19382 | 5.4066 | 1 | 2 | 4 | 6 | 11 |
| 453 |  | 3636 | 3.1876 | 1 | 1 | 2 | 4 | 6 |
| 454 | $\ldots$ | 5132 | 5.1046 | 1 | 2 | 3 | 6 | 10 |
| 455 | ....... | 1092 | 2.8333 | 1 | 1 | 2 | 3 | 5 |
| 456 | .... | 194 | 8.3711 | 1 | 1 | 4 | 9 | 21 |
| 457 |  | 127 | 4.7953 | 1 | 1 | 2 | 5 | 10 |
| 458 | ..... | 1550 | 16.9387 | 4 | 7 | 13 | 22 | 35 |
| 459 |  | 533 | 10.3471 | 2 | 4 | 7 | 13 | 22 |
| 460 |  | 2303 | 6.6309 | 1 | 3 | 5 | 8 | 13 |
| 461 | .... | 3040 | 4.8862 | 1 | 1 | 2 | 5 | 12 |
| 462 | $\ldots$ | 9360 | 13.7955 | 5 | 6 | 12 | 18 | 26 |
| 463 | ....... | 11987 | 5.1410 | 1 | 2 | 4 | 6 | 10 |
| 464 | ...... | 3079 | 3.7347 | 1 | 2 | 3 | 5 | 7 |
| 465 | ...... | 197 | 3.9086 | 1 | 1 | 2 | 4 | 7 |
| 466 | ......... | 1838 | 4.6366 | 1 | 1 | 2 | 4 | 10 |
| 467 | $\ldots$ | 1722 | 4.1057 | 1 | 1 | 2 | 4 | 8 |
| 468 | ........... | 56350 | 15.2546 | 3 | 7 | 12 | 19 | 30 |
| 471 | ....... | 9111 | 8.0289 | 4 | 5 | 6 | 9 | 13 |
| 472 | ....... | 150 | 30.6667 | 2 | 9 | 28 | 41 | 62 |
| 473 |  | 8211 | 14.3041 | 2 | 4 | 8 | 21 | 35 |
| 475 | ...... | 89514 | 12.1394 | 2 | 5 | 10 | 16 | 24 |
| 476 | $\ldots$ | 6875 | 13.7876 | 3 | 7 | 11 | 17 | 25 |
| 477 |  | 30427 | 9.1915 | 1 | 3 | 7 | 12 | 19 |
| 478 | $\ldots$ | 117755 | 8.2916 | 1 | 3 | 6 | 10 | 17 |
| 479 | $\ldots$ | 17758 | 4.5591 | 1 | 2 | 4 | 6 | 9 |
| 480 |  | 359 | 29.7159 | 10 | 13 | 22 | 37 | 61 |
| 481 |  | 177 | 32.0678 | 19 | 22 | 28 | 35 | 52 |
| 482 |  | 6754 | 14.9011 | 5 | 8 | 11 | 17 | 28 |
| 483 |  | 36200 | 45.7958 | 15 | 23 | 37 | 56 | 84 |
| 484 |  | 327 | 15.3364 | 2 | 6 | 11 | 21 | 32 |
| 485 |  | 3165 | 11.5893 | 4 | 6 | 9 | 13 | 21 |
| 486 | ....... | 2045 | 13.3482 | 1 | 6 | 11 | 18 | 28 |
| 487 |  | 3765 | 8.8770 | 1 | 3 | 7 | 11 | 17 |
| 488 |  | 1593 | 17.5267 | 5 | 8 | 13 | 22 | 35 |
| 489 | $\ldots$ | 17612 | 10.3989 | 2 | 4 | 7 | 13 | 22 |
| 490 | ...... | 4999 | 6.5719 | 1 | 2 | 4 | 8 | 14 |
| 491 | ....... | 9441 | 4.2777 | 2 | 3 | 3 | 5 | 7 |
| 492 | .... | 2029 | 17.3834 | 3 | 5 | 10 | 28 | 37 |
| 493 | ............... | 52260 | 5.8809 | 1 | 2 | 5 | 8 | 11 |
| 494 | ........ | 27127 | 2.4245 | 1 | 1 | 2 | 3 | 5 |
| 495 |  | 107 | 23.7944 | 10 | 13 | 18 | 29 | 41 |
|  |  | 10571233 |  |  |  |  |  |  |

Table 8a.-Statewide Average Operating Cost-To-Charge Ratios for Urban and Rural Hospitals (Case Weighted) April 1996

| State | Urban | Rural |
| :---: | :---: | :---: |
| ALABAMA | 0.421 | 0.476 |
| ALASKA | 0.505 | 0.795 |
| ARIZONA | 0.426 | 0.567 |
| ARKANSAS | 0.539 | 0.501 |
| CALIFORNIA | 0.408 | 0.544 |
| COLORADO | 0.509 | 0.595 |
| CONNECTICUT | 0.553 | 0.551 |
| DELAWARE | 0.533 | 0.523 |
| DISTRICT OF COLUMBIA | 0.525 |  |
| FLORIDA | 0.414 | 0.414 |
| GEORGIA | 0.527 | 0.532 |
| HAWAII | 0.484 | 0.567 |

Table 8a.-Statewide Average Operating Cost-To-Charge Ratios for Urban and Rural Hospitals (Case Weighted) April 1996Continued

| State | Urban | Rural |
| :---: | :---: | :---: |
| IDAHO | 0.563 | 0.639 |
| ILLINOIS | 0.490 | 0.588 |
| INDIANA | 0.565 | 0.628 |
| IOWA | 0.546 | 0.685 |
| KANSAS | 0.457 | 0.651 |
| KENTUCKY | 0.507 | 0.562 |
| LOUISIANA | 0.478 | 0.538 |
| MAINE | 0.589 | 0.590 |
| MARYLAND | 0.765 | 0.816 |
| MASSACHUSETTS | 0.579 | 0.600 |
| MICHIGAN | 0.514 | 0.619 |

Table 8a.-Statewide Average Operating Cost-To-Charge Ratios for Urban and Rural Hospitals (Case Weighted) April 1996Continued

| State | Urban | Rural |
| :---: | :---: | :---: |
| MINNESOTA | 0.565 | 0.655 |
| MISSISSIPPI | 0.524 | 0.527 |
| MISSOURI | 0.460 | 0.532 |
| MONTANA | 0.513 | 0.622 |
| NEBRASKA | 0.526 | 0.696 |
| NEVADA | 0.322 | 0.550 |
| NEW HAMPSHIRE | 0.597 | 0.615 |
| NEW JERSEY | 0.479 |  |
| NEW MEXICO | 0.484 | 0.546 |
| NEW YORK | 0.595 | 0.684 |
| NORTH CAROLINA | 0.546 | 0.501 |

Table 8a.-Statewide Average Operating Cost-To-Charge Ratios for Urban and Rural Hospitals (Case Weighted) April 1996Continued

| State | Urban | Rural |
| :---: | :---: | :---: |
| NORTH DAKOTA | 0.651 | 0.693 |
| OHIO | 0.567 | 0.606 |
| OKLAHOMA | 0.494 | 0.572 |
| OREGON | 0.573 | 0.649 |
| PENNSYLVANIA | 0.437 | 0.585 |
| PUERTO RICO | 0.495 | 0.642 |
| RHODE ISLAND | 0.587 |  |
| SOUTH CAROLINA | 0.476 | 0.497 |
| SOUTH DAKOTA | 0.571 | 0.629 |
| TENNESSEE | 0.534 | 0.577 |
| TEXAS | 0.463 | 0.565 |
| UTAH | 0.578 | 0.665 |
| VERMONT | 0.638 | 0.596 |
| VIRGINIA | 0.499 | 0.538 |
| WASHINGTON | 0.636 | 0.686 |
| WEST VIRGINIA | 0.579 | 0.541 |
| WISCONSIN . | 0.607 | 0.686 |
| WYOMING ...... | 0.495 | 0.735 |

Table 8b.-Statewide Average Capital Cost-To-Charge Ratios (Case Weighted) April 1996

| State | Ratio |
| :---: | :---: |
| ALABAMA | 0.055 |
| ALASKA | 0.077 |
| ARIZONA | 0.051 |
| ARKANSAS | 0.055 |
| CALIFORNIA | 0.040 |
| COLORADO | 0.053 |
| CONNECTICUT | 0.037 |
| DELAWARE | 0.054 |
| DISTRICT OF COLUMBIA | 0.042 |
| FLORIDA | 0.051 |
| GEORGIA | 0.052 |
| HAWAII | 0.051 |
| IDAHO | 0.067 |
| ILLINOIS | 0.045 |
| INDIANA | 0.059 |
| IOWA | 0.062 |
| KANSAS | 0.055 |
| KENTUCKY | 0.056 |
| LOUISIANA | 0.069 |
| MAINE | 0.045 |
| MARYLAND | 0.013 |
| MASSACHUSETTS | 0.060 |
| MICHIGAN | 0.053 |
| MINNESOTA | 0.055 |
| MISSISSIPPI | 0.056 |
| MISSOURI | 0.053 |
| MONTANA | 0.064 |
| NEBRASKA | 0.058 |
| NEVADA | 0.034 |
| NEW HAMPSHIRE | 0.065 |
| NEW JERSEY | 0.045 |
| NEW MEXICO | 0.055 |
| NEW YORK | 0.059 |
| NORTH CAROLINA | 0.050 |
| NORTH DAKOTA | 0.074 |
| OHIO | 0.056 |
| OKLAHOMA | 0.058 |
| OREGON | 0.051 |
| PENNSYLVANIA | 0.045 |
| PUERTO RICO | 0.078 |
| RHODE ISLAND | 0.039 |

Table 8b.-Statewide Average Capital Cost-To-Charge Ratios (Case Weighted) April 1996Continued

| State | Ratio |
| :---: | :---: |
| SOUTH CAROLINA | 0.053 |
| SOUTH DAKOTA | 0.064 |
| TENNESSEE | 0.057 |
| TEXAS | 0.055 |
| UTAH | 0.055 |
| VERMONT | 0.050 |
| VIRGINIA | 0.058 |
| WASHINGTON | 0.063 |
| WEST VIRGINIA | 0.060 |
| WISCONSIN | 0.048 |
| WYOMING ... | 0.067 |

## A ppendix A - Regulatory Impact A nalysis

## I. Introduction

We generally prepare a regul atory flexibility analysis that is consistent with the Regulatory Flexibility Act (RFA)(5 U.S.C. 601 through 612), unless the Secretary certifies 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 (the Act) requires the Secretary 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 A rea (MSA) or New Engl and County Metropolitan A rea (NECMA). Section 601(g) of the Social Security Amendments of 1983 (Public Law 9821) designated hospitals in certain New Engl and 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 bel ow, in combination with the rest of this proposed rule, constitutes a combined regulatory impact anal ysis and regulatory flexibility analysis.

## II. Objectives

The primary objective of the prospective payment system is to create incentives for hospital s to operate efficiently and minimize unnecessary costs while at the same time ensuring that payments are sufficient to adequatel y compensate hospital s 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 heal th care for Medicare beneficiaries. We expect that these proposed changes would ensure that the outcomes of this payment system are, in general, 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 1997, on various hospital groups. We estimate the effects of individual policy changes by esti mating 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 sol iciting comments and information about the antici pated 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 capitalrelated costs encompass nearly all general, short-term, acute care hospital s that participate in the Medicare program. There were 46 Indian Health Service hospital s in our data base, which we excluded from the analysis due to the special characteristics of the prospective payment method for these hospitals. A mong other short-term, acute care hospitals, only the 50 such hospitals in Maryland remain excluded from the prospecti ve payment system under the waiver at section 1814(b)(3) of the Act. Thus, as of April 1996, we have included 5,130 hospitals in our analysis. This represents about 82 percent of all

Medicare-partici pating hospital s. 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 1996, there were 1,141 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 2,258 psychiatric and rehabilitation units in hospitals otherwise subject to the prospective payment system. These excluded units are al so paid in accordance with § 413.40.

In accordance with section 1886(b)(3)(B)(ii)(V) of the Act, the update factor applicable to the rate-ofincrease limit for excluded hospitals and units for FY 1997 would be 1.7 percent (excluded hospital market basket minus 1.0 percentage points), adjusted to account for the relationship between the hospital's allowable operating cost per case and its target amounts.
The impact on excluded hospitals and units of the proposed update in the rate-of-increase limit depends on the cumul ative cost increases experienced by each excluded hospital and excluded unit since its applicable base period. For excluded hospitals and units that have maintained their cost increases at a level bel ow 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-ofincrease limit, the major effect will be the amount of excess costs that the hospitals would have to absorb.

In this context, we note that, under § 413.40(d)(3), an excluded hospital or unit whose costs exceed the rate-ofincrease limit is allowed to receive the lower of its rate-of-increase ceiling plus 50 percent of reasonable costs in excess of the ceiling, or 110 percent of its ceiling. In addition, under the various provisions set forth in § 413.40, excluded hospitals and units can obtain
payment adjustments for significant, 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.

## 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, beginning with changes to the operating prospective payment system.

The data used in developing the quantitative analyses presented below are taken from the FY 1995 M edPAR file and the most current provider-specific file that is used for payment purposes. Although the anal yses of the changes to the operating prospective payment system do not incorporate cost data, the most recently avail able hospital cost report data were used to create some of the variables by which hospitals are categorized. Our anal ysis has several qual ifications. 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 1995 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 anal yzed here. Estimated payment impacts of proposed FY 1997 changes to the capital
prospective payment system are discussed below in section VII of this Appendix.
The proposed changes discussed separately bel ow are the following:

- The effects of the annual reclassification of diagnoses and procedures and the recalibration of the diagnosis-rel ated group (DRG) rel ative 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 1993 data).
- The effects of geographic reclassifications by the Medicare Geographic Classification Review Board (MGCRB) that will be effective in FY 1997.
- The effects of phasing out 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 total change in payments based on FY 1997 policies relative to payments based on FY 1996 policies.
To illustrate the impacts of the FY 1997 proposed changes, our analysis begins with an FY 1997 baseline simulation model using: the FY 1996 GROUPER (version 13.0); the FY 1996 wage indexes; no MGCRB reclassifications; and current outlier policy ( 50 percent phase out of day outlier payments). Outlier payments are assumed to be 5.1 percent of total DRG payments.

Each policy change is then added incrementally to this baseline model, finally arriving at an FY 1997 model incorporating all of the proposed changes. This al lows us to isol ate the effects of each proposed change.

Our final comparison illustrates the percent change in payments per case from FY 1996 to FY 1997. Four factors not displayed in the previous five columns 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 1997 using the most recently forecasted hospital market basket increase for FY 1997 of 2.7 percent, minus 0.5 percentage points. Thus, the update to the large urban and other areas standardized amounts is 2.2 percent. Similarly, section 1886(b)(3)(C)(ii) of the Act provides that the update factor appli cable 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 al so the market basket increase minus 0.5 percent, or 2.2 percent.
A second significant factor impacting changes in hospitals' payments per case from FY 1996 to FY 1997 is a change in MGCRB recl assification status from one year to the next. That is, hospitals reclassified in FY 1996 that are no Ionger reclassified in FY 1997 may have a negative payment impact going from FY 1996 to FY 1997; conversely, hospitals not reclassified in FY 1996 that are reclassified in FY 1997 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 recl assification status, the percentage increase in payments for the category may be below the national mean.

A third significant factor is that we currently estimate that actual outlier payments during FY 1996 will be 4.2 percent of actual total DRG payments. When the FY 1996 final rule was publ ished, we projected FY 1996 outlier payments would be 5.1 percent of total DRG payments, and the standardized amounts were reduced correspondingly. The effects of the lower than expected outlier payments during FY 1996 (as discussed in the Addendum to this proposed rule) are reflected in the anal yses below comparing our current estimates of FY 1996 payments per case to estimated FY 1997 payments per case.

Finally, the regional floor provision (section 1886(d)(1)(A)(iii)(II) of the Act) expires effective with discharges occurring on or after October 1, 1996. Under this provision (applicable during FY 1996), hospitals within any census division having a regional standardized amount greater than the national standardized amount (large urban or other, depending on which amount was applicable) received a blend of 85 percent of the national amount and 15 percent of the regional amount. Hospitals in census divisions where the regi onal floor was applicable during FY 1996 will be negatively impacted by its expiration when comparing FY 1996 to FY 1997.
Tablel demonstrates the results of our anal ysis. 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 5,130 hospitals included in the analysis. This is 77 fewer hospitals than were included in the impact anal ysis in the FY 1996 final rule (60 FR 45924).

Data for 107 hospitals that were included in last year's anal ysis were not available for anal ysis this year; however, data were available this year for 30 hospitals for which data were not available last year.

The next four rows of Tablel contain hospital s categorized according to their geographic location (all urban, which is further divided into large urban and other urban, or rural ). There are 2,878 hospital s located in urban areas (MSAs or NECMAs) included in our analysis. A mong these, there are 1,597 hospitals located in large urban areas (populations over 1 million), and 1,281 hospitals in other urban areas (populations of 1 million or fewer). In addition, there are 2,252 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 1997 payment classifications, including any reclassifications under section 1886(d)(10) of the Act. For example, the rows label ed urban, Iarge urban, other urban, and rural, show the numbers of hospitals being paid based on these categorizations (after consideration of geographic reclassifications), are 2,978, $1,793,1,185$, and 2,152 , respectively.

The next three groupings examine the impacts of the proposed changes on hospital s grouped by whether or not they have residency programs (teaching hospitals that receive an indirect medical education (IME) adjustment), receive disproportionate share (DSH) payments, or some combination of these two adjustments. There are 4,057 nonteaching hospitals in our anal ysis, 841 teaching hospitals with fewer than 100 residents, and 232 teaching hospital s with 100 or more residents.

In the DSH categories, hospital s are grouped according to their DSH payment status, and whether they are considered urban or rural after MGCRB reclassifications. Hospital s in the rural DSH categories, therefore, represent hospital s 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 hospital s 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. Rural hospitals reclassified for FY 1997 for purposes of the standardized amount are not included here.
The RRCs (90), SCH/EACHs (641), and SCH/EACH and RRCs (39) shown here were not reclassified for purposes of the standardized amount. There are four EACHs included in our analysis and five EACH/RRCs.

There are two RRCs and three SCHs that will be reclassified for the standardized amount in FY 1997 that, therefore, are not included in these rows. There are significantly fewer recl assifications among these groups than there were in FY 1996, owing to the new criterion under § 412.230(a)(5)(ii) that a hospital may not be recl assified for purposes of the standardized amount if the area to which the hospital seeks reclassification does not have a higher standardized amount than that currently received by the hospital. (See the September 1, 1995 final rule (60 FR 45799).) Before this change (effective with reclassifications for FY 1997), some rural hospitals reclassified to other urban areas in order to qual ify for urban DSH payments. For other rural hospitals that already qualified for DSH payments, the urban designation enabled them to qual ify for a higher DSH adjustment than they would receive as a rural hospital.
The next two groupings are based on type of ownership and the hospital's Medicare utilization expressed as a percent of total pati ent days. These data are taken primarily from the FY 1994 Medi care cost report files, if available (otherwise FY 1993 data are used). Data needed to cal culate Medicare utilization percentages were unavailabl e for 131 hospitals. For the most part, these are either new hospitals or hospitals filing manual cost reports that are not yet entered into the data base.

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 either FY 1996 or FY 1997, or for both years, by urban/rural status. The next rows illustrate the overall number of FY 1997 recl assifications, as well as the numbers of reclassified hospitals grouped by urban and rural Iocation. The final row in Table I contai ns hospital s 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 1997 Operating Prospective Payment System
[Percent changes in payments per case]

(By Geographic Location)

| All hospitals | 5,130 | 0.1 | -0.1 | 0.0 | 0.0 | 3.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Urban hospitals | 2,878 | 0.1 | 0.0 | -0.4 | -0.1 | 3.2 |
| Large urban | 1,597 | 0.1 | 0.0 | -0.5 | -0.2 | 3.1 |
| Other urban | 1,281 | 0.1 | -0.1 | -0.2 | 0.1 | 3.3 |
| Rural hospitals | 2,252 | 0.0 | -0.1 | 2.3 | 0.1 | 2.7 |
| Bed size (urban): |  |  |  |  |  |  |
| 0-99 beds ......................................................... | 716 | 0.0 | -0.3 | -0.5 | 0.2 | 3.0 |
| 100-199 beds | 938 | 0.0 | -0.2 | -0.4 | 0.1 | 2.9 |
| 200-299 beds | 577 | 0.1 | -0.1 | -0.4 | 0.0 | 3.1 |
| 300-499 beds | 479 | 0.1 | 0.0 | -0.4 | -0.1 | 3.4 |
| 500 or more beds | 168 | 0.1 | 0.1 | -0.2 | -0.4 | 3.4 |
| Bed size (rural): |  |  |  |  |  |  |
| 0-49 beds | 1,173 | -0.1 | 0.0 | 0.0 | 0.1 | 2.8 |
| 50-99 beds | 663 | -0.1 | -0.1 | 1.1 | 0.2 | 2.8 |
| 100-149 beds | 241 | 0.0 | -0.1 | 3.1 | 0.2 | 2.9 |
| 150-199 beds | 99 | 0.0 | -0.1 | 2.8 | 0.1 | 2.8 |
| 200 or more beds | 76 | 0.1 | -0.2 | 4.9 | 0.1 | 2.2 |
| Urban by census division: |  |  |  |  |  |  |
| New England | 160 | 0.1 | 0.0 | -0.1 | -0.1 | 2.4 |
| Middle Atlantic | 434 | 0.1 | 0.6 | -0.3 | -1.1 | 3.5 |
| South Atlantic | 419 | 0.1 | -0.2 | -0.5 | 0.1 | 3.3 |
| East North Central | 483 | 0.1 | 0.3 | -0.2 | 0.2 | 2.9 |
| East South Central | 163 | 0.1 | -0.3 | -0.5 | 0.2 | 3.4 |
| West North Central | 193 | 0.1 | -0.4 | -0.5 | 0.3 | 3.4 |
| West South Central | 375 | 0.1 | -0.4 | -0.5 | 0.4 | 3.6 |
| Mountain | 125 | 0.2 | -0.4 | -0.4 | 0.3 | 3.3 |
| Pacific | 478 | 0.1 | -0.5 | -0.4 | 0.2 | 2.9 |
| Puerto Rico | 48 | -0.1 | -0.7 | -0.5 | 0.0 | 2.6 |
| Rural by census division: |  |  |  |  |  |  |
| New England | 53 | 0.1 | -1.0 | 2.0 | 0.3 | 2.1 |
| Middle Atlantic | 85 | 0.1 | -0.5 | 0.8 | -0.2 | 1.9 |
| South Atlantic | 297 | 0.0 | -0.5 | 3.1 | 0.1 | 2.6 |
| East North Central | 304 | 0.1 | 0.2 | 2.1 | 0.2 | 2.9 |
| East South Central | 278 | -0.1 | 0.2 | 2.5 | 0.2 | 2.2 |
| West North Central | 525 | 0.0 | -0.1 | 2.1 | 0.2 | 2.8 |
| West South Central ......................................... | 351 | -0.1 | 0.2 | 3.1 | 0.2 | 3.2 |
| Mountain | 213 | 0.1 | -0.2 | 0.8 | 0.1 | 3.0 |
| Pacific | 141 | 0.1 | 0.5 | 2.4 | 0.2 | 4.0 |
| Puerto Rico | 5 | -0.2 | -2.1 | 2.7 | -0.1 | 3.8 |

(by payment categories)

| Urban hospitals | 2,978 | 0.1 | 0.0 | -0.3 | -0.1 | 3.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Large urban | 1,793 | 0.1 | 0.0 | -0.2 | -0.2 | 3.2 |
| Other urban | 1,185 | 0.1 | -0.1 | -0.4 | 0.1 | 3.3 |
| Rural hospitals | 2,152 | 0.0 | -0.1 | 1.9 | 0.1 | 2.6 |
| Teaching status: |  |  |  |  |  |  |
| Non-teaching ..................................................... | 4,057 | 0.0 | -0.2 | 0.3 | 0.2 | 3.1 |
| Less than 100 res. | 841 | 0.1 | 0.0 | -0.4 | 0.0 | 3.2 |
| 100+ residents | 232 | 0.1 | 0.2 | -0.1 | -0.5 | 3.2 |
| Disproportionate Share Hospitals (DSH) |  |  |  |  |  |  |
| Non-DSH | 3,200 | 0.1 | -0.2 | 0.2 | 0.1 | 3.2 |
| Urban DSH: |  |  |  |  |  |  |
| 100 beds or more ........................................ | 1,410 | 0.0 | 0.0 | -0.3 | -0.2 | 3.2 |
| Fewer than 100 beds .................................... | 111 | -0.3 | -0.4 | -0.5 | 0.3 | 2.5 |
| Rural DSH: |  |  |  |  |  |  |
| Sole community (SCH) | 146 | -0.1 | -0.1 | 0.2 | 0.0 | 3.3 |
| Referral centers (RRC) ................................... | 25 | 0.0 | -0.1 | 3.9 | -0.1 | 3.7 |
| Over 65 | 1,353 | 0.0 | -0.1 | 0.1 | 0.1 | 3.1 |
| Unknown | 131 | -0.1 | 0.9 | -0.4 | -1.4 | 3.1 |

Hospitals Reclassified by the Medicare Geographic Review Board

Table i.-Impact Analysis of Changes for FY 1997 Operating Prospective Payment System-Continued
[Percent changes in payments per case]


${ }^{1}$ 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 1995, and hospital cost report data are from reporting periods beginning in FY 1993 and FY 1994.
${ }_{2}$ This column displays the payment impacts of the recalibration of the DRG weights, based on FY 1995 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 1993 cost reports. The percentage changes displayed here reflect the impacts of the wage and recalibration budget neutrality factor ( 0.998509 ).
${ }^{4}$ Shown here are the combined effects of geographic reclassification by the Medicare Geographic Classification Review Board (MGCRB). The effects shown here demonstrate the FY 1997 payment impacts of going from no reclassifications to the reclassifications scheduled to be in effect for FY 1997. Reclassification for prior years has no bearing on the payment impacts shown here.
${ }^{5}$ This column illustrates the payment impacts of changes in outlier payments, in accordance with section 1886(d)(5) of the Act.
${ }^{6}$ This column shows changes in payments from FY 1996 to FY 1997. It incorporates all of the changes displayed in columns 1 through 5 . It also displays the impacts of the updates to the FY 1997 standardized amounts, changes in hospitals' reclassification status in FY 1997 compared to FY 1996, the expiration of the regional floor provision at section 1886(d)(1)(A)(iii)(II) of the Act, and the difference in outlier payments from FY 1996 to FY 1997. The sum of the first five columns plus these effects may be different from the percentage changes shown here due to changes in hospitals' geographic reclassification status from FY 1996 to FY 1997, rounding errors and interactive effects.
B. The 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 recal ibrate 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.
The impact of reclassifications and recali bration 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) specifies
that any updates or adjustments to the wage index are budget neutral. As pointed out in the Addendum to this proposed rule, we compared aggregate payments using the FY 1996 DRG relative weights and the wage index effective October 1, 1995 to aggregate payments using the proposed FY 1997 DRG relative weights and wage index. Based on this comparison, we computed a wage and recal ibration budget neutral ity factor of 0.998509. In TableI, the combined overall impacts of the effects of both the DRG reclassifications and recalibration and the updated wage index (the All Hospitals row of columns 1 and 2) demonstrate that the net effect of these changes are budget neutral. That is, the 0.1 percent increase for all hospitals due to the DRG changes is
negated by the 0.1 percent decrease for all hospitals with the new wage data.
Consistent with the minor changes we are proposing for the FY 1997 GROUPER, the redistributional impacts across hospital groups are very small (an increase of 0.1 for large and other urban hospitals). Among other hospital categories, the net effects are slightly negative changes for small (up to 99 beds) rural hospitals and slightly positive changes for larger (over 200 beds) rural and urban hospitals.
The largest single effect on any of the hospital categories examined is a 0.3 percent decrease in payments for smaller ( 100 or fewer beds) urban and rural hospitals that receive DSH payments. We note that the only other hospital category to experience a
decrease of more than 0.1 percent is rural hospitals in Puerto Rico.
We attribute these negative changes to the increasing gap between the rel ative weights for medical, diagnostic, and less complicated surgi cal DRGs and the weights for the more compli cated surgical DRGs. Since the cases associated with the former DRGs tend to be treated more often in smaller
hospitals with fewer resources available, lowering the rel ative weights associated with those cases would disproportionately affect these hospitals. In general, small hospitals that serve a disproportionate share of low-income patients and hospitals in rural Puerto Rico fit this definition. We note, however, that these negative impacts are relatively minor and do not result sol ely from the limited DRG revisions we are proposing for FY 1997.

## C. The Impact of Updating the Wage Data (Column 2)

Section 1886(d)(3)(E) of the Act requires that, beginning October 1, 1993, we annual ly update the wage data used to cal cul ate the wage index. In accordance with this requirement, the proposed wage index for FY 1997 is based on data submitted for hospital cost reporting periods beginning on or after October 1, 1992 and before October 1, 1993. 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 1996 wage index before geographic reclassifications based on FY 1992 wage data to a model using the FY 1997 prereclassification wage index based on FY 1993 wage data.
As noted above, to comply with the requirements that the DRG and wage index changes be implemented in a budget neutral manner, we compute a budget neutrality adjustment factor to apply to the standardized amounts. The 0.1 percent decrease for all hospitals in this column reflects the wage and recalibration budget neutral ity factor of 0.998509 . This decrease, combined with the 0.1 percent increase for all hospitals in column 1, demonstrates that the net effect on aggregate payments of the proposed DRG and wage index changes are budget neutral.
The results indicate that the new wage data do not have a significant overall impact on hospital payments. (It should be noted that the percentage changes attributed here to the new wage data are generally reduced by 0.2 percentage points due to the budget
neutral ity factor.) Thus, hospitals with significant changes in their wage indexes are not concentrated within any particular hospital group. 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 (as described below) indicates that these changes were attributable to improved reporting, as well as relative changes in labor costs.

In the 50 States and the District of Columbia, among the urban hospitals, the largest increase ( 0.6 percent) is in the Middle Atlantic census division. Significantly, New Y ork City's wage index rises by over 1.6 percent (this also contributes to the 0.2 percent increase among major teaching hospitals and the 0.9 percent increase in the Unknown category under the Medicare Utilization rows). Last year, the Middle A tlantic experienced one of the largest decreases ( 0.6 percent), which contributed to the 0.4 percent decline among major teaching hospital s-New Y ork City's wage index fell by nearly 2.0 percent in FY 1996 (60 FR 45929). The largest decrease among urban hospitals occurs in the Pacific census division, with a decline of 0.5 percent.

Among the rural hospitals, the largest increase ( 0.5 percent) is in the Pacific census division; the largest decrease (1.0 percent) is in the New England census division. This decrease is primarily due to a 2.5 percent decrease in the wage index for rural Connecticut hospitals and a 2.4 percent decrease in the wage index for rural New Hampshire hospitals. The Pacific rural hospitals al so experienced one of the greatest increases ( 0.6 percent) among rural hospital s last year.

In Puerto Rico, payments decline by 2.1 percent for the five rural hospitals and by 0.7 percent for the urban hospital s. The average hourly wages reported in FY 1993 by two rural Puerto Rico hospitals fell from those reported in FY 1992 by 22.4 percent and 18.1 percent, leading to the 2.1 percent overall decline. Of the six urban areas in Puerto Rico, two experience increases in wage index values while four experience decreases. A mong these four, three experience a decline of more than 5 percent. These MSA s have rel atively few hospitals (two, five, and seven hospitals). The decreases appear to be the result of one or two hospitals in each area with a decrease of more than 5 percent in average hourly wages.

The proposed FY 1997 wage index represents the fourth annual update to the wage data, and will continue to
include sal aries, fringe benefits, home office salaries, and certain contract labor costs. In the past, updates to the wage data have resulted in significant payment shifts among hospitals. Since the wage index is now updated annual ly, we expect these payment fluctuations will decrease.

This expectation is borne out by comparing the proposed FY 1997 wage index (after reclassifications under sections 1886(d)(8)(B) and 1886(d)(10) of the Act) to the FY 1996 wage index. The following chart compares the shifts in wage index values (after reclassifications) for labor markets for FY 1997 with those from FY 1996. The majority of labor market areas (339) experience less than a 5 percent change. Only 25 labor market areas experi ence a change between 5 and 10 percent; 13 of those experience increases. Still fewer labor markets experience a change of more than 10 percent; two experience increases and two experience decreases. For FY 1996, by comparison, 10 labor market areas experienced an increase in their wage index value of more than 10 percent. We reviewed the data for any area that experienced a wage index change of 10 percent or more to determine the reason for the fluctuation.

| Percentage change in area wage index values | Number of labor market areas |  |
| :---: | :---: | :---: |
|  | $\begin{gathered} \text { FY } \\ 1997 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 1996 \end{gathered}$ |
| Increase more than 10 percent $\qquad$ | 2 | 10 |
| Increase between 5 and 10 percent, (inclusive) ... | 13 | 21 |
| Increase/decrease below 5 percent $\qquad$ | 339 | 331 |
| Decrease between 5 and 10 percent, (inclusive) ... | 12 | 6 |
| Decrease more than 10 percent | 2 | 0 |

Under the proposed FY 1997 wage index, 96.2 percent of urban hospitals and 92.7 percent of rural hospitals would experience a change in their wage index of less than 5 percent. Approximately 5.9 percent ( 3.1 percent of urban hospitals and 2.8 percent of rural hospitals) would experience a change of between 5 and 10 percent, and 5.3 percent ( 0.8 percent of urban hospitals and 4.5 percent of 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 | Percent of hospitals (by Urban/Rural) |  |
| :---: | :---: | :---: |
|  | Urban | Rural |
| Increase more than 10 percent $\qquad$ | 0.4 | 2.5 |
| Increase between 5 and 10 percent (inclusive) .... | 1.5 | 0.9 |
| Increase or decrease less than 5 percent $\qquad$ | 96.2 | 2.7 |
| Decrease between 5 and 10 percent (inclusive) .... | 1.6 | 1.9 |
| Decrease more than 10 percent $\qquad$ | 0.4 | 2.0 |

ANote: The sum of the columns may not total to 100 due to rounding.

## D. The Impact of MGCRB

Reclassifications (Column 3)
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 RRCs and hospitals in rural counties that are deemed urban under section 1886(d)(8)(B) of the Act). The changes in column 3 reflect the per case payment impact of moving from this baseline to a simulation incorporating the MGCRB decisions for FY 1997. As noted below, these decisions affect hospital s' standardized amount and wage index area assignments. In addition, rural hospitals reclassified for purposes of the standardized amount al so qualify to be treated as urban for purposes of the DSH adjustment.
By March 30 of each year, the M GCRB makes reclassification determinations that will be effective for the next fiscal year, which begins on October 1. The MGCRB may reclassify a hospital for the purpose of using the other area's standardized amount, wage index value, or both. (RRCs and SCHs are exempt from the proximity requirement.)
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 1997 wage index values incorporate all of the MGCRB's reclassification decisions for FY 1997.
The wage index val ues also reflect any decisions made by the HCFA
Administrator through the appeals and review process for MGCRB decisions as of March 29, 1996. 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 1997.

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 0.994059 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 2.3 percent, while payments to urban hospitals decline 0.4 percent. Large urban hospitals lose 0.5 percent because, as a group, they have the smal lest percentage of hospitals that are reclassified (fewer than 3 percent of I arge urban hospitals are recl assified). There are enough hospitals in other urban areas that are recl assified to limit the decrease in payments to urban hospital s stemming from the budget neutral ity offset to 0.2 percent. A mong urban hospital groups generally (that is, bed size, census division, and special payment status), payments fall between 0.2 and 0.5 percent.

A positive impact is evident among all rural hospital groups except rural hospitals with up to 49 beds, which experience a 0.0 percent impact. The smallest effect among all rural census divisions is 0.8 percent for the Middle Atlantic and Mountain divisions. These divisions have relatively fewer MGCRB reclassifications. A mong urban census divisions, New England displays the smallest negative impact, 0.1 percent.

Among rural hospitals designated as RRCs, 50 hospitals are reclassified for purposes of the wage index only and experience a 9.5 percent increase in payments overall. This positive impact on RRCs is al so reflected in the category of rural hospitals with 200 or more beds, which have a 4.9 percent increase in payments.

Rural hospitals reclassified for FY 1996 and FY 1997 experience a 9.1 percent increase in payments, the greatest of any group in the category. 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 recl assified for FY 1997 only experience a 7.1 percent increase in payments while rural hospitals reclassified for FY 1996 only experience a 0.4 decrease in payments. This is due to the budget neutral ity adjustment, since the changes in this column reflect FY 1997 payments relative to no reclassifications, rather than to FY 1996 reclassifications. Urban hospitals reclassified for FY 1996 but not FY 1997 experience a 2.0 percent decline in payments overall. This appears to be due to the combined impacts of the budget neutral ity adjustment and a
number of hospitals in this category that experience a 6 percent drop in their wage index after reclassification. Urban hospitals reclassified for FY 1997 but not for FY 1996 experience a 2.4 percent increase in payments.

The FY 1997 Reclassification rows of Tablel show the changes in payments per case for all FY 1997 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 hospital s reclassified for both the standardized amount and the wage index. These hospital s recei ve an 18.8 percent increase in payments. The number of hospitals in this category has declined from 42 in FY 1996 to 16 in FY 1997. In addition, rural hospitals recl assified for the wage index receive an 8.8 percent payment increase. The overall impact on reclassified hospitals is to increase their payments per case by an average of 5.3 percent for FY 1997.
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 recl assification. This is because, although these hospitals are treated as being attached to an urban area in our basel ine (their redesignation is ongoing, rather than annual like the M GCRB
reclassifications), they are eligi ble for MGCRB reclassification. For FY 1997, one hospital in this category reclassified to a large urban area, resulting in a net increase due to reclassifications of 0.8 percent.
The reclassification of hospitals primarily affects payment to nonreclassified hospitals through changes in the wage index and the geographic recl assification budget neutrality adjustment required by section 1886(d)(8)(D) of the Act. Among hospitals that are not reclassified, the overall impact of hospital recl assifications is an average decrease in payments per case of about 0.6 percent, which corresponds closely with the geographic reclassification budget neutrality factor. Rural nonreclassified hospitals decrease slightly less, experiencing a 0.4 percent decrease. This occurs because the wage index values in some rural areas increase after reclassified hospitals are excluded from the calculation of those index values.

The number of reclassifications for purposes of the standardized amount, or for both the standardized amount and the wage index, has declined from 358 in FY 1996 to 210 in FY 1997. This is not surprising because of the elimination of standardized amount
recl assifications from rural to other urban areas for individual hospitals. Individual rural hospitals can continue to reclassify to large urban areas for purposes of the standardized amount. The number of wage index only recl assifications increased slightly from 260 in FY 1996 to 274 in FY 1997.
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.

## E. Outlier Changes (Column 4)

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). Section 1886(d)(5)(A)(v) of the Act requires the Secretary to phase out payment for day outliers from FY 1994 day outlier levels in 25 percent increments beginning in FY 1995. Day outliers in FY 1997 should account for approximately 8 percent of total outlier payments ( 25 percent of FY 1994 levels). This reduction in day outlier payments will be offset by an increase in cost outlier payments.
As discussed in the Addendum, for FY 1997, we are proposing a day outlier threshold equal to the geometric mean length of stay for each DRG plus the lesser of 24 days or 3.0 standard deviations. The proposed marginal cost factor for day outliers is 35 percent. For FY 1997, we are proposing that a case would receive cost outlier payments if its costs exceed the DRG amount plus $\$ 11,050$. We are also proposing to mai ntain 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 New England ( 0.1 percent decline); urban and rural Middle Atlantic census divisions (1.1 percent and 0.2 percent declines, respectively); urban hospitals with 500 or more beds ( 0.4 percent decline); teaching hospitals with 100 or more residents ( 0.5 percent decline); and hospitals for which data were unavailable to cal culate M edicare utilization rates (1.4 percent decline). As noted in the wage index discussion previously, this last category contai ns a number of New Y ork City hospitals. Because the changes to 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. The largest positive impact is among urban hospitals in the West South Central census division (0.4 percent increase).

## F. All Changes (Column 5)

Column 5 compares our estimate of payments per case incorporating all of our proposed changes for FY 1997 to our estimate of payments per case in FY 1996. It also includes the effects of the 2.2 percent update to the standardized amounts and the hospital-specific rates for SCHs and EACHs, and the 0.9 percentage point difference between the percentage of projected outlier payments in FY 1997 (5.1 percent) and the current estimate of the percentage of actual outlier payments in FY 1996 (4.2 percent), as described in the introduction to this Appendix and the Addendum.

We also note that column 5 includes the impacts of FY 1997 MGCRB reclassifications compared to the payment impacts of FY 1996 reclassifications. Therefore, when comparing FY 1997 payments to FY 1996, the percent changes due to FY 1997 reclassifications shown in column 3 need to be offset by the effects of reclassification on hospitals' FY 1996 payments (column 4 of Table 1, September 1, 1995 final rule; 60 FR 45926). That is, column 3 of Table 1 shows the impacts of going from no M GCRB reclassifications to the FY 1997 reclassifications. When comparing FY 1996 and FY 1997 payments, hospitals similarly reclassified during FY 1996 would not experience the full extent of the change shown in column 3. For example, the impact of MGCRB reclassifications on rural hospitals' FY 1996 payments was approximately a 2.3 percent increase, equal to the 2.3 percent increase for FY 1997. Therefore, the net increase in FY 1997 payments due to reclassification for rural hospitals is 0 percent.

In addition, eliminating the regional floor provision effective for discharges occurring on or after October 1, 1996, results in approximately a 0.2 percent lower average payment in FY 1997 than would occur otherwise. Of course, this effect is attri butable to particular census divisions, as discussed below.

Finally, the FY 1996 standardized amounts were adjusted by a budget neutral ity factor of 0.997575 , in accordance with section 1886(d)(5)(I) of the Act, so that the change to the transfer payment methodology we implemented last year (doubling the per
diem payment for the first day of a transfer) would not affect aggregate payments. As we indicated in last year's final rule ( 60 FR 45854), this adjustment was applied on a one-time basis to the FY 1996 standardized amounts. After FY 1996, there will be no need for a further budget neutral ity adjustment unless or until we make further changes to the transfer payment methodology. As a result, the FY 1997 standardized amounts are rel atively higher ( 0.2 percent).

A single geographic reclassification budget neutrality factor of 0.994059 was applied to the proposed FY 1997 standardized amounts, compared to the FY 1996 factor of 0.994011. The budget neutrality adjustment factor for the updated wage index and the DRG recalibration is 0.998509 , compared to the FY 1996 factor of 0.999306. Although the net effect of these changes is small, they are reflected in the payment differences shown in this column.

There may 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 5 may not equal the sum of the previous columns plus the other impacts that we are able to identify.

The overall payment increase from FY 1997 to FY 1996 for all hospitals is a 3.1 percent increase. This reflects the 0.0 percent net change in total payments due to the proposed changes for FY 1997 shown in columns 1 through 4, the 2.2 percent update for $F Y$ 1997, and the 0.9 percent higher outlier payments in FY 1997 compared to FY 1996, as discussed above.

Hospitals in urban areas experience a 3.2 percent rise in payments per case over FY 1996. Similar to all hospitals nationally, this is primarily due to the factors discussed above: the 2.2 percent update; a 0.9 percent higher level of outlier payments estimated for FY 1997; and the offsetting effects of eliminating the regional floor and the FY 1996 transfer budget neutrality factor. Urban hospitals benefit 0.1 percent from DRG recalibration, while losing 0.1 percent due to the phase out of the day outlier policy. Their 0.4 negative impact in FY 1997 due to reclassification is offset by a similar impact from FY 1996 reclassifications
Hospital s in large and other urban areas experience 3.1 percent and 3.3 percent increases, respectively. The lower increase for hospitals in large urban areas appears to be attri butable primarily to the 0.2 percent negative impact of the continuing phase out of day outliers.

Hospitals in rural areas experience a 2.7 percent increase. Their FY 1997 payments are estimated to be 0.6 percent higher than for FY 1996 due to higher outlier payments. Like urban hospitals, the impact of geographic recl assification in FY 1997 is offset by an identical 2.3 percent increase in FY 1996.

Among urban bed size groups, column 5 shows changes in payments are higher for the largest urban hospitals compared to smaller urban hospital s. The relatively smaller increases for the smaller urban hospitals appear to be due to the negative impacts of the new wage data, as shown in column 2. Among rural bed size groups, the impacts range from 2.8 percent to 2.9 percent, with the exception of rural hospitals with 200 or more beds. Payments per case for this group of hospitals is estimated to increase 2.2 percent during FY 1997. This below average rate of increase appears to be attributable primarily to a smaller, though still significant, impact of M GCRB reclassifications during FY 1997 compared to FY 1996. In column 3 the FY 1997 impact of reclassification is shown to be 4.9 percent. For FY 1996, however, this impact was 5.4 percent. Thus, the rate of increase is 0.5 percent less for FY 1997 due to a smaller reclassification impact.

As discussed previously, effective for discharges on or after October 1, 1996, the regional floor, which benefitted certain census divisions, expires. The regional floor provided that, in those census divisions where the regional standardized amount exceeded the national standardized amount, hospitals would be paid a blend of 85 percent of the national amount and 15 percent of the regional amount. The census divisions affected by the regional floor during FY 1996 are New England and East North Central. In New England, the impacts of eliminating the regional floor are a 0.7 percent decrease for urban hospitals and a 0.6 percent decrease among rural hospitals. In the East North Central region, the impacts are a 1.0 percent reduction for urban hospitals, and a 0.7 percent reduction for rural hospitals. The negative impacts of losing the regional floor for urban
hospital s in the East North Central region are largely offset by higher estimated outlier payments in FY 1997 compared to FY 1996, the 0.3 percent higher payments due to the FY 1993 wage data (column 2 ), and the 0.2 percent increase due to the phase-out of day outliers (column 4). On the other hand, urban New England hospitals' higher outlier payments in FY 1997 are offset enti rely by the negative impacts of the expiration of the regional floor. Rural New England hospitals al so see a 1.0 percent decrease in payments stemming from the FY 1993 wage data.

Other census divisions below the average payment increase are urban Pacific, urban Puerto Rico, rural Middle Atlantic, rural South Atlantic, rural East South Central, and rural Mountain. With the exception of the rural Middle Atlantic and rural East South Central, the below average overall payment impacts of these census divisions are related to negative impacts of introducing the FY 1993 wage data. In the rural Middle Atlantic, the negative impact of the new wage data is combined with a smaller impact stemming from MGCRB recl assifications in FY 1997 (0.8 percent compared to 1.5 percent in FY 1996). A smaller FY 1997 reclassification impact ( 2.5 percent compared with 3.7 percent in FY 1996) is also the reason for the small (2.2 percent) rate of increase in the rural East South Central census division.

