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# **A Study of Charge Compression in Calculating DRG Relative Weights**

**Report**

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A STUDY OF CHARGE COMPRESSION IN CALCULATING DRG RELATIVE WEIGHTS

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## EXECUTIVE SUMMARY

### E.1 Objectives

This report summarizes the data analysis conducted by RTI International for the Centers for Medicare & Medicaid Services (CMS) under contract No. 500-00-0024-TO12, “A Study of Charge Compression in Calculating DRG Relative Weights.” The purpose of the project is to develop more accurate estimates of the costs of Medicare inpatient hospital stays that can be used in calculating relative resource weights per diagnosis-related group (DRG) under the Acute Inpatient Prospective Payment System (IPPS). The project revisits the links between costs and charges as reported on hospitals’ Medicare Cost Reports (MCRs) and examines methods of refining the cost-to-charge ratios (CCRs) that are the conversion factors used to transform Medicare claims data into estimates of average cost per DRG.

DRG weights were originally constructed from claims-level cost estimates derived using hospital CCRs for ancillary services and per diem costs for nursing services. From FY 1986 through FY 2007, DRG weights were recalibrated annually based on relative charges. Over time, concern grew that charge-based weights were increasingly distorted proxies for relative resource use. The chief argument was that charge-based weights over-value surgical and other procedure-dependent DRGs, because hospitals commonly subsidize nursing services by attaching higher markup in setting prices for procedure-based ancillary services than in setting prices for inpatient nursing units and clinics. Using departmental CCRs to convert charges to cost removes the distortion from subsidization *across* departments. With the reintroduction of cost-based weights, however, older concerns about a type of distortion referred to as “weight compression” have resurfaced. The use of CCRs that are averages for services with different markup rates *within* departments introduces the possibility of “weight compression,” where low-cost DRGs may be systematically over-valued and high-cost DRGs under-valued.

RTI’s analysis takes as its starting point the methods for estimating cost-based DRG weights that were described in the Final Rules for FY 2007 IPPS payments as published in the Federal Register of August 16, 2006. These rules returned the DRG weight recalibration from a method based on relative charges to one based on relative costs based on estimates using national aggregate CCRs for thirteen charge groups. The thirteen groups are identified in *Exhibit E-1*.

Concerns over cost estimates center on issues of data accuracy and consistency as well as distortion in cost estimates from the aggregation of CCRs across multiple services. RTI was asked to assess the potential for bias in relative weights due to aggregation problems within these thirteen charge groups, including “charge compression.” Charge compression refers to the practice of assigning a lower mark up to relatively high cost items and a higher markup to lower cost items. Within hospitals, it is a pricing strategy that is said to be common in resale items such as medical supplies or drugs charged to patients. Charge compression is one potential source of bias in the DRG weights when the applicable CCR is an average across both low- and high-markup items. Any aggregation of CCRs across services with different cost-to-charge ratios has the potential to understate or overstate cost estimates for specific DRGs, and therefore bias the weights.

**Exhibit E-1**  
**National average cost-to-charge ratios for the FY 2007**  
**inpatient prospective payment system DRG weights**

#	National charge groups from FY 2007 rules (total= 13)	MedPAR groups (total=28)	Medicare cost report cost centers	Published national CCR
1	Routine	Routine	Routine	0.56
2	Intensive	ICU	ICUs (all)	0.50
2	Intensive	CCU	CCU	
3	Drugs	Pharmacy	Drugs Charged; Intravenous Therapy	0.21
4	Supplies	Supplies	Supplies charged	0.34
4	Supplies	DME	DME sold	
4	Supplies	DME	DME rented	
5	Therapy Services	Physical Therapy	Physical Therapy	0.44
5	Therapy Services	Occupational Therapy	Occupational Therapy	
5	Therapy Services	Speech Therapy	Speech Therapy	
6	Inhalation Therapy	Respiratory Therapy	Respiratory Therapy	0.20
7	Operating Room	Operating Room	Operating Room; Recovery Room	0.32
8	Labor & Delivery	N/A	Labor & Delivery; Clinic	0.46
9	Anesthesia	Anesthesia	Anesthesia	0.16
10	Cardiology	Cardiology	Electrocardiology, Electroencephalography	0.21
11	Laboratory	Lab	Laboratories	0.19
12	Radiology	Radiology & MRI	Diagnostic Radiology Therapeutic Radiology	0.19
13	Other Services	Observation	Observation Beds	0.38
13	Other Services	Other Services	Other Ancillary;	
13	Other Services	-	Radioisotopes	
13	Other Services	Blood	Blood	
13	Other Services	Blood Admin	Blood Storage/Processing	
13	Other Services	Lithotripsy	-	
13	Other Services	Ambulatory Surgery	ASC	
13	Other Services	Emergency	Emergency	
13	Other Services	Ambulance	Ambulance	
13	Other Services	ESRD	Renal Dialysis; Home Program Dialysis	
13	Other Services	Clinics	Clinic; RHC; FQHC	

For this project, we developed develop an analysis plan that explores alternative methods of calculating national average costs per DRG, with the objective of better aligning the charges and costs used in those calculations. Methods for consideration were to include

- Modifying existing cost centers and/or creating new cost centers to reduce the within cost center variation in markups of charges over cost, and
- Using statistical methods to adjust existing departmental cost to charge ratios or charges for specific services.

The general method adopted in this project for statistical adjustment of charge compression is based on one proposed by Christopher Hogan as part of the public comments received in response to the Proposed Rules for FY 2007 IPPS as published in the Federal Register April 25, 2006. This approach models hospital department-level CCRs as a function of (a) the percent of department charges accounted for by the targeted services (those hypothesized to have a different markup rate) and (b) the hospitals' overall cost-to-charge ratio. Coefficients from charge-weighted least squares regressions are used to generate predicted alternative CCRs for the disaggregated services.

RTI convened a Technical Expert Panel (TEP) in late October 2006. The TEP advised RTI on its analytic plan; helped to identify other service areas where DRG weights are likely to be affected by compression or other aggregation problems; and provided input on the use of statistical estimation for identifying and correcting charge compression. Dr. Hogan was included as a panelist.

## E.2 Data Sources & Approach

Cost and charge data for this project came from the most recent Medicare cost reports on IPPS providers available as of August 2007, and from their inpatient claims. The provider sample was restricted to hospitals included in CMS' Impact File for the FY 2007 IPPS rules. A claims analysis file was created with records from the 100% National Medicare Provider Analysis and Review (MedPAR) file, matched by provider number and discharge date to the periods covered by the sample cost reports. We also matched records from the 100% Inpatient Standard Analytic File (SAF) to records from the MedPAR claims file. From the Inpatient SAF we extracted detailed charge information for selected revenue codes on services that we and the TEP identified as possible examples of charge compression or other sources of aggregation bias. We regrouped all claims into the DRGs appropriate for FY 2007 using 3M™ Core Grouping Software-CMS Grouper Version 24. Final sample sizes are shown in *Exhibit E-2*.

### Exhibit E-2 Analysis samples

Federal fiscal year	Number of IPPS cost reports	Percent
Cost Report FY 2004	2,461	67%
<u>Cost Report FY 2005</u>	<u>1,201</u>	<u>33</u>
Total Cost Reports	3,662	100
Number of unique IPPS providers	3,574	
Number of IPPS claims matched to sample hospitals, by cost report period	11.2 million	
Of which:		
Number of claims passing edits and retained for claims analysis file	11.1 million	
Number of unique IPPS providers with claims in the final claims analysis file	3,372	

Cost-to-charge ratios were computed following similar data quality edits and exclusion criteria as were used by CMS in the construction of FY 2007 weights (see Appendix B for detailed information on the criteria and the specific differences between RTI's methods and CMS'). We computed individual hospital CCRs and national aggregate CCRs, at the level of (a) MCR cost centers, (b) MCR cost centers aggregated to match the charge departments found in the MedPAR files, and (c) MedPAR charge departments aggregated to the level of the thirteen charge groups used for the FY 2007 weights. All national aggregates were computed from the summed totals of Medicare inpatient charges and costs.

Our analysis was conducted in three stages. In the first stage, we compared the reported Medicare program charge amounts from the cost reports to the total charges summed across all claims filed for the provider. This step was undertaken to assess the appropriateness of the matching between computed CCRs and MedPAR charges.

In the second stage, we identified CCRs with potential aggregation problems, and computed alternative, disaggregated or adjusted ratios. First, we reviewed the CCRs of departments that made up components to the thirteen national CCRs, to identify areas where separating charge groups might lead to more accurate cost conversion at the DRG level. This review led us to test separate CCRs for Emergency Room charges and for Blood and Blood Administration charges, both of which had been included in the “Other Services” group. Then we looked for examples of charge compression within individual cost centers, based on the distribution of revenue codes identified from the Inpatient SAF claims. To assess within-department aggregation, we had to rely on statistically derived estimates of disaggregated CCRs, because there are no segregated costs to match with charges at this level of detail. Following review of the distribution of individual revenue codes charged across all claims in the sample, statistical models were constructed to identify significantly different markup rates for the following:

- Devices, prosthetics and implants (combined), as a targeted service within the Medical Supplies CCR
- IV Solutions, as a targeted service within the Drugs CCR
- CT scanning and MRI, as two targeted services within the Radiology CCR
- Cardiac Catheterization, as a targeted service within the Cardiology CCR
- Intermediate Care Units, as a targeted service within the Routine Nursing Care CCR

Where significant differences in markup rates were found, predicted values from the regression equations were used to develop estimates of new or adjusted national CCRs for these services. We found no evidence of significantly different cost ratios in the models for either cardiac catheterization or intermediate care, and therefore did not compute adjusted national CCRs computed for these.

A variation of charge compression is also present in inpatient nursing services, because most patients are charged a single type of accommodation rate per day that is linked to the type of nursing unit (routine, intermediate or intensive), but not to the hours of nursing services given to individual patients. Unlike the situation with charge compression in ancillary service areas, there are virtually no detailed charge codes that can distinguish patient nursing care use. Because intensity of nursing is likely to be correlated with DRG assignment, this can be a significant source of DRG weight compression. The bias cannot be empirically evaluated or corrected without additional data. Consequently we did not evaluate nursing charge or cost compression in this study, beyond testing for differences in the cost ratios for intermediate versus other routine care.

The third stage of our analytic work tested the impact of disaggregated CCRs on weights. We followed CMS’ methods for weight re-calibration using standardized charges, transfer-adjusted case counts and exclusion of outlier cases. We analyzed the impact on weights by DRG and also by hospital, using re-computed values for hospital case-mix index (CMI).

## **E.3 Findings**

### **E.3.1 Program Charge Matching**

RTI found considerable problems in the matching of program charges from the Medicare cost report to charges as grouped in the MedPAR file claims. For inpatient nursing unit charges, most of the mismatching was in the balance between routine and intensive care charges and the source was identified as a misclassification of intermediate care charges on MedPAR. This was corrected using detail from the Inpatient SAF. Most other areas of ancillary charge mismatching could not be corrected from the available data. These areas are of more concern because they suggest that DRG charges aggregated from MedPAR claims cannot be matched to the right CCR for cost conversion. Medical Supplies is a problem area that spills into several cost centers. Our match data and anecdotal information from TEP members suggest that providers could be including costs and charges for devices and implants within MCR cost centers for the Operating Room, Radiology or Cardiology departments. In so doing, hospitals may be simply fixing their cost reports to follow their managerial accounting structures, because low-volume, high-cost items used in the operating room or other procedure areas might be purchased and managed through these departments rather than through central supply areas. However, if the Medicare cost report is going to be used as a source document for national rate-setting, reporting consistency needs to be in place. Providers should be asked to compute reclassifications that move charges plus direct and indirect (allocated) costs to the correct cost centers on the Medicare cost report.

Charges for cardiology services were the most mismatched of those we examined. Only 27 percent of hospitals had cost report Medicare program charges that were within plus or minus 5 percent of the amounts computed by summing cardiology charges on the claims. As many hospitals appeared to “over-report” as to “under-report” amounts that should have been categorized as cardiology services on their cost reports.

Some program charge mismatching results from the way in which charges are grouped in the MedPAR file. Examples include the intermediate care nursing being grouped with intensive care nursing, and electroencephalography (EEG) charges being grouped with labs. These are examples that can be fixed, either by computing adjustments based on data from the Inpatient SAF or by altering or adding new MedPAR charge departments. Most of the poor program charge matching reflects problems with consistency and accuracy in hospital cost reporting, and these pose a significant challenge to the validity of any CCR-based cost estimates. In some cases (as with the Medical Supplies reporting) it is possible that substantive improvements in DRG cost estimates could be made by clarifying instructions to providers and to the Medicare intermediaries who review the filed cost reports. To improve the situation with Cardiology and some of the other newer diagnostic services, however, it may be necessary to add new lines to the MCR.

Because severe mismatching could undermine the validity of the regression-based estimates of disaggregated CCRs, we incorporated hospital-level measures of departmental matching ratios into our regression diagnostics.

### **E.3.2 Adjusted National Aggregate Cost-to-Charge Ratios**

After re-grouping some of the component departments to the thirteen charge groups used for the national CCRs, we find that separating Emergency Room services from the “Other Services” category raises the national CCR for several other services in this group. Further separating blood-related charges alters the CCR for those services by a small incremental amount. Not all providers use this cost center, and the new Blood & Blood Administration CCR might reflect an aggregate cost ratio for a group of facilities that is not nationally representative. However, adding this charge group to the DRG cost estimation may encourage more providers to use the MCR standard cost centers for this service.

The regressions provide strong evidence of charge compression with respect to medical devices and implants within the medical supplies CCRs. Regressions also find evidence of charge compression in the pricing for IV solutions compared to therapeutic drugs, and strong evidence that the ratios for both CT scanning and MRI are lower than the ratios for other radiology services.

Based on findings of either nonsignificant or unstable coefficients, we did not predict separate CCRs for intermediate care as a component of routine nursing care or for cardiac catheterization as a component of cardiology. We were able to use SAF data to re-classify intermediate care charges from the Intensive to the Routine Care charge group, which allows intermediate care to be converted to cost using the Routine Care CCR.

Our computed changes to national aggregate CCRs are substantial, both for the target services and for the services remaining in the adjusted groups (*Exhibit E-3*). Changes ranged from a reduction of 57 percent in the converter for IV Solutions to an increase of 47 percent in the converter for Radiology services excluding the two types of scanning. For all of the charge groups where new ratios were computed, the changes to the CCRs for services remaining in the department category after the target services were removed are as important to the potential for aggregation bias as the target services.

**Exhibit E-3**  
**Original and adjusted cost-to-charge ratios (CCRs)**

Charge group	Description	National aggregate CCRs		Percent change
		Original	Adjusted	
CMS_03	Drugs, all	0.21		
CMS_03a	Drugs, excluding IV		0.23	+9.5
CMS_03b	IV Solutions only		0.09	-57.1
CMS_04	Supplies, all	0.34		
CMS_04a	Supplies, excluding Devices		0.25	-26.5
CMS_04b	Devices & implants only		0.43	+26.5
CMS_12	Radiology, all	0.19		
CMS_12a	Radiology, excluding CT& MRI		0.28	+47.4
CMS_12b	CT Scanning only		0.11	-42.1
CMS_12c	MRI only		0.17	-10.5
CMS_13	Other Services, all	0.39		
CMS_13a	Other services, excluding ER only		0.45	+15.4
CMS_13aa	Other services, excluding ER & Blood		0.44	+12.8
CMS_13b	Emergency room only		0.33	-15.4
CMS_13c	Blood products & admin only		0.47	+23.7

**E.3.3 Impact of Adjusted CCRs on DRG Weights and Hospital Case-Mix Index**

The impact of the disaggregating CCRs on DRG weights depends both on the size of the CCR adjustments and the distribution of the affected charges across DRGs. *Exhibits E-4* and *E-5* provide percentile distributions of the incremental impact on weights for each set of adjustments.

Of all the adjusted CCRs we tested, the largest impact on weights comes from correcting charge compression for devices and implants. These changes increase weights by 10 to 15 percent for a small number of high-cost DRGs, and create proportionally smaller but wide-spread reductions in weights scattered across a much larger number of DRGs. With the exception of the CCR changes related to medical supplies and radiology, the adjustments tend to have a modest effect (changes between 1 and 5 percent in either direction) on a small number of DRGs, and only very small effects on the remaining DRGs.

The impact on weights from correcting charge compression within the drugs cost center is modest—only a few DRGs are affected by more than one-half of one percent. In radiology the impact on weights is larger. Regressions on the radiology CCRs find evidence of the *opposite* of charge compression; newer and relatively high cost services for scanning have systematically higher markup (thus lower cost-to-charge ratios) than are found for other radiology services. Adjusting the CCRs for these pricing differences reduces weights by more than 2 percent for a diffuse but fairly small array of DRGs (including most of those associated with concussion or comatose states). There are offsetting increases for the radiotherapy and chemotherapy DRGs and for several non-surgical cardiovascular DRGs.

Separating first Emergency Room charges and then blood-related charges from the “Other Services” group also has a modest effect on a few DRGs, while leaving most DRGs

relatively unchanged. Weights increased in DRGs related to blood disorders including most of the leukemia DRGs (these DRG weights also increased as a result of the change increase in the CCR for therapeutic drugs after IV Solutions were pulled out). Relative weights for renal disorders DRGs also gain, because ESRD charges are converted to cost using the CCR for “Other Services”, which increased. Separating the CCR for blood-related charges has very less of an incremental impact on weights than we expected, because removing Emergency Room by itself raises the CCR for “Other Services” to 0.45 (which is close to the Blood and Blood Administration CCR of 0.47).

Reclassifying intermediate care charges from the intensive to the routine care charge groups increases weights by between 1 and 2 percent for a small number of DRGs, of which the majority are cardiovascular DRGs that make use of cardiac step-down units.

**Exhibit E-4**  
**Distribution of changes in DRG weights by type of adjustment**

	Due to separating ER from all other	Separating both ER and blood from all other	Reclassifying intermediate from intensive to routine care	Implementing regression-based adjustments (all)	All adjusted CCRs combined
MINIMUM	-2.2%	-0.5%	-0.9%	-8.0%	-9.4%
5th percentile	-0.9	-0.1	-0.8	-3.8	-4.4
25th percentile	-0.4	-0.1	-0.6	-2.2	-2.7
MEDIAN	0.0	0.0	-0.3	-1.4	-1.7
75th percentile	0.2	0.0	0.0	-0.4	-0.4
95th percentile	0.7	0.1	0.7	3.0	3.1
MAXIMUM	4.6	2.1	2.0	15.3	14.8

**Exhibit E-5**  
**Separate effects of regression-based CCR adjustments**

	Separate Effects of Regression-based Adjustments		
	Separating devices and implants	Separating IV solutions	Separating CT scanning and MRI
MINIMUM	-6.5%	-0.9%	-5.1%
5th percentile	-3.1	-0.5	-2.2
25th percentile	-1.5	-0.2	-0.7
MEDIAN	-0.9	0.0	-0.1
75th percentile	-0.5	0.1	0.2
95th percentile	1.3	0.5	1.0
MAXIMUM	15.2	2.4	6.6

The 10 DRGs with the largest total increase and the 10 with the largest total decrease in weights as result of the combined effect of all of the adjusted CCRs are listed in *Exhibit E-6*. Nearly all of the DRGs in this “top 20” impact group were affected by the medical Supplies CCR adjustments.

**Exhibit E-6**  
**DRGs with the largest percent change in weights**

**Ten with Largest Increases**

DRG num	DRG name	Cases	Cost-based weights		
			Using FY 2007 rules	Adjusted CCRs	Percent change
515	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH	49,586	5.378	6.173	14.77%
	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O				
536	AMI/HF/SHOCK	7,523	6.549	7.290	11.31
535	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK	7,634	7.552	8.365	10.77
	OTHER PERMANENT CARDIAC PACEMAKER IMPLANT W/O				
552	MAJOR CV DX	77,491	2.107	2.327	10.40
118	CARDIAC PACEMAKER DEVICE REPLACEMENT	6,925	1.697	1.873	10.36
	PERMANENT CARDIAC PACEMAKER IMPL W MAJ CV DX OR				
551	AICD LEAD OR GNRTR	51,370	3.241	3.520	8.62
498	SPINAL FUSION EXCEPT CERVICAL W/O CC	18,685	2.963	3.190	7.65
8	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W/O CC	3,164	1.540	1.655	7.49
496	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	3,099	6.460	6.913	7.01
497	SPINAL FUSION EXCEPT CERVICAL W CC	27,685	3.762	4.021	6.89

**Ten with Largest Decreases**

DRG num	DRG name	Cases	Cost-based weights		
			Using FY 2007 rules	Adjusted CCRs	Percent change
155	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17	5,426	1.238	1.171	-5.42
	W/O CC				
29	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W/O CC	5,838	0.764	0.723	-5.43
149	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC	18,079	1.459	1.380	-5.43
494	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC	22,834	0.993	0.937	-5.69
32	CONCUSSION AGE >17 W/O CC	1,599	0.600	0.563	-6.22
166	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	4,672	1.283	1.195	-6.84
288	O.R. PROCEDURES FOR OBESITY	9,913	1.848	1.721	-6.89
324	URINARY STONES W/O CC	4,214	0.487	0.452	-7.24
165	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	2,224	1.154	1.067	-7.56
167	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	4,237	0.852	0.772	-9.45

Overall, disaggregating the CCRs had a greater—and more negative—effect on weights for medical than for surgical DRGs. Compared to cost-based weights computed without these CCR adjustments, the weights decreased for medical cases by 1.1 percent but the weights increased for surgical cases by 0.4 percent. In this respect, the CCR adjustments mitigate the impact of changing from charge-based to cost-based weights. Within our analysis sample, the move from charge-based to 100% cost-based weights as computed under the FY 2007 rules would have had the effect of raising weights for medical cases by 2.2 percent and lowering them for surgical cases by 1.5 percent (*Exhibit E-7*). However, when this differential is computed based on moving from charge-based weights to the CCR-adjusted cost-based weights, it is smaller. The aggregate increase in weights for medical cases is only 1.1 percent, compared to a decrease of 1.2 percent for surgical cases.

**Exhibit E-7**  
**Average change in weights by type of DRG**

DRG type	Case-weighted average percent change in weights:		
	From charge-based to FY 2007 cost based	From FY 2007 cost-based to adjusted CCR cost-based	From charge-based to adjusted CCR cost-based
Medical	2.2%	-1.1%	1.1%
Surgical	-1.5	0.4	-1.2
All DRGs	1.1	-0.7	0.5

Even small changes in average payment per case can have a substantial impact on IPPS margins. We estimated the impact of individual DRG weight changes on hospital payments by simulating hospital case-mix index values from the adjusted weights (*Exhibit E-8*). We found that CMI changes due to the CCR adjustments would be small for most facilities. The median change in CMI for the full sample of hospitals is a reduction of one-half of one percent. The impact ranges from -0.05 points (or -3 percent) to positive 0.14 points (or 6 percent); 5 percent of facilities show a reduction of 1.4 percent or lower, and 5 percent show an increase of 1 percent or higher.

**Exhibit E-8**  
**Impact of adjusted CCRs on hospital case mix index values**

	Percent change in facility average weights
MINIMUM	-3.1%
5th percentile	-1.4
25th percentile	-0.9
MEDIAN	-0.6
75th percentile	0.0
95th percentile	1.0
MAXIMUM	6.4

Across types of hospitals, disaggregated CCRs have the same tendency to mitigate the original effects of changing from charge-based to cost-based weights. For hospitals grouped by average case-mix intensity at the baseline (that is, from charge-based weights similar to what as in effect through FY 2006) hospitals with lower (probably largely medical) case-mix will clearly benefit from the transition to cost-based weights starting in FY 2007. The benefit is reduced substantially under the adjusted CCRs, as shown by the median percent changes in CMI in *Exhibit E-9*. The same mitigating effect can be seen for hospitals grouped by urban-rural location and size, in *Exhibit E-10*.

**Exhibit E-9**  
**Median change in hospital case mix index by baseline hospital case-mix**

Hospital quintiles by baseline case-mix index:	Median percent change in case-mix index		
	From FY 2007 cost-based		
	From charge-based to FY 2007 cost based	to adjusted CCR cost-based	From charge-based to adjusted CCR cost-based
1: Charge-based CMI<1.12	2.0%	-1.2%	0.8%
2: Charge-based CMI 1.12 - 1.25	1.5	-0.8	0.7
3: Charge-based CMI 1.25 - 1.38	1.1	-0.6	0.5
4: Charge-based CMI 1.38-1.59	0.1	-0.2	0.0
5: Charge-based CMI>1.59	-0.7	0.5	-0.4

**Exhibit E-10**  
**Median change in hospital case mix index by hospital location**

Location	Median percent change in case-mix index		
	From charge-based to FY 2007 cost based	From FY 2007 cost-based to adjusted CCR cost-based	From charge-based to adjusted CCR cost-based
	Rural, ≤100 beds	1.7%	-0.9%
Rural, >100 beds	1.5	-0.8	0.6
Urban	0.5	-0.3	0.2

**E.4 Conclusions**

The analyses described in this report confirm that charge compression and other aggregation-related problems do introduce bias to the new cost-based DRG weights, and that refinements to the CCRs can reduce that bias. A number of options could improve the accuracy and precision of the CCRs as now derived from the Medicare cost report, and also reduce the need for statistically-based adjustments. The options can be divided according to whether they can be implemented over short, medium and long-term time frames.

**Short-Term Implementation**

- Incorporate edits to reject or require more intensive review of cost reports from providers with extreme cost-to-charge ratios. This would reduce the number of providers with excluded data in the national CCR computations, and would also improve the accuracy of all departmental CCRs within problem cost reports by forcing providers to review and correct the assignment of costs and charges before the MCR is filed.
- Revise cost report instructions to reduce cost and charge mismatching and program charge misalignment. This could be immediately effective for correcting the reporting of costs and charges for medical supply items that are now distributed across multiple cost centers.

- Separate Emergency Room from “Other Services” and compute a fourteenth national CCR for the DRG cost computations. Consider separating Blood and Blood Products from “Other Services” to compute a fifteenth national CCR for the DRG cost computations.
- Adopt the regression-based estimates as a temporary method for disaggregating national average CCRs for Medical Supplies, Drugs, and Radiology. Statistical models appear to work well for estimating systematic differences in markup within individual departments. They can be used as a short-term correction until more detailed information can be gathered directly from cost reports, or as a permanent adjustment if more detailed cost-finding seems impractical.
- Routinize annual data collection of a limited amount of Inpatient SAF variables to be merged into MedPAR claims to support annual updates of any needed regression estimates, until the MedPAR files can be modified.

### **Medium-Term Implementation**

- Expand the MedPAR file to include separate fields that disaggregate several existing charge departments. For compatibility with prior years’ data, the new fields should partition the existing ones rather than recombine charges. New fields should include those used to compute statistically disaggregated CCRs in this report, as well as fields for intermediate care, observation beds, other special nursing codes, therapeutic radiation and EEG, and possibly others.
- Encourage providers to use existing standard MCR cost centers, particularly those for Blood and Blood Administration, and for Therapeutic Radiology

### **Long-Term Implementation**

- Add new standard MCR cost centers for “Devices, Implants and Prosthetics” under the line for “Medical Supplies Charged to Patients.” This would eliminate the need for statistical estimation on this CCR. Consider also adding a similar line for IV Solutions as a subscripted line under the line for “Drugs Charged to Patients.”
- Add new standard MCR cost centers for CT Scanning and MRI as subscripted lines under the line for “Radiology-Diagnostic.” About one third of providers who offer CT Scanning and/or MRI services are already reporting these services on non-standard line numbers. More consistent reporting for both cost centers would eliminate the need for statistical estimation on the radiology CCRs.
- In consultation with hospital industry representatives, determine the best way to separate cardiology cost centers and add a new standard MCR cost center for cardiac catheterization and/or for all other cardiac diagnostic lab services. About 20 percent of providers already include a non-standard line on their cost reports for catheterization. Creating a new standard cost center could improve consistency in reporting and substantially improve the program charge mismatching that now occurs.

- In consultation with hospital industry representatives, consider establishing a new cost center to capture intermediate care units as distinct from routine or intensive care.
- Establish expert study groups or other research vehicles to study options for improving patient-level charging within nursing units. Nursing accounts for one-fourth of IPPS charges and 41 percent of the computed costs from our claims analysis file. Historically, nursing charges and costs have been assigned to patients without relying on individual measures of service use. Consideration should be given to finding ways to improve precision in nursing cost-finding, that will improve relative resource weights without adding substantial administrative costs to either the Medicare program or to providers.

## CHAPTER 1 INTRODUCTION

This report summarizes the data analysis conducted by RTI International for the Centers for Medicare & Medicaid Services (CMS) under contract (No. 500-00-0024-TO18), “A Study of Charge Compression in Calculating DRG Relative Weights.” The purpose of the project was to develop more accurate estimates of the costs of Medicare inpatient hospital stays that can be used in calculating relative resource weights per diagnosis-related group (DRG) under the Acute Inpatient Prospective Payment System (IPPS). This project revisits the links between costs and charges as reported on hospitals’ Medicare Cost Reports (MCRs) and examines methods of refining cost-to-charge ratios (CCRs), which are used to convert the charges reported on claims submitted to Medicare into costs for each case.

### 1.1 Background

In the initial implementation of the IPPS, DRG weights were constructed from charges for services reported on Medicare claims that had been discounted using cost-to-charge ratios (CCRs) for each standard hospital department appearing on the Medicare Cost Report (MCR).<sup>i</sup> CCRs specific to each department were computed for each hospital provider. After standardizing charges for area wage variation and other factors, ancillary charges were converted to cost by applying hospital-specific CCRs to each ancillary charge appearing on the Medicare Provider Analysis and Review (MedPAR) claims file. Average cost per DRG was computed from the sum of the ancillary costs and per-diem based routine and critical care nursing costs. Relative weights were constructed by dividing average cost per DRG by the overall national average cost per case. Matching hospital specific, service-specific CCRs to charges for each individual Medicare case was determined to be administratively complex. In addition, use of charges from the most recent available claims requires matching claims to cost-to-charge ratios derived from Medicare cost reports for an earlier time period. Beginning with the third year of prospective payment (FY 1986) the DRG weights were recalibrated based on standardized relative charges, as a simpler alternative that had been found to produce weights that were highly correlated with cost-based weights.<sup>ii</sup> Subsequent research on charge-based DRG weights using claims data from later periods found slightly increased differences between charge-based and cost-based weights, but did not conclude that the differences were sufficient to recommend returning to cost-based weights.<sup>iii, iv, v</sup> Recalibrations continued to be based on standardized charges until FY 2007.

Increasing variation in hospital mark-up practices over the last twenty years, however, has posed increasing problems with using billed charges as a proxy for cost in DRG weight construction. There has been a gradual increase in *overall* mark-up rates, and also a widening of the differences in *service-specific* average mark-up rates. Hospitals differ substantially in their overall pricing strategies; 25 percent of IPPS hospitals in 2004 had an aggregate cost-to-charge ratio of 0.28 or less (equating to a mark-up of 257 percent or more), while 25 percent had an aggregate ratio of 0.47 or more (a mark-up of 113 percent or less). Charge-based weights will overstate patterns of resource use from facilities with lower cost ratios. To the extent that case mix and patterns of service intensity are systematically different between high and low mark-up hospitals, charge-based weights will be a biased estimate of relative resource use.

Independent of trends in overall mark-up rates, there are also systematic patterns of variation in markup rates across types of services. This is the result of two types of pricing strategies, sometimes referred to as *cross-subsidization*, where higher profits on some services are intentionally allowed to offset lower profits or even losses on others, and *charge compression*, a specific type of cross-subsidization whereby higher markup rates are applied to low-cost items and lower markup rates are applied to high cost items. Charge compression is generally found in pricing for re-sale items such as medical supplies and drugs charged to patients. As discussed below, variation in mark-up rates due to cross-subsidization creates potential for bias in charge-based weights, but charge compression creates potential for bias in cost-based weights. In the earlier years of Medicare prospective payment attention was paid to possible compression in the DRG weights as a result of charge compression and the use of per diems in nursing cost measurement<sup>vi, vii</sup> but this concern waned after recalibration based on charges became standard practice.<sup>viii</sup>

Longstanding hospital practices of cross-subsidization have promoted higher markup rates on ancillary services, medical supplies and drugs, which then subsidize nursing units and clinics. In recently-submitted MCRs, for example, the median cost-to-charge ratio for clinical lab services is 0.23, while the median for routine nursing is nearly 3.6 times as high, at 0.87. Service-specific pricing differentials create bias in charge-based weights by overstating the relative cost for surgical and other cases with relatively higher ancillary service use, and understating it for general medical, psychiatric, and other cases that rely more on nursing care. As the cross-service pricing differentials have increased over time, higher mark-up services have become increasingly over-valued within the system of DRG weights, creating unwanted incentives for hospitals to specialize in certain types of increasingly profitable cases.

To correct this situation, CMS adopted a new DRG weight computation method for FY 2007 IPPS payments.<sup>ix</sup> Under the new method, national aggregate CCRs were computed for each of 13 different service departments, based on total Medicare program costs and charges from MCRs. New weights were constructed by standardizing the MedPAR charges for area price differences and other IPPS payment factors; assigning each of the standardized charges from the claim to one of the thirteen service department groups, computing the mean standardized charge by service department for each DRG; discounting each of the DRG-level charge amounts to cost by applying the thirteen national CCRs, and then computing relative weights from these DRG cost estimates.

*Exhibit 1* identifies each of the 13 groups, the component cost centers from the cost reports that were used to compute the CCRs, and the associated types of charges on the MedPAR claims that are converted by these CCRs. The 13 groups capture much of the variation in mark-up rates across major types of clinical services, thereby reducing much of the bias in weights created by cross-subsidizing pricing practices. The use of national CCRs rather than hospital-specific CCRs allows CMS to compute the cost conversion at the DRG level rather than the hospital and claim levels. This avoids the need for complex algorithms to match groups of services from each hospital's cost report cost centers to groups of services on MedPAR claims. While there is a likely loss of precision in the resulting cost estimates, it is not clear that final weights developed from national CCRs are substantially different from those that would have been developed from hospital-specific CCRs.

As expected, application of the new cost-based weights resulted in substantial payment increases for less procedure-oriented care, especially those for psychiatric care and substance abuse, and reductions for several surgical and procedure-intensive DRGs. The new weights are being phased in over a 3-year period to minimize disruptive effects.

**Exhibit 1**  
**National average cost-to-charge ratios for the FY 2007**  
**inpatient prospective payment system DRG weights**

National CCR groups (total= 13)		MedPAR departments (total=28)		Cost report lines		CMS national CCR from FY 2007 rules
#	Description	Var. #	Description	Line #	Descriptions	
1	Routine	63, 64, 65	Routine	25	Routine	0.56
2	Intensive	66	ICU	26, 28-30	ICUs (all)	0.50
2	Intensive	67	CCU	27	CCU	
3	Drugs	69	Pharmacy	56, 48	Drugs Charged; Intravenous Therapy	0.21
4	Supplies	70	Supplies	55	Supplies charged	0.34
4	Supplies	71	DME	67	DME sold	
4	Supplies	72	DME	66	DME rented	
5	Therapy Services	73	Physical Therapy	50	Physical Therapy	0.44
5	Therapy Services	74	Occupation Therapy	51	Occupational Therapy	
5	Therapy Services	75	Speech Therapy	52	Speech Therapy	
6	Inhalation Therapy	76	Respiratory Therapy	49	Respiratory Therapy	0.20
7	Operating Room	79	Operating Room	37, 38	Operating Room; Recovery Room	0.32
8 <sup>1</sup>	Labor & Delivery	N/A	N/A	39, 63	Labor & Delivery; Other O/P	0.46
9	Anesthesia	82	Anesthesia	40	Anesthesia	0.16
10	Cardiology	81	Cardiology	53, 54	Electrocardiology, Electroencephalography	0.21
11	Laboratory	83	Lab	44, 45	Laboratories	0.19
12	Radiology	84, 85	Radiology & MRI	41 42	Diagnostic Radiology Therapeutic Radiology	0.19
13	Other Services	N/A	N/A (no separate charge group)	43	Radioisotopes	0.38
13	Other Services	68	Other Services	62, 62.01, 69	Observation, Other Ancillary	
13	Other Services	77	Blood	46	Blood	
13	Other Services	78	Blood Admin	47	Blood Storage/Processing	
13	Other Services	80	Lithotripsy	N/A	N/A (no cost center)	
13	Other Services	86	Other O/P Services	58, 68	ASC; Other O/P	
13	Other Services	87	Emergency	61	Emergency	
13	Other Services	88	Ambulance	65	Ambulance	
13	Other Services	91	ESRD	57, 64	Renal Dialysis; Home Program Dialysis	
13	Other Services	92	Clinics	60, 63.50, 63.60	Clinic; RHC; FQHC	

NOTE:<sup>1</sup> National CCR for Labor and Delivery is conditional on a sample of maternity DRGs only. This CCR was not re-estimated in this study.

SOURCE: 71 FR 47887 – 47892 August 18, 2006.

## 1.2 RTI Contract

RTI has been asked to review the DRG cost estimates as adopted in the final payment rules for FY 2007. Our primary task is to consider possible bias in the new cost-based weights due to charge compression or other problems in the Medicare cost-to-charge ratios. We have been asked to review methods for reducing bias that were suggested during the public comment period on the proposed rules, and consider additional methods for refining the construction of cost converters from MCR data. The scope of work included the following tasks to be completed within the first 6 months of the contract:

1. Develop an analysis plan that explores alternative methods of calculating prices for hospital inpatient services with the objective of better aligning the charges and costs used in those calculations. Potential methods to be considered include the following:
  - Modifying existing cost centers and/or creating new cost centers to reduce the within cost center variation in markups of charges over cost.
  - Using statistical methods to adjust existing departmental cost to charge ratios or charges for specific services, using the general method proposed by Christopher Hogan, as well as variations of that method.
2. Convene a panel of technical experts (TEP) to review the analysis plan and discuss potential ways that payment methods might be adapted to counteract the effects of charge compression.
3. Conduct an analysis of alternative approaches to CCR construction, using recent Medicare cost report data and Medicare IPPS claims, analyzing the advantages and disadvantages of each alternative approach. Criteria are to include feasibility, cost of implementation, impact on DRGs, and impact on total facility Medicare payments for the services involved.
4. Prepare an interim final report by January of 2006, incorporating an evaluation of statistical approach to modifying CCRs, a summary of the impact of that and other approaches, outlining feasible changes to cost reports, claims summaries or weight computation methods, that would improve Medicare CCRs.

### **1.3 Structure of This Report**

*Chapter 2* of this report describes RTI's analytic approach. *Section 2.1* provides a "Statement of the Problem" in which we summarize RTI's interpretation of the difficulties currently encountered in the construction of cost-based DRG weights. *Section 2.2* is a description of our methods, including data sources, sample definitions and the technical approaches taken. Short tables and illustrative graphics are embedded throughout the text of the report, but larger tables and detailed documentation, including information on editing, exclusions and file matching, are included as appendix material.

A Technical Expert Panel (TEP) was convened in Baltimore on November 1, 2006. During that meeting RTI presented background material and preliminary data from cost report and claims analyses; laid out our technical approach to the requested tasks; then opened up a discussion to receive feedback on our approach and identify possible improvements or extensions to the work. A list of TEP members and the TEP agenda is provided in *Appendix A*. Input from TEP members was incorporated into a final analytic plan, which was carried out in November and December of 2006.

Our results are presented in *Chapters 3* and *4*. *Sections 3.1* through *3.3* summarize evidence of possible Medicare program charge mismatching, findings on hospital CCRs and the distribution of claims charges by DRG. *Section 3.4* presents alternative methods for refining or

disaggregating six of CMS' 13 national CCRs on the basis of this evidence. In this section, we review each of the regression results and other approaches for refining the CCRs, and document the final computations for a set of final adjusted ratios to be derived from five out of the six investigated national CCRs.

*Chapter 4* traces the impact of adjusted CCRs through to DRG weights and hospital case mix index values. We present results from simulated weight computations from each of the adjustment models, identifying DRGs with the greatest positive and negative changes in weights and summarizing the average impact by MDC and by DRG type (medical versus surgical). Finally, we estimate the impact of weight changes on hospital payments by computing changes in case mix index values.

A final set of options for improving Medicare CCRs is contained in *Chapter 5*. Possible improvements to the CCR computations are divided into short, medium and long-term interventions available to CMS, based on the time likely to be needed for their implementation.

## CHAPTER 2 METHODS

### 2.1 Statement of the Problem

Although there is general agreement on the source and direction of bias inherent in charge-based weights, the validity of alternative cost-based weights depends largely on the approach and accuracy of the data used for claims cost conversion. The effect of charge compression on cost-based weights is only one concern among several that have been raised regarding the use of CCRs from the Medicare cost reports.<sup>x</sup> Problems with Medicare CCRs can be generally grouped into those related to *data accuracy*, and those related to *data aggregation*.

#### Data Accuracy

With respect to the accuracy of the source data, there is a major concern about *misalignments* of costs and charges by cost center leading to inaccurate hospital CCRs.<sup>xi</sup> Most IPPS cost reports are not audited. Some contain errors where, in restating their accounting data to conform to the cost centers requested on the MCR, providers have misaligned some departmental costs and charges such that they are not always accumulated on the same lines. Often charges are relatively easy to assign to appropriate line numbers but costs are not, particularly in closely related cost centers such as Operating Room, Anesthesia and Recovery Room. Reported costs may not be accurate in such areas if supervisory or other staff is shared, or if the allocation statistics used to accumulate general service costs are not sufficiently detailed to distinguish between the related departments. This can distort the numerator values (cost) in the cost-to-charge ratio. Severe misalignments can be identified through review of extreme values in hospitals' CCRs and the use of careful editing algorithms. Less severe misalignments, however, can only be identified and corrected through expanded cost report audits.

Other accuracy concerns focus on *mismatching* between cost report cost centers and MedPAR claims charges. Mismatching leads to the application of the wrong CCR to a specific type of charge. Patient charges on individual claims are identified by 3-digit universal billing (UB-92) codes, of which more than 400 are regularly used on inpatient claims. In the MedPAR claims file that CMS uses in DRG construction, these revenue codes are summarized into 28 charge groups that have a rough, though not exact, correspondence to the cost centers defined on the Medicare cost report. Medicare's Fiscal Intermediaries provide hospitals with annual summaries of covered program charges that they have processed throughout the hospital's accounting period. Hospital management is expected to use these summaries when completing the annual cost report, to match their Medicare program charges to appropriate cost centers and convert to Medicare program costs with the appropriate cost-charge ratio. Most of the three-digit revenue codes can be aggregated to 2-digit or even 1-digit summaries and still have an obvious map to an appropriate line on the cost report. For a limited number of services, however, matching revenue codes from claims to the appropriate cost center is a matter of educated

guesswork.<sup>1</sup> Many hospitals adapt the cost centers on the cost report to follow their own management accounting structure, as a result of which they must make manual reclassifications to the Medicare program charges before entering them on the cost reports. The accuracy of certain DRG cost estimates depends on the providers' decisions when preparing the cost report and the Intermediary's ability to audit and correct the documents.<sup>2</sup>

### Data Aggregation

Concerns have also been voiced about the levels of aggregation used in computing the new cost ratios. An individual CCR is an aggregate ratio of costs and charges for multiple services, each of which may be priced differently with respect to its cost. If component services with different ratios are used in substantially different proportions across different DRGs, applying the average CCR to all of these services will cause errors in individual DRG cost estimates. Throughout this report we refer to this type of error as "aggregation bias." Sources of potential bias in the current DRG cost estimates include both *within-department* over-aggregation and *cross-department* over-aggregation of ancillary services, and *nursing cost compression* stemming from failure to recognize different levels of nursing intensity.

- *Cross-department aggregation.* Distortion in the FY 2007 cost weights may have resulted from combining cost centers from the Medicare cost report to produce weighted average CCRs for larger service groups, if the separate cost centers also have very different individual CCRs.<sup>3</sup> Cross-department aggregation will only create distortion in specific DRG weights if there are both differences in the mark up rates across component cost centers and these combined services tend to be distributed

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<sup>1</sup> This tends to happen in assigning codes for more recently developed services like peripheral vascular labs or lithotripsy; in services where the codes have been established as a subgroup to a department that does not correspond to common management divisions, such as chemotherapy which is included within the radiology codes; and in assigning costs and charges for drugs and supplies provided in radiology and other diagnostic settings as "incident to" these tests. Most commonly, hospitals have difficulty determining how to assign covered days of care in step-down units to the appropriate nursing care lines; and. In each of these situations, providers are left to make corrective allocations based on their best judgment. If cost reports are audited these decisions may be revised by the intermediary.

<sup>2</sup> For example: Some hospitals may allow the expenses and revenues from cardiac devices to flow through the cardiology cost center, while others will treat it as a standard chargeable medical supply item. Both the intermediary's program charge summaries (Provider Statistics and Revenue reports, or PS&Rs, which are used to identify the amounts reported on Worksheet D4) and the MedPAR claims summary consider these to be medical supplies charged to patients. The technically correct treatment is for the hospital to make a manual reclassification to move their costs and charges from cardiology to medical supplies. Some hospitals choose, instead, to leave the supplies in cardiology, but correct the program charge alignment by making a reclassification to the, moving program charge dollars from medical supplies to cardiology in order to match charges to the correct CCR. Other hospitals may simply ignore the mismatching problem. When working with the national cost report files, there is no way for CMS to know that such a correction might have been needed, or which correction was done. In converting the charges for cardiac devices to a cost estimate for purposes of DRG weight computations, however, CMS applies the CCR for medical surgical supplies.

<sup>3</sup> The proposed rules for FY2007 grouped cost centers into only ten charge groups. In response to concerns raised by MedPAC regarding aggregation across departments, the final rules created 3 more groups by separating inhalation therapy from other rehabilitation-related therapies, anesthesia from operating room services, and labor & delivery (restricted to maternity DRGs only) from operating room services.

uniquely across specific DRGs. Cost estimates for these specific DRGs may be overstated or under-stated as the result of aggregation.

Cross-department aggregation bias is relatively easy to identify and to correct, because the numerator and denominator data that are needed to retain the more detailed CCRs are available from the cost report. A reasonable question to ask is why national CCRs would not be computed for each of the standard cost centers that appear on the Medicare cost report cost report, to the extent that the cost centers can be matched to the charge groups on the MedPAR claims file. The answer is that hospitals are not required to use all of the cost centers, and many choose to combine services across cost centers. For example, only about one-half the facilities with Operating Room centers report separate Recovery Room centers, though they all have both types of services. Likewise nearly all facilities have a cost center for Physical therapy but less than one-half also identify cost centers for Occupational and Speech Therapy; many of those that don't, however, provide the services but combine the costs and charges on the line for Physician Therapy. If hospitals' claims are going to be converted using national ratios rather than the ratios created from their own accounting data, then it may be better to use ratios for an aggregate that represents the "least common denominator" group of services likely to be found for most IPPS providers.<sup>4</sup>

- *Within-department aggregation.* Bias can also result from combining services or items that have systematically different mark-up rates for one hospital department or one line number on the cost report, if those services also have predictably different distributions across DRGs. An example of this that was identified in public comments to the proposed 2007 rules is where hospitals tend to apply a lower mark-up on expensive medical devices and implants as compared to what they apply on other medical supplies. This is also a classic example of charge compression. The CCR for medical supplies is a weighted average of both types of items; because devices and implants are concentrated in a few DRGs, and also make up a significant portion of total charges for those DRGs, when the average cost per case is estimated based on the overall supplies mark-up, costs *for these DRGs* may be substantially understated, while costs for DRGs using other types of supplies will be overstated. The direction of bias in the cost estimate for any one DRG could be up or down, depending on the mix of affected services that is typically used for that DRG.

Charge compression leads to a specific form of within-department aggregation bias that understates the true cost of cases using the more expensive items, and creates corresponding compression in the DRG weights. There are also instances where reverse markups strategies may be in place; recent imaging techniques tend to be more

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<sup>4</sup> This would not be true if cost were still computed using hospital-specific ratios applied to individual claims. In theory, for hospital-specific costing the most detailed ratios should compute the most accurate costs, particularly if the CCR-to-claims charge mapping can be done using original revenue billing codes. In practice, there are two practical limitations to improving precision using more detailed ratios. First, the accuracy of overhead allocation and other aspects of departmental cost finding may deteriorate at finer levels of departmental aggregation, such that the more detailed CCRs show more extreme values and are subject to more severe editing. Second, rules for matching the more detailed CCRs to individual revenue codes on individual claims become increasingly hospital specific, and therefore not practical for CMS to implement at a national level.

expensive than other radiology procedures, yet the mark-up on these services may be higher rather than the mark-up on other diagnostic radiology. If this happens, the use of an average radiology CCR across all cases might also cause systematic distortion of the cost estimates, but the effect would be to increase, rather than to compress, cross-DRG variation in cost per case. For this reason, we find it easier to refer to this problem generically as “within-department aggregation bias.”

Adjusting for within-department aggregation bias poses particular difficulties, because the numerator values of the CCR (the component costs) have not been accumulated on the cost report. If the affected services are identified by specific revenue codes, then it is possible to use statistical estimation techniques, such as those identified by Dr. Hogan and submitted during the public comment period for the FY2007 rules. This approach was based on the observation that if expensive devices have a lower mark-up rate than other medical supplies, and there is variation across providers in the proportion of device sales to other medical supply sales, then there should be a statistically significant difference in providers’ overall CCR for medical supplies sold to patients that is a function of the proportion of supplies that is attributable to devices.

- *Nursing Cost Compression.* Nursing cost compression affects DRG weights the same way ancillary charge compression does, but it has a very different origin. Nursing costs have historically been combined with other facility-related costs plus housekeeping and dietary services, into a single per-diem or average cost per day. Averages are computed across all patients in nonintensive care inpatient units, or across all patients within individual types of critical care units. Inpatient nursing or “accommodation” charges generally follow the same principle; average room rates are set for routine medical-surgical, intermediate care or intensive care units, with only minor patient-level adjustments for isolation or other incremental fees. This is a rather primitive approach for such a significant component of the total inpatient care cost, particularly in comparison to the level of detail available for differentiating ancillary service use at individual patient levels. In our analysis files accommodation charges account for one-fourth of billed charges on Medicare IPPS claims. For one in four DRGs they account for more than one-third of charges; and for DRGs related to mental illness and substance abuse, nursing charges account for closer to 60 percent of the total bill. Per diem cost averaging always understates the costs of patients with above-average nursing complexity and overstates them for patients with below average complexity, and to the extent that nursing needs are predictably different by DRG assignment, per-diem based DRG cost weights will be severely compressed.

The new rules for DRG cost estimates in FY 2007 substituted cost-to-charge ratios for per diem costs as cost converters for inpatient nursing care. Hospitals set separate rates for routine, intermediate and intensive daily care, but many do not recognize other nursing unit differentials in their charge structure. To the extent that hospitals use different room rates for some the different patient care units that are grouped together under “Adults and Pediatrics” in the cost report (for example, for general medical floors, geriatric units, pediatric units or specialty surgical floors) *and* that the different rates reflect average cost differences across such units, using CCRs instead of per-diems reduces nursing cost compression by the simple association of lower costs to lower charges. Even though the charges are all converted using the same CCR (which may or may not be

accurate across different units), the variation created by different unit-level charges allows some improved precision in the cost estimates as compared to the previous method using a single per-diem cost.

Unlike the charge compression found in ancillary services, there are virtually no revenue codes to identify *patient level* differences in nursing resource use. More detailed *unit-level* cost ratios could improve nursing cost finding somewhat, but substantial progress in improving nursing cost estimates by DRG may not be possible until additional patient-level data become available in the form of revenue codes used for patient-specific nursing surcharges.<sup>xiii</sup>

## **2.2 Technical Approach**

### **2.2.1 Analysis Plan**

A synopsis of the final revised analysis plan for this project, established in cooperation with the CMS Project Officer, is presented in *Exhibit 2*.

### **2.2.2 Data Sources and File Construction**

Principal data sources for this project are the Medicare Cost Reports (MCRs) extracted from Healthcare Cost Report Information System (HCRIS) files, MedPAR claims files for calendar years 2003–2005, supplemented by greater charge detail from the 100% national inpatient Standard Analytic Files (SAFs) for the same period. We also used information from the FY 2007 DRG weight files, Provider-Specific Files (PSFs), PPS Impact files, CMS' charge standardization files, and coding for the 3M™ Core Grouping Software-CMS Grouper Version 24. Although hospital provider CCRs are constructed from total costs and charges, our study was limited to assessing possible bias in IPPS DRG weights only. Many of the aggregation issues are just as pertinent to the OPSS weights, but because the mix of services is different, the potential for bias in the OPSS weights is different. We therefore limited our claims source data for the regression approaches to the Inpatient SAFs.

HCRIS files containing the MCR data were downloaded from the CMS web site in August 2006 and reflect records updated as of July 2006. This file contains reports for federal fiscal years FY 2001 through part of FY 2005.<sup>5</sup> All reports for providers included in CMS' FY 2007 Impact File were initially retained in the facility analysis file. Hospitals identified as all-inclusive rate providers (because these have no individual CCRs); a small number of low-volume providers (with fewer than 25 Medicare discharges); and a small number of providers with Medicare average lengths of stay of 20 days or more (because they were assumed to represent Long-Term Acute providers that had not yet received certification), were subsequently excluded from the final files. We retained the cost reports for earlier periods (2001 through 2003) for the final set of providers identified for the CCR analysis file, but these were used only to track historical trends in cost ratios and for hospital-level edits.

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<sup>5</sup> Approximately one-third of reports applicable to FY2005 had been filed at the time of the July update.

## Exhibit 2 Final analysis plan

- I. Medicare Cost Report (MCR) analysis:
  - a. Identify inclusion criteria for analysis file.
  - b. Replicate aggregate program costs and charges for national CCRs for CMS' 13 CCR groups.
- II. MedPAR Claims analysis:
  - a. Identify claims that match to hospitals and reporting periods included in cost report files (the CCR computation sample).
  - b. Test agreement between claims charges and cost report covered program charges.
  - c. Extract FY 2005 claims meeting CMS edits and inclusion criteria (the weight computation sample).
- III. "Cross Department" Aggregation Assessment:
  - a. Review MedPAR and MCR charge groupings within CMS' 13 CCR groups.
  - b. Identify potential areas for subdivision and recomputed CCRs from existing MCR data
- IV. "Within Department" Charge Compression Assessment:
  - a. Identify and test matching claims set from Inpatient SAF and extract detail revenue codes.
  - b. Summarize sample charges by detail revenue codes (total charges, number of user claims, number of user providers).
  - c. Identify potential areas for compression or other aggregation bias (with input from the TEP).
  - d. Review and adapt Dr. Hogan's regression model for diagnosing compression.
  - e. Run regressions and diagnostics for select MCR departments.
  - f. Review regression results with CMS.
  - g. Predict "synthetic" CCRs for regression-adjusted data.
- V. Construct final set of adjusted CCRs
- VI. Computed revised national CCR charge groups:
  - a. Merge SAF data to MedPAR claims file.
  - b. Adjust charges to create new subgroups.
- VII. DRG Costs and weight construction:
  - a. Apply the FY2007 IPPS DRG Grouper to all analysis sample claims.
  - b. Standardize charges, compute transfer adjustments, and trim claims file, following CMS code.
  - c. Aggregate standardized charges by DRG and apply CCRs.
  - d. Construct raw and normalized cost weights.
  - e. Summarize impact of all adjustments:
    - i. Differences in weights by DRG
    - ii. Impact on hospital averages (case-mix index)
  - f. Review findings with CMS project officer and finalize set of adjusted CCRs.
- VIII. Recompute adjusted weights for final FY 2005 claims weight file:
  - a. Identify all FY 2005 claims associated with providers in the final facility file.
  - b. Repeat steps VII (a) through (e) using same adjusted CCRs.
- IX. Draft Final Report

The final CCR analysis file includes records for 3,664 IPPS cost reports (3,574 unique facilities) from FYs 2004 or 2005 (whichever is most recent), with multiple partial-period reports retained if they covered periods of 90 days or more (*Exhibit 3*).<sup>6</sup> A linked discharge analysis file was created from MedPAR files covering multiple calendar years, where we extracted 11.2 million discharge records for beneficiaries who were cared for in these hospitals and were discharged at any time between the beginning and ending dates of the cost reporting period. A second claims-level file was created from the Inpatient SAF, containing revenue code frequencies and total charges for claims that had been matched to the MedPAR using discharge date, total charges, and beneficiary ID (HIC number). The purpose of the SAF file was to extract selected charge codes for services that were identified as potential sources of within-department aggregation bias, but which are not separated in MedPAR. Extracted SAF claims data were then merged to the MedPAR claims analysis file.

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<sup>6</sup> Some partial-period MCRs correspond to hospital openings or closures, for which only a single MCR for that fiscal year will be present. However, other partial-period MCRs correspond to hospitals that change accounting periods, for which multiple MCRs exist in our facility CCR file.

The claims analysis file was restricted to discharges occurring during the period covered by the cost report to have the best possible data match for the regression models. Because cost reports are delayed, this is never the most up-to-date set of Medicare claims. Once adjusted national aggregate CCRs are computed, however, they can be applied to the latest claims available, so that recalibrated weights reflect the most recent information on service use by DRG.

### Exhibit 3 Analysis samples

Federal fiscal year	Number of IPPS cost reports	Percent
Cost Report FY 2004	2,461	67%
<u>Cost Report FY 2005</u>	<u>1,201</u>	<u>33%</u>
Total Cost Reports	3,662	100%
Number of unique IPPS providers	3,574	
Number of IPPS claims matched to sample hospitals, by cost report period	11.2 million	
Of which: Number of claims passing edits and retained for claims analysis file	11.1 million	
Number of unique IPPS providers with claims in the final claims analysis file	3,372	

#### 2.2.3 Editing Criteria and Data Standardization

Our first task was replicating CMS' national CCRs and DRG cost and weight computations using the more recent cost report and claims data. As part of this process we reviewed hospital CCRs for accuracy and applied CMS' exclusion criteria. Edits were designed to exclude both charges and costs from the computation of national aggregate CCRs for any individual hospital cost center with a CCR that qualified as an extreme value, because these were considered likely to reflect hospital cost and charge misalignments. *Appendix B* provides additional detail on the edit standards and their impact on the analysis samples.

All claims were regrouped using the FY 2007 Grouper to assign FY 2007 DRGs to each observation. Transfer-adjusted discharge fractions were assigned based on the original DRG used for claim payment.<sup>7</sup>

In keeping with CMS' usual procedures for DRG weight recalibrations, all claim charges were standardized for area price variation, Indirect Medical Education (IME), and Disproportionate Share Hospital (DSH) adjustments. We used payment factors appropriate to the

<sup>7</sup> The transfer-adjusted discharge fractions were computed based on the original DRG assignment but using post-acute transfer criteria from the FY 2007 proposed rules, or the most recent published criterion for discontinued DRGs. In subsequent comparisons with discharge fractions derived from the DRG assignments that would have occurred under the FY 2007 grouper, we found only small differences between the two computations with the exceptions of DRGs 544 (Major Joint Replacement or Reattachment) and 545 (Revision of Hip or Knee Replacement). Weights computed for these two DRGs were therefore corrected to reflect what would have occurred using a case count based on the revised discharge fraction.

operating and capital components of the IPPS. Also in keeping with CMS procedures as described in the final FY 2007 rules, claims were excluded from the weight sample if they had zero or negative charges, zero covered days, or if their total standardized charges were above or below three standard deviations from the geometric mean standardized charge for that DRG.

#### **2.2.4 Program Charge Matching Between Medicare Cost Reports and Medicare Claims**

Our second task was to test the matching between what providers reported as covered Medicare IPPS charges on their MCRs and what was included on claims and reflected in the MedPAR files for the same period. The validity of using any cost report CCRs as conversion factors for claims charges rests first on an “apples-to-apples” assumption that a claim charge is being discounted by a CCR that has been constructed from the data appropriate to that service. To test program charge matches we first identified a slightly smaller subset of hospitals for which we were confident that we had claims data spanning the complete cost reporting period.<sup>8</sup> Each MedPAR claim was matched to a facility MCR based on claim discharge date. Case counts and charges by type of service were all summed by provider cost report. IPPS program charges were extracted from the cost report Worksheet D-4, Column 2), and the MCR cost centers were then mapped to new line groups corresponding to the grouping of charges in MedPAR data.<sup>9</sup> Program discharges, days, and charges organized by these MedPAR-equivalent departments were all summed at the provider cost report level and merged to the file containing MedPAR claim charges that had also been summed at the provider cost report level. For each provider cost report, a program charge match ratio was computed by dividing the sums derived from the MCR Worksheet D-4 charges by the sums derived from the MedPAR data.

Because all cost reports have some timing issues due to unpaid claims at the time the MCR is submitted, one should not expect this match ratio to be exactly 1.0 even if the charge matching procedure were perfect. As discussed earlier, MedPAR charge summary departments were not originally designed to be matched to cost report line numbers, and there are some areas where MedPAR charge groups combine several charges that are likely to appear on multiple cost center lines; these will always create a matching problem, even if hospitals were to assign cost centers precisely according to CMS instructions. To the extent that hospitals have adapted MCR cost centers to match their own management accounting structure (as described in footnote 2) the match ratio will be further away from one.

Preliminary results from the program charge matching analysis were presented to the TEP in early November and discussed at length. TEP members discussed possible reasons for substantial mismatching in key service areas and implications of mismatching for the current study design, particularly for the validity of regression-based CCR adjustments. Suggestions for testing the effect of matching problems on the regressions were included in our modeling. An overview of the results from our program charge matching analysis is provided in *Section 3.3*. Specific matching issues are discussed in more detail for the charge areas chosen for CCR adjustment, within *Section 3.4*.

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<sup>8</sup> This approach was adapted from similar analyses conducted by the Greater New York Hospital Association.

<sup>9</sup> The mapping can be identified from Exhibit Table B-3 in Appendix B.

## 2.2.5 Adjusted CCR Computations

Possible CCR adjustments were divided into those based on re-grouping of component costs and charges (addressing cross-department aggregation) and those based on statistical estimations (addressing likely within-department aggregation). We also considered examining within-department aggregation by analyzing data from a subset of cost reports with more detailed reporting, as described below.

### Re-groupings

To target CCRs associated with cross-department aggregation bias, we grouped MCR cost centers by “MedPAR-equivalent” departments and computed national aggregate CCRs for each of the MedPAR departments within the 13 CMS charge groups. We then created a spreadsheet displaying the distribution of MedPAR charges across DRGs. When we found MedPAR component CCRs that were both different from the CMS group average *and* for which there appeared to be DRGs with significantly high use, we targeted these CCRs for adjustment... We focused on the Other Services group (CMS’ group 13, on *Exhibit 1*) as the most likely source for cross-department aggregation bias. This was in large part because CMS had already responded to MedPAC’s recommendations to split unlike services from other areas in the final rule (see footnote 3). For our final weight modeling we removed Emergency Room and Blood and Blood Products from this group and computed separate CCRs for each of these, and recomputed the CCR for the remaining departments within “Other Services.”

We made slightly different changes to the data for routine and critical care nursing units. First we re-computed the national aggregate ratio for routine care (the “Adults and Pediatrics” line on the cost report) to add back costs and charges for line 62. These are the originally accumulated costs and charges before corrections estimates for those associated observation beds are removed.<sup>10</sup> In addition, we noted that in the MedPAR data, all intermediate care charges are aggregated with critical care charges, but, according to MCR filing instructions, costs, days and charges related to intermediate units (sometimes called step-down units) are reported in the routine nursing cost center. We therefore used the SAF revenue code data to transfer intermediate care charges from the intensive care charge group to the routine care charge group, because these should be converted using the routine nursing CCR.

### Statistical Adjustments

To target CCRs associated with within-department aggregation bias, we first created a spreadsheet showing frequencies and total billed charges by SAF revenue code. This was used to limit our investigation to revenue codes associated with significant IPPS expenditures. As with the cross-department adjustments, we focused on types of revenue codes that (1) we thought

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<sup>10</sup> On the Medicare cost report, the costs of observation beds (other than those identified as distinct part observation units) are automatically “carved out” of the routine nursing cost center and moved to line 62, based on a formula that uses the providers’ reported number of hours charged for outpatient observation. Hospitals that have distinct-part observation units are allowed to report costs and charges for these areas as they would any other ancillary or outpatient service, using line 62.01. We did not make any changes related to line 62.0. Other observation services generally occur on in beds on the routine care units. In a per-diem based system the “carve-out” is necessary in order to estimate a true cost per inpatient day, but in a CCR based system the formula-driven adjustment is not necessary.

were likely to represent services with mark-up rates that were different from the average; (2) represented a substantial fraction (at least 5 percent) of total MedPAR grouped charges; and (3) would be expected to be concentrated in specific DRGs. Revenue codes that were identified for testing through regression models included components to the CCRs for chargeable supplies, chargeable drugs, radiology, and cardiology. We also investigated models to estimate differences between routine and critical care nursing based on the mix of intermediate care.

Regression models were estimated for each departmental CCR under investigation, and run using the individual hospital as the unit of analysis. They follow the same basic specification as was used by Chris Hogan in the original public comments to the proposed FY 2007 rules.<sup>xiii</sup> For each of these departmental CCRs we ran similarly specified models, with some variation (described later in **Section 3.4**) to test for specific revenue matching problems and for differences in the distribution of the tested services across providers.

For each national CCR for which we are computing statistically estimated adjustments, we have done the following:

- The targeted SAF revenue codes in the department are identified and a variable is computed that represents the percent of department charges in the targeted revenue codes ( $PC^{\text{target}}$ ). There can be more than one set of target codes within the departmental CCR being investigated.
- An overall CCR is computed for each hospital, equal to the aggregate average ratio for that facility’s Medicare IPPS services, adjusted to exclude those services associated with the CCR under investigation ( $CCRAVG$ ). For ancillary service models we use the aggregate average for ancillary services only. For the nursing unit models we used the aggregate total hospital ratio.
- For each specific CCR under investigation, we regress that CCR on the target percent variable or variables, plus the adjusted underlying facility Medicare average CCR, across all hospitals. Because the outcome variable is a ratio, we use charge-weighted least squares estimates, which give greater influence to hospitals with more Medicare charges. The TEP discussed which variable would be the most appropriate to use as a weight, in light of the possible discrepancies between program charges on the cost report versus claims, but did not come to a recommendation. We chose to use total charges from the claims because this is the number used as the denominator for  $PC^{\text{target}}$ . However, we did test each regression for sensitivity to this decision, and the results are included in the discussions below.

Consider the situation where there were two sets of target codes being investigated within a departmental CCR across hospitals (indexed by  $j$ ). Then the basic equation would be

$$\text{Equation 1: } CCR_j = \alpha + \beta_1 \cdot PC_j^{\text{target1}} + \beta_2 \cdot PC_j^{\text{target2}} + \gamma \cdot CCRAVG_j + \varepsilon_j$$

where  $\alpha$ ,  $\beta_1$ ,  $\beta_2$ , and  $\gamma$  are coefficients to be estimated and  $\varepsilon$  is the idiosyncratic “regression error” term representing reasons for differences in CCRs across hospitals unrelated to the department revenue code composition or hospital average CCRs. The

coefficient  $\gamma$  is a scalar, identifying the expected difference between the ratio for the particular department under investigation and the ratios for other hospital ancillary services. If it is above one, these services tend to have higher than average cost ratios (and thus lower than average markup rates); if it is below one the opposite is true.

If either of the coefficients on the percent of charges from the target revenue codes ( $\beta_1$  or  $\beta_2$ ) is significantly different from zero, then there is evidence of a systematic difference in markup, creating the potential for bias in the weights. If these coefficients also test significantly different from each other, then each of those revenue codes contributes differently to variation across hospitals' CCRs, and separate adjustments to the CCR should be estimated. If they do not, then the target codes could be combined and a single adjustment could be made to the CCR.

- Assuming  $\beta_1$  or  $\beta_2$  are significant, predicted CCRs for the targeted services can be estimated as

$$\text{Equation 2: } CCR_j^{\text{target1}} = \alpha + \beta_1 \cdot 1 + \gamma \cdot CCRAVG_j; \text{ and}$$

$$\text{Equation 3: } CCR_j^{\text{target2}} = \alpha + \beta_2 \cdot 1 + \gamma \cdot CCRAVG_j.$$

These would be hospital  $j$ 's predicted target CCRs if either of the target codes comprised 100 percent of charges for that department; in other words, they are simulations for the CCR for the target services if the hospitals had reported them in separate cost centers.

Similarly, the new adjusted CCR for the remaining department services, after excluding the effect of the target services, can be computed as

$$\text{Equation 4: } CCR_j^{\text{adjusted}} = \alpha + \gamma \cdot CCRAVG_j.$$

This would be hospital  $j$ 's predicted CCR if the target codes comprised none of the charges in that department.<sup>11</sup>

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<sup>11</sup> A slightly different approach was taken in the Hogan memo to compute the predicted adjusted CCR for the remaining department services. For a department with only one targeted service, Dr. Hogan used the following computation:

$$\text{Alternate Equation 4: } CCR_j^{\text{adjusted}} = \alpha + CCR_j - (\beta * PC_j^{\text{target}})$$

This equation can be derived from the condition that the sum of the weighted averages of the revised CCRs be equal to the original departmental CCR for each hospital. Predicted CCRs from these two versions of Equation 4 are very different at the individual hospital level, but the aggregate national CCR will be the same under either version as long as the aggregation is based on the same distribution of target and other department services as is used to compute the  $PC_j^{\text{target}}$  variables – that is, the charges from the Inpatient SAF. Where there is substantial program charge mismatch, however, there is some question over whether the aggregate national CCR should be computed using the distribution of services from SAF or from adjusted MCR total (see discussion in **Appendix F**). If the national CCRs should be computed using adjusted MCR totals, then alternative Equation 4 may be the preferable computation.

After reviewing our regression findings, we used coefficients to predict new or “synthetic” national aggregate CCRs for each of the following: medical devices and implants (combined); other medical supplies; IV solutions; other drugs charged to patients; CT scanning; MRI scanning; and other radiology services. New national aggregate CCRs were calculated after predicting new hospital-level CCRs, estimating new Medicare program costs for each hospital, by summing charges and new costs across the sample as before.

There are some technical difficulties with this design that arise from the fact that department CCRs are generated from total costs and total charges, but the predictor variables are computed based on Medicare-only data. However, since Medicare costs are, by definition, derived by multiplying Medicare program charges by department CCRs that are derived from total costs and total charges, the ratio of derived Medicare costs to Medicare charges is necessarily equal to the CCR based on total costs and total charges. The limitations associated with this approach are unavoidable no matter how the percent variables are defined. It seems appropriate in estimating IPPS adjustments to the CCRs to use percent variables based on Medicare inpatient charges. Similarly, if outpatient adjustments to the CCRs were developed, it would seem appropriate to construct the percent variables based on Medicare outpatient charges. In some departments the percent variables could be very different for inpatient and outpatient data.<sup>12</sup>

#### *Extended Analysis of Data from Nonstandard Cost Report Lines*

Some hospital providers use additional “subscripted” line numbers for cost centers that are not part of the standard Medicare Cost Report forms. In the HCRIS files, data from non-standard lines are generally “rolled up” to the standard lines (for example, data on line 53.01 would be added to the data on standard line 53).<sup>13</sup> As an alternative approach to statistical adjustment, we also examined use of nonstandard lines in these providers to determine if CCRs computed from the provider sub-groups were (1) consistent with synthetic CCRs predicted from the regressions and (2) sufficiently generalizable to be used to construct alternative national CCRs. We extracted data from the line numbers as originally filed and examined separate CCRs from providers that had reported cost centers for MRI or CT scanning and for Cardiac Catheterization Labs. Findings from this extended cost report analysis are incorporated into the discussions in *Section 3.4*.

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<sup>12</sup> Dr. Hogan’s write-up of his CCR regression model tested the difference in findings between models using Medicare inpatient only data and Medicare inpatient plus outpatient data. Results were similar, but the resulting predicted corrections to the CCRs were somewhat larger.

<sup>13</sup> Nonstandard lines are difficult to analyze in the MCR files because, as filed, any given nonstandard line can reflect data for one service in one provider and another service for another. Before CMS issues the public-use MCR HCRIS data files, the individual provider descriptions assigned to these nonstandard lines are assigned new non-standard cost center identification numbers that are defined more consistent across providers, based on word recognition in the providers’ original cost center descriptions. These redefined non-standard lines are then “rolled up” to the standard cost center that is most appropriate for that service. A copy of the CMS roll-up is included as *Appendix C*. Some error in assignments is possible in this process, and this may be responsible for some of the mismatching that we found between MCR department charges and MedPAR department charges (reported in *Section 3.3*).

## Limitations

In completing this study, we tried to investigate all areas where we expected to see systematic pricing differentials with potential to bias the DRG weights. However, we did not identify individual SAF code use by DRG, and we are aware that there may be other candidates for adjusted CCRs that are not included in this report. In addition, there are areas where separating services that are generally delivered in outpatient settings might improve the accuracy of CCRs for inpatient services. These include therapeutic radiology, nuclear medicine, chemotherapy, electroconvulsive therapy, and outpatient surgery—all areas where the charges are not significant in the IPPS files, but where aggregation bias may still be present because the outpatient services could affect the overall department CCR. Refinement of these CCRs could be investigated using combined claims data from hospital inpatient and outpatient files.

After reviewing the alternative computations and regression results, the final set of adjusted CCRs for testing revised DRG weights in this report includes seven out of the nine possible adjustments that we investigated. Separate ratios have been computed for: Emergency Room and Blood/Blood Administration (removed from “All other”); IV Solutions (removed from Drugs); Devices, Implants & Prosthetics (removed from Medical Supplies); CT Scanning (removed from Radiology); and MRI (removed from Radiology). We also corrected the assignment of intermediate care charges from Intensive to Routine Nursing. For reasons discussed later, we have not included any revised weights based on changes in Cardiology.

### **2.2.6 DRG Weight Computations**

All relative resource weights are constructed based on the average resource measures per DRG, computed as the total dollar amounts divided by the transfer-adjusted DRG case counts. Several sets of weights have been constructed for comparison purposes from the matched claims analysis sample. For reference, a set of baseline weights is derived from standardized charges without any cost adjustment, and another is derived from costs computed using the original 13 national CCRs as described in the final FY 2007 rules. Sets of adjusted weights have been computed that cumulatively incorporate our CCR adjustments in the following order:

1. Separating Emergency Room services only.
2. Adding a separate adjustment for Blood.
3. Adding the correction for intermediate care nursing.
4. Incorporating the four final regression-based adjustments for “synthetic” CCRs computed for:
  - Devices & Implants
  - IV Solutions
  - CT Scanning
  - MRI

Finally, new national aggregate CCRs were calculated after using these synthetic CCRs to estimate revised Medicare program costs for each hospital and summing new costs and charges across the sample.

## CHAPTER 3 RESULTS: CCR REFINEMENTS

### 3.1 Findings on Medicare Program Charge Matching Between Cost Reports and Claims

The validity of using any type of CCR as a cost converter for claims charges rests first on the assumption that we know which CCR is appropriate to apply to which service. For this reason, before considering ways in which to refine the CCR estimates, it is appropriate first to review findings on our ability to match Medicare program charges from the CCR source documents (the cost reports) to the charges on the target documents (the claims). This section reviews findings from hospital-level match ratios that were computed by organizing IPPS charges from the MCR (Worksheet D-4) into groups corresponding to the MedPAR charge groups, and dividing these by charges summarized from MedPAR claims covering the same period of time as the hospital cost reports.

The computed match ratios reveal several service areas with widespread program charge mapping problems. *Exhibit 4* presents simple (unweighted) averages of the match ratios for Medicare discharges, days and charges. As shown in the first three lines, the large majority of provider reports could be matched relatively closely to statistics reflecting total Medicare program activity. Ninety-three percent or more hospitals' match ratios were within five percentage points of 1.0. Match ratios for individual services, including those for the Operating Room, Medical Supplies, Radiology and Cardiology, are less encouraging. The mean ratios in this exhibit are computed as unweighted averages across hospitals, so they do not necessarily show the quality of the match across total Medicare charges – a small facility with poor a match ratio has just as much influence in the unweighted average than a large facility, for example, but would have relatively little influence on the proportion of mismatched charges. However, the fact that the mean ratios for the three total service measures are at or close to one does validate our strategy for constructing comparable databases from which to compare specific types of charges.

Match ratios for routine nursing care averaged 1.36, implying that on average, hospitals report 36 percent more Medicare program charges for routine care in their MCRs than were found in the MedPAR data. At the same time, Medicare program charges reported on the MCRs averaged 18 percent less than in MedPAR data for critical care. For either type of nursing service, less than half of the hospitals had a match ratio between 0.95 and 1.05.

On average, hospitals' MCR-reported Medicare program charges for the Operating Room cost center were 31 percent higher than the charges on their claims. The variation across hospitals in this ratio was quite large, and only 37 percent of hospitals had a match ratio within five percent of 1.0. For several other types of services, the average match ratio was closer to 1.0, but only because there appears to be offsetting positive and negative mismatching.

**Exhibit 4**  
**Program statistics charges from Medicare cost reports compared to Medicare claims**

Variable	Number cost reports with program charges	Match ratio		Percent of hospitals with match ratio between 0.95 and 1.05
		Mean	Std. dev.	
Program Discharges	3464	1.00	0.03	95%
Program Days	3467	1.00	0.03	96
Covered Charges	3471	1.01	0.05	93
Routine Care	3458	1.36	0.59	46
<u>Critical Care</u>	<u>3000</u>	<u>0.82</u>	<u>0.45</u>	<u>46</u>
Both Nursing levels, combined	3468	1.04	0.19	80
Drug Charged	3463	0.98	0.09	77
Supplies Charged	3207	0.83	0.32	60
Operating Room	3386	1.31	0.54	37
Anesthesia	2320	1.09	0.41	76
Labs	3466	1.01	0.14	45
Lab & Blood, combined	3467	0.97	0.12	60
Radiology & MRI, combined	3465	1.13	0.30	40
Cardiology	2857	0.97	0.56	27

NOTE: Match ratios computed by organizing IPPS program charges from MCR Worksheet D-4 into groups corresponding to the charges groups found in MedPAR files, then dividing these by MedPAR charges summed across all claims for each provider, for discharges occurring during the period of time covered by the cost report.