Conversely, the urban Middle A tlantic, urban West South Central, rural Pacific, and rural Puerto Rico census divisions all have overall rates of increase at least 0.4 percent above the national average. The urban West South Central gains from the continued phaseout of day outliers, as well as higher estimated FY 1997 outlier payments compared to FY 1996. As noted previously, the urban Middle Atlantic benefits significantly from the updated wage index data. These hospital s also have higher estimated FY 1997 outlier payments, which offset their 1.1 percent decrease due to the phase-out of day outliers. Rural Pacific hospitals benefit from geographic reclassification in FY 1997, with 12 hospitals being
reclassified that were not reclassified in FY 1996.

The only hospital groups with negati ve payment impacts from FY 1996 to FY 1997 are hospitals that were reclassified for FY 1996 and are not reclassified for FY 1997. Overall, these hospitals lose 0.5 percent. The urban hospitals in this category actually experience slight payment increases over FY 1996 ( 0.8 percent), while the rural hospitals lose 2.1 percent. On the other hand, hospitals reclassified for FY 1997 that were not reclassified for FY 1996 would experience the greatest payment increases: 10.5 percent for 69 rural hospitals in this category and 8.0 percent for 34 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 5. For example, among hospital groups identified in the discussion of the impacts of MGCRB recl assifications for FY 1997 (column 3), al most all have overall increases of 3.6 percent or greater. This outcome highl ights the redistributive effects of reclassification decisions upon hospital payments. This impact is illustrated even more clearly when one examines the rows categorizing hospitals by their recl assification status for FY 1997. All nonreclassified hospitals have an average payment increase of 3.0 percent. The average payment increase for all reclassified hospitals is 4.3 percent.

Among $\mathrm{SCH} / \mathrm{EACH}$, the payment increase is 2.7 percent. The primary reason for this below average increase is that there is minimal impact upon these hospitals from the higher estimated FY 1997 outlier payments. Because these hospital groups receive their hospitalspecific rate if it exceeds the applicable Federal amount (including outliers), there is less of an impact due to changes in outlier payment levels, which are not applied to the hospital-specific rate. In addition, nonspecial status rural hospitals experience only a 2.1 percent increase. This is largely attri butable to a much smaller reclassification impact for FY 1997 among these hospitals.

Table II.-Impact Analysis of Changes for FY 1997 Operating Prospective Payment System
[Payments per case]



| 5,130 | 6,470 | 6,673 | 3.1 |
| ---: | ---: | ---: | ---: |
| 2,878 | 7,004 | 7,229 | 3.2 |
| 1,597 | 7,524 | 7,761 | 3.1 |
| 1,281 | 6,317 | 6,524 | 3.3 |
| 2,252 | 4,302 | 4,419 | 2.7 |
|  |  |  |  |
| 716 | 4,721 | 4,862 | 3.0 |
| 938 | 5,939 | 6,112 | 2.9 |
| 577 | 6,521 | 6,722 | 3.1 |
| 479 | 7,410 | 7,660 | 3.4 |
| 168 | 9,150 | 9,457 | 3.4 |
|  |  |  |  |
| 1,173 | 3,540 | 3,639 | 2.8 |
| 663 | 3,996 | 4,108 | 2.8 |
| 241 | 4,462 | 4,593 | 2.9 |
| 99 | 4,582 | 4,713 | 2.8 |
| 76 | 5,417 | 5,537 | 2.2 |
|  |  |  |  |
| 160 | 7,508 | 7,686 | 2.4 |
| 434 | 7,686 | 7,953 | 3.5 |
| 419 | 6,664 | 6,887 | 3.3 |
| 483 | 6,742 | 6,940 | 2.9 |
| 163 | 6,185 | 6,395 | 3.4 |
| 193 | 6,652 | 6,880 | 3.4 |
| 375 | 6,524 | 6,756 | 3.6 |
| 125 | 6,774 | 6,996 | 3.3 |
| 478 | 8,077 | 8,313 | 2.9 |
| 48 | 2,584 | 2,652 | 2.6 |
|  |  |  |  |
| 53 | 5,236 | 5,344 | 2.1 |
| 85 | 4,695 | 4,785 | 1.9 |
| 297 | 4,476 | 4,591 | 2.6 |
| 304 | 4,328 | 4,454 | 2.9 |
| 278 | 3,960 | 4,048 | 2.2 |
| 525 | 4,008 | 4,121 | 2.8 |
| 351 | 3,876 | 4,001 | 3.2 |
| 213 | 4,575 | 4,712 | 3.0 |
| 141 | 5,306 | 5,51 | 4.0 |
| 5 | 2,042 | 2,118 | 3.8 |

(By Payment Categories)

| Urban hospitals | 2,978 | 6,960 | 7,184 | 3.2 |
| :---: | :---: | :---: | :---: | :---: |
| Large urban areas | 1,793 | 7,352 | 7,586 | 3.2 |
| Other urban areas | 1,185 | 6,322 | 6,528 | 3.3 |
| Rural areas | 2,152 | 4,269 | 4,379 | 2.6 |
| Teaching status: |  |  |  |  |
| Non-teaching | 4,057 | 5,293 | 5,458 | 3.1 |
| Fewer than 100 residents | 841 | 6,900 | 7,118 | 3.2 |
| 100 or more residents | 232 | 10,565 | 10,901 | 3.2 |
| Disproportionate Share Hospitals (DSH): |  |  |  |  |
| Non-DSH | 3,200 | 5,602 | 5,779 | 3.2 |
| Urban DSH: |  |  |  |  |
| 100 beds or more | 1,410 | 7,595 | 7,835 | 3.2 |
| Fewer than 100 beds | 111 | 4,811 | 4,929 | 2.5 |
| Rural DSH: |  |  |  |  |
| Sole community (SCH) | 146 | 4,478 | 4,625 | 3.3 |
| Referral centers (RRC) | 25 | 5,216 | 5,409 | 3.7 |
| Other rural DSH hosp.: |  |  |  |  |
| 100 beds or more | 89 | 4,235 | 4,280 | 1.1 |
| Fewer than 100 beds | 149 | 3,412 | 3,497 | 2.5 |
| Urban Teaching and DSH: |  |  |  |  |
| Both teaching and DSH | 682 | 8,576 | 8,843 | 3.1 |
| Teaching and no DSH | 337 | 7,094 | 7,324 | 3.2 |

Table II.—impact Analysis of Changes for FY 1997 Operating Prospective Payment System-Continued
[Payments per case]


Hospitals Reclassified by the Medicare Geographic Review Board

| Reclassification status during FY96 and FY97: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Reclassified during both FY96 and FY97 | 381 | 5,864 | 6,046 | 3.1 |
| Urban | 133 | 6,750 | 6,976 | 3.4 |
| Rural | 248 | 5,003 | 5,143 | 2.8 |
| Reclassified during FY97 only | 103 | 6,150 | 6,679 | 8.6 |
| Urban | 34 | 7,091 | 7,658 | 8.0 |
| Rural | 69 | 4,374 | 4,831 | 10.5 |
| Reclassified during FY96 only | 251 | 5,658 | 5,630 | -0.5 |
| Urban | 88 | 7,131 | 7,189 | 0.8 |
| Rural | 163 | 4,515 | 4,421 | -2.1 |
| FY 97 Reclassifications: All reclassified hosp. | 484 | 5,922 | 6,176 | 4.3 |
| Stand. amt. Only | 120 | 5,764 | 5,944 | 3.1 |
| Wage index only | 274 | 5,839 | 6,065 | 3.9 |
| Both | 90 | 6,205 | 6,571 | 5.9 |
| Nonreclass. | 4,619 | 6,548 | 6,745 | 3.0 |
| All urban reclass. | 167 | 6,837 | 7,150 | 4.6 |
| Stand. amt. only | 63 | 6,230 | 6,433 | 3.3 |
| Wage index only | 30 | 9,311 | 9,728 | 4.5 |
| Both | 74 | 6,370 | 6,727 | 5.6 |
| Nonreclass. | 2,711 | 7,018 | 7,235 | 3.1 |
| All rural reclass. | 317 | 4,909 | 5,096 | 3.8 |
| Stand. amt. only | 57 | 4,623 | 4,749 | 2.7 |
| Wage index only | 244 | 4,968 | 5,146 | 3.6 |
| Both | 16 | 4,898 | 5,345 | 9.1 |
| Nonreclass. | 1,908 | 4,063 | 4,152 | 2.2 |
| Other reclassifed: <br> Hospitals (section 1886(d)(8)(B)) | 27 | 4,611 | 4,756 | 3.1 |

${ }^{1}$ These payment amounts per case do not reflect any estimates of annual case-mix increases.

Table Il presents the projected impact of the proposed changes for FY 1997 for urban and rural hospitals and for the different categories of hospitals shown in Tablel. It compares the projected payments per case for FY 1997 with the average estimated per case payments for FY 1996, as cal culated 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 I equal the percentage changes in average payments from column 5 of Tablel.
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. Specifical ly, we have cost report data for the third year of the capital prospective payment system (cost
reports beginning in FY 1994) available through the March 1996 update of the Hospital Cost Report Information System (HCRIS). We al so 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 such 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 M edicare capital -rel ated 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-rel ated 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 Medi care share of the recognized costs. Therefore, we do not know actual obligated capital commitments for purposes of the FY 1997 capital cost projections. We discuss in A ppendix B the assumptions and computations we employ to generate the amount of obli gated capital commitments for use in the FY 1997 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 1997. In addition, we have integrated sufficient hospital-specific information into our actuarial model to project the impact of the proposed FY 1997 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 hospital s, we need to randomly generate numbers for the change in old capital costs, new capital costs for each year, and obl igated 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 1997 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 TableV 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 1997 payment policies.
B. Projected Impact Based on the Proposed FY 1997Actuarial Model

## 1. Assumptions

In this impact analysis, we model dynami cally the impact of the capital prospective payment system from FY 1996 to FY 1997 using a capital acquisition model. The FY 1997 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 1994 received through the March 1996 update of the Hospital Cost Reporting Information System (HCRIS), interim payment data for hospitals al ready 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, 1996 in the ProviderSpecific file. We used this data to determine the proposed FY 1997 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.
For purposes of this impact analysis, the FY 1997 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



- The Medi care case-mix index will increase by 1.6 percent in FY 1996 and FY 1997.
- The Federal capital rate as well as the hospital-specific rate is 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 1997 update for inflation is 1.00 percent (see Addendum, Part III).


## 2. Results

We have used the actuarial model to estimate the change in payment for capital-rel ated costs from FY 1996 to FY 1997. Table III shows the effect of the capital prospective payment system on low capital cost hospitals and high capital cost hospital s. 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 hospitalspecific 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 1997 percent of discharges | FY 1997 percent of capital costs | FY 1997 percent of capital payments |
| :---: | :---: | :---: | :---: | :---: |
| Low Cost Hospital | 66 | 62 | 53 | 56 |
| High Cost Hospital | 34 | 38 | 47 | 44 |

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 begi nning after obligated capital comes into use (within the limits establ ished 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 holdharmless 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 1996 to FY 1997 using the above described actuarial model.

## table III.-Impact of Proposed Changes for FY 1997 on Payments per Discharge <br> FY 1996 payments per discharge


FY 1997 payments per discharge


Under section 1886(g)(1)(A) of the Act, aggregate payments under the capital prospective payment system for FY 1992 through 1995 respectively, were projected to equal 90 percent of payments that would have been payable on a reasonable cost basis in each year. With the expiration of the capital budget neutrality provision, we now estimate that there was an aggregate 27.73 percent increase in FY 1996 Medicare capital payments over the FY 1995 payments. With the proposed Federal rate, we estimate aggregate Medicare capital payments will increase by 7.28 percent in FY 1997.
We project that low capital cost hospitals paid under the fully prospective payment methodology will experience an average increase in payments per case of 5.27 percent, and high capital cost hospitals will experience an average increase of 3.43 percent.
For hospitals paid under the fully prospective payment methodology, the Federal rate payment percentage will increase from 50 percent to 60 percent and the hospital-specific rate payment percentage will decrease from 50 to 40 percent in FY 1997. 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 hospitals receiving a hold-harml ess payment for old capital will increase from 49.81 percent to 61.34 percent. We estimate the percentage of hold-harmless hospitals paid based on 100 percent of the Federal rate will increase from 65.8 percent to 67.9 percent.

We expect that the average hospitalspecific rate payment per discharge will decrease from $\$ 123.98$ in FY 1996 to $\$ 97.08$ in FY 1997. This is partly due to the 3.68 percent decrease in the FY 1997 hospital-specific rate compared to FY 1996.

We are proposing no changes in our exceptions policies for FY 1997. 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 2.30 percent of total capital payments in FY 1996 to 5.63 percent of payments in FY 1997. 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 1997 Exceptions PAYMENTS

| Type of hospital | Number of <br> hospitals | Percent of <br> exceptions <br> payments |
| ---: | ---: | ---: |
| Low Capital Cost <br> High Capital <br> Cost ............. | 450 | 58 |
| Total ........... | 331 | 42 |

## 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 Number of Hospitals | (2) Hold-harmless |  | (3) <br> Percentage paid fully prospective rate |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Percentage paid holdharmless (A) | Percentage paid fully federal (B) |  |
| By Geographic Location: |  |  |  |  |
| All hospitals | 5,104 | 13.0 | 27.6 | 59.4 |
| Large urban areas (populations over 1 million) | 1,584 | 15.6 | 34.5 | 49.9 |
| Other urban areas (populations of 1 million or fewer) ................................... | 1,271 | 15.1 | 33.4 | 51.5 |
| Rural areas | 2,249 | 10.0 | 19.4 | 70.6 |
| Urban hospitals | 2,855 | 15.4 | 34.0 | 50.6 |
| $0-99$ beds | 698 | 16.2 | 27.7 | 56.2 |
| 100-199 beds | 933 | 19.3 | 36.8 | 43.9 |
| 200-299 beds | 577 | 13.9 | 37.3 | 48.9 |
| 300-499 beds | 479 | 11.5 | 32.6 | 55.9 |
| 500 or more beds | 168 | 6.5 | 37.5 | 56.0 |
| Rural hospitals | 2,249 | 10.0 | 19.4 | 70.6 |
| 0-49 beds | 1,171 | 7.1 | 14.3 | 78.7 |
| 50-99 beds | 662 | 12.8 | 21.9 | 65.3 |
| 100-149 beds | 241 | 14.5 | 30.3 | 55.2 |
| 150-199 beds | 99 | 16.2 | 22.2 | 61.6 |
| 200 or more beds | 76 | 7.9 | 39.5 | 52.6 |
| By Region: |  |  |  |  |
| Urban by Region | 2,855 | 15.4 | 34.0 | 50.6 |
| New England | 160 | 7.5 | 25.0 | 67.5 |
| Middle Atlantic .................................................................................... | 434 | 9.9 | 30.0 | 60.1 |
| South Atlantic ..................................................................................... | 417 | 19.2 | 41.0 | 39.8 |
| East North Central .............................................................................. | 480 | 11.3 | 28.5 | 60.2 |
| East South Central ............................................................................... | 162 | 19.8 | 36.4 | 43.8 |
| West North Central | 190 | 17.4 | 28.4 | 54.2 |
| West South Central .............................................................................. | 366 | 25.7 | 47.5 | 26.8 |
| Mountain ........................................................................................... | 124 | 15.3 | 42.7 | 41.9 |
| Pacific .............................................................................................. | 474 | 13.3 | 30.4 | 56.3 |
| Puerto Rico | 48 | 18.8 | 16.7 | 64.6 |
| Rural by Region ....................................................................................... | 2,249 | 10.0 | 19.4 | 70.6 |

Table IV.-Distribution by Method of Payment (Hold-Harmless/Fully Prospective) of Hospitals Receiving

|  | (1) <br> Total Number of Hospitals | $\begin{gathered} \text { Hold-harmless } \end{gathered}$ |  | (3) Percentage paid fully prospective rate |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Percentage paid holdharmless (A) | Percentage paid fully federal (B) |  |
| New England | 53 | 7.5 | 15.1 | 77.4 |
| Middle Atlantic | 84 | 6.0 | 19.0 | 75.0 |
| South Atlantic | 297 | 13.1 | 25.3 | 61.6 |
| East North Central | 304 | 8.6 | 13.5 | 78.0 |
| East South Central | 278 | 10.1 | 30.6 | 59.4 |
| West North Central | 525 | 7.2 | 15.0 | 77.7 |
| West South Central | 349 | 10.0 | 24.1 | 65.9 |
| Mountain. | 213 | 15.5 | 12.7 | 71.8 |
| Pacific. | 141 | 11.3 | 15.6 | 73.0 |
| Large urban areas (populations over 1 million) | 1,780 | 15.3 | 34.3 | 50.4 |
| Other urban areas (populations of 1 million or fewer) | 1,175 | 15.4 | 32.3 | 52.3 |
| Rural areas ........................................................ | 2,149 | 9.8 | 19.4 | 70.8 |
| Teaching Status: |  |  |  |  |
| Non-teaching | 4,031 | 13.7 | 26.6 | 59.7 |
| Fewer than 100 Residents | 841 | 11.1 | 32.0 | 57.0 |
| 100 or more Residents | 232 | 7.8 | 28.4 | 63.8 |
| Disproportionate share hospitals (DSH): |  |  |  |  |
| Non-DSH | 3,175 | 12.7 | 23.8 | 63.5 |
| Urban DSH: |  |  |  |  |
| 100 or more beds | 1,410 | 15.0 | 36.2 | 48.8 |
| Less than 100 beds | 110 | 11.8 | 25.5 | 62.7 |
| Rural DSH: |  |  |  |  |
| Sole Community (SCH/EACH) | 146 | 9.6 | 20.5 | 69.9 |
| Referral Center (RRC/EACH) <br> Other Rural: | 25 | 8.0 | 32.0 | 60.0 |
| 100 or more beds | 89 | 13.5 | 39.3 | 47.2 |
| Less than 100 beds | 149 | 6.7 | 25.5 | 67.8 |
| Urban teaching and DSH: |  |  |  |  |
| Both teaching and DSH | 682 | 9.1 | 32.8 | 58.1 |
| Teaching and no DSH | 337 | 13.6 | 27.6 | 58.8 |
| No teaching and DSH ... | 838 | 19.3 | 37.6 | 43.1 |
| No teaching and no DSH | 1,098 | 16.7 | 32.7 | 50.6 |
| Rural Hospital Types: |  |  |  |  |
| NON special status hospitals | 1,379 | 7.6 | 19.5 | 72.9 |
| RRC/EACH | 90 | 8.9 | 37.8 | 53.3 |
| SCH/EACH | 641 | 14.5 | 16.4 | 69.1 |
| SCH, RRC and EACH | 39 | 12.8 | 20.5 | 66.7 |
| Type of Ownership: |  |  |  |  |
| Voluntary: |  |  |  |  |
| Voluntary | 3,058 | 12.8 | 27.7 | 59.5 |
| Proprietary | 691 | 23.6 | 46.2 | 30.2 |
| Government | 1,355 | 8.1 | 17.9 | 74.0 |
| Medicare Utilization as a Percent of Inpatient Days: |  |  |  |  |
| 0-25 ........... | 256 | 14.8 | 25.0 | 60.2 |
| 25-50 ................................................................................................. | 1,285 | 14.6 | 33.1 | 52.3 |
| 50-65 ................................................................................................ | 2,105 | 12.9 | 27.8 | 59.3 |
| Over 65 ............................................................................................. | 1,353 | 10.4 | 22.2 | 67.3 |

As we explain in Appendix B, we were not able to determine a hospital specific rate for 26 of the 5,130 hospitals in our data base. Consequently, the payment methodology distribution is based on 5,104 hospitals. This 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-harml ess hospitals is expected to increase to 27.6 percent in FY 1997.

Table IV indicates that 59.4 percent of hospitals are 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 hospitalspecific rate redetermination, are now paid under the hold-harmless methodology.) As expected, a rel atively higher percentage of rural and governmental hospitals ( 70.8 percent and 74.0 percent, respectivel y 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 30.2 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 1997 actuarial model to estimate the potential impact of our proposed changes for FY 1997 on total capital payments per case, using a universe of 5,104 hospital s. The individual hospital payment parameters are taken from the best available data, including: the January 1, 1996 update to the Provider-Specific file, cost report data, and audit information supplied by intermediaries. TableV presents estimates of payments per case under our model for FY 1996 and FY 1997 (columns 2 and 3 ). Column 4 shows the total percentage change in payments from FY 1996 to FY 1997. Column 5 presents the percentage change in payments that can be attri buted to Federal rate changes alone.

Federal rate changes represented in Column 5 include the 4.36 percent decrease in the Federal rate, a 1.6 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 Medicare Geographic Classification Review Board. Column 4 includes the effects of the Federal rate changes represented in Column 3. Column 4 al so reflects the effects of all other changes, including: the change from 50 percent to 60 percent in the portion of the Federal rate for fully prospective hospitals, the hospitalspecific 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 and (2) payment classification and payment region.

The simulation results show that, on average, capital payments per case can be expected to increase 4.4 percent in FY 1997. The results show that the effect of the Federal rate changes al one is to decrease payments by 0.9 percent. The decrease attri butabl e to the Federal rate changes is more than offset by a 5.3 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 (4.4 percent and 4.8 percent, respectively). Payments per case for urban hospitals will decrease at about the same rate as payments per case for rural hospitals ( 0.8 percent and 1.3 percent, respectively) from the Federal rate changes alone. Urban hospitals will gain slightly less than rural hospital s (5.2 percent compared to 6.1 percent) from the effects of all other changes.

By region, there is relatively little variation compared to some previous years. All regi ons are estimated to recei ve increases in total capital payments per case, due to the increased share of payments that is based on the Federal rate (from 50 to 60 percent). Changes by region vary from a low of 2.1 percent increase (Middle Atlantic rural region) to a high of 15.6 percent increase (rural hospital s of the New England region).

By type of ownership, government hospital s are projected to have the I argest rate of increase (5.1 percent, -1.1 percent due to Federal rate changes and a 6.2 percent positive offset from the effects of all other changes). Payments to voluntary hospitals will increase 4.5 percent (a 0.9 percent decrease due to Federal rate changes and a 5.4 percent positive offset from the effects of all other changes) and payments to proprietary hospitals will increase 3.8 percent (a 0.7 percent decrease due to Federal rate changes and a 4.5 percent
positive offset from the effects of all other changes).

Section 1886(d)(10) of the Act established the Medicare Geographic Classification Review Board (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 1997 compared to the effects of reclassification for FY 1996, we show the average payment percentage increase for hospitals reclassified in each fiscal year and in total. For FY 1997 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.

Hospital s reclassified during FY 1997 as a whole are projected to experience a 5.3 percent increase in payments (a 0.3 percent decrease attri butable to Federal rate changes and a 5.6 percent positive offset attri butable to the effects of all other changes). Payments to nonreclassified hospitals will increase slightly less (4.3 percent) than reclassified hospitals ( 5.3 percent) overall. Payments to nonreclassified hospitals will decrease slightly more than reclassified hospital s from the Federal rate changes ( 1.0 percent compared to 0.3 percent), but they will gain about the same from the effects of all other changes ( 5.3 percent compared to 5.6 percent).

Table V.-Comparison of Total Payments Per Case
[FY 1996 Payments Compared to FY 1997 Payments]

|  | Number of hospitals | Average FY <br> 1996 payments/case | Average FY 1997 payments/case | All changes | Portion attibutable to federal rate change |
| :---: | :---: | :---: | :---: | :---: | :---: |
| By Geographic Location: |  |  |  |  |  |
| All hospitals | 5,104 | 718 | 750 | 4.4 | -0.9 |
| Large urban areas (populations over 1 million) | 1,584 | 823 | 858 | 4.3 | -0.9 |
| Other urban areas (populations of 1 million of fewer) .................... | 1,271 | 714 | 747 | 4.5 | -0.8 |
| Rural areas .......................................................................... | 2,249 | 479 | 503 | 4.8 | -1.3 |
| Urban hospitals | 2,855 | 776 | 810 | 4.4 | -0.8 |

Table V.-Comparison of Total Payments Per Case-Continued
[FY 1996 Payments Compared to FY 1997 Payments]

|  | Number of hospitals | Average FY 1996 payments/case | Average FY 1997 payments/case | All changes | Portion attibutable to federal rate change |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $0-99$ beds | 698 | 570 | 594 | 4.3 | -0.9 |
| 100-199 beds | 933 | 703 | 731 | 4.1 | -1.0 |
| 200-299 beds | 577 | 744 | 776 | 4.2 | -0.9 |
| 300-499 beds | 479 | 800 | 838 | 4.8 | -0.8 |
| 500 or more beds | 168 | 944 | 984 | 4.3 | -0.5 |
| Rural hospitals .......... | 2,249 | 479 | 503 | 4.8 | -1.3 |
| $0-49$ beds .. | 1,171 | 368 | 389 | 5.8 | -1.5 |
| $50-99$ beds | 662 | 445 | 468 | 5.0 | -1.2 |
| 100-149 beds | 241 | 512 | 536 | 4.7 | -1.3 |
| 150-199 beds | 99 | 517 | 543 | 4.9 | -1.0 |
| 200 or more beds | 76 | 609 | 633 | 3.9 | -1.5 |
| By Region: |  |  |  |  |  |
| Urban by Region | 2,855 | 776 | 810 | 4.4 | -0.8 |
| New England | 160 | 780 | 818 | 4.9 | -1.5 |
| Middle Atlantic | 434 | 816 | 855 | 4.8 | -0.8 |
| South Atlantic | 417 | 777 | 809 | 4.2 | -0.8 |
| East North Central | 480 | 730 | 759 | 4.0 | -0.7 |
| East South Central | 162 | 707 | 744 | 5.3 | -0.5 |
| West North Central | 190 | 768 | 807 | 5.1 | -0.8 |
| West South Central | 366 | 794 | 825 | 3.8 | -0.3 |
| Mountain ... | 124 | 774 | 804 | 3.8 | -1.1 |
| Pacific | 474 | 856 | 890 | 4.1 | -1.3 |
| Puerto Rico | 48 | 291 | 313 | 7.5 | -1.1 |
| Rural by Region | 2,249 | 479 | 503 | 4.8 | -1.3 |
| New England | 53 | 605 | 699 | 15.6 | -1.8 |
| Middle Atlantic | 84 | 489 | 499 | 2.1 | -2.4 |
| South Atlantic | 297 | 501 | 518 | 3.4 | -1.5 |
| East North Central | 304 | 479 | 506 | 5.7 | -0.9 |
| East South Central | 278 | 453 | 471 | 4.0 | -1.5 |
| West North Central | 525 | 449 | 471 | 5.0 | -1.4 |
| West South Central | 349 | 447 | 467 | 4.4 | -0.9 |
| Mountain | 213 | 507 | 540 | 6.4 | -0.5 |
| Pacific | 141 | 549 | 582 | 6.1 | -0.9 |
| By Payment Classification: |  |  |  |  |  |
| All hospitals | 5,104 | 718 | 750 | 4.4 | -0.9 |
| Large urban areas (populations over 1 million) ......................... | 1,780 | 808 | 842 | 4.3 | -0.9 |
| Other urban areas (populations of 1 million of fewer) ..................... | 1,175 | 714 | 747 | 4.6 | -0.8 |
| Rural areas | 2,149 | 473 | 495 | 4.8 | -1.4 |
| Teaching Status: |  |  |  |  |  |
| Non-teaching .................. | 4,031 | 623 | 647 | 3.9 | -1.0 |
| Fewer than 100 Residents | 841 | 756 | 791 | 4.7 | -0.9 |
| 100 or more Residents Urban DSH: | 232 | 1,039 | 1,096 | 5.5 | -0.7 |
| 100 or more beds | 1,410 | 814 | 850 | 4.5 | -0.9 |
| Less than 100 beds | 110 | 557 | 587 | 5.4 | -1.1 |
| Rural DSH: |  |  |  |  |  |
| Sole Community (SCH/EACH) ...................................... | 146 | 458 | 495 | 8.1 | -1.9 |
| Referral Center (RRC/EACH) ......................................... | 25 | 544 | 560 | 2.9 | -0.2 |
| Other Rural: |  |  |  |  |  |
| 100 or more beds | 89 | 501 | 519 | 3.6 | -1.9 |
| Less than 100 beds ................................................... | 149 | 365 | 385 | 5.5 | -1.6 |
| Urban teaching and DSH:: |  |  |  |  |  |
| Both teaching and DSH .................................................... | 682 | 879 | 919 | 4.6 | -0.8 |
| Teaching and no DSH ........................................................ | 337 | 786 | 827 | 5.3 | -0.8 |
| No teaching and DSH ....................................................... | 838 | 712 | 743 | 4.4 | -0.9 |
| No teaching and no DSH ................................................ | 1,098 | 672 | 695 | 3.4 | -0.8 |
| Rural Hospital Types: |  |  |  |  |  |
| Non special status hospitals ............................................ | 1,379 | 439 | 458 | 4.3 | -1.7 |
| RRC/EACH .................................................................. | 90 | 559 | 574 | 2.5 | -0.8 |
| SCH/EACH ................ | 641 | 471 | 506 | 7.4 | -1.2 |
| SCH, RRC and EACH ..................................................... | 39 | 577 | 608 | 5.4 | -1.0 |
| Hospitals Reclassified by the Medicare Geographic Classification Review Board: |  |  |  |  |  |
| Reclassification Status During FY96 and FY97: |  |  |  |  |  |
| Reclassified During Both FY96 and FY97 ..................... | 381 | 668 | 698 | 4.5 | -1.1 |
| Reclassified During FY97 Only .................................... | 103 | 678 | 736 | 8.6 | 2.9 |
| Reclassified During FY96 Only | 228 | 631 | 640 | 1.4 | -3.6 |
| FYell Reclassified Hospitals ............................................ | 484 | 670 | 706 | 5.3 | -0.3 |

Table V.-Comparison of Total Payments Per Case-Continued
[FY 1996 Payments Compared to FY 1997 Payments]


## Appendix B: Technical Appendix on the Capital Acquisition 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-rel ated costs in that year. To implement this requirement, we devel oped the capital acquisition model to determine the budget neutrality adjustment factor. Even though the budget neutrality requirement expires effective with FY 1996, we must continue to determine the recal ibration and geographic reclassification budget neutrality adjustment factor, and the reduction in the Federal and hospital-specific rates for exceptions payments. We continue to use the capital acquisition model to determine these factors.
The foll owing data are used in the capital acquisition model for FY 1997: the March 8, 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) and PPS-XI (cost reporting periods beginning in FY 1994), the January 1, 1996 update of the providerspecific file, and the March 1994 update of the intermediary audit file. The avai lable data still lack certain items that were required for the determination of budget neutrality, including each hospital's projected new capital costs for each year, its projected old capital costs for each year, and the projected obligated capital amounts that will be put in use for patient care services and recognized as old capital each year.

Since hospitals under alternative payment system wai vers (that is, hospitals in Maryland) are currently excluded from the capital prospective payment system, we excluded these hospital s from our model.

We then devel oped FY 1992, FY 1993, FY 1994, FY 1995, and FY 1996 hospital-specific rates using the provider-specific file, the intermediary audit file, and, when available, cost reports. (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 also ensured that the FY 1993 increase in the hospital-specific rate was at least 0.62 percent (the net FY 1993 update), that the FY 1994 hospital-specific rate was at least as large as the FY 1993 hospitalspecific rate decreased by 2.16 percent (the net FY 1994 update), that the FY 1995 increase in the hospital-specific rate was at least 0.05 percent (the net FY 1995 update), and that the FY 1996 increase in the hospital-specific rate was at least 21.10 percent (the net FY 1996 update). We were abl e to match hospitals to the files as shown in the following table.

| Source | Number of <br> hospitals |
| ---: | ---: |
| Provider-Specific File Only ....... | 101 |
| Provider-Specific and Audit File | 5029 |
| Total ............................... | 5130 |

Sixty-eight of these hospitals had unusable or missing data. We were able to backfill a hospital-specific rate for 42
of these hospitals from the cost reports as shown in the following table.

| Source | Number of <br> hospitals |
| :---: | ---: |
| PPS-VII Cost Reports .............. | 1 |
| PPS-VIII Cost Reports ........... | 2 |
| PPS-IX Cost Reports ............... | 3 |
| PPS-X Cost Reports ............. | 7 |
| PPS-XI Cost Reports .............. | 29 |
| Total .............................. | 42 |

We did not have data for 26 hospitals, and had to eliminate them from the capital analysis. These hospitals likely are new hospitals or hospitals with very few Medicare admissions. This leaves us with 5104 hospitals and should not affect the precision of the required adjustment factors.

Next, we determined old and new capital amounts for FY 1992 using the PPS-IX cost reports as the first source of data. For FY 1993 amounts, we used PPS-IX and PPS-X cost reports as the first source of data, weighting each cost report by the number of days in FY 1993. For FY 1994 amounts, we used PPS- $X$ and PPS-XI cost reports as the first source of data, weighting each cost report by the number of days in FY 1994. We were able to match 5,049 PPSIX cost reports, 5,062 PPS-X cost reports, and 4,654 PPS-XI cost reports. In cases where cost reports could not be matched, we used the provider-specific file for old capital information. Even in cases where a cost report was available, the breakout of old and new capital was not always available. In these cases, we used the old capital amounts and new capital ratios from the provider-specific file. If these were missing, we derived
the old capital amount from the hospital-specific rate.
Finally, we used the intermediary audit file to devel op obligated capital amounts. Since the obligated amounts are aggregate projected amounts, we computed a Medicare capital cost per admission associated with these amounts. We adjusted the aggregate amounts by the fol lowing factors:
(1) Medicare inpatient share of capital. This was derived from cost reports and was limited to the Medicare share of total inpatient days. It was necessary to limit the M edi care share because of data integrity problems. Medicare share of inpatient days is a reasonably good proxy for all ocating capital. However, it may be understated if M edi care utilization is high, and may be overstated because it does not reflect the outpatient share of capital.
(2) Capitalization factor. This factor al locates the aggregate amount of obligated capital to depreciation and interest amounts. Consistent with the assumptions in the capital input price index, we used a 25 -year life for fixed capital and a 10-year life for movable capital, and an average projected interest rate of 6.7 percent. We al so assumed that fixed capital acquisitions are about onehalf of total capital. In conjunction with the useful life and interest rate assumptions, the resulting capitalized fixed capital is about onehalf of total capitalization. This is consistent with the all ocations between fixed and movable capital found on the cost reports. The ratio we developed is 0.137 , which produces the first year capital ization based on the aggregate amount.
(3) A divisor of Medicare admissions to derive the capital costs per discharge amount. Since we must project capital amounts for each hospital, we continued to use a Monte Carlo simulation to develop these amounts. (This model is described in detail in the August 30, 1991 final rule (56 FR 43517).) The Monte Carlo simulation is now used only to project capital costs per discharge amounts for each hospital We analyzed the distributions of capital increases, and noted a slightly negative correlation between the dollar level of capital cost per admission, and the rate of increase in capital. To determine the rate of increase in capital cost per admission, we multiplied the lesser of $\$ 3,000$ or the capital cost per admi ssi on by .00006 and subtracted this result from 1.2. (Increases for capital levels over $\$ 3,000$ were not influenced by the level of capital, so this part of the calculation was capped at $\$ 3,000$.) We selected a random number from the normal distribution, multiplied it by
0.17 (the standard deviation) and added it to -0.04 (the mean) and then added 1 to create a multiplier. This random result was multiplied by the previous result to assign a rate of increase factor which was multiplied by the prior year's capital per discharge amount to develop a capital per discharge amount for the projected year.

To model a projected year, we used the old and new capital for the prior year multi plied by 0.85 (aging factor). The 0.85 aging factor is the average of changes in capital over its life due to the gradual decrease in interest payments and the retirement of fully depreciatiated capital. The aged new and old capital is subtracted from the projected capital described in the previous paragraph. The difference represents newly acquired capital. If the hospital has obli gated capital, any increase in "old" capital up to the total amount of obl igated capital in FY 1993 and FY 1994 is assigned to obligated capital. Any remaining obligated capital is assigned to FY 1995 up to the amount of the modeled increase in capital for FY 1995. Even though obligated capital must be put in use for patient care by October 1, 1994, the use of the obligated capital may have started late in FY 1994 with only part of the "first year" depreciation and interest real ized in FY 1994. The remainder of the "first year" depreciation and interest would be realized in FY 1995. With the exception of certain hospitals about whom we have information to the contrary, we assume that hospitals would meet the expiration dates provided under the obligated capital provision. Hence, no obligated capital is assigned to years FY 1996 and later. Once obligated capital is assigned, it is included with the "old" capital and is capitalized into future years as part of "old" capital. The online obl igated amounts are added to old capital and subtracted from the newly acquired capital to yield residual newly acquired capital, which is then added to new capital. The residual newly acquired capital is never permitted to be less than zero.

Next, we computed the average total capital cost per discharge from the capital costs that were generated by the model and compared the results to total capital costs per discharge that we had projected independently of the model. We adjusted the newly acquired capital amounts proportionately, so that the total capital costs per discharge generated by the model match the independently projected capital costs per discharge.

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 methodol ogy (fully prospective or hold-harmless) to the hospital. If available, the model uses the payment methodology indicated in the PPS-IX cost reports or the provider-specific file. Otherwise, the model determines the methodology by comparing the hospital's FY 1992 hospital-specific rate to the adjusted Federal rate applicable to the hospital. 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 1995 MedPAR file using the FY 1997 DRG relative weights published in this proposed rule. The case-mix index is increased each year after FY 1995 based on analysis of past experiences in casemix increases.

We analyzed the case-mix increases for the recent past and found that casemix increases have decelerated to about 1.53 percent in FY 1992, 0.80 percent in FY 1993, and 0.75 percent in FY 1994. It appears that the casemix increase for FY 1995 accelerated to around 1.6 percent. Early indications show that FY 1996 case-mix is increasing at FY 1995 level, around 1.6 percent. It appears that the deceleration of case-mix increases in FY 1993 and FY 1994 were anomal ous, rather than the beginning of a trend. Therefore, in the model we are using the recent experience and have used a casemix increase of 1.6 percent in FY 1995 and a projected casemix increase of 1.6 percent in both FY 1996 and FY 1997. (Since we are using FY 1995 cases for our anal ysis, the FY 1995 increase in case mix has no effect on projected capital payments.)

Changes in geographic classification and revisions to the hospital wage data used to establ ish 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 $1886(\mathrm{~g})(1)(\mathrm{A})$ of the Act requires that, for discharges occurring after September 30, 1993, the unadjusted standard Federal rate be reduced by 7.4 percent. Consequently, the model reduces the unadjusted standard Federal rate by 7.4 percent effective in FY 1994. Since budget neutrality expires effective with FY 1996, this adjustment affects the adjusted Federal rate starting in FY 1996.

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 1996, the budget neutral ity adjustment factor was 1.0025 . To determine the factor for FY 1997, we first determined the portion of the Federal rate that would be paid for each hospital in FY 1997 based on its applicable payment methodology. Using our model, we then compared estimated aggregate Federal rate payments based on the FY 1996 DRG relative weights and the FY 1996 geographic adjustment factor to esti mated aggregate Federal rate payments based on the FY 1997 relative weights and the FY 1997 geographic adjustment factor. In making the comparison, we held the FY 1997 Federal rate portion constant and set the other budget neutrality adjustment factor and the exceptions reduction factor to 1.00. We determi ned that to achieve budget neutral ity for the changes in the geographic adjustment factor and DRG classifications and relative weights, an incremental budget neutrality adjustment of 0.9992 for $F Y$ 1997 should be applied to the previous cumulative FY 1996 adjustment of 1.0025 (the product of the FY 1993 incremental adjustment of 0.9980, the FY 1994 incremental adjustment of 1.0053, the FY 1995 incremental
adjustment of 0.9998, and the FY 1996 incremental adjustment of 0.9994), yielding a cumulative adjustment of 1.0017 through FY 1997.

The methodology used to determine the recalibration and geographic (DRG/ GAF) budget neutrality adjustment factor is similar to that used in establ ishing budget neutral ity adjustments under the prospective payment system for operating costs. One difference is that under the operating prospective payment system, the budget neutral ity 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 neutral ity 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.

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 prospecti ve 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, the proposed FY 1997 factor, and the estimated factors that would be appli cable through FY 2001. We caution that, except with respect to FY 1992, FY 1993, FY 1994, FY 1995 and FY 1996, 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 adjustment factor will remain at 1.0017 for FY 1997 and later because we do not have sufficient information to estimate the change that will occur in the factor for years after FY 1997.
The projections are as follows:

|  | Fiscal year | Update factor | Exceptions reduction factor | Budget neutrality factor | Federal rate (after outlier) reduction) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1992 |  | N/A | 0.9813 | 0.9602 | 415.59 |
| 1993 |  | 6.07 | . 9756 | . 9162 | 1417.29 |
| 1994 |  | 3.04 | . 9485 | . 8947 | ${ }^{2} 378.34$ |
| 1995 |  | 3.44 | . 9734 | . 8432 | ${ }^{3} 376.83$ |
| 1996 |  | 1.20 | . 9849 | N/A | 4461.96 |
| 1997 |  | 1.00 | . 9393 | N/A | 5441.84 |
| 1998 |  | 1.00 | . 9161 | N/A | 435.23 |
| 1999 |  | 1.00 | . 9228 | N/A | 442.80 |
| 2000 |  | 1.10 | . 9155 | N/A | 444.13 |
| 2001 | ....... | 1.10 | N/A ${ }^{6}$ | N/A | 490.46 |

[^4]
## Appendix C: Rebased Market Basket Data Sources I. Data Sources Used To Determine the Market Basket Relative Weights and Choice of Price Proxy Variables for the Operating H ospital Input Price Indexes

As discussed in section IV of the preamble to this proposed rule, we are rebasing and revising the hospital market baskets. This appendix describes the technical features of the 1992-based indexes that we are proposing in this rule. For both the prospective payment and excluded hospital market baskets, the differences between the proposed 1992-based market basket and the previous 1987-based market basket are noted. In the September 4, 1990 final rule ( 55 FR 36170), we discussed in detail the 1987-based hospital market baskets.

We present this description of the hospital operating market baskets in three steps:

- A synopsis of the structural differences between the 1987-based market baskets and the proposed 1992based market baskets.
- A description of the methodology used to develop the cost category weights in the 1992-based market baskets, making note of the differences from the methodol ogy used to develop the 1987-based market baskets.
- A description of the data sources used to measure price change for each component of the 1992-based market baskets, making note of the differences from the price proxies used in the 1987based hospital market baskets.
A. Synopsis of Structural Changes Adopted in the Rebased 1992 Operating Hospital Market Baskets

Three major structural differences exist between the 1987-based and the proposed 1992-based operating hospital market baskets.

- The proposed hospital market baskets are based on more recent hospital expenditure data. The 1987based market baskets contai ned skeletal cost shares that were derived from the 1987 cost data from the 1988 Annual Survey of the American Hospital Association (AHA). The 1992-based market baskets use data from the hospital cost reports for cost reporting periods beginning on or after October 1 , 1991 and before October 1, 1992.
- Some cost categories have been combined, namely Fuel, Oil, Coal, and Other Fuel with M otor Gasoline, and Blood Services with Chemicals. These category mergers reflect the Bureau of Economic Analysis (BEA)
reclassification decisions in the 1987 update of the BEA Input-Output Tables.
- In the proposed 1992-based market basket, the sample of excluded hospitals is restricted to more closely reflect the average Medicare length of stay in excluded hospitals. We have used cost report data for excluded hospitals from only those hospitals in which the Medicare average length of stay is within 15 percent of the total average length of stay to more accurately reflect the structure of costs for Medicare cases. This is a change from the FY 1987-based market basket, for which data from all excluded hospitals were used.


## B. Methodology for Developing the Cost Category Weights

Cost category weights for the 1992based market baskets were devel oped in four stages. First, base weights for three (Wages and Sal aries, Employee Benefits, Pharmaceuticals) of the six main categories were derived from the 1992 Medicare cost reports for operating costs. Second, the weight for Nonmedical Professional Fees was developed by subtracting Medical Professional Fees reported in the Hospital Cost Report Information System (HCRIS) file from AHA Annual Survey Total Professional Fees to obtain Nonmedical Professional Fees, and the weight for Professional Liability Insurance was devel oped using 1989 HCRIS data trended forward to 1992, using the rel ative importance values in the previous market baskets. Third, the sum of Wages and Salaries, Employee Benefits, Pharmaceuticals, Nonmedical Professional Fees, and Professional Liability Insurance was subtracted from total expenses to obtain All Other Expenses. Finally, the weight for AII Other Expenses was divided into subcategories using cost shares from the 1987 Input-Output Table for the hospital industry, produced by the U.S. Department of Commerce, Bureau of Economic A nal ysis, aged to 1992 using price changes. We will incorporate 1992 data from the U.S. Department of Commerce into the final market basket if the data are rel eased in time to be analyzed in developing the final rule.

Below, we describe the source of the six main category weights and their subcategories in the 1992-based market baskets. We make note of the differences between the methodologi es used to devel op the 1987-based and the 1992based market baskets.

1. Wages and Salaries: The cost weight for the Wages and Salaries category was derived using the 1992 Medicare cost reports. Contract Labor, which is also derived from the 1992 Medicare cost reports, is split between the Wages and Salaries and Employee Benefits cost categories, using the
relationship for employed workers. Examples of Contract Labor are registered nurses and workers in hospital food service or security who are employed and paid by firms that contract for their work with the hospital. The Wages and Sal aries cost category was di saggregated into nine occupational subcategories (professional and technical, managers and
administration, sal es, clerical, craft and kindred, operatives excluding transport, transport equipment operatives, nonfarm laborers and service workers) to reflect the mix of occupational inputs used by hospitals. The Contract Labor wages and sal aries component was allocated proportionally to ProfessionalTechnical and Service occupations. The 1987-based weights were devel oped from the 1987 Current Population Survey, while the 1992-based weights were developed from the 1992 Current Population Survey.
2. Employee Benefits: The cost weight for the employee benefits category was derived from the 1992 cost reports. Like wages and sal aries, the employee benefit weight in each 1992-based market basket is a composite of nine labor subcategories. The employee benefits categories in the 1987-based market baskets were devel oped from the 1987 AHA A nnual Survey and used the 1987 Current Population Survey. In 1987 Contract Labor's implied fringe benefits were allocated proportionally to Professional and Technical occupations, while in 1992 they were allocated to Professional-Technical and Service occupations.
3. Nonmedical Professional Fees: The cost weight for the nonmedical professional fees category was derived from the 1992 Medi care Cost Reports and AHA Annual Survey data. Total professional fees were split into the subcategories medical and other (nonmedical) fees using AHA Total Professional Fees minus HCRIS Medical Professional Fees to equal Nonmedical Professional Fees. The 1987-based nonmedical professional fees cost category was derived from the 1987 AHA Annual Survey and A merican Medical Association (AMA) data. It was split into the subcategories medical and other fees using data derived from the American Medical Association. The medical professional fees category is excluded from the hospital market basket since it is paid under Medicare Part B.
4. Professional Liability Insurance: The 1987-based market baskets have weights for professional liability insurance that were derived from the June 30 and December 31, 1987 HAS/ Monitrend surveys. The cost weight for
the 1992-based professional liability insurance category was deri ved from 1989 HCRIS cost shares trended to 1992 using the change in the relative importance factor for professional liability insurance (mal practice) from the previous 1987-based prospective payment hospital and excluded hospital market baskets.
5. Utilities: For the 1987-based market baskets, the cost weight for utilities was derived by extrapolating the 1985 AHA Annual Survey utilities cost weight forward to 1987 using the rate of growth in the HAS/M onitrend cost weight for utilities between 1985 and 1987. The 1987 Utility subcategory weights were aged from their 1982-based index subcategory weights using price changes from 1982 to 1987. The 1992-based market basket cost weights for the subcategories (fuel, oil and gasoline; electricity; natural gas; and water and sewage) were derived from the Bureau of Economic Analysis' 1987 InputOutput table for the hospital industry, aged forward to 1992 by price changes and summed to a weight for utilities.
6. All Other Goods and Services: 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: business services, computer services, transportation and shipping, telephone, postage, other labor-intensive services, and other nonlabor-intensive services. The share for pharmaceuticals was derived from the 1992 Medicare cost reports. Rel ative shares for the other subcategories were derived from the 1987 Bureau of Economic Analysis' Input-Output table for the hospital industry and were aged forward to 1992 using price changes. As noted above, if more recent U.S. Department of Commerce data become avail able for these categories and we have time to anal yze these data before the publication of the final rule, they will be incorporated into the final market baskets.

## C. Price Proxies Used to Measure Cost Category Growth

1. Wages and Sal aries: For measuring price growth in the 1992-based market basket, 10 price proxies are applied to the 9 occupational subcategories within the wages and salaries component. As in the 1987-based market basket, the professional and technical subcategory
was split in half. An Employee Cost Index (ECI) for hourly wages paid to civilian hospital workers was applied to one half. An ECI of hourly wages and salaries paid to professional and technical workers in private industry was applied to the other half of the professional and technical component. The other eight occupations subcategories of the wages and salaries component were proxied using ECIs for wages and salaries for private industry workers in their respective occupational categories.
2. Employee Benefits: The 1992-based hospital market baskets use occupationspecific ECIs for employee benefits. The distribution of weights and price proxies is the same as for wages and salaries discussed above, but occupation-specific employee benefit ECIs replace occupation-specific wages and sal aries ECIs. The components are summed into a composite index, just as was done for the 1987-based market basket.
3. Nonmedical Professional Fees: The ECI for compensation for professional and technical workers in private industry is applied to this category. This is a revision from the 1987-based market basket in which the ECI for wages and salaries for professional and technical workers in private industry was used.
4. Fuel, Oil, and Gasoline: The percentage change in the price of refined petroleum products as measured by the Producer Price Index (PPI) (Commodity Code \#057) was applied to this component. This is a revision from the 1987-based indexes in which the PPIs for Light Fuel Oil (Commodity Code \#0573) and Gasoline (Commodity Code \#0571) were used.
5. Electricity: The percentage change in the price of commercial el ectric power as measured by the PPI
(Commodity Code \#0542) was applied to this component. This is a revision from the 1987-based indexes in which the PPI for industrial power (Commodity Code \#0543) was used.
6. Natural Gas: The percentage change in the price of gas fuels as measured by the PPI (Commodity Code \#0552) was applied to this component. This is a revision from the 1987-based indexes in which the PPI for Natural Gas (Commodity Code \#0531) was used.
7. Water and Sewerage: The percentage change in the price of water and sewerage maintenance as measured by the Consumer Price Index (CPI) for all urban consumers was applied to this component. The same price measure was used in the 1987-based market baskets.
8. Professional Liability Insurance: The percentage change in the hospital
professional liability insurance price as estimated by hospital industry professional liability insurance premium increase was applied to this component. The same price measure was used in the 1987-based market baskets.
9. Pharmaceuticals: The percentage change in the price of ethical preparations as measured by the PPI (Commodity Code \#0635) was applied to this vari able. The same price measure was used in the 1987-based market baskets.
10. Food, Direct Purchases: The percentage change in the price of processed foods and feeds as measured by the PPI (Commodity Code \#02) was applied to this component. The same price measure was used in the 1987based market baskets.
11. Food, Contract Services: The percentage change in the price of food purchased away from home as measured by the CPI for all urban consumers was applied to this component. The same price measure was used in the 1987based market baskets.
12. Chemical s: The percentage change in the price of industrial chemical products as measured by the PPI (Commodity Code \#061) was applied to this component. The same price measure was used in the 1987-based market baskets.
13. Surgical and Medical Equipment: The percentage change in the price of medical and surgi cal instruments as measured by the PPI (Commodity Code \#1562) was applied to this component. The same price measure was used in the 1987-based market baskets.
14. Photographic Supplies: The percentage change in the price of photographic supplies as measured by the PPI (Commodity Code \#1542) was applied to this component. The same price measure was used in the 1987based market baskets.
15. Rubber and Plastics: The percentage change in the price of rubber and plastic products as measured by the PPI (Commodity Code \#07) was applied to this component. The same price measure was used in the 1987-based market baskets.
16. Paper Products: The percentage change in the price of converted paper and paperboard products as measured by the PPI (Commodity Code\# 0915) was used. This is a revision from the 1987-based indexes in which a weighted average of the percentage change in the price of converted paper and paperboard products and the percentage change in the price of paper excluding newsprint and packaging paper (Commodity Code \#091301) was used.
17. A pparel: The percentage change in the price of apparel as measured by the PPI (Commodity Code \#381) was applied to this component. This is a revision from the 1987-based indexes in which the PPI for textile house furnishings (Commodity Code \#0382) was used.
18. Minor Machinery and Equipment: The percentage change in the price of machinery and equipment as measured by the PPI (Commodity Code \#11) was applied to this component. The same price measure was used in the 1987based market baskets.
19. Miscellaneous Products: The percentage change in the price of all finished goods as measured by the PPI was applied to this component. The same price measure was used in the 1987-based market baskets.
20. Business Services: The ECI for compensation for workers in the business services industry was applied to this component. This is a revision from the 1987-based indexes in which the percentage change in the AHE for wages and salaries for production and nonsupervisory workers in the business services industry as measured by the Bureau of Labor Statistics (SIC Code 73) was used.
21. Computer and Data Processing Services: The percentage change in the AHE of production and nonsupervisory workers engaged in firms furnishing computer data processing services (SIC Code 737) was applied to this component. The same price measure was used in the 1987-based market baskets.
22. Transportation and Shipping: The percentage change in the transportation component of the CPI for all urban consumers was applied to this component. The same price measure was used in the 1987-based market baskets.
23. Tel ephone: The percentage change in the price of tel ephone services as measured by the CPI for all urban consumers was applied to this component. The same price measure was used in the 1987-based market baskets.
24. Postage: The percentage change in the price of postage as measured by the CPI for all urban consumers was applied to this component. The same price measure was used in the 1987-based market baskets.
25. All Other Services, Labor Intensive: The percentage change in the ECl for compensation paid to service workers employed in private industry was applied to this component. This is a revision from the 1987-based indexes in which the ECI for wages and salaries
paid to service workers employed in private industry was used.
26. All Other Services, Nonlabor Intensive: The percentage change in the all-items component of the CPI for all urban consumers was applied to this component. The same price measure was used in the 1987-based market baskets.

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).

## II. Data Sources U sed to Determine the Cost Category W eights and Vintage Weights, and Choices of Price Proxy Variables for the Hospital Capital Input Price Index

In the preamble to this proposed rule, we discuss the rebasing of the capital input price index (CIPI). This appendix describes certain technical features of the 1992-based index that we are proposing in this rule, as well as differences between the proposed 1992based CIPI and the current 1987-based CIPI. We discussed the 1987-based CIPI in the September 1, 1995 final rule (60 FR 45817.)

This discussion has the following three parts:

- A synopsis of the differences between the 1987-based CIPI and the proposed 1992-based CIPI.
- A description of the methodology used to develop the cost category weights and vintage weights in the 1992-based CIPI, making note of the differences from the methodology used to devel op the 1987-based CIPI.
- A description of the data sources used to measure price change for each component of the 1992-based CIPI, making note of the differences from the price proxies used in the 1987-based CIPI.
A. Synopsis of Changes Adopted in the Rebased 1992 CIPI

We made no structural changes in the 1992-based CIPI. The only major change is the use of more recent hospital capital expenditure data in the proposed 1992based CIPI.

The 1987-based CIPI contai ned cost category weights that were deri ved from 1987 Medicare cost report data and the 1987 A nnual Survey of the AHA. The 1992-based CIPI uses data from the hospital Medicare cost reports for cost periods beginning between October 1, 1991 and September 30, 1992. The 1992-based CIPI al so uses data from the 1992 A nnual Survey of the AHA.

The 1987-based CIPI contained vintage weights that were derived from 1987 M edicare cost report data, the 1963-1987 Panel Survey of the AHA,
and the 1980-1989 Securities Data Corporation data on hospital bonds. The 1992-based CIPI uses data from the 1992 Medi care cost reports, the 1963-1992 Panel Survey of the AHA , and 19801992 Securities Data Corporation data on hospital bonds.
B. Methodology for Developing Cost Category Weights and Vintage Weights for the 1992-based CIPI

There are five cost categories in the CIPI: building and fixed equipment depreciation, movable equipment depreciation, capital-related interest expense from government/nonprofit debt instruments, capital-rel ated interest expense from for-profit debt instruments, and other capital-related expenses, such as taxes and insurance. The methodology for devel oping each of these cost category weights is described below:

1. Building and Fixed Equipment Depreciation: The 1992-based cost weight for building and fixed equipment depreciation was derived using the 1992 Medicare cost reports. The proportion of lease expenses attributable to building and fixed equipment was included in the cost weight based on the proportion of overall capital expenses allocated to building and fixed equipment depreciation. The 1987-based weight was developed from the 1987 Medicare cost reports and the 1987 AHA Annual Survey.
2. Movable Equipment Depreciation: The 1992-based cost weight for movable equipment depreciation was derived using the 1992 Medicare Cost Reports. The proportion of lease expenses attributable to movable equipment was included in the cost weight based on the proportion of overall capital expenses allocated to movable equipment depreciation. The 1987-based weight was developed from the 1987 Medicare cost reports and the 1987 AHA Annual Survey.
3. Government/Nonprofit Interest: The 1992-based cost weight for government/nonprofit interest was derived using the 1992 AHA Annual Survey data. The government/nonprofit interest is 85 percent of total interest, reflecting the relative debts of the government/nonprofit hospital sector and the for-profit hospital sector. The proportion of lease expenses attri butable to government/nonprofit interest was included in the cost weight based on the proportion of overall capital expenses allocated to government/non-profit interest expense. The 1987-based weight was developed from the 1987 AHA Annual Survey.
4. For-Profit Interest: The 1992-based cost weight of for-profit interest was
derived using the 1992 AHA Annual Survey data. The for-profit interest is 15 percent of total interest, reflecting the relative debts of the government/ nonprofit hospital sector and the forprofit hospital sector. The proportion of lease expenses attributable to for-profit interest was included in the cost weight based on the proportion of overall capital expenses all ocated to for-profit interest expense. The 1987-based weight was developed from the 1987 AHA Annual Survey.
5. Other Capital-Related Expenses: The 1992-based cost weight for other capital-rel ated expenses was derived using 1992 M edicare cost reports. The proportion of lease expenses attri butable to other capital-related expenses was included in the cost weight based on the proportion of overall capital expenses al located to other capital-rel ated expenses. The 1987-based weight was devel oped from the 1987 Medicare cost reports and the 1987 Capital Expenditure Survey.

There are three sets of vintage weights in the CIPI: building and fixed equipment depreciation, movable equipment depreciation, and interest expense. The methodol ogy for devel oping each of these vintage weights is described below.

1. Building and Fixed Equipment: The 1992-based building and fixed equipment vintage weights were derived from the 1992 Medicare cost reports and the 1963-1992 AHA Panel Survey. The 1987-based weights were devel oped from the 1987 Medicare cost reports and the 1963-1987 AHA Panel Survey.
2. Movable Equipment: The 1992based movable equi pment vintage weights were derived from the 1992 Medicare cost reports and the 19631992 AHA Panel Survey. The 1987based weights were devel oped from the 1987 Medicare cost reports and the 1963-1987 AHA Panel Survey.
3. Capital-Related Interest: The 1992based movable equipment vintage weights were derived from the 19801992 Securities Data Corporation data on hospital bonds and the 1963-1992 AHA Panel Survey. The 1987-based weights were developed from the 19801989 Securities Data Corporation data on hospital bonds and the 1963-1987 AHA Panel Survey.

## C. Price Proxies Used to Measure Cost Category Growth in the CIPI

1. Building and Fixed Equipment Depreciation: The percentage change in the vintage-weighted price of building and fixed equipment depreciation as measured by the Boeckh institutional construction index was applied to this category in the 1992-based CIPI. The
same price proxy was used in the 1987based CIPI.
2. Movable Equipment Depreciation: The percentage change in the vintageweighted price of movable equipment depreciation as measured by the Producer Price Index (PPI) for machinery and equipment was applied to this category in the 1992-based CIPI. The same price proxy was used in the 1987-based CIPI.
3. Government/N onprofit Interest Expense: The percentage change in the vintage-weighted price of government/ nonprofit interest expense as measured by the A verage yield on Domestic Municipal Bonds from the Bond Buyer index of 20 bonds was applied to this category in the 1992-based CIPI. The same price proxy was used in the 1987based CIPI.
4. For-Profit Interest Expense: The percentage change in the vintageweighted price of for-profit interest expense as measured by the Average yield on Moody's AAA Bonds was applied to this category in the 1992based CIPI. The same price proxy was used in the 1987-based CIPI.
5. Other Capital-Related Expenses: The percentage change in the price of other capital-related expenses as measured by the CPI for all urban consumers for residential rent was applied to this category in the 1992based CIPI. The same price proxy was used in the 1987-based CIPI.

We provided more detailed discussion of the rationale for the choice of these price proxies in the June 2, 1995 proposed rule (60 FR 29227) and in the September 1, 1995 final rule (60 FR 45815).
The Honorable A Ibert 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 Federal Fiscal Year (FY) 1997 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 of the market basket rate of increase minus 0.5 percentage points. The President's FY 1997 budget includes an update for PPS hospitals in both large urban areas and other areas equal to the market basket rate of increase minus 1.5 percentage points. The President's FY 1997 budget estimated the PPS market basket rate of increase for FY 1997 to be 3.6 percent. Based on this estimate, we recommend an update for hospitals in both large urban and other areas of 2.1 percent. However, recent data from ProPAC and other sources suggest that the final PPS market basket rate of increase for FY 1997 will be lower.

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 an update for sole community hospitals of the market basket rate of increase minus 0.5 percentage points. Consistent with the President's FY 1997 budget, we recommend an update to hospital-specific rates equal to the increase for all PPS hospitals; that is, the market basket rate of increase of 3.6 percent minus 1.5 percentage points, or 2.1 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 hospital units excluded from PPS equal to the rate of increase in the excluded hospital market basket minus 1.0 percentage point, although the update can be higher for certain hospitals and units with costs that are greater than their target amounts. The President's FY 1997 budget incorporates an increase in the TEFRA limit equal to the rate of increase in the excluded hospital market basket (3.6 percent) minus 1.5 percentage points. Therefore, we recommend an increase in the TEFRA limit of 2.1 percent.
My recommendation for the updates is based on cost projections used in the President's FY 1997 budget. A final recommendation on the appropriate percentage increases for FY 1997 will be made nearer the beginning of the new Federal Fiscal Year based on the most current market basket projection available at that time. The final recommendation will incorporate our analysis of the latest estimates of all relevant factors, including recommendations by the Prospective Payment Assessment Commission (ProPAC). We currently expect that the final estimate of the market basket rate of increase will be lower than the estimate used in the President's FY 1997 budget.
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-rel ated group (DRG) weighting factors. At this timel do not anticipate recommending any adjustment to the DRG weighting factors for FY 1997.
I am pleased to provide this recommendation to you. I am al so sending a copy of this letter to the Speaker of the House of Representatives.

Sincerely,
Donna E. Shalala
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 Federal Fiscal Year (FY) 1997 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 of the market basket rate of increase minus 0.5 percentage points. The President's FY 1997 budget includes an update for PPS hospitals in both large urban areas and other areas equal to the market basket rate of increase minus 1.5 percentage points. The President's FY 1997 budget estimated the PPS market basket rate of increase for FY 1997 to be 3.6 percent. Based on this estimate, we recommend an update for hospitals in both large urban and other areas of 2.1 percent. However, recent data from ProPAC and other sources suggest that the final PPS market basket rate of increase for FY 1997 will be lower.
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 an update for sole community hospitals of the market basket rate of increase minus 0.5 percentage points. Consistent with the President's FY 1997 budget, we recommend an update to hospital-specific rates equal to the increase for all PPS hospitals; that is, the market basket rate of increase of 3.6 percent minus 1.5 percentage points, or 2.1 percent.

Hospital s 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 hospital units excluded from PPS equal to the rate of increase in the excluded hospital market basket minus 1.0 percentage point, al though the update can be higher for certain hospitals and units with costs that are greater than their target amounts. The President's FY 1997 budget incorporates an increase in the TEFRA limit equal to the rate of increase in the excluded hospital market basket (3.6 percent) minus 1.5 percentage points.
Therefore, we recommend an increase in the TEFRA limit of 2.1 percent.
My recommendation for the updates is based on cost projections used in the President's FY 1997 budget. A final recommendation on the appropriate percentage increases for FY 1997 will be made nearer the beginning of the new Federal Fiscal Y ear based on the most current market basket projection available at that time. The final recommendation will incorporate our analysis of the latest estimates of all relevant factors, including recommendations by the Prospective Payment A ssessment Commission (ProPAC). We currently expect that the final estimate of the market basket rate of increase will be lower than the estimate used in the President's FY 1997 budget.
Section 1886(d)(4)(C)(iv) of the Act al so 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 1997.
I am pleased to provide this recommendation to you. I am al so 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 Social Security Act (the Act) address the setting of update factors for inpati ent services furnished in FY 1997 by hospital s subject to the prospective payment system and those excluded from the prospective payment system. Section 1886(b)(3)(B)(i)(XII) of the Act sets the FY 1997 percentage increase in the operating cost standardized amounts equal to the rate of increase in the hospital market basket minus 0.5 percentage points for prospective payment hospitals in all areas. Section 1886(b)(3)(B)(iv) of the Act sets the FY 1997 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 minus 0.5 percentage points. Section 1886(b)(3)(B)(ii) of the Act sets the FY 1997 percentage increase in the rate of increase limits for hospital s excluded from the prospective payment system equal to the rate of increase in the excluded hospital market basket minus the applicable reduction or, in the case of a hospital in a fiscal year for which the hospital's update adjustment percentage is at least 10 percent, the excluded hospital market basket percentage increase. Under section 1886(b)(3)(B)(v) of the Act, a hospital's update adjustment percentage increase for FY 1997 is the percentage increase by which the hospital's al lowable operating costs of inpatient hospital services recognized under this title for the cost reporting period beginning in FY 1990 exceed the hospital's target amount for such cost reporting period, increased for each fiscal year (beginning with FY 1994) by the sum of any of the hospital's applicable reductions for previous years. The applicable reduction with respect to a hospital for FY 1997 is the lesser of 1 percentage point or the percentage point difference between 10 percent and the hospital's update adjustment percentage for FY 1997.

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 for the prospective payment system as provided in section 1886(b)(3)(B) of the Act. Based on the first quarter 1996 forecast of the FY 1997 rebased market basket increase of 2.7 percent for hospital s subject to the prospective payment system, the proposed updates in the standardized amounts are 2.2 percent for hospital s in both large urban and other areas. The proposed update in the hospital-specific rate appli cable to sole community hospitals is 2.2 percent (that is, the market basket rate of increase of 2.7 percent minus 0.5 percentage points). The proposed update for hospitals excluded from the prospective payment system is based on the percentage increase in the excluded hospital market basket (currently estimated at 2.7 percent) minus the applicable reduction factor. The applicable reduction factor is the lesser of 1 percentage point or the percentage point difference between 10 percent and the hospital's update adjustment percentage. Therefore, for excluded hospitals, the hospital-specific proposed update can vary between 1.7 and 2.7 percent.

Sections 1886(e)(2)(A) and (3)(A) of the Act require that the Prospective Payment A ssessment Commission (ProPAC) recommend to the Congress by March 1, 1996 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 heal th care provided in hospitals, and longterm cost effectiveness in the provision of inpatient hospital services.

In its March 1, 1996 report, ProPAC recommended update factors to the standardized amounts equal to the percentage increase in the market basket minus 0.7 to 2.0 percentage points for hospitals in both large urban and other areas (Recommendation 10). Based on its market basket rate of increase estimate of 2.7 percent, ProPAC's recommended update to the standardized amounts equals 2.0 to 0.7 percent for hospital s in both large urban and other areas. (ProPAC's market basket is still using the 1987-based weights.) ProPA C 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 deli very 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 anal ysis 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 A ct, we are recommending that the standardized amounts be increased by an amount equal to the market basket rate of increase minus 1.5 percentage points for hospitals located in large urban and other areas. We are al so recommending an update of the market basket rate of increase minus 1.5 percentage points to the hospitalspecific rate for sole community hospitals. These figures are consi stent with the President's FY 1997 budget recommendation, which continues the reductions imposed by section 13501 of the Omnibus Budget Reconciliation Act of 1993 (Public Law 103-66), that is, reductions in the hospital market basket of 2.5 percentage points for FYs 1994 and 1995 and 2.0 percentage points for FY 1996. We believe these recommended changes in the update factor 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. When the President's budget was submitted, the market basket rate of increase was projected at 3.6 percent. As noted above, this proposed recommendation is based on the most recent forecast of the proposed rebased market basket. (See section IV of the preamble to this proposed rule for a detailed discussion of the market basket.)
We recommend that hospitals excluded from the prospective payment system receive an update equal to the percentage increase in the proposed rebased market basket that measures input price increases for services furnished by excluded hospitals minus 1.5 percentage points. That market basket rate of increase is currently forecast at 2.7 percent. Subtracting 1.5 percentage points would result in an update for hospitals excluded from the prospective payment system of 1.2 percent. This recommendation is
consistent with the President's budget, acknowledging that the market basket rate of increase for these hospitals also was forecast at 3.6 percent at the time the budget was submitted.

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 1997, ProPAC's update framework would support an update between 0.7 percentage points and 2.0 percentage points less than the increase in the hospital market basket index. The methodology employed by the Commission in previous years would lead to a recommendation of about market basket mi nus 1.5 percentage points, roughly corresponding to the midpoint of that range. In light of the significant changes occurring in health care delivery, the Commission believes that the increase in the prospective payment system rates could be held to market basket mi nus 2.0 percentage points for the next year or two. However, it is concerned about the potential effects of continuing updates at that level on hospitals' financial health. Low updates over an extended period of time could affect a hospital's ability to provide quality care to Medicare beneficiaries, compromise access, and impede the diffusion of qual ity-enhancing technol ogical advances.

Based on the market basket estimate of 2.7 percent, ProPAC recommends that hospitals in large urban and other areas recei ve an update between 0.7 to 2.0 percent.

Response: We are recommending an update that is consistent with the Administration's budget proposal. Our recommendation is that the update for FY 1997 for prospective payment system hospitals located in I arge urban and other areas be equal to the market basket rate of increase forecast minus 1.5 percentage points. Based on HCFA's current forecast of the market basket rate of increase ( 2.7 percent), we recommend an update for FY 1997 for large urban and other hospitals equal to 1.2 percent. Our recommendation is supported by the following analyses that measure changes in hospital productivity, scientific and technol ogical 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 equival ent employees (FTEs). While we recognize that productivity is a function of many variables (for example, Iabor, 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 level s 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, the Commission 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 anal ysis indicates total Medicare service output (charges per admi ssion, adjusted for CPI change) increased 10.7 percent from 1987-1995, or an approximate average annual increase of 1.2 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 an 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 Iabor in total operating inputs, as cal culated 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 al lows 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 M edicare are used as proxies for those of the total hospital, since case-mix increases (used in the intensity measure as well) are unavailabl e for non-M edicare patients. Thus, expected output growth is simply the sum of the expected change in intensity ( 0.0 percent), projected admissions change ( 2.7 percent for $F Y$ 1997), and projected real case-mix growth (1.6 percent), or 4.3 percent. The share of direct labor services in the market basket rate of increase (consisting of wages, sal aries, and employee benefits) is 61.4 percent. Multiplying the expected change in total hospital service output ( 4.3 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 0.8 to 0.9 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 empl oyee (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. ProPAC's latest estimate indicate that hospital productivity increased as much as 2.3 percent in 1994. Given this improvement, ProPAC believes a productivity adjustment in the range of -0.7 to -1.2 percentage points would be reasonable in fiscal year 1997. The adjustment is intended to share productivity equally between hospitals and Medicare. In the near future, ProPAC believes there may be even greater productivity improvements, as hospitals strive to stay competitive and financially viable.

- Intensity: We base our intensity standard on the combined effect of three
separate factors: changes in the use of qual ity 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 costineffective practices. For FY 1997, 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 qualityenhancing technol ogy changes.
Typically, a specific new technology increases cost in some uses and decreases cost in other uses.
Concurrently, heal th 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 technologi cal 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 costineffective 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 hospital s and physicians to more carefully consider the costeffectiveness 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 1991-1995 M edPAR billing data. Case-mix constant intensity is cal culated 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.

For FY 1991 and FY 1992, we estimate that 1.0 to 1.4 percent of observed case-mix increase was real. This estimate is supported by past studies of case-mix change by the RAND Corporation. The most recent study was $\geq$ Has DRG Creep Crept Up?
Decomposing the Case Mix Index Change Between 1987 and $1988 \geq$ by G.M. Carter, J.P. Newhouse, and D.A. Relles, R-4098-HCFA/ProPAC (1991). The study suggests that real case-mix change was not dependent on total change, but was rather a fai rly steady 1.0 to 1.5 percent per year. In the past we have used 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. For FY 1993 and FY 1994, we assumed that all of the observed case-mix increases of 0.9 and 0.8 percent, respectively, were real. For FY 1995, we assumed that all of the observed case-mix increase of 1.6 percent was real. We note that this assumed increase in real case mix is higher than our previously assumed upper bound of 1.4 percent. Based on its anal ysis of the FY 1995 MedPAR data, the Office of the Actuary has concluded that the apparent shifting of some cases to the outpatient setting and activity in the cardiovascular DRGs has contributed to a higher than expected increase in real case mix.

Given estimates of real case-mix increase of 1.0 percent for FY 19911992, 0.9 percent for $F Y$ 1993, 0.8 percent for FY 1994, and 1.6 percent for FY 1995, we estimate case-mix constant intensity declined by an average 1.1 percent during FY 1991 through 1995, for a cumulative decrease of 5.6 percent. If we assume that real case-mix increase was 1.4 percent for FYs 1991 and 1992, 0.9 percent for FY 1993, 0.8 percent for FY 1994, and 1.6 percent for FY 1995, we estimate case-mix constant intensity declined by an average of 1.2 percent during FY 1991 through 1994, for a cumulative decrease of 5.9 percent. Since we estimate that intensity has declined during FY 1991-1995 period, we are recommending a 0.0 percent intensity adjustment for FY 1997.

- Quality Enhancing New Science and Technology: For FY 1997, 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 qual ity-enhancing, cost increasing heal th care innovations.

While in the past the Commission has included an adjustment ranging from 0.3 to 1.0 percentage points, the current range is lower because there is little evidence of significant new costincreasing advances ready for implementation. M oreover, the costcompetitive environment now faced by hospitals may dampen the adoption of new technol ogies as they closely eval uate their rel ative costs and benefits. Therefore, the Commission recommends an adjustment of 0.1 to 0.6 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 1997 update recommendation, we are projecting a 1.6 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 requi rements. For FY 1997, we believe that real case-mix increase is equal to our projected change in case mix. We do not see any changes in coding behavior in our projected case-mix change. Our net adjustment to case-mix change for FY 1997 is 0.0 percentage points.

The -1.0 to -0.9 percent figure used in the ProPAC framework represents ProPAC's projection for observed casemix change. ProPAC projects a 0.8 to 0.9 percentage points increase in real casemix change across DRG's and a 0.0 to 0.2 percentage points increase in within-DRG case-complexity change. ProPAC's net adjustment for case mix is -0.2 to 0.0 percentage points.

- Effect of FY 1995 DRG Reclassification and Recalibration: We esti mate that DRG reclassification and recal ibration for FY 1995 resulted in a 0.0 percent increase in the case-mix index when compared with the casemix index that would have resulted if
we had not made the reclassification and recal ibration 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 1995 payment rates was 3.6 percent. Our most recent data indicate the actual FY 1995 increase was 3.0 percent, reflecting that the actual increase in wages was lower than projected. The resulting forecast error in the FY 1995 market basket rate of increase is 0.6 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 -0.6 percentage points to reflect this overestimation of the FY 1995 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 1997 UpDate Recommendations

|  | HHS | ProPAC |
| :---: | :---: | :---: |
| Market Basket | MB | MB |
| Difference Between HCFA \& ProPAC Market Baskets | ............................... | -0.1 to 0.0 |
| Subtotal .................................................................................................................. | MB | MB to MB-0.1 |
| Policy Adjustment Factors |  |  |
| Productivity .......................................................................................................................... | -0.9 to -0.8 | -1.2 to -0.7 |
| Intensity: | 0.0 | $\qquad$ |
| Science and Technology |  | 0.1 to 0.6 |
| Practice Patterns | .......................... | (1) |
| Real Within DRG Change ............................................................................................. | $\ldots$ | (2) |
| Subtotal .................................................................................................................. | -0.9 to -0.8 | -1.1 to -0.1 |
| Case-Mix Adjustment Factors |  |  |
| Projected Case-Mix Change | -1.6 | -1.0 to -0.9 |
| Real Across DRG Change ............................................................................................ | 1.6 | 0.8 to 0.9 |
| Real Within DRG Change .............................................................................................. | $\left.{ }^{3}\right)$ | 0.0 to 0.2 |
| Subtotal ................................................................................................................... | 0.0 | -0.2 to 0.0 |
| Effect of 1995 Reclassification and Recalibration ............................................................... | 0.0 |  |
| Forecast Error Correction | -0.6 | -0.6 |
| Total Recommended Update ..................................................................................... | MB-1.5 to MB-1.4 | MB-2.0 to MB-0.7 |

${ }^{1}$ Included in ProPAC's Productivity Measure.
2 Included in ProPAC's Case-Mix Adjustment.
${ }^{3}$ Included in HHS' Intensity Factor.

The above anal ysis would support a recommendation that the update be between market basket mi nus 1.4 and market basket minus 1.5 percentage points. We are recommending an update of market basket minus 1.5 percentage points, consistent with President Clinton's FY 1997 budget proposal. We al so recommend that the hospital-
specific rates applicable to sole community hospitals be increased by the same update, market basket minus 1.5 percentage points.

## V. ProPAC Recommendation for Updating the Rate-of-Increase Limits for Excluded Hospitals

ProPAC recommends an update factor equal to the market basket rate of increase minus 0.6 percentage points for excluded hospitals and units (Recommendation 12). The 0.6 percentage points reduction represents a
reduction of 0.6 percentage points to account for the forecast error in the FY 1995 market basket rate of increase for excluded units, no increase to reflect the different compensation price proxies used by ProPAC, and no al lowance for new technology. ProPAC believes that major changes in the excluded hospitals' target amounts should not be made at this time. Rather, a prospective payment system for excluded hospitals and units should be implemented as soon as possible.

Response: We recommend that hospitals excluded from the prospective payment system receive an update equal to the percentage increase in the market basket that measures input price increases for services furnished by
excluded hospitals minus 1.5 percentage points. The reduction is consistent with the updates provided under President Clinton's budget proposal. The market basket rate of increase for excluded hospitals is currently forecast at 2.7 percent. Subtracting 1.5 percentage points would result in an update of 1.2 percent for excluded hospitals and units.

As noted by ProPAC, HCFA has contracted with the RAND Corporation to analyze a classification system for rehabilitation patients that appears to have the potential to serve as the basis for a prospective payment system for rehabilitation hospitals and units. However, even if this classification system is found to be suitable, it would
be several years before we could fully implement any prospective payment system for these facilities. In addition, we have been less successful in our pursuit of a suitable classification system for the other types of excluded hospitals. Therefore, as an interim measure, the President's budget contains a proposal to rebase the target amounts for excluded hospitals and units on more recent cost data. Changes would al so be made to the conditions under which facilities would receive additional payment when they exceed their limits. Incentive payments for facilities whose costs are below their target amounts would be eliminated.

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Prospective Payment Assessment Commission

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The Prospective Payment Assessment Commission, created in 1983 by the legislation that established the Medicare prospective payment system for inpatient hospital services, advises the Congress and the Secretary of Health and Human Services on policies affecting Medicare payments to hospitals and other facilities. The Commission also studies industrywide effects of Medicare policies and important trends in the health care delivery system. On March 1 of each year, the Commission submits a report to the Congress with recommendations for improvements in Medicare policies and related subjects.

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March 1, 1996

The Honorable Albert 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 a discussion of health care spending and its impact on the Medicare program, as well as major reforms proposed for Medicare. In addition, 26 recommendations concerning Medicare payment policies are included. The report reflects the Commission's judgment about issues of substantial importance to the Medicare program and beneficiaries, hospitals, and other providers.


Enclosure

# Prospective Payment Assessment Commission 

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March 1, 1996

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 a discussion of health care spending and its impact on the Medicare program, as well as major reforms proposed for Medicare. In addition, 26 recommendations concerning Medicare payment policies are included. The report reflects the Commission's judgment about issues of substantial importance to the Medicare program and beneficiaries, hospitals, and other providers.

Sincerely,


Enclosure

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## Executive Summary

Since its inception in 1965, the Medicare program has provided health insurance coverage for the elderly and disabled. But this protection has come at a substantial cost to the Federal government. Between 1967 and 1993, total program expenditures climbed more than 30 -fold. Medicare payments per person increased, on average, 8 percent annually over the same period. Total program spending reached an estimated $\$ 177$ billion in 1995, accounting for 12 percent of the Federal budget.

The rise in Medicare spending threatens the solvency of the program's Hospital Insurance Trust Fund, its primary source of income. Moreover, it has been a major contributor to the Federal budget deficit. Payment reforms have been implemented in the past to control spending and extend the solvency of the program. This year, the Congress has focused renewed attention on Medicare spending in its plan to balance the Federal budget by 2002. Both the Congress and the President have proposed Medicare savings that would be substantially greater than any previously achieved. Their proposals, however, reflect different views on the role of the Federal government in financing care for Medicare beneficiaries.

Both the Congress and the President would expand Medicare's reliance on capitation, because of its apparent success in slowing private sector health care spending. Under Medicare's capitation option, called the risk contracting program, Medicare makes an annual per capita payment to a contracting health plan to cover a defined set of services for enrolled beneficiaries. This shifts the responsibility for payment for covered services from the Federal government to the health plans. Medicare's spending for beneficiaries enrolled in the capitation program, therefore, is predictable and limited to the per capita payment. Further, health plans have incentives to manage service use and control their costs.

As currently designed, however, Medicare's risk contracting program does not fully realize the potential benefits associated with capitation. The program's per capita rates appear to be too high in
some markets, resulting in overpayment to plans, and too low in others, discouraging plan participation in those areas. To remedy this, the Congress and the President propose changing the payment rate setting method to generate more savings from the risk program and increase the number of plans available to beneficiaries. In addition, the Congress specifies annual increases to the capitation rates to reduce spending growth further.

Even with increased emphasis on capitation arrangements, the vast majority of Medicare services will continue to be purchased on a fee-forservice basis. Both the President and the Congress would make significant changes to Medicare's traditional fee-for-service payment methods and, in fact, would achieve most of their Medicare savings through this part of the program. In addition, the Congress would implement a savings enforcement tool called the "failsafe budget mechanism." For the first time in Medicare's history, total spending per enrollee in both the capitation and fee-for-service programs would be capped each year at a congressionally mandated amount, regardless of the number or types of services provided or the underlying rate of general inflation.

At the same time that these significant changes to Medicare are being considered, private sector financing and delivery of medical care are undergoing substantial changes. After years of rapid cost growth, underwritten by payment increases from private payers, hospitals are facing intense pressure to constrain their costs. They have successfully responded by holding cost growth below the level of inflation. As a group, hospitals have been able to maintain their financial condition. But some facilities, because of commitments to teaching or providing care to the poor, may be limited in their ability to continue to meet payer demands for constrained cost growth. Both the Congress and the President propose reductions to Medicare's teaching and disproportionate share adjustments. In light of these changes, the distribution of Medicare payments becomes more critical to ensure appropriate access and adequate quality of care for beneficiaries.

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As hospitals have struggled to constrain their costs, the share of Medicare expenditures devoted to post-acute and ambulatory care providers has climbed. Medicare has imposed ever-tighter constraints on payments per service, but has failed to adequately address utilization. Volume control in these settings is particularly difficult because services can be provided in various sites. Payment constraints applied to one provider are likely to cause higher use in another. The Congress and the President begin to address this problem in two sectors with particularly high growth - skilled nursing facilities and home health agencies-by mandating prospective payment systems that bundle a set of services for a single payment.

The significant Medicare savings proposed by the Congress and the President, as well as Medicaid reforms and private sector cost-control efforts, will require health care providers to continue to modify their practices. In this dynamic environment, the challenge will be for Medicare to monitor the impact of these changes and appropriately adjust its policies to ensure continued protection of its beneficiaries.

## RECOMMENDATIONS FOR FISCAL YEAR 1996

The Prospective Payment Assessment Commission (ProPAC) is responsible for advising the Congress and the Secretary of Health and Human Services on Medicare's payment policies for all health care facilities and their effects on beneficiaries and the facilities themselves. In addition, the Commission monitors important trends in the nation's health care system. In this report, ProPAC discusses the major reforms proposed for the Medicare program and the ramifications these might have for beneficiaries and providers alike. The Commission presents 26 recommendations covering a range of topics related to these reforms, in the context of promoting more efficient operation of the health care system while maintaining access to quality care for Medicare enrollees.

## Recommendation 1: Slowing the Rise in Medicare Spending

The Commission supports the efforts of the Congress and the President to reduce the growth in Medicare expenditures. Over time, spending for
services furnished to Medicare enrollees should increase at rates comparable to those in a cost- and quality-conscious private sector.

## Recommendation 2: The Failsafe Budget Mechanism

Any failsafe budget mechanism should include a more effective risk adjustment factor to ensure payment equity between the Medicare capitation and traditional fee-for-service programs. In addition, changes in inflation that differ substantially from CBO forecasts could require modifications to the Medicare benefit budget over time. Revisions to the proposed fee-for-service sector budget allocations could also be needed as medical practices change.

## Recommendation 3: Expanding Medicare's Capitation Program

The Commission supports reforming the Medicare capitation program to control spending while expanding beneficiary choice.

## Recommendation 4: Setting and Updating the Capitation Rates

Geographic variation in the capitation rates and the volatility of the rates from year to year should be reduced. The Secretary should develop and test alternative payment methods that would allow the payment rates to reflect changes in local market conditions.

## Recommendation 5: Improving Risk Adjustment Methods

The risk adjustment methods used to set Medicare capitation payments should better reflect variation in the likely use of services. Even as research on the development of new methods continues, the Secretary should implement interim improvements as soon as possible.

## Recommendation 6: Medical Savings Accounts

The Congress's high deductible/MSA option would provide an additional choice for Medicare enrollees. ProPAC is concerned, however, that the current Medicare risk adjustment method is not sufficient to protect the program from adverse selection and resulting excess spending. The likelihood that
rates would better reflect risk would be enhanced if Medicare enrollees were required to remain in the MSA option at least for several years.

## Recommendation 7: The MedicarePlus Fee-for-Service Option

Enrollees choosing the fee-for-service option under the proposed MedicarePlus program could be responsible for substantially higher fees than what their plans would pay. The Secretary should monitor the impact of this option on beneficiary liability and on possible reductions in physician and other provider participation in traditional Medicare.

## Recommendation 8: Information for Beneficiary Health Plan Choices

Medicare should make available to beneficiaries information about the performance of plans and local providers. The Secretary should identify the information beneficiaries need to make appropriate choices and develop innovative ways to improve access to it.

## Recommendation 9: Health Plan Accountability

Medicare must hold health plans accountable for the appropriate use of Medicare funds. In addition, standards must be developed and enforced to ensure that Medicare beneficiaries will receive services of appropriate quality.

## Recommendation 10: Updating PPS Operating Rates

ProPAC's update framework would support an update between 0.7 percentage points and 2.0 percentage points less than the increase in the hospital market basket index. The methodology employed by the Commission in previous years would lead to a recommendation of about market basket minus 1.5 percentage points, roughly corresponding to the midpoint of that range. In light of the significant changes occurring in health care delivery, the Commission believes that PPS payment rate increases could be held to market basket minus 2.0 percentage points for the next year or two. However, it is concerned about the potential effects of continuing updates at that level on hospitals' ability to provide quality care to Medicare beneficiaries and other populations.

## Recommendation 11: Setting Capital Payment Rates

Prospective per discharge payment rates for inpatient capital costs should be set by developing an appropriate base payment rate and applying an annual update. The capital update should reflect the prices of capital assets, capital financing costs, and other factors related to the capital costs hospitals incur in efficiently providing inpatient care to Medicare beneficiaries.

## Recommendation 12: Updating Payments to PPS-Excluded Hospitals and Distinct-Part Units

ProPAC's update framework would support an average update to the TEFRA target amounts equal to the projected increase in the market basket index minus 0.6 percentage points for fiscal year 1997. This average is within the range of facility-specific updates in the Congress's proposal, which is between the market basket increase and 2.5 percentage points below market basket. Major changes to the TEFRA target amounts should not be made at this time. Rather, a prospective payment system for PPS-excluded hospitals and distinct-part units should be implemented as soon as practicable.

## Recommendation 13: Broadening Financial Support to Teaching Hospitals

Explicit financial support for graduate medical education activities should not be limited to the Medicare program. Mechanisms to broaden financial support for teaching-related activities in hospitals and other locations should be developed.

## Recommendation 14: Medicare Payments for Graduate Medical Education Costs

ProPAC supports changes in Medicare teaching payments that would encourage an appropriate distribution of residents across specialties and discourage inappropriate growth in the total number of residents.

## Recommendation 15: Medicare Indirect Medical Education Payments

The Medicare indirect medical education adjustment should be reduced from its current 7.7 percent level to 7.0 percent.

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## Recommendation 16: Distributing Additional Teaching-Related Payments

Funds that provide broader financial support for graduate medical education should be distributed in a way that corresponds to the additional costs incurred by teaching facilities. Providers that treat enrollees in capitation plans should receive teach-ing-related payments for those patients as well as for the other patients they serve.

## Recommendation 17: Disproportionate Share Hospital Payments

The Commission is concerned about the potential impact of reductions in DSH payments. Hospitals that treat a large number of the uninsured could be particularly vulnerable because of recent changes in the health care environment. Large reductions in DSH payments would threaten the continued ability of many of these hospitals to serve populations who depend on them for access to care.

## Recommendation 18: Method for Distributing Disproportionate Share Payments

The structure of the DSH adjustment should be reviewed to make certain that available funds are distributed equitably among the hospitals most in need of assistance. This may require collecting new data to develop a better measure of the services hospitals provide to indigent patients.

## Recommendation 19: Discharges from PPS Hospitals to Other Facilities

Medicare payments should be modified to account for the shift in services from acute to postacute settings. Broadening the definition of transfer cases, however, is not an appropriate approach.

## Recommendation 20: Prospective Payment for Post-Acute Care

Prospective payment systems should be implemented for all post-acute services. The payment method for each service should be consistent across delivery sites. The Secretary should explore methods to control volume of post-acute service use, such as bundling services for a single payment.

## Recommendation 21: Case-Mix Measures for Post-Acute Services

Reliable case-mix measurement is important in prospective payment systems to account for resource use and to analyze treatment patterns and costs across sites. The Secretary should coordinate case-mix research across post-acute care settings, using consistent methods for measuring patient acuity and resource use.

## Recommendation 22: Interim Fee-for-Service Payment Method for Skilled Nursing Facility Services

An interim payment method should be implemented to control the growth in Medicare payments for SNF services until a comprehensive prospective payment system is established. A system based on historical data and facility-specific limits, however, may not allow facilities to respond appropriately to changes in a dynamic environment.

## Recommendation 23: Interim Fee-for-Service Payment Method for Home Health Care

Until a fully prospective payment system is developed, the Commission supports adopting epi-sode-based payment limits. In addition, beneficiary copayments, subject to an annual limit, should be introduced.

## Recommendation 24: Update to the Composite Rate for Dialysis Services

The Secretary should develop methods to control total Medicare per capita expenditures for ESRD beneficiaries. In the meantime, the composite rate should be updated by 2.7 percent for hospital-based dialysis facilities and by 2.0 percent for freestanding facilities for fiscal year 1997. The Secretary should also develop reliable measures of patient severity and outcomes to analyze the relationships among treatment processes, patient outcomes, and costs. These factors should be considered in evaluating the need for and the level of future payment updates.

## Recommendation 25: Prospective Payment for Hospital Outpatient Services

A comprehensive prospective payment system should be developed for hospital outpatient ser-
vices. Such a system should include a strategy for controlling the volume of ambulatory services.

## Recommendation 26: Beneficiary Liability for Hospital Outpatient Services

The growing financial burden for Medicare enrollees who receive services in hospital outpatient
departments should be alleviated immediately. Beneficiary coinsurance for these services should be limited to 20 percent of the Medicare-allowed payment, as it is in other settings. For services not paid on a prospective basis, the Secretary should establish a new method for determining beneficiary copayments based on estimated allowed payments since they cannot be calculated precisely when services are delivered.

## Chapter 1

## Reforming the Medicare Program

For 30 years, Medicare has fulfilled its promise of protecting the elderly, and subsequently the disabled, from financial impoverishment due to illness. This protection, however, has come at a substantial cost to the Federal government and taxpayers as well as to some Medicare beneficiaries. In 1967, the program covered 19.5 million people at a cost of $\$ 4.8$ billion. ${ }^{1}$ By 1993, program spending had increased more than 30 -fold to $\$ 151.1$ billion, with the number of enrollees almost doubling to 36.3 million. Medicare beneficiaries have felt the effects of the spending increases, with their costsharing responsibilities during 1993 exceeding $\$ 30$ billion. ${ }^{2}$ Out-of-pocket costs for non-covered services also have climbed sharply.