SOURCE: RTI analysis of 11.4 million MedPAR claims matched to 3,471 Medicare IPPS cost reports from FY 2004 or 2005.

Further analysis of the ratios provides insight into the reasons for mismatching and can suggest ways to improve the reporting. *Exhibits 5a* through *5d* show more detail on the distribution of the match ratios using box plots for nonoutlier values (see note below the exhibit for the nonparametric definition of an outlier).<sup>14</sup> *Exhibit 5a* summarizes the match ratios for Medicare cases, Medicare days, and Medicare covered charges. Most match ratios for these overall program measures are generally close to 1.0. The few extreme values are likely to be related to cost reports that had difficulty with year-end accruals for unpaid claims, and as such represent reporting errors that would not affect on the validity of CCR-based cost conversions.

The match ratio distributions for inpatient nursing services in *Exhibit 5b* confirm the earlier findings regarding the assignment of intermediate care charges to critical care charge groups in the MedPAR file. In contrast to match ratios for Routine and Critical Care units individually, the match ratios when the two types of nursing care are combined are quite tightly distributed around 1.0. Thus most of the nursing unit match ratio problem lies with the

<sup>14</sup> Box plots identify the median and interquartile range (distance from the 25<sup>th</sup> to 75<sup>th</sup> percentiles), and are useful for summarizing values that are not expected to follow normal or other distributions with expected parameters. The horizontal line within the shaded boxes is the median value, and the lines outside the shaded boxes show the range of values excluding extreme or outlier values. Extreme values are defined nonparametrically, as observations falling outside the median +/- 1.5 times the interquartile range.

Intermediate Care misclassification. There are some remaining nursing charges that hospitals would be expected to report on the routine care lines of the cost report (for example, observation charges for patients who are eventually admitted, or special charges for isolation or incremental nursing) that are grouped in an “all other” category in MedPAR data. These mismatches could be corrected by changing the charge grouping for MedPAR.

In *Exhibit 5c*, we can see that the distribution of the match ratio for Drugs is fairly tight—even though only 77 percent of facilities had a match ratio within five percent of 1.0, those falling outside this range did not fall very far. However, *Exhibit 5c* indicates a systematic and severe pattern of under-reporting in MCR program charges for Medical Supplies (match ratio below 1.0) and over-reporting for the Operating Room (match ratio well above 1.0). A plausible explanation for at least part of this is that some hospitals account for major devices, prosthetics or implants used in surgery through their operating rooms, rather than through their central supply departments. It is also likely that hospitals have combined other service areas, such as GI Procedure Rooms into to the operating room cost center, but this is another service that is grouped in an “other” category in the MedPAR file.

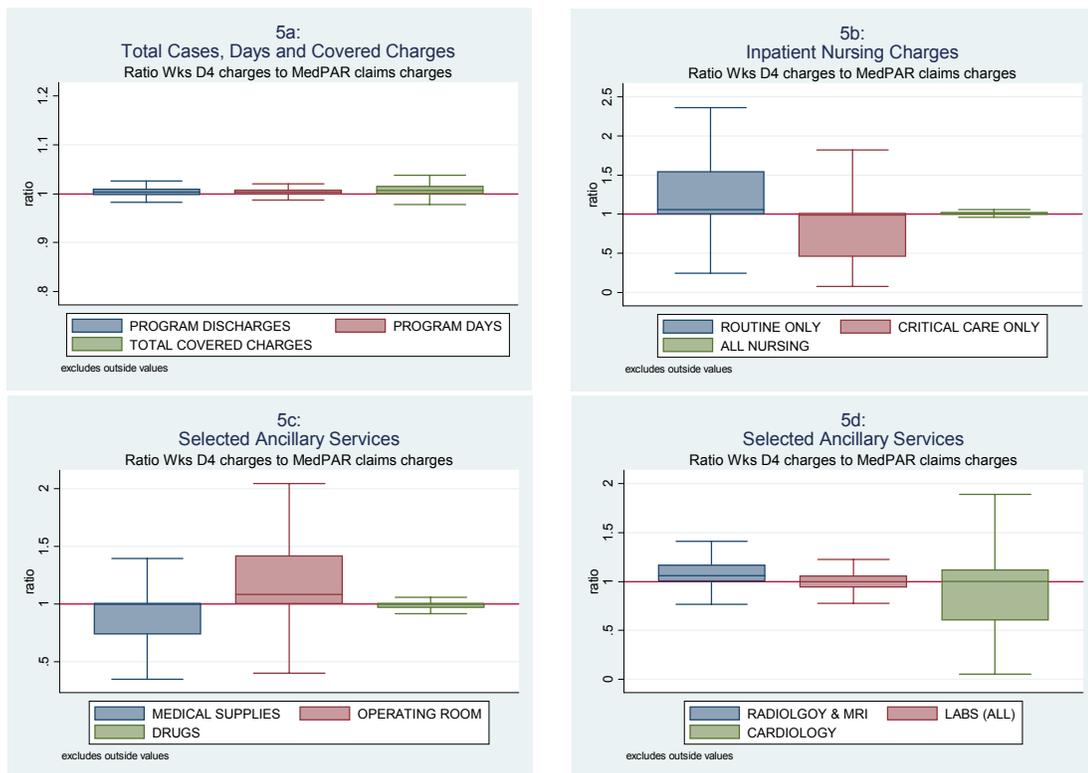
In *Exhibit 5d*, Lab services do not appear to have substantial mismatching. This is despite the problem that only about one-third of providers use the standard MCR line numbers for Blood Products and Blood Processing, and we assume that they combine these services within the Lab cost center. There does appear to be a tendency for services other than diagnostic and therapeutic Radiology to be included on the MCR Radiology cost centers. Mismatching for Cardiology services is particularly severe, and defies any quick solutions. The MedPAR file groups cardiac monitoring together in one category with other cardiac services including catheterization, echo labs and stress testing (although cardiac rehabilitation charges are summarized to a different outpatient services group). The cost report has only one line for cardiology (line 53, titled “Electrocardiology”) and it is not clear where the majority of hospitals are reporting their cardiac diagnostic services such as stress testing, echo cardiology and cardiac catheterization, or their special facilities for angioplasty or cardiac rehabilitation. It is possible that invasive cardiology services are reported as part of Radiology or in the Operating Room—this would account for some of the over-statement of program charges in those areas. At the same time, it appears equally likely that some providers report costs and charges for implantable cardiac devices in the Electrocardiology cost center rather than in Medical Supplies. Other diagnostic procedure labs (not related to cardiology but not necessarily related to other standard MCR lines either) could be reported on this line. In fact, in a dollar-weighted version of the box plot for the cardiology match ratio (not shown), the mismatching for Cardiology is nearly equally divided between over and under-stating of MCR charges relative to charges reported on the claims.

The validity of claims cost estimates, and by extension DRG cost estimates, is clearly threatened by these levels of program charge mismatching. This is because mismatching leads to the applications of the wrong CCR to department-level charges. From our analyses, it is evident that some of the mismatching problems lie not with the provider cost reports but with the way in which the claims are summarized for the MedPAR file; these could be improved with relatively straightforward administrative changes to create additional MedPAR charge variables. Other matching problems are a direct result of idiosyncratic provider reporting. Within this category, those relating to the assignment of costs and charges for chargeable medical supplies to other ancillary service cost centers are the most easily addressed. Mismatching might be substantially reduced as a result of clearer and more directive instructions from CMS to providers—possibly

coupled with some targeted review by the fiscal intermediaries' Medicare audit staff—to report these items on the same line as all other medical supplies sold to patients.

Other types of mismatching in the ancillary service areas will be more difficult to fix. A medium-term solution would be to encourage providers to make better use of the standard cost centers that are already available, to obtain better, more generalizable CCRs in (for example) Blood Products and Administration. The longer-term solution is to create new cost center lines for recently adopted technologies, particularly for interventional cardiology.

### Exhibit 5 Match ratios between Medicare cost reports and Medicare claims



**NOTES:**

Data are for inpatient PPS statistics and selected charge types.

Shaded boxes represent the 25<sup>th</sup> to 75<sup>th</sup> percentile distributions of each value, and the horizontal line within the boxes is the median value. The lines outside the shaded boxes show the range of values excluding what have been identified as extreme values, which are observations falling outside a range computed as the median +/- 1.5 times the interquartile range.

SOURCE: RTI analysis of 11.4 million MedPAR claims matched to 3,471 Medicare IPPS cost reports from FY 2004 or 2005.

## 3.2 Hospital and National Aggregate CCRs

### 3.2.1 Hospital-Level Data

Inpatient PPS charges were reported in 39 different standard cost center lines on the Medicare cost reports for our final CCR analysis file, as shown in *Exhibit 6*. Nearly 90 percent of covered program charges, however, are accounted for by nine cost centers: Routine Care; Intensive Care; Operating Room; Diagnostic Radiology; Labs; Respiratory Therapy; Electrocardiology; Drugs; and Supplies. *Exhibit 6* summarizes patterns of cost center use by the IPPS providers, percentile distributions of CCRs by cost center, and the percent of both total and IPPS program charges that is attributable to each cost center. Data were retained for this table only if the CCR for each provider in each cost center passed the data quality edits (as described in *Appendix B*).

The variation in markup strategies across hospitals is illustrated in this table by the range in values for the 25<sup>th</sup>, 50<sup>th</sup>, and 75<sup>th</sup> percentiles of individual departmental CCRs. The variation in markup by *types of service*, however, is also evident by the variation across rows in these same columns; the median CCR ranges from a low of 0.15 for Anesthesiology, to 0.86 for Routine Care, and close to or above 1.0 for clinics and certain other outpatient cost centers. For routine nursing units the distribution of CCRs across hospitals is highly skewed to the right, meaning that more than half the hospitals in the sample have ratios are higher than average. These are smaller hospitals with charges set at or below cost (and therefore CCRs at or above 1.0). However, the larger hospitals have higher markups for their nursing services and the aggregate average cost ratio for the sample is actually 0.54 (well below the 25th percentile for this service, though still higher than most other services).

Aggregate average CCRs are charge-weighted averages computed across all hospitals. The last two columns of *Exhibit 6* show where mix of services delivered to Medicare patients is different from the mix delivered to all patients. Aggregate national CCRs will be different if ratios are generated from Medicare-weighted charges (as adopted in the final regulations), than if they are generated from total patient charges. This occurs both because Medicare patients do not use the same mix of services as younger patients use, and because Medicare admissions are distributed across a slightly different mix of facilities.

**Exhibit 6**  
**Cost-to-charge ratios reported by Medicare cost center**

Cost report line number	Cost center description	Cost reports using this line for IPPS services		Distribution of CCR values by percentiles			Percent of reported charges		New CMS charge group number
		Number	Percent	25th	50th	75th	Total charges	Medicare IPPS only	
25	Adults and Pediatrics (General Routine Care)	3,662	100%	0.62	0.86	1.14	12.31%	20.19%	1
26	Intensive Care Unit	3,001	82	0.53	0.73	1.00	2.81	4.86	2
27	Coronary Care Unit	671	18	0.44	0.62	0.86	0.66	1.22	2
28	Burn Intensive Care Unit	81	2	0.37	0.55	0.68	0.08	0.06	2
29	Surgical Intensive Care Unit	166	5	0.39	0.52	0.73	0.30	0.33	2
30	Other Special Care (specify)	597	16	0.34	0.47	0.66	0.99	0.12	2
37	Operating Room	3,605	98	0.26	0.36	0.49	11.68	10.05	7
38	Recovery Room	1,812	49	0.21	0.33	0.50	0.94	0.64	7
39	Delivery Room and Labor Room	2,568	70	0.42	0.64	0.97	1.26	0.03	8
40	Anesthesiology	2,683	73	0.07	0.15	0.34	1.78	1.31	9
41	Radiology-Diagnostic	3,658	100	0.16	0.22	0.30	13.39	8.04	12
42	Radiology-Therapeutic	918	25	0.21	0.31	0.44	0.95	0.15	12
43	Radioisotope	1,364	37	0.16	0.23	0.32	0.85	0.48	12
44	Laboratory	3,660	100	0.16	0.24	0.33	11.55	11.19	11
46	Whole Blood & Packed Red Blood Cells	800	22	0.39	0.58	0.88	0.27	0.32	13
47	Blood Storing, Processing, & Trans.	1,145	31	0.40	0.59	0.89	0.45	0.51	13
48	Intravenous Therapy	638	17	0.06	0.21	0.48	0.36	0.41	3
49	Respiratory Therapy	3,559	97	0.17	0.26	0.40	3.49	4.66	6
50	Physical Therapy	3,563	97	0.37	0.50	0.66	1.41	1.03	5
51	Occupational Therapy	1,726	47	0.29	0.41	0.59	0.28	0.18	5
52	Speech Pathology	1,780	49	0.34	0.50	0.72	0.10	0.08	5
53	Electrocardiology	3,097	85	0.11	0.18	0.28	5.14	6.09	10
54	Electroencephalography	1,649	45	0.20	0.31	0.46	0.31	0.17	13
55	Medical Supplies Charged to Patients	3,562	97	0.21	0.34	0.51	7.45	9.96	4
56	Drugs Charged to Patients	3,656	100	0.18	0.26	0.36	11.91	14.20	3
57	Renal Dialysis	1,449	40	0.31	0.46	0.73	0.52	0.49	13
58	ASC (Nondistinct Part)	581	16	0.29	0.49	0.88	0.57	0.17	13
59	Other Ancillary (specify)	1,498	41	0.30	0.49	0.86	0.82	0.48	13
60	Clinic	1,856	51	0.55	0.87	1.41	1.31	0.07	13
61	Emergency	3,565	97	0.28	0.39	0.57	5.27	2.42	13
62	Observation Beds	2,845	78	0.46	0.71	1.02	0.36	0.07	13
62.01	Observation Beds, Distinct Units	95	3	0.36	0.75	1.20			
63	Other Outpatient Services	607	17	0.44	0.74	1.27	0.38	0.02	13
63.5	Federally Qualified Health Centers	413	11	1.00	1.25	1.59			
63.6	Rural Health Clinics	2	0	0.92	0.95	0.99			
64	Home Dialysis	125	3	0.29	0.41	0.57	0.02	<0.01	13
66	Durable Medical Equipment	72	2	0.51	0.67	0.91	0.01	<0.01	4
67	Durable Medical Equipment	42	1	0.46	0.60	0.99	0.01	<0.01	4
68	Other Reimbursable	63	2	0.60	0.97	1.46	0.01	<0.01	13

NOTE: Providers may have used multiple lines with nonstandard descriptions by adding subscripts to the line numbers. CMS re-groups nonstandard cost centers and rolls them up to a summary amount for the "root" (or standard) line number.

SOURCE: RTI Analysis of Medicare Cost Reports for IPPS hospital providers in the final CCR Analysis File. Number of providers using each cost center for IPPS charges represents the number from the pool of hospitals passing the facility exclusion edits as described in Appendix B.

### 3.2.2 National Aggregate CCRs over Time

Changing hospital pricing strategies over time have created steadily increasing markup rates, as reflected by declining average cost ratios in *Exhibit 7*, which shows national average CCRs for 2001–2004, and as published in the FY2007 IPPS final rules for the 13 CMS charge groups. The annual national aggregate CCRs for the 13 CMS charge groups from fiscal years 2001–2004 were computed from the Medicare program charge data for earlier reports filed by the set of facilities included in our final CCR sample. Nearly all services show declining cost ratios over this period, and the weighted average for all IPPS services in these years dropped from 0.39 to 0.33.

**Exhibit 7**  
**Aggregate average cost-to-charge ratios by CMS charge groups, 2001 – 2004**

CMS charge group from FY 2007 rules:		National CCRs computed by federal fiscal year				
#	Description	FY 2001 <i>N</i> =3378	FY 2002 <i>N</i> =3469	FY 2003 <i>N</i> =3453	FY 2004 <i>N</i> =3412	Published ratio from FY 2007 rules
1	Routine Care	0.65	0.60	0.57	0.57	0.56
2	Intensive Care	0.57	0.53	0.51	0.50	0.50
3	Drugs	0.25	0.23	0.22	0.22	0.21
4	Supplies	0.35	0.34	0.34	0.34	0.34
5	Rehab Therapies	0.49	0.46	0.45	0.43	0.44
6	Inhalation Therapy	0.22	0.21	0.20	0.20	0.20
7	Operating Room	0.37	0.34	0.33	0.32	0.32
8	Labor & Delivery	0.68	0.62	0.59	0.57	0.46 <sup>(1)</sup>
9	Anesthesia	0.18	0.17	0.16	0.16	0.16
10	Cardiology	0.24	0.22	0.21	0.21	0.21
11	Laboratory	0.23	0.21	0.20	0.19	0.19
12	Radiology	0.25	0.23	0.21	0.19	0.19
13	Other Services	0.51	0.46	0.42	0.40	0.38
Aggregate Average (for IPPS Program Charges)		0.39	0.36	0.34	0.33	

NOTES:

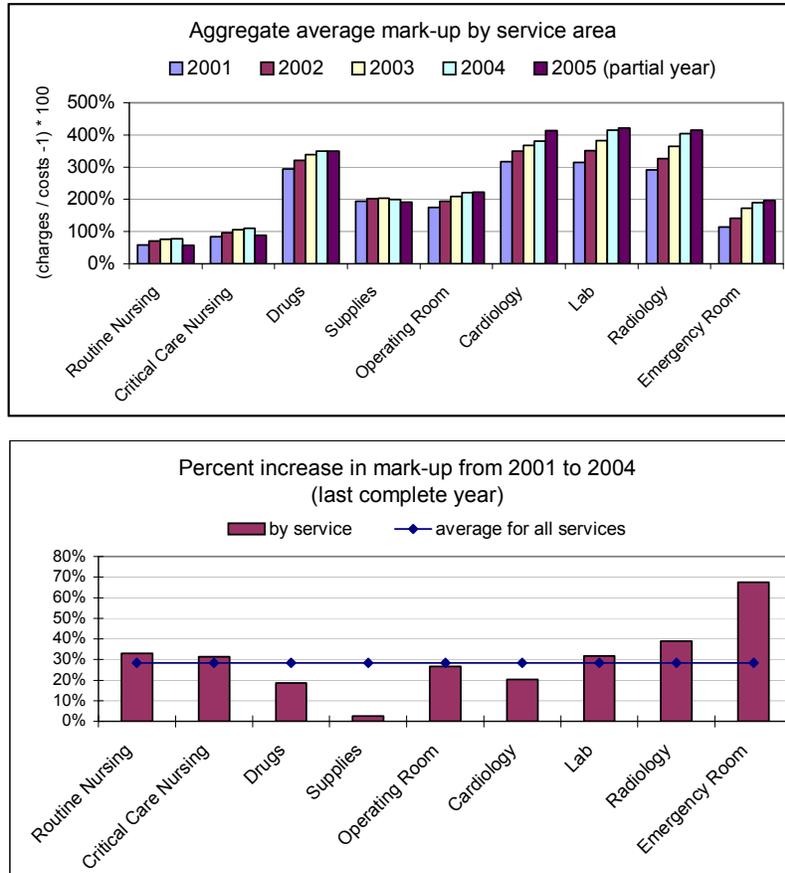
<sup>(1)</sup> CMS' figure for the national aggregate ratio for group 08 "Labor and Delivery" services was computed based on data for clinics plus the Labor and Delivery cost center, but weighted based on charges from a subset of maternity DRGs only, rather than on the mix of total program charges appearing on the cost report. For all weight computations in this report, we have substituted CMS' aggregate ratio for the computed ratio derived from cost report data.

SOURCE: RTI Analysis of Medicare Cost Reports in FY 2001 – FY 2004, for the set IPPS hospital providers in the final CCR Analysis File.

A decrease from 0.39 to 0.33 in cost-to-charge ratios translates to the average markup of charges over cost rising from 158 percent ( $100 \times [1/0.39 - 1]$ ) to 201 percent ( $100 \times [1/0.33 - 1]$ ). This is a 27 percent increase in the markup, applicable to the batch of services associated with IPPS discharges over this time period. Some of the increase may reflect changes in the mix of services including the introduction (or increased dissemination) of newer technology-dependent diagnostic services that tend to be priced very aggressively. For example, the change seen for Radiology may be related to increasing use of CT, MRI, or PET scanning and not necessarily to a strategy of increasing the markup for conventional diagnostic radiology. The rapid increases in markups are not specific to Medicare services. We examined markup percentages for specific

types of clinical services using average the all-patient mix of costs and charges, and found patterns of rising markup rates in nearly every service we examined, as shown in *Exhibit 8*. The all-patient services average markup increased from 164 percent above cost in MCRs filed for FY 2001 to 211 percent above cost in those filed for FY 2004. The markup dropped to 209 percent in the partial MCR sample that we have for FY 2005. Findings from the FY 2005 data analyzed by itself may not be generalizable, because hospitals with fiscal years ending June 30 (including many teaching facilities) are not included.

**Exhibit 8**  
**Trends over time in hospital markup for selected patient services**



SOURCE: RTI Analysis of Medicare Cost Reports in FY 2001 – FY 2004, for the set IPPS hospital providers in the final CCR Analysis File.

Prices have clearly risen faster for some types of services than for others, reflecting some structural change in hospital pricing. Emergency Rooms, for example, once had relatively low markup compared to other hospital departments, but the markup has risen faster in this service than in any other. Markups for routine and critical care nursing increased through FY 2004, though it remained well below what is typical on ancillary services. Markups for medical supplies charged to patients, on the other hand, were virtually unchanged through 2004, and even declined slightly in the sample of hospitals reporting for 2005.

### 3.2.3 Impact of Aggregating CCRs across Departments

To evaluate the potential for aggregation bias we focused only at the cost reports within our final CCR analysis sample, of which one-third is from the FY 2005 period and two thirds is from FY 2004. As described earlier, for cross-department aggregation bias we started by re-stating the edited cost and charge data for MCR cost centers into “MedPAR equivalent” groups, and then computed national aggregate CCRs for these re-stated groups. *Exhibit 9* organizes these MedPAR equivalent groups according to the order in which they are aggregated into the CMS’ new 13 charge groups; we refer to these as “MedPAR-equivalent” component CCRs, because they form the component national CCRs to CMS’ new national CCRs. Both all-patient charge-weighted and Medicare-only charge-weighted MedPAR-equivalent component CCRs are included in the table for informational purposes. With respect to the FY 2007 DRG weights however, only the Medicare-weighted component CCRs are used.

**Exhibit 9**  
**MedPAR component CCRs within the national aggregate CCRs**

MCR data aggregated to "MedPAR-equivalent" Charge Groups					New CMS Charge Groups from FY 2007 Rules			
Med- PAR Var. #	Description	National CCRs, all charges	National CCRs, from Wks D4	Percent of MedPAR charges	Percent grouped MedPAR charges	Group Description	Group CCR	Grp #
63, 64, 65	Routine	0.56	0.56	14.0%	14.0%	Routine	0.56	1
66	ICU	0.48	0.51	7.4				
67	CCU	0.47	0.48	3.2	10.6	Intensive	0.50	2
69	Pharmacy	0.22	0.21	14.9	14.9	Drugs	0.21	3
70	Supplies	0.33	0.34	15.3				
71	DME	0.60	0.62	<0.01				
72	DME	0.63	n/a	0.0	15.3	Supplies	0.34	4
73	Physical Therapy	0.44	0.44	0.9				
74	Occup. Therapy	0.37	0.36	0.2		Therapy		
75	Speech Therapy	0.47	0.44	0.1	1.2	Services	0.43	5
76	Respiratory Therapy	0.20	0.20	3.5	3.5	Inhalation Therapy	0.2	6
79	Operating Room	0.33	0.31	8.5	8.5	Operating Room	0.31	7
82	Anesthesia	0.16	0.16	1.3	1.3	Anesthesia	0.16	9
81	Cardiology	0.21	0.21	6.2	6.2	Cardiology	0.21	10
83	Lab	0.19	0.18	11.5	11.5	Laboratory	0.18	11
84, 85	Radiology, incl. MRI	0.19	0.19	7.8	7.8	Radiology	0.19	12
68	Other Services	0.34	0.36	1.3				
77	Blood	0.43	0.44	0.1				
78	Blood Admin	0.48	0.48	1.0				
80, 86	Other O/P Services	0.42	0.26	0.1				
87	Emergency	0.34	0.33	2.2				
91	ESRD	0.37	0.39	0.6				
92	Clinics	0.80	0.63	0.01	5.3	Other Services	0.39	13
100.00%					100.0%			

SOURCE: RTI Analysis of Medicare Cost Reports for IPPS hospital providers in the final CCR Analysis File.

Among the 13 national CCRs used for the FY 2007 DRG cost weights, those that are constructed from multiple MedPAR charge groups are the CCRs for Intensive Care, Medical Supplies, Rehabilitation-related therapy and the “Other Services” category. With the exception of CCU (coronary care) and Emergency Room, individual MedPAR component CCRs are generated from services with relatively low charge volume. The contribution of DME to inpatient Medical Supplies, for example, is less than one tenth of one percent of total IPPS claims charges, and does not need to be considered for possible disaggregation even though the DME CCR is much higher than the CCR for other Medical Supplies.

The companion data needed to evaluate possible aggregation bias from the other MedPAR component CCRs is the distribution of claims charges by DRG. We provide DRG-level information on MedPAR-component charges in *Exhibits 10A* through *10F*.<sup>15</sup> A complete table of MedPAR charges by DRG is provided as *Appendix D*. After excluding DRGs with fewer than 100 cases in our analysis sample, each of the panels of *Exhibit 10* shows the ten DRGs for which the particular component charge to the new CMS charge group constitutes the largest proportion of total DRG charges. These are the DRGs that are most likely to be affected by cross-department aggregation within the 13 charge groups. These tables suggest the following with respect to possible bias in DRG weights:

1. *Use of ICU and CCU (Exhibit 10A)*. There is no evidence that combining ICU and CCU into one CCR creates any distortion in the rates, even though the ratio for CCU (0.48) is lower than the ratio for ICU (0.51). Only 18 percent of facilities used the CCU cost center on the MCR, which implies that intensive cardiac care is delivered in both types of units. CCU charges do not account for more than 9 percent of charges in any single DRG. All DRGs on this list appear to have more in ICU than in CCU charges, suggesting that hospitals do not distinguish between the two types of units.
2. *Rehabilitation-related therapy ratios (Exhibit 10B)*. None of the three therapies contribute a large dollar volume to total IPPS charges, and they all tend to occur together in the DRGs that do use them. Therefore, even though the cost ratio for Occupation Therapy is lower than the ratios for the other component charges in this group, there is little opportunity for this to distort individual DRG rates.
3. *Other Services: Emergency Room. (Exhibit 10C)* Emergency Room charges account for nearly half of the charges in this group. The cost ratio for the ER component is 0.33, which is substantially lower than the average CCR for the whole group (0.39). Regardless of the distribution of ER charges across types of cases, therefore, separating Emergency Room from this group is likely to affect the weights of other DRGs because it will raise the aggregate CCR for the services remaining in that category. IPPS cases with the highest percent of charges attributable to the Emergency Room tend to be poisonings and overdoses. However, emergency charges account for more than five percent of total charges for 89 different DRGs which, combined, account for 18 percent of total IPPS claims volume in our analysis sample.

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<sup>15</sup> The documentation from Exhibit 1 also shows Radioisotopes as a component department within “Other Services.” We do not analyze Radioisotopes as a separate component in this section because we had already grouped this cost center with Radiology,

All of these DRGs would see a slight reduction in their relative weight as a result of separating ER from the “All Other” category.

4. *Other Services: Blood and Blood Products. (Exhibit 10D)* Blood-related charges are very low in total charge volume, but because of the uneven distribution of these charges across DRGs this is a more likely candidate for aggregation bias. There are a few DRGs where these charges account for roughly 10 percent of total. Because cost ratio for the Blood Administration component is relatively high (0.48, compared to 0.39 for the group), it is likely that costs for those few DRGs are understated. There is a separate standard line on the Medicare cost report for Blood and Blood Administration but less than one-third of providers use it, even though 95 percent of providers charge for Blood Administration on at least some Medicare claims. The other two-thirds of providers may combine related costs and charges into their Lab cost center, although there is no way to verify this without examining Medicare audit documents. The markup on blood products and related services is tends to be lower than the markup for most lab services, and DRG costing is still more accurate if Blood & Blood Administration is grouped within the “Other” category than within the “Lab” category.
5. *Other Services: ESRD. (Exhibit 10E)* ESRD services are concentrated in a few renal disease DRGs. Although they might be affected by grouping ESRD with other services if the cost ratios for ESRD were very different, once Emergency Room services are pulled out of the “All Other” services group the ratio for the remaining services is similar to the ESRD ratio and the potential for aggregation bias is limited. There are only 5 DRGs where ESRD accounts for more than three percent of claims charges. More than 15 percent of charges in DRG 317 (Admit for Renal Dialysis) are for ESRD services, but this is a relatively uncommon reason for admission.
6. *Other Services: Clinics (Exhibit 10F)*. Because the component cost ratio for Clinics is so much higher than the group CCR (0.63 compared to 0.39), we reviewed the case-level distribution of clinic charges to be sure that there were no DRGs with unusually high clinic usage other than those already included within Labor and Delivery charge group. We found no nonmaternity DRGs with clinic charges greater than 0.2 percent of charges. Therefore, grouping clinic charges with others cannot present potential for aggregation bias.

**Exhibit 10**  
**Ten DRGs with the highest use of MedPAR component charges within the national aggregate CCRs**

**10A**  
**Coronary care unit (CCU): percent total charges by DRG**

DRG num	MDC	DRG name	Raw case count	CMS_02 Intensive care	
				ICU	CCU
121	5	CIRCULATORY DISORDERS W AMI & MAJOR COMP, DISCHARGED ALIVE	139,738	14.2%	8.8%
139	5	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC	68,451	12.0	8.6
138	5	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	190,168	12.8	8.5
123	5	CIRCULATORY DISORDERS W AMI, EXPIRED	28,700	15.3	8.1
122	5	CIRCULATORY DISORDERS W AMI W/O MAJOR COMP, DISCHARGED ALIVE	49,041	12.3	7.9
135	5	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W CC	6,758	10.8	7.7
127	5	HEART FAILURE & SHOCK	630,619	11.4	7.3
132	5	ATHEROSCLEROSIS W CC	95,585	11.3	7.3
141	5	SYNCOPE & COLLAPSE W CC	114,694	8.8	6.7
142	5	SYNCOPE & COLLAPSE W/O CC	46,121	8.5	6.6

**10B**  
**Occupational Therapy: percent total charges by DRG**

DRG num	MDC	DRG name	Raw case count	CMS_05 Rehab therapies		
				PT	OT	ST
462	23	REHABILITATION	3,104	13.5%	10.8%	2.1%
13	1	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA	6,544	2.6	1.3	0.5
509	22	FULL THICKNESS BURN W/O SKIN GRFT OR INH INJ W/O CC OR SIG TRAUMA	137	3.4	1.2	0.1
504	22	EXTEN. BURNS OR FULL THICKNESS BURN W/MV 96+HRS W/SKIN GFT	172	0.9	1.1	0.1
14	1	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION	243,794	2.0	1.1	1.4
254	8	FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE >17 W/O CC	9,312	4.0	1.0	0.0
511	22	NONEXTENSIVE BURNS W/O CC OR SIGNIFICANT TRAUMA	558	2.1	1.0	0.0
251	8	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W/O CC	1,837	2.7	1.0	0.1
250	8	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W CC	3,828	2.6	1.0	0.1
559	1	ACUTE ISCHEMIC STROKE WITH USE OF THROMBOLYTIC AGENT	2,401	1.4	0.9	1.5

**10C**  
**Emergency Room Charges: percent total charges by DRG**

DRG num	MDC	DRG name	Raw case count	Within CMS_13
				all other: Emergency
450	21	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W/O CC	6,679	11.3%
455	21	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W/O CC	741	9.8
447	21	ALLERGIC REACTIONS AGE >17	5,681	9.7
32	1	CONCUSSION AGE >17 W/O CC	1,599	9.2
251	8	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W/O CC	1,837	9.1
254	8	FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE >17 W/O CC	9,312	8.9
281	9	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W/O CC	5,851	8.5
84	4	MAJOR CHEST TRAUMA W/O CC	1,150	8.4
129	5	CARDIAC ARREST, UNEXPLAINED	3,263	8.3
66	3	EPISTAXIS	7,492	8.3

**Exhibit 10 (continued)**  
**Distribution of Targeted Charges across DRGs: Ten DRGs with the highest use of component charges aggregated to the 13 CMS charge groups**

<b>10D</b>						
<b>Blood Products and Blood Administration Charges: percent total charges by DRG</b>						
DRG num	MDC	DRG name	Raw case count	Within CMS_13 all other:		
				Blood products	Blood admin	Both
473	17	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE >17	7,873	0.4%	10.4%	10.8%
480	PRE	LIVER TRANSPLANT AND/OR INTESTINAL TRANSPLANT CHEMOTHERAPY W ACUTE LEUKEMIA OR W USE OF HI DOSE	994	1.0	8.4	9.4
492	17	CHEMOAGENT	3,561	0.3	8.8	9.1
395	16	RED BLOOD CELL DISORDERS AGE >17	91,202	0.4	6.9	7.3
481	PRE	BONE MARROW TRANSPLANT MAJOR HEMATOLOGIC/IMMUNOLOGIC DIAG EXC SICKLE CELL CRISIS &	1,078	0.1	7.1	7.2
574	16	COAGUL	24,402	0.3	6.7	7.0
397	16	COAGULATION DISORDERS	15,508	0.4	6.3	6.7
525	5	OTHER HEART ASSIST SYSTEM IMPLANT	243	0.2	6.4	6.5
174	6	G.I. HEMORRHAGE W CC	237,045	0.2	5.6	5.8
392	16	SPLENECTOMY AGE >17	1,985	0.2	4.7	4.9

<b>10E</b>				
<b>ESRD Charges: percent total charges by DRG</b>				
DRG num	MDC	DRG name	Raw case count	Within CMS_13 all other:
				ESRD
317	11	ADMIT FOR RENAL DIALYSIS	2,366	15.5%
120	5	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	31,832	4.9
315	11	OTHER KIDNEY & URINARY TRACT O.R. PROCEDURES	32,551	4.3
144	5	OTHER CIRCULATORY SYSTEM DIAGNOSES W CC	93,898	4.2
114	5	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	7,403	3.1
292	10	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W CC	6,848	2.9
333	11	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 0-17	213	2.7
316	11	RENAL FAILURE	182,854	2.7
113	5	AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB & TOE	32,851	2.7
488	25	HIV W EXTENSIVE O.R. PROCEDURE	743	2.6

<b>10F</b>				
<b>Clinic Charges: percent total charges by DRG</b>				
DRG num	MDC	DRG name	Raw case count	Within CMS_13 all other:
				Clinics
509	22	FULL THICKNESS BURN W/O SKIN GRFT OR INH INJ W/O CC OR SIG TRAUMA	137	0.13%
271	9	SKIN ULCERS	19,600	0.11
465	23	AFTERCARE W HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	144	0.10
508	22	FULL THICKNESS BURN W/O SKIN GRFT OR INHAL INJ W CC OR SIG TRAUMA	609	0.09
56	3	RHINOPLASTY	396	0.08
481	PRE	BONE MARROW TRANSPLANT	1,078	0.08
287	10	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DISORDERS	5,150	0.08
275	9	MALIGNANT BREAST DISORDERS W/O CC	169	0.08
263	9	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W CC	21,013	0.07
333	11	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 0-17	213	0.07

SOURCE: RTI Analysis of IPPS MedPAR claims matched to cost reports for FY 2004-2005

As a result of these analyses we found that cross-department aggregation bias was a reasonable possibility only within the “All Other” Services group (CMS’ group 13) To test for this, we computed two separate national CCRs, one for Emergency Room services and one for Blood and Blood Administration, and new national CCRs for the remaining services within the group. Removing costs and charges just for Emergency Room from the numerator and denominator data of the national aggregate CCR for “Other Services” raised it from 0.39 to 0.45. Doing the same for Blood Products and Blood Administration offset this affect slightly, bringing the final adjusted national CCR for the remaining services in the “All Other” group to 0.44.

### **3.3 Charge Compression and Other Within-Department Aggregation**

Our approach for identifying within-department aggregation problems requires analysis of detailed revenue codes at the sub-department level submitted by hospitals on claims, and these data are available from the 100% Inpatient SAF. There are more than 400 hundred revenue codes regularly used on inpatient claims and used in this file. For the same claims as were used to create *Appendix D*, we summarized revenue codes to identify the frequency of use and distribution of charges by specific service. We did not summarize DRGs by UB-92 revenue code, as 400 codes across 508 DRGs would create more than 200,000 DRG-code pairs for analysis. Instead, we examined the charge detail associated with specific MCR ancillary cost centers and identified codes, or groups of codes that would best identify within-department variation in markup, taking advantage of suggestions from the TEP members and our own field experience. We then used the charges for this subset of “target service” revenue codes for estimating regression models to test for charge compression or other patterns of systematic differences in within-department mark-up.

Codes chosen as target services were used, either individually or as groups, to compute explanatory variables of interest in the regressions estimating department CCRs as a function of the target service charges as a percent of department charges and hospital overall cost-to-charge ratios.. We did not compute any DRG-level distributions of targeted codes until *after* we had completed the regression analysis and either confirmed or rejected the hypothesis of systematic within-department differences in mark-up.

*Exhibits 11* through *15* provide detail on the contribution of individual revenue codes to total charges within each of the five departments that we have chosen to investigate using the regression approach. For reference, a complete numeric listing of UB-92 codes used and their associated charges is provided as *Appendix E*.

#### **3.3.1 Revenue Codes Targeted Within Medical Supplies**

For modeling the medical supplies CCR s a function of component services (*Exhibit 11*) we built on the findings from Dr. Hogan’s initial regressions. His model estimated no significant association between overall department CCRs and the proportion of sterile supplies to other general supplies, suggesting that differences in the use of sterile supplies across DRGs do not drive differences in total supplies costs across DRGs. He did find that measures of the percent of department charges for implants and devices (code \_0278), pacemakers (code \_0275), intraocular lenses (code \_0276), and prosthetics and orthotics (\_0274) were each strongly and positively associated with the Medical Supplies departmental CCR. In his inpatient charge models, these separate coefficients were significantly different from zero but were not significantly different from each other, suggesting that they could be analyzed as a group to

derive a single rather than multiple alternative CCRs. Based on Hogan’s prior findings, we grouped the four codes listed above, and in the remainder of this report we refer to them collectively as “Devices and Implants” or just “Devices.” Together they account for 44 percent of total Medical Supplies charges in the claims file.

### Exhibit 11 UB-92 revenue codes by cost center: Medical Supplies

UB-92 code	General description	Specific charge	Amount in 100% SAF file	Number facilities using this charge	Percent facilities using this charge	Average \$ per user facility	Percent total Inpatient SAF charges	Percent total SAF Medical Supplies group
	Supplies							
_0270	sold	general	14,125,428,955	3240	96.1	4,359,700	4.5%	30.7
_0271		nonsterile	1,434,463,447	1822	54.0	787,302	0.5	3.1
_0272		sterile	9,318,343,793	3056	90.6	3,049,196	3.0	20.2
_0273		take-home	744,320	225	6.7	3,308	0.0	0.0
<b>_0274</b>		<b>prosthetics/orthotics</b>	<b>403,395,106</b>	<b>1983</b>	<b>58.8</b>	<b>203,427</b>	<b>0.1</b>	<b>0.9</b>
<b>_0275</b>		<b>pacemaker intraocular lens</b>	<b>4,564,922,708</b>	<b>2413</b>	<b>71.6</b>	<b>1,891,804</b>	<b>1.5</b>	<b>9.9</b>
_0276		O2-home	2,088,216	896	26.6	2,331	0.0	0.0
_0277		implants/devices	3	1	0.0	3	0.0	0.0
<b>_0278</b>		<b>other supplies/devices</b>	<b>15,244,966,359</b>	<b>2937</b>	<b>87.1</b>	<b>5,190,659</b>	<b>4.8</b>	<b>33.1</b>
_0279			610,923,905	807	23.9	757,031	0.2	1.3
	Supplies sold	incident to radiology						
_0621		incident to other dx	127,939,279	1227	36.4	104,270	0.0	0.3
_0622		surgical dressing	173,512,988	639	19.0	271,538	0.1	0.4
_0623		investigational devices	1,762,257	226	6.7	7,798	0.0	0.0
_0624		unknown	26,239,894	169	5.0	155,266	0.0	0.1
_0626			23	1	0.0	23	0.0	0.0
Total in Medical Supplies sections			46,034,731,253				14.6	100.0
Total in 100% SAF file			314,615,751,887	3,372	100.0		100.00	

NOTE: Boldface type indicates that these codes are targeted for regression modeling.

SOURCE: 100% Inpatient SAF claims matched to final MedPAR claims analysis file

### 3.3.2 Revenue Codes Targeted Within Drugs and Other Pharmaceuticals

In the area of drugs and pharmaceuticals (*Exhibit 12*), we found 23 separate pharmacy-related revenue codes used, but most have very low volumes in the inpatient setting. The MCR does have a standard cost center for “IV Therapy” (line 48), but only 18 percent of providers reported costs for this cost center. IV Therapy charges (codes \_0260 through \_0269) are relatively low, and the MedPAR file groups these two types of services together.<sup>16</sup>

<sup>16</sup> The charges relate to equipment use for administration of IV fluids and medication. Total IV therapy charges accounted for only 1.5 percent of charges included within this CCR, but the distribution is highly skewed across hospitals, suggesting that providers are inconsistent in their use of this code.

If we were conducting this study to assess outpatient weights, it is likely that charges for drugs incident to radiology or other diagnostics could be important to the CCR regression. Based on data from Medicare inpatient charges, however, we identified IV solutions (code \_0258, accounting for 13 percent of total pharmacy-related charges) as the only target code for the Drugs CCR regression.

### Exhibit 12 UB-92 revenue codes by cost center: Drugs & other pharmaceuticals

UB-92 code	General description	Specific charge	Amount in 100% SAF file	Number facilities using this charge	Percent facilities using this charge	Average \$ per user facility	Percent total Inpatient SAF charges	Percent total SAF Drugs group
_0250	Drugs sold	general	34,261,204,176	3328	98.7%	10,294,833	10.9%	73.2%
_0251		generic	977,636,434	530	15.7	1,844,597	0.3	2.1
_0252		nongeneric	977,354,367	546	16.2	1,790,026	0.3	2.1
_0253		take-home	2,813,554	292	8.7	9,635	0.0	0.0
_0254		incident to other dx	87,029,642	708	21.0	122,923	0.0	0.2
_0255		incident to radiology	871,404,419	2670	79.2	326,369	0.3	1.9
_0256		experimental	2,281	10	0.3	228	0.0	0.0
_0257		non-Rx	12,046,723	267	7.9	45,119	0.0	0.0
<b>_0258</b>		<b>IV solutions</b>	<b>6,061,219,705</b>	<b>3002</b>	<b>89.0</b>	<b>2,019,061</b>	<b>1.9</b>	<b>13.0</b>
_0259		other	2,411,704,559	1399	41.5	1,723,877	0.8	5.2
_0260	IV therapy	general	662,596,187	2688	79.7	246,502	0.2	1.4
_0261		infusion pump	44,202,928	124	3.7	356,475	0.0	0.1
_0262		pharm services	1,183,512	23	0.7	51,457	0.0	0.0
_0263		drug/supply						
_0263		delivery	457,275	19	0.6	24,067	0.0	0.0
_0264		supplies	10,194,213	68	2.0	149,915	0.0	0.0
_0269		other	11,242,739	98	2.9	114,722	0.0	0.0
_0630	Drugs Sold	general	8,767	4	0.1	2,192	0.0	0.0
_0631		single source	13,152	3	0.1	4,384	0.0	0.0
_0634		EPO<10k units	36,694,849	362	10.7	101,367	0.0	0.1
_0634		EPO>=10k units						
_0635		additional detail	56,339,677	309	9.2	182,329	0.0	0.1
_0636		coding	211,473,178	283	8.4	747,255	0.1	0.5
_0637		self-administrable	99,604,431	479	14.2	207,942	0.0	0.2
_0638		unknown	1,105	2	0.1	553	0.0	0.0
Total in Pharmacy sections			46,796,427,873				14.9	100.0
Total in 100% SAF file			314,615,751,887	3,372	100.0		100.00	

NOTE: Boldface type indicates that these codes are targeted for regression modeling.

SOURCE: 100% Inpatient SAF claims matched to final MedPAR claims analysis file

### 3.3.3 Revenue Codes Targeted Within Radiology

The group of charges combined under Radiology in the MedPAR file (*Exhibit 13*) includes not only diagnostic radiology but also nuclear medicine, ultrasound, mammography, PET scanning, CT scanning, radiation therapy, and oncology. PET scanning, radiation therapy and oncology charges are very low in the inpatient file. Therapeutic radiology is a standard cost center on the MCR (line 42) and could be converted with its own CCR. Only 25 percent of providers report costs on this MCR line (see *Exhibit 6*), even though 45 percent of providers recorded charges for radiation therapy (code \_0333). The computed CCRs for therapeutic radiology tend to be higher than those for other radiology services. However, radiation therapy is

not a common inpatient charge (only 1.3 percent of total Inpatient SAF charges for this group), so we did not investigate this cost center further. Nevertheless, combining therapeutic with diagnostic radiology cost centers raises the possibility that the aggregate Radiology CCR could be overstated for diagnostic radiology relative to what it would be if the two remained separate. This issue may need further investigation.

A further complication in modeling Radiology CCRs stems from the fact that the MedPAR file combines CT and PET scanning with diagnostic radiology but separates MRI to its own charge group. Since there is no standard cost center line for MRI services on the MCR, most hospitals report facility cost and charge data on the diagnostic radiology cost center (line 41). For the Radiology CCR regressions, therefore, we computed MRI charges as a percent of the total of combined Radiology plus MRI. We then identified all MRI charges (which are 11 percent of combined department charges) as one target service for the regression model, and CT scanning (codes \_0350 through \_0359, 46 percent of combined department charges) as another. We did not target Nuclear Medicine (codes \_0340 through \_0349, nine percent of charges) but it is possible that this service could be included in any further modeling.<sup>17</sup> Other components to the radiology group including oncology, PET scans, and therapeutic radiology did not have sufficient inpatient volume to be useful as predictors, but these might have been considered as target services had we used both inpatient and outpatient claims in computing the target measures.

Although there are no standard MCR lines for these cost centers, a number of providers did report separate cost centers for CT scanning, MRI, or both types of imaging, using nonstandard MCR line numbers. The usual HCRIS file creation programs aggregate (“roll up”) these nonstandard cost centers into to the standard Radiology cost center (see footnote 10). As an alternative to the regression-based approach for evaluating significant differences in the mark-up, however, we conducted an extended analysis of the MCR “pre-rollup” data for nonstandard cost centers. We were able to compute separately defined cost ratios for CT scanning in 25 percent of providers, and for MRI in 20 percent of providers, but in several of these the cost-to-charge ratios were so extremely low that it is likely that providers did not accumulate all of the costs, or possibly failed to identify allocation statistics to accumulate all of the indirect costs. Results from this extended cost report analysis are discussed along with the regression results for Radiology, in *Section 3.4.3*.

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<sup>17</sup> There is a separate standard cost center on the MCR for Nuclear Medicine (line 43, Radioisotopes) that is used by about one-third of hospitals. Nuclear Medicine charges are grouped with the MedPAR department totals for Radiology. In the analyses for this project we inadvertently assumed that MCR line 43 was also grouped with Radiology in the 13 charge groups used for CMS’ FY 2007 DRG cost estimates, CMS grouped line 43 in the “Other Services” category. Because the MedPAR claims charges for Nuclear Medicine were still in Radiology, they would have been converted to cost using the Radiology CCR rather than the “Other Services” CCR. In the analyses for this project, Nuclear Medicine charges are also converted to cost using the Radiology CCR.

**Exhibit 13**  
**UB-92 revenue codes by cost center: Radiology**

UB-92 code	General description	Specific charge	Amount in 100% SAF file	Number facilities using this charge	Percent facilities using this charge	Average \$ per user facility	Percent total Inpatient SAF charges	Percent total SAF Radiology group
_0280	Oncology	general	2,360,618	193	5.7%	12,231	0.0%	0.0%
_0285		unknown	53	1	0.0	53	0.0	0.0
_0289		other	51,919	11	0.3	4,720	0.0	0.0
_0320	Dx Radiology	general	4,697,633,238	3355	99.5	1,400,189	1.5	19.7
_0321		angiocardiography	42,736,578	417	12.4	102,486	0.0	0.2
_0322		arthrography	1,657,723	339	10.1	4,890	0.0	0.0
_0323		arteriogram	457,784,038	1431	42.4	319,905	0.1	1.9
_0324		chest	2,226,124,052	2226	66.0	1,000,056	0.7	9.4
_0325		unknown	4,385	1	0.0	4,385	0.0	0.0
_0329		other	103,122,849	352	10.4	292,963	0.0	0.4
_0330	Tx Radiology	general	7,421,641	131	3.9	56,654	0.0	0.0
_0331		chemo injected	7,354,376	552	16.4	13,323	0.0	0.0
_0332		chemo oral	155,350	31	0.9	5,011	0.0	0.0
_0333		radiation therapy	314,986,174	1500	44.5	209,991	0.1	1.3
_0335		chemo-IV	11,311,870	1086	32.2	10,416	0.0	0.0
_0339		other	1,333,365	21	0.6	63,494	0.0	0.0
_0340	Nuclear med	general	437,122,451	1568	46.5	278,777	0.1	1.8
_0341		diagnostic	1,635,352,930	2635	78.1	620,627	0.5	6.9
_0342		therapeutic	3,842,324	593	17.6	6,479	0.0	0.0
_0343		unknown	5,963,673	1266	37.5	75,801	0.0	0.4
_0344		unknown	2,682,613	166	4.9	16,160	0.0	0.0
_0349		other	28,701,718	68	2.0	422,084	0.0	0.1
<b>_0350</b>	<b>CT Scan</b>	<b>general</b>	<b>2,988,827,878</b>	<b>2973</b>	<b>88.2</b>	<b>1,005,324</b>	<b>0.9</b>	<b>12.6</b>
<b>_0351</b>		<b>head</b>	<b>2,378,955,436</b>	<b>2627</b>	<b>77.9</b>	<b>905,579</b>	<b>0.8</b>	<b>10.0</b>
<b>_0352</b>		<b>body</b>	<b>4,368,533,620</b>	<b>2456</b>	<b>72.8</b>	<b>1,778,719</b>	<b>1.4</b>	<b>18.4</b>
<b>_0359</b>		<b>other</b>	<b>123,737,865</b>	<b>640</b>	<b>19.0</b>	<b>193,340</b>	<b>0.0</b>	<b>0.5</b>
_0400	Other Imaging	general	11,146,722	242	7.2	46,061	0.0	0.0
_0401		Dx mammography	2,193,826	2095	62.1	1,047	0.0	0.0
_0402		ultrasound	972,192,398	3274	97.1	296,943	0.3	4.1
_0403		screening mammog	387,275	757	22.4	512	0.0	0.0
_0404		PET scan	39,935,957	784	23.3	50,939	0.0	0.2
_0405		unknown	275	1	0.0	275	0.0	0.0
_0406		unknown	2,843	1	0.0	2,843	0.0	0.0
_0409		other	3,974,129	76	2.3	52,291	0.0	0.0
<b>_0610</b>	<b>MRI/MRA</b>	<b>general</b>	<b>1,133,836,196</b>	<b>2892</b>	<b>85.8</b>	<b>392,060</b>	<b>0.4</b>	<b>4.8</b>
<b>_0611</b>		<b>brain</b>	<b>1,051,577,624</b>	<b>2383</b>	<b>70.7</b>	<b>441,283</b>	<b>0.3</b>	<b>4.4</b>
<b>_0612</b>		<b>spinal cord</b>	<b>441,259,785</b>	<b>2353</b>	<b>69.8</b>	<b>187,531</b>	<b>0.1</b>	<b>1.9</b>
<b>_0614</b>		<b>MRI/other</b>	<b>20,077,447</b>	<b>221</b>	<b>6.6</b>	<b>90,848</b>	<b>0.0</b>	<b>0.1</b>
<b>_0615</b>		<b>MRA/head, neck</b>	<b>115,104,216</b>	<b>780</b>	<b>23.1</b>	<b>147,570</b>	<b>0.0</b>	<b>0.5</b>
		<b>MRA/lower extremities</b>	<b>6,058,508</b>	<b>359</b>	<b>10.6</b>	<b>16,876</b>	<b>0.0</b>	<b>0.0</b>
<b>_0618</b>		<b>MRA/other</b>	<b>17,709,612</b>	<b>520</b>	<b>15.4</b>	<b>34,057</b>	<b>0.0</b>	<b>0.1</b>
<b>_0619</b>		<b>MRA/other</b>	<b>32,983,967</b>	<b>255</b>	<b>7.6</b>	<b>129,349</b>	<b>0.0</b>	<b>0.1</b>
Total in Radiology Sections			23,786,199,517				7.56	100.0
Total in 100% SAF file			314,615,751,88	7	3,372	100.0	100.00	

NOTE: Boldface type indicates that these codes are targeted for regression modeling.

SOURCE: 100% Inpatient SAF claims matched to final MedPAR claims analysis file

### 3.3.4 Revenue Codes Targeted Within Cardiology

Our chief concern in modeling the cardiology CCR as a function of component services (*Exhibit 14*) was to identify systematic differences in the mark-up between monitoring service, which are thought to have higher markup rates than invasive cardiology labs. We accumulated two target variables: the percent of charges attributable to monitoring (codes \_0730 to \_0739, accounting for 19 percent of total department charges); and the percent attributable to cardiac

catheterization (code \_0481, accounting for 42 percent). Sixty percent of the facilities in our sample submitted at least one claim for cardiac catheterization.<sup>18</sup> Virtually all facilities recorded at least some charges for monitoring functions such as EKG, telemetry and Holter monitors. Thirty-three percent of cardiology charges were in general cardiology (code \_0480), but the range of services included in this code is not clear.

### Exhibit 14 UB-92 revenue codes by cost center: Cardiology

UB-92 code	General description	Specific charge	Amount in 100% SAF file	Number facilities using this charge	Percent facilities using this charge	Average \$ per user facility	Percent total Inpatient SAF charges	Percent total SAF Cardiology group
_0730	EKG/ECG	general	2,639,423,728	3363	99.7%	784,842	0.84%	14.2%
_0731		Holter monitor	200,058,539	2372	70.3	84,342	0.06	1.1
_0732		telemetry	750,925,294	836	24.8	898,236	0.24	4.0
_0735			35	1	0.0	35	0.00	0.0
_0736			533	1	0.0	533	0.00	0.0
_0739		other	5,208,723	110	3.3	47,352	0.00	0.0
_0480	Cardiology	general	6,177,362,521	3176	94.2	1,945,013	1.96	33.3
<b>_0481</b>		<b>catheterization</b>	<b>7,817,999,011</b>	<b>1995</b>	<b>59.2</b>	<b>3,918,796</b>	<b>2.48</b>	<b>42.1</b>
_0482		stress test	308,005,293	2862	84.9	107,619	0.10	1.7
_0483		Echo	611,627,649	888	26.3	688,770	0.19	3.3
_0489		other	41,625,507	174	5.2	239,227	0.01	0.2
Total in Cardiology Sections			18,552,236,833				5.90	100.0
Total in 100% SAF file			314,615,751,887	3,372	100.0		100.00	

NOTE: Boldface type indicates that these codes are targeted for regression modeling.

SOURCE: 100% Inpatient SAF claims matched to final MedPAR claims analysis file

We also conducted an extended analysis of the “pre-rollup” MCR data for nonstandard cardiology centers. We found that roughly 20 percent of facilities—one third of those that submit claims for cardiac catheterization—may have originally reported cardiac catheterization services on a separate nonstandard line. As with MRI and CT Scanning, we constructed separate CCRs for cardiac catheterization and “all other cardiology” from this subset of facilities, and these are discussed along with the cardiology regression results in Section 3.4.4.

### 3.3.5 Revenue Codes Targeted Within Inpatient Nursing

MCR data from *Exhibit 6* revealed that the cost-to-charge ratios for critical care services tend to be slightly lower than those for routine care. We do not know if the same is true for intermediate care charges, which do not have their own cost centers, but the same regression approach can be used to investigate this question. Forty percent of facilities in the claims sample sent at least one bill to Medicare for intermediate intensive care (code \_0206), and 19 percent

<sup>18</sup> This number is relatively high because Critical Access Hospitals, whose data used to be included in short-stay inpatient hospital studies, are no longer part of the IPPS sample. These smaller rural hospitals made up a substantial portion of the facilities that did not do invasive cardiology. It is also possible that some hospitals submitting claims with this code do not operate a cardiac catheterization lab but may have provided the services through their Emergency Room.

sent at least one for intermediate coronary care (code \_0214) (*Exhibit 15*). Because intermediate care units are already grouped on the MCR line for routine care (line 25, Adults & Pediatrics), charges with these codes can be treated as a component of the routine care cost center (after correcting for the misclassification in the MedPAR files) and modeled as target services within that CCR.

A variety of other revenue codes for additional nursing and related accommodations charges are used intermittently by some but not most hospitals. These are summarized in the second half of the table in *Exhibit 15*. The most common include special room charges for isolation (code \_0164) and incremental nursing fees (codes \_0230 through \_0239). MedPAR files do not include these charges in their any of their summary groups for routine or critical care, but combined, they account for only two percent of total accommodations-related charges. Hospital use of these other codes is not consistent. While the services are not well defined, with the exception of Utilization Review (“UR”) and admission fees (codes \_0221 and \_0223) they are likely to reflect activities carried out within the nursing units. If so, it would be appropriate to include the charges with the existing nursing unit CCRs in the computation of the CCRs, and also to convert these charges using nursing unit CCRs rather than as “other services.”

Because of their low dollar volume, we did not model any of the special nursing charges as target CCR codes. To identify possible mark-up differentials between intermediate care and other routine care services, we computed a percent-of-charges variables for the sum of codes \_0206 and \_0214 only, using the corrected sum of routine plus intermediate care charges as the denominator.

**Exhibit 15**  
**UB-92 revenue codes by cost center: Inpatient nursing**

UB-92 code	Description	Number of units charged	Amount in 100% SAF file	Number facilities using this charge	Percent facilities using this charge	Average \$ per unit	Percent total Inpatient SAF charges	Percent total accommodations charges		
								Routine + intermediate	Critical + Intermediate	All
<b>Accommodations Charges</b>										
_011x	Routine/private	12,676,153	9,294,628,699			733	3.0%	15.3%		11.5%
_012x	Routine/semi	30,336,758	35,539,756,293			1,172	11.3	58.5		43.9
_013x	Routine/3-4	262,295	332,251,011			1,267	0.1	0.5		0.4
_014x	Private/deluxe	93,149	85,835,360			921	0.0	0.1		0.1
_015x	Routine/ward	<u>70,544</u>	<u>95,297,808</u>			<u>1,351</u>	<u>0.0</u>	<u>0.2</u>		<u>0.1</u>
	subtotal Routine only	43,438,899	45,347,769,171			1,044	14.4%	74.6%		56.0%
	<b>Intermediate ICU</b>	<b>5,591,302</b>	<b>9,654,119,425</b>	1332	39.5%	1,727	3.1%	15.9%	27.1%	11.9%
	<b>Intermediate CCU</b>	<b>3,072,965</b>	<b>5,790,666,683</b>	634	18.8	<u>1,884</u>	<u>1.8</u>	<u>9.5</u>	<u>16.2</u>	<u>7.1</u>
	subtotal Intermediate only	8,664,267	15,444,786,108			1,783	4.9%	25.4%	43.3%	19.1%
	subtotal Routine including Intermediate		60,792,555,279					100.0%		
_020x	Critical Care	7,487,979	15,092,931,727			2,016	4.8%			18.6%
_021x	Coronary Care	<u>2,284,661</u>	<u>5,150,982,480</u>			<u>2,255</u>	<u>1.6</u>		<u>14.4</u>	<u>6.4</u>
	subtotal Intensive only	9,772,640	20,243,914,207			2,071	6.4%		<u>56.7%</u>	25.0%
	subtotal Intensive, including Intermediate		35,688,700,315						100.0%	
	Total accommodations charges		81,036,469,486					25.8%		
<b>Other Nursing Charges</b>										
_0160	surcharges	46,034	38,879,751	77	2.3%	845	2.5%			
_0164	sterile supp	190,159	343,819,732	355	10.5	1,808	21.9			
_0169	other	25,585	28,204,509	43	1.3	1,102	1.8			
_0220	general	68,311	22,140,872	83	2.5	324	1.4			
_0221	admission	242,257	31,108,149	48	1.4	128	2.0			
_0222	tech supp	129,859	3,449,173	15	0.4	27	0.2			
_0223	UR	11,795	401,784	3	0.1	34	0.0			
_0224	late discharge	17,622	13,241,235	20	0.6	751	0.8			
_0229	other	203	62,580	13	0.4	308	0.0			
	incremental nursing -general	3,028,537	624,981,174	205	6.1	206	39.8			
_0231	nursery	216	5,524	7	0.2	26	0.0			
_0232	OB	4,234	498,441	53	1.6	118	0.0			
_0233	ICU	4,024,589	360,122,502	162	4.8	89	23.0			
_0234	CCU	204,320	90,690,367	64	1.9	444	5.8			
_0235	Hospice	102	38,537	2	0.1	378	0.0			
_0239	other	28,238	10,816,760	23	0.7	383	0.7			
	Total Other nursing charges	8,022,061	1,568,461,090			196	100.00%			
	Total in 100% SAF file		314,615,751,887	3,372	100.0%		100.00%			100.0%

NOTE: Boldface type indicates that these codes are targeted for regression modeling.

SOURCE: 100% Inpatient SAF claims matched to final MedPAR claims analysis file

### 3.4 CCR Regression Models

This section of the report describes results for a series of regressions run to model statistical adjustments to the CCRs that can be used to correct for charge compression or other sources of aggregation bias in the weights. A section follows for each of the five CCRs chosen

for regression-based adjustments. In each, we start with a set descriptive statistics in graphic form including the following:

- The distribution across sample hospitals of the CCR outcome variable.
- The distribution across sample hospitals of the percent-of-charges variables for the services targeted for assessment of different markup rates.
- Bar graphs of the bivariate relationship between the department CCR and the percent-of-charges variables (that is, before taking the hospital overall CCRs into account).
- A bar graph showing the proportion of total charges for this service that occurred in facilities with program charge match ratios below 0.90, from 0.90 to 1.10, and above 1.10.

The estimations all follow the basic model outline described in Section 2.2.2, regressing the CCR on the targeted service percent variables while controlling for the facility overall CCR. There were 3,372 facilities with data in the claims analysis sample that could be included in the CCR estimation samples. To avoid influence from facilities with extreme values (suggesting possible data errors that were not caught by the initial edits) we imposed additional exclusion criteria for the estimation samples by

- excluding observations if the department CCR was below 0.05 or above 1.5 in ancillary departments, or above 2.0 for Routine Nursing, and
- excluding observations if the program charge match ratio was less than 0.10 or more than 3.0.

The vertical lines drawn on the department CCR graphs indicate where the new exclusion cut-points fall in each CCR distribution.

Each sub-section also includes an exhibit with regression results in anywhere from three to seven different estimates:

- To test the sensitivity of the weighted regression results to the choice of charge weights we ran two estimations on the full regression sample, first using as analytic weights that department's total charges (from MCR Worksheet C) (first data column) and then using the MedPAR claims charges as analytic weights (second data column).
- Then we tested each model in several restricted samples, each continuing to use the MedPAR charges as analytic weights. The samples were the following:
  - o Restricted to hospitals with positive values in the targeted percent-of-charges variables (third data column).
  - o Restricted to hospitals with neither extremely low nor extremely high use patterns, where the percent-of-charges variable was greater than 20 percent but less than 80 percent (fourth data column).

- o Stratified by the same three levels of program charge matching that were used in the preceding descriptive graphs, which are facilities with match ratios below 0.90, between 0.90 and 1.10, and greater than 1.10 (last three data columns).

The choice of charge weights did not affect the estimates on the percent-charges variables, but the output is presented here for documentation purposes.

The purpose of the multiple estimates on restricted or stratified samples runs is only diagnostic; we wanted to gain some confidence that the coefficients do not reflect differences in pricing that are the result of other hospital characteristics that happen to be correlated both with average markup and with intensity of use of the targeted services.<sup>19</sup> For example, suppose hospitals where devices and implants make up more than 80 percent of all medical supplies are primarily orthopedic and cardiac specialty hospitals. As specialty hospitals, they might also have different cost structures, or different general pricing strategies. If, as hypothesized, the estimated impact of the percent variable on the CCR outcome is due to systematic differences in markup, then the effect should be linear, in which case the coefficients on the percent variables—measures of target services expressed as a percent of total department charges—should be similar for low-intensity users as for medium and high-intensity users. Also, if a substantial proportion of charges are from providers with poor program charge matching, we might be more concerned about the interpretation of the model coefficients if the coefficients are sensitive to the level of program charge matching. Put another way, given the presence of program charge mismatching, we are more confident about using the regression results to construct adjusted CCRs if we can least demonstrate that the coefficients are similar regardless of the level program matching.

The coefficients on the percent-of-department-charge variables for the targeted services each represent an estimate of the expected difference between the cost ratios for the targeted service and the cost ratios for the rest of that department. If the coefficients on the percent-charge variables are stable and significant, the models provide evidence of a systematic difference in markup for the targeted services. New adjusted national CCRs can be developed from the results from the regressions generated either from the full sample or from the sample restricted to hospitals with positive values in the percent-of-charges variables.

### 3.4.1 Medical Supplies

Sample descriptive information for this set of regressions is presented in *Exhibit 16*. There were 3,182 facilities with medical supplies CCRs that passed the original data quality edits. Of these, 69 were further excluded for extreme CCR values (between the vertical lines in

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<sup>19</sup> We also examined the coefficients on piece-wise regression models using several linear spline functions on the percent-charge variables (not shown), as a diagnostic tools for identifying heterogeneity in effects. In most cases the facility sample sizes were not large enough to support more than two spline “knots” with any precision in the estimates.

An alternative approach would have been to add other hospital-level variables to the model to capture possible nonmark-up related effects. Our approach of sample restriction and/or stratification accomplishes something similar to using additional indicator variables and their interaction terms. Retaining the minimal variable specification of underlying CCR plus percent-charges allows us to use final model coefficients to predict single national aggregate cost ratios from the results.

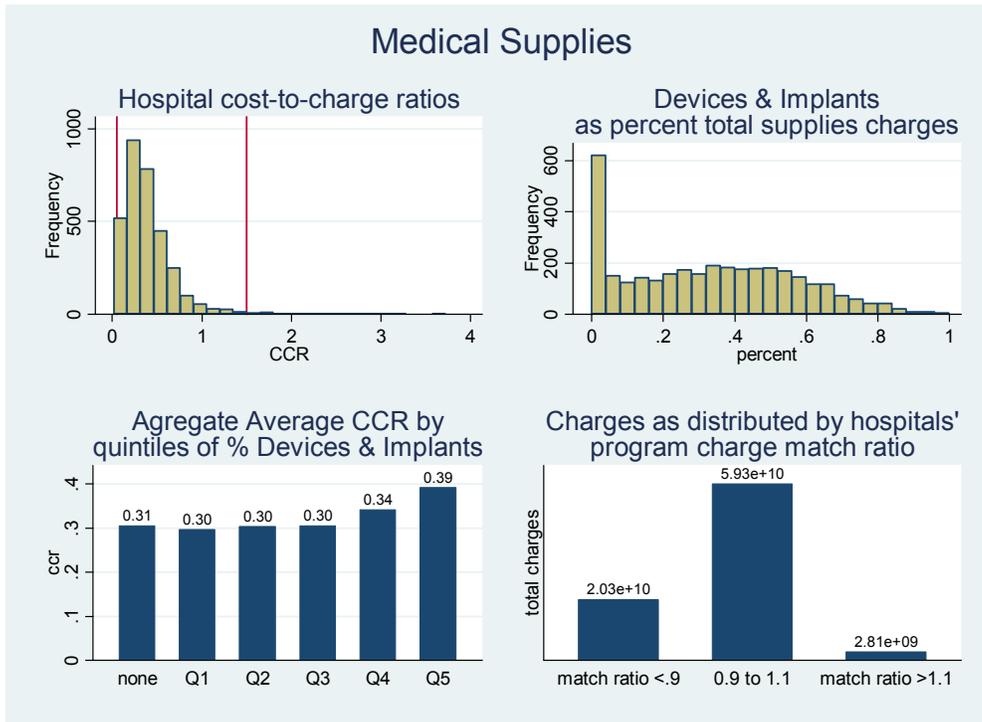
the first frame) and another 269 (about 7 percent) were excluded for poor program charge matching, leaving 2,627 hospital observations in the full medical supplies CCR estimation sample. For 221 of these (8.4 percent), the percent-devices variable was identically zero, although for a relatively large proportion of hospitals, the percent variable was very small (second frame). The third frame of this exhibit shows that medical supplies CCRs average around 0.30 for facilities with either no or low values of the percent-devices variable, but are substantially higher for those in the fourth and fifth quintiles of the (nonzero) distribution of this variable. This indicates a significant positive coefficient on this variable in the CCR regression, but it raises some question that the effect is linear.

A substantial proportion of supplies charges are attributable to facilities with program charge match ratios that are below 0.90 (fourth frame). This indicates that many of the hospitals' cost ratios for medical supplies were computed from summary cost and charge data that did not include all of the items identified as supplies in their claims. While we cannot fix the measurement problem, our confidence in the validity of predicted medical supplies CCRs will be improved if the slope coefficients estimated from the low-matching group (left bar) and coefficients from the group with relatively good matching (center bar) are similar to those from the other regressions.

The regression results provide solid evidence that if there were distinct cost centers for these items, cost ratios for devices and implants would average about 17 points higher than the ratios for other medical supplies (*Exhibit 17*). The 95 percent confidence intervals on the first three estimates for percent-devices are all approximately 12 to 23 percentage points. All of the percent-devices coefficients are significant at the one percent level. The  $R^2$ , or proportion of variance in supplies CCRs explained by the combination of the percent-devices variable and the facility average ancillary CCRs, was 24 percent when weighted by total charges, and 16 to 17 percent when weighted by program charges. This is lower than we found in the other ancillary CCR models, but slightly higher than the model of routine nursing CCRs.

The estimates on the percent-devices variable are quite stable, whether the regression uses full charges or program charges as weights, and whether it is estimated on the full sample, on those with positive percent-device values, or on those with neither very low or very high percent-charge values. The estimate from the sample of providers with program match ratios above 1.10 was much higher, but there are only 89 providers in this group. The estimate could reflect other influences from the additional costs and charges that have been included in the departmental CCR for those providers.

**Exhibit 16**  
**Descriptive statistics related to estimation of medical supplies CCR**



SOURCE: RTI Analysis of IPPS MedPAR claims matched to Medicare cost reports for FY 2004-2005

**Exhibit 17**  
**Results from diagnostic regressions of medical supplies CCR**

Outcome variable: supplies CCR	Estimation using MCR Wks C charges as weights	Estimations using SAF charges as weights					
		All	Hospitals with pc_device >0	Hospitals with .2< pc_device <.8	Sample stratified by degree of match between MCR Wks D4 charges and MedPAR claims charges:		
					MCR<90% of claims	MCR 90- 110% of claims	MCR >110% of claims
pc_device	0.177 [0.023]**	0.176 [0.027]**	0.173 [0.028]**	0.201 [0.042]**	0.167 [0.058]**	0.16 [0.029]**	0.383 [0.081]**
All-ancillary CCR <sup>1</sup>	0.703 [0.038]**	0.694 [0.042]**	0.693 [0.043]**	0.694 [0.051]**	0.54 [0.097]**	0.723 [0.043]**	0.585 [0.128]**
Constant	0.076 [0.013]**	0.072 [0.015]**	0.074 [0.015]**	0.058 [0.021]**	0.085 [0.030]**	0.091 [0.016]**	0.025 [0.043]
Observations	2,848	2,848	2,627	1,754	821	1,938	89
R-squared	0.24	0.17	0.17	0.16	0.07	0.25	0.43

NOTES:

Weighted least squares estimation with robust standard errors in brackets. \*significant at 5%; \*\* significant at 1%

<sup>1</sup> "All –ancillary" CCR has been adjusted by removing cost and charges for this cost center

### 3.4.2 Drugs

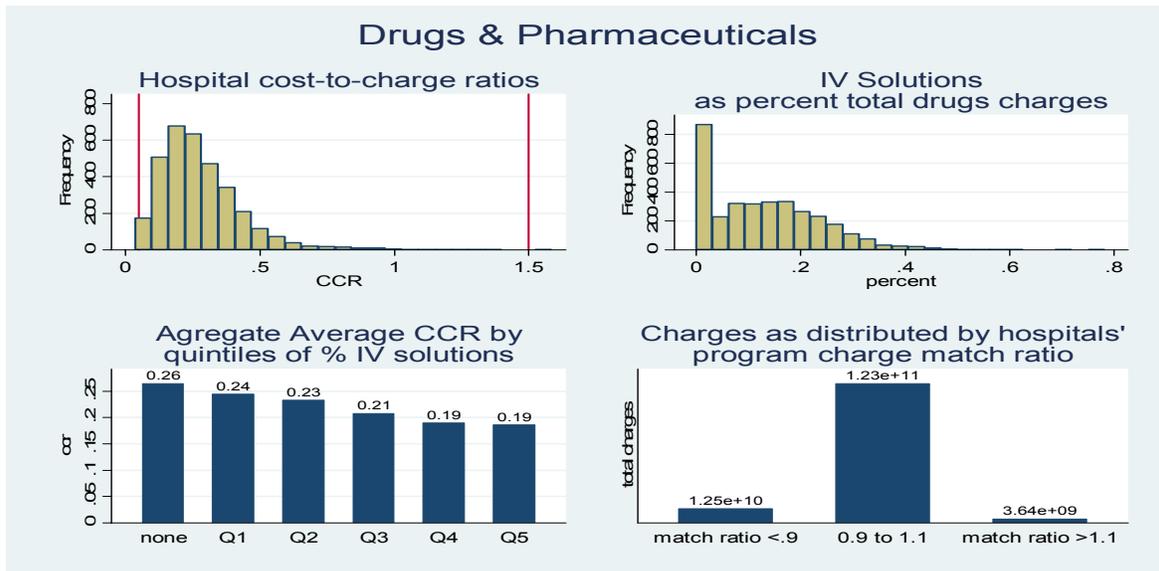
Sample descriptive information for this set of regressions is depicted in *Exhibit 18*. There were 3,327 facilities with drugs CCRs that passed the original data edits. Of these, eight were further excluded for extreme CCR values (between the vertical lines in the first frame) and two more were excluded for poor program charge matching, leaving 3,261 hospital observations in the full drugs CCR estimation sample. For 341 of these (10.5 percent), the percent-IV solutions variable was zero, although the percent variable was very small for a much larger proportion of hospitals (second frame). The third frame of this exhibit show a distinct declining pattern in the relationship between overall drugs CCRs and the percent of drugs charges attributable to IV solutions, leading us to expect a significant but negative coefficient on this variable in the CCR regression. This effect can be thought of as the complement of charge compression, because we have identified a relatively low-cost pharmaceutical item (IV solutions) that appears to have systematically higher markup.

As indicated in the fourth frame of *Exhibit 18*, most of the sample's total drugs charges occur in facilities with relatively good program charge mapping (charge match ratios between 0.9 and 1.1). Therefore we are primarily concerned that the coefficients in the middle bar of this graph are similar to those in the first four regressions.

The regression results provide strong evidence that if IV solutions were separated from other drugs, their cost ratios would average about 12 points lower than the ratios for other drugs charged to patients (*Exhibit 19*). The 95 percent confidence intervals on the estimates from the first four models span from a -16 to a -9 point difference. The coefficients on the percent-IV solutions variable are similar (within 1.5 points of each other) across the first four regressions and for the regression restricted to the facilities with reasonable program charge match ratios. All estimates on the percent-IV solutions variable are significant at the one percent level except for the one restricted to the 68 providers with MCR program charges greater than 110 percent of claims charges (a group for which we expect the model to have poor performance).

For all regressions except those run on the small number of facilities with poor match ratios, about 50 percent of the variance in drugs CCRs is explained by the combinations of the percent-IV solutions variable and the facility average ancillary CCR.

## Exhibit 18 Descriptive statistics related to estimation of drugs CCR



Source: RTI Analysis of IPPS MedPAR claims matched to Medicare cost reports for FY 2004-2005

## Exhibit 19 Results from diagnostic regressions of drugs CCR

Outcome variable: supplies CCR	Estimation using MCR Wks C charges as weights	Estimations using SAF charges as weights					
		All	Hospitals with pc_IVsol > 0	Hospitals with .2 < pcIVsol < .8	Sample stratified by degree of match between MCR Wks D4 charges and MedPAR claims charges:		
					MCR < 90% of claims	MCR 90- 110% of claims	MCR > 110% of claims
pc_IVsol	-0.107 [0.022]**	-0.11 [0.019]**	-0.124 [0.019]**	-0.124 [0.019]**	-0.223 [0.068]**	-0.117 [0.020]**	-0.062 [0.089]
All-ancillary CCR <sup>1</sup>	0.773 [0.027]**	0.791 [0.021]**	0.789 [0.022]**	0.789 [0.022]**	0.685 [0.069]**	0.789 [0.024]**	1.009 [0.076]**
Constant	0.015 [0.008]*	0.015 [0.007]*	0.019 [0.007]**	0.019 [0.007]**	0.082 [0.022]**	0.016 [0.007]*	-0.054 [0.029]
Observations	3261	3261	2920	2920	263	2589	68
R-squared	0.51	0.50	0.50	0.50	0.41	0.50	0.77

NOTES:

Weighted least squares estimation with robust standard errors in brackets

\* significant at 5%; \*\* significant at 1%

<sup>1</sup> "All -ancillary" CCR has been adjusted by removing cost and charges for this cost center

### 3.4.3 Radiology

Sample descriptive information for this set of regressions is depicted in *Exhibit 20*. There were 3,327 facilities with radiology CCRs that passed the original data edits. Of these, seven were further excluded for extreme CCR values (between the vertical lines in the first frame) and

67 were excluded for poor program charge matching, leaving 3,253 hospital observations in the full radiology CCR estimation sample. Of these, only 24 (less than one percent) had no charges for either CT or MRI scanning (second frame, top row). Only 258 (eight percent) of sample hospitals had no MRI charges, but substantially larger fraction had zero or very low values in the percent-MRI variable (third frame, top row). The average radiology CCRs show a mixed pattern with respect to the association between overall radiology CCRs and the percent attributable to either CT scanning or MRI (fourth and fifth frames), but there appears to be a modest negative association.