Medicare program spending reached an estimated $\$ 177$ billion in fiscal year 1995, accounting for 12 percent of the Federal budget. The Congressional Budget Office (CBO) projects that, under current law, program spending will grow to $\$ 332$ billion by fiscal year 2002. ${ }^{3}$ Furthermore, the Federal share of Medicaid payments is expected to climb from $\$ 89$ billion to $\$ 173$ billion over this time. Consequently, spending for Medicare and Medicaid in 2002 is projected to consume more than one-fourth of the total Federal budget.

The rise in the cost of these entitlement programs is a major contributor to the projected growth in the Federal budget deficit. The relentless increases in Medicare spending for hospital, skilled nursing facility (SNF), home health, and other services also have led to the recent warning that Medicare's primary source of income, the Hospital Insurance (HI) Trust Fund, will not be able to cover anticipated expenses beginning in 2002.

This year, as it has periodically over the past 15 years, the Congress has taken steps to rein in the growth in Medicare spending, extend the solvency of the HI Trust Fund, and balance the Federal budget.

The reductions in spending growth now being considered by the Congress and the President, however, are substantially greater than those previously enacted. In addition, the proposal passed by the Con-gress-and vetoed by the President-embodies a major philosophical change in the role and responsibilities of the Federal government and the nature of the Medicare and Medicaid entitlements. ${ }^{4}$

The President supports the objectives of slowing the rise in Medicare spending, strengthening the financial integrity of the HI Trust Fund, and balancing the Federal budget. His approach, however, varies in fundamental ways from that of the Congress. The President's proposal reflects different budget priorities, allowing larger increases in Medicare and Medicaid spending and favoring smaller tax reductions. ${ }^{5}$ His approach also does not incorporate many structural changes to Medicare and Medicaid, such as those proposed by the Congress.

In this chapter of its annual report to the Congress, the Prospective Payment Assessment Commission (ProPAC) examines the Medicare and Medicaid spending trends that led the Congress to conclude that major reforms of these programs were necessary. Past Medicare expenditure patterns and projected spending through 2002 are described. The next sections review the impact of expenditure growth on beneficiaries' financial liabilities, the HI Trust Fund, and the Federal budget deficit. The steps considered by the Congress and the President to modify the Medicare program and slow the rise in spending are then discussed. The chapter concludes with the Commission's recommendations regarding reform of the Medicare program.

In Chapter 2, ProPAC describes and provides its views and recommendations to the Congress on the existing Medicare capitation option and the MedicarePlus program. This program would replace

Medicare's risk-based contracting policies. It also reflects substantial changes in the Congress's view of how Medicare's capitation program should operate. The next two chapters examine changes in the traditional Medicare fee-for-service program. Chapter 3 presents the Commission's recommendations regarding payment policies for inpatient hospital services. In Chapter 4, the rapidly growing areas of post-acute and ambulatory services are discussed, along with recommended changes to their payment policies.

## HEALTH CARE SPENDING

Total national health care expenditures are expected to exceed $\$ 1$ trillion in $1995 .{ }^{6}$ The Federal government, the largest single payer for health care, will pay a third of the bill for medical services (see Table 1-1). The Medicare and Medicaid programs will account for $\$ 346$ billion of this spending, providing health coverage to 66 million people.

The responsibility for funding personal health care services has changed dramatically in the past 35 years, as government and private health insurance programs have expanded. Between 1960 and 1993, individual out-of-pocket spending rose from about $\$ 13$ billion to almost $\$ 158$ billion (see Table 1-2). As a share of personal health care spending, however, out-of-pocket expenditures declined from 56 percent to 20 percent, while private sector and government expenditures increased rapidly. Private sector expenditures climbed from about $\$ 5$ billion to $\$ 288$ billion. By 1993, the Federal government was spending
$\$ 259$ billion, about 33 percent of personal health care spending, primarily due to rapid expansion of the Medicare and Medicaid programs.

The enactment of Medicare and Medicaid in 1965 was followed by a rapid escalation in the health care portion of Federal, state, and local budgets (see Table 1-3). Health care expenditures increased from 7.6 percent of state and local government spending in 1965 to 12.4 percent in 1993. The effects on the Federal budget were more striking, with health expenditures rising from 3.9 percent to 18.6 percent of total Federal outlays over this period.

The drafters of the original Medicare legislation intended that the Federal government would provide most of the financing for care received by the elderly, but that services would be furnished through the existing private delivery system. The financing was to come primarily through payroll taxes, enrollee premiums and cost sharing, and general revenues. The Congress designed Medicare to pay for hospital and physician services without significantly altering the existing health care financing and delivery system. ${ }^{7}$ Thus, many of Medicare's payment policies were modeled after those in the private insurance market. The most important of these were the reliance on fee-for-service payment for physician services and cost-based reimbursement for hospital care.

These policies succeeded in guaranteeing needed care for Medicare beneficiaries. They also improved the financial condition of providers. But

## Table 1-1. National Health Expenditures by Source of Funds, Selected Years

| Year | In Billions of Dollars |  |  |  | As a Percentage of Total Expenditures |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private | Government |  | Total | Private | Government |  | Total |
|  |  | Federal | State and Local |  |  | Federal | State and Local |  |
| 1965 | \$ 31 | \$ 5 | \$ 5 | \$ 42 | 75.3\% | 11.6\% | 13.2\% | 100\% |
| 1980 | 146 | 72 | 33 | 251 | 58.1 | 28.7 | 13.3 | 100 |
| 1985 | 259 | 123 | 52 | 434 | 59.7 | 28.4 | 11.9 | 100 |
| 1990 | 410 | 196 | 91 | 697 | 58.9 | 28.1 | 13.0 | 100 |
| 1993 | 496 | 281 | 107 | 884 | 56.1 | 31.7 | 12.1 | 100 |
| 1995* | 552 | 334 | 121 | 1,008 | 54.8 | 33.2 | - 12.0 | 100 |
| 2000* | 770 | 528 | 174 | 1,472 | 52.3 | 35.8 | 11.8 | 100 |
| 2005* | 1,051 | 821 | 247 | 2,119 | 49.6 | 38.8 | 11.6 | 100 |

Note: National health expenditures include all spending in the health care sector.

* Projected.

SOURCE: Congressional Budget Otfice.

Table 1-2. Personal Health Care Expenditures by Source of Funds, Selected Years (In Billions)

|  |  |  |  | Government |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Year | Total | Out-of-Pocket | Private | Federal | State and Local |
|  |  |  |  |  |  |
| 1960 | $\$ 23.9$ | $\$ 13.4$ | $\$ 5.4$ | $\$ 2.1$ | $\$ 3.0$ |
| 1970 | 64.8 | 25.4 | 16.9 | 14.7 | 7.8 |
| 1980 | 220.1 | 61.3 | 71.8 | 63.4 | 23.6 |
| 1985 | 380.5 | 98.8 | 133.7 | 111.3 | 36.7 |
| 1990 | 612.4 | 138.3 | 230.7 | 178.1 | 65.3 |
| 1991 | 670.8 | 143.3 | 250.0 | 206.0 | 71.6 |
| 1992 | 729.7 | 150.6 | 269.8 | 234.0 | 75.3 |
| 1993 | 782.5 | 157.5 | 288.0 | 259.0 | 78.1 |

Note: Personal health care expenditures exclude research and construction, administration of public programs and net cost of private health insurance, and government public health activities.
SOURCE: Health Care Financing Administration, Office of the Actuary.
they greatly expanded service capacity and led to the rapid adoption of new and costly technologies, which contributed to the acceleration in Medicare expenditures.

## Medicare Program Expenditures

In 1967-its first full year of operation-Medicare spent $\$ 4.8$ billion on behalf of its enrollees (see Table 1-4). Eligibility for the Medicare program was expanded in 1972 to people who were disabled as well as to those with end-stage renal disease. By 1980 , spending had reached $\$ 36.4$ billion. Between 1980 and 1993, Medicare expenditures climbed on average more than 11 percent annually, to $\$ 151.1$ billion. Part of this rise can be

## Table 1-3. Government Health Expenditures as a Percentage of Total Government Expenditures, Selected Years

| Year | Federal | State and Local |
| :---: | :---: | :---: |
|  |  |  |
| 1960 | $3.1 \%$ | $7.8 \%$ |
| 1965 | 3.9 | 7.6 |
| 1966 | 5.2 | 7.5 |
| 1967 | 7.3 | 7.6 |
| 1970 | 8.5 | 8.5 |
| 1975 | 10.0 | 9.9 |
| 1980 | 11.7 | 11.0 |
| 1985 | 12.7 | 12.9 |
| 1990 | 15.4 | 12.8 |
| 1991 | 16.9 | 12.6 |
| 1992 | 17.4 | 12.4 |
| 1993 | 18.6 |  |
| SOURCE: | Health Care Financing Administration, Ofitce of the Actuary and |  |
|  | Office of National Health Statistics; and Department of |  |
| Commerce, Bureau of Economic Analysis. |  |  |

attributed to the growth in Medicare enrollees. From 1966 to 1993, the number of enrollees 65 or over rose about 2 percent a year and, since 1973, the number of disabled enrollees has gone up about 4 percent annually. The total Medicare-covered population expanded from 19.5 million in 1967 to 36.3 million in 1993.

In addition to the continuing increases in enrollees, the share of Medicare beneficiaries using services paid for by the program has risen sharply over the years. This has occurred partly because the growth in the Part B deductible has not kept pace with the rise in health care costs. Consequently, a growing number of beneficiaries meet the deductible requirements. Only 37 percent of enrollees, about 7 million people, had Medicare payments made on their behalf in 1967. By 1980, 18 million enrollees were being served, representing 63 percent of the Medicare population. In 1993 about 80 percent of the Medicare population, 29 million enrollees, used services paid for by the program. It is not surprising, therefore, that Medicare spending has increased. But this does not tell the full story.

Medicare program payments for each person served also have escalated at a rapid pace, from $\$ 593$ in 1967 to $\$ 4,387$ in 1993-an 8 percent average annual rate of increase. ${ }^{8}$ This rise is substantially larger than can be explained by general inflation during this time. In part, the growth in payments per person reflects medical inflation above that in the general economy. More important, however, are the continuing increases in the number and complexity of services furnished to Medicare beneficiaries.

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Table 1-4. Personal Health Care Expenditures Under Medicare and Medicaid, Selected Years

|  | Medicare |  |  | Medicaid |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Spending <br> (In Billions) | Enrollees <br> (In Millions) |  | Spending* <br> (In Billions) | Recipients <br> (In Millions) |
| 1967 | $\$ 4.8$ | 19.5 |  | $\$ 3.0$ | - |
| 1970 | 7.3 | 20.5 |  | 5.1 | - |
| 1973 | 10.2 | 23.5 |  | 9.1 | 19.6 |
| 1980 | 36.4 | 28.5 |  | 24.8 | 21.6 |
| 1985 | 70.3 | 31.1 |  | 39.2 | 21.8 |
| 1990 | 109.6 | 34.2 |  | 71.7 | 25.3 |
| 1993 | 151.1 | 36.3 |  | 112.8 | 33.4 |

* Includes Federal and state shares.

SOURCE: Health Care Financing Administration, Office of the Actuary.
Changes in Medicare policies will have different effects on beneficiaries, since a relatively small number of them account for a large portion of expenditures. In 1993, 53 percent had payments of less than $\$ 500$ made on their behalf. ${ }^{9}$ By contrast, 10 percent had payments of $\$ 10,000$ or more, representing almost three-quarters of all Medicare program spending. Slightly more than 3 percent had payments of $\$ 25,000$ or more; this group accounted for 39 percent of all spending.

## Medicaid Program Expenditures

Medicaid is a joint Federal and state program intended to provide medical care to low-income people who meet certain requirements. States are given substantial flexibility, within Federal guidelines, to determine eligibility and benefits for their residents. Consequently, eligibility, coverage, and payment rules vary greatly among the states. Medicare enrollees are eligible for Medicaid if they meet the income and asset standards set by a state. About 12 percent of the Medicare population was dually eligible for both programs in 1993. In addition, state Medicaid programs are required to pay Medicare premiums and cost-sharing amounts for certain low-income persons, called Qualified Medicare Beneficiaries.

The Medicaid program has experienced substantial growth, adding pressure to state and Federal budgets. Medicaid spending spiraled from $\$ 3.0$ billion in 1967 to $\$ 112.8$ billion in 1993. During the 1980s, Medicaid program spending growth was relatively stable. In the early 1990 s , however, expenditures jumped, in large part because of
expansions in eligibility, states' use of provider tax and donation programs to increase Federal matching payments, and changes in legislation that allowed states to increase payments dramatically to certain hospitals serving a disproportionate share of low-income patients.

Though more than 70 percent of Medicaid recipients were children and low-income adults in 1993, they accounted for only 30 percent of Medicaid payments. About 15.5 million childrenalmost half of all Medicaid recipients-received covered services. These children, however, generated only 16 percent of Medicaid payments. By contrast, about 27 percent of Medicaid enrollees were aged, blind, or disabled. This group, which included many Medicare beneficiaries, accounted for nearly 70 percent of total Medicaid spending, much of which was for long-term nursing home care. Hence, the Medicaid program serves important needs for the low-income Medicare population.

## MEDICARE BENEFICIARY COST SHARING

The rapid rise in the cost of medical services has increased the financial burden for many Medicare enrollees, especially those with limited incomes. Medicare beneficiaries generally are responsible for paying a certain amount of the bill for the services they receive, and as program spending has gone up, so have their liabilities. These cost-sharing responsibilities include the inpatient hospital deductible, coinsurance requirements, and balance billing payments to certain physicians whose charges are higher than the payment allowed by Medicare. Beneficiaries must also pay for all of Medicare's allowed amount for physician and other Part B services until they reach a certain deductible.

Between 1977 and 1993, beneficiary liability as a share of overall Medicare spending dropped modestly, from 18 percent to 15 percent. Total beneficiary out-of-pocket spending for services covered by Medicare, however, rose more than five-fold. ${ }^{10}$

Over time the pattern of cost sharing has changed, reflecting differences in the types of providers used and the costs of various services. The share of beneficiary out-of-pocket spending for

Part A services, especially hospital and SNF care, has accelerated. Part B liability, which accounted for about 76 percent of cost sharing in 1977, fell to about 67 percent in 1993. A major factor in this decline was the limit on balance billing that the Congress enacted as part of physician payment reform in 1989. In addition, the increase in the Part B deductible, from $\$ 60$ to $\$ 100$ during this time, lagged far behind the rise in program spending or general inflation. The decrease in the deductible as a portion of Part B liability, however, was offset by the substantial growth in the share of coinsurance payments.

The average yearly cost-sharing liability per Medicare enrollee went from $\$ 174$ in 1977 to $\$ 626$ in 1993. This figure hides large differences in payments among beneficiaries for Medicarecovered services. Almost 65 percent of enrollees incurred a liability of less than $\$ 500$ in 1992, but 6 percent were responsible for more than $\$ 2,000$ in out-of-pocket spending. A small group of beneficiaries, 1.7 percent, confronted payments of $\$ 5,000$ or more. Thus, for certain beneficiaries the financial protection from the costs of major illness offered by the Medicare program falls far short of the need.

In addition to these cost-sharing liabilities, Medicare beneficiaries are responsible for payment of the Part B premium if they elect this coverage, as almost all do. There also are substantial gaps in Medicare coverage for certain services (especially medications) that the elderly and disabled frequently require. Most Medicare beneficiaries must pay for these non-covered services directly or through private supplemental insurance.

To reduce the risk of significant out-of-pocket spending, about 75 percent of Medicare enrollees relied on private insurance to supplement their Medicare coverage in 1992. Another 12 percent were dually eligible for Medicaid, which provides financial assistance in meeting these extra costs. About 11 percent of Medicare enrollees had no supplemental coverage and were at full risk for cost-sharing expenses, while the rest were covered by other programs. The increase in out-ofpocket spending also may contribute to the growth in the number of beneficiaries who are choosing plans in Medicare's capitation program. Many of these plans require little or no cost sharing. They also frequently supplement their benefit
packages with services such as prescription drugs, which Medicare does not cover.

## THE SOLVENCY OF THE MEDICARE TRUST FUNDS

The Medicare program is financed through a variety of mechanisms, with funding channeled through two trust funds. The primary source of income for the Hospital Insurance Trust Fund is a dedicated payroll tax, paid by employers, employees, and the self-employed. Although Medicare is an entitlement, this fund must be solvent to pay claims on behalf of beneficiaries receiving Part A services, because trust fund balances limit spending authority. If the trust fund became insolvent, Part A Medicare payments would be limited to the money that accrued to the fund from current payroll tax receipts.

By contrast, the Part B Supplementary Medical Insurance Trust Fund is financed primarily through general revenues and enrollee premiums. General revenues and premiums each contributed about 49 percent of the fund's income in 1972. By 1993, the general revenue share was 72 percent, with premiums adding 25 percent. Although spending from this fund has been growing rapidly, insolvency is not a problem since general revenues are required to cover expected outlays that exceed premiums and other receipts. The growth in Part B Medicare spending, therefore, increases the Federal budget and contributes to the deficit.

The trust funds' trustees issue an annual report projecting revenues and expenses and evaluating the actuarial condition of each fund. To arrive at their conclusions, the trustees make assumptions about the growth in taxable wages and salaries, future rates of inflation, the number and life expectancy of Medicare enrollees, and patterns of service use. They base their projections on current Medicare statutory authority. In their 1995 report, the trustees projected that the HI Trust Fund would begin to run a deficit in 1996 and would be insolvent in 2002, seven years from the release of the report. ${ }^{11}$

While projections of trust fund insolvency are not a new occurrence, they have received much more attention this year. Since 1970, on several occasions the trustees have projected insolvency of
the HI Trust Fund within seven years (see Table 1-5). Their projections have not materialized, primarily because the Congress has taken action to avert the impending insolvency. In 1972, the Congress raised the Medicare payroll tax rates and increased the ceiling on the level of earnings to which the tax is applied. The Congress also has enacted many provisions intended to control Part A expenditures by curbing the growth in payments to hospitals and other providers. In 1983, the Congress enacted the Medicare prospective payment system (PPS) for inpatient hospital services and other initiatives intended to slow expenditure growth. Steps also were taken that year, and again in 1990 and 1993, to increase HI Trust Fund revenues.

Because Medicare has relied primarily on a fee-for-service payment system, initiatives to slow the rise in spending have focused on reducing the price that Medicare pays for each service furnished.
Table 1-5. Number of Years from Trustees' Projection Until Insolvency of the Hospital Insurance Trust Fund

| Year of Trustees' Report | Year of Insolvency |
| :--- | :---: |
|  |  |
| 1970 | 2 |
| 1971 | 2 |
| 1972 | 4 |
| 1973 | None indicated |
| 1974 | None indicated |
| 1975 | About $20^{*}$ |
| 1976 | About $15^{*}$ |
| 1977 | About $10^{*}$ |
| 1978 | 12 |
| 1979 | 13 |
| 1980 | 14 |
| 1981 | 10 |
| 1982 | 5 |
| 1983 | 7 |
| 1984 | 7 |
| 1985 | 13 |
| 1986 | 10 |
| 1986 amended | 12 |
| 1987 | 15 |
| 1988 | 17 |
| 1989 | None indicated |
| 1990 | 13 |
| 1991 | 14 |
| 1992 | 10 |
| 1993 | 6 |
| 1994 | 7 |
| 1995 | 7 |
| Projections for 1975, 1976, and 1977 put the dates of insolvency, |  |
| respectively, in "the late 1990s," "the early 1990s," and "the late 1980s." |  |
| s0uRCE: Henry J. Aaron and Robert D. Reischauer, "The Medicare Reform |  |
|  | Debate: What Is the Next Step?" Heatth Affairs, Winter 1995. |
|  |  |

These actions have had less effect on the overall program budget, as the number and complexity of services provided have burgeoned, perpetuating the rise in program expenditures.

HI Trust Fund solvency remains threatened over the long term, in spite of past efforts to shore up the fund temporarily and reductions in spending growth currently considered by the Congress and the President. This is because the ratio of workers paying Medicare taxes to Medicare enrollees is declining as the baby boom generation ages into Medicare.

## MEDICARE, MEDICAID, AND THE FEDERAL BUDGET

The Congressional Budget Office estimates that total Federal revenues in fiscal year 1995 will reach almost $\$ 1.36$ trillion (see Table 1-6). Expected outlays will be just under $\$ 1.52$ trillion, resulting in a $\$ 161$ billion budget deficit for the year. The cumulative Federal debt, as a result of years of deficit spending, now stands at $\$ 4.9$ trillion. The 1995 deficit is the smallest since 1989, but CBO projects that it will rise steadily over the next decade if current budgetary policies remain unchanged.

Federal spending is divided into mandatory and discretionary categories. Interest on the national debt is treated separately. Defense, international affairs, transportation, and domestic programs such as biomedical research funding are examples of discretionary spending. This spending is subject to review in the annual appropriations process. In addition, under current law it is subject to spending limits through 1998. Consequently, total discretionary spending is controlled, and policy makers must make trade-offs among competing programs. CBO projects that total discretionary spending will decrease from 35 percent of total Federal outlays in 1996 to 30 percent in 2002, if the current spending limits expire in 1998 as scheduled.

By contrast, mandatory entitlement programs like Medicare and Medicaid are not subject to annual review, the appropriations process, or spending limits. In 1996, total mandatory spending will account for 55 percent of Federal outlays. CBO estimates that the share of mandatory expenditures will climb to 62 percent in 2002. Medicare

Table 1-6. Selected Congressional Budget Office Projections, Fiscal Years 1995-2002 (In Billions)

| Budget Category | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Total revenues | $\$ 1,357$ | $\$ 1,423$ | $\$ 1,487$ | $\$ 1,553$ | $\$ 1,625$ | $\$ 1,703$ | $\$ 1,783$ | $\$ 1,871$ |
| Total outlays | 1,518 | 1,595 | 1,668 | 1,736 | 1,820 | 1,907 | 1,994 | 2,100 |
| Deficit | 161 | 172 | 182 | 183 | 195 | 204 | 211 | 228 |
| Medicare $^{\text {a }}$ |  |  |  |  |  |  |  |  |
| Medicaid $^{b}$ | 177 | 196 | 216 | 236 | 258 | 281 | 305 | 332 |

${ }^{a}$ Mandatory outlays.
${ }^{\circ}$ Federal share of Medicaid payments.
SOURCE: Congressional Budget Office.
and Medicaid outlays will be responsible for 17 percent of Federal spending in 1996. Under current policies, these programs are expected to consume 27 percent of the Federal budget in 2002. CBO points to the rapid growth in Medicare and Medicaid spending as the major factor driving up its deficit projections.

The Congress, intent on eliminating the Federal deficit by 2002 , has looked to mandatory spendingand especially the rapidly growing health entitlement programs--for substantial budget savings. The Congress can control Medicare spending by changing eligibility policies or reducing benefits. It also can require higher beneficiary cost sharing or raise taxes. These approaches are regarded as politically unattractive, however. Consequently, over the past decade as it struggled with the Federal deficit, the Congress has looked primarily to reductions in payments to providers as the method of slowing Medicare spending growth. The current proposals generally continue to follow that path.

## RENEWED ACTION BY THE CONGRESS

In November 1994, the American public elected, for the first time in several decades, a Repub-lican-controlled Congress. The 104th Congress began its work in early 1995, determined to balance the Federal budget by 2002. The first formal step in the process was the passage of a budget resolution for fiscal year 1996. The Congress laid out its spending priorities and identified the broad program areas that it would target to balance the budget by 2002 . The legislative process requires an independent projection of baseline expenditures and an assessment of the savings that can be expected from congressional proposals.

The Congressional Budget Office is charged with these responsibilities.

CBO's spending baseline reflects assumptions regarding economic growth and the level of future spending under current laws. The December 1995 update of the baseline projected that the budget deficit would rise from $\$ 161$ billion in 1995 to $\$ 228$ billion in 2002. To reduce the deficit, it is necessary for the Congress to enact legislation containing budget savings. CBO credits a legislative proposal with savings if it will result in reductions from the forecasted baseline growth. Thus, savings may be achieved even if spending continues to rise.

## Medicare Savings

CBO projects that under current law, Medicare outlays (before subtracting offsetting premium receipts) will rise from about $\$ 177$ billion in 1995 to almost $\$ 332$ billion in 2002 , or 9.4 percent annually (see Table 1-7). As a major contributor to the deficit, the Medicare program was initially targeted by the Congress for $\$ 270$ billion in savings over the next seven years. Revised CBO baseline estimates, however, projected slower Medicare spending growth. Consequently, the estimate of the savings in the bill passed by the Congress fell to $\$ 227$ billion. ${ }^{12}$ Under this proposal, Medicare expenditures would rise at an annual rate of 7.2 percent.

By contrast, the President's proposal would result in $\$ 102$ billion in total savings and an annual growth rate of 7.6 percent. A separate bill (H.R. 2530), supported by a coalition of members of the House of Representatives, contains $\$ 153$ billion in Medicare reductions. The coalition's proposal would result in Medicare mandatory spending increases of 7.5 percent annually. ${ }^{13}$

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Table 1-7. Medicare and Medicaid Baseline Spending and Estimates Under Alternative Proposals,
1995-2002 (In Billions)

| Proposal | Mandatory Outlays |  |  |  | Total Net |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1995 | 1996 | 2002 | Annual Increase 1995-2002 | $\begin{gathered} \hline \text { Outlays }^{\mathrm{a}} \\ \text { 1996-2002 } \end{gathered}$ | $\begin{gathered} \hline \text { Savings }{ }^{\text {a }} \\ 1996-2002 \end{gathered}$ |
| Medicare: |  |  |  |  |  |  |
| Baseline | \$177.4 | \$196.4 | \$331.8 | 9.4\% | \$1,679.5 | - |
| Congress ${ }^{\text {b }}$ | 177.4 | 192.9 | 288.6 | 7.2 | 1,452.8 | \$226.7 |
| President ${ }^{\text {c }}$ | 177.4 | 196.4 | 296.4 | 7.6 | 1,578.0 | 101.5 |
| Coalition ${ }^{\text {d }}$ | 177.4 | 192.2 | 294.1 | 7.5 | 1,526.8 | 152.7 |
| Republican offer ${ }^{\text {® }}$ | 177.4 | 196.4 | 292.0 | 7.4 | 1,511.5 | 168.0 |
| President's budget' | - | - | - | - | 1,555.3 | 124.2 |
| Medicaid: |  |  |  |  |  |  |
| Baseline | 89.1 | 97.2 | 172.6 | 9.9 | 924.1 | - |
| Congress ${ }^{\text {b }}$ | 89.1 | 97.1 | 127.4 | 5.2 | 791.4 | 132.7 |
| President ${ }^{\text {c }}$ | 89.1 | 97.2 | 154.0 | 8.1 | 872.4 | 51.7 |
| Coalition ${ }^{\text {d }}$ | 89.1 | 97.2 | 162.5 | 9.0 | 877.9 | 46.2 |

Note: Baseline spending and other estimates based on Congressional Budget Office December 1995 budget baseline.
${ }^{\text {a }}$ Includes effect of premium increases.
${ }^{\text {b }}$ H.R. 2491, the "Balanced Budget Act of 1995," passed by the Congress on November 20, 1995.
" The "Balanced Budget Act of 1995 for Economic Growth and Fairness," released by the President on December 7, 1995.
"H.R. 2530, the "coalition budget," introduced on October 25, 1995.

- Republican offer presented to the President on January 5, 1996, as estimated by the House of Representatives, Budget Committee.
' President's 1997 budget released on February 5, 1996, based on savings estimated by the Office of Management and Budget.
SOURCE: Congressional Budget Office; House of Representatives, Budget Committee; and Office of Management and Budget.

The Republican leadership in the Congress and the President have attempted to arrive at an agreement resolving the differences in their proposals. As part of their negotiations, the Republican leadership submitted an "offer" that would reduce the total savings in their plan from $\$ 227$ billion to $\$ 168$ billion. The President also has revised his proposal, increasing Medicare savings from $\$ 102$ billion to $\$ 124$ billion.

The annual increase in Medicare spending is similar in all the proposals, ranging from 7.2 percent to 7.6 percent. The variation in total savings, however, is much greater due to differences in the growth of Part B premiums among the proposals.

## Medicaid Savings

Because of its substantial growth, the Medicaid program also is a target for spending reductions. CBO projects that the Federal share of this program will climb from roughly $\$ 89$ billion in 1995 to
nearly $\$ 173$ billion in 2002, an annual rate of 9.9 percent. The legislation passed by the Congress would slow this rate to 5.2 percent over the sevenyear period, saving just under $\$ 133$ billion.

Medicaid spending under the President's proposal would increase, on average, 8.1 percent a year, saving almost $\$ 52$ billion. The coalition's approach is similar, leading to 9.0 percent annual growth and about $\$ 46$ billion in expenditure reductions.

## The MedicarePlus Program

The Congress is especially interested in expanding Medicare's capitation program. This would achieve both of the Congress's primary goals: slowing Medicare entitlement spending and reducing government control over the program.

Under Medicare's existing capitation program, participating health maintenance organizations contract to provide all covered services for enrolled beneficiaries in return for a predetermined
monthly payment per enrollee. This arrangement shifts the responsibility for payment for individual services furnished to beneficiaries from the Federal government to private plans. The proposed MedicarePlus program would expand the variety of health plans available to Medicare enrollees. It also would sever the connection between the capitation amount and spending in the fee-for-service program. The annual update to the capitation rate would be set in law to achieve the Medicare spending level desired by the Congress. The Congress has also expressed its dissatisfaction with the current administration of the capitation program. Its proposal would move program management from the Health Care Financing Administration to another entity within the Department of Health and Human Services.

The MedicarePlus program would include a wide range of options that meet the desire of many members of the Congress to eliminate Federal government involvement in the care Medicare beneficiaries receive. Especially noteworthy are the options to allow beneficiaries to join a private fee-for-service program or to select a medical savings account. Both of these choices would represent a significant change in the responsibilities of the Medicare program.

## The Traditional Fee-for-Service Program

The traditional fee-for-service program continues to account for most of Medicare's spending. Consequently, almost 70 percent of the savings in the congressional proposal comes from this program (see Table 1-8). The 1995 base year spending and the projected increases over the next seven years differ greatly across types of providers (see Table 1-9). The savings would be spread across hospitals, physicians, and other providers and suppliers generally in proportion to projected spending increases. The bill also would move payment for home health services from a cost to a prospective payment basis, create facility-specific payment limits for ancillary services furnished in skilled nursing facilities, and provide for a SNF prospective payment system beginning in fiscal year 1998. Although the proposal slows the growth in Medicare payments to teaching hospitals, it provides new funding from general revenues for a Teaching Hospital and Graduate Medical Education Trust Fund.

Table 1-8. Estimated Savings from the Congressional Proposal, by Category, 1996-2002 (In Billions)

| Category | Estimated <br> Savings |
| :--- | :---: |
| Fee-for-service: |  |
| Inpatient hospital | $\$ 64.7$ |
| Outpatient hospital and ambulatory | 19.1 |
| Physicians | 12.6 |
| Home health | 17.0 |
| Skilled nursing | 10.0 |
| Other services | 19.0 |
| Total fee-for-service | 142.4 |
| Failsafe | 11.5 |
| Part B premiums | 54.2 |
| MedicarePlus | 18.6 |
| Total | 226.7 |

SOURCE: Congressional Budget Office.

## A NEW PHILOSOPHY

The legislation agreed to by the Congress includes stronger controls than any previously enacted to ensure that spending for the care furnished to Medicare beneficiaries does not exceed specific targets. The effects of the proposal, however, could extend far beyond its budgetary impact. The approach represents a fundamental change in the nature of the Medicare program. The bill would take a major step in moving the Medicare program from open-ended spending for covered services to a predetermined annual government payment per enrollee. To meet its budget target, the Congress spelled out specific spending rates of increase per enrollee in the MedicarePlus program. As a result, spending for these enrollees would be predictable and controlled.

This is not now the case in the traditional fee-for-service program, which pays hospitals, physicians, and other providers for the care they furnish. The more care these providers give, the more they are paid. Consequently, even when Medicare controls the price it pays for each unit of service, its spending escalates as the number of services increases. The reductions in fee-for-service payment growth contained in the congressional proposal fall short of meeting the seven-year budget

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Table 1-9. Selected Congressional Budget Office Medicare Spending Estimates, Fiscal Years 1995-2002

| Category | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Total mandatory (in billions) | $\$ 177.4$ | $\$ 196.4$ | $\$ 215.9$ | $\$ 236.4$ | $\$ 258.1$ | $\$ 280.7$ | $\$ 305.3$ | $\$ 331.8$ |
|  |  |  |  |  |  |  |  |  |
| Part A enrollment (in millions) | 37.0 | 37.6 | 38.2 | 38.7 | 39.2 | 39.8 | 40.2 | 40.7 |
|  |  |  |  |  |  |  |  |  |
| Part A benefits (in billions) | $\$ 113.6$ | $\$ 124.8$ | $\$ 136.0$ | $\$ 147.2$ | $\$ 159.0$ | $\$ 171.2$ | $\$ 184.2$ | $\$ 197.7$ |
| $\quad$ Hospitals | 80.2 | 84.5 | 88.8 | 93.9 | 99.5 | 105.2 | 11.0 | 116.7 |
| $\quad$ PPS hospitals | 68.9 | 72.4 | 75.6 | 79.3 | 83.2 | 87.2 | 91.2 | 95.3 |
| $\quad$ Indirect medical education | 4.3 | 4.6 | 5.2 | 5.8 | 6.4 | 7.0 | 7.7 | 8.5 |
| $\quad$ Graduate medical education* | 1.9 | 2.1 | 2.3 | 2.5 | 2.7 | 2.8 | 3.0 | 3.2 |
| $\quad$ Disproportionate share | 3.4 | 3.5 | 3.6 | 3.8 | 3.9 | 4.1 | 4.3 | 4.4 |
| $\quad$ Inpatient capital* | 7.9 | 9.6 | 10.4 | 11.1 | 11.8 | 12.6 | 13.1 | 13.6 |
| $\quad$ Home health | 14.7 | 17.2 | 19.8 | 22.2 | 24.2 | 26.2 | 28.3 | 30.6 |
| Skilled nursing facility | 9.0 | 10.8 | 12.2 | 13.3 | 14.5 | 15.7 | 17.0 | 18.4 |
|  |  |  |  |  |  |  |  |  |
| Part B enrollment (in millions) | 35.7 | 36.3 | 36.8 | 37.2 | 37.7 | 38.1 | 38.5 | 39.0 |
|  |  |  |  |  |  |  |  |  |
| Part B benefits (in billions) | $\$ 63.5$ | $\$ 71.2$ | $\$ 79.6$ | $\$ 88.9$ | $\$ 98.7$ | $\$ 109.1$ | $\$ 120.8$ | $\$ 133.8$ |
| Physicians | 32.2 | 36.0 | 38.8 | 42.1 | 45.2 | 47.9 | 50.8 | 53.8 |
| Hospital outpatient | 10.6 | 12.1 | 13.7 | 15.5 | 17.6 | 19.8 | 22.4 | 25.2 |

Note: Based on December 1995 budget baseline.

* Includes PPS and other hospitals.

SOURCE: Congressional Budget Office.
target by $\$ 11.5$ billion (after offsetting premium increases); that is, if spending rises at CBO's projected rate, outlays would exceed the target by this much. To make certain that spending is not more than the predetermined annual amount for each Medicare enrollee in the fee-for-service program, the Congress would impose a method to enforce the budget limits.

## THE FAILSAFE BUDGET MECHANISM

An important aspect of the bill passed by the Congress is a savings enforcement tool called the "failsafe budget mechanism." For the first time in Medicare's history, total spending per enrollee in both the capitation and fee-for-service programs would be capped each year at a congressionally mandated amount. Medicare would still make payments to providers on behalf of beneficiaries. But total Medicare spending would be the same, even if the number of services provided grew or the rate of inflation changed.

## Medicare Benefit Budget and Budget Allotment

The failsafe mechanism contains a specific annual Medicare benefit budget for fiscal years 1996
through 2002. This budget reflects the spending levels contained in the Congress's proposal. It includes all Medicare benefit payments and would meet the congressional objective of reducing Medicare spending growth by $\$ 227$ billion through 2002.

After 2002, an update formula would be applied to the budget for the preceding year. This would result in 5 percent annual Medicare spending growth per enrollee after 2002, regardless of the rate of inflation or service use. This same annual growth rate per enrollee would apply to beneficiaries in both the fee-for-service and the MedicarePlus programs.

Each year, the Secretary would estimate a Medicare budget allotment for the fee-for-service program by removing from the benefit budget projected payments under the MedicarePlus program. The resulting budget allotment would be used as the basis for the failsafe requirements.

## Sector Allocation

The Medicare fee-for-service budget allotment would be allocated to each of nine sectors (such as inpatient hospital and home health services). For
fiscal year 1996, baseline projected spending for each sector would equal the sector's fiscal year 1995 expenditures inflated by the sector's annual growth rate, as defined in the legislation. In subsequent years, each sector's legislated growth rate would be applied to the prior year's baseline.

Beginning in fiscal year 1998, the Secretary would reduce payments for all services in any sector that exceeded its target. The payment reduction would be proportional to the amount by which the Secretary estimates spending would exceed the sector target. The percentage reductions would be the same for all services within a sector, but would likely differ across sectors. The Secretary also would be responsible for adjusting payments in all sectors to ensure that aggregate spending would be consistent with the overall fee-for-service budget allotment. In addition, there is authority for a "look-back" adjustment to reflect actual fee-for-service and MedicarePlus expenditures when final data become available. If the President submitted a proposal to revise the baseline annual growth rates for fee-for-service sectors, the Congress would have to consider it under an expedited procedure.

## Impact on Fee-for-Service Spending

The bill passed by the Congress would require $\$ 11.5$ billion in failsafe payment reductions between 1998 and 2002, according to CBO estimates. The ability of fee-for-service providers to avoid triggering the failsafe reductions depends critically on the number and intensity of services they furnish. CBO's estimates of projected spending include assumptions about annual increases in the number and intensity of hospital and SNF admissions, physician visits, and other services. Thus, to avoid these additional reductions, providers would have to furnish fewer services than CBO estimated.

Inflation rates that exceed CBO projections also could trigger subsequent payment reductions. The benefit budget is spelled out in specific dollar amounts between 1996 and 2002. After that, the update formula is a fixed percentage plus growth in the number of Medicare enrollees. There is no mechanism to account for changes in inflation. Annual payment updates for fee-for-service providers, however, are generally linked to a mar-
ket basket that measures inflation. Substantial increases in inflation would increase payment updates but could subsequently cause large payment reductions. The failsafe budget mechanism would not sunset, although fee-for-service payment updates generally would return to a market basket increase after 2002. Consequently, failsafe reductions could occur even when inflation or the number of services rose slightly.

Fee-for-service providers would be at further risk if healthier Medicare beneficiaries enrolled in MedicarePlus, while sicker beneficiaries remained in the fee-for-service program. The methods Medicare uses to adjust capitation payments explain very little of the variation in expected enrollee spending. The expansion of capitation plan options (especially medical savings accounts) may encourage beneficiaries who expect to use less than the average amount of services to enroll. The failsafe mechanism does not provide for adjustments to growth rates if healthier enrollees select MedicarePlus, leaving costlier ones in the fee-for-service program.

## CHANGES IN THE HEALTH CARE ENVIRONMENT

The proposed reform of the Medicare program comes at a time when private sector financing and delivery of medical care are undergoing substantial change. Employers and other buyers of insurance are demanding lower premiums. In response, third-party payers are moving from fee-for-service policies to capitation and other managed care methods to control their costs, while providers are grappling with stepped-up competition for patients. Competition has altered the way providers do business, with the price of services assuming increased importance.

The restructuring of the nation's health care delivery system already has had an impact. National health care expenditures rose about 6 percent in 1994, among the lowest rates in the past three decades. In addition, surveys of employer health care costs show premium increases at historic lows.

The recent reports of private sector success in checking medical care expenditure growth have not been overlooked by those in the Congress who are intent on shifting governmental activities to the private sector. During the debate on the congressional
proposal, many members indicated they thought that the private sector could manage Medicare beneficiaries' care more efficiently than the Federal government could. If this were so, they reasoned, Medicare spending growth could be moderated without adversely affecting the care beneficiaries receive.

Analysts differ, however, in their assessment of the relative success of the government and private payers in restraining the rise in spending. CBO estimates that in 1995, national health care expenditures grew by 6.8 percent. Private sector spending went up 5.5 percent, while Federal outlays rose 9.1 percent. But interpreting such findings is complicated by the lack of good information on the number and health status of enrollees, where they live, and the benefits and services they receive. Further, expenditure levels in prior years must be considered.

When real spending (removing the effects of inflation) per Medicare enrollee is compared with private health insurance spending per insured person, the findings are mixed (see Table 1-10). Between 1979 and 1983, the private sector appears to have outperformed Medicare. From 1983 to 1991, though, the pattern reversed as the Medicare program implemented policies to curb the rise in expenditures. Since 1991, Medicare spending per enrollee again has surged, while private insurance spending per insured person has risen more slowly. The private sector's improved performance likely is related to the rapid move to capitation in recent years. The Medicare

Table 1-10. Real Change in Medicare Spending Per Enrollee and Private Health Insurance Spending Per Insured Person, 1979-1993 (In Percent)

|  | $1979-$ | $1983-$ | $1987-$ | $1991-$ |
| :--- | :--- | :--- | :--- | :--- |
| Spending Category | 1983 | 1987 | 1991 | 1993 |
|  |  |  |  |  |
| Personal health care |  |  |  |  |
| $\quad$ Private insurance | $6.3 \%$ | $6.9 \%$ | $5.2 \%$ | $4.7 \%$ |
| Medicare | 7.6 | 2.9 | 3.8 | 6.5 |
| $\quad$ |  |  |  |  |
| Hospital care |  |  |  |  |
| $\quad$ Private insurance | 4.8 | 2.5 | 3.8 | 4.4 |
| $\quad$ Medicare | 7.0 | 1.1 | 2.3 | 5.9 |
| $\quad$Physicians' services     <br> $\quad$ Private insurance 7.0 10.8 5.8 5.1 <br> Medicare 8.8 7.4 2.7 0.3 |  |  |  |  |

SOURCE: ProPAC analysis of data from the Health Care Financing
Administration, Office of the Actuary.
program, by contrast, continues to rely predominantly on traditional fee-for-service methods.

While the Medicare program has successfully kept the payment per unit of service furnished in check, it has not been able to control increases in service volume and intensity. The private sector has relied more heavily on capitation, which allows plans to control costs by actively negotiating the price they will pay providers and by managing the services their enrollees receive. There is disagreement on how long the recent private sector costcontrol trends can be maintained. CBO projects that private spending growth will again begin to rise, reaching 6.9 percent annually by 2000 . This increase is still substantially lower than CBO's forecast of growth in Federal government spending under current law.

The moderation in expenditure growth for public programs, together with restraints in private health care spending, will require providers to continue to change their traditional ways of doing business. Hospitals and other providers are positioning themselves to compete in a health care system where total resources will grow much less rapidly than they have for many decades. Consequently, providers strongly support the provisions in the congressional proposal allowing them to develop provider-sponsored networks to compete with health plans.

## THE UNINSURED POPULATION

The Congress's plan for modifications in the Medicare and Medicaid entitlements coincides with a decline in the proportion of people receiving health insurance through the workplace. Currently, about 15 percent of the population, almost 40 million people, lack health insurance coverage.

The Medicaid program provides an important safety net for those who would otherwise be uninsured. CBO projects that the number of Medicaid recipients will increase from 35.4 million in 1995 to 43.6 million in 2002 under current law. Medicaid spending reductions and other policy changes in the Congress's proposal could slow this growth substantially, and perhaps actually reduce the number of people eligible for Medicaid. Hence, the pro-posal-together with a declining share of the population covered by private insurance-could leave millions more uninsured.

Many of the uninsured receive hospital and other medical services. Traditionally, third-party payers have subsidized much of the cost of this uncompensated care. Under the price-competitive health care system that the Congress and private payers are encouraging, however, providers may be unwilling or unable to continue to subsidize such care. In addition, the Congress has proposed reducing the funds the Medicare program has provided to hospitals that care for a disproportionate share of low-income patients. In view of these developments, the problems related to the rising number of uninsured will probably be exacerbated. At some point, they are likely to require further action by the Congress.

## CONCLUSIONS AND RECOMMENDATIONS

The Congress and the President continue to attempt to resolve differences in their approaches to curbing the rise in Medicare and Medicaid expenditures, strengthening the HI Trust Fund, and balancing the Federal budget. This chapter concludes with the Commission's recommendations on Medicare spending and the failsafe mechanism in the Congress's proposal.

## Recommendation 1: Slowing the Rise in Medicare Spending

> The Commission supports the efforts of the Congress and the President to reduce the growth in Medicare expenditures. Over time, spending for services furnished to Medicare enrollees should increase at rates comparable to those in a cost- and qualityconscious private sector.

The continuing escalation in Medicare costs is a threat to the solvency of the HI Trust Fund, a major contributor to the Federal deficit, and a financial burden for many enrollees. In ProPAC's view, the growth in spending for medical care in a private sector with market forces that encourage cost containment is an appropriate benchmark for the Medicare program. Judgments regarding appropriate spending levels and rates of increase should be based on several years' experience to account for short-term factors that may create a misleading picture of the trends. In addition, spending growth should be compared on a per person basis and
should recognize the health care needs of an aging and disabled Medicare population.

There are major deficiencies, however, in the data currently used to compare and forecast Medicare and private sector spending growth. The Commission plans to examine available data and alternative methods that could be used to assess trends in Medicare and private health care expenditures and will share these with the Congress.

## Recommendation 2: The Failsafe Budget Mechanism

Any failsafe budget mechanism should include a more effective risk adjustment factor to ensure payment equity between the Medicare capitation and traditional fee-for-service programs. In addition, changes in inflation that differ substantially from CBO forecasts could require modifications to the Medicare benefit budget over time. Revisions to the proposed fee-for-service sector budget allocations could also be needed as medical practices change.

The failsafe mechanism in the Congress's proposal would allocate a fixed benefit budget for Medicare's capitation and fee-for-service programs. However, the risk adjustment methods currently used in Medicare's risk contracting program are limited. (See Chapter 2, Recommendation 5.) The lack of a robust risk adjustment method may result in higher-than-intended capitation payments. Further, there is no mechanism to adjust the fee-for-service budget to account for increases in average patient complexity and severity of illness that are likely to result if healthier enrollees select Medicare's capitation program. Consequently, per enrollee capitation payments could be too high and fee-for-service payments too low.

The failsafe mechanism lacks a provision to adjust the benefit budget if general inflation differs notably from CBO's forecast. Future increases in per enrollee spending in both programs may require modifications to reflect changes in inflation. In addition, future allocations of spending across the fee-for-service sectors will be based on spending projections that do not reflect the impact of the proposed legislation. The failsafe mechanism thus could lead to payment inequities among

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provider groups as patterns of care continue to change. Adjustments in sector budget allocations
may be necessary over time to maintain access to quality care for Medicare beneficiaries.

## Notes to Chapter 1

1. This figure reflects Medicare program payments, which include payments from Medicare for covered services, but not administrative costs or beneficiary cost-sharing amounts.
2. This figure includes beneficiary deductibles, copayments, and balance billing amounts, but not Part B premiums. See Prospective Payment Assessment Commission, Medicare and the American Health Care System, Report to Congress, June 1995, 67.
3. Congressional Budget Office estimates of baseline spending and projected savings, December 1995. CBO makes a distinction between mandatory outlays for benefit payments and discretionary outlays for administrative costs. The estimates cited here include mandatory but not discretionary outlays. They do not reflect offsetting premium receipts. Net Medicare outlays, which include mandatory plus discretionary outlays less premium receipts, are projected to increase from $\$ 160$ billion in 1995 to $\$ 308$ billion in 2002.
4. The Medicare provisions are in H.R. 2491, the "Balanced Budget Act of 1995," passed by the Congress on November 20, 1995. This legislation also is referred to as "the conference agreement." The specific provisions referred to are included in Title 8, entitled "The Medicare Preservation Act of 1995."
5. The Medicare provisions of the President's proposal are included in Title 11 of draft legislation, entitled the "Balanced Budget Act of 1995 for Economic Growth and Fairness." This proposal was released by the President on December 7, 1995. It has not been introduced in the Congress.
6. National health expenditures include all spending in the health care sector. Personal health care expenditures exclude research and construction, administration of public programs and net cost of private health insurance, and government public health activities.
7. Medicare Hospital Insurance, called Part A, finances inpatient hospital care, as well as skilled nursing facility, home health, and hospice care. Supplementary Medical Insurance, or Part B, pays for physician services; outpatient services furnished by hospitals, dialysis facilities, and other ambulatory providers; and durable medical equipment and supplies.
8. Health Care Financing Administration, Medicare and Medicaid Statistical Supplement, 1995 (Washington, DC: U.S. Government Printing Office) 176.
9. Ibid., 182.
10. Ibid., 176.
11. Board of Trustees of the Federal Hospital Insurance Trust Fund, 1995 Annual Report (Washington, DC).
12. The savings estimates in all the proposals include those resulting from reductions in the growth of Medicare mandatory outlays and, where applicable, premium increases.
13. The Medicare and Medicaid provisions of the proposal are in H.R. 2530, introduced on October 25,1995 . This proposal also is referred to as the "coalition budget" proposal.

## Chapter 2

## Medicare's Capitation Program

Adoption of capitation payment methods by employers and some state Medicaid programs is widely credited with reducing the growth in their health care spending. Under capitation, the payer makes a predetermined payment per enrollee to a health plan that agrees to cover a defined set of services over a specified period, regardless of the number, type, or cost of services enrollees actually use. This contrasts with the fee-for-service payment method, under which payment is made for each service rendered. Capitation allows the payer to budget for health care spending over a year and eliminates its risk of spending any more than is budgeted. Additionally, capitation gives plans a financial incentive to reduce health care costs.

Medicare's largest capitation program, called the risk contracting program, has some of the costcontainment characteristics of capitation. Yet various aspects of the program design prevent Medicare from fully realizing the benefits of this payment method. Both the Congress and the President have proposed expanding and modifying Medicare's use of capitation. The legislation recently passed by the Congress (H.R. 2491) would broaden the range of private plans that could participate and modify the calculation of capitation amounts to curb the growth in Medicare's spending. The President's proposal would alter and increase the size of the risk program, but would not fundamentally change the way capitation rates are determined.

Refinements to the risk contracting program could contribute to Medicare's cost-control efforts while expanding the health plan choices available to its beneficiaries. To accomplish this, improved risk adjustment methods should be implemented and technical changes made to the calculation of the capitation rates. Further, Medicare needs to act as beneficiaries' agent in providing health plan information and monitoring plan performance. This is critically important because of the financial incentive plans have to limit health care costs.

This chapter first reviews policy issues relating to the existing Medicare risk program. Next, it provides an overview of the Congress's and the President's proposals to change the program. It concludes with the Prospective Payment Assessment Commission's (ProPAC's) recommendations to the Congress about setting the capitation rates, adjusting for risk, offering different types of plans, disseminating information to beneficiaries, and holding plans accountable for the services they provide.

## THE MEDICARE RISK PROGRAM

In 1985 Medicare implemented its risk contracting program, under which health maintenance organizations (HMOs) receive a full capitation payment. The risk program was intended to allow Medicare to enjoy some of the advantages of capitation arrangements with health plans, among them predictable spending and savings. Enrollees also gain because many plans cover additional benefits and have low cost-sharing requirements.

Medicare has not taken full advantage of capitation's potential for savings, however. The program's capitation rates appear to be too high in some markets and too low in others, discouraging plan participation. Further, it appears that healthier beneficiaries are likelier than others to enroll, and the payment rates do not adequately reflect this lower risk of illness. Thus, Medicare may pay more for beneficiaries in its risk program than it would have had they stayed in the fee-for-service program.

## Capitation Rates

The level of Medicare's capitation rates is tied closely to the program's traditional fee-for-service spending experience in each county. The annual growth in these rates mirrors this experience as well. Because HMOs are expected to furnish services through their provider networks more economically than Medicare does under its fee-for-service program, Medicare pays 95 percent of the estimated
amount it would have spent under the traditional program. Medicare retains the other 5 percent as savings. If plan payments are higher than projected plan costs (which include allowed profits), these savings are returned to enrollees in the form of additional benefits. These include, for instance, paying for services Medicare does not cover or reducing cost sharing for Medicare-covered services.

Level, Growth, and Variation-Obtaining the full potential savings from capitation requires continuous interaction between payers and plans. Those that purchase coverage can realize onetime savings by moving from higher premium fee-for-service plans to lower premium plans that accept capitation. They may enjoy ongoing savings if they can use their purchasing power to negotiate favorable premium rates. Some purchasers (other than Medicare) negotiate formally with plans; others have more informal processes for holding down annual premium increases. Some purchasers limit their premium contribution so that enrollees (who pay the difference between the premium and the employer's contribution) are more likely to choose lower priced plans.

Current law does not allow Medicare to use any of these approaches to limit the growth in capitation rates. This is true despite evidence that many plans in the risk program furnish all Medicarecovered services at costs significantly below their capitation rate. In 1994, the average Medicare capitation payment was $\$ 26$ a month higher than plans' expected average costs of providing Medicare services to beneficiaries. In certain markets with the highest rates, this difference was even greatermore than $\$ 110$ per enrollee per month. ${ }^{1}$ However, in those areas without Medicare risk contracts (and there are many) rates may be too low to induce plans to participate.

Because Medicare's capitation rates are tied to fee-for-service spending experience, the program does not use information about plans' costs to set its rates in a market. Even though Medicare receives this information, it cannot negotiate lower rates in areas where the rates are higher than plan costs. At the same time, in areas where no plans participate in the Medicare program, it cannot raise capitation rates even if they are too low to cover plans' anticipated costs.

The linking of capitation rates to fee-for-service spending at the county level leads to substantial variability in the rates across areas. Further, there have been significant changes in some of these rates from year to year. This has been a particular problem in rural counties, since spending fluctuations are driven by the experience of relatively few beneficiaries. The instability of Medicare's rates over time may have dissuaded plans from participating in the risk program in certain counties, even when they serve other purchasers there.

Risk Adjustment-Voluntary choice among health plans raises the likelihood of risk selection. Plans may have a mix of enrollees whose relative risk of incurring medical expenses does not represent the group of people covered by a particular purchaser. Plans that attract beneficiaries with lower-than-average risk are less likely to experience financial losses. This can occur either through enrollee or plan action, or both. For example, some plans will pay only for services furnished by limited networks of providers. Enrollees who are healthier, and thus lack longstanding relationships with providers, may be more willing to join plans that limit provider choice, resulting in favorable selection to these plans.

If, because of risk selection, the capitation rate is too high relative to the services used by its members, the plan profits at the purchaser's expense. If it is too low, the plan loses financially. For these reasons, there has been considerable interest in developing a risk adjustment method that would allow the capitation payments to reflect more accurately differences in the likely need to use services among individuals.

The variation in patterns of health care use and spending among individuals is explained by both systematic and random risk. Systematic risk reflects expenditure variation associated with measured characteristics, such as age, sex, or chronic conditions, that are predictably related to use. Random risk is variation not associated with measured characteristics. The distinction between systematic and random risk is important, because risk adjustment methods account only for sources of systematic variation. Research suggests that about one-fifth of the variation in annual health spending is systematic, while the rest is random. ${ }^{2}$ If this is correct, then even the best risk adjustment method would not
explain about 80 percent of the variability in health expenditures across individuals.

Available risk adjustment methods have been unable to account for much of the systematic variation. When used to predict individual annual expenditures, basic demographic adjustments (such as those used for Medicare capitation rates) explain little of the overall variation in resource use across individuals. Self-reported health status measures do slightly better. Methods that use prior claims information are among the best predictors of use, but they still account only for about one-eighth of individual variation in annual health care spending. ${ }^{3}$

Evidence indicates that Medicare risk plans have enjoyed favorable selection not accounted for by the program's risk adjustment method. ${ }^{4}$ The risk adjustment method Medicare uses pays plans different amounts according to their enrollees' demographic and other characteristics (see Table 2-1). For example, the capitation rate for hospital and other facility services for an 85 -year-old female eligible for both Medicare and Medicaid is twice the average capitation rate. This risk adjustment method does not account for differences in the likely need for services among beneficiaries with the same demographic characteristics.

Medicare's month-to-month disenrollment policy, intended to attract beneficiaries who otherwise would be unwilling to try a capitation arrangement,
may contribute to favorable risk selection for plans. Recent evidence indicates that those who disenroll from risk plans use a disproportionate number of certain types of services after they return to the fee-for-service program. ${ }^{5}$ This may be due to beneficiaries disenrolling from their plans to use providers or services available through fee-for-service Medicare.

Medicare may be benefiting from the rising proportion of beneficiaries in risk plans in some markets. This is because, as the risk program's share of enrollment grows, the mix of beneficiaries is more likely to reflect the general Medicare population, making risk plans less likely to experience favorable selection than they had in the past. Moreover, increases in the proportion of people enrolled in HMOs appear to influence medical practice patterns. Providers may adopt cost-conscious ways of delivering care that are encouraged by capitation even for their patients who are in fee-for-service plans. ${ }^{6}$

## Enrollment and Plan Participation

The early years of the Medicare risk program were marked by declining plan participation and gradual growth in beneficiary enrollment (see Table 2-2). However, the number of risk contracts and program enrollment both rose in 1993, 1994, and 1995. More plans have joined the risk program as capitation has become more widespread in the employer insurance market. Increasingly, plans are competing for members and looking to Medicare as

Table 2-1. Selected Demographic Group Risk Adjustment Factors to the Medicare Capitated Risk Payment, 1995

|  | Female |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Age Group | Non-Medicaid <br> Non-Working | Working Aged | Medicaid | Institutionalized |
| Part A |  |  |  |  |
| $65-69$ | 0.55 | 0.30 | 0.85 |  |
| $70-74$ | 0.70 | 0.40 | 1.10 | 1.50 |
| $75-79$ | 0.85 | 0.50 | 1.40 | 1.80 |
| $80-84$ | 1.05 | 0.70 | 1.65 | 2.05 |
| $85+$ | 1.15 | 0.75 | 2.00 | 2.05 |
|  |  |  |  | 2.05 |
| Part B | 0.70 | 0.35 | 1.05 |  |
| $65-69$ | 0.85 | 0.50 | 1.15 | 1.50 |
| $70-74$ | 0.95 | 0.70 | 1.25 | 1.65 |
| $75-79$ | 0.95 | 0.75 | 1.25 | 1.65 |
| $80-84$ | 1.00 | 0.80 | 1.25 | 1.65 |
| $85+$ |  |  |  | 1.65 |

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

Table 2-2. Medicare Risk Program Participation, 1990-1996

|  | Enrollees |  |  |
| :--- | :---: | :---: | :---: |
|  | Number <br> Year | As a Percentage <br> of Total Medicare <br> 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 | - | - | 189 |

Note: Enroliment data are as of September each year; contract data are as of January each year.
SOURCE: Health Care Financing Administration, Office of the Actuary and Office of Managed Care.
a potential source. Further, some plans are entering markets that formerly had no Medicare risk options, thereby expanding beneficiaries' choices. Entrants to competitive Medicare markets are stimulating existing plans' marketing activities, which may attract additional enrollees.

Medicare is taking steps to expand the risk program even further. One is to distribute information about risk plans to beneficiaries. Except in some regions, Medicare has left information dissemination largely to plans, making it difficult for beneficiaries to compare their choices. The Health Care Financing Administration (HCFA), which administers the risk program, is planning a new initiative to produce comparative information on premiums and benefits offered by participating risk plans in 1996. In addition, Medicare's exclusive reliance on HMOs with a limited provider network may be preventing it from realizing the program's full potential. In 1995, HCFA developed guidelines for out-of-network provider options for Medicare contracting HMOs. The agency is also conducting a demonstration program to determine whether beneficiaries are interested in joining other types of plans.

## Plan Accountability

In return for its payments, a plan provides a defined set of services to its members. This obligation is particularly important under capitation arrangements. Under fee-for-service payment methods, plans and providers usually profit when the payment and volume of services increase.

Capitation, by contrast, creates incentives to limit the number and the cost of health care services. Plans that keep costs below their capitation payments retain the balance-and thus gain from lowering costs. But such an incentive creates concerns about how costs are constrained. Ideally, plans and providers will reduce services of marginal value by developing more effective and efficient modes of care. On the other hand, they could lower costs by failing to provide needed services.

Although Medicare has the authority to hold risk plans to their contractual obligations, it collects limited information on the care plans provide. ${ }^{7}$ Most of the data relate to plans' ability to meet an array of contractual requirements and comply with policies and procedures. HCFA has been trying to update its evaluations of plans by participating in several private sector initiatives to develop plan performance measures. These include both the Foundation for Accountability and the National Committee for Quality Assurance's exploration of cost, quality, and access measures appropriate for Medicare risk enrollees.

## PROPOSED CHANGES TO MEDICARE CAPITATION ARRANGEMENTS

The Congress and the Administration have developed proposals to reform the existing risk program. Both would change the payment rate setting method to generate more savings from the risk program and increase the range of plans available to beneficiaries. The Congress's proposed changes would greatly expand the types of plans that could accept Medicare capitation payments and would break the link between the capitation rates and fee-for-service spending.

## The Congressional Proposal: MedicarePlus

The Congress has proposed replacing the risk program with an expanded capitation program, called MedicarePlus. This program would permit Medicare beneficiaries to select from a wider choice of health plans. Under MedicarePlus, the method for setting the capitation rate would be changed to reduce rates in areas where Medicare fee-for-service spending has been high and to increase rates where it has been low. Growth in the rates would no longer be tied to increases in spending under traditional fee-for-service Medicare.

Changes to the payment method are designed to allow MedicarePlus to produce savings for Medicare. Whether or not the savings materialize, however, total program spending (for both MedicarePlus and the traditional fee-for-service program) would be limited by the combination of the legislated rates and a budgeting tool called the "failsafe mechanism." (See Chapter 1.) This mechanism would automatically impose additional payment reductions on providers in traditional Medicare if spending exceeded preset expenditure targets.

Plan Choices-MedicarePlus would allow a broad array of managed care plans, including preferred provider organizations (PPOs), to participate. Fee-for-service plans also would be permitted. New options not widely available in the private market, such as medical savings accounts (MSAs) and provider-sponsored networks, also could be offered to beneficiaries. All MedicarePlus plans would receive a capitation payment from Medicare.

This menu of plans would give Medicare beneficiaries more choices. Conceivably, they could choose any type of plan that met Medicare standards and that was open for enrollment in their area. Plans would be granted flexibility in product design and benefits, beyond Medicare-covered services. States would have a prominent role in monitoring product offerings under MedicarePlus.

Fee-for-Service Option-The Congress's proposal defines MedicarePlus fee-for-service plans as insurers that "reimburse hospitals, physicians, and other providers on the basis of a privately determined fee schedule or other basis." ${ }^{8}$ These plans would be required to pay non-contracting providers at least as much as the providers were paid in the traditional fee-for-service Medicare program. If these providers' fees were higher than the plan's payments, they would be permitted to bill Medicare beneficiaries for the difference.

Medical Savings Accounts-One choice in the congressional proposal would combine a high deductible insurance policy with a medical savings account. The MSA is a designated account to which Medicare would make an annual contribution and from which the beneficiary could draw for medical expenses. A beneficiary selecting this option would purchase a high deductible health insurance plan and receive the rest of his or her

Medicare capitation (less the price of the plan's premium) in the form of a cash contribution to the MSA. High deductible plans would be required to cover all Medicare-approved expenses after the enrollee met a deductible of up to $\$ 6,000 .{ }^{9}$ Beneficiaries could use MSA funds for any qualified medical expenses. They could also withdraw money from the account for non-medical spending (albeit with a tax penalty). Medicare beneficiaries in high deductible plans would not be permitted to buy insurance (other than long-term care insurance) to cover the cost of deductible expenses or additional services they might need.

MSAs are intended to make consumers bear more of the consequences of their choices to use health care services, while still offering catastrophic protection from the risk of a major expense. Supporters of MSAs believe they can lower the use of health services. They argue that if consumers had to pay the full price of medical care up to the deductible, they would make better decisions about the use of health care than they do when insurance masks the cost. A decline in the demand for medical services would drive down overall health expenditures directly by reducing utilization. Further, providers might respond to their patients' price sensitivity by constraining their prices. Since Medicare would make a fixed payment, however, any savings resulting from using fewer services-at least in the short run-would go to the beneficiary and the high deductible plan, rather than to the program.

Beneficiaries electing this option would be strongly motivated to control their medical service use if they thought of the balance in their account as savings. If they took this view, spending from the account would seem the same as other spending. On the other hand, they might regard MSA funds as an account for health services. ${ }^{10}$ This would tend to reduce beneficiaries' restraint in purchasing health services. ${ }^{11}$ In any case, the lack of experience with this option makes it hard to predict how Medicare beneficiaries with MSAs would behave.

Most beneficiaries who selected the Medicare MSA option probably would benefit financially. Beneficiaries who did not anticipate using health services would be attracted to this option, because they would expect to keep unspent MSA funds.

Without adequate risk adjustment to the capitation rate, healthy beneficiaries choosing the MSA option could receive more funds from Medicare than the program would have spent had they remained in the traditional fee-for-service program. If this happened, Medicare expenditures would rise, increasing the likelihood that the failsafe mechanism would be triggered. Favorable selection into the MedicarePlus MSA option could thus result in reduced payments to traditional fee-forservice Medicare providers. Favorable selection may be exacerbated by beneficiaries' ability to opt out of this option every year. Because they can anticipate at least some of their medical expenses and can delay some treatments, beneficiaries could change to more comprehensive coverage when they needed it.

Not all beneficiaries selecting the high deductible/MSA option would be able to profit from their choice. They would risk significant out-of-pocket costs in the event of high spending. The financial risks would be especially great for enrollees in high deductible plans designed as fee-for-service arrangements, because providers' charges would not be limited to the amounts established by the traditional Medicare fee-for-service program. Thus, there would be only partial stoploss protection for the beneficiary in these types of plans.

Providers might find they would incur more bad debt from treating patients with medical savings accounts, since they would need to collect payments directly from their patients. This would be particularly likely if beneficiaries depleted their MSA funds before reaching their deductible. In this situation, beneficiaries would be required to use their own money to pay for care.

Benefits-Under the MedicarePlus program, participating plans would provide, at a minimum, services covered under traditional Medicare. These services could be furnished through a managed care provider network, and plans could employ utilization management to determine medical necessity and appropriateness.

Plans would still be allowed to return the difference between their expected payments and costs to beneficiaries in the form of additional benefits. The Congress's proposal also would allow plans to
rebate this difference to beneficiaries in cash. As in the current risk program, these additional benefits could induce beneficiaries to enroll in MedicarePlus plans. Plans thus would be able to compete with one another based on benefit package and provider network, as well as on price and beneficiaries' perception of plan quality.

As they do now, plans could charge beneficiaries premiums for supplemental benefits and for the actuarial value of whatever cost sharing beneficiaries would have incurred under the fee-for-service program. MedicarePlus plans would also be permitted to charge beneficiaries for the costs of covered Medicare services when the plans' estimated costs for these exceeded their MedicarePlus capitation payments. ${ }^{12}$

Payments to MedicarePlus Plans-The payment system under MedicarePlus is designed to allow savings to accrue to the Medicare program because the per person payment rates would be updated by legislated rates of increase (see Figure $2-1$ ). These rates are below those currently projected for the Medicare program. As long as MedicarePlus enrollees were as likely to use services as other beneficiaries (or the risk adjustment method fully reflected differences in risk), the MedicarePlus program would reduce Medicare expenditures (see Table 2-3). Under these circumstances, savings from this component of Medicare would be driven by the number of beneficiaries

Figure 2-1. MedicarePlus National Average Growth Percentages, 1996-2002


Note: For all subsequent years the update is 5.0 percent.
SOURCE: H.R. 2491.

Table 2-3. Estimated MedicarePlus Enrollment, Savings, and Costs, 1996-2002

| Year | MedicarePlus Enrollment (In Millions) | Percentage of Total Medicare Enrollment | Savings From Non-MSA Plans ${ }^{\text {a }}$ (In Billions) | High Deductible/ MSA Costs ${ }^{\text {b }}$ (In Billions) | Total Savings (In Billions) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 | 3.0 | 8.0\% | \$ -0.1 | \$0.0 | \$ -0.1 |
| 1997 | 3.8 | 10.0 | -1.0 | 0.5 | -0.5 |
| 1998 | 6.8 | 17.5 | -1.8 | 0.6 | -1.2 |
| 1999 | 7.7 | 19.5 | -3.3 | 0.7 | -2.6 |
| 2000 | 8.5 | 21.3 | -5.8 | 0.8 | -5.0 |
| 2001 | 9.3 | 23.2 | -8.2 | 0.9 | -7.3 |
| 2002 | 10.3 | 25.3 | -11.3 | 1.1 | -10.2 |
| 1996-2002 | - | - | -31.4 | 4.6 | -26.9 |

Note: The Congressional Budget Office constructed the capitation rates used in these estimates with Part A enrollment only. All capitation rates are expressed in calendar years. Numbers may not sum to total due to rounding. MSA = medical savings account.
${ }^{a}$ Reflects savings from beneficiaries enrolled in non-MSA arrangements, including risk contractors.
${ }^{b}$ The capitation rates and costs for new enrollees in high deductible/MSA plans reflect assumptions that these enrollees would be relatively young and would receive lower age-adjusted payments.
SOURCE: Congressional Budget Office.
who joined MedicarePlus plans. But if MedicarePlus experienced favorable selection (and risk adjustment did not correct for this), actual savings would be smaller than anticipated. Estimated savings from the MedicarePlus program would be somewhat reduced by anticipated costs due to enrollees in MedicarePlus high deductible/MSA arrangements. Regardless of the MedicarePlus enrollment or risk selection experience, however, overall Medicare spending targets would be achieved because of the failsafe budget mechanism.

Capitation rates under MedicarePlus would vary less across geographic areas than do rates in the current risk program. County rates would be blended with national ones, going up or down depending on the area's payment experience. Payment rate floors would further raise payments in areas where costs were especially low. Both the legislated updates and the blending would, in effect, uncouple the capitation amount from spending in traditional Medicare.

The MedicarePlus base payment rate would be the 1995 payment rates for risk plans in the existing program. Thus, the base rates would incorporate the geographic variation in service use patterns and health care prices as reflected in the 1995 rates. Each year, the Secretary of Health and Human Services would update these county-specific base rates using the legislated update factor for that year. Then, the Secretary would calculate the national
rate, which would be the average of all updated county rates weighted by the proportion of Medicare beneficiaries in each county.

The capitation rate for each county would be a blend of its own and the national rate. In 1996, 90 percent of payment would be the county rate. The national rate, adjusted for input price levels in that county, would account for the other 10 percent. Beginning in 1998, the blend proportion would be changed by 5 percentage points each year until the national rate made up 30 percent of the total. Finally, each county's blended rate would be compared with two payment rate floors. In 1996, each county's payment rate would be the highest of its blended rate, $\$ 300$, or 102 percent of the previous year's rate.

Blending the county with the national rate would reduce payments in areas with higher fee-forservice utilization and payments and boost payment rates in areas where use of services is lower. Plans could pass these gains to beneficiaries by providing additional benefits or cash rebates, or could retain them internally. Such flexibility could translate into increased plan participation and higher enrollment in areas where service use is lower. This payment method also would have the advantage of limiting the volatility of the rates, because the local and national components of the blend would be updated by a fixed national rate of increase specified in the law. Increases in payment rates in some areas,

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however, would result in higher outlays under the MedicarePlus program than would be the case under the current payment system.

Risk Adjustment—The congressional proposal does not require the Secretary to modify Medicare's existing risk adjustment methodology, although the Secretary would have the authority to do so. Medicare's inadequate risk adjustment method would fail to account for risk selection differences among MedicarePlus plans. Nor would it fully reflect variation in use between those who enrolled in MedicarePlus and those who did not.

The limitations of the current risk adjustment method also have implications for spending in the traditional fee-for-service program. Suppose that a disproportionate number of healthier beneficiares joined MedicarePlus, leaving the sicker and frailer in traditional Medicare. Then, fee-for-service spending per beneficiary would be higher, increasing any payment reductions in traditional Medicare required by the failsafe mechanism.

Enrollment and Disenrollment-MedicarePlus would discontinue month-to-month enrollment and disenrollment after a transition period. For each county, this period would start when the first plan was available for enrollment and end in October 1997. After this date, beneficiaries choosing to enroll in MedicarePlus would be locked into their plan for a year. They would still be able to drop out of a plan within 90 days of initial enrollment, or if they moved out of the plan's service area, or if the plan were found guilty of misconduct. Annual enrollment periods with a one-year lock-in provision could reduce favorable risk selection in MedicarePlus plans, increasing total savings and lowering the likelihood of payment reductions under the failsafe mechanism.

Beneficiaries generally would select MedicarePlus plans during annual open enrollment periods. The Congress's proposal would require the Secretary to conduct a coordinated information dissemination campaign before each open enrollment period. This could spur enrollment as beneficiaries learned about the MedicarePlus choices. On the other hand, eliminating the monthly disenrollment option might discourage reluctant beneficiaries from trying a MedicarePlus plan.

Accountability-The congressional proposal would strengthen current reporting standards and improve plan accountability by adding data reporting requirements similar to those that private purchasers impose. Beneficiaries would receive better information to compare MedicarePlus plans with each other and with the traditional program. Plans would report more specific information on factors that affect quality. An electronic data set would be established to provide uniform information on all participating plans. Many of the proposed requirements already exist in regulation. The proposal would strengthen these standards by putting them in statutory language, and would require more specific information to improve health plan accountability.

## The Administration's Proposal

The President also has proposed expanding the risk program, but the changes would be less comprehensive than those the Congress has envisioned under MedicarePlus. ${ }^{13}$ Beneficiaries would be able to enroll in qualified PPOs and provider-sponsored organizations as well as HMOs. Most enrollees would be able to join one of these plans only during annual open enrollment periods. Private fee-forservice plans and high deductible plans combined with MSAs would not be among the available options. As an alternative to the full capitation payment, the Secretary would have the authority to pay plans using a partial capitation approach.

As in the existing risk program, participating plans would be required to cover, at a minimum, Medicare-covered services. Plans would have to demonstrate that the benefits they were providing, together with the premiums charged to enrollees, were at least actuarially equivalent to the benefits in the traditional Medicare program. Additional benefits offered by plans would have to conform to one of the standardized benefit packages the Secretary would design. Standardization would help beneficiaries evaluate price and benefit differences among plans.

The Administration's proposal addresses some shortcomings of the capitation rates in the current Medicare risk program. The proposal would limit variation in Part B payment rates (which cover physician services, medical supplies, and other outpatient treatment) across counties by raising those
that are low and capping those that have been inflated by high service use rates in the fee-for-service program. The annual growth in the rates, however, would continue to be linked to that in the fee-for-service program.

Other modifications would make the capitation rates more reflective of actual plan costs. Because fee-for-service claims are used to calculate Medicare's capitation rates, the rates include hospital payments for graduate medical education and for treating a disproportionate share of low-income patients. Plans that receive capitation payments may not incur such costs. The proposal would reduce capitation amounts to reflect these hospital payments, and Medicare would retain 25 percent of the amount saved. The rest would be distributed to both Medicare risk plans that contracted with academic medical centers and the academic medical centers themselves. This change in methodology would reduce the variation in the rates, since areas where beneficiaries in fee-for-service Medicare use teaching and disproportionate share hospitals generally have higher capitation rates.

A partial capitation approach would also be introduced. Plans would be paid using fee-forservice methods, but the amounts would be lowered 5 percent on each claim. At the end of the year, plans' per person payments would be compared with the capitation rate. Plans that had kept their spending below the targets would be rewarded with additional payments; those that had exceeded the targets would be required to return some of the excess to Medicare.

In the Administration's proposal, beneficiaries could enroll in plans under three circumstances only: during an annual open enrollment period, when they first became eligible for Medicare coverage, or when their plan opted out of Medicare. Beneficiaries could continue to disenroll from plans on a monthly basis. The Secretary would be directed to distribute comparative plan information to beneficiaries.

## CONCLUSIONS AND RECOMMENDATIONS

Both the Congress and the Administration have proposed changes to Medicare's capitation program to address some of its shortcomings. The Congress
would go further in expanding beneficiary choices and modifying the payment method. In addition, it would create a link between the capitation program savings and payment rates in Medicare's traditional fee-for-service program through the failsafe budget mechanism. This chapter concludes with ProPAC's recommendations for improving Medicare's risk program as well as the Congress's and the Administration's proposals to change it.

## Recommendation 3: Expanding Medicare's Capitation Program

> The Commission supports reforming the Medicare capitation program to control spending while expanding beneficiary choice.

The Congress and the President have proposed ways to expand the role of capitation under Medicare. Capitation contains incentives for plans to control the cost and volume of the services they furnish. Further, such methods limit Medicare outlays to the per capita amounts.

Medicare beneficiaries should have a wider range of health plan options. Under the current program, beneficiary choice is largely limited to the traditional fee-for-service program and, where available, an HMO option. Additional alternatives would let Medicare beneficiaries choose the type of plan that best meets their needs and would permit new beneficiaries enrolled in a particular type of plan before retirement to stay in that arrangement. In addition, more alternatives could increase plan competition for Medicare beneficiaries on the basis of additional benefits and quality.

## Recommendation 4: Setting and Updating the Capitation Rates

Geographic variation in the capitation rates and the volatility of the rates from year to year should be reduced. The Secretary should develop and test alternative payment methods that would allow the payment rates to reflect changes in local market conditions.

Medicare sets a capitation rate for each county based on its historical spending for resident beneficiaries in the traditional Medicare fee-for-service
program. The direct linkage to fee-for-service spending patterns in narrowly defined payment areas has led to substantial variability in the payment rates among counties and excessive annual changes in the rates for many areas. Private plans have been discouraged from participating in the risk program in areas with low capitation rates, as well as in those that have experienced high rate volatility. At the same time, risk plans located in counties with high capitation rates often have been paid substantially more than their actual costs of providing basic program benefits to Medicare beneficiaries. Further, since changes in rates and in local fee-for-service spending are linked, the Medicare risk program generally has not achieved the cost savings attained by private health plans.

The Congress proposes to reduce the geographic variability of the rates. It would do so by blending the local historical fee-for-service spending experience with the input price-adjusted national average and by setting payment rate floors. The annual volatility of the payment rates would be lowered by updating them with legislated growth factors. The President's proposal would decrease variability by removing special payments from the rates and by setting ceilings and floors on a portion of the payment rates. The President's proposal would have only a limited impact on volatility in the rates over time.

Neither proposal would allow the rates to vary with changes in the costs faced by plans. ProPAC believes alternative payment methods should be developed and tested that would better reflect the evolution and impact of market forces in each area. To accomplish this, information would have to be collected on the cost performance of individual plans to enhance the Secretary's understanding of markets and lay the foundation for implementing alternative payment methods, such as competitive bidding. The Commission wishes to emphasize that these data are not intended to support restricting plan profits or other regulatory activities.

## Recommendation 5: Improving Risk Adjustment Methods

The risk adjustment methods used to set Medicare capitation payments should better reflect variation in the likely use of services. Even as research on the development
of new methods continues, the Secretary should implement interim improvements as soon as possible.

Effective risk adjustment of payments to health plans participating in the Medicare program is crucial to prevent rewarding or penalizing plans unwarrantably. It is equally essential to ensure that the financial burden of caring for Medicare beneficiaries is allocated fairly between the capitation program and the traditional fee-for-service program. These issues will become even more important if the risk program is modified to expand beneficiaries' choices among plans and plan participation.

The current knowledge base is not adequate to support highly effective risk adjustment methods. Moreover, health risks and the variations in propensity to use health services may never be sufficiently understood to adjust fully for differences in expected spending among individuals. Nevertheless, the methods used in the Medicare risk program could be improved. For example, information about the presence of specific chronic conditions, such as certain types of cancer or heart disease, enhances predictions about future health care spending levels for individuals. The Secretary should implement marginal improvements rather than wait for potentially better methods that may not be developed for many years.

While continuing to support further research on risk adjustment methods, the Secretary should also evaluate other features of capitation program design that may contribute to the risk selection problem. Enrollment and disenrollment policies, for example, may further concentrate particular groups of beneficiaries in the capitation program or in certain plans. Other policies regarding reinsurance or partial capitation may protect plans from adverse selection. Given the likelihood of continuing limitations in risk adjustment methods, these kinds of policies may be especially important as a source of auxiliary protection against the impact of risk selection.

## Recommendation 6: Medical Savings Accounts

The Congress's high deductible/MSA option would provide an additional choice for Medicare enrollees. ProPAC is concerned,
however, that the current Medicare risk adjustment method is not sufficient to protect the program from adverse selection and resulting excess spending. The likelihood that rates would better reflect risk would be enhanced if Medicare enrollees were required to remain in the MSA option at least for several years.

Medicare payments for beneficiaries choosing the high deductible/MSA option proposed by the Congress could be higher than the costs that would have been incurred if those beneficiaries had remained in the traditional program. This is particularly likely if risk adjustment methods are not improved or if longer participation requirements are not imposed. In fact, the Congressional Budget Office estimates that beneficiaries in this type of arrangement would cost the program $\$ 4.6$ billion between 1996 and 2002. These costs could trigger the failsafe mechanism in traditional Medicare.

The Secretary should move quickly to improve the risk adjustment method. In addition, further research on the high deductible/MSA option is needed to assess the effects of various plan designs and to improve this option over time. Issues requiring a closer look include the amount deposited in the MSA, the length of time before disenrollment is allowed, and the features of the high deductible plan.

## Recommendation 7: The MedicarePlus Fee-for-Service Option

Enrollees choosing the fee-for-service option under the proposed MedicarePlus program could be responsible for substantially higher fees than what their plans would pay. The Secretary should monitor the impact of this option on beneficiary liability and on possible reductions in physician and other provider participation in traditional Medicare.

Current policies limit the amount that most providers can bill Medicare beneficiaries above Medicare's payment. ProPAC is concerned that beneficiaries who choose the MedicarePlus fee-forservice option will be subjected to unanticipated out-of-pocket liabilities. The Commission also is concerned about provider behavior resulting from
these arrangements: Some providers may decide not to see those with traditional Medicare coverage by limiting their practice to patients who can pay high charges. This phenomenon could limit access of Medicare beneficiaries-particularly those with low incomes.

## Recommendation 8: Information for Beneficiary Health Plan Choices

> Medicare should make available to beneficiaries information about the performance of plans and local providers. The Secretary should identify the information beneficiaries need to make appropriate choices and develop innovative ways to improve access to it.

The risk contracting program distributes only limited information to beneficiaries about plans. Soon, however, HCFA will expand the data it distributes to include plans' benefits and premiums. The Secretary should continue efforts to identify the information beneficiaries need to make informed health plan choices and the most appropriate format for it. This is even more critical as health plan choices are expanded for Medicare beneficiaries. The Secretary should explore initiatives that would, for example, measure the satisfaction of beneficiaries who used services, describe total benefits available in an area (including those covered under insurance policies offered as supplements to Medicare), and document performance of individual providers within a plan.

As the number of choices under Medicare increases either through the current program or expansions, private entities likely will begin distributing information about these choices to beneficiaries. Although this is appropriate, Medicare should not abandon its responsibility to ensure that beneficiaries receive unbiased, comparable, and reliable data.

## Recommendation 9: Health Plan Accountability

Medicare must hold health plans accountable for the appropriate use of Medicare funds. In addition, standards must be developed and enforced to ensure that Medicare beneficiaries will receive services of appropriate quality.

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Under capitation, a health plan arranges with providers for coverage of services. Health plans have an incentive to limit the types and number of services delivered to each member when they receive a capitation payment. As a purchaser, therefore, Medicare needs to be particularly vigilant in ensuring that plans meet their contractual obligations to provide appropriate care.

The Commission recognizes that HCFA is working with the private sector to develop measures of
health plan performance. These relate to patient satisfaction, plans' financial stability, and other factors. Efforts to date have shown promise, but they still have not succeeded in providing definitive information on service use or health outcomes. Ideally, Medicare should be able to evaluate plan performance through risk-adjusted outcomes measures. Additional resources most likely will be necessary to implement an evaluation program that incorporates these measures.

## Notes to Chapter 2

1. Prospective Payment Assessment Commission and Physician Payment Review Commission, Joint Report to the Congress on Medicare Managed Care (Washington, DC: ProPAC and PPRC, 1995).
2. Joseph Newhouse and others, "Adjusting Capitation Rates Using Objective Health Measures and Prior Utilization," Health Care Financing Review 10(3): 41-54, Spring 1989.
3. Several studies have examined claims-based risk adjustment systems, which include ambulatory care groups (ACGs) and diagnostic cost groups (DCGs). ACGs classify claims based on diagnoses in ambulatory settings, or all settings combined, as well as age and other factors. DCGs classify by diagnosis and other variables from previous hospital inpatient stays.
4. Randall Brown and others, The Medicare Risk Program for HMOs-Final Summary Report on Findings from the Evaluation (Princeton, NJ: Mathematica Policy Research, February 18, 1993).
5. Physician Payment Review Commission, "Biased Selection and Medicare HMOs: Analysis of the 1989-1994 Experience," unpublished paper, December 1995.
6. Prospective Payment Assessment Commission, "Relationship Between AAPCC Payments and

Medicare Risk Plan Costs," unpublished paper, April 1995.
7. General Accounting Office, Medicare: Increased HMO Oversight Could Improve Quality and Access to Care (Washington, DC: GAO, August 1995).
8. H.R. 2491, Title 8, Subtitle A, Section 8001.
9. Costs for Medicare-covered services would have to count toward the deductible. Plans would have the discretion to count supplemental services toward the deductible or cover them once the deductible was reached.
10. American Academy of Actuaries, Medical Savings Accounts: Cost Implications and Design Issues, Public Policy Monograph \#1 (Washington, DC: American Academy of Actuaries, May 1995).
11. Joseph White, "Medical Savings Accounts: Fact vs. Fiction" (Washington, DC: Brookings Institution Occasional Papers).
12. This policy reflects a clarification to the language in H.R. 2491, which was ambiguous on this issue.
13. This description reflects the proposal released in December 1995. The President subsequently may have changed this proposal.

## Chapter 3

## Acute Care Hospital Payments

Although both the Congress and the President propose to expand Medicare's use of capitation, most beneficiaries will likely remain in the traditional fee-for-service program for the foreseeable future. Based on this expectation, most of the proposed Medicare savings under either plan would be obtained through changes to the fee-for-service program. The majority of these savings would come from payments to acute care hospitals, including those paid under the prospective payment system (PPS) and those excluded from PPS. ${ }^{1}$

Since its inception, the Prospective Payment Assessment Commission (ProPAC) has provided the Congress with recommendations on PPS payment updates, the structure of other PPS payment components, and the cost limits for PPS-excluded facilities. In fulfilling this responsibility, ProPAC considers the overall level of Medicare expendi-• tures, the equity of payments across hospitals, and the adequacy of payments for ensuring appropriate quality of care. To support its decision making, the Commission examines not only hospitals' Medicare costs, payments, and margins for inpatient services, but also total margins and other indicators that reflect the larger environment in which hospitals operate. This information is used to develop ProPAC's recommendations, to evaluate the impact of payment policy changes, and to assess the need for further policy improvements. The data from recent years indicate that the hospital industry is changing in response to the incentives of PPS and the financial pressures imposed by other payers.

After nearly a decade of annual increases averaging around 9 percent per year, the growth in PPS operating costs per discharge began to moderate in the early 1990s. In 1992, the ninth year of PPS, the increase was down to 4.9 percent, and preliminary data for 1994 show that PPS costs per discharge actually decreased for the first time (see Figure 31). This 0.5 percent decline is more than 3 percentage points below the growth rate of the market

Figure 3-1. Annual Change in Medicare Operating Costs Per Discharge, First 11 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.
basket index, which reflects the prices of goods and services that hospitals purchase.

The reduction in per unit cost growth in recent years has been much greater for inpatient care than for other hospital services like outpatient and skilled nursing care, due primarily to declines in length of stay. Moreover, the drop in length of stay has been steeper for aged patients (who make up the vast majority of the Medicare population) than for the non-aged- 18 percent compared to 13 percent since 1989. The rapid fall of Medicare length of stay may partially reflect a trend toward discharging some patients to post-acute settings earlier in the course of their treatment, representing a change in the hospital product. This has led to concern about how Medicare pays for patients who are discharged from PPS hospitals to inpatient post-acute care providers.

The substantial drop in hospital cost growth commonly is attributed to payers' resistance to continuing escalation in their payments. For a number of years, payment pressure was applied primarily by

Medicare and to some extent Medicaid. From the second through the eighth PPS years, the annual increase in Medicare payments per case was less than the corresponding per case cost increase, which resulted in steadily declining PPS margins (see Figure 3-2). ${ }^{2}$

During this period, hospitals generally were able to obtain the revenue they needed to cover additional losses from treating Medicare patients by cost shifting to private insurers. ${ }^{3}$ This was accomplished by obtaining payment increases from private payers that exceeded the corresponding cost increases. As a result, the average payment to cost ratio for private payers went from 116 percent in 1986 to 131 percent in 1992. ${ }^{4}$ Primarily because of cost shifting, hospitals were able to maintain fairly stable total margins, which reflect gains and losses from all payers as well as from non-patient care activities. Although the total margin for all community hospitals dipped by nearly a percentage point between the third and fourth years, it was back at 4.3 percent by the eighth year of PPS (see Figure 3-3).

In the early 1990s, more private insurers began to actively limit their payments to hospitals, and the combined pressure from public and private payers appears to have had a dramatic effect. In 1992, the ninth year of PPS, the Medicare per case cost and

Figure 3-2. PPS Margins for All Hospitals, First 11 Years of PPS (In Percent)


Figure 3-3. Total Margins for All Hospitals, First 11 Years of PPS (In Percent)

payment increases were the same. Over the next two years, despite payment increases as low as at any time since PPS began, cost increases that were even lower resulted in rising PPS margins.

During this period, Medicaid and uncompensated care losses stayed relatively stable. Consequently, hospitals were able to absorb smaller payment increases from private insurers without experiencing deterioration in overall financial status. The payment to cost ratio for private payers declined from its peak of 131 percent to 124 percent in 1994, while total margins remained virtually constant.

These trends portray a hospital industry adapting to an increasingly competitive environment. This has implications for how hospitals operate, how they interact with other types of facilities, and how accessible services are for Medicare beneficiaries and other populations. In the context of these changes, ProPAC presents the following discussion of payment issues and recommendations for improving Medicare policies.

The chapter begins by examining several payment update issues. Next, payments for teaching hospitals and facilities that treat low-income patients are addressed, followed by payments for discharges from PPS hospitals to inpatient postacute providers. The chapter concludes with Commission recommendations in each of these areas.

All the payment components discussed are associated with provisions of the congressional or presidential proposals designed to reduce projected Medicare expenditures.

## PAYMENT UPDATES

The Prospective Payment Assessment Commission is mandated by law to report to the Congress on the appropriate update to inpatient hospital payment rates under Medicare's PPS. In this section, the Commission discusses its views on updates to the PPS operating rates, PPS capital rates, and payments for PPS-excluded hospitals and units.

## PPS Operating Rates

In developing and presenting its annual update recommendation for PPS operating rates, ProPAC uses a consistent framework to evaluate the likely impact of various factors that may affect hospital costs. These factors include hospital input price inflation, scientific and technological advances, productivity improvements, and changes in patient complexity. The Commission also looks at the potential impact of its decision on access and quality of care. The update recommendation traditionally has been for one year and for a specific rate of increase.

The Congress has proposed to set annual updates to PPS payment rates for fiscal years 1997 through 2002 at the market basket rate of increase minus 2.0 percentage points. By contrast, the President would set these increases at market basket minus 1.0 percentage points in fiscal years 1997 through 2000, and at market basket minus 1.5 percentage points in fiscal years 2001 and 2002. Recent experience suggests that actual per case payments will go up an additional percentage point each year due to changing patient acuity as measured by the casemix index.

The Commission's update framework provides a foundation for evaluating these proposed updates. The framework begins with a forecast of hospital input price inflation in the coming year. This is based on a projection of the PPS hospital market basket index, which measures changes in the prices of a fixed basket of goods and services hospitals use as inputs to provide inpatient care. The market basket is also the basis for the annual hospital payment
updates set by the Congress. The most recent forecast of the market basket is an increase of 2.9 percent in fiscal year 1997, and slightly higher growth rates in later years.

The Commission's update framework also includes two adjustments related to the market basket. The first reflects differences between ProPAC and the Health Care Financing Administration (HCFA) in the construction of the index. ProPAC believes the index should equally reflect hospital industry wages and benefits and those in the economy as a whole. This requires giving more weight to the industry price proxies and less to general wages and benefits than HCFA does. Even so, the current forecasts for fiscal year 1997 yield the same result, 2.9 percent. If hospital wages and benefits continue to grow more slowly than compensation in the general economy-as they have recently-then future forecasts of ProPAC's market basket may be less than HCFA's.