A substantial proportion of radiology charges are attributable to facilities with program charge match ratios greater than 1.10 (bottom right-most frame). This indicates that many of the hospital radiology cost ratios were computed from MCR data that included costs and charges for items that are not classified as radiology services in their claims. We are not very concerned about the regression results from the group of facilities in the low-match category on the left of that graph, because of the small proportion of radiology charges. But our confidence in the validity of predicted radiology CCRs will be improved if the percent-of-charges coefficients estimated from the high-match hospitals group are similar to those estimated from the group with more reasonable program charge matching, and also similar to those estimated for the nonstratified samples.

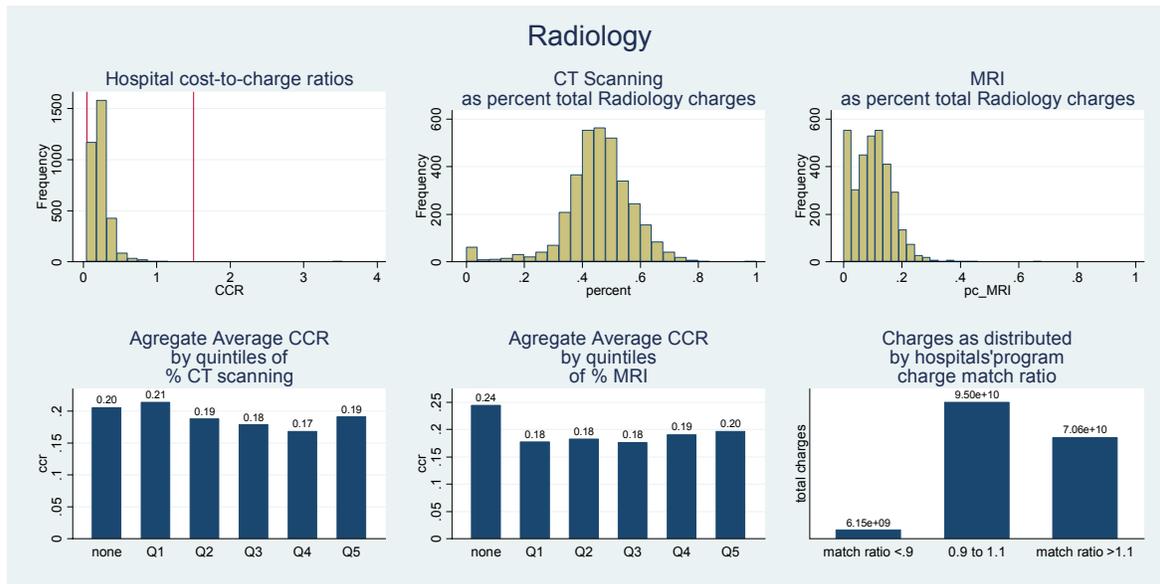
For the radiology models, we began by regressing the radiology CCR on a single variable for the percent of charges in either type of scanning. If both CT and MRI scanning were separated to a single other cost center on the MCR, the regressions estimate that the CCRs for these combined services would average 14 points lower than the ratios for other remaining radiology services (*Exhibit 21*). As nearly all hospitals have CT scanning services now, the results in the sample restricted to positive percent-scanning values are nearly identical to the results on the full sample.

We then tested the percent CT scanning and MRI as separate variables. The results suggest that the CT scanning differential is about -16 percentage points (with a 95 percent confidence interval from -20 to -12 percentage points) and for MRI is about -9 points (with a 95 percent confidence interval from -14 to -5 percentage points). The estimates are both significantly different from zero and significantly different (at the one percent level) from each other. The coefficients on the percent-charge variables are similar when estimated on the sample restricted to facilities with scanning between 20 percent and 80 percent, and for facilities with reasonable (0.90 to 1.10) as well as high (greater than 1.10) program charge match ratios.

A surprising 64 percent of the variance in radiology CCRs is explained by the combination of the percent-CT and MRI variables and the facility average ancillary CCR, for all regressions except those run on the 126 facilities with low match ratios.

## Exhibit 20

### Descriptive statistics related to estimation of radiology CCR



Source: RTI Analysis of IPPS MedPAR claims matched to Medicare cost reports for FY 2004-2005

## Exhibit 21

### Results from diagnostic regressions of radiology CCR

Outcome variable: Radiology CCR	Estimations using SAF charges as weights							
	Estimation using MCR Wks C charges as weights	All cases	Hospitals with pc_scan >0	Hospitals with pc_scan > 0	Hospitals with .2< pc_scan <.8	Sample stratified by degree of match between MCR Wks D4 charges and MedPAR claims charges:		
						MCR<90% of claims	MCR is 90%– 110% of claims	MCR >110% of claims
pc_scan (CT & MRI combined)	-0.139 [0.018]**	-0.140 [0.018]**	-0.142 [0.018]**					
All-ancillary CCR <sup>1</sup>	0.597 [0.013]**	0.612 [0.013]**	0.612 [0.013]**	0.608 [0.013]**	0.608 [0.013]**	0.627 [0.081]**	0.599 [0.017]**	0.625 [0.020]**
pc_CT				-0.159 [0.020]**	-0.151 [0.020]**	-0.132 [0.111]	-0.154 [0.029]**	-0.15 [0.025]**
pc_MRI				-0.095 [0.024]**	-0.088 [0.024]**	-0.051 [0.163]	-0.1 [0.033]**	-0.102 [0.030]**
Constant	0.096 [0.010]**	0.093 [0.010]**	0.094 [0.011]**	0.097 [0.011]**	0.092 [0.011]**	0.105 [0.046]*	0.095 [0.015]**	0.088 [0.014]**
Observations	3253	3253	3229	3229	3197	126	1953	1174
R-squared	0.64	0.64	0.64	0.64	0.64	0.42	0.64	0.71

NOTES:

Weighted least squares estimation with robust standard errors in brackets.

\* significant at 5%; \*\* significant at 1%

<sup>1</sup> "All –ancillary" CCR has been adjusted by removing cost and charges for this cost center

SOURCE: RTI Analysis of IPPS MedPAR claims matched to Medicare cost reports for FY 2004-2005

The CCR regression results for CT scanning and MRI services are very similar to our findings from an extended analysis of the cost reports. Data from subsets of providers that used nonstandard lines on the MCR to report separate cost centers for either of these two services are summarized in *Exhibit 22*. We found 906 reports with nonstandard cost centers that were identified by CMS’ HCRIS as CT scanning, and 689 that were identified as for MRI. These represent, respectively, 27 percent of hospitals that provide CT services based on their claims charges, and 23 percent of those that provide MRI. The two groups are largely overlapping—most of those that separated MRI data also separated CT scanning data. Between the two groups we were able to identify a set of 1,075 facilities, or roughly one third of those providing any scanning services, with reported cost ratios for individual scanning (CT or MRI) and reported cost ratios for radiology that we knew excluded scanning.

Many facilities had very low cost ratios on these nonstandard lines, including many below 0.05. This raises questions about the relative accuracy of their cost finding.<sup>20</sup> There is also no basis for an *a priori* assumption that these 30 percent of hospitals are representative of the full sample of radiology providers. Yet the differences between the reported cost ratios for three services are very similar to the differences predicted by the CCR regressions.

**Exhibit 22**  
**Radiology CCRs in providers that report separate costs centers for scanning**

	CT Scanning	MRI	Radiology excluding scanning
Number hospitals with charges on MedPAR claims	3,313	3,055	3,315
Number cost reports with separated cost centers	906	689	1,075
Percent of applicable hospitals	27%	23%	32%
Number cost reports passing initial CCR edits	882	678	1,043
Aggregate national CCR	0.073	0.156	0.245
Difference: separated scanning CCRs versus nonscanning Radiology CCR	-0.172	-0.090	
Difference estimated by CCR regression	-0.17	0.11	

### 3.4.4 Cardiology

Sample descriptive information is depicted in *Exhibit 23*. There were 3,365 facilities that had cardiology charges on their claims, but only 2,827 that reported cost or charge data in the cardiology cost center (line 53) of the MCR and passed the original data edits. Further exclusions were made for 147 providers for extreme CCR values (between the vertical lines in the first frame) and 144 for extremely poor program charge matching, leaving 2,536 hospital observations in the full cardiology CCR estimation sample. Of these, 812 (32 percent) had no charges for cardiac catheterization services (middle frame, top row). Average cardiology CCRs seem to be lowest for noncatheterization facilities (left-most frame on lower line), and also lowest for facilities where monitoring makes up nearly all of the cardiology services (middle frame on lower line).

<sup>20</sup> Charges and direct departmental costs are easy to recognize in the accounting records, but providers also need to capture indirect costs adequately by identifying separate allocation statistics. These particular services are very capital-intensive, and accurate cost ratios will depend on providers’ being able to assign actual equipment depreciation and lease costs directly to the cost centers, rather than the traditional method of allocating average capital costs based on square footage.

As noted earlier, cardiology claims charges appear to have little relation to cardiology charges as reported on the cost reports. Most charges are found in hospitals where the MCR over-reports cardiology (implying that other services are combined on that cost center line), but substantial services are reported for hospitals where the MCR under-reports (implying that cardiology costs and charges appear in other cost centers). The usefulness of any findings from an estimation of the Cardiology CCR on percent-catheterization charges as an estimate of pricing differences may, therefore, be limited.

The regression results for Cardiology CCRs provide no evidence of systematic differences in markup for the targeted services (*Exhibit 24*). The coefficients on the percent-of-charges variables are nonsignificant in all but one specification.

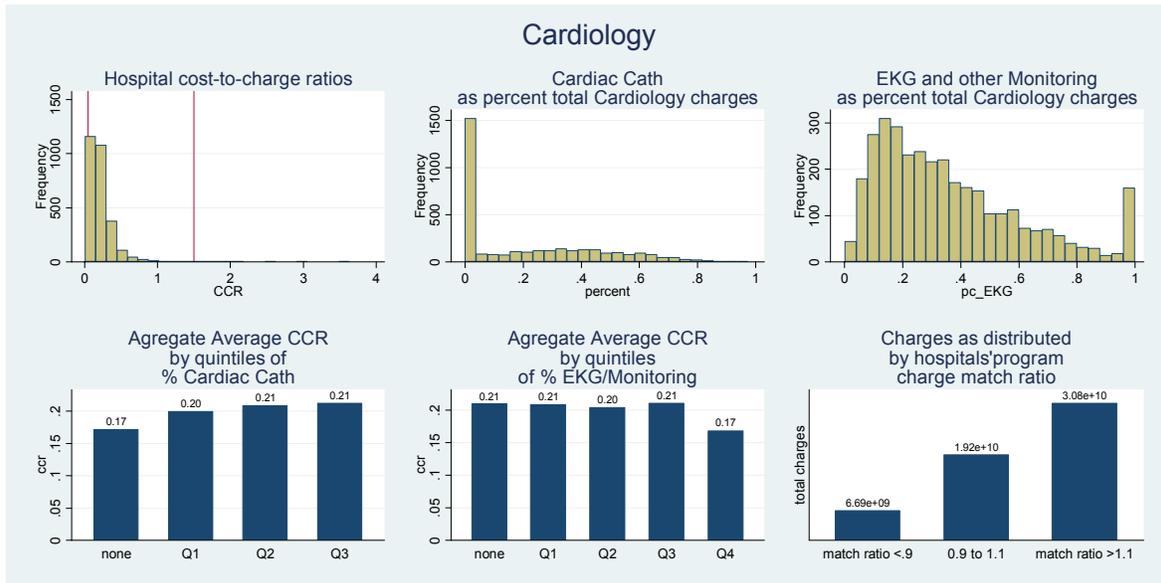
To obtain estimates comparable to what we could measure with the cost report analysis of nonstandard cost centers, we also tested specifications that included one or another of the percent—charge variables but not both. In a specification that included only the measure of monitoring charges as a percent of total cardiology (where the reference group therefore includes cardiac catheterization and other (non-monitoring) cardiology services combined) the coefficient on the percent-monitoring variable was also nonsignificant. From models using only the percent-catheterization variable (where the reference group includes other cardiology services and monitoring combined, shown in the last four columns of Exhibit 24), the coefficient on the percent-catheterization variable was significant in only one specification. When estimated from the sample restricted to the 564 facilities where program charge match ratios were between 0.90 and 1.10, the cardiac catheterization CCR was estimated to be 6.7 points lower than the CCR for the reference group, with a 95 percent confidence interval from -1.3 to -12.1 percentage points. Otherwise the estimated differentials were all smaller in magnitude and all nonsignificant.

A lower CCR for cardiac catheterization would be unexpected based on the descriptive data in *Exhibit 23* (lower line, left-most frame). It is possible that the difference in findings stems from the ability of the regression to simultaneously adjust for prevalence of catheterization charges and overall ancillary CCRs, as compared to the unadjusted differences by prevalence of cardiac catheterization alone. However, a regression finding that predicts a lower ratio for cardiac catheterization is also contrary to what we found in the extended cost report analyses of the subset of facilities that identified separate cost centers for catheterization services (*Exhibit 25*). Edited CCR data were available for 739 providers, or 38 percent of those with catheterization charges on their claims. In this subset, the aggregate CCR for the nonstandard lines that were identified by CMS' HCRIS files as "cardiac catheterization" was 0.22, which is not very different from the aggregate CCR of 0.21 for all cardiology services. However, the aggregate CCR for remaining cardiology services in this set of providers was much lower, at 0.16.<sup>21</sup> This result would be consistent with regression findings of a significant *positive* coefficient for cardiac catheterization.

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<sup>21</sup> We also noticed that the aggregate CCR for cardiology services for the subset of non-catheterization providers, i.e. those with no charges for revenue code \_0481 on any claims, was close to 0.16.

## Exhibit 23 Descriptive statistics related to estimation of cardiology CCR



SOURCE: RTI Analysis of IPPS MedPAR claims matched to Medicare cost reports for FY 2004-2005

## Exhibit 24 Results from diagnostic regressions of cardiology CCR

Outcome variable: Cardiology CCR	Estimations using SAF charges as weights				Sample stratified by degree of match between MCR Wks D4 charges and MedPAR claims charges:		
	Estimation using MCR Wks C charges as weights		Hospitals with pc_cath > 0	Hospitals with .2 < pc_cath < .8	MCR <90% of claims	MCR is 90%–110% of claims	MCR >110% of claims
	All	All					
pc_catheterization	0.009 [0.012]	0.007 [0.012]	-0.02 [0.015]	-0.04 [0.022]	0.009 [0.029]	-0.067 [0.027]*	-0.001 [0.021]
pc_EKG/other monitoring	-0.022 [0.026]	-0.012 [0.028]	0.017 [0.033]				
All-ancillary CCR <sup>1</sup>	0.588 [0.033]**	0.625 [0.032]**	0.65 [0.035]**	0.643 [0.041]**	0.678 [0.061]**	0.612 [0.066]**	0.701 [0.045]**
Constant	0.04 [0.009]**	0.022 [0.009]*	0.03 [0.009]**	0.043 [0.012]**	0 [0.017]	0.049 [0.018]**	0.024 [0.013]
Observations	2,536	2,536	1,724	1,273	547	564	613
R-squared	0.30	0.31	0.32	0.31	0.34	0.27	0.42

NOTES:

Weighted least squares estimation with robust standard errors in brackets

\* significant at 5%; \*\* significant at 1%

<sup>1</sup> "All –ancillary" CCR has been adjusted by removing cost and charges for this cost center

SOURCE: RTI Analysis of IPPS MedPAR claims matched to Medicare cost reports for FY 2004-2005

It is possible that program charge mismatching is so pervasive in this area that the regressions cannot provide valid estimates. It is also possible that the hospital sample with the cardiac catheterization cost centers is not generalizable. Yet even if we could demonstrate that the subset of providers with separate cost centers is reasonably representative, it is unclear how we should identify which cardiology services would be appropriately converted using the higher ratio for catheterization. It seems possible, even probable, that hospitals may group cardiac diagnostic labs together with the catheterization lab in the separate cost center, leaving the standard cost center named “electrocardiology” to reflect costs and charges for monitoring services only. If this is so, it would be more appropriate to apply the higher CCR to all of the charges for revenue codes in the \_048x series (referring back to Exhibit 14) rather than just the \_0481 code that identifies catheterization.

Based on (a) the nonsignificant regression findings and (b) the fact that estimates were not stable across the different sub-samples, we did not estimate any synthetically adjusted cardiology CCRs. Because of the uncertainty over which cardiology charges would be appropriate to convert at which cardiology CCRs, we are also not presenting any revised weights based on the aggregate CCRs from the extended cost report data analysis. Nevertheless these potential cost conversion problems could have substantial impact on the weights for some of the most heavily populated DRGs in the IPPS. Further investigation into ways to refine the cardiology CCRs could benefit from well-targeted interviews with hospital management, as a complement to more detailed examinations of cost report and claims data.

**Exhibit 25**  
**Cardiology CCRs in providers that report separate costs centers for cardiac catheterization**

	Cardiac Catheterization	Other Cardiology only	All Cardiology
Total number of providers using any cardiology charges			3,372
Number hospitals with usable cardiology CCRs on MCR			2,827
Percent hospitals using the standard cardiology line			84%
Number hospitals with any catheterization charges on MedPAR claims	1,995		
Number cost reports with separated cost centers	756		
Number cost reports passing initial CCR edits	739	674 <sup>1</sup>	
percent of applicable hospitals	38%		
Aggregate national CCR	0.220	0.160	0.210
Difference: separated catheterization CCRs versus other cardiology CCR	0.060	-0.050	

NOTE:

<sup>1</sup> There were 65 providers that had a nonstandard line completed for cardiac catheterization, but did not report anything on the standard line 53 for cardiology.

SOURCE: RTI Analysis of Medicare Cost Reports for IPPS hospital providers in the final CCR Analysis File.

### 3.4.5 Nursing

Sample descriptive information on intermediate care charges and the routine nursing care cost center data is depicted in *Exhibit 26*. For this sample, we first reclassified each hospital’s

intermediate care charges from intensive or coronary MedPAR charge groups to the routine care charge group, after also combining MedPAR charges for private, semi-private, and ward settings into one category. Reclassifications were based on the SAF charge codes.

There were 3,350 facilities with routine care CCRs that passed the original data edits. Of these, 69 were further excluded for extreme CCR values (between the vertical lines in the first frame) and 49 more were excluded for poor program charge matching (as measured for total nursing, to avoid penalizing providers due to the misclassification of intermediate care as discussed earlier in Section 3.1). This left 3,232 hospital observations in the full nursing care CCR estimation sample, of which three had only critical care charges (and are therefore not included in the regressions). Slightly more than one half of the remaining sample (1,630 facilities) had no charges for intermediate care, and in the half that did, the percent intermediate care relative to our adjusted total routine care varied widely (second frame). In ten percent of hospitals the percent intermediate care was less than 2.5 percent, and in ten percent of hospitals it was greater than 60 percent. The third frame of this exhibit shows a distinct declining pattern in the relationship between the routine care CCR and the percent-intermediate variable, leading us to expect a significant but negative coefficient on this variable in the CCR regression.

The great majority of charges for inpatient nursing care occur in hospitals where there is a reasonable program charge match for nursing services as a whole (right-most frame in the bottom row). If there are substantially different coefficients in the estimates stratified by match ratios it should be of less concern to these models, because the samples for the first and third strata are very small.

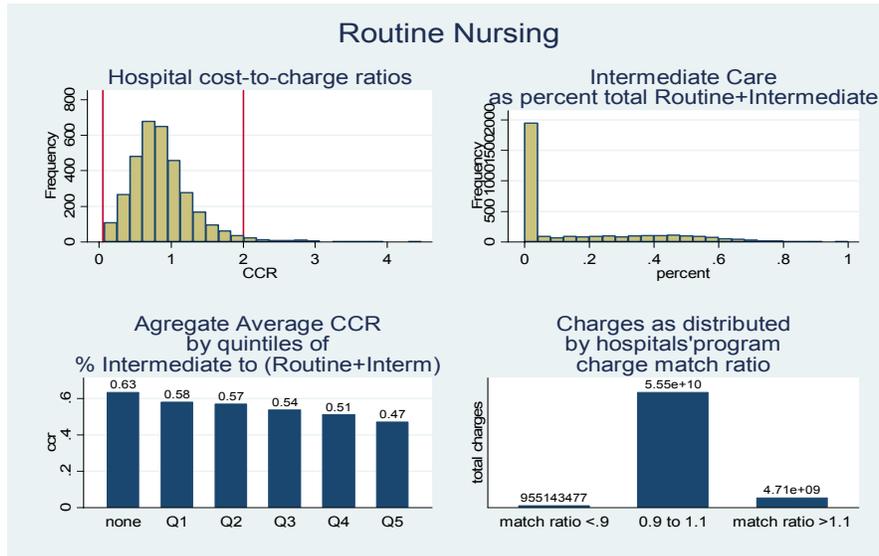
The coefficients on the percent-intermediate care variables in our routine care CCR regressions are estimated with very large standard errors and are all nonsignificant (*Exhibit 27*). This may be attributable to the wide variation in the percent-intermediate care variable. We ran only three estimations for this department; we did not test an alternate charge weight variable in the nursing regressions because we cannot correct total nursing charges for the reclassification of intermediate care, and we did not estimate the separate regressions by level of program charge matching because the mismatching was largely a function of the classification of intermediate care charges. Results from the three estimates have very wide confidence intervals, however, and are very sensitive to sample changes.

In the regression restricted to facilities with intermediate care between 20 and 80 percent of nonintensive nursing care, the coefficient is positive 0.09. Although the 95 percent confidence interval runs from -0.08 to 0.26, a positive coefficient is still contrary to our expectations based on the declining pattern of CCRs in the lower-left frame in the bottom row of *Exhibit 26*. The coefficient as estimated across the full sample is -0.07, with a 95 percent confidence interval from -0.15 to 0.005. In the sample limited to those with at least some intermediate care charges, the coefficient on percent-intermediate care is truly zero, with a confidence interval of -0.11 to 0.11.

Based on these findings, we did not we did not estimate any synthetically adjusted CCRs for routine nursing care. We did alter the charge groups on the claims to include the intermediate care with other routine care, and allowed the corrected routine care charge totals to be converted using the CCR for routine care (0.56) rather than for intensive care (0.50).

## Exhibit 26

### Descriptive statistics related to estimation of routine nursing CCR



SOURCE: RTI Analysis of IPPS MedPAR claims matched to Medicare cost reports for FY 2004-2005

## Exhibit 27

### Results from diagnostic regressions of routine nursing CCR

Outcome variable: Routine Nursing CCR	All estimations use SAF total charges as weights		
	All	Hospitals with pc_intermediate >0 only	Hospitals with .2<pc_interm<.8
pc_intermediate <sup>2</sup>	-0.074 [0.040]	0.0002 [0.055]	0.092 [0.087]
Adjusted total facility CCR <sup>1</sup>	0.871 [0.092]**	1.07 [0.124]**	1.427 [0.148]**
Constant	0.328 [0.032]**	0.244 [0.042]**	0.113 [0.058]
Observations	3,229	1,599	1,075
R-squared	0.12	0.15	0.21

NOTES: Weighted least squares estimation with robust standard errors in brackets. \* significant at 5%; \*\* significant at 1%

<sup>1</sup> Total hospital CCRs adjusted by removing cost and charges for this cost center. <sup>2</sup> Intermediate care charges computed as percent of sum of (routine + intermediate).

SOURCE: RTI Analysis of IPPS MedPAR claims matched to Medicare cost reports for FY 2004-2005

### 3.5 Summary of Regression Results

Based on the nonsignificant findings with respect to differences in markup for cardiac catheterization and EKG within the Cardiology cost center, and nonsignificant findings with respect to differences in markup for intermediate versus other routine nursing care, we did not compute statistically adjusted CCRs for separate services within either of these departments. **Exhibit 28** summarizes the results from three final models that we have used to construct “synthetic” or statistically adjusted CCRs for services in three of the five investigated department CCRs. These are: Devices & Implants within Medical Supplies, IV Solutions within Drugs, and CT Scanning and MRI within Radiology.

The final models are all estimations from samples that are restricted to hospitals with positive values in the targeted service percent-of-charges variables. Although the coefficients are estimated on this restricted sample, the new adjusted national CCRs use cost and charge data from the full sample, as described in **Appendix F**. This approach differs slightly from Dr. Hogan’s in that he used the full sample to derive the estimates for the predicted adjusted CCRs. Even though the parameter estimates obtained for the full samples and those obtained for the samples with positive targeted services are very close, the restricted sample approach allows us to use regression results to mimic the computation of separate national CCRs that would have been made if hospitals had in fact separated these services into different cost centers,

**Exhibit 28**  
**Final regressions used for statistically adjusted CCRs**

Outcome Variables:	<i>Estimation samples all limited to facilities with nonzero values for the target percents</i>		
	CCR: Supplies	CCR: Drugs	CCR: Radiology
pc_device	0.173 [0.028]**		
pc_IVsol		-0.124 [0.019]**	
pc_CT Scanning			-0.157 [0.019]**
pc_MRI			-0.093 [0.024]**
Adjusted ancillary CCRs	0.693 [0.043]**	0.789 [0.022]**	0.608 [0.013]**
Constant	0.074 [0.015]**	0.019 [0.007]**	0.095 [0.011]**
Number of Observations	2,627	2,920	3,253
R-squared	0.17	0.50	0.64

NOTES: Weighted least squares estimation with robust standard errors in brackets.

\* significant at 5%; \*\* significant at 1%

For the set of hospitals in each estimation sample, regression coefficients are used to predict hospital-level CCRs for both the new target services and the remaining cost center services (for example, Devices & Implants, and then Medical Supplies excluding Devices & Implants), following the *Equations 2* through *4* as described in *Section 2.2.5* For the new target service, new hospital costs are estimated by applying these predicted cost ratios to the charges for the target services, and a new national aggregate CCR is computed by aggregating new costs and charges across the set of hospitals in the estimation sample (in the case of Medical Supplies, across 2,627 hospitals that had Devices charges).

An adjusted national CCR for *the department after the target services are removed* has to be computed in two steps. For hospitals in the regression sample, new cost estimates are calculated by multiplying the predicted adjusted departmental cost ratio times departmental charges after removing the target services. For the set of hospitals where the target service percent-of-charges variable was zero (in the Medical Supplies example, this would be the 221 hospitals that had no claims showing charges for Devices or Implants), Medical Supplies cost are computed using the original MCR cost ratio multiplied by each of these hospitals' original Medical Supplies charge amounts. The newly computed costs and charges for both groups are summed and the ratio becomes the new revised national CCR. The computations are presented in equation form in *Appendix F*.

### **3.6 Final Adjusted CCRs for Testing Aggregation Bias**

Unadjusted and adjusted CCRs for each of the services examined, including those derived from re-grouping existing MCR data and those derived from statistical estimation, are provided in *Exhibit 29*. For reference, we have also included the original national CCRs as used in the FY 2007 IPPS rules. The “unadjusted” CCRs from RTI’s updated cost report sample are very close to those computed by CMS from FY 2004 cost reports (at most one percentage point difference). Note that the CCR for Labor and Delivery, which CMS computed based on specially weighted charges from a set of Medicare covered maternity DRGs, is not being recomputed for this new analysis sample.

**Exhibit 29**  
**Original and final adjusted CCRs used for DRG weight simulations**

Charge group	Description	CMS sample FY	RTI CCR analysis sample	
		2004 MCRs)	(mixed FY 2004 & 2005)	
		Published CCRs	Baseline CCRs	Adjusted CCRs
CMS_01	Routine care	0.56	0.56	0.56
CMS_02	Intensive care	0.50	0.50	0.50
CMS_03	Drugs	0.21	0.21	
CMS_03a	Drugs, adjusted			0.23
CMS_03b	IV Solutions only			0.09
CMS_04	Supplies	0.34	0.34	
CMS_04a	Supplies, adjusted			0.25
CMS_04b	Devices & implants only			0.43
CMS_05	Rehab therapies	0.44	0.43	0.43
CMS_06	Inhalation therapy	0.20	0.20	0.20
CMS_07	Operating Room	0.32	0.31	0.31
CMS_08	<i>Labor &amp; delivery</i>	<i>0.46</i>	<i>n/a</i>	<i>n/a</i>
CMS_09	Anesthesia	0.16	0.16	0.16
CMS_10	Cardiology	0.21	0.21	0.21
CMS_11	Laboratory	0.19	0.18	0.18
CMS_12	Radiology	0.19	0.19	
CMS_12a	Radiology, adjusted			0.28
CMS_12b	CT Scanning only			0.11
CMS_12c	MRI only			0.17
CMS_13	Other Services	0.38	0.39	
CMS_13aa	Other services, adjusted			0.44
CMS_13b	Emergency room only			0.33
CMS_13c	Blood products & admin only			0.47

NOTE: <sup>1</sup> CMS national CCR for Labor and Delivery is conditional on a sample of maternity-related DRGs only, and was not re-estimated in this study.

It is important to note that in all three charge groups where we make regression-based adjustments to national CCRs, the changes are substantial for the remaining or residual departmental CCRs as well as for the CCRs on the target services, and these changes may be just as important to the DRG weights. The cost converter other Drugs, for example, increases by about ten percent (from 0.21 to 0.23) as a result of removing IV solutions. The cost converter for other Medical Supplies declines by 26 percent (from 0.34 to 0.25) after removing devices and implants. The converter for non-scanning radiology services increases by 47 percent (from 0.19 to 0.28).

As with the target services, these “residual” departmental CCR charges (for Supplies excluding devices, Drugs excluding IV solutions, and Radiology excluding CT and MRI) affect DRG cost weights to the extent that the residual charges are highly concentrated in certain DRGs, and to the extent that both the target and the residual charges are not positively correlated. **Exhibit 30** summarizes percentile distributions of both targeted and residual services across all DRGs in the claims sample. DRG-level detail on services associated with the regression-adjusted CCRs is provided in full as *Appendix G1* (complete list in DRG number order) and *G2* (50 DRGs with highest percent-of-charges of each target service).

**Exhibit 30**  
**Percentiles of regression-adjusted charges as share of total DRG charges**

	Within the Medical Supplies CCR		Within the Drugs CCR		Within the Radiology CCR		
	Devices & implants	Supplies excluding devices	IV solutions	Drugs excluding IV solutions	CT Scanning	MRI	Radiology excluding CT & MRI
Minimum	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%
<i>Percentiles:</i>							
10 <sup>th</sup>	0.0	3.1	0.9	7.5	0.5	0.0	1.3
25 <sup>th</sup>	0.1	4.2	1.4	9.5	1.2	0.2	2.1
50 <sup>th</sup>	0.4	6.7	1.9	12.1	3.2	0.5	3.5
75 <sup>th</sup>	1.5	10.1	2.6	15.8	6.9	1.5	5.0
90 <sup>th</sup>	7.8	13.0	3.3	19.3	10.1	3.4	7.1
Maximum	61.1%	28.2%	4.9%	53.6%	30.4%	19.0%	26.4%

SOURCE: RTI Analysis of IPPS MedPAR claims matched to Medicare cost reports for FY 2004-2005. Also see Appendix G.

Devices and implants make up a very large portion of the charges of a small number of DRGs. At the extreme is DRG 515 (cardiac defibrillator implantation), where devices account for 61 percent, or the DRGs for spinal fusion (496-498, 520), where they range from 33 to 43 percent of charges. The weights for these DRGs would increase substantially as a result of the regression-based adjustments. At the same time, in one-quarter of DRGs, nondevice supplies charges comprise from 10 to 28 percent charges, and for these, supplies cost estimates will decline as a result of converting these charges with a ratio of 0.34 instead of 0.43. In some DRGs both types of supplies charges are concentrated (e.g., DRG 577 for Carotid Artery Stent Procedures, in which devices comprise 15 percent and other supplies comprise 25 percent of total charges), making the net effect of the CCR adjustments difficult to predict.

In the reverse situation, charges for IV Solutions are much more evenly distributed across DRGs – the maximum charge percentage is only 4.9 percent, and the median is 1.9 percent. Lowering the CCR from 0.21 to 0.09 might have relatively little effect on relative weights. But other chargeable drugs are more concentrated in specific DRGs, and a ten percent increase in the drugs cost converter for these will raise cost estimates and probably affect some relative weights. In the case of adjusted CCRs for other radiology services, most DRGs where scanning of either type is more than 10 percent of charges, also have other relatively high other radiology charges. In this case, the impact of the combined CCR adjustment is hard to predict because costs are being substantially adjusted, but in both directions. But for another group of DRGs with high radiology charges but low or no scanning charges—including those with substantial radiation therapy—radiology charges will be converted using a substantially higher ratio, which can have a substantial effect on total DRG costs and thus relative weights.

It is very difficult to assess bias or estimate impact of any one type of service CCR aggregation on specific DRGs, without actually re-computing complete sets of weights from alternative DRG cost estimates. For this reason we computed new baseline weights from our analysis sample, and then several alternative sets of weight, to track the impact of each of the adjusted CCRs associated with the 13 charge groups appearing in *Exhibit 29*.

## CHAPTER 4 IMPACT ON DRG WEIGHTS

### 4.1 Revised Weights

The alternative DRG weights discussed in this and the subsequent section have been computed following CMS' published methods for charge standardization, outlier exclusions and transfer-weighted case counts for maximum comparability with previously-published figures. By construction, each set of weights centers on the value of 1.00 in its initial computation. To keep the numbers at the same scale as those actually used for payment, we normalized the values using the normalization factor of 1.49338 that was applied by CMS for the FY 2007 weights.

One set of baseline weights is based on standardized charges without any cost conversion, similar to what would have been computed under the pre-2007 rules. Our baseline cost weights use the unadjusted CCRs from the middle column of that table and should be comparable to the 100 percent cost-based weights computed for FY 2007 payments (that is, without the 3-year phase in of cost-based weights). Subsequent sets of modeled weights were computed cumulatively, first using the adjusted CCRs designed to address "cross-department" aggregation, and then adding the regression-estimated CCRs designed to address "within-department" aggregation.

The weights described here are computed from the MCR-matched claims analysis file and not from the most recent claims available at the time of our analysis. Matching claims to cost reporting periods was critical for this project in order to assess the impact of data quality on the estimation of CCRs. In addition, for the regression analysis, it was important to use a CCR dependent variable that was as accurate as possible in order to obtain reliable regression coefficients for estimating refined CCRs. For this reason, the regression results were tested for sensitivity to the degree of match between claims charges and MedPAR charges.

However, when CMS develops DRG weights each year, they use the most recent available claims data in order to capture as many changes in medical practice as possible. Since the most recent available Medicare cost reports are not as current as Medicare claims data, there is some difference in time periods reflected in the standardized charge estimates derived from the claims and the national average CCRs derived from cost reports. CMS faces a similar issue regarding time lags in deciding how to apply regression estimates to refine CCRs. It is either necessary to use regression estimates from matched data that are older than the most recent claims data, or to use mismatched CCR and claims data in the CCR regression. In this study, RTI did not examine the impact of these different types of time lags.

A complete list of the revised weights from the matched analysis sample is contained in two parts in *Appendix H*. *Appendix H1* lists all of the DRGs, their case counts, and the normalized baseline and alternative weight values. *Appendix H2* follows the same format but instead lists the marginal percent change in each weight that occurred as we adding each adjusted CCR.

#### 4.1.1 Cumulative Impact of CCR Changes, by DRG

*Exhibit 31* lists the 25 DRGs with the overall largest increase in weights and the 25 DRGs with the largest overall decrease in weights, from the combined impact of all of adjusted CCRs. The data for the table were limited to DRGs with at least 100 cases in the claims file.

**Exhibit 31**  
**DRGs with largest change in weights resulting from adjusted CCRs**

DRG num	MDC	DRG name	Cases	Cost-based weights using FY 2007 rules	Cost-based weights with adjusted CCRs	Percent change
<b><u>Largest increase in weights</u></b>						
515	5	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH	49,586	5.378	6.173	14.77%
536	5	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK	7,523	6.549	7.290	11.31
535	5	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK	7,634	7.552	8.365	10.77
552	5	OTHER PERMANENT CARDIAC PACEMAKER IMPLANT W/O MAJOR CV DX	77,491	2.107	2.327	10.40
118	5	CARDIAC PACEMAKER DEVICE REPLACEMENT	6,925	1.697	1.873	10.36
551	5	PERMANENT CARDIAC PACEMAKER IMPL W MAJ CV DX OR AICD LEAD OR GNRTR	51,370	3.241	3.520	8.62
498	8	SPINAL FUSION EXCEPT CERVICAL W/O CC	18,685	2.963	3.190	7.65
8	1	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W/O CC	3,164	1.540	1.655	7.49
496	8	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	3,099	6.460	6.913	7.01
497	8	SPINAL FUSION EXCEPT CERVICAL W CC	27,685	3.762	4.021	6.89
546	8	SPINAL FUSION EXC CERV WITH CURVATURE OF THE SPINE OR MALIG	2,095	5.389	5.759	6.86
409	17	RADIOTHERAPY	1,613	1.180	1.254	6.19
520	8	CERVICAL SPINAL FUSION W/O CC	14,632	1.712	1.805	5.41
471	8	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY	13,947	3.093	3.259	5.38
344	12	OTHER MALE REPRODUCTIVE SYST O.R. PROCEDURES FOR MALIGNANCY	2,241	1.083	1.138	5.09
558	5	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W/O MAJ CV DX	170,167	1.909	1.996	4.59
545	8	REVISION OF HIP OR KNEE REPLACEMENT <sup>(1)</sup>	40,723	2.5291	2.5914	2.46
519	8	CERVICAL SPINAL FUSION W CC	11,057	2.487	2.590	4.13
491	8	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF UPPER EXTREMITY	20,270	1.697	1.765	4.02
111	5	MAJOR CARDIOVASCULAR PROCEDURES W/O CC	9,599	2.502	2.600	3.92
557	5	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W MAJOR CV DX	108,286	2.561	2.649	3.42
363	13	D&C, CONIZATION & RADIO-IMPLANT, FOR MALIGNANCY	2,034	0.968	1.001	3.36
544	8	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY <sup>(1)</sup>	404,171	1.9671	2.0311	3.25
133	5	ATHEROSCLEROSIS W/O CC	5,639	0.531	0.548	3.14
492	17	CHEMOTHERAPY W ACUTE LEUKEMIA OR W USE OF HI DOSE CHEMOAGENT	3,561	3.354	3.458	3.10
<b><u>Largest decrease in weights</u></b>						
153	6	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC	1,874	1.136	1.085	-4.45
361	13	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	240	1.142	1.091	-4.47
323	11	URINARY STONES W CC, &/OR ESW LITHOTRIPSY	18,754	0.788	0.752	-4.52
27	1	TRAUMATIC STUPOR & COMA, COMA >1 HR	5,372	1.285	1.227	-4.54
216	8	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	18,014	1.825	1.740	-4.62
198	7	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W/O CC	3,809	1.166	1.112	-4.63
31	1	CONCUSSION AGE >17 W CC	4,435	0.904	0.861	-4.69
147	6	RECTAL RESECTION W/O CC	2,408	1.546	1.473	-4.75
72	3	NASAL TRAUMA & DEFORMITY	1,149	0.735	0.699	-4.79
311	11	TRANSURETHRAL PROCEDURES W/O CC	5,616	0.635	0.604	-4.85
307	11	PROSTATECTOMY W/O CC	1,855	0.626	0.595	-5.02

(continued)

**Exhibit 31 (continued)**  
**DRGs with largest change in weights resulting from adjusted CCRs**

DRG num	MDC	DRG name	Cases	Cost-based weights using FY 2007 rules	Cost-based weights with adjusted CCRs	Percent change
164	6	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC	5,526	2.062	1.958	-5.03
181	6	G.I. OBSTRUCTION W/O CC	23,320	0.575	0.546	-5.07
337	12	TRANSURETHRAL PROSTATECTOMY W/O CC	20,734	0.580	0.551	-5.07
335	12	MAJOR MALE PELVIC PROCEDURES W/O CC	10,870	1.064	1.009	-5.18
155	6	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W/O CC	5,426	1.238	1.171	-5.42
29	1	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W/O CC	5,838	0.764	0.723	-5.43
149	6	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC	18,079	1.459	1.380	-5.43
494	7	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC	22,834	0.993	0.937	-5.69
32	1	CONCUSSION AGE >17 W/O CC	1,599	0.600	0.563	-6.22
166	6	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	4,672	1.283	1.195	-6.84
288	10	O.R. PROCEDURES FOR OBESITY	9,913	1.848	1.721	-6.89
324	11	URINARY STONES W/O CC	4,214	0.487	0.452	-7.24
165	6	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	2,224	1.154	1.067	-7.56
167	6	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	4,237	0.852	0.772	-9.45

NOTE: <sup>1</sup> Weights for DRGs 544 and 545 were adjusted to reflect more realistic predicted transfer fractions; see footnote 7.

Nineteen of the 25 DRGs with the greatest increase are surgical DRGs in MDC 5 (Circulatory System) or MDC 8 (Musculoskeletal System). For these cardiac and orthopedic cases, the weight changes reflect intentional upward adjustments to cost, generated by the revised cost estimates on expensive implantable devices and prosthetics. Three other DRGs in the upper panel of *Exhibit 31* include DRGs using radiotherapy and chemotherapy services; in these, the increases are the indirect result of raising CCRs for drugs, radiology and “other services” because we targeted component high-markup services within these charge groups.

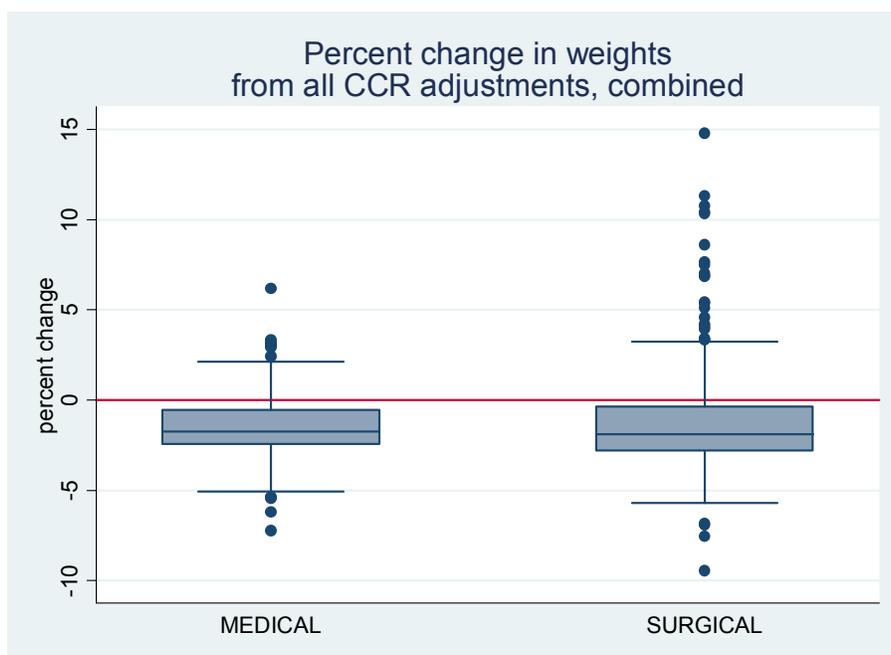
DRGs where the weights declined are a mixed, but predominantly surgical, group. Many of the decreases were a result of the reduced CCR for other supplies after removing devices (see *Appendix H2*). Others are directly related to the adjustment to lower cost estimates for scanning services.

There are many more DRGs with decreased weights than with increased weights (*Exhibit 32*). This occurred because the biggest increases in cost occurred in relatively expensive but well populated DRGs. As a result of making the relatively large increases in a small set of DRGs, a larger set of DRGs are assigned reduced DRG weights (because the weighted average is always 1.00).

#### **4.1.2 Impact on DRG Weights by CCR Adjustment**

Of the six modified CCRs for which we computed separate sets of weights, the net effects of adjustments based on re-grouping existing cost centers (isolating emergency room and blood-related charges from the “All Other” charge group, and converting intermediate care charges using the ratio for routine care) were modest by comparison to the adjustments based on statistical estimations (*Exhibit 33*). Within the group of regression-based adjustments, new

**Exhibit 32**  
**Distribution of impact on DRG weights, by DRG type**



**Exhibit 33**  
**Percentiles of DRG weight changes by type of CCR adjustment**

	Change due to CCR adjustments			Change due to regression-based estimates		
	Emergency	Blood	Intermediate care	Devices & implants	IV solutions	CT/MRI
Minimum change	-2.2%	-0.5%	-0.9%	-6.5%	-0.9%	-5.1%
10 <sup>th</sup>	-0.7	-0.1	-0.7	-2.4	-0.4	-1.4
25 <sup>th</sup>	-0.4	-0.1	-0.6	-1.5	-0.2	-0.7
50 <sup>th</sup>	0.0	0.0	-0.3	-0.9	0.0	-0.1
75 <sup>th</sup>	0.2	0.0	0.0	-0.5	0.1	0.2
90 <sup>th</sup>	0.6	0.1	0.3	0.1	0.3	0.6
Maximum change	4.6%	2.1%	2.0%	15.2%	2.4%	6.6%

CCRs for devices and medical supplies had the strongest impact. This is as expected, both because of the size of the increment to the devices CCR that we estimated from the regressions (17 percentage points higher), and the extreme concentration of devices charges within a few DRGs. Individual DRG weights increased by as much as 15 percent and decreased by as much as 6.5 percent, just from this one CCR change. The impact was also much more one-sided for this adjustment than for the others; there were supplies-related increases in 53 DRGs, but decreases in 452 (and only four DRGs with no impact).

Other adjustments to the CCRs are smaller but also have a more widely distributed effect. As illustrated by the box plots in *Exhibit 34*, they also tend to have different effects on medical than on surgical DRGs. For example, converting intermediate care charges using the routine

instead of critical care CCR resulted in modest increases to the weights for medical cases and decreases to those for surgical ones, while the devices adjustment had the opposite effect, tending to lower weights for medical DRGs (because the converter for “other supplies” was lowered) and raise them for surgical DRGs.

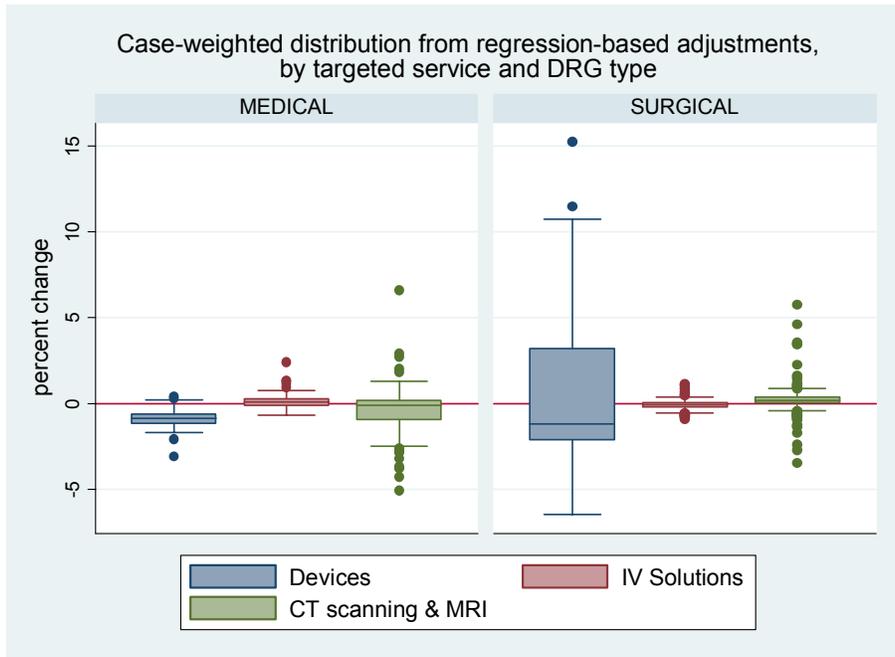
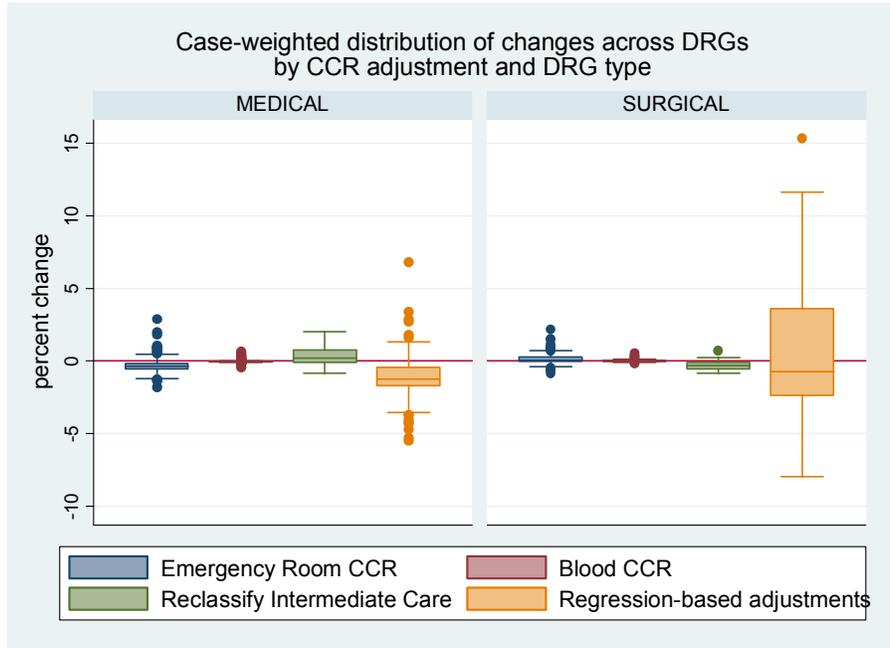
Although there are DRGs where charges for blood and related services are concentrated, the incremental effects of creating a separate CCR for “Blood and Blood Administration” appear quite small. This is because the impact on weights was computed relative to the set of weights computed after separating “Emergency Room” to its own CCR. The CCR for “Other Services” increased from 0.39 to 0.45 when emergency services were removed, and since the revised CCR for Blood and Blood Administration is 0.47, most of the effect on weights for DRGs with high blood-related charges was already accounted for.

#### **4.1.3 Cumulative Impact Relative to Changes from Charge-Based Weights**

Implementing all of the adjusted CCRs in these models substantially mitigates the impact of converting from charge-based to cost-based weights. As discussed in the background section to this report, charge-based weights had, over time, come to overestimate the relative resources associated with surgical cases and underestimate relative resources associated with medical cases. The switch to cost-based weights using CMS’ original national CCRs therefore disproportionately raised the weights for most medical DRGs and lowered them for most surgical ones.

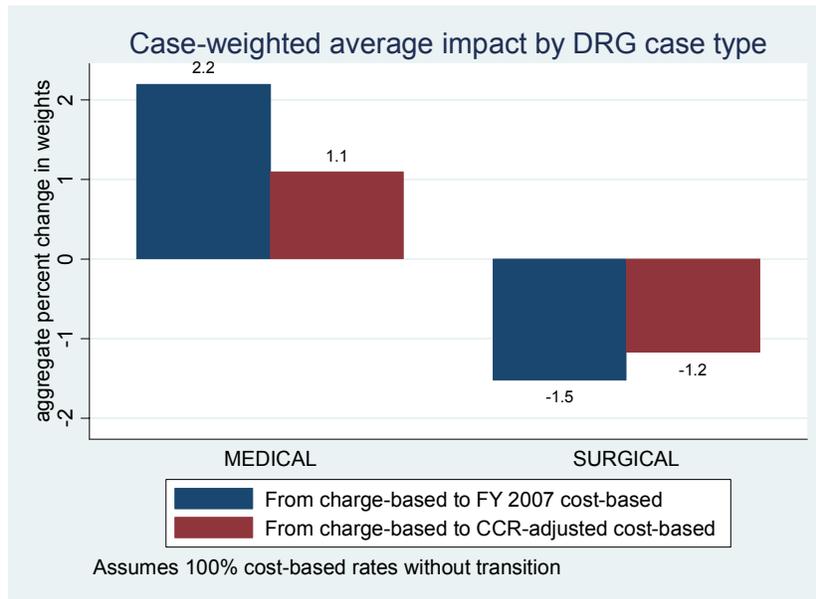
From our construction of equivalent charge-based weights on the claims analysis sample, weights for individual DRGs could be increased or decreased by 20 percent, or more, due to the move to cost-based weights. The aggregate correction effect of this change, however, is not extreme – a 2.2 percent increase for all medical DRGs combined and a 1.5 percent decrease for all surgical DRGs combined. The bar graphs in *Exhibit 35* show that using the adjusted CCRs, the aggregate correction is substantially reduced to a 1.1 percent overall increase in medical compared to a 1.2 percent decrease in surgical DRGs.

**Exhibit 34**  
**Distribution of impact on DRG weights, by CCR adjustment**



### Exhibit 35

#### Average difference between charge-based and cost-based weights by DRG type



#### 4.2 Impact of CCR Changes on Average Hospital Weights

To assess the impact of revised cost estimating methods on hospital payments, we computed the case-mix index (CMI) values for each hospital that would occur if the alternative CCRs described in this report were used to compute DRG weights. The CMI is the case-weighted average of DRG weights by provider. We then computed the change in CMI values between those using FY 2007 cost-based weights (assuming no phase-in) and two alternatives: (1) CMIs under charge-based weights; and (2) CMIs under weights after applying all of the CCR adjustments discussed earlier in this section.

*Exhibit 36* shows the distribution of CMI values for weights computed using charges, original CCRs and adjusted CCRs. The basis chosen for computing DRG weights does not alter the distribution of hospital CMI values except at the extreme upper and lower levels. This is as expected, because by construction, the case-weighted average of each set of relative weights is 1.00 (or 1.49338, if normalized). We would only expect to see substantive change in the distribution of CMIs across the hospital sample if there were changes in computation methods that had a large effect on relatively common DRGs that were heavily concentrated in some types of providers but not others.

**Exhibit 36**  
**Percentiles of hospital case-mix index values**

	Charge-based weights	FY 2007 full cost weights	Adjusted CCR cost weights
MINIMUM	0.404	0.504	0.496
10th percentile	1.020	1.042	1.030
25th percentile	1.158	1.178	1.169
MEDIAN	1.302	1.316	1.309
75th percentile	1.525	1.523	1.525
90th percentile	1.746	1.735	1.742
MAXIMUM	3.905	4.026	4.160

NOTE: Hospitals with fewer than 25 Medicare discharges are excluded from the computation

There is a more widely distributed impact on changes in case-mix computed at the individual hospital level, and therefore on provider payment. Percentile distributions on the percent change in CMI are presented in *Exhibit 37*. The first column shows the changes in CMIs attributable to the move from charge-based to fully-cost based weights. These range from negative 5.9 percent to positive 42.5 percent, although a small group of hospitals with increases above 25 percent are anomalies (the hospital with a 42.5 percent increase in CMI, for example, is a specialty surgery facility with an annual transfer-adjusted Medicare case count below 500). However, under full implementation of the FY2007 cost-based weights, CMIs would have decreased for 26 percent of IPPS providers and increased for 74 percent. In contrast, changes to CMIs from implementing adjusted CCRs (relative to the FY 2007 cost-based method) are positive for 25 percent of hospitals in the sample and negative for 75 percent. For a majority of IPPS providers, the DRG weight changes attributable to implementing adjusted CCRs (second column) seem to offset each other; the interquartile range (25<sup>th</sup> to 75<sup>th</sup> percentile) for changes in CMI is from -0.9 percent to 0.0 percent, and in eight out of 10 IPPS providers (from the 10<sup>th</sup> to the 90<sup>th</sup> percentile) the impact ranges from -1.2 percent to 0.6 percent change in CMI. Using the adjusted CCRs instead of the original CCRs from the FY 2007 rules would, therefore, reduce the payment impact of the shift from charge-based to cost-based weights.

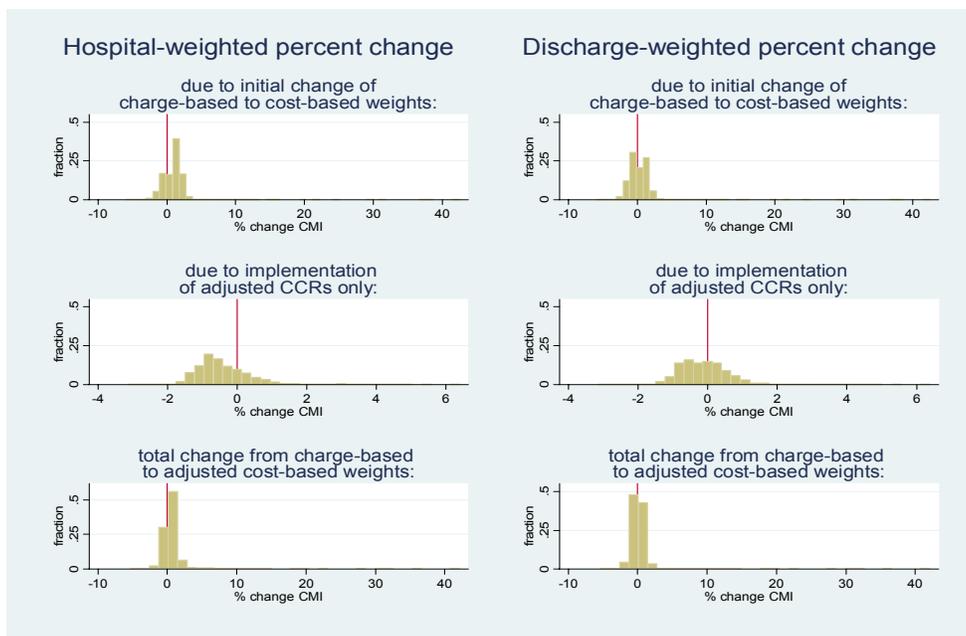
**Exhibit 37**  
**Percentiles of hospital-level changes in case-mix index values**

	Percent change: charge-based to FY2007 cost-based	Percent change: FY2007 cost-based to adjusted CCR cost-based
MINIMUM	-5.9%	-3.1%
10th percentile	-0.9	-1.2
25th percentile	-0.1	-0.9
MEDIAN	1.2	-0.6
75th percentile	1.7	0.0
90th percentile	2.2	0.6
MAXIMUM	42.5	6.4

NOTE: Hospitals with fewer than 25 Medicare discharges are excluded from the computations

Changes in the basis used for weight computation affects smaller hospitals differently than larger ones. *Exhibit 38* presents histograms of the CMI percent-change measures by hospital size groups. Graphs in the first column are unweighted (or, in effect, hospital-weighted), showing the distribution of percent changes in CMIs across providers. Graphs in the second column are weighted by transfer-adjusted discharges, showing the distribution of percent changes in CMIs across Medicare cases. Unweighted and weighted percent changes in CMIs are decomposed into (1) the effect due to the shift from charge-based to the original cost-based weights (first row), and (2) the partially offsetting effect on CMIs due to disaggregating certain CCRs (second row). The third row gives the distribution of the net impact, which is the percent change in CMIs that would occur from moving from charge-based to the adjusted-CCR cost-based method.

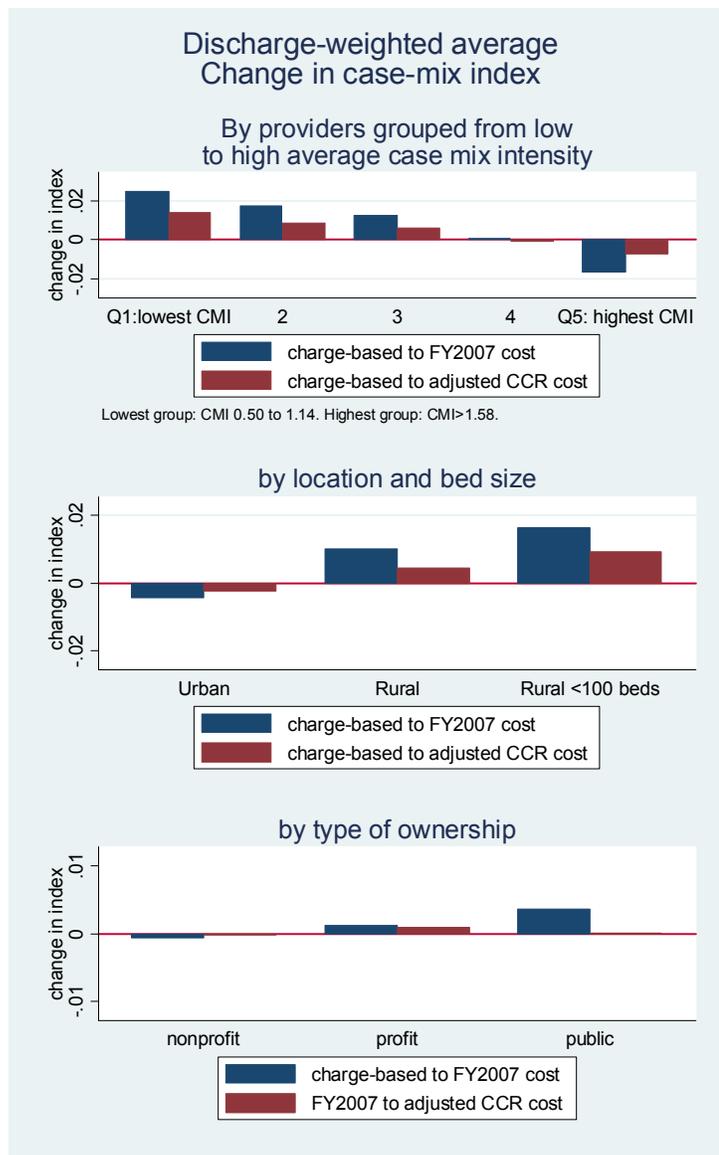
**Exhibit 38**  
**Distribution of hospital versus discharge-weighted changes in case-mix index**



As shown in the first row, moving from charge-based to the original unadjusted cost-based weights shifts the distribution of CMIs across hospitals to the right (more positive CMI changes), but because the majority of hospitals with a positive change are smaller, the discharge-weighted distribution of CMI change is more evenly distributed between negative and positive. As shown in the second row, the opposite occurs if implementing adjusted CCRs as compared to the original CCRs. CMI changes are negative for a large number of hospitals, but because they are smaller, discharge-weighted changes in CMI are more evenly distributed (though still predominantly negative). Looking at the difference in CMIs between the charge-based and the adjusted CCR cost-based weights (third row), the effects have been evened out so that hospital-weighted and discharge weighted histograms look similar, implying that negative and positive changes in CMI are similar between small and large facilities.

In *aggregate*, average changes in the CMI due to a change in DRG weight computation methods should always be zero, yet there may be substantial differences in the average change for specific subgroups of hospitals. **Exhibit 39** summarizes the average changes in CMIs for hospital subgroups defined by selected facility characteristics. We assigned categories of case intensity by grouping hospitals to quintiles of charge-based weight CMIs. Urbanicity and ownership (not-for-profit, for-profit, or public) were constructed from location and ownership information reported on MCR Worksheet S-2. Average changes for each subgroup were computed for two changes in DRG weight computation method: (1) moving from charge-based to unadjusted (FY 2007 cost based weights ignoring phase-in), shown in blue; and (2) moving from charge-based to CCR-adjusted cost-based weights (red bars).

**Exhibit 39**  
**Facility-level impact of change from charge-based to cost-based weights, by type of hospital**



In both cases the aggregate changes in the case-mix index measure are still quite small (less than two tenths of a percent for any single subgroup) but there are distinct differences by group. Hospitals with lower average intensity, smaller rural hospitals and public hospitals (a majority of which are rural), will all experience an increase in average DRG weight and therefore total payments as a result of the change from charge-based to the FY 2007 cost-based weights. The higher the average case mix measure under the old charge-based weights, the less of an increase is seen, and hospitals in the highest case-mix group absorb most of the offsetting reductions. This is as expected, because the DRGs with the greatest reductions were surgical and occur more often in larger, more sophisticated facilities. Implementing the adjusted CCRs, however, mitigates this impact in all three subgroups. It reduces the group differences by case intensity and by location, and completely eliminates differences in impact by type of ownership.

## **CHAPTER 5**

### **SUMMARY AND CONCLUSIONS**

#### **5.1 Interventions to improve CCR Measurement**

The analyses described in this report confirm that charge compression and other aggregation-related problems do introduce bias to the new cost-based DRG weights, and that refinements to the CCRs can reduce that bias. There are a number of options available to CMS to improve the accuracy and precision of the CCRs as now derived from the Medicare cost report. The options can be divided into those that can be implemented over short, medium and long-term time frames.

##### **5.1.1 Short-Term Implementation**

- Expand HCRIS edits to identify and reject reports with extreme CCR values.

HCRIS edits are incorporated into the software that Medicare’s fiscal intermediaries use to review and accept cost reports as submitted by providers, before passing them on to CMS. In constructing the CCRs for the thirteen charge groups CMS imposes several data edits that eliminate providers or provider-level cost centers with out-of-range data. Incorporating similar edits to reject or require more intensive review of cost reports from providers with extreme cost-to-charge ratios would reduce the exclusions generated by these edits. Equally important, more stringent edits would improve the accuracy of the remaining departmental CCRs within problem cost reports, by forcing providers to review and correct the assignment of costs and charges before the MCR is filed.

- Revise cost report instructions to reduce cost and charge mismatching and program charge misalignment.

This could be immediately effective for correcting the reporting of costs and charges for medical supply items that are now distributed across multiple cost centers. Because the management accounting systems of some providers probably also include costs and charges for these items in departments other than their central supply areas, CMS instructions might need to be explicit on how to compute reclassifying entries for Worksheet A (where the providers’ the trial balance of expenses is entered), Worksheet C (where the trial balance of gross revenues is entered), and possibly also the overhead allocation statistics on worksheet B-1.

- Separate Emergency Room from “Other Services” and computing a fourteenth national CCR for the DRG cost computations.
- Consider separating Blood and Blood Products from “Other Services” and compute a fifteenth national CCR for the DRG cost computations.

The impact of this change on DRG weights is slight, but it does improve payment accuracy for a small number of DRGs, and it could also serve to encourage providers to improve their reporting for this cost center (see below).

- Use regression-based estimates to disaggregate national average CCRs for Medical Supplies; Drugs; and Radiology.

Statistical models appear work well for estimating systematic differences in markup within individual departments. They can be used as a short-term correction until more detailed information can be gathered directly from cost reports (see below). They can also be considered as permanent adjusters, if more detailed cost-finding for some services seems impractical.

- Routinize annual data collection of a limited amount of Inpatient SAF variables, for use in computing statistically-adjusted CCRs.

Regression-based corrections rely on the more detailed charge codes from SAF. Historically DRG weight recalibration has been accomplished using the summarized data from the MedPAR files rather than the SAF. RTI had no difficulty in matching IPPS claims from the Inpatient SAF to MedPAR. Once specific codes and departments are chosen for statistical adjustment, programs can be written to extract data for these items and then use the new codes to disaggregate MedPAR charge departments at the individual claims level. This process could be incorporated into the annual recalibration procedures in order to run the regressions that estimate disaggregated CCRs, using claims that are matched in time to the periods covered by the provider cost reports that generate the CCRs. Once the adjusted CCRs are computed, they can be applied to the set of more current claims that is being used for the recalibration, provided the disaggregated MedPAR charges have been computed for this set as well.

### **5.1.2 Medium-Term Implementation**

- More efficient alternatives to extracting and matching SAF data would be either to (a) permanently expand the MedPAR file to include separate fields, or (b) generate a special version of the MedPAR file for use in recalibration, where the UB-92 codes are summarized at the greater level of detail needed for estimating the new CCRs and summarizing DRGs at the level of the new disaggregated revenue departments. For compatibility with prior years' data, any new fields should be computed by partitioning old fields rather than by regrouping does into different fields.

In addition to the disaggregated ancillary departments modeled in this report, separate MedPAR fields to be considered for therapeutic radiology, for radioisotopes and for EEG.

Within the nursing charge area, a separate field is needed for intermediate care charges so that these can be appropriately converted using the Routine Care CCR. At the same time, fiscal intermediaries should be advised to provide enough detail in their Provider Statistics and Revenue reports (PS&Rs) so that hospitals can identify program charges and days attributable to this level of care and report them accurately on MCR Worksheet D4.

Revenue codes for observation, incremental nursing fees and isolation charges are currently grouped into a catch-all MedPAR field (along with other services not falling

into other defined areas including some ancillaries). These are charges for services provided on the inpatient nursing units, with associated costs that are originally accumulated in inpatient nursing cost centers. Nursing unit CCRs would be more accurate if they were computed using total charges and costs as accumulated (before any adjustments for observation bed days). Other nursing-related services should be separated from any ancillary services in MedPAR so that they can also be converted using the appropriate CCR. Even though these codes are not currently used with any frequency on IPPS claims, this refinement may become more important as we look forward to possible future improvements in recording patient-level nursing care.

- Encourage providers to use existing standard MCR cost centers.

There are several standard cost centers that are not regularly used by providers, even though a large proportion of hospitals offer the services. Using a CCR based on data from a portion of providers is feasible under CMS' new approach of applying national aggregate CCRs to DRG charges. However, there is a risk that the data from providers that do use the cost centers are not generalizable to the hospital sample as a whole. This applies in particular to the cost centers for blood products (MCR line 46) and blood administration (MCR line 47).

Another line that should be used more frequently by those offering the service is therapeutic radiology (MCR# 42). Even though it is not a common service for inpatients, therapeutic radiology tends to have a higher CCR than diagnostic radiology, and by combining the two cost centers, the CCR for diagnostic radiology may be overstated.

### **5.1.3 Long-Term Implementation**

- Add new standard MCR cost centers.

A new standard cost center for "Devices, Implants and Prosthetics" added as line 55.01 (under line 55, "Medical Supplies charged to Patients") would eliminate the need for statistical estimation on this CCR. A similar line for IV Solutions (as a subscript under line 56, "Drugs Charged to Patients") would do the same.

About 25 percent of providers who offer CT Scanning and/or MRI services are already reporting these services on separate non-standard line numbers. Creating standard cost centers 41.01 for CT Scanning and 41.02 for MRI (under line 41, "Radiology-Diagnostic") could improve this percentage, and also provide an opportunity to issue additional instructions to providers to improve indirect cost allocation statistics so that these services receive full cost allocations.

About one third of providers offering cardiac catheterization services already include a non-standard line on their cost reports with this description. The current cost center associated with cardiology is line 53 "Electrocardiology." This description clearly includes costs and charges for EKGs and other monitoring services. From the results of our analysis of program charge matching between MCRs and claims, however, other cardiology diagnostic labs and interventional cardiology (catheterization and angioplasty) may be grouped in other cost centers by many providers. Creating a new

standard cost center 53.01 could improve the CCRs and substantially improve the program charge mismatching that now occurs. The organization of other cardiology services within hospitals' management and accounting structures is not well documented. CMS may need to look for industry consensus to arrive at workable definitions for any new cost center. In particular, it is not clear whether it would be preferable to establish a new line number to a) separate interventional cardiology from all other cardiology services, or b) separate all other cardiology services and allow line 53 to be used for cardiac monitoring services only.

Step-down units providing intermediate level care (between critical and routine) are increasing in use, particularly for cardiac care. We did not find statistical evidence of different cost-to-charge ratios for intermediate compared to routine care areas, and that may have been due to wide variation across hospitals in the use of these units and charge codes. It is possible that establishing new cost centers for these areas should be considered, as their popularity increases.

- Study options for patient-level charging within nursing units.

Nursing charges account for one-fourth of IPPS charges and 41 percent of the computed costs from our claims analysis file. Converting from a per-diem to a CCR-based method for converting nursing charges to costs should have improved the accuracy of the nursing cost estimate, as did the correction for the intermediate care charge converter. In the absence of a more detailed charge structure to capture patient-level differences in nursing service use, however, claims-based cost estimates continue to understate resource use for high acuity cases and overstate resource use for low acuity cases. To the extent that nursing acuity is systematically different by DRG, DRG cost estimates will be compressed.

Many hospitals do not track patient-level data that would enable them to identify case-level differences nursing intensity. Hospital management may not be aware of the potential for bias in relative resource weights from the compression brought about by having only average unit-based nursing charges rather than patient-specific service use charges. New York State has designed a system to assign nursing cost increments to Medicaid DRGs based using local expert review of nursing intensity weights (NIWs),<sup>xiii</sup> but expert consensus on DRG-specific nursing differentials is probably not a practical national-level solution. New York's system also relies on a separate data collection effort. Unless hospitals begin to implement patient-level charging (making greater use, for example, of the "incremental nursing" charge code), or begin to implement standard systems for collecting nursing acuity data that could be integrated into claims data, the possibilities for refining the inpatient nursing CCRs used in DRG weight computation are probably limited. This is a complicated issue that deserves further study, that is unlikely to be resolved in the short or medium-term future.

## ENDNOTES

- <sup>i</sup> Final Rule 48 FR 39752, September 1, 1983
- <sup>ii</sup> Cotterill, P., Bobula, J., Connerton, R. “Comparison of alternative relative weights for diagnosis-related groups.” Health Care Financing Review 7(3) Spring 1986.
- <sup>iii</sup> Price, K. “Pricing Medicare’s diagnosis-related groups: Charges versus estimated costs.” Health Care Financing Review 11(1) Fall 1989.
- <sup>iv</sup> Rogowski, J. Byrne, D. “Comparison of alternative weight recalibration methods for diagnosis-related groups.” Health Care Financing Review 12(2) Winter 1990.
- <sup>v</sup> Carter, G., Farley, D. “A longitudinal comparison of charge-based weights with cost-based weights.” Health Care Financing Review 13(3) Spring 1992.
- <sup>vi</sup> Lave, J. “Is compression occurring in DRG prices?” Inquiry 22(2): 142-147. Summer 1985.
- <sup>vii</sup> Thorpe, K. Cretin, S., Keeler, E. “Are diagnosis-related group case weights compressed?” Health Care Financing Review 10 (2) Winter 1988
- <sup>viii</sup> Carter, G. Rogowski J. “How recalibration method, pricing and coding affect DRG weights.” Health Care Financing Review 14(2), Winter 1992
- <sup>ix</sup> Proposed Rule 71 FR 23996, April 25, 2006; Final Rule 71 FR 47870, August 18, 2006
- <sup>x</sup> See, for example, comments on the FY 2007 proposed rules submitted as to the Administrator by The American Hospital Association dated June 8, 2006; by the Federation of American Hospitals dated June 12, 2006; by INGENIX, dated June 9, 2006
- <sup>xi</sup> These have been raised in some detail by the Health Economics and Outcomes Research Institute and the Greater New York Hospital Association, “Analysis of the Centers for Medicare & Medicaid Services Proposal for Changing the Diagnosis Related Group Weighting Methodology and Patient Classification System in the Inpatient Prospective Payment System”, accessed at [www.theori.org](http://www.theori.org)
- <sup>xii</sup> For an extensive review of this issue and existing literature, see Welton, J. Zone-Smith, L. and Fischer, M. “Adjustment of Inpatient Care Reimbursement for Nursing Intensity.” Policy Politics & Nursing Practice 7(4) , November 2006.
- <sup>xiii</sup> Hogan, Christopher, Direct Research, LLC. “A Proposed Solution for Charge Compression.” June 6, 2006

## APPENDIX A

**A STUDY OF CHARGE COMPRESSION AND DRG WEIGHTS**  
**Technical Expert Panel**

**October 27, 2006, 10:00 AM – 4:00 PM**

7111 Security Boulevard  
Baltimore, MD  
CMS Employee Development Center  
Room B-324/325  
You will be met at the entrance to the building

**AGENDA**

<b>Time</b>	<b>Topic</b>	<b>Discussion Leader</b>
10:00–10:15	Welcome & Introductions	Jerry Cromwell
10:15–10:30	CMS Objectives	Phil Cotterill and Marc Hartstein
10:30–10:45	Overview of RTI Analysis Plan	Kathleen Dalton
10:45–12:15	Review of revenue code misalignment/mismatching issues	Kathleen Dalton
Lunch	(Brought in)	
12:45–1:00	Presentation on regression approach for charge compression adjustment	Chris Hogan
1:00–1:45	Questions and general discussion of regression approach	Jerry Cromwell
1:45–2:30	Identification of ancillary cost centers experiencing cost compression	Kathleen Dalton
2:30–3:00	Nursing cost center charge compression	Kathleen Dalton
3:00–3:45	Other concerns about FY2007 approach to DRG cost weights	Kathleen Dalton
3:45–4:00	Wrap-up	Jerry Cromwell

## **TEP MEETING PARTICIPANTS**

### **Panelists**

1. Christopher Hogan, President, Direct Research,LLC
2. Steve Phillips, Johnson & Johnson Corporation
3. Parashar Patel, Boston Scientific Corporation
4. Todd Nelson, CFO, Grinnell Regional Medical Center
5. Julian Pettengill, Health Economist Consultant (MedPAC)
6. Alexandra Clyde, Medtronic Corporation
7. Katherine Arbuckle, Vice-President of Finance, Ascension Health
8. Karen Heller, Greater New York Hospital Association
9. Steve Clark, Clark, Koorbojian & Associates
10. Bob Halinski, Reimbursement Director, Universal Health Services
11. Timothy Wolters, BKD, LLC

### **RTI Staff**

1. Jerry Cromwell
2. Kathleen Dalton

### **CMS Staff**

1. Philip Cotterill, Project Officer, Office of Research, Development & Information
2. Marc Hartstein, Director, Division of Acute Care, Center for Medicare Management
3. Other CMS Staff

## **APPENDIX B**

## Appendix B:

### Exclusions for Medicare cost reports in CCR analysis file (see Tables B-1, B-2)

CMS rules *	RTI Rules	Notes
Exclude any short-stay hospitals not paid under IPPS rules as of FY 2007 (Critical Access Hospitals and Indian Health Service hospitals)	Same (obtained by restricting to provider numbers appearing in CMS FY 2007 Standardization File)	Critical Access Hospital (CAH) converters excluded, even if they were IPPS providers during the period covered by the MCR
Exclude all-inclusive rate providers	Same	Identified by response from MCR Wks S-2 line 32. Note that revenue codes _0100 (all inclusive R&B +ancillary charges) were still recorded by 37 providers in the sample, and _0240 (all-inclusive ancillary charges only) by 24 providers in the sample.
Exclude all cost reports with reporting periods less than 365 days	Exclude only those with reporting periods less than three months.	Partial year cost reports were combined
	Exclude cost reports with fewer than 25 Medicare discharges	This restriction was added to exclude a small number of very low-volume providers. See <b>Table B-2</b> for impact
	Exclude cost reports where Medicare average length of stay greater than 20 days	This restriction was added to exclude a small number of providers that looked like LTCHs waiting on their certification. See <b>Table B-2</b> for impact.
Exclude if provider's overall CCR is less than 0.01 or greater than 10.0	Same	
Exclude if provider reports costs and charges for fewer than ten of the 13 possible CMS charge groups	Excluded if provider does not report costs and charges for at least one inpatient nursing charge group (routine or intensive) and fewer than two out of 13 possible CMS charge groups.	The less stringent exclusion criteria were agreed to in consultation with CMS project officer. There were 20 providers in FY 2004 and 12 providers in FY 2005 that met other sample criteria but had no inpatient nursing charges. See <b>Table B-2</b> for tabulation of the count of ancillary charge groups by provider by federal fiscal year.