The second adjustment is needed because the market basket forecast is subject to error. The Commission believes substantial forecast errors should be corrected when the actual market basket increase becomes available. The fiscal year 1995 payment rates were updated based on a market basket forecast of 3.6 percent. The actual increase, however, was 3.0 percent. This resulted in payment rates that were 0.6 percentage points too high, and this discrepency should be removed in this year's update calculation. For the past few years, forecast errors have resulted in overstated payment rates, requiring later downward adjustments. This trend may last for another year or so. However, because the latest long-range market basket estimates are so low, future forecast errors might require a positive adjustment, especially if there is a resurgence of inflation.

The adjustment for scientific and technological advances is a future-oriented policy target intended to provide additional funds for hospitals to adopt quality-enhancing, cost-increasing health care innovations. The Commission has included adjustments ranging from 0.3 to 1.0 percentage points in past update recommendations. The current range likely is lower because there is little evidence of significant new cost-increasing advances ready for implementation. Moreover, the cost-competitive environment this industry now faces may dampen
the adoption of new technologies as hospitals closely evaluate their relative costs and benefits. A reasonable range for the increase in operating costs due to scientific and technological advances in 1997 is 0.1 to 0.6 percentage points. There is uncertainty about the appropriateness of this range for future years, however.

The productivity adjustment, also a futureoriented policy target, is intended to give hospitals an incentive to improve productivity. ProPAC generally expects hospitals to achieve productivity gains similar to those seen in the general economy. In the past, the Commission has expected productivity growth of anywhere from 0.5 percent to 2.0 percent per year. The adjustment in the update framework is intended to share productivity savings equally between hospitals and Medicare. The productivity adjustment thus has ranged from -0.3 to -1.0 percentage points. The near future might see even greater productivity improvements, as hospitals strive to stay competitive and financially viable. ProPAC's latest estimates indicate that hospital productivity increased as much as 2.3 percent in 1994. Given this improvement, a productivity adjustment in the range of -0.7 to - 1.2 percentage points would be reasonable in fiscal year 1997.

Some of the apparent productivity improvements that have been observed may be due to hospitals shifting care traditionally provided in the hospital to other settings, such as skilled nursing facilities and rehabilitation hospitals and units. This site-ofcare shift results in lower per case hospital costs, but not lower PPS payments. The update should reflect this site-of-care shift, which represents a change in the hospital product.

The final component in the Commission's traditional update framework is the case-mix adjustment. Under PPS, hospital payments go up automatically with increases in the case-mix index. But the case-mix index measures both real growth in patient complexity and growth due to coding improvements that are not associated with greater patient complexity. On the other hand, the index does not capture case-complexity changes within diagnosis-related groups (DRGs). Payment should reflect only real changes in patient complexity, in ProPAC's view. The case-mix adjustment in the update framework allows payments to
reflect both real across-DRG case-mix change and real within-DRG case-complexity change.

During the first few years of PPS, the national average case-mix index went up substantially, both because hospitals were coding more accurately and because patient complexity was increasing. This growth resulted in the need for rather large case-mix adjustments in the Commission's update framework, ranging from -0.7 to -1.0 percentage points. More recently, though, growth in the case-mix index has slowed, as hospitals' ability to improve their coding has diminished. This has led to smaller adjustments for case-mix change in the update framework over the past few years, ranging from -0.2 to 0.0 percentage points. The net effect of the case-mix adjustment on future updates is likely to remain small unless the DRGs are substantially revised.

Based on ProPAC's update framework, a payment update between market basket minus 2.0 and market basket minus 0.7 percentage points would be appropriate to compensate hospitals for expected cost growth for fiscal year 1997 (see Table 3-1). Moreover, substantial changes in health care financing and delivery in recent years should also be considered in setting an appropriate update. Hospitals face a more competitive environment as they vie for managed care contracts and patients. Further, private payers increasingly have resisted cost shifting, forcing hospitals to contain their costs to avoid deterioration in total margins. They have responded by holding their per case cost growth below the market basket increase. As a result, the aggregate PPS margin has increased and is now well above zero.

As a prudent purchaser, Medicare should respond to these changes by holding its price increases down and thereby sharing in the apparent productivity improvements hospitals are achieving. ProPAC's examination of the available data indicates Medicare should be able to keep its per case payment increase for PPS hospitals down to the market basket increase minus 2.0 percentage points for the next year or two without undue effects on the industry. After years of cost growth well above inflation, there should be substantial room for hospitals and the health care industry to generate lower rates of cost growth.

The Congress, however, proposes updates of market basket minus 2.0 percentage points for fiscal years 1997 through 2002. Maintaining such

## Table 3-1. Update Framework for PPS Hospital Operating Payments, Fiscal Year 1997


updates throughout this period could have a severe impact on hospitals. The required restraint on cost growth may not be feasible or desirable. Low updates over an extended period could affect hospitals' financial health and compromise access and quality of care. They also could impede the diffusion of quality-enhancing technological advances.

## PPS Capital Payment Rates

Since fiscal year 1992, Medicare has paid for its share of hospital capital costs, which consist primarily of interest and depreciation, using prospective per case rates. During a 10 -year transition period ending in 2001, payments are based on a blend of hospital-specific rates and a single Federal rate.

Initially, the base Federal payment rate was set equal to the 1989 national average Medicareallowable capital cost per discharge updated to 1992. Similarly, each facility's hospital-specific payment rate was its 1989 cost per discharge updated to 1992. From 1992 through 1995, HCFA updated base payment rates using a moving average of capital cost increases in previous years. During this period, however, the Congress required HCFA to adjust the payment rates in each year so that anticipated aggregate capital payments would equal 90 percent of anticipated aggregate costs. This budget
neutrality requirement meant that the effective payment rate was below the updated base payment rate in each year, with a growing discrepancy between the two. The expiration of budget neutrality at the end of September 1995 resulted in a 20.6 percent increase in the Federal capital payment rate for fiscal year 1996.

The congressional proposal would not alter the system for updating capital payment rates. However, it would continue the budget neutrality requirement through 2002 and lower payments to 85 percent of anticipated costs in each year. Thus, year-to-year increases in the effective capital payment rate would continue to be tied to changes in anticipated capital costs. Both the President and the Congress would reduce the Federal rate by 7.47 percent and the hospital-specific rates by 8.27 percent. These changes reflect information from hospitals' Medicare Cost Reports indicating that the 1992 base rates were overstated because the projection for cost growth between 1989 and 1992 was inaccurate.

ProPAC has recommended an alternative approach. An update framework, such as that developed by the Commission, would be applied to an appropriate base payment rate to determine the rate for the coming year. This would be similar to the method used to update PPS operating payment
rates and would finally break the link between aggregate capital costs and payments.

There are several ways to determine an appropriate base capital payment rate. For example, the 1995 effective rates-the prevailing payment amounts at that time-could be used as a base for future years. Hospitals have received these rates as capital reimbursement for the care of Medicare beneficiaries and appear not to have been adversely affected. Another method would be to rebase the 1992 capital payment rates as HCFA has suggested and update them to the current year using an analytic framework.

The ProPAC capital update framework is similar to the operating update framework described earlier. It includes factors for capital asset price changes (the capital market basket), forecast error correction, scientific and technological advances, productivity, and case-mix change. Some of these components have different values when applied to capital. ProPAC's framework also includes a discretionary financing policy adjustment for use in extended periods of unusually high or low interest rates. The application of such an update to an appropriate base payment rate would be part of a prospective payment system that provides incentives to hold costs down while recognizing the factors that determine capital cost increases for efficient hospitals.

## Payments to PPS-Excluded Hospitals and Distinct-Part Units

Five types of 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. These providers are excluded primarily because DRGs fail to predict their resource costs accurately.

PPS-excluded hospitals and distinct-part units are subject to the payment limitations and incentives established in the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). Each provider is paid on the basis of its current Medicare-allowable inpatient operating costs per discharge relative to a target amount. Each provider's target amount is its 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 that are below its ceiling (its target amount times the number of Medicare discharges) receives its costs plus an incentive payment. This payment is equal to half the difference between its costs and ceiling or 5 percent of the ceiling, whichever is less. A facility with inpatient operating costs above its ceiling receives its ceiling plus half the difference between its ceiling and costs. Payments may not exceed 110 percent of the ceiling, however. Further, TEFRA provides an exceptions process whereby facilities may receive payment adjustments if their costs are unusually high due to extraordinary circumstances.

The update to the target amounts is set prospectively by statute. Under current law, facility-specific updates range from the forecast increase in the PPS-excluded market basket to the market basket increase minus 1.0 percentage points through fiscal year 1997. Facilities that had higher costs relative to their target amounts in fiscal year 1990 receive higher updates. In 1998 and beyond, all facilities would receive the full market basket increase.

The Congress initially excluded these hospitals and distinct-part units from PPS with the understanding that a separate prospective payment system would be applied at a later date. Such a system has not been implemented primarily because appropriate patient classification systems have not yet been developed. ${ }^{5}$ Nevertheless, interest in revising Medicare's payment system for these facilities persists owing to widespread concern about the longterm applicability of TEFRA. ${ }^{6}$ A major issue relates to payment disparities between new and old providers.

The use of historical costs to set target amounts systematically rewards providers that had relatively high base year costs. To the extent that these facilities restrain cost increases or lower their costs in subsequent years, they benefit by receiving incentive payments. By contrast, providers that had relatively low base year costs are penalized by having a low target amount. These facilities are less likely to benefit from incentive payments because they may be less able to realize additional efficiency gains in later years. Accordingly, the financial outcome for
the latter group becomes heavily dependent on the annual update to the target amount. The update also does not reflect certain factors that affect facility costs, such as changes in case mix or treatment patterns. Hence, target amounts are less likely to reflect the reasonable costs of providing services over time. Providers that have been subject to TEFRA longer, therefore, may be disadvantaged relative to new ones entering the market.

Recent ProPAC analyses suggest that, in aggregate, rehabilitation hospitals and distinct-part units have done well financially under TEFRA. For most other excluded facility types, though, aggregate operating payments are at or below aggregate operating costs. Further, substantial variation in the extent to which facilities' costs exceed their target amounts was found across and within all provider types.

Although aggregate Medicare payment to cost ratios generally improved for psychiatric, long-term care, and children's facilities in recent years, this was due primarily to the influx of new providers. Facilities that first received TEFRA payments after fiscal year 1989 had higher payments (as well as higher payments relative to costs) than facilities that were subject to TEFRA before 1990. Because it does not have data on exceptions payments, however, the Commission cannot draw definite conclusions about financial performance. ${ }^{7}$ Anecdotal evidence suggests that certain facilities, particularly long-term care hospitals, receive large lump-sum exceptions payments. Therefore, reported losses are likely to be overstated, but by how much is unknown.

Both the Congress's and the President's proposals contain provisions to mitigate the payment disparities between new and old providers as well as generate savings for the Medicare program. The Congress would apply a facility-specific update to the target amount ranging from the projected increase in the PPS-excluded market basket to the market basket increase minus 2.5 percentage points for fiscal years 1996 through 2002. The reduction from the market basket projection would depend on the extent to which a facility's current costs exceed its target-the higher a facility's costs are relative to its target, the larger the update. Facilities with allowable costs substantially below the ceiling in a given year would not receive an update. These low-cost providers generally would
receive the same incentive payment, however. The Congress also would reduce capital payments, which are based on each facility's Medicare-allowable costs, by 10 percent.

The Congress also proposes to apply a floor to the target amounts for rehabilitation facilities and long-term care hospitals that first received Medicare payments before October 1, 1995, and a ceiling for those that first received payments on or after that date. Further, a new base year would be assigned to certain long-term care hospitals that serve a disproportionate share of low-income patients and had costs above their targets in fiscal years 1993 and 1994.

The President proposes to update the TEFRA target amounts for all providers by the projected increase in the market basket minus 1.0 percentage points for fiscal years 1996 through 2000. In 2001 and 2002, the update would equal the market basket increase minus 1.5 percentage points. Further, facilities would receive 85 percent of their Medi-care-allowable capital costs in fiscal years 1996 through 2005.

To account for the widening disparity between costs and payments for certain providers, the Administration proposes to rebase the target amounts for all PPS-excluded facilities using more recent cost report data, subject to floor and ceiling limits. The proposal also includes revisions to the basic TEFRA payment method such that only certain facilities would be eligible for exceptions adjustments. Additionally, only those providers whose costs exceed 110 percent of the target amount would receive payments greater than their target. Finally, the President would impose a moratorium on certification of new long-term care hospitals.

TEFRA modified cost-based payments to encourage providers to operate more efficiently and restrain cost increases. It is expected, therefore, that some facilities will be winners, while others will lose. But by its very design, TEFRA systematically creates an inequitable payment distribution. These inequities may be mitigated by the exceptions process, which provides additional payments to facilities when events or circumstances beyond their control significantly increase their costs. However, the potential availability of exceptions may weaken TEFRA's cost-containment incentives.

The Commission therefore believes that Medicare should move more quickly toward implementing a prospective payment system for these facilities. Such a system, in which payments are based on national or regional average costs rather than on facilityspecific costs, would promote efficiency among providers. It also would recognize certain cost differences that are beyond providers' control and accommodate changes in case mix and practice patterns.

In the interim, ProPAC's analytic framework can be used to update TEFRA target amounts. This approach is similar to the Commission's framework for PPS payment updates, but modified to reflect differences between TEFRA and PPS. Hence, the update is determined primarily by the projected increase in the PPS-excluded market basket index.

Medicare automatically shares in savings from productivity improvements under the TEFRA system, and payments are not case-mix adjusted. Consequently, adjustments for these factors are not needed to determine an appropriate update. Scientific and technological advances, while considered, were not included because they are not likely to increase costs significantly in the coming year. Therefore, the Commission's methodology results in an update for fiscal year 1997 equal to the market basket increase minus 0.6 percentage points to account for previous forecast error.

Although this framework yields an average update for all PPS-excluded providers, the Commission supports the notion of a facility-specific update as contained in current law and in the congressional proposal. By allowing for differential updates depending on the costliness of care, such an update recognizes that, in some cases, rising costs may be beyond a hospital's control.

## TEACHING HOSPITALS

Medicare is the only payer that makes explicit payments for hospitals' teaching-related costs: the indirect medical education (IME) adjustment and the direct graduate medical education (GME) payment. Other payers have traditionally paid higher rates to teaching institutions for these costs. The Congress and the President propose to make several changes to Medicare's payments. The Congress also would establish a Teaching Hospital and

Graduate Medical Education Trust Fund to provide additional explicit support for teaching-related costs.

Teaching hospitals incur higher costs than other facilities because of their education and research missions. Many carry the added financial burden of caring for a disproportionate share of poor or uninsured patients. Higher costs may put these facilities at a disadvantage relative to other hospitals, particularly in areas with excess inpatient capacity. Because Medicare provides additional funds to teaching and disproportionate share hospitals, the PPS margins for these facilities are much higher than those for other hospitals. Their total margins, however, are lower than average. The Commission is concerned about maintaining the financial viability of teaching hospitals because of the special role they play in the health care system.

These concerns are heightened by the changes now occuring in the health care marketplace. Teaching hospitals may have added difficulties obtaining patient volume or contracts from increasingly cost-conscious insurers and health plans. As these financial pressures grow, the Medicare program needs to ensure that its payments accurately account for the added costs teaching hospitals face. The appropriate role of other payers in supporting these social goals needs to be reassessed as well. It also is critical that funds be distributed to those facilities that make the largest contributions and have the greatest need.

The distribution of teaching-related payments can influence the number and mix of physicians across specialties. Medicare inpatient payments go up for each resident a hospital trains, which could provide incentives to substitute residents for other personnel. Further, certain specialties may be more attractive to hospitals because they can generate greater faculty practice plan revenues than others. These factors may distort the hospital market for residents and may impede movement toward an appropriate mix and number of physicians. The distribution of teaching-related funds therefore must encourage, or at least be consistent with, the right balance.

Both the Congress and the President would substantially reduce Medicare's teaching-related spending, with cumulative savings between fiscal
years 1996 and 2002 of almost $\$ 13$ billion under the congressional proposal and $\$ 10$ billion under the President's. The size of the Medicare teaching payment reductions would be the same under both proposals in fiscal year 2002: about $\$ 3.2$ billion, according to the Congressional Budget Office. The financial effects of these reductions, along with other changes in Medicare payment, need to be monitored to make sure they do not adversely affect teaching hospitals. The Medicare payment reductions in the congressional proposal would be offset, however, by general revenue payments from the new Teaching Hospital and Graduate Medical Education Trust Fund, whose cumulative contributions would total $\$ 13.5$ billion through fiscal year 2002.

## Direct Graduate Medical Education Payments

When PPS was implemented, Medicare's share of the direct costs of residency training programs (salaries and benefits of residents and faculty, classroom costs, and associated overhead) was reimbursed on a reasonable cost basis. The Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) changed this to a hospital-specific per resident payment amount based on reported costs from the first year of PPS. This amount is updated annually by the increase in the consumer price index, although the payment amounts were frozen for non-primary care residents in fiscal years 1994 and 1995. Medicare's payment is determined by multiplying a hospital's updated per resident payment amount by the weighted count of residents and then by Medicare's share of inpatient days. Residents who have completed their initial residency period are counted as half a full-time equivalent (FTE) resident. The initial residency period is the minimum number of years required for board eligibility in a specialty or five years, whichever is less.

One issue of concern is the wide variation in the per resident payment amounts across hospitals, caused by differences in reported base year costs. This variation may be the result of differences in resident salaries, teaching physician costs, or allocated overhead expenses. These base year cost differences, however, may also reflect variation in hospital cost reporting practices. Resident counts and the use of weighting factors to pay less for certain residents is another issue. Medicare does not
limit the number of residents who can be counted for payment, and there is concern that this may encourage hospitals to expand their training programs. Weighting factors are used in the current direct GME payment to discourage hospitals from training residents in subspecialties. It is unclear, though, whether the current weighting factors influence hospitals in their specialty mix decisions.

Medicare GME payments would remain unchanged under the congressional proposal, except that residents who are past their initial residency period would count only as a quarter of an FTE. In addition, the aggregate number of residents used in calculating payments would be frozen, although this would affect only hospitals that experienced an increase in residents.

The President's proposal would extend through fiscal year 2000 the freeze on per resident payment amounts for residents who are in non-primary care specialties. This proposal also would freeze, on a hospital-specific basis, both the number of nonprimary care residents and the total number of residents who could be counted for payment. In addition, the Administration's proposal would allow direct GME payments to non-hospital providers for primary care residents in other settings when the hospital is not paying for the resident's salary in those sites.

## Indirect Medical Education Payments

The indirect medical education adjustment is intended to compensate teaching hospitals for their higher Medicare patient care costs. These costs may be due to greater patient acuity, a broader scope of services available, more intensive treatment, and a costlier mix of staff than in other facilities. They may also be attributable to the expense of developing and improving diagnostic and therapeutic technologies or to the less efficient practice style of residents.

Since 1987, the indirect medical education adjustment to PPS operating payments has been set at 7.7 percent for every 10 percent increment of teaching intensity, as measured by the ratio of interns and residents to hospital beds. On the basis of several years of analysis, the Commission believes the technically appropriate rate is 4.5 percent. Recognizing, however, that a sharp reduction
in IME payments could seriously affect teaching institutions, ProPAC in 1995 recommended lowering the adjustment from 7.7 percent to 6.7 percent in fiscal year 1996 and making further reductions only after reviewing the financial effects of this change. This recommendation was made in the context of the payment provisions in effect at the time.

The Congress has proposed reducing the IME adjustment to 6.7 percent in fiscal year 1996. The adjustment would then continue to decline gradually each year to a final level of 5.0 percent in fiscal year 2000 . In addition, the proposal would establish a medical education trust fund that would provide additional payments to teaching hospitals based on each hospital's share of Medicare IME payments over a three-year base period. Funding for this new payment would come from general revenues, thus broadening the source of payment for teaching costs.

The President's proposal would lower the IME adjustment to 7.2 percent in 1996, after which it would decline in stages to 6.0 percent in fiscal year 2001. In addition, residents who were beyond their initial residency period would be counted as half an FTE for determining IME payments, as they are for GME payments. Under the proposal, residents who work in non-hospital settings also would be included in the hospital's IME resident count.

The IME adjustment continues to be higher than what the Commission has recommended in past years. Both the Congress and the President would reduce this adjustment from its current level. The President's proposal would lower it more slowly, but would also apply Medicare GME resident count and weighting rules to the IME resident counts. Treating the IME resident counts like those for GME would strengthen incentives to train residents in primary care specialties. The Commission is intrigued by such a policy, but has not examined its potential financial impact on hospitals. Such a policy could also affect the technically appropriate level for the IME adjustment. ProPAC plans to study this issue further. Finally, it is important that the impact of reducing IME payments, together with any reduced funding for disproportionate share payments, be closely monitored to make sure that Medicare beneficiaries' access to quality care is maintained.

## Other Support for Teaching-Related Costs

The Congress's proposal would establish a Teaching Hospital and Graduate Medical Education Trust Fund to help support the cost of training residents. A total of $\$ 13.5$ billion would be appropriated to the fund from general revenues between fiscal years 1997 and 2002, establishing a broader source of public support for residency training. A specified percentage of the general revenue funds would be allocated to a MedicarePlus Incentive Account. The remaining money would be allocated to the General Indirect-Cost Medical Education Account and General Direct-Cost Medical Education Account, based on the share of Medicare spending in fiscal year 1994 for IME and GME, respectively. 8

The MedicarePlus Incentive Account would distribute funds to teaching hospitals based on their share of MedicarePlus admissions among all teaching hospitals. Thus, the size of a hospital's teaching program and the complexity of its patient population would not affect these payments. Hospitals with many MedicarePlus patients would be greatly rewarded for having only a few residents. Hospitals with a large teaching commitment, however, would receive the same per case payment as these other hospitals. Moreover, because the size of the fund is fixed, the actual per case payment would depend on the total number of MedicarePlus admissions to teaching hospitals. Consequently, if few beneficiaries entered the MedicarePlus program or if few of these enrollees used teaching hospitals, the per case payment would likely be much higher than the associated costs. The reverse would be true if there were significant MedicarePlus participation, particularly in teaching hospitals.

The General Indirect-Cost Medical Education Account would distribute funds to teaching hospitals based on the share of total Medicare IME payments each hospital received over a three-year base period (1992 to 1994). Payments would not be affected by changes in the number of residents trained or the number and mix of patients treated. The General Direct-Cost Medical Education Account would distribute funds in a similar manner, based on a hospital's share of Medicare direct graduate medical education payments over the 1992 to 1994 period. The general direct-cost payment would thus depend on the hospital's per resident payment amount, resident count, and Medicare share of inpatient days in the
base period. It would not be adjusted, however, for changes in these factors between the base year and the time payments are made.

Distributing these two new accounts based on past Medicare spending for teaching may not be an effective way to provide broader general support for teaching-related expenses. This is because hospitals with high levels of Medicare teaching payments would also receive a large portion of these new general revenue payments. Conversely, hospitals with a low share of Medicare teaching payments, such as children's hospitals and some urban public hospitals, would receive little financial support from these general funds, even though they may have the same overall number of residents. The Commission is exploring a number of alternatives for distributing these funds. ProPAC will forward to the Congress later this year its views on how best to distribute general revenue payments so that they provide broader financial support for teaching-related activities in all settings.

The President's proposal would provide funds for teaching-related costs for Medicare beneficiaries in capitation programs. It would remove teachingrelated payments from the Medicare capitation rates and return 75 percent of these funds to health maintenance organizations, hospitals, and other providers that operate teaching programs for the teaching costs of care provided to beneficiaries enrolled in capitation plans. This would result in lower capitation rates, particularly in some areas with a large number of teaching hospitals. Medicare participating health plans would need to adjust to these rates by reducing extra benefits, renegotiating provider contracts, accepting lower profits, or in other ways.

## DISPROPORTIONATE SHARE HOSPITAL PAYMENTS

The disproportionate share (DSH) adjustment originally was intended to offset the cost-increasing effect of treating low-income patients. In recent years, its purpose has been viewed more broadly as preserving access to care for lowincome populations by financially assisting the hospitals they use.

The amount of DSH payment each hospital receives is determined by a complex formula and
each hospital's disproportionate share patient percentage. This percentage is derived as the sum of two ratios: Medicaid patient days as a share of total patient days and patient days for Medicare patients eligible to receive Supplemental Security Income cash payments as a percentage of total Medicare patient days. Most DSH payments go to urban hospitals.

The congressional proposal would not change the method of distributing DSH payments, but would substantially reduce funding for the adjustment. The cutback would be implemented in annual increments, beginning at 5 percent in 1996 and reaching 30 percent in 2000 . The President's proposal includes a smaller funding reduction- 10 percent-beginning in 1999.

These reductions would be implemented at a time when hospitals relying heavily on the DSH adjustment are facing competitive pressures that make it increasingly difficult to generate funds to cover their uncompensated care costs. Moreover, the number of people unable to pay for hospital care is likely to increase in the coming years. Even with insurance premiums rising more slowly than in the past, additional employers may drop health insurance coverage for their employees. Further, under the comprehensive Medicaid reforms proposed by the Congress, some states might elect to scale back Medicaid eligibility and service coverage. Finally, many local governments operating hospitals are facing their own financial pressures, which may make it difficult for them to maintain the level of operating subsidies they formerly provided.

Reductions in funding for the DSH adjustment highlight the importance of ensuring that the hospitals with the greatest need receive payments. However, optimizing the allocation of DSH funds is complicated by the use of a Medicaid variable in the distribution formula.

Medicaid utilization has never been a good measure of service to the poor, because the proportion of the low-income population covered by the program varies substantially from state to state, and the hospitals that provide the most care to uninsured low-income patients do not necessarily treat the most Medicaid patients. The misallocation may have been exacerbated in recent years by reforms a number of states have undertaken. Of particular
concern is the substantial expansion in eligibility for Medicaid in Oregon and Tennessee, with little or no indication of change in these states' low-income populations. ${ }^{9}$ Moreover, the accuracy of a Medicaid patient day count in representing the amount of care provided to the poor may deteriorate even further under the expanded state role envisioned by the Congress. With much greater control over the design of their programs, some states may broaden eligibility and service coverage while others scale them back-all with virtually no relationship to the amount of care needed by the poor.

Because of these problems, it will be essential to improve the accuracy of the data used to distribute DSH payments. This should be done in the context of a comprehensive review of the objectives of the DSH adjustment and the methods available to best accomplish them. One important methodological issue is what populations to include, as the measure now used for distributing payments does not reflect a significant portion of hospitals' low-income patient loads. It will also be important to define the scope of patient care to be covered, such as whether DSH payments should apply to outpatient care or to hospital services provided in Medicare capitation programs.

The most appropriate measure of low-income patient care must then be identified. The primary choice here is between a measure of the amount of care provided to low-income patients and the losses incurred in treating the poor. Data collection methods would also need to be assessed, since most of the likely options for distributing payments would require new data. This presents a trade-off between the level of hospital reporting burden and the ability to allocate DSH monies among providers in the desired manner. In addition, it may be necessary to deal with the difficult issue of measuring charity care.

Revamping the DSH adjustment is potentially a complex process. However, inasmuch as the facilities now relying on DSH payments face growing pressure from private payers, Medicaid, and Medicare, the distribution of available funds will be crucial in protecting access to care for vulnerable populations.

## DISCHARGES FROM PPS HOSPITALS TO OTHER FACILITIES

A per case payment system like PPS provides hospitals with a strong incentive to reduce length of
stay. Hospitals can shorten stays by changing their practices to provide care more efficiently. They also can reduce the amount of care furnished in the inpatient setting by moving patients out of the hospital to other locations. When PPS began, there was evidence of this site-of-care substitution. Hospitals began conducting more preoperative tests in the outpatient setting, for example, instead of admitting the patient to the hospital the day before surgery.

The recent growth in the use of post-acute services, together with declines in PPS inpatient length of stay, raises the issue of whether site-ofcare substitution is now occurring at the end of the hospital stay. (See Chapter 4 for a more complete discussion of this trend.) Many of the services delivered in post-acute settings may formerly have been provided in PPS hospitals. If payments are not adjusted to reflect any shift in site-of-care delivery, Medicare may be paying twice for the same service: once in the hospital, where the DRG payment rate reflects the cost of services no longer provided, and again in the post-acute care setting, where the service is now furnished. Although the DRG weights eventually reflect the relative resources required to treat the average case in a DRG, aggregate PPS payments do not reflect the shifting of these services from the hospital unless the PPS update accounts for this change in the hospital's product.

The President proposes to apply Medicare's transfer payment policy to patients who are discharged to PPS-excluded hospitals and units and to skilled nursing facilities. Hospitals that discharge patients to one of these facilities after a stay of at least a day less than the average for the DRG would receive a graduated per diem payment instead of the full DRG amount. Thus, PPS payments would be reduced when services were transferred from the hospital to post-acute sites. In addition, the proposal would stabilize the weights for DRGs with significant site-of-care shifts. This would allow the DRG weights to better reflect the cost of care provided to patients who were not discharged to another setting.

The Administration's proposal, however, would reduce hospitals' incentive to discharge patients to post-acute settings. This could result in longer hospital stays, even though the cost of providing care might be lower and the level of care might be more
appropriate in post-acute sites. This proposal could substantially weaken PPS incentives to shorten inpatient lengths of stay, leading to a less appropriate continuum of care for Medicare beneficiaries. Therefore, the likely effects of such a policy on hospital behavior need to be better understood before implementation proceeds.

## CONCLUSIONS AND RECOMMENDATIONS

The Commission has developed recommendations in each of the policy areas addressed above. These include updates for the operating and capital components of PPS and PPS-excluded hospital payments, teaching and disproportionate share payments, and payment for discharges from PPS hospitals to post-acute facilities. Despite the emphasis on capitation programs in both the congressional and presidential proposals, these payment policies will continue to govern the majority of Medicare payments for inpatient hospital services.

## Recommendation 10: Updating PPS Operating Rates

ProPAC's update framework would support an update between 0.7 percentage points and 2.0 percentage points less than the increase in the hospital market basket index. The methodology employed by the Commission in previous years would lead to a recommendation of about market basket minus 1.5 percentage points, roughly corresponding to the midpoint of that range. In light of the significant changes occurring in health care delivery, the Commission believes that PPS payment rate increases could be held to market basket minus 2.0 percentage points for the next year or two. However, it is concerned about the potential effects of continuing updates at that level on hospitals' ability to provide quality care to Medicare beneficiaries and other populations.

ProPAC's update framework accounts for the effects of inflation on hospital costs, adjusting for case-mix change, scientific and technological advances, and productivity improvements. The congressional proposal of market basket minus 2.0 percentage points falls within the range that results
from applying the Commission's framework. The Congress, however, would set the update at this level through 2002.

In the short run, hospitals should be able to continue their recent productivity growth, and thus should not be adversely affected by an update that is 2.0 percentage points below the hospital market basket increase. Payers are applying pressure on providers-particularly hospitals-to restructure the way they operate and constrain the growth in their costs. Hospital occupancy rates remain relatively low in aggregate, indicating substantial system overcapacity and ongoing opportunities for hospital productivity improvements. Hospitals can continue to better the efficiency of staffing and capital purchasing as well. In view of the changes now occurring in the health care market, hospitals should still be able to provide quality care for the immediate future, despite this constrained rate of growth.

If updates are held to this level through 2002, though, hospitals may not be able to continue providing access to quality care. It is unclear, for instance, how long they will be able to support the productivity improvements needed to keep cost per case increases down to the level required by the proposed updates. Furthermore, some of the changes other payers are making, such as controlling the use of inpatient hospital services, will reduce hospital volume. This could raise per case costs for hospitalized patients. Moreover, a continuation of cost constraint at this level could require hospitals to forego technological advances that may significantly improve quality and patient outcomes. Finally, there is the basic uncertainty about the future. The Commission is concerned that once the updates become law, it would be extremely difficult to increase them to respond to deteriorating quality and hospital financial condition, should that occur.

## Recommendation 11: Setting Capital Payment Rates

Prospective per discharge payment rates for inpatient capital costs should be set by developing an appropriate base payment rate and applying an annual update. The capital update should reflect the prices of capital assets, capital financing costs, and
other factors related to the capital costs hospitals incur in efficiently providing inpatient care to Medicare beneficiaries.

The capital payment rates currently in effect are based on estimated fiscal year 1992 hospital capital costs per discharge, updated by historical capital cost increases through 1995 and a prospective update framework for 1996. ProPAC has long opposed the use of historical cost increases, proposing instead that a prospective framework similar to that applied to PPS operating payments be used.

In the first four years of capital prospective payment, the effective capital payment rate has differed from the base payment rate due to a congressional requirement that total anticipated capital payments equal 90 percent of total anticipated capital costs. When this budget neutrality requirement expired at the end of fiscal year 1995, actual capital payment rates for 1996 went up more than 20 percent.

The Congress has proposed extending the budget neutrality requirement through fiscal year 2002 and setting payment rates so that total capital payments equal 85 percent of total anticipated capital costs. While this would eliminate the large increase in capital payments in 1996, it would continue the relationship between capital payments and costs in each year. The Commission believes that Medicare should move to a fully prospective capital payment system, severing the link between payments and costs.

## Recommendation 12: Updating Payments to PPS-Excluded Hospitals and Distinct-Part Units

ProPAC's update framework would support an average update to the TEFRA target amounts equal to the projected increase in the market basket index minus 0.6 percentage points for fiscal year 1997. This average is within the range of facilityspecific updates in the Congress's proposal, which is between the market basket increase and 2.5 percentage points below market basket. Major changes to the TEFRA target amounts should not be made at this time. Rather, a prospective payment system for PPS-excluded hospitals and
distinct-part units should be implemented as soon as practicable.

ProPAC's update framework for payments to PPS-excluded hospitals and distinct-part units reflects the market basket increase for these facilities, corrected for previous forecast error. Unlike the Commission's approach for updating PPS payments, this framework does not include adjustments for productivity or case-mix change. It does reflect an allowance for scientific and technological advances, although this was zero for fiscal year 1997. Given the structural changes occurring in the hospital industry, the Commission believes PPSexcluded hospitals and distinct-part units should be able to successfully constrain their cost increases and still provide access to quality care within the provisions of the congressional proposal, at least for the next year or two.

Financial performance varies widely among PPS-excluded hospitals and distinct-part units, particularly between new facilities and those that have been operating for many years, according to ProPAC analyses. Much of this variation is related to the design of the TEFRA payment system rather than to hospital behavior. TEFRA is not suitedand was not intended-for long-term application. Rebasing the target amounts, however, would not solve the system's inherent problems. Assigning a more recent base year would increase payments to older facilities, which would improve payment equity somewhat. Yet older facilities would still be at a competitive disadvantage because recent costs would reflect past spending patterns that were constrained by the annual updates. A prospective payment system would recognize appropriate cost differences and reward efficient facilities, particularly older ones that have responded to TEFRA's incentives.

Because there is no acceptable measure of case mix, implementation of a prospective payment system in the near term is not feasible. The development of a patient classification system for rehabilitation hospitals and distinct-part units is progressing, but few advances have been made for other PPS-excluded providers. The Secretary should accelerate efforts to develop effective patient classification systems that can form the basis of a prospective payment system for these providers. (See Recommendations 20 and 21.)

In the meantime, the formulas for updating the TEFRA target amounts under current law and in the congressional proposal appropriately recognize that all facilities do not realize identical cost increases and allow for differential updates across providers according to individual experience. The Commission will continue to examine the TEFRA payment system and its effect on providers.

## Recommendation 13: Broadening Financial Support to Teaching Hospitals

> Explicit financial support for graduate medical education activities should not be limited to the Medicare program. Mechanisms to broaden financial support for teaching-related activities in hospitals and other locations should be developed.

Medicare is the only payer that explicitly pays hospitals for the direct and indirect costs of teaching activities. Although other payers have implicitly provided funding for these activities by paying higher prices for patient care services, there is no direct connection between the amount of payment and the size or structure of the teaching program. Moreover, because the implicit support for teaching activities is not separable from the price of patient care at teaching hospitals, these facilities are at a disadvantage relative to non-teaching hospitals because of higher prices related to their teaching mission. As hospital markets become more competitive with the growth of managed care and other structural changes, it will be increasingly difficult for teaching hospitals to compete for patients from price-sensitive insurers.

To allow teaching hospitals to compete fairly with other institutions, the Commission supports the concept of an all-payer fund to help underwrite teaching activities at hospitals and in other settings. The Teaching Hospital and Graduate Medical Education Trust Fund proposed by the Congress would provide broader support for these activities by using both general revenues and Medicare payments. 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 remain viable in this role.

## Recommendation 14: Medicare Payments for Graduate Medical Education Costs

> ProPAC supports changes in Medicare teaching payments that would encourage an appropriate distribution of residents across specialties and discourage inappropriate growth in the total number of residents.

Medicare payments should foster an appropriate specialty balance and supply of future practicing physicians. Both the President's and the Congress's proposals for Medicare direct GME payments would move in this direction. The President's proposal would provide greater incentives for training primary care residents than for those in other specialties, which is desirable. The Congress would discourage the growth in the number of residents while relying more on market forces to determine the number and distribution of physicians. Medicare payments should reflect the desired change in direction, rather than impeding these changes.

## Recommendation 15: Medicare Indirect Medical Education Payments

## The Medicare indirect medical education adjustment should be reduced from its current 7.7 percent level to 7.0 percent.

Ultimately, the Medicare IME adjustment should be reduced from its current 7.7 percent level to one that corresponds more closely to the actual relationship between teaching intensity and costs. The final level of the adjustment, however, should depend on what other changes are made in the Medicare program. The Commission therefore recommends an initial reduction of the IME adjustment to 7.0 percent. As the adjustment is reduced, it will be important to monitor teaching hospitals' financial condition and the effect on access to their services.

ProPAC also supports the concept of basing IME payments on resident counts and weighting factors consistent with those used in GME payment. Additional analysis is needed to examine the effect of this policy on individual teaching hospitals, however. The Commission recommends proceeding cautiously with such a change. It is also important to point out that the technically appropriate level of
the teaching adjustment would change with such a policy. ProPAC plans to examine in more detail the impact of this policy on hospitals and on the empirical relationship between teaching intensity and hospital costs.

## Recommendation 16: Distributing Additional Teaching-Related Payments

Funds that provide broader financial support for graduate medical education should be distributed in a way that corresponds to the additional costs incurred by teaching facilities. Providers that treat enrollees in capitation plans should receive teachingrelated payments for those patients as well as for the other patients they serve.

ProPAC is concerned about how general revenues would be disbursed through the General IndirectCost Medical Education Account and the General Direct-Cost Medical Education Account. The distribution of payments from these accounts would be based on previous Medicare payment levels, even though the funds would come from general revenues. Hospitals with a high share of Medicare teaching payments would receive a proportionately higher share of these new payments compared to hospitals with the same amount of teaching activity but a low share of Medicare patients. Payments based on prior Medicare utilization may not achieve their broader purpose. Over the coming year, ProPAC will examine how best to provide general support for teaching-related activities.

Additionally, funding mechanisms are needed so that teaching hospitals can compete effectively in the managed care market. Such mechanisms should give participants in Medicare's capitation program an incentive to use teaching hospitals when needed while paying providers appropriately for serving capitation patients. How funds would be disbursed to hospitals under the Congress's proposed MedicarePlus Incentive Account concerns the Commission. First, these payments would not account for differences in the intensity or size of hospital residency programs. Second, because the total payments available through this account would be fixed, they would not reflect Medicare beneficiaries' use of the proposed MedicarePlus program. Payments from a fund like this one should reflect the amount of teaching activity in a hospital and
other teaching settings. Further, total payments made through such a mechanism should depend on Medicare beneficiaries' participation in capitation programs.

## Recommendation 17: Disproportionate Share Hospital Payments

> The Commission is concerned about the potential impact of reductions in DSH payments. Hospitals that treat a large number of the uninsured could be particularly vulnerable because of recent changes in the health care environment. Large reductions in DSH payments would threaten the continued ability of many of these hospitals to serve populations who depend on them for access to care.

With increasing numbers of people lacking health insurance and contraction in many state and local programs designed to fund care for them, hospitals' uncompensated care burdens will likely be higher than ever in the coming years. Many of the hospitals that treat large numbers of uninsured patients are teaching institutions, which are facing stepped-up price competition in the private market along with substantial cutbacks in their IME payments. But some non-teaching hospitals also have significant low-income patient shares, and even among those involved in medical education, the amount of service to the poor frequently does not correspond to the level of teaching intensity. The financial integrity of many hospitals that play a critical role in ensuring access to care for low-income patients may be affected by changes occurring in the public and private financing of medical care. The role they serve will, if anything, become more important in the near future and should be protected.

## Recommendation 18: Method for Distributing Disproportionate Share Payments

> The structure of the DSH adjustment should be reviewed to make certain that available funds are distributed equitably among the hospitals most in need of assistance. This may require collecting new data to develop a better measure of the services hospitals provide to indigent patients.

The distribution of DSH payments is determined partly by each hospital's Medicaid patient days as a
percentage of total days. Medicaid utilization has never been an optimal measure of service to lowincome patients, and its accuracy is deteriorating even further with changes taking place in the structure of the Medicaid programs in several states. Moreover, this problem would be exacerbated by the Medicaid reforms the Congress has proposed.

An alternative method of distributing DSH payments should be considered, but in the context of a comprehensive review. This review should begin by assessing the objectives of the DSH adjustment. It should also extend to defining the lowincome population to be covered and identifying the scope of patient care to be included (for example, outpatient care or services furnished under the Medicare capitation program). Alternative measures of low-income patient care could then be considered, including the data collection each would require.

## Recommendation 19: Discharges from PPS Hospitals to Other Facilities

Medicare payments should be modified to account for the shift in services from acute to post-acute settings. Broadening the definition of transfer cases, however, is not an appropriate approach.

PPS provides hospitals with a strong financial incentive to reduce length of stay by moving care to other settings, since in most cases payments are the same regardless of whether the full course of treatment is provided in the hospital. Although the DRG weights eventually reflect this shift in services, aggregate Medicare payments do not. Constrained updates due to expected productivity improvements may appropriately adjust aggregate payments, but they will not account for cost differences between patients who use post-acute services and those who do not.

The President proposes to treat as transfers those cases who are discharged to skilled nursing facilities and PPS-excluded hospitals and units. The Commission, however, thinks this policy would discourage the use of post-acute providers. Moreover, it could result in longer inpatient stays, which may not be desirable or cost effective in the long run. The expanded transfer policy, therefore, should not be implemented without additional analysis of its impact. Other policies that would better integrate the payment system across settings need to be studied. One would be to bundle acute and postacute services for certain DRGs into a single payment rate. Another would be to develop DRGs that reflect the use of post-acute services. The Commission will continue to examine methods to better integrate the fee-for-service payment system and will work with the Secretary on this endeavor.

## Notes to Chapter 3

1. The Congress's Medicare provisions are in H.R. 2491, the "Balanced Budget Act of 1995." The Medicare provisions of the President's plan are in Title 11 of draft legislation, called the "Balanced Budget Act of 1995 for Economic Growth and Fairness." Released on December 7, 1995, this proposal has not been introduced in the Congress.
2. The PPS margin is the difference between the PPS operating payments a hospital receives and the operating costs of treating its Medicare patients, taken as a percentage of the payments.
3. ProPAC views cost shifting as a dynamic process whereby changes in payments relative to costs for some payers are offset by changes for other payers. During the late 1980s, increasing losses from Medicare, Medicaid, and uncompensated care were offset by increasing gains from private payers. For more information on this issue, see Prospective Payment Assessment Commission, The Relationship of Hospital Costs and Payments by Source of Revenue, 1980-1991, ProPAC Intramural Report I-95-01, October 1995.
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. The rehabilitation industry and the research community have developed a patient classification system for rehabilitation hospitals and distinct-part units (referred to as functionalrelated groups) that is based on patient functional status. HCFA is evaluating how well this technique works in grouping patients.
6. The Omnibus Budget Reconciliation Act of 1990 required the Secretary of Health and Human Services to propose either a prospective
payment system for PPS-excluded providers or modifications to the current TEFRA system. The Act also required ProPAC to analyze and comment on the proposal. Absent the Secretary's proposal, the Commission submitted an interim report to the Congress that examined the financial condition of PPS-excluded providers and explored broad alternative payment methods. Prospective Payment Assessment Commission, Interim Report on Payment Reform for PPS-Excluded Facilities, Congressional Report C-92-05, October 1992.
7. Data on the amount of payment adjustments received through the exceptions process are not systematically collected or automated. In addition, there is a considerable lag between the time an exception is granted and when it appears as a higher target amount on the cost report.
8. The trust fund would also receive revenue from Medicare to support the Medicare Indirect-Cost Medical Education Account and the Medicare Direct-Cost Medical Education Account. Money from these two accounts would be used to finance indirect medical education adjustment payments and direct graduate medical education payments to certain hospitals that operate graduate training programs for interns and residents.
9. HCFA has attempted to minimize the bias resulting from the major reform in Tennessee and plans to do so for Oregon. Under HCFA's directive, Tennessee's Medicaid agency furnishes each hospital with a list of its patients who would have been eligible for Medicaid under the prior criteria. The hospitals then use this information to provide the Medicare fiscal intermediary with a restricted count of Medicaid days. This is an administratively difficult procedure, and does not appear to be a realistic approach for ensuring consistent Medicaid utilization data in the future.

## Chapter 4

# Post-Acute and Ambulatory Care Providers 

As the share of Medicare expenditures devoted to hospital inpatient services declines, the share devoted to post-acute and ambulatory care continues to rise. This shift in spending primarily reflects major changes in the volume and mix of services used. Revisions in Medicare's coverage policies explain some of the increased use of post-acute services, but Medicare payment policies also encourage the growth of both post-acute and ambulatory care. Medicare's prospective payment system (PPS) provides incentives for hospitals to reduce costs by shifting services from inpatient to other settings. At the same time, the way that Medicare pays for post-acute and ambulatory facilities offers few incentives for providers to reduce their costs and control the volume of services they furnish.

Medicare has instituted many changes to its post-acute and ambulatory payment policies to contain its cost per service. An effective volume control measure has remained elusive, however. The overlap of services delivered across settings and the lack of a uniform definition of service units contribute to the difficulty in addressing this problem. Both the Congress and the President propose implementing prospective payment systems for services provided by skilled nursing facilities (SNFs) and home health agencies, the most significant sources of post-acute expenditures. ${ }^{1}$ The prospective payment amount would apply to all the services furnished by the facility for an episode of care.