**NOTE:**

\* Source for CMS rules is 71 FR 47970, August 18, 2007

## Appendix B (continued)

### Edit rules for excluding department costs and charges in CCR computations (see Table B-3)

CMS rules*	RTI Rules	Notes
Exclude if MCR cost center CCR is less than 0.01 or greater than 10.0	Same, but applied to CCRs <i>after</i> MCR cost centers were grouped to MedPAR-equivalent departments	MCR cost centers were grouped into MedPAR-equivalent departments before applying any edits based on extreme CCR values. Has the effect of allowing some misclassifications of costs and charges to offset each other within MedPAR department (for example, between operating room and recovery room).
Exclude if MCR cost center CCR is greater than 3 standard deviations from the geometric mean of the normalized CCR for that cost center. (Note: individual provider cost center CCR are normalized by being divided by the provider's overall CCR).	Same, but applied to CCRs <i>after</i> MCR cost centers were grouped to MedPAR-equivalent departments ( <b>Table B-3</b> shows MCR to MedPAR cost center alignments used).	RTI followed the same criteria, but we noted that the distribution of departmental CCRs after this edit still tends to be highly skewed to the right; as a consequence we applied additional restrictions to the regression estimation samples to exclude extreme values.  Two changes to this edit standard might improve the effectiveness for excluding likely data errors: first, <i>before</i> normalizing and computing geometric mean values, exclude costs and charges for any MedPAR department CCR with charges less than \$100. Second, consider setting the standard for exclusion at 2.5 standard deviations from the geometric mean of the normalized ratio.

NOTE: \* Source for CMS rules is 71 FR 47964, August 18, 2007

## Appendix B (continued)

### Edit rules for excluding MedPAR claims in DRG weight computations

CMS rules	RTI Rules	Notes
Exclude all organ acquisition charges (i.e. zero them out) from individual claims	Same.	(Organ acquisition charges are paid through a separate pass-through reimbursement and are not part of the IPPS)
Exclude transplant cases from non-Medicare approved transplant facilities	Exclusion rule not imposed	
Exclude if total charges on claim differed from total charges summed across departments by more than \$10.	Same	(Affected less than 0.001%)
Exclude if total charges <=0 or length of stay=0	Same	Dropped 1,082 claims out of 11.2 million (0.01%).
Exclude if total charges greater than 3 standard deviations from geometric mean charge per transfer-adjusted case for that DRG	Same, applied <i>after</i> charges had been standardized.	Dropped 60,811 claims out of 11.2 million (0.5%).  We noticed at least five claims in the sample had total charges greater than \$5 million. Although such claims are excluded by this edit step, the charges are so extreme that they have the effect of raising the geometric means for the DRGs in which they fall, probably distorting the edit cut-points that should be used to identify outliers. Setting a preliminary screen of \$1 million dollars per claim, <i>before</i> computing the geometric means, might improve the effectiveness of this edit step.  Note: transfer-adjusted case count for the claims analysis file was computed using most recent available PACT rules for the original DRG assignment on the claim, rather than for the FY 2007 DRG assignment. Computation for FY 2005 claims application file was computed using FY 2007 DRG and FY 2007 PACT rules. Because estimated transfer fractions for DRGs 544 and 545 using this method were determined to be too far below expected (close to 50% for both), weights were adjusted after the fact for these two DRGs only, to reflect what would have been computed using a discharge fraction of 0.999 or 0.98, respectively.
Exclude if total charges greater than 3 standard deviations from geometric mean charge per day for that DRG	Additional exclusion on charges per day not applied	

NOTE: \* Source for CMS rules is 71 FR 47970, August 18, 2007

## Appendix B (continued)

### Claims matching between MCRs, MedPAR and Inpatient Standard Analytic File

CMS rules	RTI Rules	Notes
Not applicable	Identify MedPAR IPPS claims from providers in final CCR analysis file; restrict claims to those with discharge dates occurring between MCR begin date and MCR end date; apply standardization factors.	Note: The final standardization factors used data from both CMS' FY 2007 file and FY 2007 Impact file. These factors matched with 3,411 out of 3,662 provider cost reports in the CCR analysis file. Weights are therefore computed from the claims of 3,411 out of the 3,662 reports used to generate CCRs. Providers excluded from the weight computations are small and mainly rural; a re-computation of national CCRs from the N of 3,411 (instead of the 3,662) yielded no difference in any of the 13 CCRs as computed at two significant digits.
Not applicable	Identify IP SAF claims that match to records in MedPAR analysis file by: provider number; discharge date; total charges. Exclude SAF claim not matched on all three criteria	Claims match rate =99.77%

**Appendix Table B-1**  
**Number of cost reports by fiscal year, for providers in the CCR analysis file**

Year	365+ days in reporting period	91 to 365 days in reporting period	Fewer than 25 Medicare discharges	Medicare LOS >= 20 days	Total	Total excluding low-volume and long-stay providers	Final cost report years only	Unduplicated provider count, final cost report years only
2001	3,387	149	19	1	3,556	3,536		
2002	3,476	120	25	0	3,621	3,596		
2003	3,467	121	31	2	3,621	3,588		
2004	3,434	187	35	18	3,674	3,621	2,461	2,379
2005	1,058	157	22	6	1,243	1,215	1,201	1,195
2006	0	4	0	0	4	4		
<b>Total</b>	<b>14,822</b>	<b>738</b>	<b>132</b>	<b>27</b>	<b>15,719</b>	<b>15,560</b>	<b>3,662</b>	<b>3,574</b>

**Appendix Table B-2**  
**Frequency count of cost reports in CCR analysis file by number of ancillary charge groups present**

Number of CMS ancillary charge groups present on cost report	Hospital cost reports	
	Frequency	Percent
2	3	0.08
3	4	0.11
4	5	0.14
5	14	0.38
6	27	0.74
7	62	1.69
8	142	3.88
9	393	10.73
10	1,264	34.52
11	1,748	47.73
<b>Total</b>	<b>3,662</b>	<b>100</b>

**Appendix Table B-3**  
**Impact of Departmental CCR edit criteria on department-level sample statistics**

MCR line numbers included for ratios	MedPAR variable		Number of observations			Unweighted average department CCR		
	Number	Description	Before edits	After edits	Percent change	Before edits	After edits	Percent change
25,62	_63-_65	Routine nursing including observation	3,662	3,640	-0.6%	0.917	0.915	-0.1%
26,28-30	_66	ICU nursing	3,036	3,012	-0.8%	0.795	0.817	2.8%
27	_67	CCU nursing	669	665	-0.6%	0.686	0.700	2.0%
59,62.01	_68	Other I/P & Ancillary Services	1,522	1,501	-1.4%	0.705	0.750	6.3%
48,56	_69	Drugs & Pharmaceuticals	3,652	3,616	-1.0%	0.289	0.292	1.3%
55	_70	Medical Supplies	3,539	3,469	-2.0%	0.401	0.430	7.2%
67	_71	DME sales	42	42	0.0%	0.737	0.737	0.0%
66	_72	DME rentals	69	67	-2.9%	0.788	0.765	-2.8%
50	_73	Physical Therapy	3,558	3,524	-1.0%	0.536	0.548	2.2%
51	_74	Occupational Therapy	1,720	1,695	-1.5%	0.479	0.490	2.3%
52	_75	Speech Therapy	1,776	1,745	-1.7%	0.589	0.601	2.2%
49	_76	Respiratory \ Inhalation Therapy	3,558	3,519	-1.1%	0.320	0.326	1.9%
46, 46.50	_77	Blood Products	798	784	-1.8%	0.694	0.683	-1.7%
47	_78	Blood Storage & Admin	1,140	1,128	-1.1%	0.677	0.672	-0.6%
37,38,39	_79	Operating Room, including L&D	3,603	3,565	-1.1%	0.426	0.456	7.0%
(37,38)	(79a)	(Operating & Recovery Room only)	3,602	3,561	-1.1%	0.402	0.432	7.5%
(39)	(79b)	(Labor & Delivery only)	2,552	2,524	-1.1%	0.850	0.870	2.4%
53,54	_81	Cardiology (including EEG*)	3,166	3,113	-1.7%	0.238	0.248	4.3%
40	_82	Anesthesia	2,627	2,612	-0.6%	0.299	0.329	9.9%
44	_83	Lab	3,659	3,628	-0.8%	0.262	0.268	2.4%
41,42,43	_84	Radiology including MRI & Radioisotopes	3,658	3,616	-1.1%	0.248	0.259	4.5%
58,63,68	_86	Other O/P Services	1,069	1,061	-0.7%	0.869	0.876	0.9%
61	_87	Emergency Room	3,558	3,533	-0.7%	0.468	0.478	2.3%
57, 64	_91	ESRD	1,443	1,425	-1.2%	0.572	0.585	2.2%
60,63.50,63.60	_92	Clinics	2,055	2,035	-1.0%	1.200	1.236	3.0%

## APPENDIX C

**Appendix C**  
**CMS cost center aggregation table**  
**Sorted by line number**

HCFA			Codes		
	Line	Label			
Std.	1	Old Capital Related Cost - Buildings & Fixtures	0100	-	0149
Std.	2	Old Capital Related Cost - Movable Equipment	0200	-	0249
Std.	3	New Capital Related Cost - Buildings & Fixtures	0300	-	0349
Std.	4	New Capital Related Cost - Movable Equipment	0400	-	0449
Std.	5	Employee Benefits	0500	-	0519
Std.	6	Administrative & General		0600	
	6	Communications	1160	-	1179
	6	Other Administrative & General	0660	-	0669
	6	Data Processing	0620	-	0629
	6	Management Services	1140	-	1159
	6	Admitting	0640	-	0649
	6	Purchasing, Receiving, and Stores	0630	-	0639
	6	Cashiering and Accounts Receivable	0650	-	0659
	6	NonPatient Telephones	0610	-	0619
Std.	7	Maintenance and Repairs	0700	-	0719
Std.	8	Operation of Plant	0800	-	0819
Std.	9	Laundry & Linen Service	0900	-	0919
Std.	10	Housekeeping	1000	-	1019
Std.	11	Dietary	1100	-	1119
Std.	12	Cafeteria	1200	-	1219
Std.	13	Maintenance of Personnel	1300	-	1319
Std.	14	Nursing Administration	1400	-	1419
Std.	15	Central Services and Supply	1500	-	1519
Std.	16	Pharmacy	1600	-	1619
Std.	17	Medical Records & Library	1700	-	1719
Std.	18	Social Service	1800	-	1819
	19	Other General Service Cost Centers	1950	-	1999
	19	Inservice Education	1080	-	1099
Std.	20	Nonphysician Anesthetists	2000	-	2019
Std.	21	Nursing School	2100	-	2119
Std.	22	Interns & Residents (Approved) - Salary & Fringe	2200	-	2219
Std.	23	Interns & Residents (Approved) - Other Costs	2300	-	2319
Std.	24	Paramedical Education Program	2400	-	2499
Std.	25	Adults & Pediatrics (General Routine Care)		2500	
Std.	26	Intensive Care Unit	2600	-	2619
Std.	27	Coronary Care Unit	2700	-	2719
Std.	28	Burn Intensive Care Unit	2800	-	2819
Std.	29	Surgical Intensive Care Unit	2900	-	2919
	30	Psychiatric ICU	2140	-	2159
	30	Pediatric ICU	2080	-	2099
	30	Neonatal ICU	2060	-	2079
	30	Trauma ICU	2180	-	2199
	30	Detoxification ICU	2040	-	2059
	30	Premature ICU	2120	-	2139

**Appendix C (continued)**  
**CMS cost center aggregation table**  
**Sorted by line number**

HCFA			Codes		
	Line	Label			
Std.	31	Subprovider	3100	-	3109
Std.	33	Nursery		3300	
Std.	34	Skilled Nursing Facility		3400	
Std.	35	Nursing Facility		3500	
Std.	35.01	ICF/MR		3510	
Std.	36	Other Long Term Care		3600	
Std.	37	Operating Room	3700	-	3729
	37	Prosthetic Devices	3540	-	3549
	37	Circumcision	3220	-	3229
	37	Endoscopy	3330	-	3339
Std.	38	Recovery Room	3800	-	3829
Std.	39	Delivery Room & Labor Room	3900	-	3929
	39	Birthing Center	3070	-	3079
Std.	40	Anesthesiology	4000	-	4029
	40	Acupuncture	3020	-	3029
Std.	41	Radiology - Diagnostic	4100	-	4129
	41	Nuclear Medicine - Diagnostic	3450	-	3459
	41	Ultra Sound	3630	-	3639
	41	Mammography	3440	-	3449
	41	Angiocardiology	3030	-	3039
	41	Echocardiography	3260	-	3269
	41	CAT Scan	3230	-	3239
	41	MRI	3430	-	3439
Std.	42	Radiology - Therapeutic	4200	-	4229
	42	Nuclear Medicine - Therapeutic	3470	-	3479
	42	Electroshock Therapy	3320	-	3329
	42	Chemotherapy	3190	-	3199
Std.	43	Radioisotope	4300	-	4329
Std.	44	Laboratory	4400	-	4429
	44	Oncology	3480	-	3489
	44	Biopsy	3060	-	3069
	44	Hematology	3350	-	3359
	44	Cytology	3240	-	3249
	44	Immunology	3380	-	3389
	44	Bacteriology & Microbiology	3050	-	3059
	44	Chemistry	3180	-	3189
	44	Vascular Lab	3650	-	3659
	44	Laboratory - Pathological	3420	-	3429
	44	Laboratory - Clinical	3390	-	3399
	44	Histology	3360	-	3369
	44	Urology	3640	-	3649
	44	Gastro Intestinal Service	3340	-	3349

**Appendix C (continued)**  
**CMS cost center aggregation table**  
**Sorted by line number**

HCFA			Codes		
	Line	Label			
Std.	45	PBP Clinical Lab Service Program Only		4500	
Std.	46	Whole Blood & Packed Red Blood Cells	4600	-	4629
Std.	47	Blood Storing, Processing, & Transfusing	4700	-	4729
Std.	48	Intravenous Therapy	4800	-	4829
Std.	49	Respiratory Therapy	4900	-	4929
	49	Pulmonary Function Testing	3560	-	3569
Std.	50	Physical Therapy	5000	-	5029
	50	Osteopathic Therapy	3530	-	3539
Std.	51	Occupational Therapy	5100	-	5129
Std.	52	Speech Pathology	5200	-	5229
Std.	53	Electrocardiology	5300	-	5329
	53	EKG and EEG	3280	-	3289
	53	Electromyography	3290	-	3299
	53	Cardiopulmonary	3160	-	3179
	53	Stress Test	3620	-	3629
	53	Cardiology	3140	-	3159
	53	Holter Monitor	3370	-	3379
	53	Cardiac Catheterization Laboratory	3120	-	3129
Std.	54	Electroencephalography	5400	-	5429
Std.	55	Medical Supplies Charged to Patients	5500	-	5529
Std.	56	Drugs Charged to Patients	5600	-	5629
Std.	57	Renal Dialysis		5700	
Std.	58	ASC (Non-Distinct Part)	5800	-	5829
	59	Audiology	3040	-	3049
	59	Dental Services	3250	-	3259
	59	Recreational Therapy	3580	-	3589
	59	Psychiatric / Psychological Services	3550	-	3559
	59	Ophthalmology	3520	-	3529
	59	Other Ancillary Cost Centers	3950	-	3999
Std.	60	Clinic	6000	-	6099
	63.50 - 63.59	Rural Health Clinic	6310	-	6319
	63.85-63.99		6350	-	6364
	63.60-63.84	Federally Qualified Health Center	6320	-	6344
Std.	61	Emergency	6100	-	6119
Std.	62	Observation Beds (Distinct Part)	6201	-	6210
Std.	62	Observation Beds (Non-Distinct Part)		6200	
	63	Family Practice	4040	-	4049
	63	Telemedicine	4050	-	4059
	63	All Other Outpatient Cost Centers	4950	-	4999

**Appendix C (continued)**  
**CMS cost center aggregation table**  
**Sorted by line number**

HCFA			Codes		
	Line	Label			
Std.	64	Home Program Dialysis	6400		
Std.	65	Ambulance Services	6500		
Std.	66	Durable Medical Equipment -- Rented	6600	-	6619
	66	Support Surfaces -- Rented	6620	-	6624
Std.	67	Durable Medical Equipment -- Sold	6700	-	6719
	67	Support Surfaces -- Sold	6720	-	6724
	68	Other Reimbursable Cost Centers (excl. HHA & CORF)	5950	-	5999
	69	CORF	6900	-	6909
	69.10	CMHC	6910	-	6919
	69.20	OPT	6920	-	6929
	69.30	OOT	6930	-	6939
	69.40	OSP	6940	-	6949
Std.	70	Intern - Resident Svc. (not in Approved Program)		7000	
Std.	71	Home Health Agency	7100	-	7109
Std.	82	Lung Acquisition		8200	
Std.	83	Kidney Acquisition		8300	
Std.	84	Liver Acquisition		8400	
Std.	85	Heart Acquisition		8500	
Std.	85.01	Pancreas Acquisition		8510	
Std.	86	Other Organ Acquisition	8600	-	8619
Std.	88	Interest Expense		8800	
Std.	89	Utilization Review -- SNF		8900	
Std.	90	Other Capital Related Costs		9000	
Std.	92	ASC (Distinct Part)	9200	-	9219
Std.	93	Hospice	9300	-	9304
	94	All Other Special Purpose Cost Centers	6950	-	6999
Std.	96	Gift, Flower, Coffee Shop, & Canteen	9600	-	9619
Std.	97	Research	9700	-	9719
Std.	98	Physicians' Private Offices	9800	-	9819
Std.	99	Nonpaid Workers	9900	-	9919
	100	Other Nonreimbursable Cost Centers	7950	-	7999

## APPENDIX D

**Appendix D  
DRG Charges by MedPAR Charge Department**

DRG num	MDC	Case type	DRG name	Routine -										
				Raw case count	Routine - Private	Semi-private	Routine - Ward	Intensive Care	Coronary Care	Other I/P services	Pharmacy	Supplies	DME (sold)	DME (used/rented)
1	1	SURG	CRANIOTOMY AGE >17 W CC	22,105	1.9%	5.8%	0.0%	16.0%	1.6%	1.2%	12.9%	14.3%	0.0%	0.0%
2	1	SURG	CRANIOTOMY AGE >17 W/O CC	9,118	1.7%	5.2%	0.0%	10.5%	0.8%	0.9%	8.6%	24.1%	0.0%	0.0%
3	1	SURG *	CRANIOTOMY AGE 0-17	4	0.0%	14.9%	0.0%	10.1%	0.0%	3.5%	12.3%	16.0%	0.0%	0.0%
6	1	SURG	CARPAL TUNNEL RELEASE	303	4.7%	15.2%	0.0%	2.4%	0.5%	0.9%	10.2%	10.8%	0.0%	0.0%
7	1	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W CC	13,863	3.2%	11.1%	0.0%	7.9%	3.0%	1.7%	13.3%	17.1%	0.0%	0.0%
8	1	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W/O CC	3,164	1.5%	6.9%	0.0%	2.2%	1.0%	1.0%	5.6%	29.7%	0.0%	0.0%
9	1	MED	SPINAL DISORDERS & INJURIES	1,648	3.4%	14.2%	0.0%	12.8%	2.0%	2.2%	12.9%	5.3%	0.0%	0.0%
10	1	MED	NERVOUS SYSTEM NEOPLASMS W CC	18,044	5.5%	18.8%	0.0%	5.4%	1.8%	1.3%	14.0%	4.1%	0.0%	0.0%
11	1	MED	NERVOUS SYSTEM NEOPLASMS W/O CC	2,857	3.8%	16.3%	0.0%	6.5%	1.3%	1.3%	8.5%	5.4%	0.0%	0.0%
12	1	MED	DEGENERATIVE NERVOUS SYSTEM DISORDERS	51,217	5.5%	23.4%	0.1%	5.3%	2.6%	2.3%	13.0%	3.6%	0.0%	0.0%
13	1	MED	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA	6,544	5.8%	23.7%	0.1%	2.9%	1.0%	1.9%	20.2%	2.8%	0.0%	0.0%
14	1	MED	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION	243,794	3.5%	12.5%	0.0%	10.8%	4.0%	3.0%	11.1%	4.4%	0.0%	0.0%
15	1	MED	NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT	35,120	3.1%	14.6%	0.0%	8.0%	4.0%	3.5%	9.3%	4.7%	0.0%	0.0%
16	1	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W CC	15,919	4.0%	15.7%	0.1%	8.1%	3.8%	2.0%	14.1%	4.4%	0.0%	0.0%
17	1	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC	2,696	3.6%	15.8%	0.1%	5.3%	2.8%	3.5%	6.7%	2.6%	0.0%	0.0%
18	1	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W CC	30,391	5.4%	17.9%	0.0%	4.4%	2.3%	2.4%	20.0%	3.8%	0.0%	0.0%
19	1	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W/O CC	7,780	4.7%	18.1%	0.0%	3.4%	2.1%	3.1%	21.2%	2.6%	0.0%	0.0%
21	1	MED	VIRAL MENINGITIS	2,046	5.3%	11.8%	0.1%	7.4%	1.6%	1.2%	24.5%	3.9%	0.0%	0.0%
22	1	MED	HYPERTENSIVE ENCEPHALOPATHY	3,002	2.6%	10.2%	0.0%	14.0%	5.0%	2.4%	13.1%	4.0%	0.0%	0.0%
23	1	MED	NONTRAUMATIC STUPOR & COMA	9,695	4.0%	15.4%	0.0%	7.8%	3.2%	2.1%	12.3%	4.7%	0.0%	0.0%
26	1	MED	SEIZURE & HEADACHE AGE 0-17	12	7.5%	5.9%	0.0%	14.4%	0.0%	0.1%	22.3%	3.0%	0.0%	0.0%
27	1	MED	TRAUMATIC STUPOR & COMA, COMA >1 HR	5,372	2.0%	7.6%	0.0%	19.6%	2.0%	3.0%	10.4%	4.7%	0.0%	0.0%
28	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W CC	17,681	2.9%	11.8%	0.1%	17.0%	3.0%	2.2%	11.0%	4.5%	0.0%	0.0%
29	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W/O CC	5,838	3.3%	13.5%	0.0%	15.5%	2.7%	2.7%	6.6%	3.5%	0.0%	0.0%
31	1	MED	CONCUSSION AGE >17 W CC	4,435	2.6%	14.4%	0.1%	8.0%	2.9%	3.8%	8.5%	3.9%	0.0%	0.0%
32	1	MED	CONCUSSION AGE >17 W/O CC	1,599	2.9%	14.2%	0.0%	6.7%	1.7%	4.9%	5.9%	2.4%	0.0%	0.0%
34	1	MED	OTHER DISORDERS OF NERVOUS SYSTEM W CC	25,029	3.7%	17.8%	0.0%	7.6%	3.5%	2.2%	11.3%	3.9%	0.0%	0.0%
35	1	MED	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC	7,102	3.7%	18.5%	0.0%	4.9%	2.6%	3.2%	7.1%	3.5%	0.0%	0.0%
36	2	SURG	RETINAL PROCEDURES	325	2.2%	11.4%	0.0%	0.5%	0.3%	0.5%	10.2%	13.8%	0.0%	0.0%
37	2	SURG	ORBITAL PROCEDURES	1,125	3.3%	12.1%	0.0%	4.5%	1.3%	1.1%	13.3%	9.6%	0.0%	0.0%
38	2	SURG	PRIMARY IRIS PROCEDURES	47	3.8%	21.3%	0.0%	1.4%	9.6%	1.4%	12.3%	4.9%	0.0%	0.0%
39	2	SURG	LENS PROCEDURES WITH OR WITHOUT VITRECTOMY	343	2.7%	14.3%	0.0%	3.3%	0.6%	0.7%	12.0%	15.3%	0.0%	0.0%
40	2	SURG	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17	1,228	3.5%	19.1%	0.0%	2.6%	1.3%	1.2%	10.4%	9.2%	0.0%	0.0%
42	2	SURG	INTRAOCULAR PROCEDURES EXCEPT RETINA, IRIS & LENS	1,798	2.6%	13.0%	0.0%	1.2%	0.6%	0.8%	12.0%	14.0%	0.0%	0.0%
43	2	MED	HYPHEMA	100	3.9%	21.5%	0.0%	6.6%	3.5%	2.2%	9.3%	3.3%	0.0%	0.0%
44	2	MED	ACUTE MAJOR EYE INFECTIONS	1,136	7.0%	29.2%	0.1%	1.7%	0.5%	0.9%	24.5%	3.1%	0.0%	0.0%
45	2	MED	NEUROLOGICAL EYE DISORDERS	2,571	3.2%	14.2%	0.1%	5.4%	2.9%	3.9%	7.3%	2.3%	0.0%	0.0%
46	2	MED	OTHER DISORDERS OF THE EYE AGE >17 W CC	3,654	6.1%	20.3%	0.0%	4.9%	2.2%	2.1%	16.5%	3.3%	0.0%	0.0%
47	2	MED	OTHER DISORDERS OF THE EYE AGE >17 W/O CC	1,202	5.2%	22.1%	0.0%	4.1%	1.4%	2.5%	15.0%	2.4%	0.0%	0.0%
49	3	SURG	MAJOR HEAD & NECK PROCEDURES	2,231	2.6%	7.1%	0.0%	7.7%	0.9%	0.6%	10.1%	16.2%	0.0%	0.0%
50	3	SURG	SIALOADENECTOMY	1,939	2.4%	8.3%	0.0%	1.8%	0.4%	0.5%	8.3%	10.0%	0.0%	0.0%
51	3	SURG	SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY	196	3.3%	12.5%	0.0%	2.4%	1.2%	0.4%	12.1%	9.0%	0.0%	0.0%
52	3	SURG	CLEFT LIP & PALATE REPAIR	200	1.3%	6.3%	0.0%	7.6%	0.4%	0.7%	13.2%	12.6%	0.0%	0.0%
53	3	SURG	SINUS & MASTOID PROCEDURES AGE >17	1,918	3.5%	9.6%	0.0%	5.0%	0.8%	0.6%	14.6%	10.6%	0.0%	0.0%
55	3	SURG	MISCELLANEOUS EAR, NOSE, MOUTH & THROAT PROCEDURES	1,226	3.1%	9.2%	0.0%	6.3%	1.7%	0.9%	11.5%	10.8%	0.0%	0.0%
56	3	SURG	RHINOPLASTY	396	2.9%	9.0%	0.0%	5.1%	0.7%	0.9%	12.7%	10.4%	0.0%	0.0%
57	3	SURG	T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	673	2.8%	10.1%	0.0%	7.2%	3.0%	1.1%	18.9%	7.7%	0.0%	0.0%
59	3	SURG	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	103	3.1%	9.9%	0.0%	3.9%	1.2%	1.2%	21.0%	7.7%	0.0%	0.0%
60	3	SURG *	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0-17	4	2.6%	0.7%	0.0%	20.3%	0.0%	0.0%	18.6%	7.7%	0.0%	0.0%
61	3	SURG	MYRINGOTOMY W TUBE INSERTION AGE >17	182	4.1%	13.1%	0.0%	4.8%	1.3%	1.3%	19.3%	7.1%	0.0%	0.0%
62	3	SURG *	MYRINGOTOMY W TUBE INSERTION AGE 0-17	3	6.8%	3.5%	0.0%	0.0%	0.0%	0.0%	5.1%	8.2%	0.0%	0.0%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	CMS_01	CMS_01	CMS_01	CMS_02	CMS_02	CMS_13	CMS_03	CMS_04	CMS_04	CMS_04	
				Raw case count	Routine - Private	Routine - Semi-private	Routine - Ward	Intensive Care	Coronary Care	Other I/P services	Pharmacy	Supplies	DME (sold)	DME (used/rented)
63	3	SURG	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES	2,595	2.9%	9.8%	0.0%	6.3%	1.3%	1.1%	12.2%	13.6%	0.0%	0.0%
64	3	MED	EAR, NOSE, MOUTH & THROAT MALIGNANCY	3,016	5.8%	19.0%	0.0%	3.6%	1.0%	1.0%	22.1%	6.1%	0.0%	0.0%
65	3	MED	DYSEQUILIBRIUM	37,820	2.8%	16.4%	0.1%	5.6%	4.4%	3.8%	6.8%	2.3%	0.0%	0.0%
66	3	MED	EPISTAXIS	7,492	3.7%	18.3%	0.1%	7.7%	3.9%	1.7%	12.4%	6.5%	0.0%	0.0%
67	3	MED	EPIGLOTTITIS	346	2.5%	10.9%	0.1%	15.4%	3.9%	1.6%	23.6%	4.6%	0.0%	0.0%
68	3	MED	OTITIS MEDIA & URI AGE >17 W CC	15,278	7.0%	17.7%	0.0%	3.9%	2.2%	1.6%	18.0%	5.2%	0.0%	0.0%
69	3	MED	OTITIS MEDIA & URI AGE >17 W/O CC	4,091	6.5%	18.8%	0.1%	3.3%	1.6%	1.6%	16.8%	4.6%	0.0%	0.0%
70	3	MED	OTITIS MEDIA & URI AGE 0-17	21	8.3%	20.4%	0.0%	10.0%	0.0%	0.2%	16.5%	3.4%	0.0%	0.0%
71	3	MED	LARYNGOTRACHEITIS	55	4.5%	18.2%	0.1%	9.6%	0.6%	2.3%	21.1%	6.4%	0.0%	0.0%
72	3	MED	NASAL TRAUMA & DEFORMITY	1,149	3.1%	16.8%	0.0%	6.7%	3.5%	1.9%	8.7%	3.5%	0.0%	0.0%
73	3	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE >17	9,048	4.7%	17.6%	0.1%	6.3%	2.6%	1.6%	17.8%	5.3%	0.0%	0.0%
74	3	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE 0-17	1	0.0%	15.2%	0.0%	0.0%	0.0%	21.3%	9.6%	0.0%	0.0%	0.0%
75	4	SURG	MAJOR CHEST PROCEDURES	42,362	2.4%	7.1%	0.0%	12.6%	4.0%	0.9%	14.2%	14.0%	0.0%	0.0%
76	4	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W CC	44,411	3.5%	11.2%	0.0%	8.9%	3.7%	1.5%	17.3%	9.4%	0.0%	0.0%
77	4	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W/O CC	1,954	3.5%	12.6%	0.0%	5.3%	2.4%	1.4%	11.7%	10.7%	0.0%	0.0%
78	4	MED	PULMONARY EMBOLISM	44,357	4.0%	12.8%	0.0%	9.7%	4.9%	3.2%	16.4%	5.3%	0.0%	0.0%
79	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W CC	150,866	5.4%	17.0%	0.0%	6.4%	2.7%	1.0%	22.2%	7.8%	0.0%	0.0%
80	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W/O CC	6,582	6.9%	22.3%	0.1%	2.9%	1.4%	0.9%	21.7%	7.2%	0.0%	0.0%
81	4	MED *	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE 0-17	2	0.0%	6.8%	0.0%	19.2%	8.3%	0.0%	26.7%	0.8%	0.0%	0.0%
82	4	MED	RESPIRATORY NEOPLASMS	58,733	5.2%	16.6%	0.0%	4.8%	2.3%	1.1%	18.6%	6.7%	0.0%	0.0%
83	4	MED	MAJOR CHEST TRAUMA W CC	6,149	4.1%	17.7%	0.1%	7.4%	2.8%	2.1%	11.7%	5.9%	0.0%	0.0%
84	4	MED	MAJOR CHEST TRAUMA W/O CC	1,150	4.5%	21.9%	0.2%	5.1%	1.9%	2.5%	8.3%	4.5%	0.0%	0.0%
85	4	MED	PLEURAL EFFUSION W CC	20,168	4.4%	15.1%	0.0%	7.1%	4.2%	1.4%	14.1%	6.8%	0.0%	0.0%
86	4	MED	PLEURAL EFFUSION W/O CC	1,587	4.3%	17.8%	0.0%	5.0%	3.2%	1.6%	9.9%	6.4%	0.0%	0.0%
87	4	MED	PULMONARY EDEMA & RESPIRATORY FAILURE	85,170	3.7%	10.9%	0.0%	12.1%	4.2%	1.2%	18.7%	7.4%	0.0%	0.0%
88	4	MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	385,561	4.7%	17.5%	0.0%	5.8%	3.1%	1.2%	18.0%	7.4%	0.0%	0.0%
89	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W CC	499,866	4.9%	18.0%	0.0%	5.7%	2.9%	1.0%	19.6%	6.9%	0.0%	0.0%
90	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W/O CC	38,225	5.8%	22.3%	0.0%	2.6%	1.5%	1.0%	18.8%	6.2%	0.0%	0.0%
91	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE 0-17	44	6.4%	13.5%	0.0%	6.7%	1.6%	1.4%	19.7%	6.5%	0.0%	0.0%
92	4	MED	INTERSTITIAL LUNG DISEASE W CC	15,191	4.3%	15.3%	0.0%	8.1%	4.3%	1.5%	16.2%	6.7%	0.0%	0.0%
93	4	MED	INTERSTITIAL LUNG DISEASE W/O CC	1,281	4.8%	18.0%	0.0%	5.2%	3.1%	1.5%	13.7%	6.4%	0.0%	0.0%
94	4	MED	PNEUMOTHORAX W CC	12,426	4.6%	14.3%	0.0%	10.3%	3.4%	1.4%	13.5%	8.8%	0.0%	0.0%
95	4	MED	PNEUMOTHORAX W/O CC	1,363	5.8%	16.4%	0.0%	7.7%	2.9%	2.0%	8.9%	9.1%	0.0%	0.0%
96	4	MED	BRONCHITIS & ASTHMA AGE >17 W CC	52,952	5.3%	18.6%	0.0%	4.5%	2.9%	1.2%	18.2%	6.2%	0.0%	0.0%
97	4	MED	BRONCHITIS & ASTHMA AGE >17 W/O CC	23,267	5.6%	20.9%	0.0%	3.4%	1.9%	1.3%	17.8%	6.2%	0.0%	0.0%
98	4	MED	BRONCHITIS & ASTHMA AGE 0-17	9	6.8%	30.7%	0.0%	0.0%	0.0%	0.2%	22.3%	3.8%	0.0%	0.0%
99	4	MED	RESPIRATORY SIGNS & SYMPTOMS W CC	19,656	3.6%	12.1%	0.0%	6.9%	4.5%	2.1%	12.5%	4.9%	0.0%	0.0%
100	4	MED	RESPIRATORY SIGNS & SYMPTOMS W/O CC	5,879	2.9%	10.6%	0.0%	5.9%	4.6%	2.1%	10.3%	4.1%	0.0%	0.0%
101	4	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W CC	21,122	4.5%	14.9%	0.0%	6.7%	3.7%	1.8%	14.4%	5.8%	0.0%	0.0%
102	4	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O CC	4,428	3.5%	14.7%	0.1%	6.0%	3.3%	1.9%	11.7%	4.4%	0.0%	0.0%
103	PRE	SURG	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	704	1.3%	1.4%	0.0%	11.5%	6.3%	1.7%	19.0%	20.1%	0.0%	0.0%
104	5	SURG	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W CARD CATH	18,986	0.9%	2.7%	0.0%	9.2%	5.6%	1.2%	12.6%	22.1%	0.0%	0.0%
105	5	SURG	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W/O CARD CATH	30,122	0.8%	2.1%	0.0%	8.9%	4.9%	1.1%	12.7%	25.4%	0.0%	0.0%
106	5	SURG	CORONARY BYPASS W PTCA	3,115	0.8%	1.5%	0.0%	7.5%	5.0%	1.2%	14.3%	21.6%	0.0%	0.0%
108	5	SURG	OTHER CARDIOTHORACIC PROCEDURES	7,850	1.0%	2.2%	0.0%	9.5%	5.1%	1.2%	13.9%	19.2%	0.0%	0.0%
110	5	SURG	MAJOR CARDIOVASCULAR PROCEDURES W CC	53,032	1.2%	3.5%	0.0%	9.8%	4.4%	1.1%	13.2%	22.7%	0.0%	0.0%
111	5	SURG	MAJOR CARDIOVASCULAR PROCEDURES W/O CC	9,599	1.0%	2.5%	0.0%	4.8%	1.8%	0.7%	6.5%	45.2%	0.0%	0.0%
113	5	SURG	AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB & TOE	32,851	5.3%	14.0%	0.0%	6.1%	2.2%	1.3%	18.6%	9.4%	0.0%	0.0%
114	5	SURG	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	7,403	6.2%	18.4%	0.0%	3.3%	1.5%	1.6%	19.6%	6.6%	0.0%	0.0%
117	5	SURG	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	4,975	2.4%	6.2%	0.0%	9.0%	6.0%	1.4%	9.9%	19.8%	0.0%	0.0%
118	5	SURG	CARDIAC PACEMAKER DEVICE REPLACEMENT	6,925	1.0%	5.1%	0.0%	4.4%	3.7%	0.9%	6.4%	48.1%	0.0%	0.0%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	Routine -										
				Raw case count	Routine - Private	Semi-private	Routine - Ward	Intensive Care	Coronary Care	Other I/P services	Pharmacy	Supplies	DME (sold)	DME (used/rented)
119	5	SURG	VEIN LIGATION & STRIPPING	923	3.6%	13.1%	0.1%	6.0%	1.8%	1.8%	14.2%	11.2%	0.0%	0.0%
120	5	SURG	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	31,832	3.8%	12.5%	0.0%	7.4%	3.7%	1.4%	16.5%	9.2%	0.0%	0.0%
121	5	MED	CIRCULATORY DISORDERS W AMI & MAJOR COMP, DISCHARGED ALIVE	139,738	2.0%	8.1%	0.0%	14.2%	8.8%	1.3%	15.8%	5.9%	0.0%	0.0%
122	5	MED	CIRCULATORY DISORDERS W AMI W/O MAJOR COMP, DISCHARGED ALIVE	49,041	1.6%	6.3%	0.0%	12.3%	7.9%	1.3%	14.4%	6.1%	0.0%	0.0%
123	5	MED	CIRCULATORY DISORDERS W AMI, EXPIRED	28,700	1.3%	4.7%	0.0%	15.3%	8.1%	1.2%	19.0%	6.4%	0.0%	0.0%
124	5	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH & COMPLEX DIAG	114,099	1.9%	6.0%	0.0%	7.9%	6.5%	1.3%	11.2%	7.6%	0.0%	0.0%
125	5	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O COMPLEX DIAG	85,712	1.6%	4.9%	0.0%	5.8%	4.8%	1.4%	9.0%	8.2%	0.0%	0.0%
126	5	MED	ACUTE & SUBACUTE ENDOCARDITIS	5,089	3.8%	15.3%	0.0%	9.5%	4.5%	1.4%	20.3%	5.3%	0.0%	0.0%
127	5	MED	HEART FAILURE & SHOCK	630,619	3.3%	12.5%	0.0%	11.4%	7.3%	1.5%	15.0%	5.9%	0.0%	0.0%
128	5	MED	DEEP VEIN THROMBOPHLEBITIS	4,110	6.2%	28.5%	0.1%	3.3%	1.3%	4.4%	18.8%	3.8%	0.0%	0.0%
129	5	MED	CARDIAC ARREST, UNEXPLAINED	3,263	0.8%	2.0%	0.0%	15.4%	5.7%	1.3%	16.2%	6.1%	0.0%	0.0%
130	5	MED	PERIPHERAL VASCULAR DISORDERS W CC	81,469	5.7%	21.0%	0.0%	5.0%	2.6%	3.6%	18.1%	5.1%	0.0%	0.0%
131	5	MED	PERIPHERAL VASCULAR DISORDERS W/O CC	21,156	6.5%	25.0%	0.1%	3.6%	2.2%	5.0%	15.2%	4.3%	0.0%	0.0%
132	5	MED	ATHEROSCLEROSIS W CC	95,585	2.4%	10.2%	0.1%	11.3%	7.3%	1.6%	12.8%	4.3%	0.0%	0.0%
133	5	MED	ATHEROSCLEROSIS W/O CC	5,639	2.2%	9.5%	0.1%	9.6%	6.4%	1.8%	10.8%	4.9%	0.0%	0.0%
134	5	MED	HYPERTENSION	37,372	3.2%	12.9%	0.1%	10.5%	6.0%	2.5%	9.8%	3.4%	0.0%	0.0%
135	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W CC	6,758	3.1%	13.1%	0.1%	10.8%	7.7%	2.3%	11.3%	4.6%	0.0%	0.0%
136	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W/O CC	899	2.1%	13.2%	0.1%	12.9%	6.3%	2.6%	6.3%	4.1%	0.0%	0.0%
138	5	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	190,168	2.6%	10.5%	0.0%	12.8%	8.5%	1.8%	13.3%	4.6%	0.0%	0.0%
139	5	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC	68,451	2.5%	10.5%	0.1%	12.0%	8.6%	1.9%	10.9%	3.4%	0.0%	0.0%
140	5	MED	ANGINA PECTORIS	29,358	2.1%	10.7%	0.1%	11.0%	5.7%	1.4%	12.7%	4.1%	0.0%	0.0%
141	5	MED	SYNCOPE & COLLAPSE W CC	114,694	2.7%	13.9%	0.1%	8.8%	6.7%	3.4%	7.9%	3.1%	0.0%	0.0%
142	5	MED	SYNCOPE & COLLAPSE W/O CC	46,121	2.3%	13.1%	0.1%	8.5%	6.6%	4.1%	5.4%	2.4%	0.0%	0.0%
143	5	MED	CHEST PAIN	220,210	2.0%	8.7%	0.0%	8.5%	6.2%	1.6%	10.9%	3.2%	0.0%	0.0%
144	5	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W CC	93,898	4.4%	13.0%	0.0%	8.3%	4.0%	1.6%	18.4%	6.4%	0.0%	0.0%
145	5	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W/O CC	5,127	3.4%	11.8%	0.1%	8.2%	5.4%	2.3%	11.6%	5.4%	0.0%	0.0%
146	6	SURG	RECTAL RESECTION W CC	9,791	3.8%	11.8%	0.0%	7.6%	1.7%	0.8%	17.6%	13.8%	0.0%	0.0%
147	6	SURG	RECTAL RESECTION W/O CC	2,408	4.6%	14.1%	0.1%	2.9%	0.9%	0.5%	14.1%	17.8%	0.0%	0.0%
149	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC	18,079	4.7%	14.0%	0.0%	2.5%	0.7%	0.5%	14.9%	18.8%	0.0%	0.0%
150	6	SURG	PERITONEAL ADHESIOLYSIS W CC	21,274	3.8%	11.6%	0.0%	7.9%	1.9%	0.9%	22.3%	10.1%	0.0%	0.0%
151	6	SURG	PERITONEAL ADHESIOLYSIS W/O CC	4,887	4.1%	14.5%	0.0%	1.6%	0.5%	0.7%	15.6%	16.3%	0.0%	0.0%
152	6	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W CC	4,604	4.6%	14.2%	0.0%	5.6%	1.6%	0.9%	19.0%	11.8%	0.0%	0.0%
153	6	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC	1,874	5.2%	16.9%	0.0%	1.8%	0.3%	0.5%	16.0%	14.8%	0.0%	0.0%
155	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W/O CC	5,426	3.4%	9.7%	0.0%	3.5%	0.7%	0.6%	12.6%	20.6%	0.0%	0.0%
156	6	SURG *	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE 0-17	2	0.0%	2.3%	0.0%	24.8%	0.0%	0.8%	12.0%	6.4%	0.0%	0.0%
157	6	SURG	ANAL & STOMAL PROCEDURES W CC	7,521	4.8%	14.1%	0.0%	4.6%	1.6%	0.9%	18.2%	9.1%	0.0%	0.0%
158	6	SURG	ANAL & STOMAL PROCEDURES W/O CC	3,435	4.5%	14.5%	0.0%	1.0%	0.4%	0.7%	15.2%	11.0%	0.0%	0.0%
159	6	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W CC	17,474	3.5%	11.6%	0.0%	4.4%	1.2%	0.9%	15.2%	16.1%	0.0%	0.0%
160	6	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W/O CC	10,778	3.4%	11.4%	0.0%	1.0%	0.3%	0.7%	12.0%	21.8%	0.0%	0.0%
161	6	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W CC	9,419	3.0%	13.7%	0.0%	4.7%	1.8%	0.9%	13.3%	11.3%	0.0%	0.0%
162	6	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W/O CC	4,668	2.7%	13.8%	0.0%	0.8%	0.3%	0.7%	9.7%	14.2%	0.0%	0.0%
163	6	SURG *	HERNIA PROCEDURES AGE 0-17	8	4.4%	7.3%	0.0%	10.0%	0.0%	0.9%	11.0%	3.2%	0.0%	0.0%
164	6	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC	5,526	3.0%	11.3%	0.0%	6.4%	1.8%	0.8%	22.0%	10.2%	0.0%	0.0%
165	6	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	2,224	3.0%	14.0%	0.1%	1.1%	0.7%	0.5%	18.1%	12.9%	0.0%	0.0%
166	6	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	4,672	2.8%	10.2%	0.0%	3.5%	1.0%	0.7%	16.1%	13.7%	0.0%	0.0%
167	6	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	4,237	2.2%	9.8%	0.0%	0.5%	0.2%	0.5%	12.9%	16.3%	0.0%	0.0%
168	3	SURG	MOUTH PROCEDURES W CC	1,496	3.5%	11.9%	0.0%	7.5%	1.3%	0.9%	17.4%	7.3%	0.0%	0.0%
169	3	SURG	MOUTH PROCEDURES W/O CC	796	3.4%	8.5%	0.0%	4.3%	0.6%	0.6%	12.4%	9.9%	0.0%	0.0%
170	6	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W CC	16,601	3.8%	12.0%	0.0%	7.6%	2.5%	1.3%	18.6%	10.2%	0.0%	0.0%
171	6	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC	1,327	3.9%	11.6%	0.0%	2.6%	0.8%	1.1%	13.2%	15.4%	0.0%	0.0%
172	6	MED	DIGESTIVE MALIGNANCY W CC	30,562	5.2%	19.3%	0.0%	4.1%	1.7%	1.1%	19.6%	5.8%	0.0%	0.0%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	CMS_01	CMS_01	CMS_01	CMS_02	CMS_02	CMS_13	CMS_03	CMS_04	CMS_04	CMS_04	
				Raw case count	Routine - Private	Routine - Semi-private	Routine - Ward	Intensive Care	Coronary Care	Other I/P services	Pharmacy	Supplies	DME (sold)	DME (used/rented)
173	6	MED	DIGESTIVE MALIGNANCY W/O CC	2,112	4.6%	20.6%	0.1%	1.7%	0.9%	1.0%	14.4%	6.6%	0.0%	0.0%
174	6	MED	G.I. HEMORRHAGE W CC	237,045	3.5%	13.6%	0.0%	10.1%	3.6%	1.1%	13.4%	5.7%	0.0%	0.0%
175	6	MED	G.I. HEMORRHAGE W/O CC	27,532	3.9%	17.6%	0.1%	7.1%	2.7%	1.0%	11.4%	4.7%	0.0%	0.0%
176	6	MED	COMPLICATED PEPTIC ULCER	13,609	4.0%	14.6%	0.0%	7.3%	2.8%	1.1%	17.2%	5.8%	0.0%	0.0%
177	6	MED	UNCOMPLICATED PEPTIC ULCER W CC	7,309	4.5%	14.7%	0.0%	4.3%	2.3%	1.3%	15.0%	4.9%	0.0%	0.0%
178	6	MED	UNCOMPLICATED PEPTIC ULCER W/O CC	2,419	3.4%	14.8%	0.0%	3.1%	2.2%	1.1%	12.4%	4.4%	0.0%	0.0%
179	6	MED	INFLAMMATORY BOWEL DISEASE	13,275	5.5%	21.1%	0.0%	3.2%	1.4%	1.1%	22.2%	4.0%	0.0%	0.0%
180	6	MED	G.I. OBSTRUCTION W CC	84,287	5.4%	20.1%	0.0%	3.7%	1.6%	1.0%	19.9%	4.8%	0.0%	0.0%
181	6	MED	G.I. OBSTRUCTION W/O CC	23,320	5.6%	24.1%	0.0%	1.2%	0.6%	1.0%	15.9%	3.3%	0.0%	0.0%
182	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W CC	236,040	4.9%	18.5%	0.0%	3.3%	1.9%	1.3%	17.2%	4.1%	0.0%	0.0%
183	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W/O CC	73,354	4.2%	18.2%	0.1%	2.5%	1.7%	1.2%	14.9%	3.3%	0.0%	0.0%
184	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE 0-17	51	6.7%	29.6%	0.0%	8.2%	0.0%	1.6%	16.4%	1.6%	0.0%	0.0%
185	3	MED	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE >17	5,515	6.4%	17.4%	0.1%	4.2%	2.0%	1.6%	24.4%	4.3%	0.0%	0.0%
186	3	MED *	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE 0-17	6	6.1%	37.9%	0.0%	0.0%	0.2%	0.2%	30.3%	1.1%	0.0%	0.0%
187	3	MED	DENTAL EXTRACTIONS & RESTORATIONS	541	3.6%	19.5%	0.0%	3.5%	3.1%	0.9%	18.0%	5.1%	0.0%	0.0%
188	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W CC	80,123	4.7%	18.0%	0.0%	5.5%	2.2%	1.2%	18.2%	5.5%	0.0%	0.0%
189	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W/O CC	11,347	4.5%	21.6%	0.1%	2.3%	1.2%	1.1%	14.1%	4.5%	0.0%	0.0%
190	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 0-17	7	6.6%	16.4%	0.0%	11.8%	1.7%	0.5%	11.8%	7.3%	0.0%	0.0%
191	7	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W CC	9,540	3.2%	8.6%	0.0%	10.2%	1.3%	1.0%	19.8%	11.3%	0.0%	0.0%
192	7	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W/O CC	1,193	3.9%	10.6%	0.0%	4.9%	0.7%	0.7%	12.9%	14.9%	0.0%	0.0%
193	7	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W CC	3,886	3.5%	11.5%	0.0%	8.3%	2.0%	1.0%	19.9%	10.0%	0.0%	0.0%
194	7	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W/O CC	409	4.5%	13.2%	0.0%	3.3%	0.4%	0.6%	15.0%	13.2%	0.0%	0.0%
195	7	SURG	CHOLECYSTECTOMY W C.D.E. W CC	2,722	2.9%	10.6%	0.0%	7.3%	2.1%	0.7%	18.3%	11.3%	0.0%	0.0%
196	7	SURG	CHOLECYSTECTOMY W C.D.E. W/O CC	563	3.6%	12.9%	0.0%	2.0%	0.6%	0.6%	14.2%	15.3%	0.0%	0.0%
197	7	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W CC	15,394	3.0%	11.0%	0.0%	7.5%	2.1%	0.8%	18.7%	11.0%	0.0%	0.0%
198	7	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W/O CC	3,809	3.2%	13.9%	0.1%	2.0%	0.6%	0.6%	14.7%	15.0%	0.0%	0.0%
199	7	SURG	HEPATOBIILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY	1,320	4.2%	13.8%	0.0%	5.2%	1.0%	0.9%	17.9%	11.2%	0.0%	0.0%
200	7	SURG	HEPATOBIILIARY DIAGNOSTIC PROCEDURE FOR NON-MALIGNANCY	889	3.6%	10.8%	0.0%	8.1%	1.8%	1.1%	20.4%	9.0%	0.0%	0.0%
201	7	SURG	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES	2,425	3.7%	11.6%	0.0%	8.1%	2.1%	1.3%	20.8%	10.0%	0.0%	0.0%
202	7	MED	CIRRHOSIS & ALCOHOLIC HEPATITIS	25,340	4.0%	15.2%	0.0%	8.6%	2.6%	1.3%	17.4%	5.2%	0.0%	0.0%
203	7	MED	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS	29,760	5.2%	18.9%	0.0%	3.0%	1.4%	1.1%	17.4%	7.2%	0.0%	0.0%
204	7	MED	DISORDERS OF PANCREAS EXCEPT MALIGNANCY	64,155	4.6%	16.7%	0.0%	4.5%	1.7%	1.0%	19.9%	4.6%	0.0%	0.0%
205	7	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA W CC	29,252	4.8%	16.2%	0.0%	7.7%	2.4%	1.3%	16.6%	4.8%	0.0%	0.0%
206	7	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA W/O CC	1,804	5.9%	20.0%	0.0%	1.9%	0.6%	1.6%	13.2%	4.1%	0.0%	0.0%
207	7	MED	DISORDERS OF THE BILIARY TRACT W CC	34,462	3.8%	16.4%	0.0%	4.2%	2.0%	1.0%	16.5%	7.3%	0.0%	0.0%
208	7	MED	DISORDERS OF THE BILIARY TRACT W/O CC	8,603	3.4%	16.9%	0.0%	1.9%	1.1%	1.0%	13.1%	7.9%	0.0%	0.0%
210	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W CC	119,159	3.8%	12.7%	0.0%	3.2%	1.2%	0.8%	11.2%	18.8%	0.0%	0.0%
211	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W/O CC	24,192	3.9%	14.4%	0.0%	0.8%	0.3%	0.6%	9.2%	21.5%	0.0%	0.0%
212	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 0-17	5	0.0%	14.9%	0.0%	4.1%	0.0%	1.7%	5.3%	14.1%	0.0%	0.0%
213	8	SURG	AMPUTATION FOR MUSCULOSKELETAL SYSTEM & CONN TISSUE DISORDERS	9,150	6.3%	15.5%	0.0%	3.8%	1.1%	1.1%	19.6%	8.9%	0.0%	0.0%
216	8	SURG	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	18,014	3.3%	10.9%	0.0%	1.4%	0.6%	0.7%	9.5%	31.0%	0.0%	0.0%
217	8	SURG	WIND DEBRID & SKN GRFT EXCEPT HAND, FOR MUSCLESKELET & CONN TISS DIS	14,956	5.8%	15.8%	0.0%	4.8%	1.1%	1.3%	19.2%	11.4%	0.0%	0.0%
218	8	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W CC	27,359	3.4%	11.6%	0.0%	2.4%	0.9%	0.9%	10.9%	20.7%	0.0%	0.0%
219	8	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W/O CC	19,101	3.1%	11.3%	0.0%	0.4%	0.2%	0.6%	8.7%	23.7%	0.0%	0.0%
223	8	SURG	MAJOR SHOULDER/ELBOW PROC, OR OTHER UPPER EXTREMITY PROC W CC	12,053	3.0%	9.8%	0.0%	1.9%	0.8%	0.8%	10.3%	21.4%	0.0%	0.0%
224	8	SURG	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC, W/O CC	9,247	2.5%	8.7%	0.0%	0.4%	0.2%	0.6%	9.2%	23.7%	0.0%	0.0%
225	8	SURG	FOOT PROCEDURES	5,855	5.3%	16.7%	0.0%	1.4%	0.6%	1.3%	15.6%	11.9%	0.0%	0.0%
226	8	SURG	SOFT TISSUE PROCEDURES W CC	6,199	4.9%	14.6%	0.0%	3.4%	1.0%	1.2%	15.9%	10.3%	0.0%	0.0%
227	8	SURG	SOFT TISSUE PROCEDURES W/O CC	4,468	3.5%	12.3%	0.0%	0.4%	0.1%	0.8%	10.4%	17.1%	0.0%	0.0%
228	8	SURG	MAJOR THUMB OR JOINT PROC, OR OTH HAND OR WRIST PROC W CC	2,388	4.1%	13.4%	0.0%	1.7%	0.7%	1.1%	14.2%	13.3%	0.0%	0.0%
229	8	SURG	HAND OR WRIST PROC, EXCEPT MAJOR JOINT PROC, W/O CC	996	3.8%	13.4%	0.0%	0.6%	0.2%	0.8%	12.4%	11.9%	0.0%	0.0%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	Raw case count	Routine -									
					Routine - Private	Semi-private	Routine - Ward	Intensive Care	Coronary Care	Other I/P services	Pharmacy	Supplies	DME (sold)	DME (used/rented)
230	8	SURG	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES OF HIP & FEMUR	2,325	5.2%	14.0%	0.0%	2.3%	0.6%	1.0%	16.1%	11.6%	0.0%	0.0%
232	8	SURG	ARTHROSCOPY	540	2.3%	10.3%	0.0%	1.7%	0.6%	0.8%	11.2%	20.8%	0.0%	0.0%
233	8	SURG	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W CC	16,227	3.7%	11.2%	0.0%	3.6%	1.1%	1.4%	10.5%	25.1%	0.0%	0.0%
234	8	SURG	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W/O CC	7,937	2.6%	7.6%	0.0%	0.9%	0.2%	0.9%	6.4%	41.4%	0.0%	0.0%
235	8	MED	FRACTURES OF FEMUR	4,473	6.4%	24.1%	0.1%	3.0%	1.2%	1.5%	13.4%	7.8%	0.0%	0.0%
236	8	MED	FRACTURES OF HIP & PELVIS	38,224	6.0%	25.2%	0.1%	3.0%	1.4%	1.4%	11.6%	4.9%	0.0%	0.0%
237	8	MED	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH	1,745	5.3%	26.9%	0.0%	1.2%	1.1%	2.0%	10.0%	3.7%	0.0%	0.0%
238	8	MED	OSTEOMYELITIS	8,936	6.6%	24.8%	0.0%	2.3%	1.1%	1.9%	22.3%	5.4%	0.0%	0.0%
239	8	MED	PATHOLOGICAL FRACTURES & MUSCULOSKELETAL & CONN TISS MALIGNANCY	38,354	6.0%	24.0%	0.0%	2.5%	1.2%	1.3%	15.5%	4.6%	0.0%	0.0%
240	8	MED	CONNECTIVE TISSUE DISORDERS W CC	11,713	5.1%	15.7%	0.1%	5.7%	2.7%	2.4%	19.3%	4.3%	0.0%	0.0%
241	8	MED	CONNECTIVE TISSUE DISORDERS W/O CC	2,522	5.9%	21.7%	0.1%	2.2%	0.8%	2.1%	21.8%	2.6%	0.0%	0.0%
242	8	MED	SEPTIC ARTHRITIS	2,494	6.3%	22.1%	0.0%	3.2%	1.3%	1.7%	22.4%	4.7%	0.0%	0.0%
243	8	MED	MEDICAL BACK PROBLEMS	93,055	5.4%	23.0%	0.0%	2.9%	1.4%	2.1%	11.4%	4.1%	0.0%	0.0%
244	8	MED	BONE DISEASES & SPECIFIC ARTHROPATHIES W CC	15,368	5.4%	26.4%	0.1%	2.7%	1.7%	2.6%	12.9%	4.0%	0.0%	0.0%
245	8	MED	BONE DISEASES & SPECIFIC ARTHROPATHIES W/O CC	5,303	5.8%	29.7%	0.0%	1.4%	0.9%	2.8%	10.0%	4.5%	0.0%	0.0%
246	8	MED	NON-SPECIFIC ARTHROPATHIES	1,240	4.5%	22.6%	0.0%	3.6%	2.1%	2.5%	12.4%	3.2%	0.0%	0.0%
247	8	MED	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE	19,555	4.7%	21.9%	0.0%	3.0%	2.0%	3.0%	10.6%	3.1%	0.0%	0.0%
248	8	MED	TENDONITIS, MYOSITIS & BURSTITIS	14,725	4.3%	21.3%	0.0%	5.4%	3.1%	2.0%	12.7%	3.8%	0.0%	0.0%
249	8	MED	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	12,544	6.0%	21.7%	0.1%	1.9%	0.8%	1.5%	14.7%	7.6%	0.0%	0.0%
250	8	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W CC	3,828	4.3%	23.4%	0.1%	3.2%	1.9%	2.0%	10.1%	4.4%	0.0%	0.0%
251	8	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W/O CC	1,837	4.6%	23.8%	0.1%	2.0%	1.3%	2.0%	7.7%	4.3%	0.0%	0.0%
253	8	MED	FX, SPRN, STRN & DISL OF UPARM,LOWLEG EX FOOT AGE >17 W CC	23,076	5.1%	23.5%	0.0%	3.6%	1.8%	1.9%	11.8%	5.3%	0.0%	0.0%
254	8	MED	FX, SPRN, STRN & DISL OF UPARM,LOWLEG EX FOOT AGE >17 W/O CC	9,312	5.6%	29.3%	0.1%	1.5%	0.8%	2.1%	8.2%	4.4%	0.0%	0.0%
256	8	MED	OTHER MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE DIAGNOSES	6,749	7.0%	22.4%	0.0%	3.0%	1.4%	2.0%	17.8%	4.9%	0.0%	0.0%
257	9	SURG	TOTAL MASTECTOMY FOR MALIGNANCY W CC	12,362	3.2%	10.0%	0.0%	1.5%	0.5%	0.6%	10.0%	12.9%	0.0%	0.0%
258	9	SURG	TOTAL MASTECTOMY FOR MALIGNANCY W/O CC	10,604	3.0%	8.7%	0.0%	0.2%	0.1%	0.4%	9.1%	14.4%	0.0%	0.0%
259	9	SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY W CC	2,575	2.7%	12.2%	0.0%	1.7%	0.5%	0.8%	9.8%	9.4%	0.0%	0.0%
260	9	SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY W/O CC	2,492	2.1%	8.9%	0.0%	0.4%	0.1%	0.7%	8.2%	11.3%	0.0%	0.0%
261	9	SURG	BREAST PROC FOR NON-MALIGNANCY EXCEPT BIOPSY & LOCAL EXCISION	1,427	2.6%	8.9%	0.0%	1.0%	0.3%	0.5%	10.0%	14.3%	0.0%	0.0%
262	9	SURG	BREAST BIOPSY & LOCAL EXCISION FOR NON-MALIGNANCY	574	6.6%	16.5%	0.0%	1.6%	0.8%	1.1%	16.5%	7.6%	0.0%	0.0%
263	9	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W CC	21,013	7.1%	20.9%	0.0%	3.2%	1.0%	1.6%	21.7%	8.5%	0.0%	0.0%
264	9	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W/O CC	3,553	7.8%	20.9%	0.0%	0.9%	0.2%	1.5%	19.8%	9.3%	0.0%	0.0%
265	9	SURG	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W CC	3,813	4.9%	15.4%	0.0%	4.5%	1.1%	1.1%	14.1%	9.5%	0.0%	0.0%
266	9	SURG	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W/O CC	2,054	4.5%	13.5%	0.0%	1.5%	0.2%	0.8%	10.4%	11.0%	0.0%	0.0%
267	9	SURG	PERIANAL & PILONIDAL PROCEDURES	251	5.6%	14.6%	0.0%	3.6%	0.3%	1.3%	17.0%	8.5%	0.0%	0.0%
268	9	SURG	SKIN, SUBCUTANEOUS TISSUE & BREAST PLASTIC PROCEDURES	908	3.4%	9.5%	0.0%	4.1%	0.6%	1.0%	11.8%	11.9%	0.0%	0.0%
269	9	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W CC	10,043	5.9%	16.5%	0.0%	3.4%	1.4%	1.5%	20.2%	8.7%	0.0%	0.0%
270	9	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W/O CC	2,362	5.5%	15.9%	0.1%	1.2%	0.4%	1.3%	16.2%	8.7%	0.0%	0.0%
271	9	MED	SKIN ULCERS	19,600	7.9%	25.3%	0.0%	2.3%	1.1%	2.3%	22.6%	6.6%	0.0%	0.0%
272	9	MED	MAJOR SKIN DISORDERS W CC	5,593	9.0%	19.1%	0.0%	5.3%	1.9%	1.7%	24.3%	4.6%	0.0%	0.0%
273	9	MED	MAJOR SKIN DISORDERS W/O CC	1,203	9.3%	20.8%	0.0%	3.8%	1.3%	2.2%	20.8%	3.2%	0.0%	0.0%
274	9	MED	MALIGNANT BREAST DISORDERS W CC	2,046	6.3%	20.6%	0.0%	3.2%	1.5%	1.3%	20.2%	4.9%	0.0%	0.0%
275	9	MED	MALIGNANT BREAST DISORDERS W/O CC	169	5.3%	24.3%	0.0%	2.6%	0.4%	1.2%	13.1%	4.2%	0.0%	0.0%
276	9	MED	NON-MALIGNANT BREAST DISORDERS	1,426	7.0%	24.2%	0.1%	2.2%	1.3%	1.3%	22.6%	4.5%	0.0%	0.0%
277	9	MED	CELLULITIS AGE >17 W CC	107,912	6.6%	26.1%	0.1%	2.6%	1.3%	2.9%	22.3%	4.6%	0.0%	0.0%
278	9	MED	CELLULITIS AGE >17 W/O CC	30,874	7.2%	30.6%	0.1%	0.9%	0.5%	3.3%	23.4%	3.7%	0.0%	0.0%
279	9	MED *	CELLULITIS AGE 0-17	3	11.0%	12.5%	0.0%	4.8%	0.0%	13.9%	19.4%	1.2%	0.0%	0.0%
280	9	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W CC	17,614	4.5%	22.0%	0.1%	4.1%	2.3%	2.3%	10.3%	4.1%	0.0%	0.0%
281	9	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W/O CC	5,851	4.6%	24.4%	0.1%	2.9%	1.5%	2.6%	7.7%	3.0%	0.0%	0.0%
283	9	MED	MINOR SKIN DISORDERS W CC	6,022	7.0%	22.4%	0.0%	4.3%	2.2%	1.9%	19.0%	4.3%	0.0%	0.0%
284	9	MED	MINOR SKIN DISORDERS W/O CC	1,643	7.4%	25.6%	0.1%	2.5%	1.7%	2.1%	16.5%	3.5%	0.0%	0.0%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	Raw case count	Routine -									
					Routine - Private	Routine - Semi-private	Routine - Ward	Intensive Care	Coronary Care	Other I/P services	Pharmacy	Supplies	DME (sold)	DME (used/rented)
285	10	SURG	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT.& METABOL DISORDERS	7,358	5.9%	18.7%	0.0%	3.1%	1.4%	1.6%	19.6%	7.5%	0.0%	0.0%
286	10	SURG	ADRENAL & PITUITARY PROCEDURES	2,466	2.3%	5.9%	0.0%	10.9%	1.0%	0.8%	11.9%	12.7%	0.0%	0.0%
287	10	SURG	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DISORDERS	5,150	6.2%	21.9%	0.1%	3.8%	1.6%	1.6%	20.0%	7.3%	0.0%	0.0%
288	10	SURG	O.R. PROCEDURES FOR OBESITY	9,913	2.0%	5.2%	0.0%	4.5%	0.6%	0.5%	12.5%	32.0%	0.0%	0.0%
289	10	SURG	PARATHYROID PROCEDURES	6,051	3.0%	8.3%	0.0%	2.5%	0.7%	0.6%	9.4%	9.2%	0.0%	0.0%
290	10	SURG	THYROID PROCEDURES	10,776	2.5%	7.3%	0.0%	3.0%	0.7%	0.5%	9.1%	11.9%	0.0%	0.0%
291	10	SURG	THYROGLOSSAL PROCEDURES	50	3.5%	7.1%	0.0%	4.8%	0.0%	0.6%	11.6%	9.4%	0.0%	0.0%
292	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W CC	6,848	4.0%	13.7%	0.0%	5.9%	2.8%	1.5%	16.6%	10.7%	0.0%	0.0%
293	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W/O CC	307	3.3%	11.9%	0.0%	3.5%	1.0%	1.1%	12.2%	16.1%	0.0%	0.0%
294	10	MED	DIABETES AGE >35	88,637	4.5%	19.2%	0.1%	8.4%	3.3%	1.7%	15.3%	4.3%	0.0%	0.0%
295	10	MED	DIABETES AGE 0-35	3,752	3.6%	11.9%	0.0%	13.1%	3.1%	1.3%	19.9%	4.1%	0.0%	0.0%
296	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W CC	228,622	5.6%	20.3%	0.0%	5.4%	2.8%	1.4%	15.9%	4.8%	0.0%	0.0%
297	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W/O CC	39,075	5.4%	23.4%	0.1%	3.9%	2.4%	1.7%	11.8%	3.5%	0.0%	0.0%
298	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE 0-17	86	7.3%	29.7%	0.0%	7.7%	0.0%	1.9%	16.5%	2.7%	0.0%	0.0%
299	10	MED	INBORN ERRORS OF METABOLISM	1,280	5.0%	14.8%	0.1%	4.8%	1.2%	1.4%	37.1%	3.4%	0.0%	0.0%
300	10	MED	ENDOCRINE DISORDERS W CC	20,114	4.9%	17.4%	0.1%	7.8%	4.1%	1.5%	14.7%	4.3%	0.0%	0.0%
301	10	MED	ENDOCRINE DISORDERS W/O CC	3,502	5.5%	18.0%	0.0%	5.6%	3.7%	1.5%	14.4%	2.6%	0.0%	0.0%
302	11	SURG	KIDNEY TRANSPLANT	8,398	3.1%	7.6%	0.0%	7.0%	0.8%	0.8%	30.5%	6.5%	0.0%	0.0%
303	11	SURG	KIDNEY AND URETER PROCEDURES FOR NEOPLASM	18,225	3.5%	10.1%	0.0%	5.8%	1.4%	0.8%	12.3%	15.2%	0.0%	0.0%
304	11	SURG	KIDNEY AND URETER PROCEDURES FOR NON-NEOPLASM WITHOUT CC	12,477	4.0%	12.5%	0.0%	5.6%	1.7%	1.2%	15.5%	11.1%	0.0%	0.0%
305	11	SURG	KIDNEY AND URETER PROCEDURES FOR NON-NEOPLASM WITHOUT CC	2,594	3.3%	9.9%	0.0%	1.0%	0.2%	0.8%	10.0%	19.0%	0.0%	0.0%
306	11	SURG	PROSTATECTOMY W CC	5,534	3.8%	17.3%	0.0%	3.5%	1.3%	0.8%	13.1%	10.0%	0.0%	0.0%
307	11	SURG	PROSTATECTOMY W/O CC	1,855	3.2%	12.4%	0.0%	0.4%	0.2%	0.5%	10.6%	14.4%	0.0%	0.0%
308	11	SURG	MINOR BLADDER PROCEDURES W CC	5,125	4.2%	13.7%	0.0%	3.5%	1.1%	0.7%	14.1%	15.6%	0.0%	0.0%
309	11	SURG	MINOR BLADDER PROCEDURES W/O CC	2,869	2.3%	7.4%	0.0%	0.3%	0.1%	0.4%	8.7%	35.5%	0.0%	0.0%
310	11	SURG	TRANSURETHRAL PROCEDURES W CC	23,959	3.4%	15.5%	0.0%	2.8%	1.3%	0.8%	12.7%	10.3%	0.0%	0.0%
311	11	SURG	TRANSURETHRAL PROCEDURES W/O CC	5,616	2.9%	12.7%	0.0%	0.4%	0.3%	0.7%	10.1%	13.5%	0.0%	0.0%
312	11	SURG	URETHRAL PROCEDURES, AGE >17 W CC	1,276	5.1%	15.3%	0.0%	3.1%	1.2%	0.8%	14.7%	9.8%	0.0%	0.0%
313	11	SURG	URETHRAL PROCEDURES, AGE >17 W/O CC	488	4.2%	12.4%	0.0%	0.5%	0.3%	0.5%	11.8%	12.2%	0.0%	0.0%
315	11	SURG	OTHER KIDNEY & URINARY TRACT O.R. PROCEDURES	32,551	3.2%	10.7%	0.0%	5.6%	2.5%	1.5%	13.4%	14.8%	0.0%	0.0%
316	11	MED	RENAL FAILURE	182,854	4.2%	15.3%	0.0%	9.0%	4.2%	1.5%	16.3%	5.5%	0.0%	0.0%
317	11	MED	ADMIT FOR RENAL DIALYSIS	2,366	4.3%	12.3%	0.1%	3.8%	1.9%	1.4%	17.0%	8.4%	0.0%	0.0%
318	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W CC	5,493	5.4%	19.3%	0.0%	3.4%	1.5%	1.1%	17.1%	5.6%	0.0%	0.0%
319	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W/O CC	358	4.3%	15.9%	0.1%	1.6%	0.3%	1.1%	12.1%	7.4%	0.0%	0.0%
320	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W CC	206,671	5.8%	22.0%	0.1%	3.9%	2.1%	1.2%	18.0%	5.2%	0.0%	0.0%
321	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W/O CC	28,834	5.9%	24.4%	0.1%	2.2%	1.1%	1.4%	16.7%	3.9%	0.0%	0.0%
322	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE 0-17	48	10.7%	16.0%	0.0%	1.6%	0.4%	1.6%	23.5%	2.6%	0.0%	0.0%
323	11	MED	URINARY STONES W CC, & OR ESW LITHOTRIPSY	18,754	3.3%	14.9%	0.0%	1.9%	0.8%	0.9%	12.7%	7.1%	0.0%	0.0%
324	11	MED	URINARY STONES W/O CC	4,214	3.5%	14.5%	0.1%	0.5%	0.2%	0.9%	11.5%	7.8%	0.0%	0.0%
325	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W CC	9,078	4.9%	23.9%	0.1%	3.4%	1.8%	1.2%	12.6%	5.6%	0.0%	0.0%
326	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W/O CC	2,425	5.2%	26.2%	0.1%	1.7%	0.5%	1.2%	11.4%	5.4%	0.0%	0.0%
327	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE 0-17	6	6.7%	16.6%	0.0%	0.0%	0.0%	0.0%	31.9%	4.2%	0.0%	0.0%
328	11	MED	URETHRAL STRICTURE AGE >17 W CC	547	4.3%	18.6%	0.0%	2.8%	0.5%	1.4%	13.5%	7.9%	0.0%	0.0%
329	11	MED	URETHRAL STRICTURE AGE >17 W/O CC	53	2.7%	16.5%	0.4%	0.8%	0.7%	1.0%	8.2%	12.6%	0.0%	0.0%
331	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W CC	50,499	5.3%	17.4%	0.1%	5.6%	2.2%	1.5%	19.4%	5.5%	0.0%	0.0%
332	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W/O CC	3,517	4.9%	18.8%	0.0%	2.6%	1.3%	1.7%	17.8%	5.7%	0.0%	0.0%
333	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 0-17	213	5.3%	16.8%	0.0%	9.7%	0.0%	2.7%	25.6%	2.4%	0.0%	0.0%
334	12	SURG	MAJOR MALE PELVIC PROCEDURES W CC	8,590	3.7%	9.0%	0.0%	2.8%	0.7%	0.5%	11.7%	14.7%	0.0%	0.0%
335	12	SURG	MAJOR MALE PELVIC PROCEDURES W/O CC	10,870	3.0%	7.8%	0.0%	0.9%	0.1%	0.3%	9.8%	17.2%	0.0%	0.0%
336	12	SURG	TRANSURETHRAL PROSTATECTOMY W CC	27,394	3.8%	14.3%	0.0%	1.7%	0.8%	0.6%	12.1%	12.3%	0.0%	0.0%
337	12	SURG	TRANSURETHRAL PROSTATECTOMY W/O CC	20,734	3.5%	12.1%	0.0%	0.4%	0.1%	0.5%	10.8%	14.1%	0.0%	0.0%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	Routine -										
				Raw case count	Routine - Private	Semi-private	Routine - Ward	Intensive Care	Coronary Care	Other I/P services	Pharmacy	Supplies	DME (sold)	DME (used/rented)
338	12	SURG	TESTES PROCEDURES, FOR MALIGNANCY	624	4.1%	14.8%	0.1%	2.1%	1.6%	0.7%	12.5%	8.9%	0.0%	0.0%
339	12	SURG	TESTES PROCEDURES, NON-MALIGNANCY AGE >17	1,147	5.1%	13.9%	0.0%	4.1%	1.2%	1.1%	17.1%	8.0%	0.0%	0.0%
341	12	SURG	PENIS PROCEDURES	2,889	3.0%	7.9%	0.0%	1.8%	0.3%	0.4%	10.6%	34.5%	0.0%	0.0%
342	12	SURG	CIRCUMCISION AGE >17	428	3.6%	13.9%	0.0%	1.1%	0.5%	0.6%	12.5%	10.9%	0.0%	0.0%
344	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY	2,241	2.4%	8.3%	0.0%	1.5%	0.5%	0.5%	10.0%	17.6%	0.0%	0.0%
345	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIGNANCY	1,281	4.3%	15.8%	0.0%	3.4%	1.0%	0.9%	15.5%	10.0%	0.0%	0.0%
346	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W CC	3,643	6.3%	21.1%	0.0%	3.1%	1.4%	1.2%	18.6%	5.2%	0.0%	0.0%
347	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W/O CC	200	6.2%	17.2%	0.0%	2.4%	0.7%	0.7%	17.1%	6.5%	0.0%	0.0%
348	12	MED	BENIGN PROSTATIC HYPERTROPHY W CC	3,890	4.5%	24.0%	0.1%	3.4%	1.6%	1.2%	13.0%	5.7%	0.0%	0.0%
349	12	MED	BENIGN PROSTATIC HYPERTROPHY W/O CC	493	4.6%	26.2%	0.4%	1.9%	0.6%	1.7%	10.0%	5.7%	0.0%	0.0%
350	12	MED	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM	6,524	6.5%	22.0%	0.0%	2.3%	1.2%	1.3%	21.9%	4.6%	0.0%	0.0%
352	12	MED	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES	1,001	6.3%	18.1%	0.1%	4.4%	0.8%	1.4%	17.7%	5.7%	0.0%	0.0%
353	13	SURG	PELVIC EVISCERATION, RADICAL HYSTERECTOMY & RADICAL VULVECTOMY	2,675	4.0%	12.6%	0.0%	4.5%	0.8%	0.9%	14.5%	10.8%	0.0%	0.0%
354	13	SURG	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W CC	7,108	4.4%	13.4%	0.0%	4.0%	1.0%	0.8%	12.8%	10.4%	0.0%	0.0%
355	13	SURG	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W/O CC	4,540	4.1%	13.3%	0.0%	0.5%	0.2%	0.5%	10.5%	13.1%	0.0%	0.0%
356	13	SURG	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	20,604	3.1%	8.3%	0.0%	0.4%	0.1%	0.4%	10.9%	22.5%	0.0%	0.0%
357	13	SURG	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY	5,100	4.5%	11.5%	0.0%	5.3%	1.2%	0.9%	17.1%	10.7%	0.0%	0.0%
358	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W CC	18,981	4.0%	11.4%	0.0%	2.1%	0.5%	0.6%	13.1%	13.6%	0.0%	0.0%
359	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC	25,835	3.5%	10.4%	0.0%	0.3%	0.1%	0.4%	11.2%	16.5%	0.0%	0.0%
360	13	SURG	VAGINA, CERVIX & VULVA PROCEDURES	12,936	3.8%	9.1%	0.0%	0.6%	0.2%	0.5%	11.3%	18.8%	0.0%	0.0%
361	13	SURG	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	240	3.5%	9.2%	0.0%	1.1%	0.5%	0.4%	13.7%	18.9%	0.0%	0.0%
363	13	SURG	D&C, CONIZATION & RADIO-IMPLANT, FOR MALIGNANCY	2,034	5.5%	14.9%	0.0%	1.8%	0.7%	0.7%	10.4%	6.2%	0.0%	0.0%
364	13	SURG	D&C, CONIZATION EXCEPT FOR MALIGNANCY	1,722	3.6%	18.9%	0.0%	2.2%	1.2%	0.9%	11.1%	7.7%	0.0%	0.0%
365	13	SURG	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES	1,468	4.9%	12.8%	0.0%	4.1%	1.2%	1.0%	20.6%	10.8%	0.0%	0.0%
366	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W CC	4,223	6.4%	19.3%	0.0%	2.3%	1.4%	1.2%	23.5%	5.0%	0.0%	0.0%
367	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC	365	7.1%	21.0%	0.0%	1.8%	0.7%	0.9%	20.4%	3.9%	0.0%	0.0%
368	13	MED	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM	3,778	6.6%	19.8%	0.0%	3.9%	1.4%	1.2%	23.7%	5.7%	0.0%	0.0%
369	13	MED	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS	3,285	4.8%	21.4%	0.1%	2.5%	1.4%	1.4%	12.9%	4.5%	0.0%	0.0%
370	14	SURG	CESAREAN SECTION W CC	1,810	7.1%	18.6%	0.1%	2.3%	0.2%	2.3%	13.7%	7.3%	0.0%	0.0%
371	14	SURG	CESAREAN SECTION W/O CC	2,242	7.2%	18.0%	0.1%	0.2%	0.0%	1.7%	13.1%	9.2%	0.0%	0.0%
372	14	MED	VAGINAL DELIVERY W COMPLICATING DIAGNOSES	1,163	7.8%	19.6%	0.2%	1.4%	0.1%	2.7%	13.6%	6.0%	0.0%	0.0%
373	14	MED	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	4,595	6.9%	21.3%	0.1%	0.4%	0.0%	2.6%	11.4%	7.3%	0.0%	0.0%
374	14	SURG	VAGINAL DELIVERY W STERILIZATION &/OR D&C	113	5.2%	15.1%	0.3%	0.6%	0.6%	1.7%	14.9%	6.5%	0.0%	0.0%
375	14	SURG	VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL &/OR D&C	9	3.0%	21.6%	0.0%	4.9%	0.0%	3.2%	16.1%	8.2%	0.0%	0.0%
376	14	MED	POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE	395	6.1%	18.9%	0.0%	5.5%	1.1%	2.2%	18.0%	4.1%	0.0%	0.0%
377	14	SURG	POSTPARTUM & POST ABORTION DIAGNOSES W O.R. PROCEDURE	95	4.8%	12.4%	0.1%	2.9%	0.5%	0.8%	18.4%	16.4%	0.0%	0.0%
378	14	MED	ECTOPIC PREGNANCY	179	2.6%	12.6%	0.2%	1.1%	0.6%	0.5%	10.2%	13.2%	0.0%	0.0%
379	14	MED	THREATENED ABORTION	471	9.3%	27.2%	0.0%	3.8%	0.0%	5.6%	16.9%	3.0%	0.0%	0.0%
380	14	MED	ABORTION W/O D&C	90	3.7%	19.0%	0.0%	2.0%	1.1%	1.5%	17.5%	3.8%	0.0%	0.0%
381	14	SURG	ABORTION W D&C, ASPIRATION CURETTAGE OR HYSTEROTOMY	156	2.7%	11.2%	0.1%	2.8%	1.1%	1.1%	13.5%	6.1%	0.0%	0.0%
382	14	MED	FALSE LABOR	39	7.9%	22.0%	0.0%	0.0%	0.0%	18.4%	12.6%	2.9%	0.0%	0.0%
383	14	MED	OTHER ANTEPARTUM DIAGNOSES W MEDICAL COMPLICATIONS	2,290	7.7%	26.0%	0.1%	4.6%	0.8%	3.6%	17.0%	4.0%	0.0%	0.0%
384	14	MED	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	121	5.2%	25.0%	0.1%	3.5%	0.2%	5.4%	12.4%	4.9%	0.0%	0.0%
392	16	SURG	SPLENECTOMY AGE >17	1,985	2.7%	7.0%	0.0%	8.4%	1.6%	0.8%	23.8%	11.6%	0.0%	0.0%
394	16	SURG	OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS	2,541	4.1%	13.0%	0.0%	6.4%	2.4%	1.4%	16.0%	9.1%	0.0%	0.0%
395	16	MED	RED BLOOD CELL DISORDERS AGE >17	91,202	4.9%	17.8%	0.0%	4.6%	2.7%	1.3%	14.0%	5.1%	0.0%	0.0%
396	16	MED	RED BLOOD CELL DISORDERS AGE 0-17	11	3.4%	11.3%	0.0%	5.8%	0.0%	1.2%	26.9%	3.6%	0.0%	0.0%
397	16	MED	COAGULATION DISORDERS	15,508	3.6%	12.9%	0.0%	5.9%	2.1%	1.1%	34.4%	3.6%	0.0%	0.0%
398	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W CC	6,043	4.5%	17.1%	0.0%	5.7%	2.1%	1.6%	18.5%	4.6%	0.0%	0.0%
399	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC	989	4.5%	18.7%	0.1%	4.0%	1.3%	1.7%	17.9%	3.0%	0.0%	0.0%
401	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W CC	6,001	4.7%	13.7%	0.0%	4.6%	1.7%	1.1%	21.7%	8.0%	0.0%	0.0%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	CMS_01	CMS_01	CMS_01	CMS_02	CMS_02	CMS_13	CMS_03	CMS_04	CMS_04	CMS_04	
				Raw case count	Routine - Private	Routine - Semi-private	Routine - Ward	Intensive Care	Coronary Care	Other I/P services	Pharmacy	Supplies	DME (sold)	DME (used/rented)
402	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W/O CC	1,309	3.9%	13.2%	0.0%	1.6%	0.6%	0.8%	14.8%	9.7%	0.0%	0.0%
403	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W CC	29,455	5.5%	15.3%	0.0%	4.8%	1.8%	1.2%	26.3%	4.4%	0.0%	0.0%
404	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC	3,427	5.8%	18.5%	0.0%	2.0%	0.6%	1.4%	25.0%	4.0%	0.0%	0.0%
406	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W CC	2,102	4.0%	9.4%	0.0%	8.5%	2.2%	0.9%	18.9%	10.0%	0.0%	0.0%
407	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W/O CC	554	2.9%	10.6%	0.0%	4.0%	0.9%	0.7%	10.3%	12.4%	0.0%	0.0%
408	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R.PROC	1,905	4.7%	12.7%	0.0%	3.6%	1.0%	1.2%	23.2%	9.0%	0.0%	0.0%
409	17	MED	RADIOTHERAPY	1,613	8.5%	22.5%	0.0%	1.5%	0.4%	0.6%	22.4%	3.6%	0.0%	0.0%
410	17	MED	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS	26,485	5.2%	13.5%	0.0%	1.2%	0.2%	0.7%	56.5%	3.1%	0.0%	0.0%
411	17	MED *	HISTORY OF MALIGNANCY W/O ENDOSCOPY	4	6.9%	9.7%	0.0%	0.0%	0.0%	2.5%	11.1%	2.8%	0.0%	0.0%
412	17	MED *	HISTORY OF MALIGNANCY W ENDOSCOPY	12	1.1%	22.2%	0.0%	14.6%	0.0%	0.8%	16.8%	5.2%	0.0%	0.0%
413	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W CC	5,145	6.4%	18.4%	0.0%	3.6%	1.4%	1.4%	22.0%	5.4%	0.0%	0.0%
414	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC	444	6.5%	20.9%	0.0%	2.6%	1.2%	1.4%	17.2%	4.3%	0.0%	0.0%
417	18	MED	SEPTICEMIA AGE 0-17	29	2.8%	14.5%	0.0%	11.8%	0.8%	0.7%	21.9%	5.0%	0.0%	0.0%
418	18	MED	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS	27,021	7.4%	20.3%	0.0%	4.2%	1.9%	1.6%	23.1%	5.6%	0.0%	0.0%
419	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W CC	15,598	5.8%	18.8%	0.1%	3.4%	1.8%	1.5%	18.7%	3.8%	0.0%	0.0%
420	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W/O CC	2,655	5.6%	21.7%	0.1%	2.3%	1.0%	1.5%	15.1%	3.3%	0.0%	0.0%
421	18	MED	VIRAL ILLNESS AGE >17	11,059	6.2%	18.2%	0.0%	4.2%	1.9%	1.4%	18.7%	3.8%	0.0%	0.0%
422	18	MED	VIRAL ILLNESS & FEVER OF UNKNOWN ORIGIN AGE 0-17	53	8.3%	21.6%	0.0%	5.3%	0.5%	2.3%	27.2%	2.6%	0.0%	0.0%
423	18	MED	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES	8,177	5.4%	13.6%	0.0%	7.4%	2.4%	1.2%	27.6%	5.3%	0.0%	0.0%
424	19	SURG	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	951	4.8%	18.4%	0.0%	4.4%	1.6%	1.9%	12.6%	14.9%	0.0%	0.0%
425	19	MED	ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	12,335	4.6%	17.9%	0.0%	5.6%	3.0%	2.5%	10.3%	3.4%	0.0%	0.0%
426	19	MED	DEPRESSIVE NEUROSES	3,758	5.5%	38.4%	0.0%	3.3%	1.3%	2.8%	9.9%	2.2%	0.0%	0.0%
427	19	MED	NEUROSES EXCEPT DEPRESSIVE	1,313	4.2%	39.5%	0.1%	4.9%	0.8%	2.6%	10.7%	1.8%	0.0%	0.0%
428	19	MED	DISORDERS OF PERSONALITY & IMPULSE CONTROL	739	7.8%	47.4%	0.0%	3.8%	0.7%	4.7%	10.8%	1.6%	0.0%	0.0%
429	19	MED	ORGANIC DISTURBANCES & MENTAL RETARDATION	22,299	6.1%	27.8%	0.1%	4.0%	2.4%	2.3%	9.4%	3.2%	0.0%	0.0%
430	19	MED	PSYCHOSES	66,511	6.0%	53.6%	0.3%	4.6%	0.4%	3.1%	11.0%	0.8%	0.0%	0.0%
431	19	MED	CHILDHOOD MENTAL DISORDERS	296	5.8%	45.0%	0.0%	5.4%	0.3%	2.8%	13.0%	1.3%	0.0%	0.0%
432	19	MED	OTHER MENTAL DISORDER DIAGNOSES	363	6.1%	26.6%	0.2%	4.8%	1.6%	2.9%	9.1%	2.5%	0.0%	0.0%
433	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA	4,444	2.5%	42.8%	0.1%	4.6%	1.6%	1.4%	10.7%	1.7%	0.0%	0.0%
439	21	SURG	SKIN GRAFTS FOR INJURIES	1,554	5.9%	13.3%	0.0%	6.8%	1.4%	1.2%	17.8%	10.8%	0.0%	0.0%
440	21	SURG	WOUND DEBRIDEMENTS FOR INJURIES	4,770	6.1%	15.0%	0.0%	5.5%	1.4%	1.3%	19.7%	9.8%	0.0%	0.0%
441	21	SURG	HAND PROCEDURES FOR INJURIES	688	3.6%	10.8%	0.0%	3.1%	0.5%	1.2%	14.0%	8.8%	0.0%	0.0%
442	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W CC	16,814	3.7%	9.6%	0.0%	8.1%	2.1%	1.2%	19.7%	11.4%	0.0%	0.0%
443	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W/O CC	3,181	4.2%	10.8%	0.0%	2.8%	0.8%	1.0%	14.0%	17.2%	0.0%	0.0%
444	21	MED	TRAUMATIC INJURY AGE >17 W CC	5,449	4.3%	19.8%	0.1%	5.4%	2.6%	2.5%	12.2%	4.2%	0.0%	0.0%
445	21	MED	TRAUMATIC INJURY AGE >17 W/O CC	1,960	4.4%	22.4%	0.0%	3.6%	1.8%	2.7%	8.9%	3.3%	0.0%	0.0%
447	21	MED	ALLERGIC REACTIONS AGE >17	5,681	2.9%	12.0%	0.0%	14.3%	4.9%	1.7%	15.6%	5.1%	0.0%	0.0%
449	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W CC	36,276	2.6%	10.8%	0.0%	14.6%	4.1%	1.5%	15.3%	4.8%	0.0%	0.0%
450	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W/O CC	6,679	2.6%	11.0%	0.1%	15.0%	4.0%	1.6%	12.7%	4.1%	0.0%	0.0%
452	21	MED	COMPLICATIONS OF TREATMENT W CC	25,763	5.0%	15.3%	0.0%	6.6%	2.3%	1.6%	18.5%	6.8%	0.0%	0.0%
453	21	MED	COMPLICATIONS OF TREATMENT W/O CC	4,893	5.9%	18.5%	0.1%	4.1%	1.8%	1.7%	15.1%	7.1%	0.0%	0.0%
454	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W CC	3,784	3.4%	15.7%	0.1%	10.0%	3.5%	2.1%	12.3%	4.7%	0.0%	0.0%
455	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W/O CC	741	3.1%	16.7%	0.1%	7.4%	2.7%	4.7%	7.4%	3.2%	0.0%	0.0%
461	23	SURG	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES	2,196	3.5%	12.2%	0.0%	3.8%	1.3%	1.2%	11.5%	18.2%	0.0%	0.0%
462	23	MED	REHABILITATION	3,104	4.2%	48.5%	0.0%	0.3%	0.2%	3.2%	7.1%	2.1%	0.0%	0.0%
463	23	MED	SIGNS & SYMPTOMS W CC	29,814	4.9%	19.5%	0.1%	5.1%	2.9%	2.2%	11.7%	4.0%	0.0%	0.0%
464	23	MED	SIGNS & SYMPTOMS W/O CC	6,935	4.7%	20.1%	0.1%	4.3%	2.8%	2.9%	8.3%	3.0%	0.0%	0.0%
465	23	MED	AFTERCARE W HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	144	4.4%	23.1%	0.0%	2.9%	3.6%	2.7%	13.2%	6.2%	0.0%	0.0%
466	23	MED	AFTERCARE W/O HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	968	5.4%	18.7%	0.0%	6.1%	3.6%	1.3%	15.0%	6.6%	0.0%	0.0%
467	23	MED	OTHER FACTORS INFLUENCING HEALTH STATUS	867	5.1%	19.8%	0.0%	4.4%	1.6%	1.7%	13.6%	5.6%	0.0%	0.0%
468		SURG	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	47,282	2.7%	9.0%	0.0%	9.1%	3.7%	1.1%	16.5%	16.3%	0.0%	0.0%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	Routine -										
				Raw case count	Routine - Private	Semi-private	Routine - Ward	Intensive Care	Coronary Care	Other I/P services	Pharmacy	Supplies	DME (sold)	DME (used/rented)
480	PRE	SURG	LIVER TRANSPLANT AND/OR INTESTINAL TRANSPLANT	994	2.0%	3.8%	0.0%	10.6%	0.2%	1.1%	20.0%	7.7%	0.1%	0.0%
481	PRE	SURG	BONE MARROW TRANSPLANT	1,078	5.4%	10.6%	0.0%	16.7%	0.5%	1.4%	37.9%	1.9%	0.0%	0.0%
482	PRE	SURG	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES	4,629	3.2%	8.9%	0.0%	13.3%	1.7%	1.0%	14.0%	10.9%	0.0%	0.0%
484	24	SURG	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	411	1.1%	2.6%	0.0%	17.5%	1.3%	2.1%	13.9%	14.5%	0.0%	0.0%
485	24	SURG	LIMB REATTACHMENT, HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	3,399	2.5%	7.6%	0.0%	9.1%	1.4%	1.4%	11.5%	19.3%	0.0%	0.0%
486	24	SURG	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	2,286	1.3%	4.0%	0.0%	15.1%	1.1%	2.4%	14.1%	12.5%	0.0%	0.0%
487	24	MED	OTHER MULTIPLE SIGNIFICANT TRAUMA	4,340	2.4%	8.5%	0.0%	16.3%	2.0%	2.7%	12.1%	6.0%	0.0%	0.0%
488	25	SURG	HIV W EXTENSIVE O.R. PROCEDURE	743	4.2%	11.3%	0.0%	7.9%	2.1%	0.7%	26.9%	7.7%	0.0%	0.0%
489	25	MED	HIV W MAJOR RELATED CONDITION	12,470	5.9%	15.8%	0.0%	6.7%	1.8%	0.7%	29.4%	3.9%	0.0%	0.0%
490	25	MED	HIV W OR W/O OTHER RELATED CONDITION	4,603	6.1%	19.7%	0.0%	3.6%	1.2%	1.0%	24.2%	3.2%	0.0%	0.0%
491	8	SURG	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF UPPER EXTREMITY	20,270	2.1%	6.1%	0.0%	0.6%	0.3%	0.3%	6.9%	43.8%	0.0%	0.0%
492	17	MED	CHEMOTHERAPY W ACUTE LEUKEMIA OR W USE OF HI DOSE CHEMOAGENT	3,561	7.2%	11.8%	0.0%	4.1%	0.5%	0.7%	45.2%	2.7%	0.0%	0.0%
493	7	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W CC	56,599	3.1%	10.3%	0.0%	4.2%	1.5%	0.8%	15.6%	13.9%	0.0%	0.0%
494	7	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC	22,834	2.5%	9.9%	0.0%	1.0%	0.5%	0.6%	12.2%	18.3%	0.0%	0.0%
495	PRE	SURG	LUNG TRANSPLANT	300	1.8%	3.1%	0.0%	11.9%	3.4%	0.8%	25.2%	9.7%	0.0%	0.0%
496	8	SURG	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	3,099	1.5%	4.7%	0.1%	4.7%	0.5%	0.7%	7.8%	47.3%	0.0%	0.0%
497	8	SURG	SPINAL FUSION EXCEPT CERVICAL W CC	27,685	1.8%	4.7%	0.0%	2.1%	0.4%	0.7%	7.2%	50.1%	0.0%	0.0%
498	8	SURG	SPINAL FUSION EXCEPT CERVICAL W/O CC	18,685	1.8%	4.0%	0.0%	0.7%	0.1%	0.5%	5.9%	55.9%	0.0%	0.0%
499	8	SURG	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W CC	33,081	3.5%	10.7%	0.0%	2.7%	0.6%	0.9%	12.4%	14.3%	0.0%	0.0%
500	8	SURG	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W/O CC	43,738	3.0%	8.9%	0.0%	0.7%	0.1%	0.6%	11.7%	14.9%	0.0%	0.0%
501	8	SURG	KNEE PROCEDURES W PDX OF INFECTION W CC	2,997	5.4%	13.1%	0.0%	3.3%	1.1%	1.2%	19.6%	12.1%	0.0%	0.0%
502	8	SURG	KNEE PROCEDURES W PDX OF INFECTION W/O CC	701	6.0%	13.8%	0.0%	0.5%	0.2%	1.0%	18.0%	15.0%	0.0%	0.0%
503	8	SURG	KNEE PROCEDURES W/O PDX OF INFECTION	5,321	3.9%	11.7%	0.0%	1.0%	0.3%	0.8%	11.6%	22.0%	0.0%	0.0%
504	22	SURG	EXTEN. BURNS OR FULL THICKNESS BURN W/MV 96+HRS W/SKIN GFT	172	0.4%	1.0%	0.0%	30.3%	0.0%	2.0%	19.9%	13.0%	0.2%	0.0%
505	22	MED	EXTEN. BURNS OR FULL THICKNESS BURN W/MV 96+HRS W/O SKIN GFT	157	0.7%	1.3%	0.0%	29.8%	1.5%	2.1%	17.1%	9.5%	0.1%	0.0%
506	22	SURG	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W CC OR SIG TRAUMA	863	2.3%	5.0%	0.0%	32.2%	0.2%	2.6%	15.2%	11.7%	0.0%	0.0%
507	22	SURG	FULL THICKNESS BURN W SKIN GRFT OR INHAL INJ W/O CC OR SIG TRAUMA	274	2.5%	5.4%	0.0%	34.0%	0.1%	3.0%	12.8%	12.1%	0.0%	0.0%
508	22	MED	FULL THICKNESS BURN W/O SKIN GRFT OR INHAL INJ W CC OR SIG TRAUMA	609	4.9%	15.6%	0.0%	18.9%	0.5%	1.7%	17.4%	8.1%	0.0%	0.0%
509	22	MED	FULL THICKNESS BURN W/O SKIN GRFT OR INH INJ W/O CC OR SIG TRAUMA	137	6.3%	8.1%	0.0%	36.5%	0.6%	0.9%	13.6%	9.2%	0.0%	0.0%
510	22	MED	NON-EXTENSIVE BURNS W CC OR SIGNIFICANT TRAUMA	1,615	4.5%	12.0%	0.0%	22.7%	0.7%	1.8%	17.7%	8.1%	0.0%	0.0%
511	22	MED	NON-EXTENSIVE BURNS W/O CC OR SIGNIFICANT TRAUMA	558	4.2%	9.3%	0.0%	33.6%	0.4%	2.5%	13.4%	8.7%	0.0%	0.0%
512	PRE	SURG	SIMULTANEOUS PANCREAS/KIDNEY TRANSPLANT	402	3.0%	5.7%	0.0%	7.9%	0.2%	0.8%	30.0%	7.2%	0.0%	0.0%
513	PRE	SURG	PANCREAS TRANSPLANT	195	2.7%	8.0%	0.0%	8.5%	0.1%	0.8%	31.3%	6.8%	0.0%	0.0%
515	5	SURG	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH	49,586	0.5%	1.6%	0.0%	2.0%	1.9%	0.5%	2.7%	68.4%	0.0%	0.0%
518	5	SURG	PERC CARDIO PROC W/O CORONARY ARTERY STENT OR AMI	22,359	0.9%	3.4%	0.0%	3.5%	3.5%	0.9%	6.3%	23.9%	0.0%	0.0%
519	8	SURG	CERVICAL SPINAL FUSION W CC	11,057	1.8%	5.0%	0.0%	4.6%	0.7%	1.1%	8.5%	37.9%	0.0%	0.0%
520	8	SURG	CERVICAL SPINAL FUSION W/O CC	14,632	1.4%	3.5%	0.0%	1.1%	0.1%	0.8%	6.8%	46.6%	0.0%	0.0%
521	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE W CC	29,416	4.6%	29.6%	0.1%	6.4%	2.3%	1.9%	13.4%	3.1%	0.0%	0.0%
522	20	MED	ALC/DRUG ABUSE OR DEPEND W REHABILITATION THERAPY W/O CC	4,965	3.0%	76.7%	0.0%	0.8%	0.0%	1.6%	8.1%	0.4%	0.0%	0.0%
523	20	MED	ALC/DRUG ABUSE OR DEPEND W/O REHABILITATION THERAPY W/O CC	14,026	6.4%	44.0%	0.1%	3.5%	1.2%	1.9%	9.6%	1.5%	0.0%	0.0%
524	1	MED	TRANSIENT ISCHEMIA	103,634	2.9%	13.9%	0.1%	7.0%	4.2%	4.6%	6.9%	2.7%	0.0%	0.0%
525	5	SURG	OTHER HEART ASSIST SYSTEM IMPLANT	243	0.5%	1.0%	0.0%	6.6%	3.9%	1.6%	13.5%	30.3%	0.0%	0.0%
528	1	SURG	INTRACRANIAL VASCULAR PROC W PDX HEMORRHAGE	1,641	0.8%	2.5%	0.1%	21.1%	0.5%	2.9%	15.8%	15.0%	0.0%	0.0%
529	1	SURG	VENTRICULAR SHUNT PROCEDURES W CC	4,345	3.2%	10.0%	0.0%	10.1%	1.3%	1.0%	12.2%	19.2%	0.0%	0.0%
530	1	SURG	VENTRICULAR SHUNT PROCEDURES W/O CC	2,853	2.7%	7.3%	0.0%	3.7%	0.6%	0.6%	7.9%	33.1%	0.0%	0.0%
531	1	SURG	SPINAL PROCEDURES W CC	4,564	3.2%	8.2%	0.0%	8.1%	1.2%	1.4%	13.7%	19.5%	0.0%	0.0%
532	1	SURG	SPINAL PROCEDURES W/O CC	2,483	2.9%	8.4%	0.0%	4.2%	0.2%	1.1%	9.7%	27.1%	0.0%	0.0%
533	1	SURG	EXTRACRANIAL PROCEDURES W CC	42,395	1.5%	4.6%	0.0%	9.4%	3.2%	1.4%	10.5%	13.7%	0.0%	0.0%
534	1	SURG	EXTRACRANIAL PROCEDURES W/O CC	38,873	1.0%	2.9%	0.0%	7.9%	2.3%	1.1%	9.5%	15.3%	0.0%	0.0%
535	5	SURG	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK	7,634	0.6%	2.3%	0.0%	4.1%	4.0%	0.7%	5.9%	53.2%	0.0%	0.0%
536	5	SURG	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK	7,523	0.5%	2.0%	0.0%	3.5%	3.2%	0.7%	4.7%	55.3%	0.0%	0.0%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	Raw case count	Routine -				Coronary Care	Other I/P services	Pharmacy	Supplies	DME (sold)	DME (used/rented)
					Routine - Private	Semi-private	Routine - Ward	Intensive Care						
537	8	SURG	LOCAL EXCIS & REMOV OF INT FIX DEV EXCEPT HIP & FEMUR W CC	8,196	5.0%	12.9%	0.0%	2.6%	0.9%	1.0%	17.1%	14.5%	0.0%	0.0%
538	8	SURG	LOCAL EXCIS & REMOV OF INT FIX DEV EXCEPT HIP & FEMUR W/O CC	4,862	3.7%	10.0%	0.0%	0.6%	0.2%	0.7%	12.8%	20.0%	0.0%	0.0%
539	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR OR PROCEDURE W CC	4,666	3.5%	10.2%	0.0%	7.2%	2.0%	0.9%	20.5%	9.9%	0.0%	0.0%
540	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR OR PROCEDURE W/O CC	1,455	3.2%	10.6%	0.0%	3.8%	1.0%	0.5%	11.1%	12.4%	0.0%	0.0%
541	PRE	SURG	ECMO OR TRACH W MV 96+HRS OR PDX EXC FACE, MOUTH & NECK W MAJ O.R.	21,643	0.7%	2.1%	0.0%	20.5%	4.3%	1.4%	21.6%	8.9%	0.0%	0.0%
542	PRE	SURG	TRACH W MV 96+HRS OR PDX EXC FACE, MOUTH & NECK W/O MAJ O.R.	21,116	0.9%	3.2%	0.0%	23.1%	5.2%	1.2%	21.7%	6.2%	0.0%	0.0%
543	1	SURG	CRANIOTOMY W MAJOR DEVICE IMPLANT OR ACUTE COMPLEX CNS PRINCIPAL DIAGNOSIS	5,219	1.3%	3.7%	0.0%	19.7%	1.9%	1.6%	17.8%	11.5%	0.0%	0.0%
544	8	SURG	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	404,171	2.8%	7.9%	0.0%	0.9%	0.3%	0.5%	7.8%	42.8%	0.0%	0.0%
545	8	SURG	REVISION OF HIP OR KNEE REPLACEMENT	40,723	2.7%	7.4%	0.0%	1.2%	0.3%	0.5%	8.0%	42.4%	0.0%	0.0%
546	8	SURG	SPINAL FUSION EXC CERV WITH CURVATURE OF THE SPINE OR MALIG	2,095	1.8%	4.5%	0.0%	4.4%	0.4%	0.8%	7.6%	47.6%	0.0%	0.0%
547	5	SURG	CORONARY BYPASS W CARDIAC CATH W MAJOR CV DX	30,935	1.0%	2.3%	0.0%	9.0%	6.1%	1.4%	14.5%	15.6%	0.0%	0.0%
548	5	SURG	CORONARY BYPASS W CARDIAC CATH W/O MAJOR CV DX	30,209	1.1%	2.2%	0.0%	7.3%	5.2%	1.4%	12.6%	17.7%	0.0%	0.0%
549	5	SURG	CORONARY BYPASS W/O CARDIAC CATH W MAJOR CV DX	12,558	1.1%	2.1%	0.0%	10.2%	6.0%	1.3%	14.7%	16.6%	0.0%	0.0%
550	5	SURG	CORONARY BYPASS W/O CARDIAC CATH W/O MAJOR CV DX	32,049	1.1%	2.0%	0.0%	8.1%	5.0%	1.3%	12.8%	19.1%	0.0%	0.0%
551	5	SURG	PERMANENT CARDIAC PACEMAKER IMPL W MAJ CV DX OR AICD LEAD OR GNRTR	51,370	1.1%	4.2%	0.0%	6.3%	5.0%	0.9%	6.2%	43.4%	0.0%	0.0%
552	5	SURG	OTHER PERMANENT CARDIAC PACEMAKER IMPLANT W/O MAJOR CV DX	77,491	0.9%	3.5%	0.0%	4.7%	3.7%	0.9%	3.9%	49.4%	0.0%	0.0%
553	5	SURG	OTHER VASCULAR PROCEDURES W CC W MAJOR CV DX	36,701	2.6%	8.5%	0.0%	8.1%	3.7%	1.7%	13.9%	14.1%	0.0%	0.0%
554	5	SURG	OTHER VASCULAR PROCEDURES W CC W/O MAJOR CV DX	71,370	2.5%	8.7%	0.0%	5.2%	2.0%	1.7%	11.5%	18.4%	0.0%	0.0%
555	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W MAJOR CV DX	41,449	1.1%	3.4%	0.0%	5.8%	6.0%	1.0%	10.8%	21.3%	0.0%	0.0%
556	5	SURG	PERCUTANEOUS CARDIOVASC PROC W NON-DRUG-ELUTING STENT W/O MAJ CV DX	23,685	0.7%	1.7%	0.0%	2.8%	2.6%	0.8%	9.0%	29.0%	0.0%	0.0%
557	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W MAJOR CV DX	108,286	0.7%	2.1%	0.0%	4.5%	4.5%	0.8%	9.3%	32.7%	0.0%	0.0%
558	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W/O MAJ CV DX	170,167	0.5%	1.4%	0.0%	2.3%	2.1%	0.6%	7.5%	38.4%	0.0%	0.0%
559	1	MED	ACUTE ISCHEMIC STROKE WITH USE OF THROMBOLYTIC AGENT	2,401	1.6%	6.6%	0.0%	16.7%	3.6%	2.3%	22.7%	5.2%	0.0%	0.0%
560	1	MED	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM	3,173	3.5%	9.3%	0.0%	9.7%	2.3%	2.1%	34.3%	4.0%	0.0%	0.0%
561	1	MED	NON-BACTERIAL INFECTIONS OF NERVOUS SYSTEM EXCEPT VIRAL MENINGITIS	2,632	3.9%	11.8%	0.0%	10.4%	2.7%	1.3%	25.2%	4.3%	0.0%	0.0%
562	1	MED	SEIZURE AGE > 17 W CC	49,210	3.5%	14.7%	0.0%	10.4%	4.0%	1.7%	13.8%	4.2%	0.0%	0.0%
563	1	MED	SEIZURE AGE > 17 W/O CC	19,540	4.2%	17.7%	0.1%	8.1%	3.7%	2.1%	7.8%	2.6%	0.0%	0.0%
564	1	MED	HEADACHES AGE >17	14,652	5.6%	15.9%	0.0%	4.1%	2.1%	2.5%	14.3%	2.9%	0.0%	0.0%
565	4	MED	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT 96+ HOURS	41,790	1.1%	3.9%	0.0%	21.2%	5.5%	1.2%	22.6%	5.8%	0.0%	0.0%
566	4	MED	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT < 96 HOURS	63,900	1.7%	5.4%	0.0%	17.3%	4.7%	1.3%	20.1%	6.5%	0.0%	0.0%
567	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROC AGE > 17 W CC W MAJOR GI DX	9,947	2.2%	6.5%	0.0%	13.4%	2.5%	1.0%	25.0%	9.0%	0.0%	0.0%
568	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES PROC AGE > 17 W CC W/O MAJOR GI DX	15,552	3.1%	8.8%	0.0%	11.0%	2.0%	0.9%	19.5%	12.4%	0.0%	0.0%
569	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC W MAJOR GI DX	56,829	2.9%	8.8%	0.0%	10.6%	2.3%	0.9%	24.1%	10.2%	0.0%	0.0%
570	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC W/O MAJOR GI DX	67,586	3.8%	11.3%	0.0%	7.5%	1.8%	0.8%	18.7%	13.5%	0.0%	0.0%
571	6	MED	MAJOR ESOPHAGEAL DISORDERS	10,239	3.6%	11.5%	0.0%	10.3%	3.2%	1.2%	17.4%	5.9%	0.0%	0.0%
572	8	MED	MAJOR GASTROINTESTINAL DISORDERS AND PERITONEAL INFECTIONS	42,874	7.2%	20.8%	0.0%	4.6%	2.3%	1.1%	20.6%	4.7%	0.0%	0.0%
573	11	SURG	MAJOR BLADDER PROCEDURES	6,194	3.9%	9.2%	0.0%	8.3%	1.4%	0.9%	16.8%	13.3%	0.0%	0.0%
574	16	MED	MAJOR HEMATOLOGIC/IMMUNOLOGIC DIAG EXC SICKLE CELL CRISIS & COAGUL	24,402	7.1%	14.1%	0.0%	3.7%	1.4%	1.0%	32.3%	3.6%	0.0%	0.0%
575	18	MED	SEPTICEMIA W MV96+ HOURS AGE >17	8,808	1.0%	3.4%	0.0%	19.4%	5.3%	1.1%	25.5%	5.6%	0.0%	0.0%
576	18	MED	SEPTICEMIA W/O MV96+ HOURS AGE >17	243,162	4.3%	14.5%	0.0%	9.2%	3.2%	1.1%	22.5%	6.3%	0.0%	0.0%
577	1	SURG	CAROTID ARTERY STENT PROCEDURE	2,431	0.8%	2.0%	0.0%	3.3%	3.1%	1.3%	5.7%	38.4%	0.0%	0.0%
578	18	SURG	INFECTIOUS & PARASITIC DISEASES W OR PROCEDURE	30,959	3.3%	9.9%	0.0%	10.9%	3.2%	1.2%	23.1%	8.8%	0.0%	0.0%
579	18	SURG	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W OR PROCEDURE	19,311	5.6%	12.5%	0.0%	7.0%	2.2%	1.3%	21.8%	9.3%	0.0%	0.0%
				11,064,379	3.1%	10.9%	0.0%	7.4%	3.2%	1.3%	14.9%	15.3%	0.006%	0.000%
			MINIMUM	1	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%
			25th PERCENTILE	1,434	2.9%	9.8%	0.0%	2.5%	0.6%	0.9%	11.2%	4.4%	0.0%	0.0%
			MEDIAN	5,095	3.9%	13.8%	0.0%	4.4%	1.4%	1.2%	14.0%	7.3%	0.0%	0.0%
			75 PERCENTILE	19,642	5.3%	18.6%	0.0%	7.7%	2.6%	1.7%	18.5%	12.8%	0.0%	0.0%
			MAXIMUM	630,619	11.0%	76.7%	0.4%	36.5%	9.6%	21.3%	56.5%	68.4%	0.2%	0.0%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	CMS_05	CMS_05	CMS_05	CMS_06	CMS_13	CMS_13	CMS_07	CMS_13	CMS_10	CMS_09	CMS_11
				Raw case count	Physical therapy	Occupational therapy	Speech therapy	Inhalation therapy	Blood products	Blood administration	Operating room	Lithotripsy	Cardiology	Anesthesia
1	1	SURG	CRANIOTOMY AGE >17 W CC	22,105	0.9%	0.5%	0.4%	3.2%	0.0%	1.0%	15.8%	0.0%	1.0%	8.9%
2	1	SURG	CRANIOTOMY AGE >17 W/O CC	9,118	0.7%	0.4%	0.2%	0.6%	0.0%	0.3%	24.6%	0.0%	0.5%	5.6%
3	1	SURG *	CRANIOTOMY AGE 0-17	4	0.2%	0.1%	0.0%	0.1%	0.0%	0.1%	21.8%	0.0%	0.0%	5.4%
6	1	SURG	CARPAL TUNNEL RELEASE	303	0.7%	0.6%	0.1%	0.7%	0.0%	0.4%	33.7%	0.0%	2.2%	6.1%
7	1	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W CC	13,863	1.1%	0.4%	0.4%	2.0%	0.0%	0.6%	10.3%	0.0%	3.1%	9.6%
8	1	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W/O CC	3,164	0.4%	0.2%	0.1%	0.3%	0.0%	0.1%	22.7%	0.0%	1.7%	3.3%
9	1	MED	SPINAL DISORDERS & INJURIES	1,648	1.7%	0.9%	0.3%	3.4%	0.0%	0.3%	0.7%	0.0%	2.3%	10.0%
10	1	MED	NERVOUS SYSTEM NEOPLASMS W CC	18,044	1.2%	0.5%	0.4%	1.7%	0.0%	0.4%	2.2%	0.0%	1.8%	10.6%
11	1	MED	NERVOUS SYSTEM NEOPLASMS W/O CC	2,857	1.0%	0.5%	0.3%	0.4%	0.0%	0.1%	8.8%	0.0%	2.2%	8.9%
12	1	MED	DEGENERATIVE NERVOUS SYSTEM DISORDERS	51,217	2.1%	0.8%	0.7%	1.6%	0.1%	0.3%	0.9%	0.0%	3.6%	13.7%
13	1	MED	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA	6,544	2.6%	1.3%	0.5%	1.0%	0.1%	0.4%	1.2%	0.0%	1.8%	10.4%
14	1	MED	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION	243,794	2.0%	1.1%	1.4%	2.4%	0.0%	0.3%	0.7%	0.0%	6.1%	12.3%
15	1	MED	NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT	35,120	1.8%	0.9%	1.0%	1.4%	0.0%	0.2%	1.7%	0.0%	7.4%	12.1%
16	1	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W CC	15,919	1.4%	0.5%	0.6%	2.5%	0.0%	0.4%	0.8%	0.0%	3.7%	16.8%
17	1	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC	2,696	1.2%	0.4%	0.4%	0.6%	0.0%	0.0%	1.3%	0.0%	6.0%	14.9%
18	1	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W CC	30,391	1.3%	0.4%	0.1%	1.4%	0.0%	0.4%	1.3%	0.0%	3.3%	14.9%
19	1	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W/O CC	7,780	1.2%	0.4%	0.2%	0.5%	0.1%	0.1%	1.4%	0.0%	4.2%	11.8%
21	1	MED	VIRAL MENINGITIS	2,046	0.9%	0.3%	0.3%	1.9%	0.0%	0.2%	1.0%	0.0%	2.1%	16.9%
22	1	MED	HYPERTENSIVE ENCEPHALOPATHY	3,002	1.0%	0.4%	0.4%	2.0%	0.0%	0.1%	0.5%	0.0%	5.4%	14.7%
23	1	MED	NONTRAUMATIC STUPOR & COMA	9,695	1.4%	0.5%	0.4%	2.3%	0.0%	0.2%	0.4%	0.0%	4.2%	17.3%
26	1	MED	SEIZURE & HEADACHE AGE 0-17	12	0.3%	0.0%	0.5%	6.0%	0.0%	0.2%	2.5%	0.0%	0.7%	21.0%
27	1	MED	TRAUMATIC STUPOR & COMA, COMA >1 HR	5,372	1.0%	0.5%	0.4%	5.4%	0.1%	1.3%	0.6%	0.0%	2.3%	11.0%
28	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W CC	17,681	1.5%	0.7%	0.6%	2.5%	0.0%	1.3%	0.6%	0.0%	2.8%	11.6%
29	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W/O CC	5,838	1.7%	0.7%	0.5%	0.9%	0.0%	0.5%	0.4%	0.0%	2.7%	9.1%
31	1	MED	CONCUSSION AGE >17 W CC	4,435	1.7%	0.6%	0.3%	2.0%	0.0%	0.5%	0.3%	0.0%	4.0%	11.7%
32	1	MED	CONCUSSION AGE >17 W/O CC	1,599	1.5%	0.5%	0.2%	0.6%	0.0%	0.1%	0.1%	0.0%	3.8%	10.1%
34	1	MED	OTHER DISORDERS OF NERVOUS SYSTEM W CC	25,029	1.8%	0.7%	0.4%	2.7%	0.0%	0.3%	1.1%	0.0%	4.3%	14.4%
35	1	MED	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC	7,102	1.9%	0.7%	0.3%	0.5%	0.0%	0.1%	1.9%	0.0%	5.2%	12.2%
36	2	SURG	RETINAL PROCEDURES	325	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	46.1%	0.0%	1.4%	2.9%
37	2	SURG	ORBITAL PROCEDURES	1,125	0.6%	0.2%	0.1%	1.2%	0.0%	0.5%	26.7%	0.0%	1.5%	7.2%
38	2	SURG	PRIMARY IRIS PROCEDURES	47	0.2%	0.2%	0.1%	0.8%	0.0%	0.0%	14.8%	0.0%	2.5%	8.5%
39	2	SURG	LENS PROCEDURES WITH OR WITHOUT VITRECTOMY	343	0.1%	0.0%	0.0%	0.8%	0.0%	0.2%	32.5%	0.0%	2.1%	5.8%
40	2	SURG	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17	1,228	0.3%	0.1%	0.0%	0.7%	0.0%	0.2%	25.7%	0.0%	2.1%	7.0%
42	2	SURG	INTRAOCULAR PROCEDURES EXCEPT RETINA, IRIS & LENS	1,798	0.1%	0.1%	0.0%	0.4%	0.0%	0.1%	38.3%	0.0%	1.4%	4.6%
43	2	MED	HYPHEMA	100	1.2%	0.3%	0.1%	1.0%	0.0%	0.6%	0.3%	0.0%	3.9%	11.8%
44	2	MED	ACUTE MAJOR EYE INFECTIONS	1,136	0.5%	0.1%	0.0%	0.8%	0.0%	0.4%	0.8%	0.0%	1.3%	11.5%
45	2	MED	NEUROLOGICAL EYE DISORDERS	2,571	0.6%	0.3%	0.1%	0.7%	0.0%	0.1%	1.2%	0.0%	7.5%	12.8%
46	2	MED	OTHER DISORDERS OF THE EYE AGE >17 W CC	3,654	1.1%	0.3%	0.1%	1.3%	0.0%	0.5%	0.8%	0.0%	3.5%	13.1%
47	2	MED	OTHER DISORDERS OF THE EYE AGE >17 W/O CC	1,202	0.8%	0.3%	0.1%	0.4%	0.0%	0.2%	1.3%	0.0%	3.7%	11.5%
49	3	SURG	MAJOR HEAD & NECK PROCEDURES	2,231	0.3%	0.1%	0.2%	2.2%	0.0%	0.3%	34.3%	0.0%	0.8%	8.0%
50	3	SURG	SIALOADENECTOMY	1,939	0.1%	0.0%	0.0%	0.6%	0.0%	0.1%	50.3%	0.0%	0.9%	5.7%
51	3	SURG	SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY	196	0.2%	0.0%	0.1%	1.0%	0.0%	0.1%	35.6%	0.0%	1.1%	7.7%
52	3	SURG	CLEFT LIP & PALATE REPAIR	200	0.0%	0.0%	0.0%	3.1%	0.0%	0.0%	41.3%	0.0%	1.0%	4.0%
53	3	SURG	SINUS & MASTOID PROCEDURES AGE >17	1,918	0.3%	0.1%	0.1%	1.8%	0.0%	0.5%	31.0%	0.0%	1.2%	5.5%
55	3	SURG	MISCELLANEOUS EAR, NOSE, MOUTH & THROAT PROCEDURES	1,226	0.3%	0.1%	0.2%	2.4%	0.0%	0.3%	32.9%	0.0%	1.4%	6.3%
56	3	SURG	RHINOPLASTY	396	0.2%	0.1%	0.0%	1.4%	0.0%	1.1%	36.2%	0.0%	1.8%	5.8%
57	3	SURG	T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	673	0.2%	0.1%	0.2%	3.4%	0.0%	0.4%	21.2%	0.0%	1.3%	9.2%
59	3	SURG	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	103	0.0%	0.1%	0.1%	1.9%	0.0%	0.2%	28.3%	0.0%	1.0%	8.5%
60	3	SURG *	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0-17	4	0.0%	0.0%	0.0%	3.5%	0.0%	0.0%	15.6%	0.0%	2.1%	15.0%
61	3	SURG	MYRINGOTOMY W TUBE INSERTION AGE >17	182	0.4%	0.1%	0.2%	2.2%	0.0%	0.4%	19.2%	0.2%	1.5%	9.8%
62	3	SURG *	MYRINGOTOMY W TUBE INSERTION AGE 0-17	3	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	55.1%	0.0%	0.0%	10.0%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	CMS_05	CMS_05	CMS_05	CMS_06	CMS_13	CMS_13	CMS_07	CMS_13	CMS_10	CMS_09	CMS_11	
				Raw case count	Physical therapy	Occupational therapy	Speech therapy	Inhalation therapy	Blood products	Blood administration	Operating room	Lithotripsy	Cardiology	Anesthesia	Labs
63	3	SURG	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES	2,595	0.5%	0.2%	0.1%	2.3%	0.0%	0.8%	23.6%	0.0%	1.4%	4.4%	7.0%
64	3	MED	EAR, NOSE, MOUTH & THROAT MALIGNANCY	3,016	0.5%	0.2%	0.3%	2.9%	0.0%	1.0%	6.4%	0.0%	1.4%	1.1%	10.8%
65	3	MED	DYSEQUILIBRIUM	37,820	1.5%	0.4%	0.2%	0.7%	0.0%	0.1%	0.2%	0.0%	7.8%	0.0%	13.5%
66	3	MED	EPISTAXIS	7,492	0.5%	0.1%	0.1%	2.5%	0.1%	3.5%	4.6%	0.0%	3.0%	0.7%	15.3%
67	3	MED	EPIGLOTTITIS	346	0.3%	0.1%	0.2%	5.8%	0.0%	0.2%	2.2%	0.0%	1.9%	0.5%	11.9%
68	3	MED	OTITIS MEDIA & URI AGE >17 W CC	15,278	1.0%	0.3%	0.1%	4.9%	0.0%	0.3%	0.4%	0.0%	3.8%	0.1%	16.4%
69	3	MED	OTITIS MEDIA & URI AGE >17 W/O CC	4,091	0.9%	0.2%	0.1%	4.0%	0.0%	0.0%	0.4%	0.0%	3.8%	0.1%	15.1%
70	3	MED	OTITIS MEDIA & URI AGE 0-17	21	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.6%	0.0%	0.5%	0.2%	15.9%
71	3	MED	LARYNGOTRACHEITIS	55	0.3%	0.0%	0.2%	6.9%	0.0%	0.2%	0.8%	0.0%	2.5%	0.0%	12.2%
72	3	MED	NASAL TRAUMA & DEFORMITY	1,149	1.7%	0.5%	0.2%	1.4%	0.0%	0.9%	1.8%	0.0%	3.6%	0.4%	11.2%
73	3	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE >17	9,048	0.7%	0.2%	0.5%	4.6%	0.0%	0.4%	2.4%	0.0%	3.4%	0.4%	14.0%
74	3	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE 0-17	1	0.0%	0.0%	0.0%	5.3%	0.0%	1.9%	40.9%	0.0%	0.0%	1.1%	4.6%
75	4	SURG	MAJOR CHEST PROCEDURES	42,362	0.6%	0.1%	0.1%	5.6%	0.0%	0.8%	16.5%	0.0%	1.6%	2.8%	10.4%
76	4	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W CC	44,411	0.7%	0.2%	0.2%	6.1%	0.0%	0.8%	6.5%	0.0%	2.5%	0.8%	12.9%
77	4	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W/O CC	1,954	0.3%	0.1%	0.1%	3.4%	0.0%	0.2%	16.0%	0.0%	2.6%	2.4%	13.0%
78	4	MED	PULMONARY EMBOLISM	44,357	0.8%	0.2%	0.1%	3.3%	0.0%	0.3%	0.4%	0.0%	5.1%	0.0%	15.6%
79	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W CC	150,866	0.9%	0.2%	0.8%	8.0%	0.0%	0.5%	1.0%	0.0%	2.3%	0.1%	13.6%
80	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W/O CC	6,582	0.9%	0.3%	1.2%	7.6%	0.0%	0.1%	1.0%	0.0%	1.6%	0.1%	12.2%
81	4	MED *	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE 0-17	2	0.0%	0.0%	0.0%	12.2%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	12.0%
82	4	MED	RESPIRATORY NEOPLASMS	58,733	0.6%	0.2%	0.1%	4.9%	0.0%	0.7%	3.3%	0.0%	2.4%	0.4%	12.2%
83	4	MED	MAJOR CHEST TRAUMA W CC	6,149	2.2%	0.6%	0.2%	4.3%	0.0%	0.4%	0.5%	0.0%	3.1%	0.1%	11.1%
84	4	MED	MAJOR CHEST TRAUMA W/O CC	1,150	2.3%	0.7%	0.1%	2.1%	0.0%	0.1%	0.1%	0.0%	3.6%	0.0%	9.2%
85	4	MED	PLEURAL EFFUSION W CC	20,168	0.8%	0.2%	0.1%	4.2%	0.1%	0.8%	2.6%	0.0%	4.3%	0.3%	15.9%
86	4	MED	PLEURAL EFFUSION W/O CC	1,587	0.4%	0.1%	0.1%	2.4%	0.0%	0.2%	4.9%	0.0%	5.0%	0.6%	16.5%
87	4	MED	PULMONARY EDEMA & RESPIRATORY FAILURE	85,170	0.8%	0.2%	0.2%	12.2%	0.0%	0.3%	0.5%	0.0%	3.6%	0.0%	13.9%
88	4	MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	385,561	0.8%	0.2%	0.1%	11.4%	0.0%	0.2%	0.4%	0.0%	4.4%	0.1%	13.6%
89	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W CC	499,866	1.0%	0.3%	0.2%	7.7%	0.0%	0.4%	0.5%	0.0%	3.6%	0.1%	14.6%
90	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W/O CC	38,225	0.9%	0.2%	0.2%	6.7%	0.0%	0.1%	0.3%	0.0%	3.0%	0.0%	14.6%
91	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE 0-17	44	0.0%	0.0%	0.0%	8.5%	0.0%	0.9%	1.5%	0.0%	2.1%	0.6%	17.1%
92	4	MED	INTERSTITIAL LUNG DISEASE W CC	15,191	0.9%	0.2%	0.1%	7.8%	0.0%	0.4%	0.8%	0.0%	5.3%	0.1%	14.7%
93	4	MED	INTERSTITIAL LUNG DISEASE W/O CC	1,281	0.6%	0.2%	0.1%	5.8%	0.0%	0.1%	1.8%	0.0%	6.6%	0.2%	14.6%
94	4	MED	PNEUMOTHORAX W CC	12,426	0.9%	0.2%	0.1%	5.8%	0.0%	0.5%	2.5%	0.0%	2.3%	0.3%	10.1%
95	4	MED	PNEUMOTHORAX W/O CC	1,363	0.5%	0.2%	0.0%	2.9%	0.0%	0.1%	3.4%	0.0%	1.9%	0.4%	7.8%
96	4	MED	BRONCHITIS & ASTHMA AGE >17 W CC	52,952	0.8%	0.2%	0.1%	8.9%	0.0%	0.2%	0.4%	0.0%	4.5%	0.0%	14.8%
97	4	MED	BRONCHITIS & ASTHMA AGE >17 W/O CC	23,267	0.5%	0.1%	0.1%	11.0%	0.0%	0.0%	0.2%	0.0%	4.0%	0.0%	13.1%
98	4	MED	BRONCHITIS & ASTHMA AGE 0-17	9	0.0%	0.0%	0.0%	7.6%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	17.3%
99	4	MED	RESPIRATORY SIGNS & SYMPTOMS W CC	19,656	0.5%	0.2%	0.1%	3.7%	0.0%	0.4%	1.1%	0.0%	9.0%	0.1%	16.4%
100	4	MED	RESPIRATORY SIGNS & SYMPTOMS W/O CC	5,879	0.3%	0.1%	0.1%	2.1%	0.0%	0.1%	0.8%	0.0%	13.2%	0.1%	16.3%
101	4	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W CC	21,122	1.1%	0.3%	0.2%	4.9%	0.0%	0.4%	1.5%	0.0%	5.2%	0.2%	14.4%
102	4	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O CC	4,428	0.8%	0.2%	0.1%	2.6%	0.0%	0.1%	1.3%	0.0%	8.4%	0.2%	14.4%
103	PRE	SURG	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	704	0.4%	0.1%	0.1%	3.9%	0.2%	4.3%	9.7%	0.0%	4.1%	1.4%	11.7%
104	5	SURG	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W CARD CATH	18,986	0.4%	0.1%	0.1%	3.5%	0.1%	2.6%	15.9%	0.0%	8.3%	2.2%	9.3%
105	5	SURG	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W/O CARD CATH	30,122	0.4%	0.1%	0.1%	3.7%	0.2%	2.8%	20.0%	0.0%	2.6%	2.8%	9.0%
106	5	SURG	CORONARY BYPASS W PTCA	3,115	0.3%	0.1%	0.0%	3.3%	0.1%	2.4%	14.8%	0.0%	14.0%	2.1%	8.3%
108	5	SURG	OTHER CARDIOTHORACIC PROCEDURES	7,850	0.4%	0.1%	0.1%	3.7%	0.2%	2.7%	19.3%	0.0%	6.1%	2.6%	9.2%
110	5	SURG	MAJOR CARDIOVASCULAR PROCEDURES W CC	53,032	0.4%	0.1%	0.1%	3.6%	0.1%	1.9%	14.2%	0.0%	7.0%	2.2%	8.8%
111	5	SURG	MAJOR CARDIOVASCULAR PROCEDURES W/O CC	9,599	0.2%	0.0%	0.0%	0.7%	0.0%	0.6%	20.8%	0.0%	2.8%	3.1%	4.1%
113	5	SURG	AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB & TOE	32,851	1.1%	0.3%	0.1%	2.1%	0.1%	1.5%	14.6%	0.0%	1.9%	2.4%	10.8%
114	5	SURG	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	7,403	1.1%	0.2%	0.0%	1.7%	0.0%	0.6%	14.0%	0.0%	2.1%	2.3%	11.2%
117	5	SURG	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	4,975	0.3%	0.1%	0.1%	1.4%	0.0%	0.5%	18.5%	0.0%	7.3%	1.8%	8.4%
118	5	SURG	CARDIAC PACEMAKER DEVICE REPLACEMENT	6,925	0.2%	0.1%	0.0%	0.6%	0.0%	0.1%	15.9%	0.0%	5.9%	0.9%	4.8%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	CMS_05	CMS_05	CMS_05	CMS_06	CMS_13	CMS_13	CMS_07	CMS_13	CMS_10	CMS_09	CMS_11	
				Raw case count	Physical therapy	Occupational therapy	Speech therapy	Inhalation therapy	Blood products	Blood administration	Operating room	Lithotripsy	Cardiology	Anesthesia	Labs
119	5	SURG	VEIN LIGATION & STRIPPING	923	0.6%	0.1%	0.0%	1.7%	0.0%	1.3%	20.9%	0.0%	2.5%	3.8%	9.1%
120	5	SURG	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	31,832	0.7%	0.1%	0.1%	2.4%	0.1%	1.0%	13.3%	0.0%	2.9%	2.3%	11.2%
121	5	MED	CIRCULATORY DISORDERS W AMI & MAJOR COMP, DISCHARGED ALIVE	139,738	0.8%	0.2%	0.2%	3.9%	0.0%	0.7%	0.5%	0.0%	12.3%	0.1%	15.1%
122	5	MED	CIRCULATORY DISORDERS W AMI W/O MAJOR COMP, DISCHARGED ALIVE	49,041	0.4%	0.1%	0.0%	1.2%	0.0%	0.4%	0.5%	0.0%	23.4%	0.1%	13.5%
123	5	MED	CIRCULATORY DISORDERS W AMI, EXPIRED	28,700	0.2%	0.1%	0.1%	7.5%	0.1%	0.9%	0.7%	0.0%	7.4%	0.1%	15.9%
124	5	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH & COMPLEX DIAG	114,099	0.2%	0.1%	0.0%	1.7%	0.0%	0.2%	0.9%	0.0%	33.9%	0.2%	10.7%
125	5	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O COMPLEX DIAG	85,712	0.1%	0.0%	0.0%	0.7%	0.0%	0.1%	1.0%	0.0%	41.6%	0.3%	9.3%
126	5	MED	ACUTE & SUBACUTE ENDOCARDITIS	5,089	0.8%	0.3%	0.2%	3.0%	0.0%	1.0%	2.0%	0.0%	5.7%	0.2%	14.3%
127	5	MED	HEART FAILURE & SHOCK	630,619	0.9%	0.2%	0.1%	4.5%	0.0%	0.5%	0.5%	0.0%	7.1%	0.1%	17.0%
128	5	MED	DEEP VEIN THROMBOPHLEBITIS	4,110	0.8%	0.2%	0.1%	1.4%	0.0%	0.4%	0.7%	0.0%	2.2%	0.1%	15.4%
129	5	MED	CARDIAC ARREST, UNEXPLAINED	3,263	0.1%	0.0%	0.1%	12.4%	0.1%	0.6%	0.6%	0.0%	4.7%	0.0%	16.9%
130	5	MED	PERIPHERAL VASCULAR DISORDERS W CC	81,469	0.9%	0.2%	0.1%	1.8%	0.0%	0.8%	1.9%	0.0%	2.9%	0.2%	14.5%
131	5	MED	PERIPHERAL VASCULAR DISORDERS W/O CC	21,156	0.6%	0.1%	0.0%	0.5%	0.0%	0.2%	2.3%	0.0%	2.7%	0.2%	14.8%
132	5	MED	ATHEROSCLEROSIS W CC	95,585	0.3%	0.1%	0.0%	1.6%	0.0%	0.3%	0.3%	0.0%	10.8%	0.0%	17.5%
133	5	MED	ATHEROSCLEROSIS W/O CC	5,639	0.2%	0.1%	0.0%	0.8%	0.0%	0.1%	0.5%	0.0%	13.8%	0.1%	15.5%
134	5	MED	HYPERTENSION	37,372	0.7%	0.2%	0.1%	1.1%	0.0%	0.1%	0.5%	0.0%	8.5%	0.1%	16.3%
135	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W CC	6,758	0.9%	0.3%	0.1%	2.6%	0.0%	0.6%	0.9%	0.0%	10.1%	0.2%	16.3%
136	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W/O CC	899	0.6%	0.2%	0.0%	1.1%	0.0%	0.2%	0.8%	0.0%	15.0%	0.1%	14.8%
138	5	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	190,168	0.7%	0.2%	0.1%	2.3%	0.0%	0.3%	0.6%	0.0%	10.5%	0.1%	16.6%
139	5	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC	68,451	0.3%	0.1%	0.0%	0.7%	0.0%	0.0%	0.4%	0.0%	14.4%	0.1%	17.1%
140	5	MED	ANGINA PECTORIS	29,358	0.2%	0.1%	0.0%	1.6%	0.0%	0.2%	0.2%	0.0%	12.1%	0.0%	17.9%
141	5	MED	SYNCOPE & COLLAPSE W CC	114,694	1.2%	0.3%	0.1%	1.2%	0.0%	0.2%	0.4%	0.0%	9.8%	0.1%	16.1%
142	5	MED	SYNCOPE & COLLAPSE W/O CC	46,121	0.9%	0.2%	0.1%	0.5%	0.0%	0.1%	0.2%	0.0%	12.3%	0.0%	15.4%
143	5	MED	CHEST PAIN	220,210	0.3%	0.1%	0.0%	1.2%	0.0%	0.1%	0.2%	0.0%	12.0%	0.0%	17.6%
144	5	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W CC	93,898	0.6%	0.2%	0.1%	2.6%	0.1%	1.1%	4.0%	0.0%	4.3%	0.5%	14.7%
145	5	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W/O CC	5,127	0.5%	0.1%	0.1%	0.8%	0.0%	0.3%	3.0%	0.0%	10.1%	0.3%	15.5%
146	6	SURG	RECTAL RESECTION W CC	9,791	0.8%	0.2%	0.0%	2.4%	0.1%	1.1%	20.2%	0.0%	1.4%	3.5%	9.2%
147	6	SURG	RECTAL RESECTION W/O CC	2,408	0.4%	0.1%	0.0%	1.0%	0.0%	0.4%	29.8%	0.0%	0.6%	4.9%	6.4%
149	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC	18,079	0.4%	0.1%	0.0%	1.0%	0.0%	0.3%	27.2%	0.0%	0.7%	4.8%	6.5%
150	6	SURG	PERITONEAL ADHESIOLYSIS W CC	21,274	0.8%	0.2%	0.1%	3.4%	0.0%	0.7%	13.5%	0.0%	1.4%	2.4%	9.9%
151	6	SURG	PERITONEAL ADHESIOLYSIS W/O CC	4,887	0.4%	0.1%	0.0%	1.0%	0.0%	0.1%	25.8%	0.0%	0.7%	4.6%	5.8%
152	6	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W CC	4,604	0.7%	0.2%	0.0%	2.2%	0.1%	0.9%	19.6%	0.0%	1.2%	3.4%	9.1%
153	6	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC	1,874	0.4%	0.0%	0.0%	0.8%	0.0%	0.2%	29.8%	0.0%	0.5%	5.4%	5.7%
155	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W/O CC	5,426	0.3%	0.1%	0.0%	1.3%	0.0%	0.3%	32.6%	0.0%	0.7%	5.6%	5.0%
156	6	SURG *	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE 0-17	2	0.0%	0.0%	0.0%	4.5%	0.0%	14.5%	3.0%	0.0%	0.3%	0.4%	16.4%
157	6	SURG	ANAL & STOMAL PROCEDURES W CC	7,521	0.7%	0.1%	0.0%	1.8%	0.1%	1.4%	17.8%	0.0%	1.7%	3.2%	11.9%
158	6	SURG	ANAL & STOMAL PROCEDURES W/O CC	3,435	0.3%	0.0%	0.0%	0.6%	0.0%	0.2%	31.5%	0.0%	1.1%	5.8%	7.8%
159	6	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W CC	17,474	0.6%	0.1%	0.0%	2.8%	0.0%	0.5%	23.0%	0.0%	1.6%	4.2%	7.6%
160	6	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W/O CC	10,778	0.3%	0.0%	0.0%	1.0%	0.0%	0.1%	33.9%	0.0%	0.7%	6.2%	3.8%
161	6	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W CC	9,419	0.6%	0.1%	0.1%	2.2%	0.0%	0.6%	22.9%	0.0%	2.2%	4.0%	8.7%
162	6	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W/O CC	4,668	0.3%	0.1%	0.0%	0.5%	0.0%	0.1%	35.4%	0.0%	1.4%	6.3%	5.2%
163	6	SURG *	HERNIA PROCEDURES AGE 0-17	8	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	47.6%	0.0%	0.0%	6.8%	7.0%
164	6	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC	5,526	0.6%	0.1%	0.0%	3.0%	0.0%	0.5%	13.4%	0.0%	1.6%	2.3%	9.7%
165	6	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	2,224	0.2%	0.0%	0.0%	0.9%	0.0%	0.1%	20.8%	0.0%	0.7%	3.7%	7.2%
166	6	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	4,672	0.4%	0.1%	0.0%	1.8%	0.0%	0.6%	19.1%	0.0%	1.6%	3.4%	8.5%
167	6	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	4,237	0.1%	0.0%	0.0%	0.5%	0.0%	0.1%	25.9%	0.0%	0.8%	4.5%	6.0%
168	3	SURG	MOUTH PROCEDURES W CC	1,496	0.3%	0.1%	0.2%	2.9%	0.0%	0.8%	21.5%	0.0%	1.6%	4.1%	10.4%
169	3	SURG	MOUTH PROCEDURES W/O CC	796	0.1%	0.0%	0.1%	1.0%	0.0%	0.1%	39.7%	0.0%	0.8%	7.3%	7.6%
170	6	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W CC	16,601	0.6%	0.2%	0.1%	2.6%	0.1%	1.8%	10.1%	0.0%	1.7%	1.5%	12.4%
171	6	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC	1,327	0.2%	0.0%	0.0%	0.8%	0.0%	0.4%	24.1%	0.0%	1.3%	3.7%	8.3%
172	6	MED	DIGESTIVE MALIGNANCY W CC	30,562	0.5%	0.1%	0.1%	1.6%	0.1%	2.0%	3.8%	0.0%	1.9%	0.6%	15.2%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	CMS_05	CMS_05	CMS_05	CMS_06	CMS_13	CMS_13	CMS_07	CMS_13	CMS_10	CMS_09	CMS_11	
				Raw case count	Physical therapy	Occupational therapy	Speech therapy	Inhalation therapy	Blood products	Blood administration	Operating room	Lithotripsy	Cardiology	Anesthesia	Labs
173	6	MED	DIGESTIVE MALIGNANCY W/O CC	2,112	0.2%	0.1%	0.0%	0.4%	0.1%	1.0%	8.0%	0.0%	2.0%	1.5%	16.0%
174	6	MED	G.I. HEMORRHAGE W CC	237,045	0.6%	0.2%	0.1%	1.9%	0.2%	5.6%	3.4%	0.0%	2.7%	0.6%	21.8%
175	6	MED	G.I. HEMORRHAGE W/O CC	27,532	0.3%	0.1%	0.0%	0.5%	0.1%	3.1%	4.9%	0.0%	2.0%	0.8%	24.6%
176	6	MED	COMPLICATED PEPTIC ULCER	13,609	0.6%	0.1%	0.1%	1.7%	0.1%	2.5%	3.5%	0.0%	2.9%	0.6%	20.4%
177	6	MED	UNCOMPLICATED PEPTIC ULCER W CC	7,309	0.6%	0.1%	0.1%	1.3%	0.1%	1.2%	3.5%	0.0%	4.1%	0.6%	20.7%
178	6	MED	UNCOMPLICATED PEPTIC ULCER W/O CC	2,419	0.2%	0.0%	0.0%	0.5%	0.1%	0.7%	4.1%	0.0%	5.7%	0.8%	21.8%
179	6	MED	INFLAMMATORY BOWEL DISEASE	13,275	0.5%	0.1%	0.0%	1.0%	0.0%	1.1%	2.3%	0.0%	1.6%	0.4%	17.9%
180	6	MED	G.I. OBSTRUCTION W CC	84,287	0.7%	0.2%	0.1%	2.1%	0.0%	0.4%	1.1%	0.0%	1.9%	0.1%	14.4%
181	6	MED	G.I. OBSTRUCTION W/O CC	23,320	0.3%	0.1%	0.0%	0.4%	0.0%	0.1%	0.7%	0.0%	1.3%	0.1%	13.2%
182	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W CC	236,040	0.6%	0.2%	0.1%	1.4%	0.0%	0.4%	1.7%	0.0%	3.4%	0.3%	17.2%
183	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W/O CC	73,354	0.3%	0.1%	0.1%	0.5%	0.0%	0.1%	1.7%	0.0%	5.0%	0.3%	16.1%
184	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE 0-17	51	0.0%	0.0%	0.1%	0.9%	0.0%	0.1%	1.5%	0.0%	0.8%	0.1%	17.7%
185	3	MED	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE >17	5,515	0.8%	0.2%	0.2%	1.6%	0.1%	1.2%	1.8%	0.0%	2.6%	0.3%	13.0%
186	3	MED *	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE 0-17	6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	21.3%
187	3	MED	DENTAL EXTRACTIONS & RESTORATIONS	541	0.3%	0.1%	0.1%	1.8%	0.0%	1.4%	18.7%	0.0%	2.2%	3.7%	10.5%
188	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W CC	80,123	0.6%	0.2%	0.1%	2.0%	0.1%	1.5%	3.1%	0.0%	2.1%	0.5%	18.0%
189	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W/O CC	11,347	0.3%	0.1%	0.0%	0.5%	0.0%	0.4%	5.0%	0.0%	1.8%	0.9%	18.7%
190	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 0-17	7	0.0%	0.0%	0.0%	0.2%	0.0%	2.3%	3.3%	0.0%	0.9%	1.1%	14.1%
191	7	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W CC	9,540	0.6%	0.2%	0.0%	2.9%	0.1%	2.0%	15.3%	0.0%	1.1%	2.8%	12.4%
192	7	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W/O CC	1,193	0.5%	0.1%	0.0%	1.1%	0.1%	0.7%	27.9%	0.0%	0.5%	5.3%	10.3%
193	7	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W CC	3,886	0.7%	0.2%	0.0%	2.8%	0.1%	1.1%	14.2%	0.0%	1.4%	2.5%	12.3%
194	7	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W/O CC	409	0.4%	0.1%	0.0%	1.0%	0.0%	0.5%	24.6%	0.0%	0.9%	4.1%	10.4%
195	7	SURG	CHOLECYSTECTOMY W C.D.E. W CC	2,722	0.7%	0.1%	0.0%	2.7%	0.0%	0.7%	16.4%	0.0%	1.6%	2.8%	12.0%
196	7	SURG	CHOLECYSTECTOMY W C.D.E. W/O CC	563	0.2%	0.0%	0.0%	0.9%	0.0%	0.2%	26.4%	0.0%	0.8%	4.6%	9.2%
197	7	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W CC	15,394	0.7%	0.1%	0.1%	3.0%	0.1%	0.9%	15.3%	0.0%	1.9%	2.6%	11.5%
198	7	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W/O CC	3,809	0.3%	0.0%	0.0%	1.0%	0.0%	0.2%	26.8%	0.0%	1.1%	4.8%	7.7%
199	7	SURG	HEPATOBIILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY	1,320	0.5%	0.1%	0.0%	1.9%	0.0%	1.0%	16.9%	0.0%	1.1%	2.9%	12.6%
200	7	SURG	HEPATOBIILIARY DIAGNOSTIC PROCEDURE FOR NON-MALIGNANCY	889	0.6%	0.1%	0.0%	2.9%	0.1%	1.8%	11.4%	0.0%	1.5%	2.0%	14.4%
201	7	SURG	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES	2,425	0.6%	0.2%	0.1%	2.4%	0.2%	1.7%	8.0%	0.0%	1.4%	1.1%	13.7%
202	7	MED	CIRRHOIS & ALCOHOLIC HEPATITIS	25,340	0.7%	0.2%	0.1%	2.3%	0.2%	3.4%	2.0%	0.0%	2.3%	0.2%	20.3%
203	7	MED	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS	29,760	0.5%	0.1%	0.1%	1.3%	0.1%	1.2%	3.9%	0.0%	1.4%	0.5%	16.0%
204	7	MED	DISORDERS OF PANCREAS EXCEPT MALIGNANCY	64,155	0.5%	0.1%	0.0%	1.6%	0.0%	0.4%	1.5%	0.0%	2.1%	0.3%	18.5%
205	7	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA W CC	29,252	0.8%	0.2%	0.1%	2.1%	0.2%	1.9%	1.5%	0.0%	2.1%	0.1%	20.2%
206	7	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA W/O CC	1,804	0.3%	0.1%	0.0%	0.4%	0.0%	0.3%	2.8%	0.0%	1.7%	0.4%	20.8%
207	7	MED	DISORDERS OF THE BILIARY TRACT W CC	34,462	0.5%	0.1%	0.1%	1.6%	0.0%	0.6%	3.0%	0.0%	3.0%	0.5%	18.5%
208	7	MED	DISORDERS OF THE BILIARY TRACT W/O CC	8,603	0.2%	0.0%	0.0%	0.6%	0.0%	0.1%	4.2%	0.0%	3.1%	0.7%	19.7%
210	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W CC	119,159	2.4%	0.5%	0.1%	1.9%	0.1%	2.1%	18.1%	0.0%	2.2%	2.9%	8.9%
211	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W/O CC	24,192	2.9%	0.5%	0.0%	0.7%	0.1%	1.3%	22.6%	0.0%	1.4%	3.7%	6.5%
212	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 0-17	5	1.2%	0.0%	0.0%	0.0%	0.0%	0.2%	44.7%	0.0%	0.0%	7.0%	3.4%
213	8	SURG	AMPUTATION FOR MUSCULOSKELETAL SYSTEM & CONN TISSUE DISORDERS	9,150	1.2%	0.3%	0.1%	1.9%	0.1%	1.3%	17.0%	0.0%	1.4%	2.9%	10.7%
216	8	SURG	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	18,014	1.1%	0.3%	0.0%	1.0%	0.0%	0.4%	16.1%	0.0%	1.1%	2.4%	7.0%
217	8	SURG	WIND DEBRID & SKN GRFT EXCEPT HAND, FOR MUSCLESKELET & CONN TISS DIS	14,956	1.4%	0.3%	0.1%	2.1%	0.1%	1.2%	15.1%	0.0%	1.2%	2.6%	9.8%
218	8	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W CC	27,359	1.9%	0.4%	0.0%	1.5%	0.0%	0.8%	22.8%	0.0%	1.9%	4.0%	6.6%
219	8	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W/O CC	19,101	2.1%	0.4%	0.0%	0.5%	0.0%	0.2%	30.8%	0.0%	1.0%	5.4%	3.4%
223	8	SURG	MAJOR SHOULDER/ELBOW PROC, OR OTHER UPPER EXTREMITY PROC W CC	12,053	1.2%	0.5%	0.0%	1.2%	0.0%	0.3%	28.9%	0.0%	1.7%	5.1%	5.2%
224	8	SURG	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC, W/O CC	9,247	0.8%	0.4%	0.0%	0.4%	0.0%	0.0%	36.7%	0.0%	1.0%	6.5%	2.7%
225	8	SURG	FOOT PROCEDURES	5,855	1.5%	0.2%	0.0%	1.0%	0.0%	0.3%	22.8%	0.0%	1.3%	3.8%	8.4%
226	8	SURG	SOFT TISSUE PROCEDURES W CC	6,199	1.5%	0.4%	0.1%	1.7%	0.0%	0.8%	18.9%	0.0%	1.6%	3.3%	10.5%
227	8	SURG	SOFT TISSUE PROCEDURES W/O CC	4,468	1.9%	0.4%	0.0%	0.5%	0.0%	0.2%	36.0%	0.0%	0.7%	6.4%	4.6%
228	8	SURG	MAJOR THUMB OR JOINT PROC, OR OTH HAND OR WRIST PROC W CC	2,388	0.8%	0.6%	0.0%	1.0%	0.0%	0.4%	26.3%	0.0%	1.5%	4.3%	7.7%
229	8	SURG	HAND OR WRIST PROC, EXCEPT MAJOR JOINT PROC, W/O CC	996	0.4%	0.4%	0.0%	0.3%	0.0%	0.0%	34.8%	0.0%	1.0%	6.1%	5.2%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	CMS_05	CMS_05	CMS_05	CMS_06	CMS_13	CMS_13	CMS_07	CMS_13	CMS_10	CMS_09	CMS_11	
				Raw case count	Physical therapy	Occupational therapy	Speech therapy	Inhalation therapy	Blood products	Blood administration	Operating room	Lithotripsy	Cardiology	Anesthesia	Labs
230	8	SURG	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES OF HIP & FEMUR	2,325	2.2%	0.4%	0.0%	1.2%	0.1%	1.4%	23.7%	0.0%	1.2%	4.0%	9.2%
232	8	SURG	ARTHROSCOPY	540	1.2%	0.3%	0.0%	0.7%	0.0%	0.3%	35.0%	0.0%	1.2%	5.6%	4.4%
233	8	SURG	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W CC	16,227	1.2%	0.4%	0.1%	1.7%	0.0%	0.6%	13.5%	0.0%	1.5%	1.9%	7.2%
234	8	SURG	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W/O CC	7,937	0.8%	0.2%	0.0%	0.3%	0.0%	0.1%	20.8%	0.0%	0.7%	3.2%	3.3%
235	8	MED	FRACTURES OF FEMUR	4,473	2.4%	0.4%	0.1%	1.9%	0.1%	1.3%	1.9%	0.0%	3.0%	0.3%	12.5%
236	8	MED	FRACTURES OF HIP & PELVIS	38,224	3.6%	0.7%	0.1%	2.0%	0.0%	0.7%	0.6%	0.0%	3.1%	0.1%	12.0%
237	8	MED	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH	1,745	3.6%	0.8%	0.1%	1.2%	0.0%	0.3%	2.4%	0.0%	2.0%	0.5%	9.7%
238	8	MED	OSTEOMYELITIS	8,936	1.1%	0.2%	0.1%	1.6%	0.1%	0.5%	2.5%	0.0%	1.7%	0.2%	12.4%
239	8	MED	PATHOLOGICAL FRACTURES & MUSCULOSKELETAL & CONN TISS MALIGNANCY	38,354	1.9%	0.5%	0.1%	2.0%	0.0%	0.7%	1.0%	0.0%	1.8%	0.1%	10.2%
240	8	MED	CONNECTIVE TISSUE DISORDERS W CC	11,713	1.1%	0.4%	0.1%	2.2%	0.1%	3.0%	1.8%	0.0%	3.4%	0.2%	16.9%
241	8	MED	CONNECTIVE TISSUE DISORDERS W/O CC	2,522	1.5%	0.5%	0.1%	0.5%	0.4%	1.4%	1.1%	0.0%	3.1%	0.1%	14.7%
242	8	MED	SEPTIC ARTHRITIS	2,494	1.4%	0.3%	0.1%	1.3%	0.0%	0.8%	2.8%	0.0%	2.5%	0.3%	15.0%
243	8	MED	MEDICAL BACK PROBLEMS	93,055	2.6%	0.7%	0.1%	1.5%	0.0%	0.2%	1.5%	0.0%	2.6%	0.2%	10.2%
244	8	MED	BONE DISEASES & SPECIFIC ARTHROPATHIES W CC	15,368	2.5%	0.7%	0.1%	1.5%	0.0%	0.5%	1.2%	0.0%	3.4%	0.2%	15.0%
245	8	MED	BONE DISEASES & SPECIFIC ARTHROPATHIES W/O CC	5,303	3.0%	0.8%	0.0%	0.5%	0.0%	0.2%	2.9%	0.0%	2.8%	0.5%	12.4%
246	8	MED	NON-SPECIFIC ARTHROPATHIES	1,240	1.9%	0.5%	0.0%	1.0%	0.0%	0.2%	0.5%	0.0%	5.1%	0.1%	16.5%
247	8	MED	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE	19,555	2.4%	0.7%	0.1%	1.1%	0.0%	0.2%	0.7%	0.0%	4.6%	0.1%	13.0%
248	8	MED	TENDONITIS, MYOSITIS & BURSIITIS	14,725	2.1%	0.6%	0.2%	1.6%	0.0%	0.4%	0.9%	0.0%	4.0%	0.1%	16.4%
249	8	MED	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	12,544	2.6%	0.4%	0.1%	1.2%	0.0%	0.5%	11.1%	0.0%	2.0%	2.2%	10.1%
250	8	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W CC	3,828	2.6%	1.0%	0.1%	1.6%	0.0%	0.4%	2.5%	0.0%	3.9%	0.5%	11.8%
251	8	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W/O CC	1,837	2.7%	1.0%	0.1%	0.6%	0.0%	0.1%	5.0%	0.0%	3.3%	0.9%	9.1%
253	8	MED	FX, SPRN, STRN & DISL OF UPARM,LOWLEG EX FOOT AGE >17 W CC	23,076	3.1%	0.9%	0.1%	2.1%	0.0%	0.7%	1.8%	0.0%	3.3%	0.3%	12.0%
254	8	MED	FX, SPRN, STRN & DISL OF UPARM,LOWLEG EX FOOT AGE >17 W/O CC	9,312	4.0%	1.0%	0.0%	0.6%	0.0%	0.2%	2.9%	0.0%	2.6%	0.6%	8.7%
256	8	MED	OTHER MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE DIAGNOSES	6,749	1.7%	0.4%	0.1%	1.6%	0.0%	0.6%	2.4%	0.0%	2.3%	0.3%	12.9%
257	9	SURG	TOTAL MASTECTOMY FOR MALIGNANCY W CC	12,362	0.3%	0.1%	0.0%	1.0%	0.0%	0.5%	38.4%	0.0%	1.0%	6.9%	8.8%
258	9	SURG	TOTAL MASTECTOMY FOR MALIGNANCY W/O CC	10,604	0.2%	0.1%	0.0%	0.4%	0.0%	0.1%	43.8%	0.0%	0.6%	7.8%	7.6%
259	9	SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY W CC	2,575	0.3%	0.1%	0.0%	1.0%	0.0%	0.4%	32.3%	0.0%	1.4%	5.7%	11.3%
260	9	SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY W/O CC	2,492	0.1%	0.0%	0.0%	0.3%	0.0%	0.0%	41.4%	0.0%	0.8%	7.4%	10.1%
261	9	SURG	BREAST PROC FOR NON-MALIGNANCY EXCEPT BIOPSY & LOCAL EXCISION	1,427	0.1%	0.0%	0.0%	0.7%	0.0%	0.3%	45.5%	0.0%	0.6%	8.2%	4.7%
262	9	SURG	BREAST BIOPSY & LOCAL EXCISION FOR NON-MALIGNANCY	574	0.4%	0.1%	0.0%	1.6%	0.2%	0.3%	21.2%	0.0%	1.9%	4.1%	11.9%
263	9	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W CC	21,013	1.3%	0.2%	0.1%	1.9%	0.0%	0.8%	11.1%	0.0%	1.2%	1.9%	10.9%
264	9	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W/O CC	3,553	1.2%	0.2%	0.0%	0.8%	0.0%	0.3%	19.6%	0.0%	0.8%	3.6%	8.6%
265	9	SURG	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W CC	3,813	1.0%	0.2%	0.1%	1.7%	0.1%	0.9%	24.8%	0.0%	1.2%	4.6%	9.4%
266	9	SURG	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W/O CC	2,054	0.6%	0.1%	0.0%	0.4%	0.0%	0.2%	38.6%	0.0%	0.7%	6.9%	6.6%
267	9	SURG	PERIANAL & PILONIDAL PROCEDURES	251	0.8%	0.0%	0.0%	0.8%	0.0%	0.6%	25.5%	0.0%	1.1%	4.7%	9.3%
268	9	SURG	SKIN, SUBCUTANEOUS TISSUE & BREAST PLASTIC PROCEDURES	908	0.5%	0.1%	0.0%	1.5%	0.1%	0.8%	36.6%	0.0%	0.9%	7.1%	6.7%
269	9	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W CC	10,043	0.9%	0.2%	0.1%	1.7%	0.1%	0.9%	13.8%	0.0%	1.6%	2.3%	11.2%
270	9	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W/O CC	2,362	0.8%	0.2%	0.0%	0.7%	0.0%	0.2%	26.1%	0.0%	0.9%	4.9%	8.8%
271	9	MED	SKIN ULCERS	19,600	1.8%	0.3%	0.1%	1.8%	0.0%	0.7%	1.2%	0.0%	1.8%	0.1%	13.8%
272	9	MED	MAJOR SKIN DISORDERS W CC	5,593	1.1%	0.3%	0.1%	2.0%	0.0%	0.6%	0.7%	0.0%	2.4%	0.1%	13.9%
273	9	MED	MAJOR SKIN DISORDERS W/O CC	1,203	1.2%	0.2%	0.0%	0.7%	0.0%	0.1%	0.9%	0.0%	3.2%	0.1%	12.5%
274	9	MED	MALIGNANT BREAST DISORDERS W CC	2,046	0.8%	0.2%	0.1%	1.8%	0.0%	1.3%	1.6%	0.0%	1.9%	0.2%	12.1%
275	9	MED	MALIGNANT BREAST DISORDERS W/O CC	169	0.5%	0.1%	0.0%	0.5%	0.0%	0.6%	3.5%	0.0%	2.6%	0.7%	10.8%
276	9	MED	NON-MALIGNANT BREAST DISORDERS	1,426	0.4%	0.1%	0.0%	1.6%	0.0%	0.5%	5.0%	0.0%	2.0%	1.2%	13.5%
277	9	MED	CELLULITIS AGE >17 W CC	107,912	1.3%	0.3%	0.1%	2.0%	0.0%	0.4%	1.5%	0.0%	2.3%	0.2%	14.0%
278	9	MED	CELLULITIS AGE >17 W/O CC	30,874	1.1%	0.2%	0.0%	0.6%	0.0%	0.1%	2.2%	0.0%	1.4%	0.4%	12.6%
279	9	MED	CELLULITIS AGE 0-17	3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.0%
280	9	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W CC	17,614	2.5%	0.7%	0.1%	1.7%	0.1%	1.3%	1.1%	0.0%	3.1%	0.2%	12.8%
281	9	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W/O CC	5,851	2.9%	0.7%	0.1%	0.6%	0.0%	0.3%	1.1%	0.0%	2.8%	0.2%	10.0%
283	9	MED	MINOR SKIN DISORDERS W CC	6,022	1.0%	0.3%	0.1%	1.9%	0.0%	0.5%	1.5%	0.0%	2.9%	0.2%	15.6%
284	9	MED	MINOR SKIN DISORDERS W/O CC	1,643	1.1%	0.2%	0.1%	0.9%	0.0%	0.1%	2.7%	0.0%	2.9%	0.5%	14.7%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	CMS_05	CMS_05	CMS_05	CMS_06	CMS_13	CMS_13	CMS_07	CMS_13	CMS_10	CMS_09	CMS_11	
				Raw case count	Physical therapy	Occupational therapy	Speech therapy	Inhalation therapy	Blood products	Blood administration	Operating room	Lithotripsy	Cardiology	Anesthesia	Labs
285	10	SURG	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT.& METABOL DISORDERS	7,358	1.2%	0.2%	0.0%	1.5%	0.0%	0.9%	14.5%	0.0%	1.7%	2.2%	11.5%
286	10	SURG	ADRENAL & PITUITARY PROCEDURES	2,466	0.5%	0.2%	0.1%	1.7%	0.0%	0.5%	29.5%	0.0%	0.9%	5.0%	9.8%
287	10	SURG	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DISORDERS	5,150	1.4%	0.2%	0.1%	2.0%	0.0%	0.7%	9.0%	0.0%	1.6%	1.4%	12.0%
288	10	SURG	O.R. PROCEDURES FOR OBESITY	9,913	0.4%	0.1%	0.0%	2.5%	0.0%	0.3%	27.3%	0.0%	0.5%	4.6%	4.7%
289	10	SURG	PARATHYROID PROCEDURES	6,051	0.2%	0.1%	0.0%	0.8%	0.0%	0.1%	39.8%	0.0%	1.1%	7.5%	12.9%
290	10	SURG	THYROID PROCEDURES	10,776	0.1%	0.0%	0.0%	1.1%	0.0%	0.1%	44.6%	0.0%	0.9%	8.2%	7.9%
291	10	SURG	THYROGLOSSAL PROCEDURES	50	0.1%	0.0%	0.0%	0.4%	0.0%	0.0%	48.0%	0.0%	1.2%	8.0%	4.5%
292	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W CC	6,848	0.8%	0.2%	0.1%	2.0%	0.0%	0.9%	12.2%	0.0%	2.1%	1.7%	11.3%
293	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W/O CC	307	0.6%	0.1%	0.0%	0.9%	0.0%	0.2%	23.4%	0.0%	1.6%	3.0%	8.4%
294	10	MED	DIABETES AGE >35	88,637	1.0%	0.3%	0.1%	1.9%	0.0%	0.4%	0.7%	0.0%	3.8%	0.1%	18.7%
295	10	MED	DIABETES AGE 0-35	3,752	0.2%	0.1%	0.0%	1.2%	0.0%	0.3%	0.8%	0.0%	1.8%	0.1%	22.4%
296	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W CC	228,622	1.3%	0.4%	0.3%	2.1%	0.0%	0.6%	1.0%	0.0%	3.5%	0.1%	17.7%
297	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W/O CC	39,075	1.4%	0.4%	0.2%	0.8%	0.0%	0.2%	0.6%	0.0%	4.0%	0.1%	18.8%
298	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE 0-17	86	0.1%	0.1%	0.0%	2.1%	0.0%	0.1%	1.3%	0.0%	0.7%	0.2%	15.5%
299	10	MED	INBORN ERRORS OF METABOLISM	1,280	0.6%	0.2%	0.1%	1.8%	0.0%	0.8%	0.9%	0.0%	2.3%	0.1%	13.0%
300	10	MED	ENDOCRINE DISORDERS W CC	20,114	1.4%	0.4%	0.2%	2.3%	0.0%	0.4%	0.7%	0.0%	3.7%	0.1%	18.2%
301	10	MED	ENDOCRINE DISORDERS W/O CC	3,502	1.1%	0.3%	0.1%	0.7%	0.0%	0.1%	0.6%	0.0%	4.0%	0.1%	16.3%
302	11	SURG	KIDNEY TRANSPLANT	8,398	0.2%	0.1%	0.0%	0.8%	0.1%	1.4%	19.4%	0.0%	0.7%	3.7%	12.6%
303	11	SURG	KIDNEY AND URETER PROCEDURES FOR NEOPLASM	18,225	0.5%	0.1%	0.0%	2.0%	0.1%	1.3%	27.1%	0.0%	1.1%	4.5%	8.9%
304	11	SURG	KIDNEY AND URETER PROCEDURES FOR NON-NEOPLASM WITHOUT CC	12,477	0.5%	0.1%	0.0%	1.6%	0.1%	1.3%	17.7%	0.1%	1.2%	2.7%	10.4%
305	11	SURG	KIDNEY AND URETER PROCEDURES FOR NON-NEOPLASM WITHOUT CC	2,594	0.1%	0.0%	0.0%	0.5%	0.0%	0.3%	34.8%	0.4%	0.4%	5.8%	4.9%
306	11	SURG	PROSTATECTOMY W CC	5,534	0.6%	0.1%	0.1%	1.2%	0.1%	1.1%	22.5%	0.1%	1.9%	3.7%	10.9%
307	11	SURG	PROSTATECTOMY W/O CC	1,855	0.1%	0.0%	0.0%	0.3%	0.0%	0.2%	40.8%	0.2%	0.8%	6.4%	6.8%
308	11	SURG	MINOR BLADDER PROCEDURES W CC	5,125	0.5%	0.1%	0.1%	1.7%	0.0%	1.3%	23.2%	0.1%	1.3%	4.0%	8.5%
309	11	SURG	MINOR BLADDER PROCEDURES W/O CC	2,869	0.1%	0.0%	0.0%	0.3%	0.0%	0.1%	34.4%	0.0%	0.5%	6.1%	2.7%
310	11	SURG	TRANSURETHRAL PROCEDURES W CC	23,959	0.4%	0.1%	0.0%	1.2%	0.0%	1.2%	20.7%	0.3%	1.8%	3.6%	10.2%
311	11	SURG	TRANSURETHRAL PROCEDURES W/O CC	5,616	0.1%	0.0%	0.0%	0.3%	0.0%	0.2%	33.7%	0.7%	1.0%	5.9%	6.6%
312	11	SURG	URETHRAL PROCEDURES, AGE >17 W CC	1,276	0.6%	0.1%	0.1%	1.3%	0.0%	0.7%	23.3%	0.1%	1.7%	4.3%	9.9%
313	11	SURG	URETHRAL PROCEDURES, AGE >17 W/O CC	488	0.2%	0.0%	0.0%	0.3%	0.0%	0.1%	41.5%	0.3%	0.6%	8.1%	5.0%
315	11	SURG	OTHER KIDNEY & URINARY TRACT O.R. PROCEDURES	32,551	0.5%	0.1%	0.1%	1.4%	0.1%	1.0%	15.5%	0.0%	3.1%	1.9%	9.8%
316	11	MED	RENAL FAILURE	182,854	1.0%	0.3%	0.2%	2.6%	0.1%	1.2%	1.7%	0.0%	3.6%	0.2%	17.9%
317	11	MED	ADMIT FOR RENAL DIALYSIS	2,366	0.5%	0.2%	0.1%	1.5%	0.1%	1.3%	6.7%	0.0%	3.0%	0.8%	14.5%
318	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W CC	5,493	0.6%	0.2%	0.1%	1.8%	0.1%	1.8%	4.5%	0.0%	2.2%	0.6%	12.7%
319	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W/O CC	358	0.2%	0.0%	0.0%	0.4%	0.1%	1.0%	16.1%	0.2%	1.5%	2.6%	10.4%
320	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W CC	206,671	1.3%	0.4%	0.3%	2.0%	0.0%	0.5%	1.1%	0.0%	2.7%	0.1%	16.8%
321	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W/O CC	28,834	1.3%	0.4%	0.2%	0.8%	0.0%	0.1%	0.8%	0.0%	2.5%	0.1%	16.5%
322	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE 0-17	48	0.0%	0.1%	0.0%	1.3%	0.0%	0.0%	1.5%	0.0%	1.1%	0.5%	24.7%
323	11	MED	URINARY STONES W CC, &/OR ESW LITHOTRIPSY	18,754	0.3%	0.1%	0.0%	0.9%	0.0%	0.3%	13.5%	3.0%	1.9%	2.4%	10.1%
324	11	MED	URINARY STONES W/O CC	4,214	0.1%	0.0%	0.0%	0.3%	0.0%	0.1%	15.0%	0.7%	1.2%	2.6%	8.3%
325	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W CC	9,078	0.7%	0.2%	0.1%	1.5%	0.1%	2.0%	3.5%	0.0%	2.5%	0.6%	15.4%
326	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W/O CC	2,425	0.5%	0.2%	0.1%	0.4%	0.0%	0.9%	5.3%	0.0%	1.9%	1.0%	13.6%
327	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE 0-17	6	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	5.0%	0.0%	0.0%	0.5%	21.9%
328	11	MED	URETHRAL STRICTURE AGE >17 W CC	547	0.6%	0.1%	0.1%	1.4%	0.1%	0.4%	16.0%	0.1%	2.5%	3.2%	11.9%
329	11	MED	URETHRAL STRICTURE AGE >17 W/O CC	53	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	30.0%	0.0%	2.7%	5.4%	8.1%
331	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W CC	50,499	0.8%	0.2%	0.1%	1.9%	0.1%	1.1%	3.1%	0.0%	2.7%	0.4%	16.8%
332	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W/O CC	3,517	0.5%	0.1%	0.0%	0.5%	0.0%	0.6%	6.5%	0.1%	2.6%	0.9%	15.2%
333	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 0-17	213	0.1%	0.0%	0.0%	0.8%	0.0%	1.1%	4.9%	0.0%	0.3%	1.1%	18.9%
334	12	SURG	MAJOR MALE PELVIC PROCEDURES W CC	8,590	0.2%	0.0%	0.0%	1.0%	0.1%	1.6%	36.3%	0.0%	1.0%	6.2%	8.6%
335	12	SURG	MAJOR MALE PELVIC PROCEDURES W/O CC	10,870	0.1%	0.0%	0.0%	0.4%	0.0%	0.8%	43.6%	0.0%	0.4%	7.4%	7.2%
336	12	SURG	TRANSURETHRAL PROSTATECTOMY W CC	27,394	0.3%	0.1%	0.0%	0.9%	0.0%	0.8%	32.5%	0.0%	1.5%	5.2%	8.5%
337	12	SURG	TRANSURETHRAL PROSTATECTOMY W/O CC	20,734	0.1%	0.0%	0.0%	0.3%	0.0%	0.1%	42.9%	0.0%	0.9%	6.7%	6.1%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	Case MDC type	DRG name	CMS_05	CMS_05	CMS_05	CMS_06	CMS_13	CMS_13	CMS_07	CMS_13	CMS_10	CMS_09	CMS_11		
			Raw case count	Physical therapy	Occupational therapy	Speech therapy	Inhalation therapy	Blood products	Blood administration	Operating room	Lithotripsy	Cardiology	Anesthesia	Labs	
338	12	SURG	TESTES PROCEDURES, FOR MALIGNANCY	624	0.6%	0.1%	0.1%	1.1%	0.0%	1.4%	22.9%	0.1%	1.7%	3.9%	11.1%
339	12	SURG	TESTES PROCEDURES, NON-MALIGNANCY AGE >17	1,147	0.6%	0.1%	0.1%	1.8%	0.0%	0.6%	23.4%	0.0%	1.4%	4.2%	9.9%
341	12	SURG	PENIS PROCEDURES	2,889	0.3%	0.0%	0.0%	0.7%	0.0%	0.3%	26.4%	0.0%	0.9%	4.6%	5.0%
342	12	SURG	CIRCUMCISION AGE >17	428	0.4%	0.1%	0.0%	0.8%	0.0%	0.3%	36.1%	0.0%	1.2%	5.8%	8.5%
344	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY	2,241	0.2%	0.0%	0.0%	0.6%	0.0%	0.8%	21.7%	0.0%	0.9%	3.7%	5.0%
345	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIGNANCY	1,281	0.7%	0.1%	0.1%	1.8%	0.0%	1.1%	20.6%	0.0%	1.6%	3.6%	9.9%
346	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W CC	3,643	0.9%	0.2%	0.1%	1.6%	0.1%	2.0%	3.4%	0.0%	2.0%	0.5%	13.0%
347	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W/O CC	200	0.4%	0.1%	0.0%	1.2%	0.1%	1.0%	11.4%	0.0%	2.4%	2.3%	10.6%
348	12	MED	BENIGN PROSTATIC HYPERTROPHY W CC	3,890	0.9%	0.3%	0.1%	1.6%	0.0%	0.6%	5.4%	0.0%	3.1%	0.9%	14.7%
349	12	MED	BENIGN PROSTATIC HYPERTROPHY W/O CC	493	0.7%	0.2%	0.0%	0.4%	0.0%	0.2%	8.5%	0.0%	3.2%	1.4%	13.6%
350	12	MED	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM	6,524	0.8%	0.2%	0.1%	1.6%	0.0%	0.4%	3.2%	0.0%	1.9%	0.6%	15.1%
352	12	MED	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES	1,001	1.1%	0.2%	0.1%	1.9%	0.1%	1.2%	6.6%	0.0%	2.2%	1.1%	13.7%
353	13	SURG	PELVIC EVISCERATION, RADICAL HYSTERECTOMY & RADICAL VULVECTOMY	2,675	0.7%	0.1%	0.0%	1.8%	0.0%	1.4%	26.9%	0.0%	0.9%	4.9%	12.1%
354	13	SURG	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W CC	7,108	0.5%	0.1%	0.0%	1.8%	0.0%	1.1%	27.7%	0.0%	1.3%	4.7%	12.0%
355	13	SURG	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W/O CC	4,540	0.2%	0.0%	0.0%	0.8%	0.0%	0.2%	38.4%	0.0%	0.5%	6.6%	9.8%
356	13	SURG	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	20,604	0.1%	0.0%	0.0%	0.6%	0.0%	0.1%	40.6%	0.0%	0.8%	7.1%	3.8%
357	13	SURG	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY	5,100	0.6%	0.1%	0.0%	2.1%	0.1%	1.7%	21.6%	0.0%	1.2%	3.8%	12.9%
358	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W CC	18,981	0.3%	0.0%	0.0%	1.4%	0.0%	0.6%	33.5%	0.0%	1.2%	6.0%	8.2%
359	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC	25,835	0.1%	0.0%	0.0%	0.6%	0.0%	0.1%	41.9%	0.0%	0.5%	7.4%	5.9%
360	13	SURG	VAGINA, CERVIX & VULVA PROCEDURES	12,936	0.2%	0.0%	0.0%	0.7%	0.0%	0.3%	39.4%	0.0%	0.9%	7.1%	5.0%
361	13	SURG	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	240	0.1%	0.0%	0.0%	1.2%	0.0%	0.9%	32.1%	0.0%	0.7%	5.1%	6.1%
363	13	SURG	D&C, CONIZATION & RADIO-IMPLANT, FOR MALIGNANCY	2,034	0.3%	0.1%	0.0%	0.8%	0.0%	1.3%	16.2%	0.0%	1.4%	3.2%	8.3%
364	13	SURG	D&C, CONIZATION EXCEPT FOR MALIGNANCY	1,722	0.4%	0.1%	0.0%	1.1%	0.1%	1.6%	19.5%	0.1%	2.5%	3.8%	12.7%
365	13	SURG	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES	1,468	0.6%	0.1%	0.0%	2.0%	0.0%	1.1%	18.2%	0.0%	1.1%	3.1%	10.5%
366	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W CC	4,223	0.6%	0.1%	0.0%	1.5%	0.1%	1.6%	2.9%	0.0%	1.8%	0.4%	12.9%
367	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC	365	0.5%	0.1%	0.0%	0.4%	0.0%	1.0%	3.6%	0.0%	2.2%	0.7%	10.6%
368	13	MED	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM	3,778	0.9%	0.3%	0.3%	2.0%	0.0%	0.6%	1.5%	0.0%	1.6%	0.2%	15.0%
369	13	MED	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS	3,285	0.5%	0.1%	0.0%	1.0%	0.1%	1.5%	3.5%	0.0%	2.6%	0.5%	14.6%
370	14	SURG	CESAREAN SECTION W CC	1,810	0.1%	0.0%	0.0%	1.1%	0.1%	0.8%	28.3%	0.0%	0.6%	3.9%	10.6%
371	14	SURG	CESAREAN SECTION W/O CC	2,242	0.0%	0.0%	0.0%	0.5%	0.0%	0.2%	36.7%	0.0%	0.2%	4.6%	7.0%
372	14	MED	VAGINAL DELIVERY W COMPLICATING DIAGNOSES	1,163	0.0%	0.0%	0.0%	0.3%	0.0%	0.6%	30.9%	0.0%	0.5%	2.3%	11.3%
373	14	MED	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	4,595	0.0%	0.0%	0.0%	0.2%	0.0%	0.1%	37.9%	0.0%	0.2%	2.7%	7.5%
374	14	SURG	VAGINAL DELIVERY W STERILIZATION &/OR D&C	113	0.0%	0.0%	0.0%	1.0%	0.0%	1.1%	37.4%	0.0%	0.1%	6.0%	8.0%
375	14	SURG	VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL &/OR D&C	9	0.0%	0.0%	0.0%	0.8%	0.0%	2.3%	17.8%	0.0%	1.5%	2.2%	13.4%
376	14	MED	POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE	395	0.2%	0.0%	0.0%	2.8%	0.1%	0.6%	3.3%	0.0%	3.0%	0.2%	16.3%
377	14	SURG	POSTPARTUM & POST ABORTION DIAGNOSES W O.R. PROCEDURE	95	0.3%	0.0%	0.0%	0.8%	0.0%	1.3%	18.3%	0.0%	1.1%	3.3%	8.8%
378	14	MED	ECTOPIC PREGNANCY	179	0.0%	0.0%	0.0%	0.7%	0.0%	1.5%	28.9%	0.0%	0.4%	5.1%	11.0%
379	14	MED	THREATENED ABORTION	471	0.1%	0.0%	0.0%	0.3%	0.0%	0.6%	10.8%	0.0%	0.6%	0.1%	12.7%
380	14	MED	ABORTION W/O D&C	90	0.0%	0.0%	0.0%	0.2%	0.1%	1.5%	14.7%	0.0%	0.3%	0.6%	20.0%
381	14	SURG	ABORTION W D&C, ASPIRATION CURETTAGE OR HYSTEROTOMY	156	0.0%	0.0%	0.0%	0.6%	0.1%	1.4%	27.7%	0.0%	0.4%	5.2%	14.3%
382	14	MED	FALSE LABOR	39	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	16.7%	0.0%	0.1%	0.0%	12.3%
383	14	MED	OTHER ANTEPARTUM DIAGNOSES W MEDICAL COMPLICATIONS	2,290	0.1%	0.1%	0.0%	1.9%	0.1%	1.0%	4.9%	0.0%	1.6%	0.3%	15.3%
384	14	MED	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	121	0.1%	0.0%	0.0%	0.2%	0.0%	0.4%	16.1%	0.0%	0.5%	1.8%	12.9%
392	16	SURG	SPLENECTOMY AGE >17	1,985	0.5%	0.1%	0.0%	2.9%	0.2%	4.7%	13.8%	0.0%	1.3%	2.4%	11.3%
394	16	SURG	OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS	2,541	0.6%	0.2%	0.1%	2.2%	0.1%	2.8%	13.8%	0.0%	1.7%	2.3%	13.6%
395	16	MED	RED BLOOD CELL DISORDERS AGE >17	91,202	0.6%	0.2%	0.1%	1.8%	0.4%	6.9%	2.1%	0.0%	3.2%	0.3%	21.4%
396	16	MED	RED BLOOD CELL DISORDERS AGE 0-17	11	0.2%	0.0%	0.0%	0.4%	0.0%	3.1%	1.1%	0.0%	2.4%	0.3%	17.7%
397	16	MED	COAGULATION DISORDERS	15,508	0.6%	0.2%	0.1%	1.6%	0.4%	6.3%	1.0%	0.0%	1.9%	0.1%	14.5%
398	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W CC	6,043	0.8%	0.2%	0.1%	2.3%	0.2%	2.3%	1.4%	0.0%	2.9%	0.1%	16.9%
399	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC	989	0.6%	0.2%	0.1%	0.8%	0.4%	1.6%	1.9%	0.0%	2.9%	0.3%	15.8%
401	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W CC	6,001	0.7%	0.2%	0.1%	1.9%	0.1%	1.9%	8.2%	0.0%	1.8%	1.2%	14.0%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	CMS_05	CMS_05	CMS_05	CMS_06	CMS_13	CMS_13	CMS_07	CMS_13	CMS_10	CMS_09	CMS_11	
				Raw case count	Physical therapy	Occupational therapy	Speech therapy	Inhalation therapy	Blood products	Blood administration	Operating room	Lithotripsy	Cardiology	Anesthesia	Labs
402	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W/O CC	1,309	0.4%	0.1%	0.0%	0.4%	0.0%	0.5%	20.9%	0.0%	1.1%	3.8%	12.6%
403	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W CC	29,455	0.7%	0.2%	0.1%	1.9%	0.2%	4.5%	1.9%	0.0%	1.9%	0.2%	15.6%
404	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC	3,427	0.6%	0.2%	0.1%	0.5%	0.1%	2.9%	3.7%	0.0%	1.4%	0.5%	14.0%
406	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W CC	2,102	0.6%	0.2%	0.1%	3.0%	0.1%	1.9%	18.0%	0.0%	1.4%	3.3%	11.0%
407	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W/O CC	554	0.3%	0.0%	0.0%	0.8%	0.0%	0.6%	37.2%	0.0%	0.6%	6.7%	8.4%
408	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R.PROC	1,905	0.5%	0.1%	0.1%	1.7%	0.0%	2.0%	11.6%	0.0%	1.5%	1.9%	10.7%
409	17	MED	RADIOTHERAPY	1,613	0.6%	0.2%	0.1%	1.4%	0.0%	0.5%	1.1%	0.0%	0.5%	0.1%	6.3%
410	17	MED	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS	26,485	0.2%	0.0%	0.0%	0.5%	0.0%	0.9%	2.1%	0.0%	0.5%	0.2%	6.7%
411	17	MED *	HISTORY OF MALIGNANCY W/O ENDOSCOPY	4	0.0%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	3.9%	0.0%	15.3%
412	17	MED *	HISTORY OF MALIGNANCY W ENDOSCOPY	12	0.7%	1.2%	0.0%	3.6%	0.0%	0.5%	9.5%	0.0%	1.5%	2.0%	16.0%
413	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W CC	5,145	0.7%	0.2%	0.1%	2.0%	0.1%	1.3%	2.7%	0.0%	2.0%	0.3%	13.0%
414	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC	444	0.5%	0.1%	0.1%	0.6%	0.0%	0.6%	4.4%	0.0%	2.1%	0.7%	11.6%
417	18	MED	SEPTICEMIA AGE 0-17	29	0.0%	0.0%	0.0%	1.7%	0.0%	0.7%	2.6%	0.0%	1.9%	0.4%	18.9%
418	18	MED	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS	27,021	1.2%	0.2%	0.1%	1.6%	0.0%	0.6%	4.1%	0.0%	1.5%	0.6%	12.8%
419	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W CC	15,598	0.7%	0.2%	0.1%	1.7%	0.0%	0.9%	0.7%	0.0%	3.6%	0.1%	17.8%
420	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W/O CC	2,655	0.8%	0.2%	0.1%	1.0%	0.0%	0.2%	0.5%	0.0%	4.0%	0.1%	18.2%
421	18	MED	VIRAL ILLNESS AGE >17	11,059	0.9%	0.3%	0.1%	2.0%	0.0%	0.4%	0.6%	0.0%	3.8%	0.1%	18.2%
422	18	MED	VIRAL ILLNESS & FEVER OF UNKNOWN ORIGIN AGE 0-17	53	0.0%	0.0%	0.0%	0.8%	0.3%	0.1%	0.7%	0.0%	0.8%	0.1%	17.9%
423	18	MED	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES	8,177	0.8%	0.2%	0.2%	4.1%	0.1%	1.3%	1.5%	0.0%	2.1%	0.2%	14.6%
424	19	SURG	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	951	1.0%	0.4%	0.2%	1.2%	0.0%	0.4%	11.1%	0.0%	3.4%	1.7%	9.8%
425	19	MED	ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	12,335	1.2%	0.5%	0.3%	1.5%	0.0%	0.1%	0.3%	0.0%	6.1%	0.0%	17.1%
426	19	MED	DEPRESSIVE NEUROSES	3,758	0.8%	0.7%	0.1%	1.0%	0.0%	0.1%	0.3%	0.0%	3.6%	0.1%	13.8%
427	19	MED	NEUROSES EXCEPT DEPRESSIVE	1,313	0.7%	0.7%	0.1%	0.8%	0.0%	0.1%	0.5%	0.0%	3.1%	0.0%	13.1%
428	19	MED	DISORDERS OF PERSONALITY & IMPULSE CONTROL	739	0.5%	0.9%	0.1%	0.4%	0.0%	0.1%	0.3%	0.0%	1.3%	0.1%	10.3%
429	19	MED	ORGANIC DISTURBANCES & MENTAL RETARDATION	22,299	1.9%	0.7%	0.4%	1.1%	0.0%	0.1%	0.3%	0.0%	3.8%	0.0%	14.9%
430	19	MED	PSYCHOSES	66,511	0.3%	0.7%	0.0%	0.5%	0.0%	0.0%	0.2%	0.0%	1.1%	0.1%	9.5%
431	19	MED	CHILDHOOD MENTAL DISORDERS	296	0.5%	0.7%	0.1%	0.5%	0.0%	0.1%	0.7%	0.0%	1.4%	0.2%	11.6%
432	19	MED	OTHER MENTAL DISORDER DIAGNOSES	363	1.0%	0.5%	0.2%	1.4%	0.0%	0.1%	1.2%	0.0%	4.2%	0.1%	17.5%
433	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA	4,444	0.2%	0.1%	0.0%	0.8%	0.0%	0.1%	0.2%	0.0%	1.9%	0.0%	17.8%
439	21	SURG	SKIN GRAFTS FOR INJURIES	1,554	0.8%	0.2%	0.0%	3.2%	0.0%	1.1%	21.8%	0.0%	0.8%	3.8%	7.6%
440	21	SURG	WOUND DEBRIDEMENTS FOR INJURIES	4,770	1.3%	0.3%	0.1%	2.2%	0.0%	1.0%	17.6%	0.0%	1.0%	3.2%	9.1%
441	21	SURG	HAND PROCEDURES FOR INJURIES	688	0.5%	0.4%	0.0%	0.9%	0.0%	0.5%	32.5%	0.0%	1.4%	5.7%	6.9%
442	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W CC	16,814	0.8%	0.2%	0.1%	2.9%	0.1%	1.7%	14.8%	0.0%	1.5%	2.5%	10.5%
443	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W/O CC	3,181	0.8%	0.1%	0.0%	0.9%	0.0%	0.6%	28.6%	0.0%	0.9%	4.9%	6.4%
444	21	MED	TRAUMATIC INJURY AGE >17 W CC	5,449	2.1%	0.5%	0.2%	1.8%	0.0%	0.7%	1.0%	0.0%	3.3%	0.2%	12.9%
445	21	MED	TRAUMATIC INJURY AGE >17 W/O CC	1,960	2.2%	0.6%	0.1%	0.7%	0.0%	0.2%	1.3%	0.0%	2.9%	0.2%	10.6%
447	21	MED	ALLERGIC REACTIONS AGE >17	5,681	0.4%	0.1%	0.2%	5.0%	0.0%	0.3%	1.0%	0.0%	4.0%	0.2%	14.3%
449	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W CC	36,276	0.7%	0.2%	0.1%	4.9%	0.0%	0.4%	0.5%	0.0%	3.7%	0.1%	18.8%
450	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W/O CC	6,679	0.5%	0.2%	0.1%	1.6%	0.0%	0.1%	0.2%	0.0%	4.2%	0.0%	20.7%
452	21	MED	COMPLICATIONS OF TREATMENT W CC	25,763	0.7%	0.2%	0.1%	1.7%	0.1%	2.5%	4.9%	0.1%	2.3%	0.8%	15.5%
453	21	MED	COMPLICATIONS OF TREATMENT W/O CC	4,893	0.6%	0.1%	0.0%	0.7%	0.0%	1.3%	9.4%	0.0%	2.3%	1.6%	13.8%
454	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W CC	3,784	1.2%	0.3%	0.2%	3.1%	0.0%	0.8%	0.5%	0.0%	4.5%	0.1%	17.4%
455	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W/O CC	741	1.0%	0.3%	0.1%	1.1%	0.0%	0.2%	0.6%	0.0%	5.5%	0.1%	14.8%
461	23	SURG	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES	2,196	0.9%	0.3%	0.1%	1.1%	0.0%	0.7%	22.8%	0.0%	3.3%	3.9%	7.7%
462	23	MED	REHABILITATION	3,104	13.5%	10.8%	2.1%	0.9%	0.0%	0.2%	0.4%	0.0%	0.4%	0.1%	3.7%
463	23	MED	SIGNS & SYMPTOMS W CC	29,814	1.7%	0.6%	0.3%	1.8%	0.0%	0.7%	0.7%	0.0%	4.7%	0.1%	17.3%
464	23	MED	SIGNS & SYMPTOMS W/O CC	6,935	2.0%	0.7%	0.3%	0.7%	0.0%	0.3%	0.4%	0.0%	5.7%	0.1%	16.7%
465	23	MED	AFTERCARE W HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	144	0.6%	0.0%	0.2%	1.0%	0.0%	0.4%	8.8%	0.0%	8.4%	1.5%	13.9%
466	23	MED	AFTERCARE W/O HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	968	0.8%	0.3%	0.2%	2.0%	0.0%	0.8%	5.4%	0.2%	10.7%	0.8%	13.8%
467	23	MED	OTHER FACTORS INFLUENCING HEALTH STATUS	867	0.8%	0.2%	0.1%	2.1%	0.1%	0.4%	2.4%	0.0%	6.5%	0.3%	14.9%
468		SURG	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	47,282	0.8%	0.2%	0.2%	4.0%	0.1%	1.2%	8.6%	0.0%	5.5%	1.3%	10.6%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	CMS_05	CMS_05	CMS_05	CMS_06	CMS_13	CMS_13	CMS_07	CMS_13	CMS_10	CMS_09	CMS_11	
				Raw case count	Physical therapy	Occupational therapy	Speech therapy	Inhalation therapy	Blood products	Blood administration	Operating room	Lithotripsy	Cardiology	Anesthesia	Labs
480	PRE	SURG	LIVER TRANSPLANT AND/OR INTESTINAL TRANSPLANT	994	0.5%	0.2%	0.0%	2.6%	1.0%	8.4%	14.8%	0.0%	0.7%	3.2%	18.7%
481	PRE	SURG	BONE MARROW TRANSPLANT	1,078	0.3%	0.1%	0.0%	0.6%	0.1%	7.1%	1.3%	0.0%	0.4%	0.1%	12.4%
482	PRE	SURG	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES	4,629	0.6%	0.2%	0.6%	6.0%	0.0%	0.6%	20.3%	0.0%	0.9%	3.9%	8.6%
484	24	SURG	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	411	0.7%	0.4%	0.4%	6.7%	0.1%	2.1%	9.4%	0.0%	0.9%	1.5%	9.7%
485	24	SURG	LIMB REATTACHMENT, HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	3,399	1.6%	0.4%	0.2%	3.2%	0.1%	2.0%	14.3%	0.0%	1.7%	2.4%	8.7%
486	24	SURG	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	2,286	0.8%	0.4%	0.2%	5.7%	0.2%	3.2%	10.4%	0.0%	1.1%	1.7%	9.6%
487	24	MED	OTHER MULTIPLE SIGNIFICANT TRAUMA	4,340	1.4%	0.5%	0.3%	5.1%	0.1%	1.8%	0.8%	0.0%	2.0%	0.1%	11.0%
488	25	SURG	HIV W EXTENSIVE O.R. PROCEDURE	743	0.5%	0.1%	0.1%	2.8%	0.1%	1.7%	7.9%	0.0%	1.5%	1.3%	12.9%
489	25	MED	HIV W MAJOR RELATED CONDITION	12,470	0.4%	0.1%	0.1%	3.3%	0.1%	1.2%	1.3%	0.0%	1.4%	0.2%	16.0%
490	25	MED	HIV W OR W/O OTHER RELATED CONDITION	4,603	0.4%	0.1%	0.0%	1.3%	0.2%	1.6%	1.7%	0.0%	1.7%	0.3%	17.6%
491	8	SURG	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF UPPER EXTREMITY	20,270	1.1%	0.5%	0.0%	0.6%	0.0%	0.5%	26.5%	0.0%	0.6%	4.4%	3.2%
492	17	MED	CHEMOTHERAPY W ACUTE LEUKEMIA OR W USE OF HI DOSE CHEMOAGENT	3,561	0.2%	0.0%	0.0%	0.7%	0.3%	8.8%	1.1%	0.0%	0.7%	0.1%	12.2%
493	7	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W CC	56,599	0.4%	0.1%	0.0%	1.9%	0.0%	0.5%	18.1%	0.0%	2.3%	3.2%	11.9%
494	7	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC	22,834	0.1%	0.0%	0.0%	0.5%	0.0%	0.1%	28.0%	0.0%	1.6%	4.9%	8.5%
495	PRE	SURG	LUNG TRANSPLANT	300	0.7%	0.2%	0.0%	6.8%	0.1%	1.7%	13.2%	0.0%	1.2%	2.1%	14.4%
496	8	SURG	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	3,099	0.8%	0.3%	0.1%	1.3%	0.0%	0.9%	18.1%	0.0%	0.4%	3.2%	4.3%
497	8	SURG	SPINAL FUSION EXCEPT CERVICAL W CC	27,685	1.1%	0.3%	0.0%	0.8%	0.0%	0.8%	19.8%	0.0%	0.5%	3.1%	3.7%
498	8	SURG	SPINAL FUSION EXCEPT CERVICAL W/O CC	18,685	1.0%	0.3%	0.0%	0.3%	0.0%	0.4%	21.6%	0.0%	0.2%	3.4%	2.1%
499	8	SURG	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W CC	33,081	1.8%	0.5%	0.0%	1.1%	0.0%	0.4%	32.7%	0.0%	1.2%	5.6%	5.4%
500	8	SURG	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W/O CC	43,738	1.4%	0.4%	0.0%	0.5%	0.0%	0.1%	42.8%	0.0%	0.6%	7.3%	3.2%
501	8	SURG	KNEE PROCEDURES W PDX OF INFECTION W CC	2,997	2.0%	0.3%	0.0%	1.4%	0.1%	1.4%	16.2%	0.0%	1.7%	2.6%	12.0%
502	8	SURG	KNEE PROCEDURES W PDX OF INFECTION W/O CC	701	2.2%	0.3%	0.0%	0.5%	0.0%	0.7%	23.3%	0.0%	0.8%	3.9%	9.4%
503	8	SURG	KNEE PROCEDURES W/O PDX OF INFECTION	5,321	2.8%	0.4%	0.0%	0.8%	0.0%	0.6%	27.7%	0.0%	1.1%	4.5%	5.9%
504	22	SURG	EXTEN. BURNS OR FULL THICKNESS BURN W/MV 96+HRS W/SKIN GFT	172	0.9%	1.1%	0.1%	7.2%	0.3%	1.8%	6.5%	0.0%	0.7%	1.2%	10.5%
505	22	MED	EXTEN. BURNS OR FULL THICKNESS BURN W/MV 96+HRS W/O SKIN GFT	157	0.6%	0.4%	0.0%	11.6%	0.2%	2.1%	2.0%	0.0%	1.2%	0.3%	13.2%
506	22	SURG	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W CC OR SIG TRAUMA	863	1.6%	0.9%	0.1%	2.6%	0.1%	1.0%	10.9%	0.0%	1.0%	1.7%	8.1%
507	22	SURG	FULL THICKNESS BURN W SKIN GRFT OR INHAL INJ W/O CC OR SIG TRAUMA	274	1.3%	0.9%	0.0%	1.0%	0.1%	0.3%	16.6%	0.0%	0.9%	2.6%	5.0%
508	22	MED	FULL THICKNESS BURN W/O SKIN GRFT OR INHAL INJ W CC OR SIG TRAUMA	609	2.7%	0.6%	0.1%	2.4%	0.1%	0.7%	5.9%	0.0%	1.8%	1.0%	9.9%
509	22	MED	FULL THICKNESS BURN W/O SKIN GRFT OR INH INJ W/O CC OR SIG TRAUMA	137	3.4%	1.2%	0.1%	1.7%	0.0%	0.1%	4.8%	0.0%	1.0%	1.0%	6.5%
510	22	MED	NON-EXTENSIVE BURNS W CC OR SIGNIFICANT TRAUMA	1,615	2.1%	0.7%	0.1%	4.1%	0.1%	0.4%	4.3%	0.0%	1.6%	0.5%	10.7%
511	22	MED	NON-EXTENSIVE BURNS W/O CC OR SIGNIFICANT TRAUMA	558	2.1%	1.0%	0.0%	1.4%	0.0%	0.2%	6.0%	0.0%	1.0%	0.8%	8.1%
512	PRE	SURG	SIMULTANEOUS PANCREAS/KIDNEY TRANSPLANT	402	0.3%	0.1%	0.0%	1.6%	0.2%	2.5%	16.8%	0.0%	0.5%	3.6%	15.7%
513	PRE	SURG	PANCREAS TRANSPLANT	195	0.2%	0.1%	0.0%	1.1%	0.0%	1.9%	15.2%	0.0%	0.3%	2.9%	16.1%
515	5	SURG	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH	49,586	0.1%	0.0%	0.0%	0.4%	0.0%	0.1%	9.9%	0.0%	7.6%	0.5%	2.0%
518	5	SURG	PERC CARDIO PROC W/O CORONARY ARTERY STENT OR AMI	22,359	0.1%	0.0%	0.0%	0.3%	0.0%	0.1%	1.5%	0.0%	47.3%	0.5%	4.3%
519	8	SURG	CERVICAL SPINAL FUSION W CC	11,057	0.8%	0.3%	0.1%	1.4%	0.0%	0.3%	23.1%	0.0%	0.8%	3.8%	4.4%
520	8	SURG	CERVICAL SPINAL FUSION W/O CC	14,632	0.5%	0.2%	0.0%	0.3%	0.0%	0.1%	28.3%	0.0%	0.3%	4.7%	2.3%
521	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE W CC	29,416	1.0%	0.4%	0.2%	1.8%	0.0%	0.2%	0.3%	0.0%	2.7%	0.0%	15.8%
522	20	MED	ALC/DRUG ABUSE OR DEPEND W REHABILITATION THERAPY W/O CC	4,965	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	6.7%
523	20	MED	ALC/DRUG ABUSE OR DEPEND W/O REHABILITATION THERAPY W/O CC	14,026	0.6%	0.4%	0.1%	0.5%	0.0%	0.0%	0.1%	0.0%	2.0%	0.0%	14.7%
524	1	MED	TRANSIENT ISCHEMIA	103,634	1.4%	0.5%	0.5%	0.9%	0.0%	0.1%	0.4%	0.0%	9.4%	0.1%	13.6%
525	5	SURG	OTHER HEART ASSIST SYSTEM IMPLANT	243	0.2%	0.1%	0.0%	2.3%	0.2%	6.4%	15.0%	0.0%	4.8%	2.0%	9.3%
528	1	SURG	INTRACRANIAL VASCULAR PROC W PDX HEMORRHAGE	1,641	0.5%	0.3%	0.3%	4.5%	0.1%	0.7%	10.2%	0.0%	0.7%	1.7%	8.4%
529	1	SURG	VENTRICULAR SHUNT PROCEDURES W CC	4,345	1.2%	0.6%	0.3%	1.9%	0.0%	0.3%	17.2%	0.0%	1.0%	2.9%	7.4%
530	1	SURG	VENTRICULAR SHUNT PROCEDURES W/O CC	2,853	1.2%	0.4%	0.1%	0.4%	0.0%	0.0%	27.4%	0.0%	0.5%	5.0%	3.4%
531	1	SURG	SPINAL PROCEDURES W CC	4,564	1.2%	0.5%	0.1%	2.1%	0.0%	0.8%	17.3%	0.0%	1.1%	2.9%	7.8%
532	1	SURG	SPINAL PROCEDURES W/O CC	2,483	1.0%	0.4%	0.1%	0.4%	0.0%	0.2%	28.6%	0.0%	0.5%	5.0%	4.3%
533	1	SURG	EXTRACRANIAL PROCEDURES W CC	42,395	0.4%	0.2%	0.2%	1.4%	0.0%	0.4%	28.5%	0.0%	3.3%	4.6%	7.2%
534	1	SURG	EXTRACRANIAL PROCEDURES W/O CC	38,873	0.1%	0.0%	0.0%	0.5%	0.0%	0.1%	39.1%	0.0%	2.0%	6.5%	5.4%
535	5	SURG	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK	7,634	0.2%	0.1%	0.0%	1.2%	0.0%	0.2%	7.5%	0.0%	12.6%	0.4%	4.0%
536	5	SURG	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK	7,523	0.1%	0.0%	0.0%	0.8%	0.0%	0.2%	8.0%	0.0%	14.3%	0.5%	3.2%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	CMS_05	CMS_05	CMS_05	CMS_06	CMS_13	CMS_13	CMS_07	CMS_13	CMS_10	CMS_09	CMS_11	
				Raw case count	Physical therapy	Occupational therapy	Speech therapy	Inhalation therapy	Blood products	Blood administration	Operating room	Lithotripsy	Cardiology	Anesthesia	Labs
537	8	SURG	LOCAL EXCIS & REMOV OF INT FIX DEV EXCEPT HIP & FEMUR W CC	8,196	1.6%	0.3%	0.0%	1.5%	0.0%	1.1%	21.6%	0.0%	1.3%	3.5%	9.6%
538	8	SURG	LOCAL EXCIS & REMOV OF INT FIX DEV EXCEPT HIP & FEMUR W/O CC	4,862	1.4%	0.3%	0.0%	0.5%	0.0%	0.4%	35.1%	0.0%	0.5%	5.8%	5.0%
539	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR OR PROCEDURE W CC	4,666	0.7%	0.2%	0.1%	2.7%	0.1%	2.4%	14.6%	0.0%	1.3%	2.6%	12.5%
540	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR OR PROCEDURE W/O CC	1,455	0.4%	0.1%	0.0%	0.8%	0.0%	0.4%	33.4%	0.0%	0.7%	5.8%	9.7%
541	PRE	SURG	ECMO OR TRACH W MV 96+HRS OR PDX EXC FACE, MOUTH & NECK W MAJ O.R.	21,643	0.5%	0.2%	0.2%	11.9%	0.1%	1.9%	5.8%	0.0%	1.5%	1.0%	11.3%
542	PRE	SURG	TRACH W MV 96+HRS OR PDX EXC FACE, MOUTH & NECK W/O MAJ O.R.	21,116	0.4%	0.2%	0.2%	15.2%	0.1%	1.0%	2.4%	0.0%	1.2%	0.4%	11.5%
543	1	SURG	CRANIOTOMY W MAJOR DEVICE IMPLANT OR ACUTE COMPLEX CNS PRINCIPAL DIAGNOSIS	5,219	0.7%	0.4%	0.5%	6.0%	0.0%	0.9%	9.5%	0.0%	1.1%	1.5%	9.7%
544	8	SURG	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	404,171	2.7%	0.6%	0.0%	0.9%	0.0%	0.9%	20.9%	0.0%	0.7%	3.1%	4.7%
545	8	SURG	REVISION OF HIP OR KNEE REPLACEMENT	40,723	2.2%	0.5%	0.0%	0.7%	0.0%	1.4%	21.4%	0.0%	0.6%	3.2%	5.5%
546	8	SURG	SPINAL FUSION EXC CERV WITH CURVATURE OF THE SPINE OR MALIG	2,095	0.9%	0.3%	0.0%	1.1%	0.0%	1.3%	16.3%	0.0%	0.5%	2.8%	4.9%
547	5	SURG	CORONARY BYPASS W CARDIAC CATH W MAJOR CV DX	30,935	0.4%	0.1%	0.1%	3.9%	0.1%	2.2%	18.0%	0.0%	9.4%	2.5%	9.8%
548	5	SURG	CORONARY BYPASS W CARDIAC CATH W/O MAJOR CV DX	30,209	0.3%	0.1%	0.0%	3.2%	0.1%	1.9%	21.4%	0.0%	10.7%	3.0%	8.7%
549	5	SURG	CORONARY BYPASS W/O CARDIAC CATH W MAJOR CV DX	12,558	0.5%	0.1%	0.1%	4.4%	0.1%	2.5%	21.7%	0.0%	2.6%	3.1%	9.7%
550	5	SURG	CORONARY BYPASS W/O CARDIAC CATH W/O MAJOR CV DX	32,049	0.4%	0.1%	0.0%	3.8%	0.2%	2.1%	27.1%	0.0%	2.4%	3.7%	8.9%
551	5	SURG	PERMANENT CARDIAC PACEMAKER IMPL W MAJ CV DX OR AICD LEAD OR GNRTR	51,370	0.3%	0.1%	0.0%	1.2%	0.0%	0.3%	10.7%	0.0%	8.8%	0.7%	5.8%
552	5	SURG	OTHER PERMANENT CARDIAC PACEMAKER IMPLANT W/O MAJOR CV DX	77,491	0.2%	0.1%	0.0%	0.4%	0.0%	0.1%	13.5%	0.0%	8.1%	0.8%	4.2%
553	5	SURG	OTHER VASCULAR PROCEDURES W CC W MAJOR CV DX	36,701	0.6%	0.2%	0.1%	2.1%	0.1%	1.1%	15.1%	0.0%	3.8%	1.9%	9.5%
554	5	SURG	OTHER VASCULAR PROCEDURES W CC W/O MAJOR CV DX	71,370	0.6%	0.1%	0.0%	0.9%	0.0%	0.9%	22.0%	0.0%	2.4%	2.8%	6.9%
555	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W MAJOR CV DX	41,449	0.2%	0.1%	0.0%	1.2%	0.0%	0.3%	1.4%	0.0%	35.5%	0.2%	7.0%
556	5	SURG	PERCUTANEOUS CARDIOVASC PROC W NON-DRUG-ELUTING STENT W/O MAJ CV DX	23,685	0.0%	0.0%	0.0%	0.3%	0.0%	0.1%	1.4%	0.0%	44.2%	0.2%	4.1%
557	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W MAJOR CV DX	108,286	0.1%	0.0%	0.0%	0.8%	0.0%	0.2%	1.7%	0.0%	33.5%	0.1%	5.4%
558	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W/O MAJ CV DX	170,167	0.0%	0.0%	0.0%	0.2%	0.0%	0.1%	1.9%	0.0%	39.4%	0.2%	3.2%
559	1	MED	ACUTE ISCHEMIC STROKE WITH USE OF THROMBOLYTIC AGENT	2,401	1.4%	0.9%	1.5%	2.3%	0.0%	0.2%	1.6%	0.0%	4.1%	0.1%	8.8%
560	1	MED	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM	3,173	1.1%	0.5%	0.3%	3.3%	0.1%	1.2%	1.6%	0.0%	1.8%	0.1%	11.2%
561	1	MED	NON-BACTERIAL INFECTIONS OF NERVOUS SYSTEM EXCEPT VIRAL MENINGITIS	2,632	1.2%	0.5%	0.5%	3.1%	0.0%	0.5%	1.1%	0.0%	1.8%	0.1%	14.4%
562	1	MED	SEIZURE AGE > 17 W CC	49,210	1.0%	0.4%	0.4%	2.8%	0.0%	0.2%	0.5%	0.0%	3.6%	0.1%	17.8%
563	1	MED	SEIZURE AGE > 17 W/O CC	19,540	0.8%	0.3%	0.2%	0.6%	0.0%	0.0%	0.2%	0.0%	3.6%	0.0%	24.2%
564	1	MED	HEADACHES AGE >17	14,652	0.8%	0.3%	0.1%	0.9%	0.0%	0.1%	1.1%	0.0%	4.1%	0.1%	13.3%
565	4	MED	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT 96+ HOURS	41,790	0.5%	0.1%	0.2%	14.7%	0.1%	0.8%	0.8%	0.0%	1.8%	0.1%	12.7%
566	4	MED	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT < 96 HOURS	63,900	0.6%	0.2%	0.2%	12.5%	0.0%	0.6%	0.9%	0.0%	3.4%	0.1%	14.5%
567	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROC AGE > 17 W CC W MAJOR GI DX	9,947	0.7%	0.2%	0.1%	5.2%	0.1%	2.4%	9.3%	0.0%	1.3%	1.7%	11.9%
568	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES PROC AGE > 17 W CC W/O MAJOR GI DX	15,552	0.7%	0.2%	0.1%	4.0%	0.1%	1.2%	16.2%	0.0%	1.3%	2.9%	10.1%
569	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC W MAJOR GI DX	56,829	0.8%	0.2%	0.1%	4.1%	0.1%	1.5%	11.1%	0.0%	1.3%	2.0%	11.0%
570	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC W/O MAJOR GI DX	67,586	0.7%	0.2%	0.0%	2.7%	0.1%	1.2%	17.5%	0.0%	1.5%	3.0%	10.1%
571	6	MED	MAJOR ESOPHAGEAL DISORDERS	10,239	0.6%	0.2%	0.1%	2.0%	0.1%	3.8%	3.1%	0.0%	2.5%	0.6%	21.0%
572	8	MED	MAJOR GASTROINTESTINAL DISORDERS AND PERITONEAL INFECTIONS	42,874	1.1%	0.3%	0.1%	2.0%	0.1%	0.7%	1.2%	0.0%	1.7%	0.1%	16.3%
573	11	SURG	MAJOR BLADDER PROCEDURES	6,194	0.7%	0.1%	0.0%	2.3%	0.1%	1.7%	22.3%	0.0%	0.9%	3.9%	10.2%
574	16	MED	MAJOR HEMATOLOGIC/IMMUNOLOGIC DIAG EXC SICKLE CELL CRISIS & COAGUL	24,402	0.5%	0.1%	0.1%	1.4%	0.3%	6.7%	0.7%	0.0%	1.5%	0.1%	16.1%
575	18	MED	SEPTICEMIA W MV96+ HOURS AGE >17	8,808	0.3%	0.1%	0.1%	12.9%	0.1%	1.5%	0.7%	0.0%	1.6%	0.1%	13.6%
576	18	MED	SEPTICEMIA W/O MV96+ HOURS AGE >17	243,162	0.8%	0.2%	0.3%	4.0%	0.1%	1.1%	1.1%	0.0%	2.8%	0.1%	15.7%
577	1	SURG	CAROTID ARTERY STENT PROCEDURE	2,431	0.1%	0.1%	0.1%	0.4%	0.0%	0.2%	20.0%	0.0%	5.1%	0.6%	3.3%
578	18	SURG	INFECTIOUS & PARASITIC DISEASES W OR PROCEDURE	30,959	0.7%	0.2%	0.1%	4.7%	0.1%	1.6%	6.8%	0.0%	2.1%	1.1%	12.6%
579	18	SURG	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W OR PROCEDURE	19,311	1.2%	0.3%	0.1%	2.5%	0.1%	1.2%	13.7%	0.0%	1.2%	2.4%	10.8%
				11,064,379	0.9%	0.2%	0.1%	3.5%	0.1%	1.0%	8.5%	0.01%	6.2%	1.3%	11.5%
			MINIMUM	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%
			25th PERCENTILE	1,434	0.3%	0.1%	0.0%	0.8%	0.0%	0.2%	1.3%	0.0%	1.1%	0.2%	8.5%
			MEDIAN	5,095	0.6%	0.2%	0.1%	1.5%	0.0%	0.5%	7.7%	0.0%	1.8%	1.0%	11.5%
			75 PERCENTILE	19,642	1.0%	0.3%	0.1%	2.3%	0.1%	1.1%	21.6%	0.0%	3.3%	3.6%	14.7%
			MAXIMUM	630,619	13.5%	10.8%	2.1%	15.2%	1.0%	14.5%	55.1%	3.0%	47.3%	9.2%	24.7%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	Raw case count	CMS_12		CMS_13		CMS_13		CMS_13		N/A	CMS_13		Total
					Radiology	MRI	Other O/P services	Emergency	Ambulance	Pro- fessional fees	Organ acquisition (removed)	ESRD		Clinics		
1	1	SURG	CRANIOTOMY AGE >17 W CC	22,105	8.5%	2.1%	0.1%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
2	1	SURG	CRANIOTOMY AGE >17 W/O CC	9,118	7.3%	2.9%	0.1%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3	1	SURG *	CRANIOTOMY AGE 0-17	4	2.4%	4.5%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	7.3%	0.0%	100.0%	
6	1	SURG	CARPAL TUNNEL RELEASE	303	2.4%	1.1%	0.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%	
7	1	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W CC	13,863	9.1%	2.8%	0.1%	1.2%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%	
8	1	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W/O CC	3,164	16.9%	3.0%	0.2%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
9	1	MED	SPINAL DISORDERS & INJURIES	1,648	14.5%	8.8%	0.1%	3.7%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%	
10	1	MED	NERVOUS SYSTEM NEOPLASMS W CC	18,044	17.9%	9.0%	0.0%	2.9%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	
11	1	MED	NERVOUS SYSTEM NEOPLASMS W/O CC	2,857	17.6%	12.6%	0.1%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
12	1	MED	DEGENERATIVE NERVOUS SYSTEM DISORDERS	51,217	10.7%	5.1%	0.1%	4.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
13	1	MED	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA	6,544	6.1%	12.6%	0.1%	3.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	
14	1	MED	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION	243,794	11.4%	8.7%	0.1%	3.8%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%	
15	1	MED	NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT	35,120	13.9%	8.0%	0.1%	3.9%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%	
16	1	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W CC	15,919	10.8%	5.3%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%	
17	1	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC	2,696	14.8%	14.5%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
18	1	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W CC	30,391	10.0%	4.5%	0.1%	3.8%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	100.0%	
19	1	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W/O CC	7,780	11.5%	8.5%	0.1%	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
21	1	MED	VIRAL MENINGITIS	2,046	9.5%	6.5%	0.1%	3.8%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
22	1	MED	HYPERTENSIVE ENCEPHALOPATHY	3,002	10.7%	6.6%	0.1%	4.5%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	100.0%	
23	1	MED	NONTRAUMATIC STUPOR & COMA	9,695	12.8%	4.2%	0.1%	5.9%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%	
26	1	MED	SEIZURE & HEADACHE AGE 0-17	12	6.4%	4.5%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	100.0%	
27	1	MED	TRAUMATIC STUPOR & COMA, COMA >1 HR	5,372	20.1%	1.6%	0.1%	6.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
28	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W CC	17,681	18.5%	2.3%	0.1%	4.5%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
29	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W/O CC	5,838	25.1%	3.2%	0.1%	7.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
31	1	MED	CONCUSSION AGE >17 W CC	4,435	24.2%	3.1%	0.1%	7.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
32	1	MED	CONCUSSION AGE >17 W/O CC	1,599	31.1%	3.8%	0.1%	9.2%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	
34	1	MED	OTHER DISORDERS OF NERVOUS SYSTEM W CC	25,029	12.0%	7.3%	0.1%	4.2%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%	
35	1	MED	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC	7,102	15.0%	13.1%	0.1%	5.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
36	2	SURG	RETINAL PROCEDURES	325	1.0%	0.4%	0.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%	
37	2	SURG	ORBITAL PROCEDURES	1,125	8.2%	0.9%	0.2%	2.1%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%	
38	2	SURG	PRIMARY IRIS PROCEDURES	47	6.1%	4.2%	0.0%	5.4%	0.0%	0.0%	0.0%	0.0%	0.5%	0.1%	100.0%	
39	2	SURG	LENS PROCEDURES WITH OR WITHOUT VITRECTOMY	343	2.2%	0.3%	1.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%	
40	2	SURG	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17	1,228	6.9%	3.0%	0.1%	1.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
42	2	SURG	INTRAOCULAR PROCEDURES EXCEPT RETINA, IRIS & LENS	1,798	2.7%	0.4%	0.2%	1.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%	
43	2	MED	HYPHEMA	100	21.0%	2.0%	0.1%	6.7%	0.0%	0.0%	0.0%	0.0%	0.4%	0.1%	100.0%	
44	2	MED	ACUTE MAJOR EYE INFECTIONS	1,136	10.9%	2.4%	0.1%	3.2%	0.0%	0.0%	0.0%	0.0%	0.7%	0.1%	100.0%	
45	2	MED	NEUROLOGICAL EYE DISORDERS	2,571	13.3%	19.0%	0.0%	4.5%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
46	2	MED	OTHER DISORDERS OF THE EYE AGE >17 W CC	3,654	13.9%	4.1%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%	
47	2	MED	OTHER DISORDERS OF THE EYE AGE >17 W/O CC	1,202	15.5%	7.2%	0.1%	6.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
49	3	SURG	MAJOR HEAD & NECK PROCEDURES	2,231	1.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
50	3	SURG	SIALOADENECTOMY	1,939	1.0%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	
51	3	SURG	SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY	196	4.2%	1.1%	0.3%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
52	3	SURG	CLEFT LIP & PALATE REPAIR	200	1.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
53	3	SURG	SINUS & MASTOID PROCEDURES AGE >17	1,918	4.1%	1.1%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
55	3	SURG	MISCELLANEOUS EAR, NOSE, MOUTH & THROAT PROCEDURES	1,226	4.8%	0.5%	0.2%	1.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	
56	3	SURG	RHINOPLASTY	396	2.6%	0.2%	0.2%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	100.0%	
57	3	SURG	T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	673	6.8%	0.5%	0.1%	2.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	
59	3	SURG	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	103	4.3%	0.2%	0.4%	1.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%	
60	3	SURG *	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0-17	4	9.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%	
61	3	SURG	MYRINGOTOMY W TUBE INSERTION AGE >17	182	6.3%	3.0%	0.1%	1.2%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%	
62	3	SURG *	MYRINGOTOMY W TUBE INSERTION AGE 0-17	3	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	100.0%	