This chapter presents background information to support the Prospective Payment Assessment Commission's (ProPAC's) recommendations for payments to post-acute and ambulatory care providers. The recommendations reflect the Commission's concerns about expenditure growth within and across treatment settings. The first section focuses on rehabilitation facilities and long-term care hospitals, skilled
nursing facilities, and home health agencies. It documents spending growth, payment policies, and proposed changes for each type of provider, concluding with ProPAC's recommendations. The second section contains comparable information for dialysis facilities and hospital outpatient departments.

## POST-ACUTE CARE PROVIDERS

Payments to post-acute care providers are the fastest growing component of Medicare expenditures. Rehabilitation facilities, long-term care hospitals, skilled nursing facilities, and home health agencies accounted for more than 22 percent of Medicare Part A spending (including both program and beneficiary contributions) in 1993, up from about 7 percent in 1986 (see Table 4-1).

Post-acute care expenditures have been driven by a rapid growth in service utilization. Rehabilitation facility admissions per 1,000 beneficiaries, for example, climbed 148 percent between 1986 and 1993 (see Table 4-2). The increase in beneficiaries receiving care in a skilled nursing facility was similar over this period. Use rates for long-term care hospitals and home health agencies experienced marked growth as well.

Higher utilization is partly attributable to practice pattern changes resulting from Medicare coverage policies: Medicare relaxed restrictions on the coverage of home health and SNF services in the late 1980s, expanding the number of beneficiaries eligible to receive post-acute care. But payment policies for both acute care hospitals and post-acute care providers also contributed to greater use.

Medicare's PPS rewards acute care hospitals for reducing costs per admission. The most direct way for hospitals to lower costs is to shorten stays. In 1984, the Medicare average length of stay in a PPS hospital was 8.8 days. It fell to 8.1 days in 1991

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Table 4-1. Distribution of Total Medicare and Beneficiary Payments for Selected Part A Services, 1986-1993

| Year | Share of Part A Payments (In Percent) |  |  |  |  | Total Part A Payments (In Millions) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PPS Hospital | Rehabilitation | Long-Term Care | Skilled <br> Nursing | Home Health |  |
| 1986 | 91.2\% | 1.5\% | 0.2\% | 1.5\% | 3.7\% | \$ 53.3 |
| 1987 | 90.6 | 1.8 | 0.2 | 1.5 | 3.5 | 54.3 |
| 1988 | 89.3 | 2.0 | 0.3 | 2.2 | 3.6 | 59.0 |
| 1989 | 85.6 | 2.2 | 0.3 | 5.5 | 4.0 | 65.1 |
| 1990 | 84.1 | 2.6 | 0.3 | 4.8 | 5.4 | 72.4 |
| 1991 | 81.9 | 3.0 | 0.3 | 4.8 | 7.0 | 81.2 |
| 1992 | 78.1 | 3.4 | 0.3 | 6.3 | 8.7 | 91.3 |
| 1993 | 74.3 | 3.6 | 0.5 | 7.9 | 10.4 | 102.5 |

Note: The percentages do not add to 100 percent because shares for hospices, cancer hospitals, children's hospitals, and psychiatric facilities are not shown. All numbers include both program and beneficiary payments.
SOURCE: ProPAC analysis using Medicare Cost Reports and other data from the Health Care Financing Administration.
and by another 13.1 percent to 7.1 days by 1994 . Often the shortened stays were accomplished by providing some services that once were part of the hospitalization in a post-acute setting. In fact, ProPAC analysis found that for the 12 diagnosisrelated groups (DRGs) most likely to result in postacute service use, acute hospital length of stay reductions were greater than the average for all DRGs. From 1991 to 1994, length of stay for these DRGs fell more than 16 percent and as much as 28 percent, significantly more than the overall drop.

In 1995, about 58 percent of PPS hospitals had a skilled nursing facility, SNF swing beds, or a
rehabilitation unit. ProPAC analysis showed that for the 12 DRGs with high post-acute use, hospitals with post-acute units had shorter lengths of stay than those without units. The difference may be that postacute services were more readily available in hospitals that had such units. In addition to being able to lower costs subject to the PPS rate, hospitals that own post-acute units gain other financial advantages. They can raise the occupancy of the facility overall, thus providing a larger patient base over which to spread fixed costs. Other resources, such as expensive equipment or certain specialized personnel, also can be used more efficiently over a larger patient base and thus can lower per unit costs.

Table 4-2. Medicare Utilization for Selected Part A Services, 1986-1993

|  | Admissions Per <br> 1,000 Beneficiaries $^{\text {a }}$ |  |  |  | Persons Served <br> Per 1,000 Beneficiaries ${ }^{\mathrm{b}}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | PPS |  | Long-Term <br> Hospital | Rehabilitation | Care |

admissions per 1,000 beneficiaries counts all admissions, not the number of beneficiaries who were hospitalized at any time during the year.
${ }^{\text {D }}$ Persons served per 1,000 beneficiaries counts the number of beneficiaries who were provided the service in a given year, not the number of admissions.
SOURCE: ProPAC analysis of Medicare Cost Reports and data from the Health Care Financing Administration.

Medicare's payment policies for post-acute providers also have contributed to the expansion of post-acute service use and expenditures. Rehabilitation facilities and long-term care hospitals receive cost-based payments at least for their first two years of operation, after which payments are limited by a facility-specific cap. This payment method encourages the development of new facilities and rewards those that have high costs. Skilled nursing facilities also are paid their incurred costs up to a limit for routine services, such as room, board, and nursing care. However, because of varying definitions of the costs subject to these limits and open-ended cost reimbursement for ancillary services, payments per beneficiary have increased substantially. Further, despite per visit home health payment limits, the number and scope of services provided are not restrained and as a result have grown.

Medicare's post-acute facility payment methods have been modified over the years to control expenditures. Several characteristics of post-acute providers, however, make it difficult to slow spending. One is the overlap of services delivered across sites. All of these facilities provide therapyspeech, physical, and occupational-as well as more medically related nursing services. At least a portion of the patient population in any of these settings could be treated in another site. Yet because the payment methods and rates vary across providers, the Medicare program pays different amounts for the same or similar services, depending on where they are delivered.

Service payment units are not measured consistently across settings, which also contributes to the difficulty in controlling costs. Rehabilitation hospitals, for example, receive a per stay payment. By contrast, skilled nursing facilities are subject to per diem cost limits for routine services, and ancillary services are paid separately. As a result of the various payment definitions and methods, the total costs for an episode of care cannot be compared across sites. Thus, it is difficult to ensure that Medicare's policies encourage the most cost-effective methods of care. Even the payment modifications proposed by the Congress and the President would not facilitate comparisons of service volume, patient mix, or case severity across post-acute providers.

An additional complication is the changing nature of service delivery and organization.

Increasingly, many of these providers are offering a level of care labeled "subacute." Less intensive than the care traditionally offered in a hospital, subacute care may describe the set of services formerly provided at the end of a hospital stay. Some beneficiaries who bypassed an acute care hospital to receive rehabilitation services or to be admitted to a long-term care hospital may be receiving subacute care. Because Medicare's payment methods vary across provider type, they do not consistently reflect the type or level of care a patient receives. Consequently, Medicare payments frequently do not reflect new patterns of service delivery.

## Rehabilitation Facilities and Long-Term Care Hospitals

Rehabilitation facilities and long-term care hospitals are paid in accordance with the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). Under TEFRA, payments for inpatient operating costs are based on each facility's current Medicareallowable costs or a facility-specific limit. The limit (or target amount) equals the facility's allowable costs per discharge in a base year, trended to the current year by an annual update factor. Capital payments are based on reasonable costs. (See Chapter 3 for a complete 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 on October 1, 1983, however, certain types of hospitals and distinct-part units were excluded because DRGs and payments based on national average costs were not appropriate for them. The Congress expected that a separate prospective payment system for these facilities would be implemented within a few years.

PPS-excluded facilities have continued under the TEFRA payment system for longer than expected, however. This is because adequate patient classification systems, which are needed for a prospective payment system, have not been developed. Consequently, several flaws inherent in TEFRA that would have had little significance in the short run have led to growth in aggregate Medicare utilization and expenditures over time, as well as substantial inequities across providers.

Of primary concern is the use of facility-specific costs to set base payment limits. Because the expense of opening a new facility is higher today than in the past, facilities with more recent base years automatically have higher limits and receive higher payments. The incentive to open a facility is strengthened by the fact that newly certified PPSexcluded hospitals or units are exempt from the TEFRA limits for their first two 12 -month cost reporting periods. During this time, Medicare pays on the basis of reasonable costs; the second cost reporting period is designated as the base year. ${ }^{2}$ Consequently, new providers have no incentive to avoid high start-up costs because these result in higher base year costs and higher future cost limits.

Moreover, acute care hospitals that treat a large number of long-stay cases or patients who require rehabilitative care have a strong incentive to establish rehabilitation distinct-part units or separate long-term care hospitals within hospitals. By doing this, an acute care hospital can lower its costs subject to PPS and reallocate some expenses to its specialty hospital or to a unit that receives cost-based reimbursement. To the extent that the TEFRA payment for long-stay or rehabilitation cases is greater than the regular DRG payment plus any outlier payment under PPS, the financial benefit could be substantial.

Growth in Facilities, Utilization, and Expendi-tures-The number of Medicare-certified rehabilitation and long-term care facilities has grown rapidly over the last decade (see Table 4-3). Between 1986 and 1994, rehabilitation hospitals and distinctpart units grew by 160 percent and 75 percent, respectively. After dipping in the late 1980s, the number of long-term care hospitals increased from 90 in 1990 to 146 in 1994. Similarly, Medicare
discharges from rehabilitation hospitals and units combined rose by 39 percent from 1990 to 1993, and long-term care hospital discharges grew by 48 percent over the same period (see Table 4-4).

The proliferation of providers and the growth in discharges have led to a marked increase in aggregate Medicare spending for rehabilitation and longterm care facility services (see Table 4-5). Total payments to rehabilitation hospitals and units combined rose from $\$ 1.9$ billion in 1990 to $\$ 3.7$ billion in 1993-a 95 percent increase. Although Medicare payments to long-term care hospitals are comparatively small, they grew by 150 percent over the same period.

The TEFRA payment system was designed to moderate the growth in Medicare hospital payments by giving facilities an incentive to constrain cost increases. Recent ProPAC analyses indicate that lengths of stay in rehabilitation and long-term care facilities have declined and annual per case cost increases have slowed for certain groups of facilities. Yet aggregate Medicare inpatient operating payments per discharge for these providers have risen, on average, faster than the market basket. In fact, aggregate operating payments to longterm care hospitals grew by about 15 percent per year from 1990 to 1993. This is primarily due to the large number of new providers that entered the TEFRA payment system with higher costs, resulting in higher aggregate payments.

Proposed Payment Changes-The Congress's and the President's proposals contain provisions to curb TEFRA payment increases through lower updates to the target amount, capital payment reductions, limits on exceptions adjustments, and restrictions on additional payments for facilities

Table 4-3. Medicare-Certified Rehabilitation and Long-Term Care Facilities, Selected Years

|  |  |  |  |  | Percent Change <br> $1986-1994$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Facility Type | 1986 | 1988 | 1990 | 1992 | 1994 | $87 \%$ |
| Rehabilitation | 545 | 697 | 813 | 923 | 1,019 | 195 |
| Hospitals | 75 | 106 | 135 | 759 | 824 | 75 |
| Distinct-part units | 470 | 591 | 678 |  | 102 | 146 |
| Long-term care | 94 | 82 | 90 | 102 | 55 |  |

SOURCE: Health Care Financing Administration, Office of Survey and Certification.

Table 4-4. Medicare Discharges from Rehabilitation and Long-Term Care Facilities, 1990-1993

| Facility Type | 1990 | 1991 | 1992 | 1993 | Percent Change <br> 1990-1993 |
| :--- | ---: | ---: | ---: | ---: | :---: |
| Rehabilitation | 169,491 | 198,423 | 223,948 | 235,212 |  |
| Hospitals | 55,814 | 65,248 | 73,479 | 68,297 | $39 \%$ |
| Distinct-part units | 113,677 | 133,175 | 150,469 | 166,915 | 47 |
| Long-term care | 15,262 | 16,474 | 18,334 | 22,514 | 48 |

Note: Due to missing and inaccurate data, these figures do not represent total Medicare discharges.
SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.
with operating costs above their target amounts. (See Chapter 3 for more information regarding these proposals.) Neither proposal, however, addresses the need to control utilization, although the President proposes to place a moratorium on certifying new long-term care hospitals.

## Skilled Nursing Facility Services

The Medicare Part A 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 prior to the SNF admission and be in need of skilled nursing or rehabilitative services on a daily basis.

For payment purposes, Medicare separates SNF costs into routine, capital, and ancillary service categories. Medicare payments for routine costs, which include room, board, and skilled nursing services, are based on facility-specific costs, subject to an input price-adjusted national average per diem cost limit. Separate limits apply for hospitalbased and freestanding facilities. These limits usually are updated each year, but were frozen for fiscal years 1994 and 1995. Capital costs and those for ancillary services, such as physical therapy, occupational therapy, speech therapy, laboratory
tests, and radiology procedures, are reimbursed on a facility-specific cost basis. ${ }^{3}$ Although most ancillary services are provided by SNFs and paid under Part A, there are situations when they are reimbursed under Part B.

Growth in Facilities, Utilization, and Expendi-tures-Between 1986 and 1994, the number of hospital-based SNFs increased by 163 percent, from 652 to 1,718 (see Table 4-6). The number of freestanding SNFs rose by 29 percent, while hospitals with SNF swing beds rose by 65 percent. During this period, many hospitals responded to declining average lengths of stay for Medicare beneficiaries and other patients by developing new lines of business, including hospital-based SNFs. Less restrictive state planning requirements for converting hospital acute-care beds to SNF beds contributed to their rapid growth.

Similar patterns are found in utilization and expenditures. In 1986, some 304,000 Medicare beneficiaries received care in skilled nursing facilities, and Medicare program payments totaled $\$ 600$ million (see Table 4-7). By 1994, 925,000 beneficiaries received SNF care, and payments reached $\$ 8.3$ billion. Numerous incremental legislative and administrative changes to SNF coverage and payment

Table 4-5. Medicare Rehabilitation and Long-Term Care Facility Payments, 1990-1993 (In Billions)

| Facility Type | 1990 | 1991 | 1992 | $1993^{*}$ | Percent Change <br> $1990-1993$ |
| :--- | ---: | ---: | ---: | ---: | :---: |
| Rehabilitation | $\$ 1.9$ | $\$ 2.4$ | $\$ 3.1$ | $\$ 3.7$ | $95 \%$ |
| Long-term care | 0.2 | 0.2 | 0.3 | 0.5 | 150 |

Note: Includes program payments and beneficiary payments. Does not include exceptions payments.

* Payments for facilities with cost reporting periods beginning on or after October 1, 1993, and before January 1, 1994, are estimated.

SOURCE: ProPAC analysis of Medicare Cost Reports and other data from the Health Care Financing Administration.

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Table 4-6. Types of Medicare-Certified Skilled Nursing Facilities, Selected Years

|  |  |  |  | Percent <br> Change |
| :--- | ---: | ---: | ---: | :---: |
| Facility Type | 1986 | 1990 | 1994 | $1986-1994$ |
| Hospital-based | 652 | 1,145 | 1,718 | $163 \%$ |
| Freestanding | 8,414 | 8,120 | 10,818 | 29 |
| Swing-bed hospitals | 812 | 1,243 | 1,342 | 65 |

SOURCE: Health Care Financing Administration, Office of Survey and Certification.
policies have contributed to utilization and payment growth. The most significant ones were a lawsuit that resulted in broadening SNF coverage guidelines in April 1988, along with the passage of the Medicare Catastrophic Coverage Act (MCCA) of 1988, and its repeal in $1990 .{ }^{4}$ The impact of these changes can be seen in the increase in Medicare-covered days and program payments in 1989, followed by a decrease in 1990. Although covered days have grown at an average annual rate of 10 percent since 1990, Part A program payments for SNF services have gone up even faster, at an average annual rate of 35 percent.

Some of the recent rise in Medicare program payments may be attributable to higher prices for inputs. Inflation alone, however, cannot account for the disparity between growth in use and payments. One source of the higher rise in payments has been the greater use of therapy and other ancillary ser-
vices provided to Medicare patients. In 1988, charges for physical, occupational, speech, and respiratory therapy services were about 15 percent of total Medicare SNF charges. By 1994, therapy services represented more than 30 percent of charges. Even though final payments for these and other ancillary services are based on costs rather than charges, these estimates suggest a large increase in their contribution to the overall growth of Medicare payments for SNF services.

Because of cost-based payment, greater ancillary use results in higher Medicare payments. Further, SNFs may cite high ancillary service use to justify an exemption from routine service cost limits, thereby increasing routine service payments.

Proposed Payment Changes-Many factors have contributed to the dramatic rise in Medicare expenditures for SNF services. The Congress and the President agree that the most appropriate longterm method for controlling SNF spending is to establish a comprehensive prospective payment system. Both have proposed legislation to do this. They differ, however, in their timing for implementing the comprehensive system and their methods for constraining Medicare payments under interim measures.

The Congressional Proposal-The Congress proposes significant changes to Medicare's payment for skilled nursing facility services. It would

Table 4-7. Medicare Skilled Nursing Facility Payments and Utilization, 1983-1994

| Year of Service | Skilled Nursing Facility |  | People Served |  | Days |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Payments (In Billions) | Percent Change | Number (In Thousands) | Per 1,000 <br> Enrollees | Number (In Thousands) | Per Person Served |
| 1983 | \$0.5 | - | 265 | 9 | 9,314 | 35.1 |
| 1984 | 0.6 | 6.9\% | 299 | 10 | 9,640 | 32.2 |
| 1985 | 0.6 | 2.9 | 314 | 10 | 8,927 | 28.4 |
| 1986 | 0.6 | 0.2 | 304 | 10 | 8,160 | 26.8 |
| 1987 | 0.6 | 8.8 | 293 | 9 | 7,445 | 25.4 |
| 1988 | 0.9 | 47.1 | 384 | 12 | 10,667 | 27.8 |
| 1989 | 3.5 | 275.7 | 636 | 19 | 29,780 | 46.8 |
| 1990 | 2.5 | -29.0 | 638 | 19 | 25,200 | 39.5 |
| 1991 | 2.9 | 18.4 | 671 | 20 | 23,700 | 35.3 |
| 1992 | 4.5 | 55.3 | 785 | 22 | 28,960 | 36.9 |
| 1993 | 6.5 | 42.8 | 870 | 24 | 34,437 | 39.6 |
| 1994* | 8.3 | 28.5 | 925 | 25 | 36,865 | 39.9 |

Note: Payments represent program liabilities incurred during the year and do not include beneficiary copayments.

* Estimated.

SOURCE: Health Care Financing Administration, Office of the Actuary.
require the Secretary of Health and Human Services to establish a prospective payment system for SNF services to be implemented on October 1, 1997. Under this system, a SNF would receive a fixed payment for each episode of care; the payment would cover all routine, nonroutine, and capital costs. Payment rates could vary by case mix, patient acuity, or any other appropriate factors. Aggregate payments, however, could not exceed 90 percent of what would have been paid under the current system. In addition, the prospective payment rates would be reduced to take into account beneficiary coinsurance.

An interim payment system for services provided on or after October 1, 1995, would be established until a prospective payment system was implemented. Since much of the recent growth in SNF spending is due to increased ancillary service use, payment for these services would be limited. Routine services would be subject to the per diem limits, and nonroutine services would be subject to facility-specific aggregate per stay cost limits. Nonroutine services would include all therapies, prescription drugs, complex medical equipment, intravenous therapy and solutions, radiation therapy, and diagnostic services. All other services, including some now considered ancillary, would be regarded as routine.

For fiscal year 1996 and beyond, the Secretary would recalculate the per diem routine cost limits, taking into account the expanded definition of routine services. To maintain the savings associated with the fiscal year 1994 and 1995 freeze on routine cost limits, any changes in the costs of services that occurred during these years would not be included in the new limits.

Payments for nonroutine services would be based on facility-specific costs, subject to facilityspecific aggregate per stay cost limits. ${ }^{5}$ This would provide an incentive for SNFs to restrict ancillary service use while allowing for variation across facilities in costs related to patient mix and input prices. For fiscal years 1996 through 2002, Medicare payments for SNF capital costs would be reduced by 10 percent.

The congressional proposal would also require the Secretary to establish a separate per stay amount for patients who need intensive nursing or
therapy services and to implement an annual exceptions payment application period. In addition, Part B billing would be restricted, and SNFs would have to submit all claims for beneficiaries in their care. SNFs would be required to document on their Medicare Cost Report all nonroutine services provided to Medicare SNF patients, beginning in fiscal year 1996. This would include the number and type of therapy services, laboratory tests, and radiology and diagnostic procedures.

The Administration's Proposal-The Administration's proposal would also significantly alter Medicare payment for skilled nursing facility services. A prospective payment system for SNFs would be implemented beginning in fiscal year 1999. It would be based on fixed payments for all routine, ancillary, and capital costs. Budget-neutral rates would be calculated so that aggregate fiscal year 1999 payments would not exceed 93 percent of aggregate fiscal year 1998 payments.

Beginning in fiscal year 1997 and until the establishment of the comprehensive prospective payment system, SNFs would be reimbursed under an interim system. Payments for routine services would be based on facility-specific prospective per diem payment rates. They would be calculated using Medicare Cost Report data, adjusted to maintain the savings associated with the freeze on routine cost limits during fiscal years 1994 and 1995. These rates would be subject to regional limits, adjusted to reflect differences in input prices. Although these limits would be applied to all SNFs, they would be calculated using data for freestanding facilities only, rather than including hospital-based SNFs, which tend to have higher costs. The per diem rates could be adjusted to reflect changes in the mix of patients treated by a SNF. However, these adjustments would be made prospectively and in a budget-neutral manner.

Ancillary services would continue to be reimbursed on a facility-specific cost basis, but only up to the amount that would have been paid under the fee schedule rates used by Medicare to pay other facilities for similar services. Salaries for therapists who provide contracted services would be limited as well. Capital costs would continue to be reimbursed on a facility-specific cost basis.

Beginning in fiscal year 1997, SNFs could no longer receive exceptions payments for costs in
excess of their limits. In addition, new facilities would no longer be granted an exemption from routine cost limits for their first few years of operation. Prospective per diem payment rates for routine services in new facilities would be based on the mean payment for SNFs in the same geographic area. SNFs would also have to submit all claims for Part B services for their patients and use consistent coding.

## Home Health Services

Beneficiaries qualify for home health services if they are homebound and under the care of a physician who prescribes part-time or intermittent skilled nursing services, physical therapy, or speech therapy. Once authorized, beneficiaries may receive an unlimited number of these qualifying services, as well as home health aide visits, medical social services, or occupational therapy. Coverage is not tied to a prior hospitalization, and no copayment is required.

Under Medicare's payment method for home health services, agencies are paid the lower of their aggregate costs or limits. The limits are equal to 112 percent of the average cost per visit for each of six types of visits, computed separately for rural and urban areas. The labor portion of each limit is adjusted by the hospital wage index. These cost limits are frozen for cost reporting periods beginning between July 1, 1994, and June 30, 1996. Because this payment method is largely cost-based, agencies have little incentive to control the cost or volume of services delivered.

Growth in Facilities, Utilization, and Expendi-tures-The increased availability of home health providers has contributed to the growth in use and Medicare expenditures for these services. The number of licensed agencies climbed by 50 percent between 1990 and 1995 (see Table 4-8). Freestanding proprietary agencies, which accounted for about half of all agencies in 1995, rose 65 percent. Hospital-based agencies also grew substantially, from 1,543 in 1990 to 2,346 in 1995.

Home health visits have increased dramatically in the last decade, from about 37 million in 1983 to 209 million in 1994 (see Table 4-9). The number of beneficiaries using home health climbed from 45 per 1,000 Medicare enrollees to 87 per 1,000
enrollees during this period. Use levels also surged from an average of 28 to 65 visits per person. Much of this increase is due to changes in coverage guidelines. These revisions allowed beneficiaries who needed part-time care (fewer than eight hours a day) or intermittent care (four or fewer days per week) to qualify for services. This expanded both the number of people receiving the benefit and the number of services used.

Home health episodes of care have also become longer. A home health episode is defined as a series of visits, preceded and followed by a period without visits. Using a gap of 60 days to define new episodes, the proportion of short episodes (those lasting 30 or fewer days) fell from 39 percent in 1990 to 32 percent in 1993 (see Table 4-10). Episodes lasting 121 days or longer went from 19 percent to 25 percent of all episodes. Longer episodes tended to include a higher proportion of the less costly home health aide visits. For example, 50 percent of the visits in very long episodes (those lasting at least 166 days) were aide visits, whereas aide services accounted for only 21 percent of the visits in short episodes (see Table 4-11). Further, compared with shorter episodes, longer ones were characterized by a higher proportion of aide visits throughout the episode.

Medicare's spending for home health services has grown at least 20 percent a year since the late 1980s. The rate of growth has declined, however, since the 53 percent spike in 1990. Still, home health's share of Medicare program expenditures has continued rising.

Proposed Payment Changes-The Congress and the Administration both have proposed establishing prospective payment systems for home health services. The congressional proposal would set prospective rates for each type of home health visit but limit total payments per episode, as of fiscal year 1997. By contrast, the Administration's proposal would establish episode-based payments effective in fiscal year 2000. Measures to limit spending in the intervening years also would be introduced.

In addition, both proposals would retain the savings from the two-year freeze on the cost limits and would make other interim modifications to the current payment system to reduce Medicare spending.

Table 4-8. Types of Medicare-Certified Home Health Agencies, 1990-1995

|  |  |  |  |  |  | Percent <br> Change |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Agency Type | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | $1990-1995$ |
|  |  |  |  |  |  |  |  |
| Visiting Nurse Association | 476 | 515 | 595 | 596 | 575 | 570 | $20 \%$ |
| Government | 981 | 1,089 | 1,240 | 1,205 | 1,208 | 1,191 | 21 |
| Hospital-based | 1,543 | 1,601 | 1,786 | 1,998 | 2,207 | 2,346 | 52 |
| Rehabilitation facility-based | 10 | 4 | 1 | 1 | 3 | 3 | -70 |
| Skilled nursing facility-based | 105 | 90 | 106 | 117 | 127 | 145 | 38 |
| Freestanding proprietary | 2,678 | 2,650 | 2,691 | 3,234 | 3,937 | 4,407 | 65 |
| $\quad$ Total | 5,793 | 5,949 | 6,419 | 7,151 | 8,057 | 8,662 | 50 |

* Includes a small number of freestanding, private, not-for-profit agencies that are not Visiting Nurse Associations (26 percent).

SOURCE: Health Care Financing Administration, Office of Survey and Certification.

The Congressional Proposal-The Congress proposes replacing cost-based payments with prospective rates for each of the six types of home health visits beginning in fiscal year 1997. These rates would be based on national average costs in cost reporting periods ending on or before June 30, 1994. They would be updated for each succeeding year by the home health market basket increase minus 2.0 percentage points. Rates would be recalculated using the most recent data every five years beginning in October 1999.

Total payments for the first 165 days of care would be limited to the lower of actual per visit payments or aggregated, episode-based limits. To determine the episode limits, visits would be aggregated into patient-level episodes of care. Each episode would be classified into one of 18 case-mix
categories. For each case-mix category, regional limits would be calculated based on the average cost of up to 120 days of care. Each agency's limit would equal the number of episodes it provided in each case-mix category times the regional case-mix limit.

Agencies with aggregate payments below their limit would receive an incentive payment equal to 50 percent of this difference up to 5 percent of their aggregate payments. Basing the payment limit on 120 days of care and sharing part of the payment difference would give agencies an incentive to reduce the number of services provided during an episode.

The episode limit would be applied to the first 165 days in an episode. The prospective payments for the subsequent visits in an episode would not be included in the episode-based payment limit. The

Table 4-9. Medicare Home Health Care Payments and Utilization, 1983-1994

| Year of Service | Medicare |  | People Served |  | Visits |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Payments (In Billions) | Percent Change | Number (In Thousands) | Per 1,000 Enrollees | Number (In Thousands) | Per 1,000 Enrollees | Per Person Served |
| 1983 | \$ 1.6 | - | 1,318 | 45 | 36,898 | 1,234 | 28 |
| 1984 | 1.9 | 17.5\% | 1,498 | 50 | 40,422 | 1,330 | 27 |
| 1985 | 1.9 | 4.0 | 1,549 | 50 | 39,449 | 1,274 | 25 |
| 1986 | 1.9 | -0.5 | 1,571 | 50 | 38,000 | 1,204 | 24 |
| 1987 | 1.9 | -1.2 | 1,544 | 48 | 35,591 | 1,104 | 23 |
| 1988 | 2.1 | 8.6 | 1,582 | 48 | 37,132 | 1,130 | 23 |
| 1989 | 2.6 | 23.8 | 1,685 | 50 | 46,199 | 1,379 | 27 |
| 1990 | 3.9 | 53.2 | 1,940 | 57 | 69,565 | 2,038 | 36 |
| 1991 | 5.7 | 44.2 | 2,223 | 64 | 100,044 | 2,875 | 45 |
| 1992 | 7.9 | 39.5 | 2,523 | 71 | 134,844 | 3,796 | 53 |
| 1993 | 10.7 | 34.6 | 2,900 | 80 | 173,953 | 4,804 | 60 |
| 1994* | 13.0 | 22.1 | 3,220 | 87 | 209,149 | 5,765 | 65 |

Note: Payments represent program liabilities incurred during the year and do not include beneficiary copayments.

* Estimated.

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

Table 4-10. Distribution of Home Health Episode Lengths, 1990 and 1993

|  | Percent of |  |
| :--- | :---: | :---: | :---: |
| All Episodes |  |  |$\quad$| Percent |
| :---: |
| Episode Length |
| Change |
| All episodes |
|  |
| Short |
| Medium |

Note: Short episodes lasted 30 days or fewer; medium episodes exceeded 30 days but lasted fewer than 121 days; long episodes exceeded 120 days.
SOURCE: ProPAC analysis of 1990 and 1993 home health claims from the Health Care Financing Administration.
patient would, however, have to be certified as requiring continuing care. New episodes would begin after a period of 60 days without services.

The congressional proposal would also limit aggregate exceptions and exemptions payments to the amounts paid in fiscal year 1994, increased by the market basket percentage change for each year.

The Administration's Proposal-The Administration's proposal also would establish an episode-based
prospective payment system for home health services, but not until fiscal year 2000. The Secretary would develop both a prospective payment rate for an episode of care and a reliable case-mix adjuster in the interim. The episode payment amounts would be updated by the market basket. If a beneficiary received services from multiple agencies, each agency's payment would be prorated. Payment rates would incorporate a 15 percent reduction in cost limits that would be in effect on September 30, 1999.

The Administration's proposal also contains some interim changes to the payment system for fiscal years 1997 through 1999. Agency payments would be the lower of aggregate cost limits, agencyspecific per beneficiary amounts, or actual costs. Cost limits would be reduced from 112 percent of the mean to 105 percent of the median. The per beneficiary amount would be determined by blending 1994 agency-specific costs with the national average cost. Alternatively, the Secretary could substitute a utilization measure in this formula. Agencies could receive bonus payments up to 5 percent of their aggregate payments if their costs or utilization were below 125 percent of the 1994 national average or regional aggregate experience.

Other changes would base payments on the service delivery area instead of the agency's geographic

Table 4-11. Number and Type of Home Health Visits, by Episode Length

| Episode Length | Total Number of Visits | When Visits Occur in Episode | Mean Visits Per Episode | Share of Visits in Episode |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Skilled Nursing | Aide | Physical Therapy | Other |
| Short | 6,930,600 | 100\% | 9 | 60\% | 21\% | 15\% | 4\% |
| Medium | 35,158,905 | 100 | 33 | 49 | 31 | 16 | 3 |
| First 30 days |  | 72 |  | 50 | 29 | 16 | 6 |
| Days 31-120 |  | 28 |  | 45 | 36 | 15 | 4 |
| Long | 10,139,625 | 100 | 74 | 47 | 38 | 11 | 4 |
| First 30 days |  | 37 |  | 49 | 33 | 12 | 6 |
| Days 31-120 |  | 56 |  | 45 | 40 | 11 | 4 |
| Days 121-165 |  | 7 |  | 46 | 42 | 9 | 3 |
| Very Long | 83,114,840 | 100 | 163 | 42 | 50 | 6 | 2 |
| First 30 days |  | 18 |  | 49 | 38 | 9 | 4 |
| Days 31-120 |  | 29 |  | 43 | 47 | 7 | 3 |
| Days 121-165 |  | 14 |  | 41 | 57 | 5 | 3 |
| Days 166 or more |  | 39 |  | 38 | 57 | 4 | 1 |

Note: Short episodes lasted 30 days or fewer; medium episodes exceeded 30 days but lasted fewer than 121 days; long episodes exceeded 120 days. These data are for episodes beginning between July 1, 1993, and June 30, 1994.
SOURCE: ProPAC analysis of 1990 and 1993 home health claims from the Health Care Financing Administration.
location. Interim payments, which currently are provided to home health agencies, would be eliminated. The proposal also would require that, beginning in fiscal year 1997, only the services provided during the first 100 days following a hospitalization would be paid under Part A. Visits after that period or any that were not associated with a hospital stay would be paid under Part B.

## Conclusions and Recommendations

Both the Congress's and the President's proposals attempt to restrict the growth in Medicare's postacute care spending. The average payment updates under the TEFRA payment system would be lower than those under current law. Skilled nursing and home health payments would be changed from costbased reimbursement to prospective payment systems. Each proposal contains interim measures to restrict payments. However, neither one fully addresses the rising use of post-acute services. Following are the Commission's recommendations on the general approach to improve payments to postacute providers and to help control the growth in Medicare spending.

## Recommendation 20: Prospective Payment for Post-Acute Care

Prospective payment systems should be implemented for all post-acute services. The payment method for each service should be consistent across delivery sites. The Secretary should explore methods to control the volume of post-acute service use, such as bundling services for a single payment.

The post-acute care industry is characterized by substantial growth in the numbers of providers, people receiving services, and the services used by each recipient. These factors have contributed to the double-digit increase in Medicare's expenditures and the ever-larger share of Medicare payments for post-acute services. Some of this growth is due to site substitution between hospitals and post-acute providers. A large part of it, however, is due to the absolute increase in post-acute services provided to beneficiaries.

Prospective payment systems for post-acute services are needed to ensure that only necessary
services are provided and to improve Medicare's ability to track and compare service use. Further, broadening the payment unit to include all the services furnished during an episode of care would encourage providers to be more efficient. These payment changes, however, should be accompanied by mechanisms to make certain that facilities have the capacity to provide quality services appropriate to the patient's needs.

The Health Care Financing Administration (HCFA) has sponsored demonstration projects to develop prospective payment systems for skilled nursing facilities and home health agencies that have been in progress for several years. In addition, it is supporting research to develop prospective payment for rehabilitation services. Despite the overlap in the types of services delivered by each of these providers, the research projects have been managed, tested, and evaluated independently of each other. The Secretary should coordinate these efforts to develop consistent service units and prospective payment systems.

## Recommendation 21: Case-Mix Measures for Post-Acute Services

Reliable case-mix measurement is important in prospective payment systems to account for resource use and to analyze treatment patterns and costs across sites. The Secretary should coordinate case-mix research across post-acute care settings, using consistent methods for measuring patient acuity and resource use.

Reliable case-mix measurement systems strengthen prospective payment by accounting for patient characteristics that affect resource use. Further, they allow for comparisons of service use and expenditures across beneficiaries and treatment settings. HCFA is sponsoring research to measure the intensity of services provided in rehabilitation, skilled nursing, and home health settings. It is essential that these studies be coordinated. Many of the same services, particularly nursing and therapies, are delivered by each of these providers, yet the units for measuring resource use differ in each demonstration. Thus, accurate comparisons of treatments or costs are not possible. HCFA should coordinate its efforts to produce a reliable system that consistently
classifies patients served and the number and types of services provided across delivery sites.

## Recommendation 22: Interim Fee-for-Service Payment Method for Skilled Nursing Facility Services


#### Abstract

An interim payment method should be implemented to control the growth in Medicare payments for SNF services until a comprehensive prospective payment system is established. A system based on historical data and facility-specific limits, however, may not allow facilities to respond appropriately to changes in a dynamic environment.


The Congress's and the President's proposals differ in their approaches to limiting Medicare payments for SNF services until a prospective payment system is implemented. They are similar, however, in that each would impose facility-specific and national limits. Both proposals would use Medicare Cost Report data, updated by the SNF market basket, to calculate limits or rates. Therefore, payments would reflect historical costs, patient mix, and treatment patterns. To account for the lack of a case-mix measurement system, the congressional plan would require the Secretary to develop a separate method for reimbursing SNFs for patients with intensive nursing or therapy needs. Likewise, the President's proposal would allow the Secretary to adjust the per diem rates to reflect changes in patient severity.

The Commission believes that interim payment limits should be designed to provide appropriate constraints on Medicare outlays without unduly restricting this evolving industry. Facility-specific limits would allow SNFs that had high costs during the base year to maintain higher payments year after year, while those that experienced low costs during the base year would be restricted to these lower levels. On the other hand, payment limits based on average costs would not reflect legitimate cost differences across facilities. Further, historical data would not account for the higher costs associated with the changing acuity of SNF patients. Alternative methods for calculating payment limits, such as using a larger geographic area or blending facility-specific and national rates, should be explored.

## Recommendation 23: Interim Fee-for-Service Payment Method for Home Health Care

Until a fully prospective payment system is
developed, the Commission supports adopt-
ing episode-based payment limits. In addi-
tion, beneficiary copayments, subject to an
annual limit, should be introduced.
The Commission recognizes that a prospective payment system for home health care will take time to implement. In the interim, other mechanisms should be established to constrain the growth in service use. Instituting episode-based payment limits, as proposed by the Congress and the Administration, would encourage providers to deliver services more efficiently. In addition, adopting copayments would increase beneficiaries' involvement in home health treatment decisions, consistent with their financial responsibility for other Medi-care-covered services. Beneficiary out-of-pocket costs should be limited, however, so that the copayments do not restrict access inappropriately. Further, Medicare needs to explore other means, such as case management and utilization review, to control use.

In developing prospective payment rates, characteristics of the current home health delivery system should be considered. Units of service are not uniformly defined across agencies. Consistent definitions would allow the Secretary to better monitor and evaluate Medicare's expenditures and quality of care. In addition, both the Congress and the President propose blending national and regional costs to establish payment limits. While the Commission believes these proposals would improve the current cost-based system, it is concerned that maintaining regional variation in the limits would perpetuate unjustified differences in utilization and expenditures. ProPAC supports a transition from regional to national rates, as was used in establishing hospital prospective payment rates, to eliminate this type of unexplained variation.

## AMBULATORY CARE PROVIDERS

Medicare spending for ambulatory care, whether furnished in outpatient facilities or in physicians' offices, increased from 30 percent of total program expenditures in 1983 to 32 percent in 1994. Part B payments to outpatient facilities alone reached
$\$ 14.1$ billion in 1994. ${ }^{6}$ Outpatient care is provided in hospital outpatient departments, freestanding ambulatory surgical centers, independent clinical laboratories, comprehensive outpatient rehabilitation facilities, and hospital-based and freestanding dialysis centers. However, 85 percent of Medicare outpatient spending goes to hospital outpatient departments and dialysis centers. This section focuses on services provided by these facilities.

## Outpatient Dialysis Services

The 1972 amendments to the Social Security Act extended all Medicare Part A and Part B benefits to people with end-stage renal disease (ESRD). Virtually all patients of any age who are diagnosed with ESRD are eligible. ESRD is marked by the irreversible loss of kidney (renal) function. It is treated either with organ transplantation or permanent renal dialysis. The vast majority of ESRD enrollees are treated with either hemodialysis or peritoneal dialysis on an outpatient basis. ${ }^{7}$ Consequently, there is a strong incentive for these beneficiaries to purchase Part B coverage.

Benefits for a kidney transplant patient generally start the month in which the transplant is performed, whereas dialysis benefits generally begin three months after eligibility is established. For an ESRD enrollee who also is covered by an employersponsored group health plan, all medical claims during the first 18 months of Medicare eligibility are paid first by the employer's plan. If the employer's plan does not pay in full, Medicare will make secondary payments up to its specified limits or the billed amount, whichever is lower. This is known as the Medicare secondary payer provision.

Most dialysis patients receive hemodialysis in either hospital-based or freestanding dialysis centers. Others dialyze at home under the supervision of a local facility. When coverage for ESRD patients began, Medicare paid hospital-based and freestanding dialysis providers their reasonable costs and reasonable charges, respectively, limited to $\$ 138$ per treatment. Beginning in 1983, the payment methodology was changed to a prospective rate per dialysis treatment.

The prospective payment, called the composite rate, covers the bundle of services, tests, drugs, and supplies routinely required for a dialysis treatment
(hemodialysis or peritoneal dialysis) whether it is provided in a facility or performed by the beneficiary at home. It represents the national median cost per treatment, weighted by the percentage of patients dialyzing in each site.

The composite rate was calculated in 1983 based on a sample of Medicare Cost Reports from 1977 through 1979. Therefore, it reflects the mix and costs of inputs and the proportion of patients dialyzing in different sites at that time. The labor portion of the base rate is adjusted for geographic differences in wages; however, payments may not exceed $\$ 139$ per treatment. ${ }^{8}$ Hospital-based facilities receive a slightly higher composite rate than freestanding facilities.

Unlike Medicare payments to other types of providers, the composite rate has not been updated annually. Aside from a $\$ 2$ decrease implemented in 1986 and a $\$ 1$ increase in 1991, the composite rates have not changed. When accounting for inflation, therefore, the real payment per treatment has declined substantially. The Omnibus Budget Reconciliation Act (OBRA) of 1990 requires ProPAC to examine the payment for dialysis services and recommend an update factor each year.

Even though the composite rate has changed very little since it was implemented, total Medicare payments to dialysis facilities have increased rapidly. This is largely due to a 10 percent annual growth in the number of beneficiaries receiving dialysis. Rising use of certain extra billable dialysis-related items, among them nonroutine drugs and some diagnostic and laboratory tests, has contributed as well.

Moreover, aggregate Medicare expenditures for all beneficiaries with ESRD (including transplant recipients) have escalated, from 3.8 percent of total program payments in 1985 to 5.0 percent in 1994. This includes spending for acute and post-acute care for other conditions in addition to dialysisrelated services. Consequently, aggregate payments per ESRD enrollee rose from $\$ 28,158$ to $\$ 39,431$ during this period, while the size of this group grew rapidly (from 0.3 percent of the Medicare population to more than 0.6 percent). In 1994, Medicare payments per person with ESRD were almost nine times greater than for other beneficiaries. This reflects the high annual cost of dialysis as well as the high overall morbidity of these patients.

Proposed Payment Changes-Neither the Congress's nor the President's proposal includes an update to the composite rate. Both would, however, extend the Medicare secondary payer provision. Under current law, the 18 -month period will revert to 12 months on October 1, 1998. The President proposes to set it at 18 months indefinitely. The Congress would permanently extend it to 30 months.

While these proposals would not affect the composite rate payment methodology, they would achieve savings for the Medicare program. The exact amount of savings is uncertain, but it could be substantial. When the Medicare secondary payer provision was extended from 12 to 18 months (under OBRA 1990), the General Accounting Office (GAO) estimated that Medicare would shift $\$ 87$ million to employer plans each year. ${ }^{9}$ In addition, GAO estimated that dialysis providers would receive $\$ 41$ million more annually. This is because most private health plans pay on the basis of charges, which generally are substantially higher than Medicare's composite rate.

Update Framework-Dialysis providers have continued to treat a growing Medicare ESRD population, even though the inflation-adjusted payment rate has declined substantially. Moreover, freestanding facilities have prospered, largely because of dramatic gains in productivity that lowered service costs. Between 1983 and 1987, facilities achieved substantial productivity improvements through changes in staffing patterns, the use of high
flux and high efficiency dialysis (which led to shorter dialysis sessions), dialyzer reuse, and price discounts from suppliers. ${ }^{10}$ Scientific and technological advances, on the other hand, raised per treatment costs by 0.8 percent annually, on average.

Between 1987 and 1991, however, productivity gains had a much smaller effect on the cost per hemodialysis treatment (although still greater than that for scientific and technological advances). During this period, treatment sessions became more intensive, requiring more sophisticated techniques and equipment and a richer mix of staff to monitor patient outcomes. Scientific and technological advances continued to increase per treatment costs, but only by about 0.2 percent annually.

More recent data show that dialysis facilities' costs are rising, though more slowly than inflation in the goods and services they purchase. Medicare costs for both hemodialysis and peritoneal dialysis in hospital-based facilities increased, on average, by 1.4 percent per year from 1991 to 1994. By contrast, ProPAC's market basket index for hospitalbased facilities averaged 3.3 percent annual growth over the same time. ${ }^{11}$ Medicare costs in freestanding facilities rose by 2.2 percent annually from 1991 to 1993, compared with a 3.7 percent average market basket increase. ${ }^{12}$

On average, Medicare costs in hospital-based facilities were about 45 percent higher in 1994 than those in freestanding facilities. Aggregate Medicare payments to hospital-based facilities covered only

Table 4-12. Payment to Cost Ratios for Hospital-Based and Freestanding Dialysis Facilities, All Dialysis Treatments, 1990-1994

| Hospital Category | Hospital-Based Facilities |  |  |  |  | Freestanding Facilities |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1990 | 1991 | 1992 | 1993 | 1994 | 1990 | 1991 | 1992 | 1993 | 1994 |
| All | 0.86 | 0.80 | 0.80 | 0.77 | 0.77 | 1.12 | 1.13 | 1.11 | 1.08 | 1.05 |
| Rural | 0.85 | 0.79 | 0.77 | 0.78 | 0.78 | 1.10 | 1.09 | 1.07 | 1.02 | 0.98 |
| Urban | 0.86 | 0.80 | 0.80 | 0.76 | 0.76 | 1.12 | 1.14 | 1.12 | 1.09 | 1.06 |
| Nonprofit | 0.85 | 0.80 | 0.80 | 0.77 | 0.77 | 1.08 | 1.06 | 1.03 | 1.04 | 1.05 |
| Profit | 1.00 | 0.85 | 0.85 | 0.68 | 0.68 | 1.13 | 1.15 | 1.13 | 1.09 | 1.05 |
| Small | 0.72 | 0.72 | 0.71 | 0.64 | 0.64 | 1.04 | 1.04 | 1.02 | 0.97 | 0.92 |
| Medium | 0.85 | 0.77 | 0.77 | 0.75 | 0.75 | 1.12 | 1.11 | 1.09 | 1.06 | 1.02 |
| Large | 0.91 | 0.85 | 0.85 | 0.80 | 0.80 | 1.15 | 1.18 | 1.16 | 1.13 | 1.10 |

Note: 1994 ratios are based on estimated payments and costs for freestanding facilities. Includes both hemodialysis and peritoneal dialysis treatments.
SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

77 percent of reported costs (see Table 4-12). By contrast, Medicare payments were approximately 5 percent above freestanding facilities' reported Medicare costs. ${ }^{13}$ For both types of providers, larger facilities (those that treated the highest volumes of patients) had lower costs per treatment and therefore better financial performance.