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	Raw case count	CMS_12		CMS_13		CMS_13		CMS_13		N/A	CMS_13		Total
					Radiology	MRI	Other O/P services	Emergency	Ambulance	Pro- fessional fees	Organ acquisition (removed)	ESRD		Clinics		
63	3	SURG	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES	2,595	9.2%	0.6%	0.1%	2.1%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%	
64	3	MED	EAR, NOSE, MOUTH & THROAT MALIGNANCY	3,016	13.4%	1.3%	0.1%	1.8%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	100.0%	
65	3	MED	DYSEQUILIBRIUM	37,820	14.3%	12.4%	0.1%	6.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
66	3	MED	EPISTAXIS	7,492	6.0%	0.4%	0.1%	8.3%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
67	3	MED	EPIGLOTTITIS	346	7.6%	0.2%	0.1%	5.8%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%	
68	3	MED	OTITIS MEDIA & URI AGE >17 W CC	15,278	9.7%	1.4%	0.1%	5.4%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%	
69	3	MED	OTITIS MEDIA & URI AGE >17 W/O CC	4,091	12.2%	2.8%	0.1%	6.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
70	3	MED	OTITIS MEDIA & URI AGE 0-17	21	11.0%	1.4%	0.0%	5.2%	0.0%	0.0%	0.0%	0.0%	4.9%	0.0%	100.0%	
71	3	MED	LARYNGOTRACHEITIS	55	8.1%	0.0%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%	
72	3	MED	NASAL TRAUMA & DEFORMITY	1,149	25.5%	1.0%	0.1%	7.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%	
73	3	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE >17	9,048	10.7%	1.8%	0.1%	4.3%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
74	3	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE 0-17	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
75	4	SURG	MAJOR CHEST PROCEDURES	42,362	5.4%	0.2%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
76	4	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W CC	44,411	11.1%	0.8%	0.1%	1.3%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%	
77	4	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W/O CC	1,954	12.0%	0.5%	0.2%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
78	4	MED	PULMONARY EMBOLISM	44,357	13.3%	0.5%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
79	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W CC	150,866	6.5%	0.4%	0.1%	2.8%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%	
80	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W/O CC	6,582	6.9%	0.4%	0.1%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
81	4	MED *	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE 0-17	2	6.2%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%	
82	4	MED	RESPIRATORY NEOPLASMS	58,733	15.4%	1.8%	0.1%	2.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	
83	4	MED	MAJOR CHEST TRAUMA W CC	6,149	19.3%	1.0%	0.1%	5.3%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
84	4	MED	MAJOR CHEST TRAUMA W/O CC	1,150	23.4%	1.1%	0.1%	8.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
85	4	MED	PLEURAL EFFUSION W CC	20,168	13.3%	0.4%	0.1%	2.7%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%	
86	4	MED	PLEURAL EFFUSION W/O CC	1,587	17.7%	0.3%	0.1%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
87	4	MED	PULMONARY EDEMA & RESPIRATORY FAILURE	85,170	5.6%	0.2%	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
88	4	MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	385,561	6.5%	0.3%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	
89	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W CC	499,866	7.7%	0.4%	0.0%	3.9%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
90	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W/O CC	38,225	9.5%	0.5%	0.0%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
91	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE 0-17	44	7.1%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	3.7%	0.0%	100.0%	
92	4	MED	INTERSTITIAL LUNG DISEASE W CC	15,191	9.4%	0.5%	0.1%	3.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
93	4	MED	INTERSTITIAL LUNG DISEASE W/O CC	1,281	12.1%	0.7%	0.1%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
94	4	MED	PNEUMOTHORAX W CC	12,426	16.4%	0.4%	0.1%	3.9%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
95	4	MED	PNEUMOTHORAX W/O CC	1,363	21.8%	0.2%	0.3%	7.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
96	4	MED	BRONCHITIS & ASTHMA AGE >17 W CC	52,952	7.4%	0.4%	0.0%	4.7%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
97	4	MED	BRONCHITIS & ASTHMA AGE >17 W/O CC	23,267	7.5%	0.4%	0.0%	5.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
98	4	MED	BRONCHITIS & ASTHMA AGE 0-17	9	5.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	100.0%	
99	4	MED	RESPIRATORY SIGNS & SYMPTOMS W CC	19,656	15.2%	0.6%	0.1%	5.4%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%	
100	4	MED	RESPIRATORY SIGNS & SYMPTOMS W/O CC	5,879	19.0%	0.8%	0.1%	6.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
101	4	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W CC	21,122	13.9%	0.8%	0.1%	4.6%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%	
102	4	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O CC	4,428	18.3%	0.9%	0.1%	6.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
103	PRE	SURG	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	704	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%	
104	5	SURG	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W CARD CATH	18,986	2.3%	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
105	5	SURG	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W/O CARD CATH	30,122	1.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%	
106	5	SURG	CORONARY BYPASS W PTCA	3,115	2.0%	0.1%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
108	5	SURG	OTHER CARDIOTHORACIC PROCEDURES	7,850	2.5%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
110	5	SURG	MAJOR CARDIOVASCULAR PROCEDURES W CC	53,032	4.5%	0.2%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%	
111	5	SURG	MAJOR CARDIOVASCULAR PROCEDURES W/O CC	9,599	4.9%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
113	5	SURG	AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB & TOE	32,851	4.4%	0.5%	0.1%	0.6%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	100.0%	
114	5	SURG	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	7,403	4.5%	0.8%	0.1%	0.9%	0.0%	0.0%	0.0%	0.0%	3.1%	0.1%	100.0%	
117	5	SURG	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	4,975	5.0%	0.1%	0.5%	1.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
118	5	SURG	CARDIAC PACEMAKER DEVICE REPLACEMENT	6,925	2.6%	0.0%	0.5%	0.8%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	Raw case count	CMS_12	CMS_12	CMS_13	CMS_13	CMS_13	CMS_13	N/A	CMS_13	CMS_13	Total
					Radiology	MRI	Other O/P services	Emergency	Ambulance	Pro-fessional fees	Organ acquisition (removed)	ESRD	Clinics	
119	5	SURG	VEIN LIGATION & STRIPPING	923	4.7%	0.5%	0.3%	1.0%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
120	5	SURG	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	31,832	4.9%	0.5%	0.1%	1.1%	0.0%	0.0%	0.0%	4.9%	0.0%	100.0%
121	5	MED	CIRCULATORY DISORDERS W AMI & MAJOR COMP. DISCHARGED ALIVE	139,738	5.7%	0.4%	0.0%	3.3%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
122	5	MED	CIRCULATORY DISORDERS W AMI W/O MAJOR COMP. DISCHARGED ALIVE	49,041	5.6%	0.4%	0.0%	4.3%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
123	5	MED	CIRCULATORY DISORDERS W AMI, EXPIRED	28,700	6.0%	0.3%	0.0%	3.9%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
124	5	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH & COMPLEX DIAG	114,099	6.1%	0.4%	0.0%	2.4%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%
125	5	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O COMPLEX DIAG	85,712	7.6%	0.6%	0.1%	2.6%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
126	5	MED	ACUTE & SUBACUTE ENDOCARDITIS	5,089	7.3%	1.4%	0.1%	1.6%	0.0%	0.0%	0.0%	2.1%	0.0%	100.0%
127	5	MED	HEART FAILURE & SHOCK	630,619	6.7%	0.3%	0.0%	4.2%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
128	5	MED	DEEP VEIN THROMBOPHLEBITIS	4,110	8.6%	0.7%	0.1%	2.5%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%
129	5	MED	CARDIAC ARREST, UNEXPLAINED	3,263	7.6%	0.2%	0.1%	8.3%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
130	5	MED	PERIPHERAL VASCULAR DISORDERS W CC	81,469	10.5%	1.3%	0.1%	2.8%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
131	5	MED	PERIPHERAL VASCULAR DISORDERS W/O CC	21,156	12.2%	1.1%	0.1%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
132	5	MED	ATHEROSCLEROSIS W CC	95,585	11.9%	0.5%	0.0%	6.3%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
133	5	MED	ATHEROSCLEROSIS W/O CC	5,639	16.3%	0.8%	0.1%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
134	5	MED	HYPERTENSION	37,372	13.8%	4.2%	0.1%	6.1%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
135	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W CC	6,758	9.1%	1.1%	0.0%	4.0%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
136	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W/O CC	899	12.3%	2.1%	0.0%	5.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
138	5	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	190,168	8.2%	0.8%	0.1%	5.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
139	5	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC	68,451	9.3%	0.8%	0.1%	6.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
140	5	MED	ANGINA PECTORIS	29,358	12.7%	0.4%	0.0%	6.5%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
141	5	MED	SYNCOPE & COLLAPSE W CC	114,694	14.1%	3.9%	0.0%	5.5%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
142	5	MED	SYNCOPE & COLLAPSE W/O CC	46,121	15.9%	5.3%	0.0%	6.5%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
143	5	MED	CHEST PAIN	220,210	18.6%	0.7%	0.1%	7.4%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
144	5	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W CC	93,898	7.8%	0.7%	0.1%	2.8%	0.0%	0.0%	0.0%	4.2%	0.0%	100.0%
145	5	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W/O CC	5,127	14.2%	1.4%	0.1%	5.2%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
146	6	SURG	RECTAL RESECTION W CC	9,791	3.6%	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
147	6	SURG	RECTAL RESECTION W/O CC	2,408	1.2%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
149	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC	18,079	2.3%	0.0%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
150	6	SURG	PERITONEAL ADHESIOLYSIS W CC	21,274	7.5%	0.1%	0.1%	1.2%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
151	6	SURG	PERITONEAL ADHESIOLYSIS W/O CC	4,887	6.3%	0.1%	0.1%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
152	6	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W CC	4,604	3.9%	0.1%	0.1%	0.5%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
153	6	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC	1,874	1.3%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
155	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W/O CC	5,426	2.4%	0.0%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
156	6	SURG *	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE 0-17	2	1.4%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	12.6%	0.0%	100.0%
157	6	SURG	ANAL & STOMAL PROCEDURES W CC	7,521	5.3%	0.2%	0.1%	1.7%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
158	6	SURG	ANAL & STOMAL PROCEDURES W/O CC	3,435	3.4%	0.1%	0.2%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
159	6	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W CC	17,474	5.0%	0.1%	0.1%	1.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
160	6	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W/O CC	10,778	2.6%	0.0%	0.2%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
161	6	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W CC	9,419	7.2%	0.1%	0.1%	2.0%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
162	6	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W/O CC	4,668	5.6%	0.0%	0.3%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
163	6	SURG *	HERNIA PROCEDURES AGE 0-17	8	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
164	6	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC	5,526	10.7%	0.1%	0.0%	2.0%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
165	6	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	2,224	12.7%	0.0%	0.0%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
166	6	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	4,672	12.9%	0.1%	0.1%	3.1%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
167	6	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	4,237	15.2%	0.0%	0.1%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
168	3	SURG	MOUTH PROCEDURES W CC	1,496	6.1%	0.4%	0.1%	1.2%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%
169	3	SURG	MOUTH PROCEDURES W/O CC	796	2.6%	0.1%	0.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
170	6	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W CC	16,601	9.6%	0.4%	0.2%	1.2%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
171	6	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC	1,327	10.6%	0.4%	0.2%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
172	6	MED	DIGESTIVE MALIGNANCY W CC	30,562	13.8%	0.8%	0.2%	2.2%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%







Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	Raw case count	CMS_12		CMS_13		CMS_13		CMS_13		N/A	CMS_13		Total
					Radiology	MRI	Other O/P services	Emergency	Ambulance	Pro-fessional fees	Organ acquisition (removed)	ESRD		Clinics		
338	12	SURG	TESTES PROCEDURES, FOR MALIGNANCY	624	9.3%	1.9%	0.1%	0.9%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
339	12	SURG	TESTES PROCEDURES, NON-MALIGNANCY AGE >17	1,147	5.0%	0.2%	0.1%	1.4%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%	
341	12	SURG	PENIS PROCEDURES	2,889	2.1%	0.1%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%	
342	12	SURG	CIRCUMCISION AGE >17	428	2.5%	0.1%	0.2%	0.9%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
344	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY	2,241	25.3%	0.4%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	
345	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIGNANCY	1,281	6.5%	0.3%	0.1%	2.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%	
346	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W/ CC	3,643	13.8%	2.5%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
347	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W/O CC	200	15.2%	2.2%	0.4%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	100.0%	
348	12	MED	BENIGN PROSTATIC HYPERTROPHY W CC	3,890	13.2%	0.8%	0.1%	4.8%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	
349	12	MED	BENIGN PROSTATIC HYPERTROPHY W/O CC	493	13.9%	1.5%	0.2%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
350	12	MED	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM	6,524	10.8%	0.5%	0.1%	4.4%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%	
352	12	MED	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES	1,001	11.3%	0.7%	0.1%	4.3%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%	
353	13	SURG	PELVIC EVISCERATION, RADICAL HYSTERECTOMY & RADICAL VULVECTOMY	2,675	2.8%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	
354	13	SURG	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W/ CC	7,108	3.3%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	
355	13	SURG	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W/O CC	4,540	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
356	13	SURG	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	20,604	1.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
357	13	SURG	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY	5,100	4.1%	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	
358	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/ CC	18,981	2.9%	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
359	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC	25,835	0.9%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
360	13	SURG	VAGINA, CERVIX & VULVA PROCEDURES	12,936	1.8%	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
361	13	SURG	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	240	4.6%	0.2%	0.0%	0.7%	0.0%	0.1%	0.0%	0.0%	0.4%	0.0%	100.0%	
363	13	SURG	D&C, CONIZATION & RADIO-IMPLANT, FOR MALIGNANCY	2,034	26.3%	0.5%	0.1%	1.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%	
364	13	SURG	D&C, CONIZATION EXCEPT FOR MALIGNANCY	1,722	9.1%	0.3%	0.1%	2.5%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
365	13	SURG	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES	1,468	6.8%	0.2%	0.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
366	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/ CC	4,223	15.6%	0.7%	0.1%	2.3%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%	
367	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC	365	20.9%	0.9%	0.0%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
368	13	MED	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM	3,778	10.6%	0.7%	0.1%	3.3%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%	
369	13	MED	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS	3,285	19.9%	1.0%	0.1%	4.8%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%	
370	14	SURG	CESAREAN SECTION W/ CC	1,810	2.3%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	100.0%	
371	14	SURG	CESAREAN SECTION W/O CC	2,242	0.9%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	100.0%	
372	14	MED	VAGINAL DELIVERY W/ COMPLICATING DIAGNOSES	1,163	1.6%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	100.0%	
373	14	MED	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	4,595	0.9%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	100.0%	
374	14	SURG	VAGINAL DELIVERY W/ STERILIZATION &/OR D&C	113	0.9%	0.0%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	100.0%	
375	14	SURG	VAGINAL DELIVERY W/ O.R. PROC EXCEPT STERIL &/OR D&C	9	5.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
376	14	MED	POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE	395	10.4%	1.5%	0.0%	5.5%	0.0%	0.0%	0.0%	0.0%	0.3%	0.1%	100.0%	
377	14	SURG	POSTPARTUM & POST ABORTION DIAGNOSES W/ O.R. PROCEDURE	95	7.6%	0.1%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	100.0%	
378	14	MED	ECTOPIC PREGNANCY	179	6.1%	0.1%	0.2%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
379	14	MED	THREATENED ABORTION	471	6.8%	0.1%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	1.0%	0.2%	100.0%	
380	14	MED	ABORTION W/O D&C	90	6.5%	0.9%	0.0%	5.8%	0.0%	0.0%	0.0%	0.0%	1.0%	0.1%	100.0%	
381	14	SURG	ABORTION W/ D&C, ASPIRATION CURETTAGE OR HYSTEROTOMY	156	5.5%	0.0%	0.2%	4.8%	0.0%	0.0%	0.0%	0.0%	1.0%	0.1%	100.0%	
382	14	MED	FALSE LABOR	39	4.3%	1.3%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	100.0%	
383	14	MED	OTHER ANTEPARTUM DIAGNOSES W/ MEDICAL COMPLICATIONS	2,290	6.0%	0.7%	0.1%	3.9%	0.0%	0.0%	0.0%	0.0%	0.5%	0.2%	100.0%	
384	14	MED	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	121	8.8%	0.6%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	100.0%	
392	16	SURG	SPLENECTOMY AGE >17	1,985	5.4%	0.2%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
394	16	SURG	OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS	2,541	7.6%	0.5%	0.1%	1.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%	
395	16	MED	RED BLOOD CELL DISORDERS AGE >17	91,202	7.5%	0.7%	0.1%	3.9%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%	
396	16	MED	RED BLOOD CELL DISORDERS AGE 0-17	11	10.7%	2.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%	100.0%	
397	16	MED	COAGULATION DISORDERS	15,508	6.1%	0.6%	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%	
398	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/ CC	6,043	13.6%	1.2%	0.1%	3.1%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%	
399	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC	989	17.9%	1.7%	0.1%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
401	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W/ OTHER O.R. PROC W/ CC	6,001	11.1%	1.5%	0.1%	0.8%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%	

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	Raw case count	CMS_12		CMS_13		CMS_13		CMS_13		N/A	CMS_13		Total
					Radiology	MRI	Other O/P services	Emergency	Ambulance	Professional fees	Organ acquisition (removed)	ESRD		Clinics		
402	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W/O CC	1,309	12.7%	1.9%	0.2%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
403	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W CC	29,455	9.4%	1.7%	0.1%	1.5%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%	
404	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC	3,427	12.6%	4.1%	0.1%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
406	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W CC	2,102	5.7%	0.4%	0.0%	0.3%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%		
407	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W/O CC	554	2.9%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
408	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R.PROC	1,905	12.3%	1.4%	0.1%	0.5%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%		
409	17	MED	RADIOTHERAPY	1,613	28.3%	0.9%	0.2%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	100.0%		
410	17	MED	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS	26,485	7.6%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%		
411	17	MED *	HISTORY OF MALIGNANCY W/O ENDOSCOPY	4	43.9%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%		
412	17	MED *	HISTORY OF MALIGNANCY W ENDOSCOPY	12	2.2%	1.7%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%		
413	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W CC	5,145	14.8%	1.7%	0.1%	2.3%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%		
414	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC	444	18.9%	3.2%	0.2%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%		
417	18	MED	SEPTICEMIA AGE 0-17	29	6.8%	0.2%	0.2%	2.6%	0.0%	0.1%	0.0%	6.3%	0.1%	100.0%		
418	18	MED	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS	27,021	9.4%	0.8%	0.1%	2.4%	0.0%	0.0%	0.0%	0.6%	0.6%	100.0%		
419	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W CC	15,598	12.9%	1.4%	0.1%	4.4%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%		
420	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W/O CC	2,655	16.7%	2.0%	0.1%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%		
421	18	MED	VIRAL ILLNESS AGE >17	11,059	11.3%	2.2%	0.1%	4.9%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%		
422	18	MED	VIRAL ILLNESS & FEVER OF UNKNOWN ORIGIN AGE 0-17	53	5.0%	0.0%	0.5%	2.9%	0.0%	0.0%	0.0%	3.3%	0.0%	100.0%		
423	18	MED	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES	8,177	7.3%	1.2%	0.1%	1.9%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%		
424	19	SURG	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	951	7.5%	1.9%	0.1%	1.4%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%		
425	19	MED	ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	12,335	13.2%	5.6%	0.1%	6.1%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%		
426	19	MED	DEPRESSIVE NEUROSES	3,758	7.7%	2.2%	0.0%	5.7%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%		
427	19	MED	NEUROSES EXCEPT DEPRESSIVE	1,313	7.6%	2.8%	0.1%	5.7%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%		
428	19	MED	DISORDERS OF PERSONALITY & IMPULSE CONTROL	739	3.9%	1.2%	0.0%	3.8%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%		
429	19	MED	ORGANIC DISTURBANCES & MENTAL RETARDATION	22,299	11.5%	4.8%	0.0%	4.7%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%		
430	19	MED	PSYCHOSES	66,511	3.0%	1.0%	0.0%	3.4%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%		
431	19	MED	CHILDHOOD MENTAL DISORDERS	296	4.0%	2.5%	0.1%	4.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%		
432	19	MED	OTHER MENTAL DISORDER DIAGNOSES	363	10.4%	4.5%	0.1%	4.9%	0.0%	0.0%	0.0%	0.1%	0.1%	100.0%		
433	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA	4,444	5.9%	0.5%	0.0%	6.8%	0.0%	0.2%	0.0%	0.1%	0.0%	100.0%		
439	21	SURG	SKIN GRAFTS FOR INJURIES	1,554	2.5%	0.1%	0.0%	0.4%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%		
440	21	SURG	WOUND DEBRIDEMENTS FOR INJURIES	4,770	3.3%	0.3%	0.1%	0.9%	0.0%	0.0%	0.0%	0.9%	0.1%	100.0%		
441	21	SURG	HAND PROCEDURES FOR INJURIES	688	4.0%	0.3%	0.1%	4.2%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%		
442	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W CC	16,814	5.9%	0.3%	0.1%	1.0%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%		
443	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W/O CC	3,181	4.0%	0.4%	0.2%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%		
444	21	MED	TRAUMATIC INJURY AGE >17 W CC	5,449	17.7%	2.2%	0.1%	5.8%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%		
445	21	MED	TRAUMATIC INJURY AGE >17 W/O CC	1,960	22.5%	3.2%	0.1%	8.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%		
447	21	MED	ALLERGIC REACTIONS AGE >17	5,681	6.9%	0.7%	0.1%	9.7%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%		
449	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W CC	36,276	8.3%	1.3%	0.1%	6.7%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%		
450	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W/O CC	6,679	8.4%	1.5%	0.1%	11.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%		
452	21	MED	COMPLICATIONS OF TREATMENT W CC	25,763	9.3%	0.5%	0.1%	3.1%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%		
453	21	MED	COMPLICATIONS OF TREATMENT W/O CC	4,893	10.2%	0.7%	0.3%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%		
454	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W CC	3,784	12.1%	1.3%	0.1%	6.2%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%		
455	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W/O CC	741	19.4%	1.4%	0.2%	9.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%		
461	23	SURG	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES	2,196	5.0%	0.7%	0.2%	0.7%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%		
462	23	MED	REHABILITATION	3,104	1.4%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%		
463	23	MED	SIGNS & SYMPTOMS W CC	29,814	12.4%	3.3%	0.1%	5.1%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%		
464	23	MED	SIGNS & SYMPTOMS W/O CC	6,935	14.7%	5.7%	0.1%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%		
465	23	MED	AFTERCARE W HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	144	7.5%	0.0%	0.4%	1.0%	0.0%	0.0%	0.0%	0.0%	0.1%	100.0%		
466	23	MED	AFTERCARE W/O HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	968	6.1%	0.1%	0.1%	1.1%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%		
467	23	MED	OTHER FACTORS INFLUENCING HEALTH STATUS	867	13.5%	1.2%	0.1%	4.9%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%		
468		SURG	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	47,282	6.2%	0.7%	0.1%	1.0%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%		

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	Raw case count	CMS_12		CMS_13		CMS_13		CMS_13		N/A	CMS_13		Total
					Radiology	MRI	Other O/P services	Emergency	Ambulance	Professional fees	Organ acquisition (removed)	ESRD		Clinics		
480	PRE	SURG	LIVER TRANSPLANT AND/OR INTESTINAL TRANSPLANT	994	3.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
481	PRE	SURG	BONE MARROW TRANSPLANT	1,078	2.7%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.1%	100.0%
482	PRE	SURG	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES	4,629	4.5%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	100.0%
484	24	SURG	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	411	12.2%	0.6%	0.1%	2.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	100.0%
485	24	SURG	LIMB REATTACHMENT, HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	3,399	9.8%	0.4%	0.1%	2.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	100.0%
486	24	SURG	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	2,286	13.1%	0.5%	0.1%	2.4%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	100.0%
487	24	MED	OTHER MULTIPLE SIGNIFICANT TRAUMA	4,340	20.9%	1.3%	0.1%	4.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	100.0%
488	25	SURG	HIV W EXTENSIVE O.R. PROCEDURE	743	5.9%	1.0%	0.1%	0.7%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	100.0%
489	25	MED	HIV W MAJOR RELATED CONDITION	12,470	6.7%	1.4%	0.1%	2.2%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	100.0%
490	25	MED	HIV W OR W/O OTHER RELATED CONDITION	4,603	8.8%	2.0%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	100.0%
491	8	SURG	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF UPPER EXTREMITY	20,270	1.9%	0.1%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
492	17	MED	CHEMOTHERAPY W ACUTE LEUKEMIA OR W USE OF HI DOSE CHEMOAGENT	3,561	3.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	100.0%
493	7	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W CC	56,599	9.4%	0.5%	0.1%	1.8%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	100.0%
494	7	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC	22,834	8.5%	0.3%	0.2%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
495	PRE	SURG	LUNG TRANSPLANT	300	3.3%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	100.0%
496	8	SURG	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	3,099	2.7%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	100.0%
497	8	SURG	SPINAL FUSION EXCEPT CERVICAL W CC	27,685	2.3%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	100.0%
498	8	SURG	SPINAL FUSION EXCEPT CERVICAL W/O CC	18,685	1.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
499	8	SURG	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W CC	33,081	4.1%	1.4%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	100.0%
500	8	SURG	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W/O CC	43,738	3.0%	0.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
501	8	SURG	KNEE PROCEDURES W PDX OF INFECTION W CC	2,997	3.8%	0.7%	0.1%	0.9%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	100.0%
502	8	SURG	KNEE PROCEDURES W PDX OF INFECTION W/O CC	701	2.8%	0.4%	0.1%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
503	8	SURG	KNEE PROCEDURES W/O PDX OF INFECTION	5,321	3.0%	0.5%	0.1%	0.8%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	100.0%
504	22	SURG	EXTEN. BURNS OR FULL THICKNESS BURN W/MV 96+HRS W/SKIN GFT	172	2.3%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	100.0%
505	22	MED	EXTEN. BURNS OR FULL THICKNESS BURN W/MV 96+HRS W/O SKIN GFT	157	2.9%	0.2%	0.2%	2.5%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	100.0%
506	22	SURG	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W CC OR SIG TRAUMA	863	1.9%	0.2%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.3%	0.1%	0.0%	100.0%
507	22	SURG	FULL THICKNESS BURN W SKIN GRFT OR INHAL INJ W/O CC OR SIG TRAUMA	274	1.0%	0.1%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
508	22	MED	FULL THICKNESS BURN W/O SKIN GRFT OR INHAL INJ W CC OR SIG TRAUMA	609	3.8%	0.6%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.9%	0.1%	0.0%	100.0%
509	22	MED	FULL THICKNESS BURN W/O SKIN GRFT OR INH INJ W/O CC OR SIG TRAUMA	137	1.4%	0.0%	0.1%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
510	22	MED	NON-EXTENSIVE BURNS W CC OR SIGNIFICANT TRAUMA	1,615	3.7%	0.4%	0.1%	2.8%	0.0%	0.0%	0.0%	0.0%	0.6%	0.1%	0.0%	100.0%
511	22	MED	NON-EXTENSIVE BURNS W/O CC OR SIGNIFICANT TRAUMA	558	2.4%	0.2%	0.1%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
512	PRE	SURG	SIMULTANEOUS PANCREAS/KIDNEY TRANSPLANT	402	2.9%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	100.0%
513	PRE	SURG	PANCREAS TRANSPLANT	195	3.1%	0.1%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	100.0%
515	5	SURG	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH	49,586	1.5%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	100.0%
518	5	SURG	PERC CARDIO PROC W/O CORONARY ARTERY STENT OR AMI	22,359	2.3%	0.3%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	100.0%
519	8	SURG	CERVICAL SPINAL FUSION W CC	11,057	3.9%	1.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	100.0%
520	8	SURG	CERVICAL SPINAL FUSION W/O CC	14,632	2.5%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
521	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE W CC	29,416	8.6%	2.2%	0.0%	4.9%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	100.0%
522	20	MED	ALC/DRUG ABUSE OR DEPEND W REHABILITATION THERAPY W/O CC	4,965	0.8%	0.1%	0.0%	0.9%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
523	20	MED	ALC/DRUG ABUSE OR DEPEND W/O REHABILITATION THERAPY W/O CC	14,026	6.2%	1.6%	0.1%	5.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
524	1	MED	TRANSIENT ISCHEMIA	103,634	13.6%	11.6%	0.0%	5.4%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	100.0%
525	5	SURG	OTHER HEART ASSIST SYSTEM IMPLANT	243	1.4%	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	100.0%
528	1	SURG	INTRACRANIAL VASCULAR PROC W PDX HEMORRHAGE	1,641	12.5%	0.4%	0.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	100.0%
529	1	SURG	VENTRICULAR SHUNT PROCEDURES W CC	4,345	7.8%	1.2%	0.1%	0.7%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	100.0%
530	1	SURG	VENTRICULAR SHUNT PROCEDURES W/O CC	2,853	5.0%	0.5%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
531	1	SURG	SPINAL PROCEDURES W CC	4,564	6.1%	3.4%	0.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	100.0%
532	1	SURG	SPINAL PROCEDURES W/O CC	2,483	3.6%	1.9%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
533	1	SURG	EXTRACRANIAL PROCEDURES W CC	42,395	7.0%	1.6%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	100.0%
534	1	SURG	EXTRACRANIAL PROCEDURES W/O CC	38,873	5.3%	0.8%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
535	5	SURG	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK	7,634	1.9%	0.1%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	100.0%
536	5	SURG	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK	7,523	1.9%	0.1%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	100.0%

Appendix D (continued)  
DRG Charges by MedPAR Charge Department

DRG num	MDC	Case type	DRG name	Raw case count	CMS_12	CMS_12	CMS_13	CMS_13	CMS_13	CMS_13	N/A	CMS_13	CMS_13	Total
					Radiology	MRI	Other O/P services	Emergency	Ambulance	Pro-fessional fees	Organ acquisition (removed)	ESRD	Clinics	
537	8	SURG	LOCAL EXCIS & REMOV OF INT FIX DEV EXCEPT HIP & FEMUR W CC	8,196	3.7%	0.6%	0.1%	0.6%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
538	8	SURG	LOCAL EXCIS & REMOV OF INT FIX DEV EXCEPT HIP & FEMUR W/O CC	4,862	2.3%	0.2%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
539	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR OR PROCEDURE W CC	4,666	6.8%	1.1%	0.1%	0.4%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
540	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR OR PROCEDURE W/O CC	1,455	4.4%	1.3%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
541	PRE	SURG	ECMO OR TRACH W MV 96+HRS OR PDX EXC FACE, MOUTH & NECK W MAJ O.R.	21,643	4.6%	0.2%	0.1%	0.3%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%
542	PRE	SURG	TRACH W MV 96+HRS OR PDX EXC FACE, MOUTH & NECK W/O MAJ O.R.	21,116	4.3%	0.2%	0.0%	0.6%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
543	1	SURG	CRANIOTOMY W MAJOR DEVICE IMPLANT OR ACUTE COMPLEX CNS PRINCIPAL DIAGNOSIS	5,219	8.9%	1.6%	0.1%	1.3%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
544	8	SURG	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	404,171	1.8%	0.1%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
545	8	SURG	REVISION OF HIP OR KNEE REPLACEMENT	40,723	1.7%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
546	8	SURG	SPINAL FUSION EXC CERV WITH CURVATURE OF THE SPINE OR MALIG	2,095	3.6%	0.8%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
547	5	SURG	CORONARY BYPASS W CARDIAC CATH W MAJOR CV DX	30,935	2.7%	0.1%	0.0%	0.5%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
548	5	SURG	CORONARY BYPASS W CARDIAC CATH W/O MAJOR CV DX	30,209	2.5%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
549	5	SURG	CORONARY BYPASS W/O CARDIAC CATH W MAJOR CV DX	12,558	2.4%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
550	5	SURG	CORONARY BYPASS W/O CARDIAC CATH W/O MAJOR CV DX	32,049	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
551	5	SURG	PERMANENT CARDIAC PACEMAKER IMPL W MAJ CV DX OR AICD LEAD OR GNRTR	51,370	3.4%	0.2%	0.2%	0.9%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
552	5	SURG	OTHER PERMANENT CARDIAC PACEMAKER IMPLANT W/O MAJOR CV DX	77,491	3.9%	0.3%	0.3%	1.1%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
553	5	SURG	OTHER VASCULAR PROCEDURES W CC W MAJOR CV DX	36,701	9.0%	0.6%	0.2%	0.8%	0.0%	0.0%	0.0%	2.4%	0.0%	100.0%
554	5	SURG	OTHER VASCULAR PROCEDURES W CC W/O MAJOR CV DX	71,370	10.5%	0.4%	0.2%	0.5%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
555	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W MAJOR CV DX	41,449	2.8%	0.1%	0.1%	1.2%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
556	5	SURG	PERCUTANEOUS CARDIOVASC PROC W NON-DRUG-ELUTING STENT W/O MAJ CV DX	23,685	2.2%	0.1%	0.0%	0.5%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
557	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W MAJOR CV DX	108,286	1.9%	0.1%	0.1%	1.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
558	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W/O MAJ CV DX	170,167	1.5%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
559	1	MED	ACUTE ISCHEMIC STROKE WITH USE OF THROMBOLYTIC AGENT	2,401	12.1%	4.4%	0.1%	3.4%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
560	1	MED	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM	3,173	6.3%	5.0%	0.1%	1.4%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
561	1	MED	NON-BACTERIAL INFECTIONS OF NERVOUS SYSTEM EXCEPT VIRAL MENINGITIS	2,632	7.6%	7.0%	0.1%	1.8%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
562	1	MED	SEIZURE AGE > 17 W CC	49,210	10.2%	4.8%	0.0%	4.9%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
563	1	MED	SEIZURE AGE > 17 W/O CC	19,540	10.7%	6.9%	0.1%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
564	1	MED	HEADACHES AGE >17	14,652	14.0%	11.6%	0.1%	5.6%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
565	4	MED	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT 96+ HOURS	41,790	4.7%	0.2%	0.0%	1.3%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%
566	4	MED	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT < 96 HOURS	63,900	5.8%	0.3%	0.1%	3.3%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%
567	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROC AGE > 17 W CC W MAJOR GI DX	9,947	5.9%	0.1%	0.0%	1.0%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
568	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES PROC AGE > 17 W CC W/O MAJOR GI DX	15,552	4.8%	0.1%	0.1%	0.3%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
569	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC W MAJOR GI DX	56,829	6.6%	0.1%	0.1%	0.9%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
570	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC W/O MAJOR GI DX	67,586	4.6%	0.1%	0.1%	0.4%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
571	6	MED	MAJOR ESOPHAGEAL DISORDERS	10,239	7.3%	0.4%	0.2%	4.4%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
572	8	MED	MAJOR GASTROINTESTINAL DISORDERS AND PERITONEAL INFECTIONS	42,874	10.4%	0.4%	0.1%	3.1%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
573	11	SURG	MAJOR BLADDER PROCEDURES	6,194	3.3%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
574	16	MED	MAJOR HEMATOLOGIC/IMMUNOLOGIC DIAG EXC SICKLE CELL CRISIS & COAGUL	24,402	6.3%	0.6%	0.0%	2.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
575	18	MED	SEPTICEMIA W MV96+ HOURS AGE >17	8,808	5.0%	0.2%	0.0%	1.2%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%
576	18	MED	SEPTICEMIA W/O MV96+ HOURS AGE >17	243,162	7.9%	0.6%	0.0%	3.3%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
577	1	SURG	CAROTID ARTERY STENT PROCEDURE	2,431	14.3%	0.7%	0.3%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
578	18	SURG	INFECTIOUS & PARASITIC DISEASES W OR PROCEDURE	30,959	6.3%	0.5%	0.1%	1.1%	0.0%	0.0%	0.0%	1.6%	0.0%	100.0%
579	18	SURG	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W OR PROCEDURE	19,311	4.8%	0.5%	0.1%	0.7%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
				11,064,379	6.9%	0.9%	0.1%	2.2%	0.0%	0.0%	0.0%	0.6%	0.01%	100.0%
			MINIMUM	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
			25th PERCENTILE	1,434	4.0%	0.2%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
			MEDIAN	5,095	7.2%	0.5%	0.1%	2.0%	0.0%	0.0%	0.0%	0.3%	0.0%	
			75 PERCENTILE	19,642	12.0%	1.5%	0.1%	4.3%	0.0%	0.0%	0.0%	0.6%	0.0%	
			MAXIMUM	630,619	43.9%	19.0%	1.0%	11.3%	0.1%	3.4%	0.0%	15.5%	0.8%	

## **APPENDIX E**

Appendix E

Revenue Code Frequencies and Related Charges from 100% IPPS SAF Claims matched MedPAR Claims Study file

Description			Total SAF Charges	Number facilities using this charge	Percent facilities using this charge	Average \$ per user facility	Percent total charges
_0001			\$ 314,615,751,887	3372	100.0%	\$ 93,302,418	100.00%
_0100	All inclusive rates	R&B + anc	\$ 715,969	37	1.1%	\$ 19,351	0.00%
_0101		R&B	\$ 10,873,200	16	0.5%	\$ 679,575	0.00%
_0110	Routine/private	general	\$ 5,547,976,919	1849	54.8%	\$ 3,000,528	1.76%
_0111		medsurg	\$ 3,390,551,182	1073	31.8%	\$ 3,159,880	1.08%
_0112		OB	\$ 16,360,383	657	19.5%	\$ 24,902	0.01%
_0113		Ped	\$ 16,211,542	182	5.4%	\$ 89,074	0.01%
_0114		Psych	\$ 45,740,513	211	6.3%	\$ 216,780	0.01%
_0115		Hospice	\$ 138,583	17	0.5%	\$ 8,152	0.00%
_0116		Detox	\$ 5,322,681	38	1.1%	\$ 140,071	0.00%
_0117		Oncol	\$ 171,651,819	146	4.3%	\$ 1,175,697	0.05%
_0118		Rehab	\$ 5,024,257	101	3.0%	\$ 49,745	0.00%
_0119		Other	\$ 95,650,820	119	3.5%	\$ 803,788	0.03%
_0120	Routine/semi	general	\$ 15,601,690,766	2161	64.1%	\$ 7,219,663	4.96%
_0121		medsurg	\$ 18,551,807,785	1318	39.1%	\$ 14,075,727	5.90%
_0122		OB	\$ 51,205,429	1204	35.7%	\$ 42,529	0.02%
_0123		Ped	\$ 35,244,846	446	13.2%	\$ 79,024	0.01%
_0124		Psych	\$ 518,480,250	756	22.4%	\$ 685,820	0.16%
_0125		Hospice	\$ 1,584,288	24	0.7%	\$ 66,012	0.00%
_0126		Detox	\$ 66,881,022	207	6.1%	\$ 323,097	0.02%
_0127		Oncol	\$ 396,804,838	175	5.2%	\$ 2,267,456	0.13%
_0128		Rehab	\$ 66,078,534	261	7.7%	\$ 253,174	0.02%
_0129		Other	\$ 249,978,535	152	4.5%	\$ 1,644,596	0.08%
_0130	Routine/3-4	general	\$ 98,520,067	108	3.2%	\$ 912,223	0.03%
_0131		medsurg	\$ 206,811,260	86	2.6%	\$ 2,404,782	0.07%
_0132		OB	\$ 2,215,735	32	0.9%	\$ 69,242	0.00%
_0133		Ped	\$ 2,749,009	20	0.6%	\$ 137,450	0.00%
_0134		Psych	\$ 13,175,411	29	0.9%	\$ 454,325	0.00%
_0136		Detox	\$ 1,603,400	6	0.2%	\$ 267,233	0.00%
_0137		Oncol	\$ 5,403,389	7	0.2%	\$ 771,913	0.00%
_0138		Rehab	\$ 904,701	9	0.3%	\$ 100,522	0.00%
_0139		Other	\$ 868,039	4	0.1%	\$ 217,010	0.00%
_0140	Private/deluxe	general	\$ 65,323,517	112	3.3%	\$ 583,246	0.02%
_0141		medsurg	\$ 18,870,172	56	1.7%	\$ 336,967	0.01%
_0142		OB	\$ 78,243	16	0.5%	\$ 4,890	0.00%
_0144		Psych	\$ 624,848	2	0.1%	\$ 312,424	0.00%
_0146		Detox	\$ 16,911	1	0.0%	\$ 16,911	0.00%
_0147		Oncol	\$ 404,247	7	0.2%	\$ 57,750	0.00%
_0148		Rehab	\$ 278,400	1	0.0%	\$ 278,400	0.00%
_0149		Other	\$ 239,022	5	0.1%	\$ 47,804	0.00%
_0150	Routine/ward	general	\$ 62,702,112	56	1.7%	\$ 1,119,681	0.02%
_0151		medsurg	\$ 25,633,076	31	0.9%	\$ 826,873	0.01%
_0152		OB	\$ 94,346	10	0.3%	\$ 9,435	0.00%
_0153		Ped	\$ 24,765	2	0.1%	\$ 12,383	0.00%
_0154		Psych	\$ 3,337,537	7	0.2%	\$ 476,791	0.00%
_0156		Detox	\$ 23,504	2	0.1%	\$ 11,752	0.00%
_0157			\$ 1,713	1	0.0%	\$ 1,713	0.00%
_0158		Rehab	\$ 102,285	2	0.1%	\$ 51,143	0.00%
_0159		Other	\$ 3,378,470	6	0.2%	\$ 563,078	0.00%
_0160	surcharges	general	\$ 38,879,751	77	2.3%	\$ 504,932	0.01%
_0164		sterile supp	\$ 343,819,732	355	10.5%	\$ 968,506	0.11%
_0169		other	\$ 28,204,509	43	1.3%	\$ 655,919	0.01%
_0170	Nursery		\$ 1,035	2	0.1%	\$ 518	0.00%
_0171			\$ 13,282	3	0.1%	\$ 4,427	0.00%
_0180	LOA		\$ 177,027	224	6.6%	\$ 790	0.00%
_0181			\$ -	4	0.1%	\$ -	0.00%
_0182			\$ 22,500	1	0.0%	\$ 22,500	0.00%
_0183			\$ -	1	0.0%	\$ -	0.00%

Appendix E (continued)

Revenue Code Frequencies and Related Charges from 100% IPPS SAF Claims matched MedPAR Claims Study file, matched to most recent cost reports ( FY 2004 or FY 2005)

Description		Total SAF Charges	Number facilities using this charge	Percent facilities using this charge	Average \$ per user facility	Percent total charges	
_0184		\$ -	1	0.0%	\$ -	0.00%	
_0185		\$ 498	3	0.1%	\$ 166	0.00%	
_0189		\$ 3	4	0.1%	\$ 1	0.00%	
_0200	Critical Care	ICU	10,100,138,063	2605	77.3%	\$ 3,877,212	3.21%
_0201		SICU	\$ 1,820,857,835	388	11.5%	\$ 4,692,933	0.58%
_0202		MICU	\$ 1,976,681,941	431	12.8%	\$ 4,586,269	0.63%
_0203		PICU	\$ 8,427,093	137	4.1%	\$ 61,512	0.00%
_0204		PsyICU	\$ 34,915,397	61	1.8%	\$ 572,384	0.01%
_0205		?	\$ 915	1	0.0%	\$ 915	0.00%
_0206		Intermediate ICU	\$ 9,654,119,425	1332	39.5%	\$ 7,247,837	3.07%
_0207		Burn	\$ 202,729,202	97	2.9%	\$ 2,089,992	0.06%
_0208		Trauma	\$ 186,357,867	94	2.8%	\$ 1,982,531	0.06%
_0209		Other ICU	\$ 1,208,842,052	248	7.4%	\$ 4,874,363	0.38%
_0210	Coronary care	CCU	\$ 4,231,340,358	1107	32.8%	\$ 3,822,349	1.34%
_0211		MI	\$ 178,053,181	40	1.2%	\$ 4,451,330	0.06%
_0212		Pulm Unit	\$ 46,608,683	34	1.0%	\$ 1,370,844	0.01%
_0213		Transplant	\$ 9,539,674	8	0.2%	\$ 1,192,459	0.00%
_0214		Intermediate CCU	\$ 5,790,666,683	634	18.8%	\$ 9,133,544	1.84%
_0219		Other CCU	\$ 685,440,584	122	3.6%	\$ 5,618,365	0.22%
_0220	Special Charges	general	\$ 22,140,872	83	2.5%	\$ 266,757	0.01%
_0221		admission	\$ 31,108,149	48	1.4%	\$ 648,086	0.01%
_0222		tech supp	\$ 3,449,173	15	0.4%	\$ 229,945	0.00%
_0223		UR	\$ 401,784	3	0.1%	\$ 133,928	0.00%
_0224		late discharge	\$ 13,241,235	20	0.6%	\$ 662,062	0.00%
_0229		other	\$ 62,580	13	0.4%	\$ 4,814	0.00%
_0230	Increm nursing	general	\$ 624,981,174	205	6.1%	\$ 3,048,689	0.20%
_0231		nursery	\$ 5,524	7	0.2%	\$ 789	0.00%
_0232		OB	\$ 498,441	53	1.6%	\$ 9,405	0.00%
_0233		ICU	\$ 360,122,502	162	4.8%	\$ 2,222,978	0.11%
_0234		CCU	\$ 90,690,367	64	1.9%	\$ 1,417,037	0.03%
_0235		Hospice	\$ 38,537	2	0.1%	\$ 19,269	0.00%
_0239		other	\$ 10,816,760	23	0.7%	\$ 470,294	0.00%
_0240	All-incl. ancill	general	\$ 4,496,059	23	0.7%	\$ 195,481	0.00%
_0242		comprehensive	\$ 242	1	0.0%	\$ 242	0.00%
_0249		other	\$ 29,067	7	0.2%	\$ 4,152	0.00%
_0250	Drugs sold	general	\$ 34,261,204,176	3328	98.7%	\$ 10,294,833	10.89%
_0251		genreic	\$ 977,636,434	530	15.7%	\$ 1,844,597	0.31%
_0252		non-generic	\$ 977,354,367	546	16.2%	\$ 1,790,026	0.31%
_0253		take-home	\$ 2,813,554	292	8.7%	\$ 9,635	0.00%
_0254		incident to other dx	\$ 87,029,642	708	21.0%	\$ 122,923	0.03%
_0255		incident to radiology	\$ 871,404,419	2670	79.2%	\$ 326,369	0.28%
_0256		exerimental	\$ 2,281	10	0.3%	\$ 228	0.00%
_0257		non-Rx	\$ 12,046,723	267	7.9%	\$ 45,119	0.00%
_0258		IV solutions	\$ 6,061,219,705	3002	89.0%	\$ 2,019,061	1.93%
_0259		other	\$ 2,411,704,559	1399	41.5%	\$ 1,723,877	0.77%
_0260	IV therapy	general	\$ 662,596,187	2688	79.7%	\$ 246,502	0.21%
_0261		infusion pump	\$ 44,202,928	124	3.7%	\$ 356,475	0.01%
_0262		pharm services	\$ 1,183,512	23	0.7%	\$ 51,457	0.00%
_0263		drug/supply deliv	\$ 457,275	19	0.6%	\$ 24,067	0.00%
_0264		supplies	\$ 10,194,213	68	2.0%	\$ 149,915	0.00%
_0269		other	\$ 11,242,739	98	2.9%	\$ 114,722	0.00%
_0270	Supplies sold	general	\$ 14,125,428,955	3240	96.1%	\$ 4,359,700	4.49%
_0271		non-sterile	\$ 1,434,463,447	1822	54.0%	\$ 787,302	0.46%
_0272		sterile	\$ 9,318,343,793	3056	90.6%	\$ 3,049,196	2.96%
_0273		take-home	\$ 744,320	225	6.7%	\$ 3,308	0.00%
_0274		prosthetics/orthot	\$ 403,395,106	1983	58.8%	\$ 203,427	0.13%
_0275		pacemaker	\$ 4,564,922,708	2413	71.6%	\$ 1,891,804	1.45%
_0276		intraocular lens	\$ 2,088,216	896	26.6%	\$ 2,331	0.00%
_0277		O2-home	\$ 3	1	0.0%	\$ 3	0.00%

Appendix E (continued)

Revenue Code Frequencies and Related Charges from 100% IPPS SAF Claims matched MedPAR Claims Study file, matched to most recent cost reports ( FY 2004 or FY 2005)

	Description	Total SAF Charges	Number facilities using this charge	Percent facilities using this charge	Average \$ per user facility	Percent total charges
_0278	implants/devices	\$ 15,244,966,359	2937	87.1%	\$ 5,190,659	4.85%
_0279	oth supplies/devices	\$ 610,923,905	807	23.9%	\$ 757,031	0.19%
_0280	Oncology general	\$ 2,360,618	193	5.7%	\$ 12,231	0.00%
_0285		\$ 53	1	0.0%	\$ 53	0.00%
_0289	other	\$ 51,919	11	0.3%	\$ 4,720	0.00%
_0290	DME general	\$ 19,043,020	122	3.6%	\$ 156,090	0.01%
_0291	rental	\$ 3,737,520	52	1.5%	\$ 71,875	0.00%
_0292	purchase new	\$ 396,942	71	2.1%	\$ 5,591	0.00%
_0294	HHA	\$ 123	2	0.1%	\$ 62	0.00%
_0299	other	\$ 398,679	9	0.3%	\$ 44,298	0.00%
_0300	Lab - clin general	\$ 12,687,331,787	3335	98.9%	\$ 3,804,297	4.03%
_0301	chemistry	\$ 12,822,277,603	2604	77.2%	\$ 4,924,070	4.08%
_0302	immunology	\$ 981,292,759	2477	73.5%	\$ 396,162	0.31%
_0303	renal (home)	\$ 4,741	4	0.1%	\$ 1,185	0.00%
_0304	nonroutine dialysis	\$ 880,047	49	1.5%	\$ 17,960	0.00%
_0305	hematology	\$ 4,156,372,062	2494	74.0%	\$ 1,666,549	1.32%
_0306	bact/microbio	\$ 1,997,454,710	2461	73.0%	\$ 811,644	0.63%
_0307	urology	\$ 263,001,605	2188	64.9%	\$ 120,202	0.08%
_0309	other	\$ 209,295,579	1685	50.0%	\$ 124,211	0.07%
_0310	Lab - path general	\$ 542,846,208	2508	74.4%	\$ 216,446	0.17%
_0311	cytology	\$ 81,570,130	2103	62.4%	\$ 38,788	0.03%
_0312	histology	\$ 325,570,393	1477	43.8%	\$ 220,427	0.10%
_0314	biopsy	\$ 9,756,376	174	5.2%	\$ 56,071	0.00%
_0319	other	\$ 6,137,279	162	4.8%	\$ 37,884	0.00%
_0320	Diagnostic Rad general	\$ 4,697,633,238	3355	99.5%	\$ 1,400,189	1.49%
_0321	angiocardiography	\$ 42,736,578	417	12.4%	\$ 102,486	0.01%
_0322	arthrography	\$ 1,657,723	339	10.1%	\$ 4,890	0.00%
_0323	arteriogram	\$ 457,784,038	1431	42.4%	\$ 319,905	0.15%
_0324	chest	\$ 2,226,124,052	2226	66.0%	\$ 1,000,056	0.71%
_0325		\$ 4,385	1	0.0%	\$ 4,385	0.00%
_0329	other	\$ 103,122,849	352	10.4%	\$ 292,963	0.03%
_0330	Xray - Tx general	\$ 7,421,641	131	3.9%	\$ 56,654	0.00%
_0331	chemo injected	\$ 7,354,376	552	16.4%	\$ 13,323	0.00%
_0332	chemo oral	\$ 155,350	31	0.9%	\$ 5,011	0.00%
_0333	radation therapy	\$ 314,986,174	1500	44.5%	\$ 209,991	0.10%
_0335	chemo-IV	\$ 11,311,870	1086	32.2%	\$ 10,416	0.00%
_0339	other	\$ 1,333,365	21	0.6%	\$ 63,494	0.00%
_0340	Nuclear med general	\$ 437,122,451	1568	46.5%	\$ 278,777	0.14%
_0341	diagnostic	\$ 1,635,352,930	2635	78.1%	\$ 620,627	0.52%
_0342	treatment	\$ 3,842,324	593	17.6%	\$ 6,479	0.00%
_0343	unk	\$ 95,963,673	1266	37.5%	\$ 75,801	0.03%
_0344	unk	\$ 2,682,613	166	4.9%	\$ 16,160	0.00%
_0349	other	\$ 28,701,718	68	2.0%	\$ 422,084	0.01%
_0350	CT Scanning general	\$ 2,988,827,878	2973	88.2%	\$ 1,005,324	0.95%
_0351	head	\$ 2,378,955,436	2627	77.9%	\$ 905,579	0.76%
_0352	body	\$ 4,368,533,620	2456	72.8%	\$ 1,778,719	1.39%
_0359	other	\$ 123,737,865	640	19.0%	\$ 193,340	0.04%
_0360	Oper Room general	\$ 20,980,956,965	3283	97.4%	\$ 6,390,788	6.67%
_0361	minor	\$ 1,721,942,681	2168	64.3%	\$ 794,254	0.55%
_0362	otherorgan transplant	\$ 3,665,623	42	1.2%	\$ 87,277	0.00%
_0364	unk	\$ 3,494	1	0.0%	\$ 3,494	0.00%
_0367	kidney transplant	\$ 7,871,179	28	0.8%	\$ 281,114	0.00%
_0369	other	\$ 332,154,884	278	8.2%	\$ 1,194,802	0.11%
_0370	Anesthesia general	\$ 3,824,093,538	2964	87.9%	\$ 1,290,180	1.22%
_0371	incident to radiology	\$ 12,363,805	368	10.9%	\$ 33,597	0.00%
_0372	incid to other dx	\$ 26,565,603	261	7.7%	\$ 101,784	0.01%
_0375	unk	\$ 347	1	0.0%	\$ 347	0.00%
_0379	other	\$ 61,516,127	213	6.3%	\$ 288,808	0.02%
_0380	Blood general	\$ 8,007,231	158	4.7%	\$ 50,679	0.00%

Appendix E (continued)

Revenue Code Frequencies and Related Charges from 100% IPPS SAF Claims matched MedPAR Claims Study file, matched to most recent cost reports ( FY 2004 or FY 2005)

	Description	Total SAF Charges	Number facilities using this charge	Percent facilities using this charge	Average \$ per user facility	Percent total charges
_0381	packed red cells	\$ 15,693,127	236	7.0%	\$ 66,496	0.00%
_0382	whole blood	\$ 168,052	47	1.4%	\$ 3,576	0.00%
_0383	plasma	\$ 14,191,737	435	12.9%	\$ 32,625	0.00%
_0384	platelets	\$ 19,594,271	417	12.4%	\$ 46,989	0.01%
_0385	leucocytes	\$ 27,997,483	140	4.2%	\$ 199,982	0.01%
_0386	other components	\$ 52,744,735	258	7.7%	\$ 204,437	0.02%
_0387	other derivatives	\$ 5,898,399	204	6.0%	\$ 28,914	0.00%
_0389	other	\$ 12,677,966	127	3.8%	\$ 99,827	0.00%
_0390	Blood process general	\$ 2,579,899,560	3201	94.9%	\$ 805,967	0.82%
_0391	blood admin	\$ 555,641,712	2838	84.2%	\$ 195,786	0.18%
_0399	other storage/process	\$ 30,382,588	183	5.4%	\$ 166,025	0.01%
_0400	Other Imaging general	\$ 11,146,722	242	7.2%	\$ 46,061	0.00%
_0401	Dx mammography	\$ 2,193,826	2095	62.1%	\$ 1,047	0.00%
_0402	ultrasound	\$ 972,192,398	3274	97.1%	\$ 296,943	0.31%
_0403	screening mammog	\$ 387,275	757	22.4%	\$ 512	0.00%
_0404	PET scan	\$ 39,935,957	784	23.3%	\$ 50,939	0.01%
_0405	unk	\$ 275	1	0.0%	\$ 275	0.00%
_0406	unk	\$ 2,843	1	0.0%	\$ 2,843	0.00%
_0409	other	\$ 3,974,129	76	2.3%	\$ 52,291	0.00%
_0410	Resp Therapy general	\$ 7,995,976,069	3206	95.1%	\$ 2,494,066	2.54%
_0412	inhalation services	\$ 949,326,945	874	25.9%	\$ 1,086,186	0.30%
_0413	hyperbaric O2	\$ 41,302,743	444	13.2%	\$ 93,024	0.01%
_0417	unk	\$ 1,230	1	0.0%	\$ 1,230	0.00%
_0419	other	\$ 117,488,337	319	9.5%	\$ 368,302	0.04%
_0420	Physical Therapy general	\$ 1,980,123,250	3151	93.4%	\$ 628,411	0.63%
_0421	visit charge	\$ 144,864,737	593	17.6%	\$ 244,291	0.05%
_0422	hourly charge	\$ 6,899,433	55	1.6%	\$ 125,444	0.00%
_0423	group rate	\$ 1,382,940	167	5.0%	\$ 8,281	0.00%
_0424	evaluation/re-eval	\$ 523,434,207	2337	69.3%	\$ 223,977	0.17%
_0425	unk	\$ 338	1	0.0%	\$ 338	0.00%
_0429	other	\$ 24,217,083	94	2.8%	\$ 257,629	0.01%
_0430	Occup Therapy general	\$ 515,700,341	2700	80.1%	\$ 191,000	0.16%
_0431	visit charge	\$ 35,560,355	386	11.4%	\$ 92,125	0.01%
_0432	hourly charge	\$ 1,434,954	47	1.4%	\$ 30,531	0.00%
_0433	group rate	\$ 948,817	131	3.9%	\$ 7,243	0.00%
_0434	evaluatin/re-eval	\$ 210,580,558	1940	57.5%	\$ 108,547	0.07%
_0439	other	\$ 3,665,695	46	1.4%	\$ 79,689	0.00%
_0440	Speech Therapy general	\$ 305,921,562	2742	81.3%	\$ 111,569	0.10%
_0441	visit charge	\$ 15,730,773	512	15.2%	\$ 30,724	0.00%
_0442	hourly charge	\$ 1,946,278	71	2.1%	\$ 27,412	0.00%
_0443	group rate	\$ 128,265	48	1.4%	\$ 2,672	0.00%
_0444	evaluatin/re-eval	\$ 106,528,501	1753	52.0%	\$ 60,769	0.03%
_0449	other	\$ 2,905,383	48	1.4%	\$ 60,529	0.00%
_0450	Emerg Room general	\$ 6,658,285,366	3215	95.3%	\$ 2,071,006	2.12%
_0451	EMTALA screening	\$ 18,140,195	80	2.4%	\$ 226,752	0.01%
_0452	ER beyond EMTALA	\$ 54,209,997	42	1.2%	\$ 1,290,714	0.02%
_0454	unk	\$ 920	1	0.0%	\$ 920	0.00%
_0456	urgent care	\$ 804,100	116	3.4%	\$ 6,932	0.00%
_0459	other	\$ 22,137,834	69	2.0%	\$ 320,838	0.01%
_0460	Pulm Function general	\$ 1,987,050,319	3249	96.4%	\$ 611,588	0.63%
_0469	other	\$ 27,204,107	104	3.1%	\$ 261,578	0.01%
_0470	Audiology general	\$ 1,427,620	260	7.7%	\$ 5,491	0.00%
_0471	diagnostic	\$ 4,585,729	762	22.6%	\$ 6,018	0.00%
_0472	treatment	\$ 205,351	31	0.9%	\$ 6,624	0.00%
_0479	other	\$ 3,756	23	0.7%	\$ 163	0.00%
_0480	Cardiology general	\$ 6,177,362,521	3176	94.2%	\$ 1,945,013	1.96%
_0481	catheterization lab	\$ 7,817,999,011	1995	59.2%	\$ 3,918,796	2.48%
_0482	stress test	\$ 308,005,293	2862	84.9%	\$ 107,619	0.10%
_0483	Echo	\$ 611,627,649	888	26.3%	\$ 688,770	0.19%

Appendix E (continued)

Revenue Code Frequencies and Related Charges from 100% IPPS SAF Claims matched MedPAR Claims Study file, matched to most recent cost reports ( FY 2004 or FY 2005)

Description		Total SAF Charges	Number facilities using this charge	Percent facilities using this charge	Average \$ per user facility	Percent total charges
_0489	other	\$ 41,625,507	174	5.2%	\$ 239,227	0.01%
_0490	Ambul Surg general	\$ 215,078,462	768	22.8%	\$ 280,050	0.07%
_0499	other	\$ 6,202,173	42	1.2%	\$ 147,671	0.00%
_0500	Outpatient Services general	\$ 32,730,447	57	1.7%	\$ 574,218	0.01%
_0509	other	\$ 88	1	0.0%	\$ 88	0.00%
_0510	Hospital clinics general	\$ 41,607,639	1825	54.1%	\$ 22,799	0.01%
_0511	chronic pain	\$ 735,927	186	5.5%	\$ 3,957	0.00%
_0512	dental	\$ 141,574	55	1.6%	\$ 2,574	0.00%
_0513	psychiatric	\$ 44,675	20	0.6%	\$ 2,234	0.00%
_0514	ob-gyn	\$ 40,156	53	1.6%	\$ 758	0.00%
_0515	pediatrics	\$ 5,162	10	0.3%	\$ 516	0.00%
_0516	urgent care	\$ 533,873	59	1.7%	\$ 9,049	0.00%
_0517	family practice	\$ 24,073	15	0.4%	\$ 1,605	0.00%
_0519	other	\$ 1,820,358	193	5.7%	\$ 9,432	0.00%
_0520	Freestanding clinics general	\$ 29,775	4	0.1%	\$ 7,444	0.00%
_0521	RHC	\$ 4,875	9	0.3%	\$ 542	0.00%
_0530	Osteopathic services general	\$ 1,620	4	0.1%	\$ 405	0.00%
_0540	Ambulance general	\$ 595,630	83	2.5%	\$ 7,176	0.00%
_0541	supplies	\$ 367	3	0.1%	\$ 122	0.00%
_0542	medical transport	\$ 68,366	26	0.8%	\$ 2,629	0.00%
_0543	heart-mobile	\$ 17,578	2	0.1%	\$ 8,789	0.00%
_0544	Oxygen	\$ 291	2	0.1%	\$ 146	0.00%
_0545	Air amb	\$ 264,928	7	0.2%	\$ 37,847	0.00%
_0546	neonatal ambulance	\$ 234	1	0.0%	\$ 234	0.00%
_0549	other	\$ 485	2	0.1%	\$ 243	0.00%
_0550	Skilled Nursing general	\$ 350	1	0.0%	\$ 350	0.00%
_0552	hourly charge	\$ 44,989	3	0.1%	\$ 14,996	0.00%
_0560	Med Social Services general	\$ 84,779	18	0.5%	\$ 4,710	0.00%
_0561	visit charge	\$ 6,100	2	0.1%	\$ 3,050	0.00%
_0569	other	\$ 16,293	1	0.0%	\$ 16,293	0.00%
_0570	Home Hlth Aide general	\$ 2,676	1	0.0%	\$ 2,676	0.00%
_0603	Home O2 >4 LPM	\$ 44	1	0.0%	\$ 44	0.00%
_0610	MRI/MRA general	\$ 1,133,836,196	2892	85.8%	\$ 392,060	0.36%
_0611	brain	\$ 1,051,577,624	2383	70.7%	\$ 441,283	0.33%
_0612	spinal cord	\$ 441,259,785	2353	69.8%	\$ 187,531	0.14%
_0614	MRI/other	\$ 20,077,447	221	6.6%	\$ 90,848	0.01%
_0615	MRA/head,neck	\$ 115,104,216	780	23.1%	\$ 147,570	0.04%
_0616	MRA/lower extremities	\$ 6,058,508	359	10.6%	\$ 16,876	0.00%
_0618	MRA/other	\$ 17,709,612	520	15.4%	\$ 34,057	0.01%
_0619	MRA/other	\$ 32,983,967	255	7.6%	\$ 129,349	0.01%
_0621	Supplies sold incident to radiology	\$ 127,939,279	1227	36.4%	\$ 104,270	0.04%
_0622	incident to other dx	\$ 173,512,988	639	19.0%	\$ 271,538	0.06%
_0623	surgical dressing	\$ 1,762,257	226	6.7%	\$ 7,798	0.00%
_0624	investigational devices	\$ 26,239,894	169	5.0%	\$ 155,266	0.01%
_0626	unk	\$ 23	1	0.0%	\$ 23	0.00%
_0630	Drugs Sold general	\$ 8,767	4	0.1%	\$ 2,192	0.00%
_0631	single source	\$ 13,152	3	0.1%	\$ 4,384	0.00%
_0634	EPO<10k units	\$ 36,694,849	362	10.7%	\$ 101,367	0.01%
_0635	EPO>=10k units	\$ 56,339,677	309	9.2%	\$ 182,329	0.02%
_0636	add'l detail coding	\$ 211,473,178	283	8.4%	\$ 747,255	0.07%
_0637	self-administrable	\$ 99,604,431	479	14.2%	\$ 207,942	0.03%
_0638	unk	\$ 1,105	2	0.1%	\$ 553	0.00%
_0650	Hospice general	\$ 586	1	0.0%	\$ 586	0.00%
_0657	physician services	\$ 514	1	0.0%	\$ 514	0.00%
_0672	O/P Special Residenc contracted	\$ 150	1	0.0%	\$ 150	0.00%
_0680	Trauma response not used	\$ 2,160	1	0.0%	\$ 2,160	0.00%
_0681	Level 1	\$ 23,132,268	134	4.0%	\$ 172,629	0.01%
_0682	Level 2	\$ 16,398,221	151	4.5%	\$ 108,597	0.01%
_0683	Level 3	\$ 4,411,529	68	2.0%	\$ 64,875	0.00%

Appendix E (continued)

Revenue Code Frequencies and Related Charges from 100% IPPS SAF Claims matched MedPAR Claims Study file, matched to most recent cost reports ( FY 2004 or FY 2005)

	Description	Total SAF Charges	Number facilities using this charge	Percent facilities using this charge	Average \$ per user facility	Percent total charges
_0684	Level 4	\$ 487,712	13	0.4%	\$ 37,516	0.00%
_0689	Other	\$ 177,813	5	0.1%	\$ 35,563	0.00%
_0700	Cast Room	\$ 1,791,227	220	6.5%	\$ 8,142	0.00%
_0709	other	\$ 96,215	8	0.2%	\$ 12,027	0.00%
_0710	Recovery Rm	\$ 2,838,311,842	3192	94.7%	\$ 889,195	0.90%
_0719	other	\$ 42,293,014	250	7.4%	\$ 169,172	0.01%
_0720	Labor & Del	\$ 13,482,715	1438	42.6%	\$ 9,376	0.00%
_0721	labor	\$ 3,409,642	653	19.4%	\$ 5,222	0.00%
_0722	delivery	\$ 6,484,743	824	24.4%	\$ 7,870	0.00%
_0723	circumcision	\$ 495	3	0.1%	\$ 165	0.00%
_0724	birthing room	\$ 332,633	57	1.7%	\$ 5,836	0.00%
_0729	other	\$ 642,855	165	4.9%	\$ 3,896	0.00%
_0730	EKG/ECG	\$ 2,639,423,728	3363	99.7%	\$ 784,842	0.84%
_0731	holter monitor	\$ 200,058,539	2372	70.3%	\$ 84,342	0.06%
_0732	telemetry	\$ 750,925,294	836	24.8%	\$ 898,236	0.24%
_0735	unk	\$ 35	1	0.0%	\$ 35	0.00%
_0736	unk	\$ 533	1	0.0%	\$ 533	0.00%
_0739	other	\$ 5,208,723	110	3.3%	\$ 47,352	0.00%
_0740	EEG	\$ 349,072,039	2884	85.5%	\$ 121,037	0.11%
_0741	unk	\$ 550	1	0.0%	\$ 550	0.00%
_0749	other	\$ 7,656,958	74	2.2%	\$ 103,472	0.00%
_0750	GI Services	\$ 1,227,423,489	2313	68.6%	\$ 530,663	0.39%
_0759	other	\$ 21,825,247	82	2.4%	\$ 266,162	0.01%
_0760	Observation	\$ 16,375,747	550	16.3%	\$ 29,774	0.01%
_0761	treatment room	\$ 340,099,739	2029	60.2%	\$ 167,619	0.11%
_0762	observ room	\$ 273,643,931	2750	81.6%	\$ 99,507	0.09%
_0769	other	\$ 1,365,633	64	1.9%	\$ 21,338	0.00%
_0770	Preventive Care	\$ 7,627	17	0.5%	\$ 449	0.00%
_0771	vaccine admin	\$ 513,159	404	12.0%	\$ 1,270	0.00%
_0779	other	\$ 26	1	0.0%	\$ 26	0.00%
_0790	Lithotripsy	\$ 17,097,000	714	21.2%	\$ 23,945	0.01%
_0799	other	\$ 239,772	17	0.5%	\$ 14,104	0.00%
_0800	I/P Dialysis	\$ 204,032,055	243	7.2%	\$ 839,638	0.06%
_0801	hemo	\$ 1,742,467,215	2030	60.2%	\$ 858,358	0.55%
_0802	peritoneal	\$ 25,171,137	272	8.1%	\$ 92,541	0.01%
_0803	CAPD	\$ 15,119,809	307	9.1%	\$ 49,250	0.00%
_0804	CCPD	\$ 12,635,817	232	6.9%	\$ 54,465	0.00%
_0805	?	\$ 3,075	1	0.0%	\$ 3,075	0.00%
_0809	other	\$ 19,015,713	115	3.4%	\$ 165,354	0.01%
_0810	Organ Acquisition	\$ 6,126,186	48	1.4%	\$ 127,629	0.00%
_0811	living donor	\$ 118,579,374	191	5.7%	\$ 620,834	0.04%
_0812	cadaveric donor	\$ 441,840,070	211	6.3%	\$ 2,094,029	0.14%
_0813	unknown donor	\$ 8,415,022	20	0.6%	\$ 420,751	0.00%
_0814	unsuccessful search	\$ 1,054,932	1	0.0%	\$ 1,054,932	0.00%
_0815	?	\$ 247,597	1	0.0%	\$ 247,597	0.00%
_0817	?	\$ 1,421,455	3	0.1%	\$ 473,818	0.00%
_0819	other	\$ 17,316,868	77	2.3%	\$ 224,894	0.01%
_0820	Hemo--O/P or Home	\$ 260,528	10	0.3%	\$ 26,053	0.00%
_0821	composite rate	\$ 3,285,566	74	2.2%	\$ 44,400	0.00%
_0829	other	\$ 298,007	7	0.2%	\$ 42,572	0.00%
_0830	Perit Dialysis--O/P	\$ 5,853	2	0.1%	\$ 2,927	0.00%
_0831	composite rate	\$ 2,743	3	0.1%	\$ 914	0.00%
_0841	CAPD--O/P	\$ 31,194	6	0.2%	\$ 5,199	0.00%
_0845	composite rate	\$ 240	1	0.0%	\$ 240	0.00%
_0850	CCPD--O/P	\$ 2,781	1	0.0%	\$ 2,781	0.00%
_0851	composite rate	\$ 1,320	3	0.1%	\$ 440	0.00%
_0855	composite rate	\$ 563	2	0.1%	\$ 282	0.00%
_0880	Miscellaneous Dialysi	\$ 3,138,647	43	1.3%	\$ 72,992	0.00%
_0881	ultrafiltration	\$ 5,716,228	71	2.1%	\$ 80,510	0.00%

Appendix E (continued)

Revenue Code Frequencies and Related Charges from 100% IPPS SAF Claims matched MedPAR Claims Study file, matched to most recent cost reports ( FY 2004 or FY 2005)

	Description	Total SAF Charges	Number facilities using this charge	Percent facilities using this charge	Average \$ per user facility	Percent total charges
_0889	other	\$ 2,416,400	43	1.3%	\$ 56,195	0.00%
_0890	reserved ?	\$ 303,573	3	0.1%	\$ 101,191	0.00%
_0891	reserved ?	\$ 745,706	4	0.1%	\$ 186,427	0.00%
_0892	reserved ?	\$ 1,020,000	1	0.0%	\$ 1,020,000	0.00%
_0893	reserved ?	\$ 646,258	5	0.1%	\$ 129,252	0.00%
_0900	Psych treatment general	\$ 6,355,393	365	10.8%	\$ 17,412	0.00%
_0901	electro convulsive tx	\$ 3,074,329	261	7.7%	\$ 11,779	0.00%
_0902	milieu therapy	\$ 2,865	6	0.2%	\$ 478	0.00%
_0903	play therapy	\$ 2,245	3	0.1%	\$ 748	0.00%
_0904	activity therapy	\$ 301,792	19	0.6%	\$ 15,884	0.00%
_0906	chemical dependency	\$ 1,084	2	0.1%	\$ 542	0.00%
_0909	other	\$ 1,707	3	0.1%	\$ 569	0.00%
_0910	Psychol services general	\$ 1,386,802	165	4.9%	\$ 8,405	0.00%
_0911	rehab	\$ 595,290	35	1.0%	\$ 17,008	0.00%
_0912	partial hosp/routine	\$ 186,249	23	0.7%	\$ 8,098	0.00%
_0913	partial hosp/intensive	\$ 13,202	4	0.1%	\$ 3,301	0.00%
_0914	indiv therapy	\$ 3,486,212	432	12.8%	\$ 8,070	0.00%
_0915	group therapy	\$ 10,091,378	401	11.9%	\$ 25,166	0.00%
_0916	family therapy	\$ 224,802	98	2.9%	\$ 2,294	0.00%
_0917	bio feedback	\$ 29,467	26	0.8%	\$ 1,133	0.00%
_0918	testing	\$ 1,210,879	155	4.6%	\$ 7,812	0.00%
_0919	other	\$ 835,391	63	1.9%	\$ 13,260	0.00%
_0920	Other Diagnostic general	\$ 79,450,273	1780	52.8%	\$ 44,635	0.03%
_0921	peripheral vasc lab	\$ 1,429,411,301	3207	95.1%	\$ 445,716	0.45%
_0922	EMG	\$ 51,453,965	1279	37.9%	\$ 40,230	0.02%
_0923	Pap smear	\$ 31,193	139	4.1%	\$ 224	0.00%
_0924	allergy testing	\$ 225,949	54	1.6%	\$ 4,184	0.00%
_0925	pregnancy test	\$ 12,670	35	1.0%	\$ 362	0.00%
_0929	other	\$ 2,797,891	113	3.4%	\$ 24,760	0.00%
_0930	Med Rehab Day Prog	\$ 251	2	0.1%	\$ 126	0.00%
_0931	half day	\$ 155	2	0.1%	\$ 78	0.00%
_0940	Other Therapeutic general	\$ 282,440,551	2043	60.6%	\$ 138,248	0.09%
_0941	recreation therapy	\$ 1,022,681	65	1.9%	\$ 15,734	0.00%
_0942	education/ training	\$ 36,459,552	1203	35.7%	\$ 30,307	0.01%
_0943	cardiac rehab	\$ 48,809,047	1275	37.8%	\$ 38,282	0.02%
_0944	drug rehab	\$ 119,225	36	1.1%	\$ 3,312	0.00%
_0945	alcohol rehab	\$ 671,440	61	1.8%	\$ 11,007	0.00%
_0946	complex med eqt-rout	\$ 29,194,373	200	5.9%	\$ 145,972	0.01%
_0947	complex med eqt-ancill	\$ 43,615,254	205	6.1%	\$ 212,757	0.01%
_0948	?	\$ 4,793	3	0.1%	\$ 1,598	0.00%
_0949	other	\$ 16,156,221	238	7.1%	\$ 67,883	0.01%
_0960	Professional fees general	\$ 4,131,773	24	0.7%	\$ 172,157	0.00%
_0961	psychiatric	\$ 77,571	15	0.4%	\$ 5,171	0.00%
_0963	anesthesiologist	\$ 222,601	4	0.1%	\$ 55,650	0.00%
_0964	CRNA	\$ 11,618,064	53	1.6%	\$ 219,209	0.00%
_0969	other	\$ 3,986	5	0.1%	\$ 797	0.00%
_0971	Professional fees Lab	\$ 229,783	17	0.5%	\$ 13,517	0.00%
_0972	Radiology-Dx	\$ 17,708	8	0.2%	\$ 2,214	0.00%
_0973	Radiology-Tx	\$ 322	1	0.0%	\$ 322	0.00%
_0975	Oper Room	\$ 51,439	4	0.1%	\$ 12,860	0.00%
_0976	Respiratorytherapy	\$ 13,275	6	0.2%	\$ 2,213	0.00%
_0977	Physical therapy	\$ 5,028	1	0.0%	\$ 5,028	0.00%
_0980	Professional fees unknown donor	\$ 442	1	0.0%	\$ 442	0.00%
_0981	Emergency	\$ 3,185,211	37	1.1%	\$ 86,087	0.00%
_0982	O/P Services	\$ 12,669	5	0.1%	\$ 2,534	0.00%
_0983	Clinic	\$ 105,028	11	0.3%	\$ 9,548	0.00%

Appendix E (continued)

Revenue Code Frequencies and Related Charges from 100% IPPS SAF Claims matched MedPAR Claims Study file, matched to most recent cost reports ( FY 2004 or FY 2005)

	Description	Total SAF Charges	Number facilities using this charge	Percent facilities using this charge	Average \$ per user facility	Percent total charges
_0985	EKG	\$ 232,778	52	1.5%	\$ 4,477	0.00%
_0986	EEG	\$ 34,078	7	0.2%	\$ 4,868	0.00%
_0987	Hospital Visit	\$ 59,667	5	0.1%	\$ 11,933	0.00%
_0988	Consultation	\$ 6,434	9	0.3%	\$ 715	0.00%
_0989	Private Duty Nurse	\$ 947,542	3	0.1%	\$ 315,847	0.00%
_0990	Patient Convenience general	\$ 4,413,253	378	11.2%	\$ 11,675	0.00%
_0991	guest trays	\$ 439,770	198	5.9%	\$ 2,221	0.00%
_0992	private linen	\$ 915	3	0.1%	\$ 305	0.00%
_0993	telephone	\$ 1,237,092	47	1.4%	\$ 26,321	0.00%
_0994	TV/Radio	\$ 678,569	20	0.6%	\$ 33,928	0.00%
_0995	nonpatient room rental	\$ 58,157	8	0.2%	\$ 7,270	0.00%
_0996	late discharge fee	\$ 1,289	2	0.1%	\$ 645	0.00%
_0997	admission kits	\$ 125,379	11	0.3%	\$ 11,398	0.00%
_0998	beauty shop	\$ 9,870	17	0.5%	\$ 581	0.00%
_0999	other	\$ 1,430,495	117	3.5%	\$ 12,226	0.00%
_0010	other unknown	\$ 292	2	0.1%	\$ 146	0.00%
_0019		\$ 5	1	0.0%	\$ 5	0.00%
_0028		\$ 9	1	0.0%	\$ 9	0.00%
_0031		\$ 282	2	0.1%	\$ 141	0.00%
_0035		\$ 260	1	0.0%	\$ 260	0.00%
_0071		\$ 566	2	0.1%	\$ 283	0.00%
_0072		\$ 3,230	1	0.0%	\$ 3,230	0.00%
_0080		\$ 9,040	1	0.0%	\$ 9,040	0.00%
_0090		\$ 12	1	0.0%	\$ 12	0.00%
_0093		\$ 9,120	1	0.0%	\$ 9,120	0.00%
_0098		\$ 13	1	0.0%	\$ 13	0.00%
_0099		\$ 4,336	1	0.0%	\$ 4,336	0.00%
code errors	4-digit codes	\$ 99,162	51	1.5%	\$ 1,944	0.00%
Total		\$ 314,615,751,887	3,372			

**Appendix F:  
Computations for regression-adjusted national aggregate CCRs:**

In the absence of program charge mismatching between MCR and claims data, the amounts to be used for the *chg* variables in these equations could come directly from the claims files (MedPAR or SAF). But because of the mismatching, the claims charges for the new categories would not add up to the total charges used in the hospitals' ratio calculations. *For purposes of the adjusted national CCR computation only*, we made a judgment call to calculate target service charges in this step by multiplying the percent-charges variables by their respective MCR department program charges, and calculated the “~other” amounts by backing the target charge amounts out of the original MCR department program charges.