It appears that freestanding dialysis facilities in particular-which account for about 64 percent of all facilities and serve about 69 percent of all dialysis patients-performed well through 1994. As the costs of providing dialysis services have slowly risen, however, Medicare payment to cost ratios have gradually declined. Additionally, cost report data suggest that facilities recently have achieved only modest cost savings through productivity improvements (see Table 4-13). In 1994, hemodialysis treatments per station and total treatments per full-time equivalent employee were no longer increasing as they had in the past, while staffing mix was stable.

Some observers are concerned that continued attempts to achieve productivity gains-primarily through shorter dialysis sessions-may adversely affect the quality of care provided to Medicare ESRD beneficiaries. Adjusted survival rates have improved among dialysis patients in recent years, despite the fact that they are older and sicker than before. ${ }^{14}$ Survival has increased for all age, race, ethnic, and diagnosis groups, as well as for all
dialytic modalities. But rates still may not be as high as they should.

A measure of dialysis adequacy is $\mathrm{Kt} / \mathrm{V}$ (the fraction of a patient's total body water cleared of urea during a dialysis session). ${ }^{15}$ Recent studies have found that almost 50 percent of hemodialysis patients had a $\mathrm{Kt} / \mathrm{V}$ of less than 1.0 , placing them at higher risk for morbidity and mortality. One reason may be that many patients are not dialyzed long enough. Treatment times fell, on average, from 15 to 18 hours a week in the 1970s to 12 to 15 hours a week in the 1980s. During the early 1990s, average lengths of hemodialysis slipped even further, although recently they have begun to rise. Improved technology may account for shorter treatment times, but economic incentives to save on labor and capital costs as well as patient preferences also contribute to the phenomenon.

Mortality rates for dialysis patients generally are believed to be greater in the United States than in Europe or Japan. Studies have found that the higher mortality in this country cannot be explained by differences in patient age, gender, race, or the presence of diabetes. These studies, however, continue to be limited by inadequate measures of patient severity.

More definitive studies are needed, but recent evidence suggests that treatment factors heavily influence mortality rates. For example, prescribed

Table 4-13. Median Productivity Indicators for Hospital-Based and Freestanding Dialysis Facilities, 1990-1994

|  | Total <br> Treatment <br> Per FTE | Staff <br> Mix | Hemodialysis <br> Treatments <br> Per Station | Length of <br> Dialysis <br> (in Hours) | Dialyzer <br> Reuse |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Facility Type |  |  |  |  |  |
| Hospital-based <br> 190 | 550 | 0.67 | 599 | 4.5 | - |
| 1991 | 561 | 0.64 | 618 | 4.5 | - |
| 1992 | 563 | 0.64 | 621 | 4.5 | - |
| 1993 | 587 | 0.63 | 645 | 4.5 | - |
| 1994 | 588 | 0.63 | 642 | 4.5 | - |
|  |  |  |  |  |  |
| Freestanding |  |  |  |  |  |
| 1990 | 659 | 0.33 | 539 | 4.5 | 9.1 |
| 1991 | 625 | 0.35 | 555 | 4.5 | 10.0 |
| 1992 | 617 | 0.34 | 566 | 4.5 | 11.2 |
| 1993 | 0.35 | 563 | 4.5 | 12.0 |  |

Note: 1994 data are not available for freestanding facilities. FTE = full-time equivalent. Staff mix = ratio of registered nurses to all direct patient care staff, including registered and licensed practical nurses, nursing assistants, and technicians. Dialyzer reuse measures average number of times dialyzers are reused.
SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.
$\mathrm{Kt} / \mathrm{V}$ in Europe appears to be higher than in the United States, and dialyzer reuse-which may decrease urea clearance-is less common in other countries. ${ }^{16}$ Nations also differ in the extent to which they use in-facility hemodialysis, which has been associated with a lower survival rate compared with peritoneal dialysis. Even within the United States, the relative use of these modalities varies among facility types. This reinforces the concern that treatment variation may be driving differences in mortality rates.

ProPAC's ongoing analysis of dialysis costs indicates that input prices can be expected to rise by about 3.2 percent between fiscal years 1996 and 1997. Scientific and technological advances are expected to increase per treatment costs by 0.7 percent over the same period. ${ }^{17}$ Although this industry is not likely to repeat the marked productivity improvements experienced in the 1980s, the Commission believes that gains consistent with the hospital industry can be achieved.

Despite rising costs and declining financial performance, the number of dialysis providers continues to grow by about 6 percent per year. This may reflect the continued increase in the number of ESRD beneficiaries. However, freestanding facili-ties-particularly proprietary ones-have grown by about 9 percent annually, a rate much faster than that for hospital-based providers.

Many industry experts have raised concerns about whether this industry can continue to provide quality dialysis services without higher payments. There is no conclusive evidence that the quality of care has actually declined or that there are quality differences across facility types. Nonetheless, recent studies indicate that a substantial percentage of hemodialysis patients in the United States may be underdialyzed and that treatment is a major factor affecting patient outcomes. If facilities must extend treatment times to ensure that Medicare patients receive adequate dialysis, their costs are likely to increase further.

## Hospital Outpatient Services

Medicare payments for many hospital outpatient services are based at least partially on the providers' reasonable costs of furnishing the service. For certain ambulatory surgeries, radiology services, and diagnostic procedures, the total payment is the lowest of
the hospital's reasonable costs, charges, or a blended amount that combines the lesser of costs or charges with a prospective payment amount for the same service in another setting. Payment for some other services, such as clinic and emergency room visits, is the lesser of the hospital's costs or charges. Still others (laboratory tests, for example) are paid for using a fee schedule, without regard to the provider's actual costs.

The use of multiple payment methods not only creates conflicting incentives for hospitals, but imposes an administrative burden. Moreover, different payment methods and amounts are applied for the same service across sites of care. This may inappropriately influence the choice of treatment setting.

In addition, cost-based payment methods provide weak incentives to constrain the cost and volume of services furnished. As a result, Medicare outlays for hospital outpatient services have increased rapidly. In response, the Congress mandated in OBRA 1990 that the Secretary of Health and Human Services develop a prospective payment system for hospital outpatient services. The Secretary's report, released in 1995, recommended implementation of prospective payment in several phases. ${ }^{18}$ In its response to that report, the Commission expressed concern about several issues.

First, if prospective payment were implemented on an incremental basis, hospitals and Medicare would bear the costs associated with adopting a new payment system while receiving few of the desired benefits. Partial implementation would do little to promote simplicity or predictability of payment, or to reduce the administrative burden on hospitals or the program. Such a policy also would create opportunities for providers to increase their revenues by altering billing practices or reallocating overhead costs to services that remain under cost-based payment. Second, even a comprehensive prospective payment system would retain fee-forservice payment, with little incentive for providers to control the burgeoning volume of services.

Given these concerns, the Commission recommended that the incremental hospital outpatient prospective payment system proposed by the Secretary not be enacted. ProPAC continued to support the concept of a comprehensive payment system
for hospital outpatient services, but recommended that the Congress require the Secretary to submit a fully detailed legislative proposal for implementing such a system. In addition, the Commission recommended coupling prospective payment with a strategy to control the growth in overall outpatient service volume. As most outpatient services can be provided in multiple settings, imposing volume controls only on hospital outpatient services probably would shift them to other sites.

Beneficiary Liability-Because Medicare payments for hospital outpatient services are based partially on costs, final payments are not known until providers' annual cost reports are settled. Consequently, under current law, the beneficiary copayment is set at 20 percent of charges rather than 20 percent of the total payment, as it is for other Part B services.

Basing copayments on hospital charges results in savings to the Medicare program. Since beneficiary liability is subtracted from the total payment to determine Medicare's contribution, rising copayments defray some program spending. At the same time, however, charge-based copayments impose an ever-greater financial burden on Medicare enrollees who use hospital outpatient services. Moreover, this burden is increasingly uneven across types of services and settings.

According to the most recent estimates, beneficiaries are responsible, on average, for 37 percent of the total payments to hospitals for Medicarecovered outpatient services. For certain surgeries, radiology, and diagnostic procedures, beneficiaries pay about 53 percent of the total. For other costbased outpatient services, it is about 30 percent. These shares are considerably higher than if the same services were provided in other ambulatory settings.

These differences in cost sharing unfairly penalize beneficiaries who receive care in hospital outpatient facilities. In addition, they provide strong incentives for physicians, acting on behalf of patients, to choose a site of care on the basis of financial considerations rather than clinical appropriateness. These incentives are 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. Setting beneficiary copayments at 20 percent of payments instead of 20 percent of charges would increase program spending, but would eliminate this source of adverse incentives and growing inequity in the payment burden.

Formula-Driven Overpayment-Medicare's share of the payment for certain ambulatory surgeries, radiology services, and some diagnostic services is supposed to be the total amount minus the beneficiary copayment. For facilities paid the blended amount, however, program payments are not reduced by the entire copayment. ${ }^{19}$ Thus, total payments to hospitals for outpatient services are higher than the Congress intended. In addition, this problem with the formula provides a strong incentive for hospitals to raise charges, which increases beneficiary liability and total payments to hospitals.

ProPAC previously recommended changing the formula so that the beneficiary copayment is subtracted after the total amount is calculated. This correction would result in savings for Medicare, which should be used to offset spending increases caused by reducing beneficiary copayments.

Proposed Payment Changes-The Congress's proposal would correct the formula-driven overpayment in a manner that is consistent with past ProPAC recommendations. However, it does not address prospective payment for hospital outpatient services or the issue of beneficiary liability. The President's proposal contains no provision regarding Medicare payment for hospital outpatient services.

## Conclusions and Recommendations

The Commission's analyses of Medicare policies regarding ambulatory care providers have focused on dialysis facilities and hospital outpatient departments not only because of ProPAC's statutory obligations, but also because these facilities account for the vast majority of Medicare outpatient spending. In making recommendations, however, the Commission is mindful of how changes to Medicare's payment policies will affect other ambulatory care providers and expenditures for other services.

## Recommendation 24: Update to the Composite Rate for Dialysis Services

> The Secretary should develop methods to control total Medicare per capita expenditures for ESRD beneficiaries. In the meantime, the composite rate should be updated by 2.7 percent for hospital-based dialysis facilities and by 2.0 percent for freestanding facilities for fiscal year 1997 . The Secretary should also develop reliable measures of patient severity and outcomes to analyze the relationships among treatment processes, patient outcomes, and costs. These factors should be considered in evaluating the need for and the level of future payment updates.

The rapid growth in total Medicare spending for ESRD beneficiaries is a major concern. A large part of this increase is due to an expanding ESRD population. But these beneficiaries are also using more acute inpatient, skilled nursing, home health, and dialysis-related services than ever before. A comprehensive payment method that encompasses a broader set of services should be explored. Capitation has been successful in controlling expenditure growth for other populations. Most ESRD beneficiaries, though, are not eligible to enroll in the Medicare risk program. The Secretary should either open enrollment to this group or consider implementing a separate capitation program. At a minimum, utilization review or other managed care techniques should be used to control the total volume of services provided to ESRD beneficiaries across all sites of care.

Until major policy changes are made, Medicare should consider the adequacy of its current payment rates. Unlike program payments to other types of health care providers, the composite rate for outpatient dialysis services is not updated annually. That Medicare treats dialysis facilities differently is of some concern. This is heightened by the fact that neither the Congress's nor the President's proposal contains a provision to update the composite rates. Under these proposals, dialysis facilities would not receive payment increases for the next seven years.

Dialysis facilities have treated a growing Medicare ESRD population, even though the inflation-adjusted payment rate has declined substantially. The Medicare
program is responsible for making certain that payments for services furnished to its beneficiaries are adequate to ensure quality care. Recent evidence suggests that input costs are rising and that large productivity gains may no longer be possible. Consequently, these facilities may be unable to continue to provide quality dialysis services without a payment rate increase. Given widespread concern about the quality of dialysis services, the composite rate should be updated as suggested by ProPAC's update framework. Differential updates would help to account for cost differences between hospital-based and freestanding facilities. Further, the Secretary should closely monitor treatment patterns and patient outcomes to ensure that facilities use the payment increase to improve quality of care.

## Recommendation 25: Prospective Payment for Hospital Outpatient Services

A comprehensive prospective payment system should be developed for hospital outpatient services. Such a system should include a strategy for controlling the volume of ambulatory services.

A prospective payment system for all hospital outpatient services should be implemented as soon as possible. Prospective payment would create incentives for controlling costs by offering providers the opportunity for profits as well as the risk of financial loss. Because almost all services provided in the hospital outpatient setting can be obtained in other ambulatory settings, the Secretary should strive to create consistent payment policies across all sites and providers.

ProPAC analyses indicate that much of the rise in Medicare spending for outpatient services is due to rapid increases in utilization. To constrain future growth in outpatient service use, a strategy for limiting use should be developed. Imposing volume controls on hospital outpatient services only, however, probably would lead to a shift in use to other sites. Ultimately, therefore, volume control methods should apply to all ambulatory care settings.

## Recommendation 26: Beneficiary Liability for Hospital Outpatient Services

The growing financial burden for Medicare enrollees who receive services in hospital
outpatient departments should be alleviated immediately. Beneficiary coinsurance for these services should be limited to 20 percent of the Medicare-allowed payment, as it is in other settings. For services not paid on a prospective basis, the Secretary should establish a new method for determining beneficiary copayments based on estimated allowed payments since they cannot be calculated precisely when services are delivered.

Under current law, the beneficiary's copayment for hospital outpatient services is 20 percent of charges rather than 20 percent of the total payment, as it is for virtually all other Part B services. Because hospital charges generally are higher than total payments, beneficiaries are responsible for substantially more than 20 percent of total payments. In addition, because hospitals' charges have grown more rapidly than total payments, beneficiary cost sharing has increased disproportionately. If this continues, the beneficiary's share of outpatient payment soon will overtake the program's share.

Beneficiary liability for hospital outpatient services is higher than it would be if the services were provided in another setting. Such differences in cost sharing unfairly penalize beneficiaries who receive care in hospital outpatient facilities.

Until a prospective payment system is implemented, copayments should be based on estimated payments. This could be done in several ways. Copayments could equal a lower percentage of charges, for example. Alternatively, HCFA could use an estimate of each hospital's payment to charge ratio, to determine the coinsurance amount for each service.

Reducing beneficiary coinsurance would raise Medicare outlays. The Commission therefore recommends that the reduction in program payments resulting from correcting the blended payment formula, as specified in the Congress's proposal, partially offset this increase. If necessary, the change in beneficiary liability could be phased in over several years.

## Notes to Chapter 4

1. The Medicare provisions passed by the Congress are in H.R. 2491, the "Balanced Budget Act of 1995." The Medicare provisions of the President's proposal are in Title II of draft legislation, called the "Balanced Budget Act of 1995 for Economic Growth and Fairness." Released on December 7, 1995, it has not been introduced in the Congress.
2. Rehabilitation and psychiatric distinct-part units newly certified by Medicare are exempt from TEFRA limits only for their first full 12month cost reporting period. The first full year of operation is designated as the base year for these facilities.
3. The only restriction on ancillary service costs, other than meeting Medicare's definition of reasonableness, is that when physical and respiratory therapy services are provided "under arrangement" by an external facility, the therapists' salaries must be below HCFA's statelevel salary guidelines.
4. In the lawsuit, Fox v. Bowen, 656 F. Supp. 1236 (D. Conn. 1986), the Court held that the Secretary's practice of using arbitrary rules to deny physical therapy benefits delivered by SNFs violated Medicare statutes and regulations and the due process clause of the U.S. Constitution. MCCA removed the prior hospital stay requirement, decreased the SNF copayment, and broadened coverage by changing the maximum benefit to 150 days per year.
5. The nonroutine cost limits would be calculated by determining the average costs per stay of nonroutine services during the last (12-month) cost report submitted on or before December 31, 1994. This amount would then be updated by the SNF market basket to fiscal year 1996 and multiplied by the number of stays that the SNF had during the year. Per stay amounts would be updated by the SNF market basket minus 2 percentage points in fiscal year 1997 and in each subsequent year until the implementation of the prospective payment system. Estimates of Medicare Part B payments for SNF services provided to beneficiaries eligible for Part A during the 1994 cost reporting period
would be included in the facility-specific limits. In addition, facilities that did not submit a cost report in 1994 would be assigned per stay limits based on the national average cost for nonroutine services.
6. Health Care Financing Administration, Office of the Actuary.
7. As the number of kidney transplants performed and graft survival rates has risen over time, the proportion of all Medicare ESRD beneficiaries with a functioning transplant has increasedfrom 10.8 percent in 1978 to 22.0 percent in 1991. Still, dialysis patients accounted for a large majority of ESRD enrollees in 1991.
8. The payment limit was increased to $\$ 139$ under OBRA 1990.
9. U.S. Congress, General Accounting Office, Medicare: Impact of OBRA-90's Dialysis Provisions on Providers and Beneficiaries, GAO/HEHS-94-65 (Washington, DC: U.S. Government Printing Office, April 1994).
10. Project HOPE's Center for Health Affairs, Identifying Changes in the Factors of Production for Dialysis Services, ProPAC Extramural Technical Report, No. E-93-01, March 1993.
11. ProPAC's dialysis facility market basket contains four cost components-capital, labor, other direct costs, and overhead. Because cost shares for these components differ for hospitalbased and freestanding facilities, the Commission developed separate market baskets. Price proxies were derived from the components of HCFA's input price indexes for PPS hospitals, skilled nursing facilities, and home health agencies.
12. HCFA introduced a new cost report for freestanding dialysis facilities effective for cost reporting periods beginning on or after October 1, 1993 (fiscal year 1994 and after). The revised cost report corrects for certain errors that led to data quality problems. Unfortunately, the 1994 data for these facilities were not available for ProPAC's analysis.
13. The composite rate is intended to cover the portion of facility costs that is allowable in accordance with Medicare principles of reimbursement. HCFA's audit of fiscal year 1991 cost reports found that Medicare-allowable costs in freestanding dialysis facilities were 12.2 percent lower than reported costs, whereas those in hospital-based facilities were 4.6 percent lower. After adjusting reported costs by HCFA's audit correction factors, payment to cost ratios are substantially higher.
14. Project HOPE's Center for Health Affairs, Quality of Dialysis in the United States, ProPAC Extramural Technical Report, forthcoming.
15. $\mathrm{Kt} / \mathrm{V}$ (where $K$ is the dialyzer clearance of urea, $t$ is the time of dialysis, and $V$ is the patient's urea volume) measures the intensity of dialysis relative to the patient's size, describing the fractional removal of urea.
16. Past studies found that inadequate manual reprocessing of dialyzers was associated with a higher risk of morbidity and mortality, although this no longer appears to be a problem.
17. Each year, ProPAC estimates how Medicare costs are affected by the dialysis industry's adoption of new cost-increasing, quality-enhancing scientific and technological advances. The Commission's most recent analysis indicates that
these innovations will raise facilities' total operating and capital costs by $\$ 26.6$ million, or 0.7 percent, in fiscal year 1997. Abt Associates, The Incremental Impact of Scientific and Technological Advances on Cost Increases in Dialysis Facilities, ProPAC Extramural Technical Report, No. E-96-01, January 1996.
18. U.S. Department of Health and Human Services, Report to Congress: Medicare Hospital Outpatient Prospective Payment, March 17, 1995.
19. The blended amount is determined by a twopart formula: the hospital-specific portion (the lesser of costs or charges minus 20 percent of charges) and the prospective portion (80 percent of the applicable prospective rate). The prospective rate for ambulatory surgery is the amount for the relevant procedure category used to pay freestanding ambulatory surgical centers. For radiology and diagnostic services, it is that portion of the physician fee schedule intended to represent the technical expense of providing that service.

The second part of the forumula inappropriately assumes that 20 percent of the prospective rate equals 20 percent of charges (the copayment). In fact, charges are usually much higher than the prospective rate. Because the full contribution of beneficiary cost sharing is not captured, Medicare's share of hospital payments is overstated.

## Appendix A. Technical Report Series

Appendix A lists the Prospective Payment Assessment Commission's (ProPAC's) 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 202/4018986.

## EXTRAMURAL TECHNICAL REPORT SERIES

## E-87-01: Improving the Definition of Hospital Labor Market Areas and Wage Indexes (Abt Associates, Inc.)

Methods for improving the definition of hospital labor market areas were investigated. This report identifies urban and rural labor market areas with the greatest amount of wage variation. It also examines the sources of wage variation within current labor markets and possible improvements in the area wage adjustment. Appended are step-bystep instructions for assigning hospitals within metropolitan statistical areas to urbanized areas as defined by the Bureau of the Census. (formerly E-87-12)(2/87)

## E-87-03: Measures of Complexity of Illness Within DRGs (SysteMetrics/McGraw-Hill, Inc.)

The goal of this research was to refine the Commission's method of monitoring continuing changes in DRG case mix and case complexity (changes within DRGs). This study refines the Commission's methodology for estimating the annual component of real case-mix change within DRGs. The methodology was used to develop annual estimates of within-DRG case-mix change for Medicare patients from 1984 to 1986. It was also used by the Commission to estimate this component of real case-mix change in future years as additional

Medicare data became available. Estimates from this study were used to analyze the indirect medical education adjustment. (3/89)

## E-87-06: Assessing the Adequacy of the Medicare Cost Report Data (SysteMetrics/McGraw-Hill,Inc.)

This report provides information on perceived strengths and weaknesses of the Medicare Cost Report. Hospital financial officers, fiscal intermediaries, and industry representatives were surveyed. In general, the results of this study indicate that most hospitals believe that the cost report is acceptable as a reimbursement tool. Most hospitals thought, however, that the cost report does not accurately measure the cost of care for Medicare beneficiaries because bad debt, charity care, patient telephones, and so forth are not recognized. PPS has resulted in changes in reporting practices. Particular attention is given to passthrough items like capital and direct medical education. (4/88)

## E-87-08: Trends in the Concentration of Six Surgical Procedures Under PPS and Their Implications for Patient Mortality and Medicare Cost (Project HOPE)

This report examines trends in hospitals' volumes of six specialized surgical procedures and the impact of those trends on mortality and costs. The six procedures are coronary artery bypass grafting, total hip replacement, abdominal aneurysm repair, intestinal resection, transurethral prostatectomy, and carotid endarterectomy. (6/88)

## E-87-11: Small Isolated Rural Hospitals: Alternative Criteria for Identification in Comparison with Current Sole Community Hospitals (SysteMetrics/McGraw-Hill, Inc.)

This study determines how many facilities become eligible for sole community hospital (SCH) status. The contractor also examines how the distribution of SCHs would change if the SCH criteria were altered. This study also provides information used to analyze the financial vulnerability of small isolated rural hospitals. (6/88)

## E-88-01: Subacute Care in Hospitals: Synthesis of Findings from the 1987 Survey of Hospitals and Case Studies in Five States (Lewin/ICF)

This document is the final report of an 18 -month study of subacute care in hospitals, often referred to as transitional care. Results of a representative national survey of hospitals are presented, along with findings from case studies in five states (California, Louisiana, New York, North Carolina, and Washington). Information is also presented on other types of transitional care, such as home health and skilled nursing care. (9/88)

E-88-02: An Analysis of Hospital Sensitivity to DRG Price Variation in the Medicare Prospective Payment System (SysteMetrics/McGraw-Hill, Inc.)
This study provides information on whether hospital behavior in rendering care and assigning resources is sensitive to differences between hospital costs and PPS prices. The contractor interviewed health care consultants and hospital administrators to identify the extent and objectives of hospital strategies to concentrate in or discontinue selected services. Second, the contractor assessed whether these strategies were in direct response to variations in the DRG prices or other factors influencing hospital management. Third, it examined the use of product line management and service costing in hospitals' responses to DRG price variations. (8/88)

## E-89-01: Urban and Rural Cost Differences: Literature Synthesis and Review (SysteMetrics/McGraw-Hill, Inc.)

The reasons for differences in urban and rural hospitals' costs per case are synthesized from current research in this report. Specifically, the basis for the lower costs of rural hospitals compared with urban hospitals is explored, and further research suggested. (3/89)

## E-89-02: Treatment of Certain Hospital Labor Expenses in the PPS Market Baske (SysteMetrics/McGraw-Hill, Inc.)

This report examines certain hospital labor expenses not directly measured by the PPS market basket (contract labor, employee bonuses, recruitment costs, employee benefits, overtime and part-time employment, and changes in employee skill mix).

The project examines how these costs are currently measured in the market basket and changes in these expenses between 1985 and 1988. Estimates were made of the effect these labor expenses would have on market basket increases if the expenses were directly measured in the market basket wage component. The calculations of the Average Hourly Earnings for Non-Supervisory Hospital Workers and the Employment Cost Index for Hospitals are also described in the study. (2/89)

## E-90-01: The Relationship Between Declining Use of Rural Hospitals and Access to Inpatient Services for Medicare Beneficiaries in Rural Areas (Codman Research Group, Inc.)

This study examines hospital utilization patterns for Medicare beneficiaries living in defined rural and urban hospital market areas of five statesAlabama, California, Illinois, Montana, and Texas-from 1984 to 1986. The study examines Medicare beneficiary care according to the market area where the beneficiary lives. Cases are divided into eight DRG groups to examine whether access is impaired for some services and not others. The study also examines how these changes in utilization affect admissions and market share of rural and urban hospitals. ( $1 / 90$ )

## E-90-02: Alternative Hospital Market Area Definitions (SysteMetrics/McGraw-Hill, Inc.)

This report examines alternative methods for defining hospital market areas through an extensive literature search and contact with experts in the field. The study reviews the role market areas play in PPS. It also reviews numerous alternatives that have been used for defining market areas, exploring options that have not been used for hospitals. Finally, the study provides an evaluation of the alternative methodologies and their potential applicability to PPS for defining hospital labor and product markets. (3/90)

## E-90-04: The Dynamics of Hospital Services Changing Patterns in the Services Provided by Hospitals from 1980 to 1987 (Kirsten Iversen)

The level of services and facilities provided by hospitals is dynamic, changing over time and across settings. This analysis describes patterns in the
changing levels of services provided by different groups of hospitals from 1980 to 1987. (3/90)

## E-90-05: Methodology for Measuring Case-Mix Change: How Much Change in the Case Mix 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 casemix 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 over time. 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-90-08: Comparative Analysis of Annual Survey and Medicare Cost Report Margin Data (American Hospital Association)

This study presents the results of a comparative analysis of total hospital margin data derived from a matched sample of Medicare Cost Reports and corresponding American Hospital Association (AHA) annual surveys. Initially, the national average Medicare Cost Report margin was significantly higher than the corresponding annual survey margin. After editing, however, the cost report margin was found to be slightly lower than the AHA figure. A telephone survey was used to investigate the reasons for the cost report/AHA discrepancies. The study analyzes the discrepancies by type of hospital and categorizes the reasons they occur. The study concludes that properly edited cost report income statement data are usable in research applications. Only one
source of bias was documented as significantly affecting calculation of average total margins by hospital group. This was the failure of some public hospitals to report government subsidies as revenue on their Medicare Cost Reports. (9/90)

## E-90-09: Hospital Cost Variations Under PPS (Center for Health Policy Studies, Georgetown University)

This study explores the impact of PPS and other factors in accounting for variations in total costs among hospitals during the 1980s. The goal was to understand the extent to which PPS has affected hospital costs, and the mechanisms that have produced those effects. The impact of PPS was isolated by analyzing a time-series of cost data for a sample of hospitals, while controlling for the effects of other factors, such as input prices, mix of outputs, volume of outputs, local competition, and health insurance coverage. The study also focuses on the roles of staffing, service mix, patient volume, and financial pressure to identify the mechanisms that have operated to produce PPS effects. These analyses were conducted separately for all sample hospitals and for important subgroups of the hospital industry, including urban and rural hospitals. (9/90)

## E-91-01: Classification Systems for PPS-Excluded and Non-PPS Providers (Project HOPE)

This study provides an overview and evaluation of systems that measure the case mix or resource complexity of patients treated in hospitals excluded from Medicare's PPS or patients treated by nonPPS providers. PPS-excluded hospitals include psychiatric and rehabilitation hospitals and distinctpart units as well as children's, long-term, and cancer hospitals. Non-PPS providers include home health agencies and skilled nursing facilities. The report identifies and describes available research on patient classification systems, case-mix measurement systems, and payment systems for each type of provider. Each system is evaluated using a set of criteria related to patient classification such as administrative feasibility, ability to explain variations in resource use, and clinical validity. Other criteria are applied to the evaluation of payment systems. Among the criteria used are administrative feasibility, equity of the system, and system effectiveness. (1/91)

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## 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)

## E-91-04: Volume Adjustments Used in State Medicaid Programs and Rate Setting Systems (Abt Associates, Inc.)

This report presents information about volume adjustments used to adjust payments to hospitals by state Medicaid programs. The contractor surveyed states to determine the number that use a volume adjustment, how the adjustment is calculated, eligibility requirements, whether there are upper and lower thresholds for the adjustment, and the formula used to calculate the adjustment. The contractor also laid out a theoretical framework for considering
volume adjustments, and outlined the relationships between policy goals and characteristics of these adjustments. (7/91)

## E-91-05: Medicaid Payment Methodologies for Inpatient Hospital Services (Abt Associates, Inc.)

This report describes state Medicaid inpatient hospital payment methodologies in effect as of July 1, 1991. The information was collected through telephone interviews with knowledgeable staff at state Medicaid offices, rate setting commissions, and hospital associations. The survey attempted to identify, describe, and document key concepts used to develop Medicaid payment systems for inpatient hospital services. (8/91)

## 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-92-04: Within DRG Case Complexity Change in Fiscal Year 1990 (SysteMetrics/McGraw-Hill, Inc.)

ProPAC annually recommends to the Congress an update factor for increasing the standardized payment amounts under PPS. This update factor reflects changes in the cost of providing services, including changes in the cost of hospital inputs; the effects of scientific and technological advances; productivity increases; and changes in the mix of patients that hospitals treat. The distribution of cases across DRGs is captured by the Medicare case-mix index, which directly affects the payment that hospitals receive for each case. This study measures the change in the distribution of cases by complexity level within DRGS. The study uses Medicare data for fiscal years 1988 through 1990 to develop estimates of within-DRG case complexity change and examines changes in coding of secondary diagnoses, both by overall and by hospital group. (4/92)

## 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-93-02: Within DRG Case Complexity Change, 1991 (SysteMetrics, Inc.)

This study measures the change in within-DRG case complexity from 1989 to 1990 and from 1990 to 1991. It also examines changes in the number of secondary diagnoses and complications and comorbidities from 1989 to 1991. This information is used for ProPAC's within-DRG case-complexity adjustment. The within-DRG case-complexity adjustment is designed to capture increases in patient complexity that are not measured by the DRGs. It is part of the case-mix adjustment in ProPAC's annual PPS operating and capital update recommendation to the Congress. The case-mix adjustment allows hospital payments to increase for real case-mix change, while removing payment increases that are due to changes in medical record documentation or coding practices. (2/93)

## 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 ASCapproved 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

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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 tech-niques-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, classbased, 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 Medicaideligible 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, or 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)

## Pending <br> 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. (Forthcoming)

## 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. (Forthcoming)

## INTRAMURAL TECHNICAL REPORT SERIES

## I-88-02: Recalibration Analysis Comparing Charge-Based and Cost-Based DRG Weights

ProPAC analyzed the two methods of recalibrating the DRG relative weights, using charges only (charge-based) and using charges that are adjusted by costs (cost-based). This report provides a detailed description of the data, methods, and results of ProPAC's comparisons. (3/88)

## I-89-03: Review of Medicare Cost Report Data for Policy Analysis

This report summarizes the Commission's work on the use of the Medicare Cost Report data for decision making. The major activity the Commission initiated to identify improvements in the use of existing cost data for policy analysis was to convene a panel to discuss the strengths and weaknesses of the Medicare Cost Report. The report also summarizes ProPAC monitoring of HCFA's threeyear demonstration assessing the costs and benefits of adding to the cost report financial and utilization information regarding other payers. (3/89)

## I-89-04: Payment Adjustments-Indirect Teaching and Disproportionate Share Hospitals

ProPAC analyzed the effect of teaching effort on Medicare costs. The objectives of the analysis were to estimate the relationship between teaching effort and Medicare cost per case using the most recent Medicare Cost Report data available. ProPAC also examined the overlap between the indirect medical education and the disproportionate share payment adjustments and evaluated the financial impact of revising the indirect medical education adjustment. The report describes the methods and results of the analysis. (7/89)

## I-90-01: Medicare-Dependent Hospitals Under PPS

The Omnibus Budget Reconciliation Act of 1989 required the Commission to study the appropriateness of making a Medicare payment adjustment to hospitals that treat a high proportion of Medicare discharges. Information on this topic was also included in ProPAC's June 1990 report, Medicare Prospective Payment and the American Health Care System. (6/90)

## I-90-02: Adjusting the Area Wage Index for Occupational Mix

Currently, the area wage index does not account for geographic differences in occupational mix. ProPAC studied the effect of adjusting the area wage index for occupational mix and the relationship of occupational mix to case mix. This report describes the methods and results of the analysis. The results include metropolitan statistical area, regional, and urban/rural estimates of the impact. The report also calculates how payments would be affected by adjusting the wage index for occupational mix. (8/90)

## I-90-04: 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. (9/90)

## I-91-01: Hospital Closures: 1985-1988

This report contains descriptive statistics on hospitals that closed between 1985 and 1988. Data are from the American Hospital Association Annual Survey of Hospitals, Medicare Cost Reports, and the Area Resource File. Rural and urban hospitals that closed are analyzed separately and compared with open rural and urban hospitals having fewer than 200 beds. (1/91)

## 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 PPSexcluded 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 Medicaredependent 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 hospitallevel 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 they play and the influence of hospital management and physician staff within the hospital environment. The report describes survey methods and results, including differences in approaches to hospitalphysician 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 report presents the results of an analysis of Medicare's payment for transfer cases. Currently, the transferring hospital is paid a uniform per diem payment up to the full DRG amount. The receiving hospital is paid the full DRG payment if it is the final discharging hospital. The analysis examines the relationship between payments and costs for these cases. In addition, it examines the characteristics of hospitals and cases involved in a transfer sequence. The study also includes information on trends in transfer rates since 1984. (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)

## Pending

## Medicare Per Capita Expenditures and Costs

This report will present a descriptive analysis of the variation in 1991 per capita expenditures for elderly beneficiaries by state and between the rural and urban areas of each state. Four per capita measures are being developed: (1) Medicare spending, (2) Medicare payments standardized to the national level (which will isolate geographic differences in utilization), (3) the provider production costs associated with Medicare spending, and (4) production costs adjusted for geographic price differences. All four of these measures will be broken down by setting, with physician services attributed to the setting in which they were provided. Geographic comparison will also be enhanced in the second and fourth measures by controlling for age and sex differences and by adding an estimated value for care provided to the elderly in military and Department of Veterans Affairs hospitals. (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-laborrelated 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)

## 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)

## 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 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. 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.)

# Appendix B. Biographical Sketches of Commissioners 

Stuart H. Altman, Chairman

Stuart H. Altman is the Sol C. Chaikin Professor of National Health Policy at the Florence Heller Graduate School of Social Policy at Brandeis University. An economist whose research interests are primarily in the area of Federal health policy, he has been at Brandeis since 1977. Between 1971 and 1976, Dr. Altman was deputy assistant secretary for planning and evaluation/health at the Department of Health, Education, and Welfare (now the Department of Health and Human Services). From 1973 to 1974, he also served as the deputy director for health of the President's Cost of Living Council, where he was responsible for developing the council's program on health care cost containment. Dr. Altman is a member of the Institute of Medicine of the National Academy of Sciences and a former member of its governing council, and serves on the board of Beth Israel Hospital (Boston). He is a past president of the Association for Health Services Research and a former board member of the Robert Wood Johnson Clinical Scholars Program. He has testified before the Congress on a wide range of health policy issues and has written an array of articles in the field. Dr. Altman received a B.B.A. from the City College of New York, and both an M.A. and a Ph.D. in economics from the University of California, Los Angeles.

## Susan S. Bailis

Susan S. Bailis is president and chief operating officer of The $A \cdot D \cdot S$ Group, which specializes in long-term care and senior living. 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 Alzheimer's Disease and Related Disorders Association, the board of Simmons College, the board of overseers of the Florence Heller School at Brandeis University, secretary of the National Association of Social Workers, and presi-dent-elect of the Society for Hospital Social Work Directors of the American Hospital Association. She is a member of the Business Leadership Forum and Women's Leadership Forum of the Democratic National Committee. She also served as a member of 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.

## James D. Bernstein

James D. Bernstein is director of the North Carolina Office of Rural Health and Resources Development, which has established 65 communitybased health centers and recruited more than 1,100 providers to the state since 1973. Previously, Mr. Bernstein administered a 40-bed hospital and eight health centers for the Indian Health Service. He has held a variety of professional positions, including chairman of the Rural Health Care Advisory Panel of the Office of Technology Assessment. He currently is national program director for the Robert Wood Johnson Foundation initiative, Practice Sites: State Primary Care Development Strategies. Mr. Bernstein received a B.A. from the Johns Hopkins University and an M.H.A. from the University of Michigan.

## 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 Hospital System in Minneapolis, Minnesota, 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 two terms on a regional policy advisory board of the American Hospital Association, Mr. Edmands has been board president of the Health Systems Agency of Western Kansas. Other community involvements include the Salina health education board and Voluntary Hospitals of America. Currently a preceptor for the University of Kansas program in health care administration and chair of the university's health care services advisory board, Mr. Edmands formerly was a faculty preceptor for the University of Minnesota independent study program in hospital administration. He holds a B.S. in business administration from the University of Kansas and an M.H.A. from the University of Minnesota.

## 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, Washington Hospital Center, the Alpha Center for Health Planning, and the Genesee Regional Health Planning Council. 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 State of California Health Information Committee. He also chairs the Consumer Experience Studies Committee 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 providing information on health care quality, access, and costs to the public. 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. He is the immediate past president of the California Business Group on Health. Mr. Kerr 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, the Johns Hopkins University, New York University, and Columbia University. He was administrator of the Division of Health Policy and Planning of the state of Wisconsin and executive director of the American Public Health Association in New York and Washington State. Dr. Kimmey served as president of the American Health Planning Association (1980-81) and as a member of 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. Her primary academic appointment is in the Graduate School of Public Health, but she holds secondary appointments in the Department of Psychiatry, Department of Economics, and the Katz Graduate School of Business. She is a member of the research study section of the Agency for Health Care Policy and

Research and of the Institute of Medicine's report review committee. Formerly, Dr. Lave was a faculty member at Carnegie-Mellon University. At the Department of Health and Human Services, she was director of the Division of Economic and Quantitative Analysis in the Office of the Deputy Assistant Secretary and director of the Office of Research in the Health Care Financing Administration. A charter member of the Federal government's Senior Executive Service, Dr. Lave is also a member of the Institute of Medicine of the National Academy of Sciences and the National Academy of Social Insurance. She is a past president of the Association for Health Services Research and the Foundation for Health Services Research. In addition, 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 both the Journal of Health Politics, Policy and Law and the Health Administration Press. Dr. Lave has served as a consultant to private and public agencies in the United States and Canada. She received a B.A. from Queens University in Canada, from which she also holds an honorary LL.D., and a Ph.D. in economics from Harvard University.

## Hugh W. Long

Hugh W. Long is associate 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. Dr. Long has taught at Yale University, Stanford University, San Jose State University, and Ohio State University. He is a member 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. Dr. Long is the faculty director of Tulane's Master of Medical Management degree program for physicians. He is 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.

## 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. A trustee for several organizations, including the investment program (mutual funds) of the American Association of Retired Persons, Dr. Myers also serves on the board of advisers of Studies on Smoking. 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.

## Donald R. Oder

Donald R. Oder is executive vice president and chief operating officer of Rush-Presbyterian-St. Luke's Medical Center in Chicago, where he formerly was senior vice president. Before that, he was audit manager with Arthur Andersen \& Co. in Chicago. Mr. Oder has held various academic appointments and currently is a professor in the Department of Health Systems Management at the Rush University College of Health Sciences. He is a member of and has held leadership positions in several professional associations, including the American College of Healthcare Executives, the American Hospital Association, the Illinois Hospital Association, Voluntary Hospitals of America, the American Institute of Certified Public Accountants, and the Illinois C.P.A. Society. He has served
on the board of directors of the Better Business Bureau of Metropolitan Chicago, Inc., and on the occupational health committee of the Chicago Association of Commerce and Industry. Mr. Oder received a B.S. from Wichita State University, a C.P.A. certificate from the University of Illinois, and an M.B.A. from the University of Chicago.

## Glenda Rosenbloom

Glenda Rosenbloom has been vice president of prospective payment for American Medical International since 1983. 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. She cochaired the Medicare Technical Advisory Group, which includes senior officials from the Health Care Financing Administration, the hospital industry, peer review organizations, and fiscal intermediaries. Ms. Rosenbloom 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.

## J. Michael Sadaj

J. Michael Sadaj is a physician in private practice and a member of Rocky Mountain Clinic in Butte, Montana, where he specializes in internal medicine and pulmonary diseases. He is vice president and treasurer of the Montana Physicians Organization's medical service organization. He has served as secretary-treasurer, vice president, and president of St. James Community Hospital medical staff, as well as chief of the Department of Medicine, and is currently chairman of the credentialing committee. From 1979 to 1990, Dr. Sadaj was medical director of respiratory therapy and the pulmonary laboratory at St. James. For several years, he has served on the Occupational Diseases Board of the state of Montana. A past president of the Montana Medical Association (1988-89), Dr. Sadaj was a member of the executive committee from 1985 to 1995. In addition, he has served as a delegate to the American Medical Association

Resident Physician Section, Young Physician Section, and the House of Delegates, and from 1977 to 1979, was the resident member on the organization's Council on Constitution and Bylaws. Dr. Sadaj is a founding member of the board of directors of the Montana Professional Assistance Program and was a member of the Rural Physician Retention Trust Fund Advisory Board. In 1984, he was elected to the Butte-Silver Bow Government Study Commission. From 1974 to 1979, Dr. Sadaj was a resident in internal medicine and a fellow in pulmonary diseases at the University of Nebraska Medical Center. He received B.S. and M.D. degrees from the University of Nebraska.

## 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 has served as executive assistant to the president, executive assistant to the secretary-treasurer, and director of the employee benefits department of the A.F.L.-C.I.O., as well as head of 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 Advisory Council on Social Security. 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 the Owen School of Vanderbilt, 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 in Orange, California, 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. Dr. Spitzer has written and spoken extensively on such issues as managing nonprofit organizations, cost containment, quality and productivity, nursing in the 1990s, and strategic management and leadership. 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, he is a member of the board of commissioners of the Joint Commission on the Accreditation of Healthcare Organizations. 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 served as liaison to the President's Task Force on Health Care Reform from the National Conference of State Legislatures. He also was a member of the Governor's Health Care Advisory Board's Task Force on the President's Health Care Plan in New York and chaired
the committee on Medicaid of the Health Policy Agenda for the American People. Before his election to the Assembly, Mr. Tallon was the executive director of the NY-PENN Health Planning Council, one of New York's eight regional health planning agencies. Mr. Tallon received a B.A. from Syracuse University and completed graduate work at the Maxwell School of Citizenship and Public Affairs. He received an M.A. from Boston University.

## 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 vice 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 diag-nosis-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 longterm 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 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 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 treat-
ment 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 $1861(\mathrm{~s})(10)$, 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 $1886(e)(6), \ldots$

## 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 <br> Pass Through Payments for Hemophilia Inpatients

(a) Pass Through Payment for Hemophilia Inpa-tients.-The second sentence of section 1886(a)(4) 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 lowincome 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. 101508: 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 $1886(\mathrm{~d})(1)(\mathrm{B})$ 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 lowincome 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: <br> Prospective Payment System for Skilled Nursing Facilities

(1) Development of Proposal.-The Secretary of Health and Human Services shall develop a proposal 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 lowincome patients, differences in wages and wagerelated 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 consid-er-
(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.

## 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 wagerelated 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 con-cerning-
(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.


[^0]:    ${ }^{1}$ 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.

[^1]:    (Note: The PPS XII Minimum Data Set covering 1995 will not be available until July 31, 1996.)

    File Cost: $\$ 715.00$ per year

    ## 5. PPS-IX to PPS-XII Capital Data Set

[^2]:    §412.63 Federal rates for inpatient operating costs for fiscal years after Federal fiscal year 1984.
    (s) $* * *$
    (1) $* * *$ The wage index is updated annually.

    *     *         *             *                 * 

[^3]:    ${ }^{1}$ The update factor and the GAF/DRG budget neutrality factors are built permanently into the rates. Thus, for example, the incremental change from FY 1996 to FY 1997 resulting from the application of the 0.9992 GAF/DRG budget neutrality factor for FY 1997 is 0.9992 .
    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 1997 exceptions reduction factor is $0.9393 / 0.9849$, or 0.9537 .

[^4]:    ${ }^{1}$ Note: Includes the DRG/GAF adjustment factor of 0.9980 and the change in the outlier adjustment from 0.9497 in FY 1992 to 0.9496 in FY 1993.
    ${ }^{2}$ Note: Includes the 7.4 percent reduction in the unadjusted standard Federal rate. Also includes the DRG/GAF adjustment factor of 1.0033 and the change in the outlier adjustment from 0.9496 in FY 1993 to 0.9454 in FY 1994.
    ${ }^{3}$ Note: Includes the DRG/GAF adjustment factor of 1.0031 and the change in the outlier adjustment from 0.9454 in FY 1994 to 0.9414 in FY 1995.
    ${ }^{4}$ Note: Includes the the transfer adjustment of .9972. Also includes the DRG/GAF adjustment factor of 1.0025 and the change in the outlier adjustment from 0.9414 in FY 1995 to 0.9536 in FY 1996.
    ${ }^{5}$ Note: Includes the DRG/GAF adjustment factor of 1.0017 and the change in the outlier adjustment from 0.9536 in FY 1996 to 0.9476 in FY 1997. Future adjustments are, for purposes of this projection, assumed to remain at the same level.
    ${ }^{6}$ Note: We are unable to estimate exceptions payments for the year under the special exceptions provision ( $\S 412.348(\mathrm{~g})$ of the regulations) because the regular exceptions provision ( $\$ 412.348(e)$ ) expires.