In the equations below, the subscript *j* is used for hospitals with positive values in the percent-charges variable for the target service, while the subscript *k* is used for hospitals where the percent-charge variable is zero. The formulas are as follows:

Let:

$$chg^{device} = MCR\_wksD4^{ms} \times pc\_device$$

and

$$chg^{msother} = MCR\_wksD4^{ms} - chg^{device}$$

and

$$chg^{msold} = MCR\_wksD4^{ms}$$

Description	Formula
National Aggregate CCR for Devices & Implants	$CCR^{devices} = \frac{\left( \sum_{j=1}^{2627} (ccr_j^{device} \times chg_j^{device}) \right)}{\sum_{j=1}^{2627} chg_j^{device}}$
National Aggregate CCR for Medical Supplies Excluding Devices & Implants	$CCR^{ms\_new} = \frac{\left( \sum_{j=1}^{2627} (ccr_j^{msother} \times chg_j^{msother}) + \sum_{k=1}^{221} (ccr_k^{msold} \times chg_k^{msold}) \right)}{\sum_{j=1}^{2627} chg_j^{msother} + \sum_k^{221} chg_j^{msold}}$

Let:

$$chg^{IV} = MCR\_wksD4^{drugs} \times pc\_IVsolutions$$

and

$$chg^{drugother} = MCR\_wksD4^{drugs} - chg^{IV}$$

and

$$chg^{drugold} = MCR\_wksD4^{drugs}$$

Description	Formula
National Aggregate CCR for IV Solutions	$CCR^{IV} = \left( \frac{\left( \sum_{j=1}^{2920} (ccr_j^{IV} \times chg_j^{IV}) \right)}{\sum_{j=1}^{2920} chg_j^{IV}} \right)$
National Aggregate CCR for Drugs Excluding IV Solutions	$CCR^{drug\_new} = \left( \frac{\left( \sum_{j=1}^{2920} (ccr_j^{drugother} \times chg_j^{drugother}) + \sum_{k=1}^{341} (ccr_k^{drugold} \times chg_k^{drugold}) \right)}{\sum_{j=1}^{2920} chg_j^{drugother} + \sum_{k=1}^{341} chg_k^{drugold}} \right)$

Let:

$$chg^{CT} = MCR\_wksD4^{rad} \times pc\_CTscan$$

and

$$chg^{MRI} = MCR\_wksD4^{rad} \times pc\_CMRI$$

and

$$chg^{radother} = MCR\_wksD4^{rad} - chg^{CT} - chg^{MRI}$$

and

$$chg^{radold} = MCR\_wksD4^{rad}$$

Description	Formula
National Aggregate CCR for CT Scanning	$CCR^{ctscan} = \left( \frac{\left( \sum_{j=1}^{3229} (ccr_j^{ctscan} \times chg_j^{ctscan}) \right)}{\sum_{j=1}^{3229} chg_j^{ctscan}} \right)$
National Aggregate CCR for MRI	$CCR^{mri} = \left( \frac{\left( \sum_{j=1}^{3229} (ccr_j^{mri} \times chg_j^{mri}) \right)}{\sum_{j=1}^{3229} chg_j^{mri}} \right)$
National Aggregate CCR for Radiology Excluding CT Scanning and MRI	$CCR^{rad\_new} = \left( \frac{\left( \sum_{j=1}^{3229} (ccr_j^{radother} \times chg_j^{radother}) + \sum_{k=1}^{24} (ccr_k^{radold} \times chg_k^{radold}) \right)}{\sum_{j=1}^{3229} chg_j^{radother} + \sum_{k=1}^{24} chg_k^{radold}} \right)$

## **APPENDIX G**

**Appendix G1  
Targeted Service Charges as a Percent of Total DRG Charges**

DRG num	MDC	DRG type	DRG name	Case count	Target service charges as percent total DRG charges					
					Inter-mediate care	Devices & implants only	IV solutions only	CT scan only	MRI only	Cardiac cath only
1	1	SURG	CRANIOTOMY AGE >17 W CC	22,105	2.6%	4.6%	1.8%	5.8%	2.1%	0.1%
2	1	SURG	CRANIOTOMY AGE >17 W/O CC	9,118	1.6%	11.7%	1.1%	4.4%	2.9%	0.0%
3	1	SURG *	CRANIOTOMY AGE 0-17	4	0.0%	11.2%	0.2%	1.6%	4.5%	0.0%
6	1	SURG	CARPAL TUNNEL RELEASE	303	1.5%	2.3%	1.4%	1.0%	1.1%	0.2%
7	1	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W CC	13,863	5.2%	10.7%	1.7%	3.5%	2.8%	0.6%
8	1	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W/O CC	3,164	1.9%	21.8%	0.6%	1.8%	3.0%	0.4%
9	1	MED	SPINAL DISORDERS & INJURIES	1,648	4.6%	0.4%	1.4%	10.1%	8.8%	0.1%
10	1	MED	NERVOUS SYSTEM NEOPLASMS W CC	18,044	3.6%	0.1%	1.7%	10.1%	9.0%	0.0%
11	1	MED	NERVOUS SYSTEM NEOPLASMS W/O CC	2,857	4.2%	0.4%	0.9%	12.9%	12.6%	0.0%
12	1	MED	DEGENERATIVE NERVOUS SYSTEM DISORDERS	51,217	5.5%	0.2%	1.4%	7.4%	5.1%	0.1%
13	1	MED	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA	6,544	2.7%	0.2%	1.8%	3.5%	12.6%	0.1%
14	1	MED	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION	243,794	7.6%	0.1%	1.6%	8.3%	8.7%	0.1%
15	1	MED	NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT	35,120	8.5%	0.3%	1.2%	8.2%	8.0%	0.6%
16	1	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W CC	15,919	7.3%	0.0%	2.0%	7.5%	5.3%	0.1%
17	1	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC	2,696	6.2%	0.1%	0.8%	11.2%	14.5%	0.1%
18	1	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W CC	30,391	4.8%	0.1%	2.1%	5.4%	4.5%	0.2%
19	1	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W/O CC	7,780	4.4%	0.1%	1.2%	7.1%	8.5%	0.3%
21	1	MED	VIRAL MENINGITIS	2,046	4.1%	0.0%	3.4%	6.6%	6.5%	0.1%
22	1	MED	HYPERTENSIVE ENCEPHALOPATHY	3,002	7.6%	0.0%	1.5%	7.4%	6.6%	0.3%
23	1	MED	NONTRAUMATIC STUPOR & COMA	9,695	7.2%	0.0%	1.8%	9.6%	4.2%	0.1%
26	1	MED	SEIZURE & HEADACHE AGE 0-17	12	2.0%	0.0%	1.5%	2.7%	4.5%	0.0%
27	1	MED	TRAUMATIC STUPOR & COMA, COMA >1 HR	5,372	4.3%	0.1%	1.5%	16.4%	1.6%	0.1%
28	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W CC	17,681	6.0%	0.1%	1.6%	14.9%	2.3%	0.1%
29	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W/O CC	5,838	5.9%	0.1%	0.9%	21.3%	3.2%	0.0%
31	1	MED	CONCUSSION AGE >17 W CC	4,435	5.8%	0.1%	1.1%	19.2%	3.1%	0.1%
32	1	MED	CONCUSSION AGE >17 W/O CC	1,599	4.8%	0.1%	0.7%	25.2%	3.8%	0.0%
34	1	MED	OTHER DISORDERS OF NERVOUS SYSTEM W CC	25,029	6.2%	0.2%	1.4%	7.8%	7.3%	0.3%
35	1	MED	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC	7,102	5.6%	0.6%	0.6%	9.5%	13.1%	0.3%
524	1	MED	TRANSIENT ISCHEMIA	103,634	9.1%	0.0%	0.7%	10.3%	11.6%	0.2%
528	1	SURG	INTRACRANIAL VASCULAR PROC W PDX HEMORRHAGE	1,641	1.5%	5.2%	1.8%	4.2%	0.4%	0.1%
529	1	SURG	VENTRICULAR SHUNT PROCEDURES W CC	4,345	3.4%	9.1%	1.8%	5.2%	1.2%	0.1%
530	1	SURG	VENTRICULAR SHUNT PROCEDURES W/O CC	2,853	1.6%	18.5%	1.2%	3.7%	0.5%	0.0%
531	1	SURG	SPINAL PROCEDURES W CC	4,564	2.3%	10.4%	1.6%	3.1%	3.4%	0.1%
532	1	SURG	SPINAL PROCEDURES W/O CC	2,483	1.3%	15.8%	1.3%	1.4%	1.9%	0.0%
533	1	SURG	EXTRACRANIAL PROCEDURES W CC	42,395	4.1%	2.7%	1.6%	1.6%	1.6%	1.2%
534	1	SURG	EXTRACRANIAL PROCEDURES W/O CC	38,873	2.4%	2.6%	1.7%	0.6%	0.8%	0.7%
543	1	SURG	CRANIOTOMY W MAJOR DEVICE IMPLANT OR ACUTE COMPLEX CNS PRINCIPAL DIAGNOSIS	5,219	2.2%	3.3%	2.2%	5.7%	1.6%	0.1%
559	1	MED	ACUTE ISCHEMIC STROKE WITH USE OF THROMBOLYTIC AGENT	2,401	4.6%	0.2%	1.4%	7.5%	4.4%	0.1%
560	1	MED	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM NON-BACTERIAL INFECTIONS OF NERVOUS SYSTEM EXCEPT VIRAL MENINGITIS	3,173	3.9%	0.1%	2.6%	3.9%	5.0%	0.0%
561	1	MED	MENINGITIS	2,632	4.0%	0.1%	3.3%	4.7%	7.0%	0.1%
562	1	MED	SEIZURE AGE > 17 W CC	49,210	7.3%	0.0%	1.9%	7.4%	4.8%	0.1%
563	1	MED	SEIZURE AGE > 17 W/O CC	19,540	7.8%	0.0%	0.9%	8.4%	6.9%	0.1%
564	1	MED	HEADACHES AGE >17	14,652	4.6%	0.1%	1.6%	10.1%	11.6%	0.2%
577	1	SURG	CAROTID ARTERY STENT PROCEDURE	2,431	1.9%	13.8%	0.5%	1.0%	0.7%	3.5%
36	2	SURG	RETINAL PROCEDURES	325	0.4%	1.9%	0.9%	0.2%	0.4%	0.2%
37	2	SURG	ORBITAL PROCEDURES	1,125	2.6%	2.6%	1.4%	6.5%	0.9%	0.2%
38	2	SURG	PRIMARY IRIS PROCEDURES	47	10.0%	0.4%	0.9%	4.6%	4.2%	0.0%
39	2	SURG	LENS PROCEDURES WITH OR WITHOUT VITRECTOMY	343	3.0%	3.6%	0.6%	0.7%	0.3%	0.3%
40	2	SURG	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17	1,228	2.5%	2.2%	1.1%	3.4%	3.0%	0.3%
42	2	SURG	INTRAOCULAR PROCEDURES EXCEPT RETINA, IRIS & LENS	1,798	1.0%	2.8%	0.7%	1.8%	0.4%	0.1%
43	2	MED	HYPHEMA	100	7.2%	0.0%	0.9%	17.4%	2.0%	0.0%
44	2	MED	ACUTE MAJOR EYE INFECTIONS	1,136	1.4%	0.0%	2.9%	9.2%	2.4%	0.0%
45	2	MED	NEUROLOGICAL EYE DISORDERS	2,571	6.8%	0.1%	0.6%	9.1%	19.0%	0.2%
46	2	MED	OTHER DISORDERS OF THE EYE AGE >17 W CC	3,654	4.8%	0.1%	2.1%	10.8%	4.1%	0.1%
47	2	MED	OTHER DISORDERS OF THE EYE AGE >17 W/O CC	1,202	4.1%	0.0%	1.8%	12.3%	7.2%	0.0%
49	3	SURG	MAJOR HEAD & NECK PROCEDURES	2,231	2.2%	7.4%	1.5%	0.6%	0.1%	0.1%
50	3	SURG	SIALOADENECTOMY	1,939	0.8%	0.6%	1.4%	0.5%	0.1%	0.1%
51	3	SURG	SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY	196	1.9%	0.6%	1.7%	2.9%	1.1%	0.2%
52	3	SURG	CLEFT LIP & PALATE REPAIR	200	3.0%	1.5%	1.8%	0.3%	0.0%	0.0%
53	3	SURG	SINUS & MASTOID PROCEDURES AGE >17	1,918	2.1%	1.5%	2.0%	2.8%	1.1%	0.1%
55	3	SURG	MISCELLANEOUS EAR, NOSE, MOUTH & THROAT PROCEDURES	1,226	2.6%	2.1%	1.6%	2.7%	0.5%	0.3%
56	3	SURG	RHINOPLASTY T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	396	3.1%	1.7%	1.5%	1.2%	0.2%	0.4%
57	3	SURG	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	673	3.4%	0.5%	3.1%	4.9%	0.5%	0.0%
59	3	SURG	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	103	1.7%	0.0%	3.1%	3.2%	0.2%	0.0%
60	3	SURG *	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0-17	4	0.0%	0.0%	1.1%	7.6%	0.0%	0.0%
61	3	SURG	MYRINGOTOMY W TUBE INSERTION AGE >17	182	4.3%	0.3%	2.0%	4.4%	3.0%	0.0%
62	3	SURG *	MYRINGOTOMY W TUBE INSERTION AGE 0-17	3	0.0%	0.5%	0.5%	0.0%	0.0%	0.0%

**Appendix G1 (continued)**  
**Targeted Service Charges as a Percent of Total DRG Charges**

DRG num	MDC	DRG type	DRG name	Case count	Target service charges as percent total DRG charges					
					Inter-mediate care	Devices & implants only	IV solutions only	CT scan only	MRI only	Cardiac cath only
63	3	SURG	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES	2,595	2.7%	5.2%	1.9%	4.3%	0.6%	0.1%
64	3	MED	EAR, NOSE, MOUTH & THROAT MALIGNANCY	3,016	2.4%	0.3%	3.2%	5.6%	1.3%	0.1%
65	3	MED	DYSEQUILIBRIUM	37,820	8.5%	0.0%	0.8%	10.3%	12.4%	0.3%
66	3	MED	EPISTAXIS	7,492	6.4%	0.2%	1.8%	2.3%	0.4%	0.1%
67	3	MED	EPIGLOTTITIS	346	4.6%	0.0%	3.6%	4.6%	0.2%	0.2%
68	3	MED	OTITIS MEDIA & URI AGE >17 W CC	15,278	4.2%	0.0%	2.3%	5.9%	1.4%	0.2%
69	3	MED	OTITIS MEDIA & URI AGE >17 W/O CC	4,091	3.5%	0.0%	2.4%	8.2%	2.8%	0.1%
70	3	MED	OTITIS MEDIA & URI AGE 0-17	21	10.0%	0.0%	0.9%	8.0%	1.4%	0.0%
71	3	MED	LARYNGOTRACHEITIS	55	1.6%	0.0%	2.8%	4.9%	0.0%	0.0%
72	3	MED	NASAL TRAUMA & DEFORMITY	1,149	6.8%	0.1%	1.2%	20.5%	1.0%	0.0%
73	3	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE >17	9,048	5.1%	0.1%	2.6%	7.3%	1.8%	0.3%
74	3	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE 0-17	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
168	3	SURG	MOUTH PROCEDURES W CC	1,496	3.2%	0.7%	2.5%	3.6%	0.4%	0.2%
169	3	SURG	MOUTH PROCEDURES W/O CC	796	2.2%	1.5%	2.0%	1.6%	0.1%	0.0%
185	3	MED	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE >17	5,515	3.7%	0.1%	3.8%	8.0%	1.2%	0.2%
186	3	MED *	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE 0-17	6	0.0%	0.0%	4.6%	0.0%	0.0%	0.0%
187	3	MED	DENTAL EXTRACTIONS & RESTORATIONS	541	4.6%	0.1%	2.2%	3.1%	0.3%	0.3%
75	4	SURG	MAJOR CHEST PROCEDURES	42,362	5.5%	1.0%	1.9%	1.7%	0.2%	0.2%
76	4	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W CC	44,411	5.4%	1.8%	2.0%	5.0%	0.8%	0.4%
77	4	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W/O CC	1,954	4.4%	2.0%	1.3%	5.8%	0.5%	0.4%
78	4	MED	PULMONARY EMBOLISM	44,357	9.3%	0.1%	1.3%	8.9%	0.5%	0.4%
79	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W CC	150,866	5.4%	0.1%	3.3%	3.1%	0.4%	0.1%
80	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W/O CC	6,582	3.1%	0.0%	3.3%	3.3%	0.4%	0.0%
81	4	MED *	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE 0-17	2	9.6%	0.0%	1.5%	2.3%	0.0%	0.0%
82	4	MED	RESPIRATORY NEOPLASMS	58,733	4.5%	0.2%	1.9%	8.8%	1.8%	0.1%
83	4	MED	MAJOR CHEST TRAUMA W CC	6,149	5.5%	0.1%	1.3%	12.7%	1.0%	0.1%
84	4	MED	MAJOR CHEST TRAUMA W/O CC	1,150	4.5%	0.0%	0.8%	15.4%	1.1%	0.2%
85	4	MED	PLEURAL EFFUSION W CC	20,168	7.8%	0.1%	1.4%	7.0%	0.4%	0.2%
86	4	MED	PLEURAL EFFUSION W/O CC	1,587	6.5%	0.0%	1.0%	10.1%	0.3%	0.2%
87	4	MED	PULMONARY EDEMA & RESPIRATORY FAILURE	85,170	7.2%	0.0%	2.0%	2.5%	0.2%	0.2%
88	4	MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	385,561	6.6%	0.0%	1.6%	3.1%	0.3%	0.4%
89	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W CC	499,866	5.9%	0.0%	2.4%	3.9%	0.4%	0.1%
90	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W/O CC	38,225	3.3%	0.0%	2.6%	5.1%	0.5%	0.1%
91	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE 0-17	44	0.8%	0.1%	2.7%	3.2%	0.0%	0.0%
92	4	MED	INTERSTITIAL LUNG DISEASE W CC	15,191	8.2%	0.0%	1.5%	5.6%	0.5%	0.6%
93	4	MED	INTERSTITIAL LUNG DISEASE W/O CC	1,281	6.0%	0.0%	1.3%	7.6%	0.7%	1.5%
94	4	MED	PNEUMOTHORAX W CC	12,426	7.1%	0.3%	1.6%	8.2%	0.4%	0.1%
95	4	MED	PNEUMOTHORAX W/O CC	1,363	6.4%	0.6%	1.0%	10.0%	0.2%	0.1%
96	4	MED	BRONCHITIS & ASTHMA AGE >17 W CC	52,952	5.8%	0.0%	1.8%	3.5%	0.4%	0.3%
97	4	MED	BRONCHITIS & ASTHMA AGE >17 W/O CC	23,267	4.2%	0.0%	1.7%	3.3%	0.4%	0.3%
98	4	MED	BRONCHITIS & ASTHMA AGE 0-17	9	0.0%	0.0%	1.9%	0.8%	0.0%	0.0%
99	4	MED	RESPIRATORY SIGNS & SYMPTOMS W CC	19,656	8.2%	0.1%	1.0%	7.4%	0.6%	1.7%
100	4	MED	RESPIRATORY SIGNS & SYMPTOMS W/O CC	5,879	8.0%	0.1%	0.7%	8.1%	0.8%	3.2%
101	4	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W CC	21,122	6.9%	0.1%	1.4%	7.6%	0.8%	0.6%
102	4	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O CC	4,428	6.8%	0.1%	0.9%	9.2%	0.9%	1.7%
565	4	MED	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT 96+ HOURS	41,790	2.9%	0.1%	2.8%	1.7%	0.2%	0.1%
566	4	MED	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT < 96 HOURS	63,900	3.7%	0.1%	2.4%	2.5%	0.3%	0.5%
104	5	SURG	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W CARD CATH	18,986	4.8%	9.3%	1.4%	0.5%	0.1%	5.1%
105	5	SURG	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W/O CARD CATH	30,122	4.1%	11.1%	1.4%	0.3%	0.1%	0.3%
106	5	SURG	CORONARY BYPASS W PTCA	3,115	3.4%	5.0%	1.5%	0.4%	0.1%	8.9%
108	5	SURG	OTHER CARDIOTHORACIC PROCEDURES	7,850	4.3%	1.9%	1.5%	0.6%	0.2%	3.4%
110	5	SURG	MAJOR CARDIOVASCULAR PROCEDURES W CC	53,032	3.3%	10.6%	1.8%	1.4%	0.2%	3.9%
111	5	SURG	MAJOR CARDIOVASCULAR PROCEDURES W/O CC	9,599	1.8%	28.1%	1.1%	0.6%	0.0%	1.6%
113	5	SURG	AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB & TOE	32,851	3.6%	1.0%	2.5%	0.8%	0.5%	0.4%
114	5	SURG	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	7,403	2.9%	0.2%	2.6%	0.7%	0.8%	0.3%
117	5	SURG	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	4,975	8.7%	10.5%	1.4%	1.1%	0.1%	2.6%
118	5	SURG	CARDIAC PACEMAKER DEVICE REPLACEMENT	6,925	5.6%	42.2%	0.6%	0.7%	0.0%	2.3%
119	5	SURG	VEIN LIGATION & STRIPPING	923	2.9%	1.2%	1.7%	1.1%	0.5%	0.7%
120	5	SURG	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	31,832	5.7%	1.5%	1.8%	1.6%	0.5%	0.6%

**Appendix G1 (continued)**  
**Targeted Service Charges as a Percent of Total DRG Charges**

DRG num	MDC	DRG type	DRG name	Case count	Target service charges as percent total DRG charges					
					Inter-mediate care	Devices & implants only	IV solutions only	CT scan only	MRI only	Cardiac cath only
121	5	MED	CIRCULATORY DISORDERS W AMI & MAJOR COMP, DISCHARGED ALIVE	139,738	9.6%	0.2%	1.4%	2.1%	0.4%	5.6%
122	5	MED	CIRCULATORY DISORDERS W AMI W/O MAJOR COMP, DISCHARGED ALIVE	49,041	8.6%	0.5%	0.9%	2.1%	0.4%	14.8%
123	5	MED	CIRCULATORY DISORDERS W AMI, EXPIRED	28,700	4.4%	0.1%	2.2%	2.8%	0.3%	1.9%
124	5	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH & COMPLEX DIAG	114,099	9.0%	0.7%	0.9%	1.6%	0.4%	26.9%
125	5	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O COMPLEX DIAG	85,712	7.4%	1.0%	0.8%	2.0%	0.6%	34.2%
126	5	MED	ACUTE & SUBACUTE ENDOCARDITIS	5,089	7.1%	0.2%	2.8%	3.7%	1.4%	0.0%
127	5	MED	HEART FAILURE & SHOCK	630,619	12.6%	0.1%	1.0%	2.3%	0.3%	0.1%
128	5	MED	DEEP VEIN THROMBOPHLEBITIS	4,110	3.3%	0.1%	1.4%	4.9%	0.7%	0.0%
129	5	MED	CARDIAC ARREST, UNEXPLAINED	3,263	1.1%	0.1%	2.4%	4.7%	0.2%	0.0%
130	5	MED	PERIPHERAL VASCULAR DISORDERS W CC	81,469	4.4%	0.2%	1.8%	4.6%	1.3%	0.1%
131	5	MED	PERIPHERAL VASCULAR DISORDERS W/O CC	21,156	3.6%	0.4%	1.0%	5.5%	1.1%	0.2%
132	5	MED	ATHEROSCLEROSIS W CC	95,585	12.2%	0.2%	0.7%	2.4%	0.5%	0.5%
133	5	MED	ATHEROSCLEROSIS W/O CC	5,639	11.9%	1.0%	0.5%	3.2%	0.8%	1.9%
134	5	MED	HYPERTENSION	37,372	10.4%	0.1%	0.8%	7.4%	4.2%	0.1%
135	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W CC	6,758	12.6%	0.1%	1.0%	4.6%	1.1%	0.2%
136	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W/O CC	899	16.0%	0.1%	0.4%	5.7%	2.1%	0.6%
138	5	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	190,168	13.9%	0.3%	1.1%	3.4%	0.8%	0.1%
139	5	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC	68,451	14.8%	0.3%	0.8%	2.8%	0.8%	0.2%
140	5	MED	ANGINA PECTORIS	29,358	10.5%	0.0%	0.7%	2.6%	0.4%	0.2%
141	5	MED	SYNCOPE & COLLAPSE W CC	114,694	12.7%	0.2%	0.9%	8.9%	3.9%	0.1%
142	5	MED	SYNCOPE & COLLAPSE W/O CC	46,121	12.8%	0.2%	0.6%	9.8%	5.3%	0.1%
143	5	MED	CHEST PAIN	220,210	11.4%	0.0%	0.5%	4.3%	0.7%	0.1%
144	5	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W CC	93,898	6.4%	0.5%	2.1%	3.5%	0.7%	0.1%
145	5	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W/O CC	5,127	8.3%	0.5%	1.2%	6.1%	1.4%	0.7%
479	5	SURG	OTHER VASCULAR PROCEDURES W/O CC	24,654	2.4%	10.2%	1.0%	0.4%	0.2%	2.2%
515	5	SURG	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH	49,586	2.2%	61.1%	0.3%	0.2%	0.0%	2.5%
518	5	SURG	PERC CARDIO PROC W/O CORONARY ARTERY STENT OR AMI	22,359	4.4%	4.2%	0.5%	0.7%	0.3%	19.9%
525	5	SURG	OTHER HEART ASSIST SYSTEM IMPLANT	243	1.4%	11.1%	1.5%	0.3%	0.1%	2.6%
535	5	SURG	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK	7,634	3.4%	45.1%	0.5%	0.3%	0.1%	7.4%
536	5	SURG	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK	7,523	3.0%	47.2%	0.4%	0.4%	0.1%	8.4%
547	5	SURG	CORONARY BYPASS W CARDIAC CATH W MAJOR CV DX	30,935	4.8%	1.1%	1.7%	0.6%	0.1%	6.4%
548	5	SURG	CORONARY BYPASS W CARDIAC CATH W/O MAJOR CV DX	30,209	5.1%	0.8%	1.6%	0.4%	0.1%	8.1%
549	5	SURG	CORONARY BYPASS W/O CARDIAC CATH W MAJOR CV DX	12,558	4.9%	1.2%	1.7%	0.5%	0.1%	0.4%
550	5	SURG	CORONARY BYPASS W/O CARDIAC CATH W/O MAJOR CV DX	32,049	4.7%	0.8%	1.7%	0.2%	0.0%	0.5%
551	5	SURG	PERMANENT CARDIAC PACEMAKER IMPL W MAJ CV DX OR AICD LEAD OR GNRTR	51,370	6.0%	35.8%	0.7%	0.8%	0.2%	3.8%
552	5	SURG	OTHER PERMANENT CARDIAC PACEMAKER IMPLANT W/O MAJOR CV DX	77,491	5.3%	42.5%	0.5%	1.0%	0.3%	3.2%
553	5	SURG	OTHER VASCULAR PROCEDURES W CC W MAJOR CV DX	36,701	5.1%	3.9%	1.5%	1.4%	0.6%	1.7%
554	5	SURG	OTHER VASCULAR PROCEDURES W CC W/O MAJOR CV DX	71,370	3.2%	5.8%	1.3%	0.9%	0.4%	1.1%
555	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W MAJOR CV DX	41,449	4.9%	7.7%	0.7%	0.8%	0.1%	20.9%
556	5	SURG	PERCUTANEOUS CARDIOVASC PROC W NON-DRUG-ELUTING STENT W/O MAJ CV DX	23,685	2.9%	14.4%	0.5%	0.4%	0.1%	29.9%
557	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W MAJOR CV DX	108,286	3.7%	20.8%	0.5%	0.6%	0.1%	23.5%
558	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W/O MAJ CV DX	170,167	2.5%	25.7%	0.4%	0.3%	0.0%	28.5%
146	6	SURG	RECTAL RESECTION W CC	9,791	3.1%	0.8%	3.8%	1.9%	0.1%	0.1%
147	6	SURG	RECTAL RESECTION W/O CC	2,408	1.5%	1.1%	3.0%	0.5%	0.0%	0.0%
149	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC	18,079	1.5%	1.0%	3.3%	1.4%	0.0%	0.0%
150	6	SURG	PERITONEAL ADHESIOLYSIS W CC	21,274	3.1%	1.2%	4.9%	4.5%	0.1%	0.1%
151	6	SURG	PERITONEAL ADHESIOLYSIS W/O CC	4,887	0.9%	3.4%	3.4%	4.4%	0.1%	0.0%
152	6	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W CC	4,604	2.9%	0.7%	3.8%	2.0%	0.1%	0.1%
153	6	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC	1,874	1.0%	0.7%	3.6%	0.6%	0.0%	0.0%
155	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W/O CC	5,426	1.7%	1.1%	2.4%	0.8%	0.0%	0.0%
156	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE 0-17	2	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%
157	6	SURG	ANAL & STOMAL PROCEDURES W CC	7,521	3.0%	0.8%	3.2%	3.2%	0.2%	0.1%
158	6	SURG	ANAL & STOMAL PROCEDURES W/O CC	3,435	1.0%	0.9%	2.9%	2.2%	0.1%	0.1%

**Appendix G1 (continued)**  
**Targeted Service Charges as a Percent of Total DRG Charges**

DRG num	MDC	DRG type	DRG name	Case count	Target service charges as percent total DRG charges					
					Inter-mediate care	Devices & implants only	IV solutions only	CT scan only	MRI only	Cardiac cath only
159	6	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W CC	17,474	2.2%	4.8%	2.7%	3.0%	0.1%	0.1%
160	6	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W/O CC	10,778	0.8%	7.4%	2.2%	1.7%	0.0%	0.0%
161	6	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W CC	9,419	3.0%	2.5%	2.4%	4.6%	0.1%	0.2%
162	6	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W/O CC	4,668	0.6%	3.3%	1.8%	3.9%	0.0%	0.1%
163	6	SURG *	HERNIA PROCEDURES AGE 0-17	8	7.4%	0.0%	0.2%	0.0%	0.0%	0.0%
164	6	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC	5,526	2.9%	0.3%	4.1%	8.6%	0.1%	0.1%
165	6	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	2,224	1.1%	0.3%	3.6%	11.4%	0.0%	0.0%
166	6	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	4,672	1.9%	0.5%	2.9%	11.0%	0.1%	0.2%
167	6	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	4,237	0.5%	0.4%	2.4%	13.9%	0.0%	0.0%
170	6	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W CC	16,601	3.8%	2.0%	3.0%	4.1%	0.4%	0.3%
171	6	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC	1,327	1.6%	3.1%	2.6%	4.3%	0.4%	0.5%
172	6	MED	DIGESTIVE MALIGNANCY W CC	30,562	3.3%	0.6%	3.1%	8.6%	0.8%	0.1%
173	6	MED	DIGESTIVE MALIGNANCY W/O CC	2,112	2.0%	1.1%	2.1%	11.6%	1.0%	0.3%
174	6	MED	G.I. HEMORRHAGE W CC	237,045	6.4%	0.1%	2.3%	3.3%	0.3%	0.1%
175	6	MED	G.I. HEMORRHAGE W/O CC	27,532	5.4%	0.0%	2.4%	4.6%	0.3%	0.1%
176	6	MED	COMPLICATED PEPTIC ULCER	13,609	5.1%	0.1%	3.2%	5.6%	0.5%	0.4%
177	6	MED	UNCOMPLICATED PEPTIC ULCER W CC	7,309	4.5%	0.1%	2.4%	9.2%	0.9%	0.7%
178	6	MED	UNCOMPLICATED PEPTIC ULCER W/O CC	2,419	4.1%	0.1%	2.1%	11.3%	0.7%	1.7%
179	6	MED	INFLAMMATORY BOWEL DISEASE	13,275	2.8%	0.1%	3.7%	8.7%	0.5%	0.1%
180	6	MED	G.I. OBSTRUCTION W CC	84,287	3.3%	0.1%	4.0%	10.8%	0.4%	0.1%
181	6	MED	G.I. OBSTRUCTION W/O CC	23,320	1.4%	0.0%	3.7%	16.6%	0.2%	0.0%
182	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W CC	236,040	3.8%	0.1%	2.7%	11.3%	0.9%	0.6%
183	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W/O CC	73,354	3.2%	0.1%	2.4%	15.7%	0.9%	1.5%
184	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE 0-17	51	6.3%	0.1%	0.9%	3.2%	0.0%	0.0%
188	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W CC	80,123	4.3%	0.1%	3.3%	7.7%	0.5%	0.1%
189	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W/O CC	11,347	2.4%	0.1%	2.7%	12.0%	0.6%	0.1%
190	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 0-17	7	0.0%	0.0%	2.6%	8.3%	0.0%	0.0%
567	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROC AGE > 17 W CC W MAJOR GI DX	9,947	3.2%	0.4%	4.8%	3.1%	0.1%	0.1%
568	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES PROC AGE > 17 W CC W/O MAJOR GI DX	15,552	3.7%	0.7%	3.6%	2.1%	0.1%	0.2%
569	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC W MAJOR GI DX	56,829	3.1%	0.5%	4.9%	4.0%	0.1%	0.1%
570	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC W/O MAJOR GI DX	67,586	3.2%	0.8%	3.8%	2.6%	0.1%	0.2%
571	6	MED	MAJOR ESOPHAGEAL DISORDERS	10,239	5.2%	0.1%	2.9%	3.7%	0.4%	0.2%
191	7	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W CC	9,540	2.8%	1.3%	3.3%	2.9%	0.3%	0.1%
192	7	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W/O CC	1,193	1.9%	1.0%	2.3%	2.1%	0.2%	0.1%
193	7	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W CC	3,886	3.2%	0.5%	3.7%	3.2%	0.4%	0.2%
194	7	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W/O CC	409	1.4%	1.0%	2.9%	2.3%	0.2%	0.1%
195	7	SURG	CHOLECYSTECTOMY W C.D.E. W CC	2,722	3.6%	0.4%	3.6%	3.2%	0.5%	0.2%
196	7	SURG	CHOLECYSTECTOMY W C.D.E. W/O CC	563	1.4%	0.3%	2.8%	2.0%	0.3%	0.0%
197	7	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W CC	15,394	3.4%	0.4%	3.5%	3.9%	0.3%	0.2%
198	7	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W/O CC	3,809	1.3%	0.3%	2.8%	2.8%	0.2%	0.1%
199	7	SURG	HEPATOBIILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY	1,320	2.2%	1.0%	3.4%	3.7%	0.5%	0.1%
200	7	SURG	HEPATOBIILIARY DIAGNOSTIC PROCEDURE FOR NON-MALIGNANCY	889	2.9%	0.4%	3.5%	4.7%	0.5%	0.1%
201	7	SURG	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES	2,425	3.3%	2.0%	3.7%	4.3%	0.7%	0.2%
202	7	MED	CIRRHOSIS & ALCOHOLIC HEPATITIS	25,340	4.4%	0.1%	2.3%	5.0%	0.7%	0.1%
203	7	MED	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS	29,760	2.6%	1.1%	2.5%	10.1%	1.6%	0.1%
204	7	MED	DISORDERS OF PANCREAS EXCEPT MALIGNANCY	64,155	3.2%	0.1%	3.8%	10.7%	1.5%	0.2%
205	7	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA W CC	29,252	4.5%	0.1%	2.3%	7.0%	1.2%	0.1%
206	7	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA W/O CC	1,804	1.3%	0.1%	2.1%	13.2%	2.4%	0.0%
207	7	MED	DISORDERS OF THE BILIARY TRACT W CC	34,462	3.7%	0.5%	2.7%	8.2%	1.4%	0.4%
208	7	MED	DISORDERS OF THE BILIARY TRACT W/O CC	8,603	2.2%	0.6%	2.3%	9.9%	1.7%	0.5%
493	7	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W CC	56,599	2.9%	0.4%	2.8%	4.4%	0.5%	0.3%
494	7	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC	22,834	1.0%	0.3%	2.3%	3.6%	0.3%	0.2%
210	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W CC	119,159	2.1%	8.5%	1.8%	1.6%	0.3%	0.1%
211	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W/O CC	24,192	0.7%	10.2%	1.7%	1.2%	0.4%	0.0%

**Appendix G1 (continued)**  
**Targeted Service Charges as a Percent of Total DRG Charges**

DRG num	MDC	DRG type	DRG name	Case count	Target service charges as percent total DRG charges					
					Inter-mediate care	Devices & implants only	IV solutions only	CT scan only	MRI only	Cardiac cath only
212	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 0-17 AMPUTATION FOR MUSCULOSKELETAL SYSTEM & CONN TISSUE	5	4.1%	5.5%	0.1%	0.0%	0.0%	0.0%
213	8	SURG	DISORDERS	9,150	2.2%	0.7%	2.5%	0.7%	0.5%	0.2%
216	8	SURG	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE WND DEBRID & SKN GRFT EXCEPT HAND, FOR MUSCSKELET & CONN TISS	18,014	1.2%	7.0%	1.1%	3.7%	3.1%	0.1%
217	8	SURG	DIS	14,956	2.3%	2.7%	2.6%	1.3%	0.7%	0.1%
218	8	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W CC LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W/O CC	27,359	1.7%	9.7%	1.6%	2.1%	0.2%	0.2%
219	8	SURG	MAJOR SHOULDER/ELBOW PROC, OR OTHER UPPER EXTREMITY PROC W CC	19,101	0.4%	11.8%	1.5%	1.1%	0.1%	0.0%
223	8	SURG	CC	12,053	1.4%	8.9%	1.6%	2.1%	0.3%	0.1%
224	8	SURG	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC, W/O CC	9,247	0.4%	9.3%	1.6%	0.9%	0.1%	0.0%
225	8	SURG	FOOT PROCEDURES	5,855	1.3%	3.3%	2.3%	1.1%	1.0%	0.1%
226	8	SURG	SOFT TISSUE PROCEDURES W CC	6,199	2.1%	2.0%	2.1%	2.9%	1.8%	0.1%
227	8	SURG	SOFT TISSUE PROCEDURES W/O CC	4,468	0.4%	5.3%	1.7%	1.0%	0.7%	0.0%
228	8	SURG	MAJOR THUMB OR JOINT PROC, OR OTH HAND OR WRIST PROC W CC	2,388	1.4%	5.6%	2.0%	2.1%	0.6%	0.1%
229	8	SURG	HAND OR WRIST PROC, EXCEPT MAJOR JOINT PROC, W/O CC	996	0.4%	2.9%	2.2%	0.9%	0.4%	0.1%
230	8	SURG	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES OF HIP & FEMUR	2,325	1.2%	2.2%	2.3%	1.1%	0.3%	0.1%
232	8	SURG	ARTHROSCOPY	540	1.7%	5.1%	1.8%	0.5%	0.4%	0.2%
233	8	SURG	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W CC	16,227	2.2%	7.9%	1.2%	4.0%	3.5%	0.2%
234	8	SURG	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W/O CC	7,937	0.5%	14.4%	0.9%	1.9%	2.7%	0.0%
235	8	MED	FRACTURES OF FEMUR	4,473	2.3%	1.1%	1.6%	3.9%	0.9%	0.1%
236	8	MED	FRACTURES OF HIP & PELVIS	38,224	2.6%	0.2%	1.3%	8.0%	2.1%	0.1%
237	8	MED	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH	1,745	1.7%	0.1%	0.9%	6.8%	7.8%	0.0%
238	8	MED	OSTEOMYELITIS	8,936	2.3%	0.2%	2.8%	2.5%	3.7%	0.1%
			PATHOLOGICAL FRACTURES & MUSCULOSKELETAL & CONN TISS							
239	8	MED	MALIGNANCY	38,354	2.4%	0.3%	1.5%	7.3%	6.8%	0.1%
240	8	MED	CONNECTIVE TISSUE DISORDERS W CC	11,713	4.4%	0.1%	1.8%	4.7%	2.5%	0.3%
241	8	MED	CONNECTIVE TISSUE DISORDERS W/O CC	2,522	2.4%	0.1%	1.4%	5.4%	4.4%	0.2%
242	8	MED	SEPTIC ARTHRITIS	2,494	2.7%	0.1%	3.1%	2.7%	2.2%	0.1%
243	8	MED	MEDICAL BACK PROBLEMS	93,055	2.9%	0.3%	1.0%	9.4%	8.8%	0.2%
244	8	MED	BONE DISEASES & SPECIFIC ARTHROPATHIES W CC	15,368	3.3%	0.4%	1.3%	4.3%	3.0%	0.3%
245	8	MED	BONE DISEASES & SPECIFIC ARTHROPATHIES W/O CC	5,303	2.0%	1.1%	1.1%	4.0%	4.5%	0.3%
246	8	MED	NON-SPECIFIC ARTHROPATHIES	1,240	4.6%	0.1%	1.2%	5.3%	3.8%	0.9%
247	8	MED	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE	19,555	3.8%	0.1%	0.9%	7.8%	6.4%	0.6%
248	8	MED	TENDONITIS, MYOSITIS & BURSTITIS	14,725	5.7%	0.0%	1.9%	6.6%	3.9%	0.2%
249	8	MED	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	12,544	1.6%	1.0%	1.9%	2.1%	0.6%	0.2%
250	8	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W CC	3,828	3.8%	0.2%	1.1%	9.0%	1.7%	0.2%
251	8	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W/O CC	1,837	2.8%	0.4%	0.9%	10.7%	1.7%	0.3%
253	8	MED	FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE >17 W CC	23,076	3.6%	0.3%	1.3%	6.8%	1.7%	0.2%
254	8	MED	FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE >17 W/O CC	9,312	1.9%	0.3%	0.8%	7.3%	2.3%	0.1%
256	8	MED	OTHER MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE DIAGNOSES	6,749	2.8%	0.2%	2.3%	5.2%	3.1%	0.2%
471	8	SURG	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF UPPER EXTREMITY	13,947	0.4%	37.0%	1.0%	0.2%	0.0%	0.0%
491	8	SURG	EXTREMITY	20,270	0.5%	29.9%	1.1%	0.6%	0.1%	0.1%
496	8	SURG	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	3,099	1.0%	36.4%	1.1%	0.9%	0.4%	0.1%
497	8	SURG	SPINAL FUSION EXCEPT CERVICAL W CC	27,685	0.8%	37.8%	1.1%	0.7%	0.3%	0.1%
498	8	SURG	SPINAL FUSION EXCEPT CERVICAL W/O CC	18,685	0.3%	42.4%	0.9%	0.2%	0.1%	0.0%
499	8	SURG	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W CC	33,081	1.4%	2.9%	1.6%	1.3%	1.4%	0.2%
500	8	SURG	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W/O CC	43,738	0.5%	2.2%	1.6%	0.4%	0.5%	0.0%
501	8	SURG	KNEE PROCEDURES W PDX OF INFECTION W CC	2,997	2.0%	3.0%	2.7%	1.0%	0.7%	0.1%
502	8	SURG	KNEE PROCEDURES W PDX OF INFECTION W/O CC	701	0.4%	3.9%	2.9%	0.4%	0.4%	0.0%
503	8	SURG	KNEE PROCEDURES W/O PDX OF INFECTION	5,321	0.7%	9.1%	1.8%	1.0%	0.5%	0.1%
519	8	SURG	CERVICAL SPINAL FUSION W CC	11,057	1.5%	26.3%	1.1%	1.4%	1.1%	0.1%
520	8	SURG	CERVICAL SPINAL FUSION W/O CC	14,632	0.5%	33.1%	1.0%	0.4%	0.3%	0.0%

**Appendix G1 (continued)**  
**Targeted Service Charges as a Percent of Total DRG Charges**

DRG num	MDC	DRG type	DRG name	Case count	Target service charges as percent total DRG charges						
					Inter-mediate care	Devices & implants only	IV solutions only	CT scan only	MRI only	Cardiac cath only	
537	8	SURG	LOCAL EXCIS & REMOV OF INT FIX DEV EXCEPT HIP & FEMUR W CC	8,196	1.6%	4.2%	2.3%	0.9%	0.6%	0.1%	
538	8	SURG	LOCAL EXCIS & REMOV OF INT FIX DEV EXCEPT HIP & FEMUR W/O CC	4,862	0.4%	6.6%	1.9%	0.3%	0.2%	0.0%	
544	8	SURG	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	404,171	0.6%	27.9%	1.3%	0.4%	0.1%	0.1%	
545	8	SURG	REVISION OF HIP OR KNEE REPLACEMENT	40,723	0.5%	29.0%	1.2%	0.3%	0.0%	0.1%	
546	8	SURG	SPINAL FUSION EXC CERV WITH CURVATURE OF THE SPINE OR MALIG	2,095	1.3%	36.1%	1.1%	1.3%	0.8%	0.0%	
572	8	MED	MAJOR GASTROINTESTINAL DISORDERS AND PERITONEAL INFECTIONS	42,874	4.1%	0.1%	3.2%	7.2%	0.4%	0.1%	
257	9	SURG	TOTAL MASTECTOMY FOR MALIGNANCY W CC	12,362	1.0%	1.2%	1.6%	1.1%	0.1%	0.1%	
258	9	SURG	TOTAL MASTECTOMY FOR MALIGNANCY W/O CC	10,604	0.2%	2.0%	1.6%	0.6%	0.0%	0.0%	
259	9	SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY W CC	2,575	1.2%	0.7%	1.3%	2.9%	0.6%	0.1%	
260	9	SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY W/O CC	2,492	0.4%	0.5%	1.2%	0.8%	0.1%	0.1%	
261	9	SURG	BREAST PROC FOR NON-MALIGNANCY EXCEPT BIOPSY & LOCAL EXCISION	1,427	0.6%	3.3%	1.6%	0.3%	0.1%	0.0%	
262	9	SURG	BREAST BIOPSY & LOCAL EXCISION FOR NON-MALIGNANCY	574	1.6%	0.5%	2.3%	1.5%	0.5%	0.3%	
263	9	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W CC	21,013	2.0%	0.4%	3.2%	1.1%	0.7%	0.1%	
264	9	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W/O CC	3,553	0.5%	0.4%	3.4%	0.7%	0.6%	0.0%	
265	9	SURG	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W CC	3,813	2.4%	0.8%	1.9%	1.6%	0.4%	0.1%	
266	9	SURG	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W/O CC	2,054	0.8%	1.5%	1.6%	0.9%	0.1%	0.0%	
267	9	SURG	PERIANAL & PILONIDAL PROCEDURES	251	2.5%	0.1%	2.8%	2.3%	0.4%	0.0%	
268	9	SURG	SKIN, SUBCUTANEOUS TISSUE & BREAST PLASTIC PROCEDURES	908	2.0%	1.3%	1.8%	1.1%	0.1%	0.1%	
269	9	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W CC	10,043	2.3%	0.9%	3.0%	2.3%	0.9%	0.2%	
270	9	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W/O CC	2,362	0.8%	0.7%	2.8%	2.7%	0.7%	0.1%	
271	9	MED	SKIN ULCERS	19,600	2.2%	0.1%	3.3%	1.8%	1.2%	0.1%	
272	9	MED	MAJOR SKIN DISORDERS W CC	5,593	3.8%	0.0%	3.0%	4.4%	1.3%	0.2%	
273	9	MED	MAJOR SKIN DISORDERS W/O CC	1,203	2.9%	0.0%	2.3%	7.5%	2.2%	0.4%	
274	9	MED	MALIGNANT BREAST DISORDERS W CC	2,046	2.9%	0.1%	2.3%	9.4%	3.2%	0.1%	
275	9	MED	MALIGNANT BREAST DISORDERS W/O CC	169	2.8%	0.3%	1.0%	14.3%	3.1%	0.0%	
276	9	MED	NON-MALIGANT BREAST DISORDERS	1,426	2.6%	0.1%	3.4%	2.6%	0.6%	0.2%	
277	9	MED	CELLULITIS AGE >17 W CC	107,912	2.8%	0.1%	3.1%	2.6%	1.2%	0.1%	
278	9	MED	CELLULITIS AGE >17 W/O CC	30,874	1.1%	0.0%	3.8%	2.5%	1.3%	0.0%	
279	9	MED	CELLULITIS AGE 0-17	3	0.0%	0.0%	1.5%	5.1%	0.0%	0.0%	
280	9	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W CC	17,614	4.4%	0.0%	1.2%	11.5%	2.2%	0.1%	
281	9	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W/O CC	5,851	3.1%	0.0%	0.9%	14.7%	3.2%	0.1%	
283	9	MED	MINOR SKIN DISORDERS W CC	6,022	4.2%	0.0%	2.1%	4.5%	1.2%	0.2%	
284	9	MED	MINOR SKIN DISORDERS W/O CC	1,643	3.0%	0.0%	1.9%	5.5%	1.7%	0.3%	
285	10	SURG	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DISORDERS	7,358	2.4%	0.7%	2.5%	0.6%	1.4%	0.3%	
286	10	SURG	ADRENAL & PITUITARY PROCEDURES	2,466	2.3%	1.3%	1.7%	1.8%	2.2%	0.1%	
287	10	SURG	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DISORDERS	5,150	3.0%	0.7%	2.6%	1.1%	1.4%	0.2%	
288	10	SURG	O.R. PROCEDURES FOR OBESITY	9,913	1.5%	3.8%	1.9%	0.5%	0.0%	0.0%	
289	10	SURG	PARATHYROID PROCEDURES	6,051	1.6%	0.2%	1.4%	0.6%	0.2%	0.1%	
290	10	SURG	THYROID PROCEDURES	10,776	1.4%	0.3%	1.4%	0.5%	0.1%	0.1%	
291	10	SURG	THYROIDECTOMY PROCEDURES	50	4.8%	0.6%	1.6%	0.2%	0.0%	0.8%	
292	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W CC	6,848	4.2%	2.4%	2.3%	2.2%	1.2%	0.4%	
293	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W/O CC	307	2.6%	4.5%	1.9%	2.5%	1.6%	0.7%	
294	10	MED	DIABETES AGE >35	88,637	6.0%	0.1%	2.3%	4.3%	1.5%	0.3%	
295	10	MED	DIABETES AGE 0-35	3,752	4.1%	0.1%	3.4%	2.6%	0.7%	0.1%	
296	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W CC	228,622	5.5%	0.1%	2.7%	5.9%	1.3%	0.1%	
297	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W/O CC	39,075	4.9%	0.0%	2.7%	8.2%	1.9%	0.1%	
298	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE 0-17	86	2.4%	0.0%	1.5%	1.4%	0.0%	0.0%	
299	10	MED	INBORN ERRORS OF METABOLISM	1,280	2.8%	0.1%	2.5%	3.9%	1.6%	0.4%	
300	10	MED	ENDOCRINE DISORDERS W CC	20,114	7.4%	0.1%	1.9%	7.0%	2.6%	0.2%	
301	10	MED	ENDOCRINE DISORDERS W/O CC	3,502	7.1%	0.0%	1.2%	7.7%	3.5%	0.2%	
302	11	SURG	KIDNEY TRANSPLANT	8,398	2.3%	0.5%	1.7%	0.4%	0.1%	0.1%	
303	11	SURG	KIDNEY AND URETER PROCEDURES FOR NEOPLASM	18,225	2.3%	0.9%	2.3%	1.6%	0.3%	0.1%	
304	11	SURG	KIDNEY AND URETER PROCEDURES FOR NON-NEOPLASM WITHOUT CC	12,477	3.2%	0.9%	2.2%	3.4%	0.3%	0.1%	

**Appendix G1 (continued)**  
**Targeted Service Charges as a Percent of Total DRG Charges**

DRG num	MDC	DRG type	DRG name	Case count	Target service charges as percent total DRG charges					
					Inter-mediate care	Devices & implants only	IV solutions only	CT scan only	MRI only	Cardiac cath only
305	11	SURG	KIDNEY AND URETER PROCEDURES FOR NON-NEOPLASM WITHOUT CC	2,594	0.6%	1.1%	2.0%	1.8%	0.1%	0.0%
306	11	SURG	PROSTATECTOMY W CC	5,534	3.1%	0.4%	2.9%	3.0%	0.4%	0.2%
307	11	SURG	PROSTATECTOMY W/O CC	1,855	0.3%	0.2%	3.1%	1.0%	0.1%	0.0%
308	11	SURG	MINOR BLADDER PROCEDURES W CC	5,125	1.8%	5.3%	2.7%	2.3%	0.2%	0.1%
309	11	SURG	MINOR BLADDER PROCEDURES W/O CC	2,869	0.2%	20.2%	1.7%	0.4%	0.0%	0.0%
310	11	SURG	TRANSURETHRAL PROCEDURES W CC	23,959	2.3%	0.8%	2.4%	6.7%	0.4%	0.1%
311	11	SURG	TRANSURETHRAL PROCEDURES W/O CC	5,616	0.5%	0.8%	2.2%	5.7%	0.2%	0.1%
312	11	SURG	URETHRAL PROCEDURES, AGE >17 W CC	1,276	2.7%	1.1%	2.5%	3.0%	0.3%	0.2%
313	11	SURG	URETHRAL PROCEDURES, AGE >17 W/O CC	488	0.3%	1.7%	2.5%	0.4%	0.0%	0.0%
315	11	SURG	OTHER KIDNEY & URINARY TRACT O.R. PROCEDURES	32,551	4.4%	5.3%	1.5%	1.5%	0.5%	1.3%
316	11	MED	RENAL FAILURE	182,854	7.1%	0.2%	2.2%	3.6%	1.0%	0.2%
317	11	MED	ADMIT FOR RENAL DIALYSIS	2,366	3.1%	1.1%	1.7%	1.0%	0.3%	0.6%
318	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W CC	5,493	3.1%	0.2%	2.5%	10.4%	2.1%	0.2%
319	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W/O CC	358	0.6%	0.5%	2.0%	11.6%	2.7%	0.1%
320	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W CC	206,671	4.2%	0.1%	3.0%	6.3%	1.0%	0.1%
321	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W/O CC	28,834	2.6%	0.0%	2.9%	9.1%	1.5%	0.0%
322	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE 0-17	48	1.5%	0.0%	3.8%	4.7%	0.0%	0.0%
323	11	MED	URINARY STONES W CC, &/OR ESW LITHOTRIPSY	18,754	1.7%	1.0%	2.4%	15.0%	0.4%	0.1%
324	11	MED	URINARY STONES W/O CC	4,214	0.6%	0.9%	2.5%	20.0%	0.3%	0.1%
325	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W CC	9,078	3.5%	0.1%	2.1%	8.6%	0.9%	0.1%
326	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W/O CC	2,425	1.7%	0.3%	2.3%	12.1%	1.1%	0.2%
327	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE 0-17	6	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%
328	11	MED	URETHRAL STRICTURE AGE >17 W CC	547	1.6%	0.3%	2.4%	5.4%	0.7%	0.1%
329	11	MED	URETHRAL STRICTURE AGE >17 W/O CC	53	1.4%	1.6%	1.5%	1.6%	0.4%	0.0%
331	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W CC	50,499	4.6%	0.3%	2.4%	4.6%	0.8%	0.3%
332	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W/O CC	3,517	2.9%	0.6%	2.2%	7.7%	1.2%	0.5%
333	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 0-17	213	4.0%	0.1%	1.7%	1.4%	1.1%	0.0%
573	11	SURG	MAJOR BLADDER PROCEDURES	6,194	2.6%	1.1%	3.4%	1.5%	0.1%	0.1%
334	12	SURG	MAJOR MALE PELVIC PROCEDURES W CC	8,590	1.2%	0.7%	2.6%	0.6%	0.1%	0.2%
335	12	SURG	MAJOR MALE PELVIC PROCEDURES W/O CC	10,870	0.4%	0.6%	2.2%	0.1%	0.0%	0.0%
336	12	SURG	TRANSURETHRAL PROSTATECTOMY W CC	27,394	1.4%	0.3%	3.3%	1.6%	0.2%	0.1%
337	12	SURG	TRANSURETHRAL PROSTATECTOMY W/O CC	20,734	0.3%	0.1%	3.4%	0.3%	0.0%	0.0%
338	12	SURG	TESTES PROCEDURES, FOR MALIGNANCY	624	2.6%	0.8%	2.2%	4.6%	1.9%	0.2%
339	12	SURG	TESTES PROCEDURES, NON-MALIGNANCY AGE >17	1,147	1.9%	0.4%	3.4%	2.5%	0.2%	0.1%
341	12	SURG	PENIS PROCEDURES	2,889	0.8%	23.9%	2.0%	1.0%	0.1%	0.1%
342	12	SURG	CIRCUMCISION AGE >17	428	0.8%	0.2%	3.2%	1.1%	0.1%	0.0%
344	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY	2,241	1.0%	8.2%	1.7%	3.1%	0.4%	0.1%
345	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIGNANCY	1,281	1.9%	0.7%	3.1%	3.8%	0.3%	0.1%
346	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W CC	3,643	2.9%	0.2%	2.4%	7.1%	2.5%	0.1%
347	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W/O CC	200	1.3%	0.7%	2.0%	5.7%	2.2%	0.0%
348	12	MED	BENIGN PROSTATIC HYPERTROPHY W CC	3,890	3.5%	0.2%	2.3%	8.3%	0.8%	0.2%
349	12	MED	BENIGN PROSTATIC HYPERTROPHY W/O CC	493	2.0%	0.4%	1.9%	8.4%	1.5%	0.4%
350	12	MED	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM	6,524	2.2%	0.1%	3.5%	6.1%	0.5%	0.0%
352	12	MED	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES	1,001	2.9%	0.1%	3.0%	6.8%	0.7%	0.0%
353	13	SURG	PELVIC EVISCERATION, RADICAL HYSTERECTOMY & RADICAL VULVECTOMY	2,675	1.6%	0.9%	3.1%	1.3%	0.1%	0.1%
354	13	SURG	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W CC	7,108	1.9%	0.7%	2.3%	1.6%	0.1%	0.2%
355	13	SURG	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W/O CC	4,540	0.4%	0.6%	2.0%	0.5%	0.0%	0.0%
356	13	SURG	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	20,604	0.3%	8.4%	2.2%	0.3%	0.0%	0.0%
357	13	SURG	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY	5,100	1.8%	0.8%	3.1%	2.0%	0.1%	0.1%
358	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W CC	18,981	1.1%	1.6%	2.4%	1.5%	0.1%	0.1%
359	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC	25,835	0.2%	2.5%	2.2%	0.3%	0.0%	0.0%
360	13	SURG	VAGINA, CERVIX & VULVA PROCEDURES	12,936	0.5%	6.6%	2.1%	0.8%	0.1%	0.1%
361	13	SURG	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	240	0.2%	2.8%	2.3%	2.6%	0.2%	0.1%
363	13	SURG	D&C, CONIZATION & RADIO-IMPLANT, FOR MALIGNANCY	2,034	1.5%	0.9%	1.4%	5.1%	0.5%	0.1%
364	13	SURG	D&C, CONIZATION EXCEPT FOR MALIGNANCY	1,722	2.2%	0.8%	1.7%	5.1%	0.3%	0.4%
365	13	SURG	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES	1,468	1.6%	1.3%	3.6%	3.6%	0.2%	0.1%
366	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W CC	4,223	2.0%	0.3%	3.1%	9.3%	0.7%	0.1%
367	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC	365	1.7%	0.3%	3.6%	12.4%	0.9%	0.1%
368	13	MED	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM	3,778	3.7%	0.1%	3.5%	7.1%	0.7%	0.0%
369	13	MED	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS	3,285	2.6%	0.4%	1.8%	11.9%	1.0%	0.2%

**Appendix G1 (continued)**  
**Targeted Service Charges as a Percent of Total DRG Charges**

DRG num	MDC	DRG type	DRG name	Case count	Target service charges as percent total DRG charges					
					Inter-mediate care	Devices & implants only	IV solutions only	CT scan only	MRI only	Cardiac cath only
370	14	SURG	CESAREAN SECTION W CC	1,810	1.0%	0.1%	2.5%	0.7%	0.2%	0.0%
371	14	SURG	CESAREAN SECTION W/O CC	2,242	0.1%	0.0%	2.9%	0.1%	0.0%	0.0%
372	14	MED	VAGINAL DELIVERY W COMPLICATING DIAGNOSES	1,163	0.6%	0.0%	2.6%	0.3%	0.2%	0.1%
373	14	MED	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	4,595	0.2%	0.0%	2.6%	0.1%	0.1%	0.0%
374	14	SURG	VAGINAL DELIVERY W STERILIZATION &/OR D&C	113	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%
375	14	SURG	VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL &/OR D&C	9	2.6%	0.4%	2.7%	0.0%	0.0%	0.0%
376	14	MED	POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE	395	2.6%	0.0%	2.6%	6.9%	1.5%	0.4%
377	14	SURG	POSTPARTUM & POST ABORTION DIAGNOSES W O.R. PROCEDURE	95	0.8%	6.6%	3.3%	5.5%	0.1%	0.4%
378	14	MED	ECTOPIC PREGNANCY	179	0.8%	0.3%	2.2%	1.3%	0.1%	0.0%
379	14	MED	THREATENED ABORTION	471	1.8%	0.0%	3.9%	0.4%	0.1%	0.0%
380	14	MED	ABORTION W/O D&C	90	1.2%	0.0%	1.9%	1.1%	0.9%	0.0%
381	14	SURG	ABORTION W D&C, ASPIRATION CURETTAGE OR HYSTEROTOMY	156	2.5%	0.0%	2.4%	1.0%	0.0%	0.0%
382	14	MED	FALSE LABOR	39	0.0%	0.0%	3.4%	0.0%	1.3%	0.0%
383	14	MED	OTHER ANTEPARTUM DIAGNOSES W MEDICAL COMPLICATIONS	2,290	2.5%	0.2%	3.2%	0.8%	0.7%	0.0%
384	14	MED	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	121	2.4%	0.0%	3.3%	1.6%	0.6%	0.0%
392	16	SURG	SPLENECTOMY AGE >17	1,985	2.3%	0.5%	2.6%	3.4%	0.2%	0.1%
394	16	SURG	OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS	2,541	4.3%	1.4%	1.7%	3.8%	0.5%	0.2%
395	16	MED	RED BLOOD CELL DISORDERS AGE >17	91,202	5.0%	0.1%	1.9%	4.1%	0.7%	0.2%
396	16	MED	RED BLOOD CELL DISORDERS AGE 0-17	11	0.0%	0.0%	0.1%	9.8%	2.0%	0.0%
397	16	MED	COAGULATION DISORDERS	15,508	4.1%	0.1%	1.7%	3.7%	0.6%	0.1%
398	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W CC	6,043	4.5%	0.1%	2.3%	9.2%	1.2%	0.1%
399	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC	989	3.8%	0.1%	1.9%	13.8%	1.7%	0.1%
574	16	MED	MAJOR HEMATOLOGIC/IMMUNOLOGIC DIAG EXC SICKLE CELL CRISIS & COAGUL	24,402	2.7%	0.1%	3.1%	3.6%	0.6%	0.0%
401	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W CC	6,001	3.0%	2.0%	2.1%	6.3%	1.5%	0.2%
402	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W/O CC	1,309	1.3%	2.1%	1.5%	8.5%	1.9%	0.0%
403	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W CC	29,455	3.3%	0.2%	2.3%	5.2%	1.7%	0.1%
404	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC	3,427	1.8%	0.4%	1.8%	7.5%	4.1%	0.0%
406	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W CC	2,102	3.2%	0.7%	3.2%	2.8%	0.4%	0.1%
407	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W/O CC	554	1.9%	1.2%	1.9%	1.0%	0.2%	0.0%
408	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R.PROC	1,905	1.6%	2.4%	2.4%	5.0%	1.4%	0.4%
409	17	MED	RADIOTHERAPY	1,613	0.9%	0.3%	1.8%	1.8%	0.9%	0.0%
410	17	MED	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS	26,485	0.7%	0.3%	3.0%	1.6%	0.5%	0.0%
411	17	MED *	HISTORY OF MALIGNANCY W/O ENDOSCOPY	4	0.0%	0.0%	0.4%	30.4%	0.0%	0.0%
412	17	MED *	HISTORY OF MALIGNANCY W ENDOSCOPY	12	14.6%	0.0%	1.6%	0.0%	1.7%	0.0%
413	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W CC	5,145	2.8%	0.2%	2.9%	9.1%	1.7%	0.1%
414	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC	444	2.8%	0.2%	1.8%	13.6%	3.2%	0.2%
473	17	MED	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE >17	7,873	2.1%	0.1%	3.3%	2.3%	0.5%	0.0%
492	17	MED	CHEMOAGENT	3,561	1.5%	0.1%	3.3%	1.1%	0.2%	0.0%
539	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR OR PROCEDURE W CC	4,666	2.8%	1.4%	2.9%	3.7%	1.1%	0.1%
540	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR OR PROCEDURE W/O CC	1,455	1.4%	1.3%	1.5%	2.6%	1.3%	0.1%
417	18	MED	SEPTICEMIA AGE 0-17	29	0.8%	0.1%	1.7%	2.2%	0.2%	0.0%
418	18	MED	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS	27,021	3.6%	0.2%	3.4%	6.3%	0.8%	0.1%
419	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W CC	15,598	3.5%	0.1%	2.4%	8.2%	1.4%	0.1%
420	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W/O CC	2,655	2.6%	0.1%	2.4%	11.5%	2.0%	0.3%
421	18	MED	VIRAL ILLNESS AGE >17	11,059	4.2%	0.0%	2.6%	7.1%	2.2%	0.2%
422	18	MED	VIRAL ILLNESS & FEVER OF UNKNOWN ORIGIN AGE 0-17	53	2.5%	0.0%	1.5%	2.0%	0.0%	0.0%
423	18	MED	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES	8,177	4.3%	0.1%	3.2%	4.2%	1.2%	0.1%
575	18	MED	SEPTICEMIA W MV96+ HOURS AGE >17	8,808	2.6%	0.1%	3.7%	2.1%	0.2%	0.1%
576	18	MED	SEPTICEMIA W/O MV96+ HOURS AGE >17	243,162	4.8%	0.1%	3.6%	4.3%	0.6%	0.1%
578	18	SURG	INFECTIOUS & PARASITIC DISEASES W OR PROCEDURE	30,959	3.9%	1.1%	3.5%	2.9%	0.5%	0.3%
579	18	SURG	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W OR PROCEDURE	19,311	3.4%	1.2%	3.2%	2.4%	0.5%	0.1%
424	19	SURG	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	951	3.3%	7.8%	1.5%	3.7%	1.9%	1.0%
425	19	MED	ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	12,335	5.9%	0.0%	1.1%	8.4%	5.6%	0.7%

**Appendix G1 (continued)**  
**Targeted Service Charges as a Percent of Total DRG Charges**

DRG num	MDC	DRG type	DRG name	Case count	Target service charges as percent total DRG charges					
					Inter-mediate care	Devices & implants only	IV solutions only	CT scan only	MRI only	Cardiac cath only
426	19	MED	DEPRESSIVE NEUROSES	3,758	2.5%	0.0%	0.7%	4.7%	2.2%	0.6%
427	19	MED	NEUROSES EXCEPT DEPRESSIVE	1,313	2.6%	0.1%	0.7%	4.3%	2.8%	0.7%
428	19	MED	DISORDERS OF PERSONALITY & IMPULSE CONTROL	739	1.3%	0.0%	0.6%	2.4%	1.2%	0.0%
429	19	MED	ORGANIC DISTURBANCES & MENTAL RETARDATION	22,299	4.9%	0.0%	1.1%	8.5%	4.8%	0.0%
430	19	MED	PSYCHOSES	66,511	0.8%	0.0%	0.3%	2.0%	1.0%	0.0%
431	19	MED	CHILDHOOD MENTAL DISORDERS	296	1.1%	0.0%	0.2%	2.8%	2.5%	0.4%
432	19	MED	OTHER MENTAL DISORDER DIAGNOSES	363	3.9%	0.0%	1.1%	6.8%	4.5%	0.0%
433	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA	4,444	2.9%	0.0%	1.1%	3.8%	0.5%	0.0%
521	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE W CC	29,416	4.3%	0.0%	1.6%	5.9%	2.2%	0.1%
522	20	MED	ALC/DRUG ABUSE OR DEPEND W REHABILITATION THERAPY W/O CC	4,965	0.0%	0.0%	0.0%	0.3%	0.1%	0.0%
523	20	MED	ALC/DRUG ABUSE OR DEPEND W/O REHABILITATION THERAPY W/O CC	14,026	2.6%	0.0%	0.9%	4.2%	1.6%	0.1%
439	21	SURG	SKIN GRAFTS FOR INJURIES	1,554	2.5%	1.5%	2.3%	0.9%	0.1%	0.1%
440	21	SURG	WOUND DEBRIDEMENTS FOR INJURIES	4,770	2.8%	0.8%	2.9%	1.4%	0.3%	0.1%
441	21	SURG	HAND PROCEDURES FOR INJURIES	688	0.9%	0.8%	2.1%	1.4%	0.3%	0.0%
442	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W CC	16,814	3.1%	2.3%	3.1%	2.7%	0.3%	0.3%
443	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W/O CC	3,181	1.6%	5.3%	2.4%	1.4%	0.4%	0.3%
444	21	MED	TRAUMATIC INJURY AGE >17 W CC	5,449	4.8%	0.1%	1.6%	12.1%	2.2%	0.1%
445	21	MED	TRAUMATIC INJURY AGE >17 W/O CC	1,960	3.8%	0.1%	1.2%	15.7%	3.2%	0.0%
447	21	MED	ALLERGIC REACTIONS AGE >17	5,681	6.3%	0.1%	1.7%	3.4%	0.7%	0.5%
449	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W CC	36,276	5.4%	0.0%	2.1%	5.1%	1.3%	0.3%
450	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W/O CC	6,679	5.3%	0.0%	1.8%	5.5%	1.5%	0.1%
452	21	MED	COMPLICATIONS OF TREATMENT W CC	25,763	4.1%	0.5%	2.8%	5.4%	0.5%	0.5%
453	21	MED	COMPLICATIONS OF TREATMENT W/O CC	4,893	3.2%	0.3%	2.7%	6.4%	0.7%	1.1%
454	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W CC	3,784	6.3%	0.0%	2.0%	7.9%	1.3%	0.3%
455	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W/O CC	741	5.5%	0.1%	1.0%	13.7%	1.4%	0.4%
504	22	SURG	EXTEN. BURNS OR FULL THICKNESS BURN W/MV 96+HRS W/SKIN GFT	172	1.0%	1.8%	2.1%	0.5%	0.1%	0.1%
505	22	MED	EXTEN. BURNS OR FULL THICKNESS BURN W/MV 96+HRS W/O SKIN GFT	157	0.3%	0.1%	1.7%	0.8%	0.2%	0.0%
506	22	SURG	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W CC OR SIG TRAUMA	863	2.8%	1.1%	1.5%	0.6%	0.2%	0.2%
507	22	SURG	FULL THICKNESS BURN W SKIN GRFT OR INHAL INJ W/O CC OR SIG TRAUMA	274	1.6%	0.7%	1.4%	0.2%	0.1%	0.1%
508	22	MED	FULL THICKNESS BURN W/O SKIN GRFT OR INHAL INJ W CC OR SIG TRAUMA	609	2.6%	0.4%	2.5%	1.6%	0.6%	0.1%
509	22	MED	FULL THICKNESS BURN W/O SKIN GRFT OR INH INJ W/O CC OR SIG TRAUMA	137	1.4%	0.7%	1.9%	0.3%	0.0%	0.1%
510	22	MED	NON-EXTENSIVE BURNS W CC OR SIGNIFICANT TRAUMA	1,615	2.8%	0.4%	2.2%	1.4%	0.4%	0.1%
511	22	MED	NON-EXTENSIVE BURNS W/O CC OR SIGNIFICANT TRAUMA	558	2.8%	0.1%	1.6%	1.0%	0.2%	0.0%
461	23	SURG	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES	2,196	2.7%	7.4%	1.6%	2.1%	0.7%	1.6%
462	23	MED	REHABILITATION	3,104	0.3%	0.1%	0.1%	0.4%	0.4%	0.0%
463	23	MED	SIGNS & SYMPTOMS W CC	29,814	5.9%	0.0%	1.4%	8.3%	3.3%	0.2%
464	23	MED	SIGNS & SYMPTOMS W/O CC	6,935	5.6%	0.0%	1.0%	10.3%	5.7%	0.2%
465	23	MED	AFTERCARE W HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	144	3.8%	0.9%	1.2%	3.4%	0.0%	4.1%
466	23	MED	AFTERCARE W/O HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	968	6.4%	0.5%	1.7%	1.9%	0.1%	5.3%
467	23	MED	OTHER FACTORS INFLUENCING HEALTH STATUS	867	3.0%	0.7%	2.1%	7.6%	1.2%	2.4%
484	24	SURG	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	411	1.5%	5.2%	2.0%	8.7%	0.6%	0.0%
485	24	SURG	LIMB REATTACHMENT, HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	3,399	2.4%	9.1%	1.8%	5.3%	0.4%	0.1%
486	24	SURG	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	2,286	2.0%	3.8%	1.9%	8.1%	0.5%	0.1%
487	24	MED	OTHER MULTIPLE SIGNIFICANT TRAUMA	4,340	4.0%	0.2%	1.7%	15.6%	1.3%	0.1%
488	25	SURG	HIV W EXTENSIVE O.R. PROCEDURE	743	3.2%	1.5%	2.9%	3.0%	1.0%	0.3%
489	25	MED	HIV W MAJOR RELATED CONDITION	12,470	3.0%	0.1%	3.4%	3.9%	1.4%	0.0%
490	25	MED	HIV W OR W/O OTHER RELATED CONDITION	4,603	2.7%	0.1%	2.8%	5.7%	2.0%	0.1%
103	PRE	SURG	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	704	3.3%	8.9%	1.5%	0.5%	0.0%	2.0%
480	PRE	SURG	LIVER TRANSPLANT AND/OR INTESTINAL TRANSPLANT	994	1.4%	0.2%	1.8%	0.8%	0.2%	0.1%
481	PRE	SURG	BONE MARROW TRANSPLANT	1,078	5.2%	0.1%	3.6%	0.8%	0.2%	0.0%
482	PRE	SURG	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES	4,629	4.3%	1.1%	1.9%	1.7%	0.2%	0.1%
495	PRE	SURG	LUNG TRANSPLANT	300	3.8%	0.3%	1.5%	0.5%	0.1%	0.1%
512	PRE	SURG	SIMULTANEOUS PANCREAS/KIDNEY TRANSPLANT	402	1.0%	0.3%	3.1%	0.9%	0.2%	0.0%
513	PRE	SURG	PANCREAS TRANSPLANT	195	1.4%	0.3%	2.1%	1.1%	0.1%	0.0%
541	PRE	SURG	ECMO OR TRACH W MV 96+HRS OR PDX EXC FACE, MOUTH & NECK W MAJ O.R.	21,643	2.4%	1.4%	2.8%	1.9%	0.2%	0.4%
542	PRE	SURG	TRACH W MV 96+HRS OR PDX EXC FACE, MOUTH & NECK W/O MAJ O.R.	21,116	2.9%	0.2%	2.6%	1.6%	0.2%	0.1%

**Appendix G1 (continued)**  
**Targeted Service Charges as a Percent of Total DRG Charges**

DRG num	MDC	DRG type	DRG name	Case count	Target service charges as percent total DRG charges					
					Inter-mediate care	Devices & implants only	IV solutions only	CT scan only	MRI only	Cardiac cath only
468		SURG	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	47,282	5.2%	7.8%	2.3%	2.7%	0.7%	2.5%
470		**	UNGROUPABLE	19	0.0%	0.0%	4.5%	2.3%	0.0%	0.0%
476		SURG	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	2,800	6.0%	0.2%	2.3%	3.2%	0.7%	0.5%
477		SURG	NON-EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	26,528	5.1%	0.9%	2.3%	4.4%	1.2%	0.5%
				11,140,200	4.6%	6.8%	2.0%	3.2%	0.9%	2.6%
			MINIMUM		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
			10th percentile		0.6%	0.0%	0.9%	0.5%	0.0%	0.0%
			25th percentile		1.6%	0.1%	1.4%	1.2%	0.2%	0.0%
			MEDIAN		2.8%	0.4%	1.9%	3.2%	0.5%	0.1%
			75 percentile		4.4%	1.5%	2.6%	6.9%	1.5%	0.3%
			90th percentile		6.4%	7.8%	3.3%	10.1%	3.4%	0.7%
			MAXIMUM		16.0%	61.1%	4.9%	30.4%	19.0%	34.2%

**Appendix G2**  
**Top 50 DRGs ranked by regression-targeted services as percent total DRG charges:**  
**Devices & implants**

DRG num	MDC	DRG name	Case count	CMS_04b	CMS_04a	CMS_04
				Devices & implants only (CCR=0.43)	Other medical supplies charged (CCR=0.25)	Total supplies charged (CCR=0.34)
515	5	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH	49,586	61.1%	7.3%	68.4%
536	5	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK	7,523	47.2%	8.1%	55.3%
535	5	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK	7,634	45.1%	8.2%	53.2%
552	5	OTHER PERMANENT CARDIAC PACEMAKER IMPLANT W/O MAJOR CV DX	77,491	42.5%	6.9%	49.4%
498	8	SPINAL FUSION EXCEPT CERVICAL W/O CC	18,685	42.4%	13.4%	55.9%
118	5	CARDIAC PACEMAKER DEVICE REPLACEMENT	6,925	42.2%	5.9%	48.1%
497	8	SPINAL FUSION EXCEPT CERVICAL W CC	27,685	37.8%	12.3%	50.1%
471	8	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY	13,947	37.0%	16.0%	53.1%
496	8	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	3,099	36.4%	10.8%	47.3%
546	8	SPINAL FUSION EXC CERV WITH CURVATURE OF THE SPINE OR MALIG	2,095	36.1%	11.5%	47.6%
551	5	PERMANENT CARDIAC PACEMAKER IMPL W MAJ CV DX OR AICD LEAD OR GNRTR	51,370	35.8%	7.6%	43.4%
520	8	CERVICAL SPINAL FUSION W/O CC	14,632	33.1%	13.6%	46.6%
491	8	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF UPPER EXTREMITY	20,270	29.9%	13.9%	43.8%
545	8	REVISION OF HIP OR KNEE REPLACEMENT	40,723	29.0%	13.4%	42.4%
111	5	MAJOR CARDIOVASCULAR PROCEDURES W/O CC	9,599	28.1%	17.1%	45.2%
544	8	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	404,171	27.9%	14.9%	42.8%
519	8	CERVICAL SPINAL FUSION W CC	11,057	26.3%	11.6%	37.9%
558	5	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W/O MAJ CV DX	170,167	25.7%	12.7%	38.4%
341	12	PENIS PROCEDURES	2,889	23.9%	10.6%	34.5%
8	1	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W/O CC	3,164	21.8%	8.0%	29.7%
557	5	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W MAJOR CV DX	108,286	20.8%	11.9%	32.7%
309	11	MINOR BLADDER PROCEDURES W/O CC	2,869	20.2%	15.2%	35.5%
530	1	VENTRICULAR SHUNT PROCEDURES W/O CC	2,853	18.5%	14.6%	33.1%
532	1	SPINAL PROCEDURES W/O CC	2,483	15.8%	11.3%	27.1%
556	5	PERCUTANEOUS CARDIOVASC PROC W NON-DRUG-ELUTING STENT W/O MAJ CV DX	23,685	14.4%	14.6%	29.0%
234	8	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W/O CC	7,937	14.4%	27.0%	41.4%
577	1	CAROTID ARTERY STENT PROCEDURE	2,431	13.8%	24.7%	38.4%
219	8	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR AGE >17 W/O CC	19,101	11.8%	11.9%	23.7%
2	1	CRANIOTOMY AGE >17 W/O CC	9,118	11.7%	12.5%	24.1%
105	5	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W/O CARD CATH	30,122	11.1%	14.4%	25.4%
525	5	OTHER HEART ASSIST SYSTEM IMPLANT	243	11.1%	19.2%	30.3%
7	1	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W CC	13,863	10.7%	6.3%	17.1%
110	5	MAJOR CARDIOVASCULAR PROCEDURES W CC	53,032	10.6%	12.1%	22.7%
117	5	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	4,975	10.5%	9.4%	19.8%
531	1	SPINAL PROCEDURES W CC	4,564	10.4%	9.1%	19.5%
211	8	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W/O CC	24,192	10.2%	11.2%	21.5%
479	5	OTHER VASCULAR PROCEDURES W/O CC	24,654	10.2%	16.6%	26.8%
218	8	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR AGE >17 W CC	27,359	9.7%	10.9%	20.7%
224	8	SHOULDER,ELBOW OR FOREARM PROC,EXC MAJOR JOINT PROC, W/O CC	9,247	9.3%	14.4%	23.7%
104	5	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W CARD CATH	18,986	9.3%	12.8%	22.1%
503	8	KNEE PROCEDURES W/O PDX OF INFECTION	5,321	9.1%	12.9%	22.0%
485	24	LIMB REATTACHMENT, HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	3,399	9.1%	10.2%	19.3%
529	1	VENTRICULAR SHUNT PROCEDURES W CC	4,345	9.1%	10.1%	19.2%
223	8	MAJOR SHOULDER/ELBOW PROC, OR OTHER UPPER EXTREMITY PROC W CC	12,053	8.9%	12.5%	21.4%
103	PRE	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	704	8.9%	11.2%	20.1%
210	8	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W CC	119,159	8.5%	10.2%	18.8%
356	13	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	20,604	8.4%	14.0%	22.5%
344	12	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY	2,241	8.2%	9.4%	17.6%
233	8	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W CC	16,227	7.9%	17.2%	25.1%
424	19	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	951	7.8%	7.1%	14.9%

**Appendix G2 (continued)**  
**Top 50 DRGs ranked by regression-targeted services as percent total DRG charges:**  
**IV solutions**

DRG num	MDC	DRG name	Case count	CMS_03b	CMS_03a	CMS_03
				IV solutions only (CCR=0.09)	Other drugs charged (CCR=0.23)	Total drugs charged (CCR=0.21)
569	6	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC W MAJOR GI DX	56,829	4.9%	19.2%	24.1%
150	6	PERITONEAL ADHESIOLYSIS W CC	21,274	4.9%	17.5%	22.3%
567	6	STOMACH, ESOPHAGEAL & DUODENAL PROC AGE > 17 W CC W MAJOR GI DX	9,947	4.8%	20.2%	25.0%
164	6	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC	5,526	4.1%	17.9%	22.0%
180	6	G.I. OBSTRUCTION W CC	84,287	4.0%	16.0%	19.9%
379	14	THREATENED ABORTION	471	3.9%	13.0%	16.9%
570	6	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC W/O MAJOR GI DX	67,586	3.8%	14.9%	18.7%
204	7	DISORDERS OF PANCREAS EXCEPT MALIGNANCY	64,155	3.8%	16.0%	19.9%
185	3	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE >17	5,515	3.8%	20.6%	24.4%
278	9	CELLULITIS AGE >17 W/O CC	30,874	3.8%	19.6%	23.4%
152	6	MINOR SMALL & LARGE BOWEL PROCEDURES W CC	4,604	3.8%	15.2%	19.0%
146	6	RECTAL RESECTION W CC	9,791	3.8%	13.8%	17.6%
193	7	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W CC	3,886	3.7%	16.2%	19.9%
575	18	SEPTICEMIA W MV96+ HOURS AGE >17	8,808	3.7%	21.8%	25.5%
201	7	OTHER HEPATOBILIARY OR PANCREAS O.R. PROCEDURES	2,425	3.7%	17.1%	20.8%
179	6	INFLAMMATORY BOWEL DISEASE	13,275	3.7%	18.5%	22.2%
181	6	G.I. OBSTRUCTION W/O CC	23,320	3.7%	12.2%	15.9%
365	13	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES	1,468	3.6%	17.0%	20.6%
195	7	CHOLECYSTECTOMY W C.D.E. W CC	2,722	3.6%	14.7%	18.3%
153	6	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC	1,874	3.6%	12.3%	16.0%
568	6	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES PROC AGE > 17 W CC W/O MAJOR GI DX	15,552	3.6%	15.9%	19.5%
576	18	SEPTICEMIA W/O MV96+ HOURS AGE >17	243,162	3.6%	18.8%	22.5%
367	13	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC	365	3.6%	16.8%	20.4%
67	3	EPIGLOTTITIS	346	3.6%	20.0%	23.6%
481	PRE	BONE MARROW TRANSPLANT	1,078	3.6%	34.3%	37.9%
165	6	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	2,224	3.6%	14.5%	18.1%
578	18	INFECTIOUS & PARASITIC DISEASES W OR PROCEDURE	30,959	3.5%	19.6%	23.1%
200	7	HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR NON-MALIGNANCY	889	3.5%	16.9%	20.4%
350	12	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM	6,524	3.5%	18.4%	21.9%
368	13	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM	3,778	3.5%	20.2%	23.7%
197	7	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W CC	15,394	3.5%	15.3%	18.7%
337	12	TRANSURETHRAL PROSTATECTOMY W/O CC	20,734	3.4%	7.3%	10.8%
489	25	HIV W MAJOR RELATED CONDITION	12,470	3.4%	26.0%	29.4%
21	1	VIRAL MENINGITIS	2,046	3.4%	21.0%	24.5%
199	7	HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY	1,320	3.4%	14.5%	17.9%
382	14	FALSE LABOR	39	3.4%	9.2%	12.6%
151	6	PERITONEAL ADHESIOLYSIS W/O CC	4,887	3.4%	12.2%	15.6%
264	9	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W/O CC	3,553	3.4%	16.4%	19.8%
573	11	MAJOR BLADDER PROCEDURES	6,194	3.4%	13.4%	16.8%
418	18	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS	27,021	3.4%	19.7%	23.1%
295	10	DIABETES AGE 0-35	3,752	3.4%	16.5%	19.9%
276	9	NON-MALIGANT BREAST DISORDERS	1,426	3.4%	19.2%	22.6%
339	12	TESTES PROCEDURES, NON-MALIGNANCY AGE >17	1,147	3.4%	13.7%	17.1%
492	17	CHEMOTHERAPY W ACUTE LEUKEMIA OR W USE OF HI DOSE CHEMOAGENT	3,561	3.3%	41.9%	45.2%
79	4	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W CC	150,866	3.3%	18.9%	22.2%
561	1	NON-BACTERIAL INFECTIONS OF NERVOUS SYSTEM EXCEPT VIRAL MENINGITIS	2,632	3.3%	21.9%	25.2%
188	6	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W CC	80,123	3.3%	14.9%	18.2%
149	6	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC	18,079	3.3%	11.6%	14.9%
80	4	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W/O CC	6,582	3.3%	18.4%	21.7%
384	14	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	121	3.3%	9.1%	12.4%

**Appendix G2 (continued)**  
**Top 50 DRGs ranked by regression-targeted services as percent total DRG charges:**  
**CT scanning**

DRG num	MDC	DRG name	Case count	CMS_12b	CMS_12c	CMS_12a	CMS_12
				CT scan only (CCR=0.11)	MRI (CCR=0.17)	All other radiology (CCR=0.28)	Total radiology (CCR=0.19)
32	1	CONCUSSION AGE >17 W/O CC	1,599	25.2%	3.8%	5.9%	34.9%
29	1	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W/O CC	5,838	21.3%	3.2%	3.8%	28.3%
72	3	NASAL TRAUMA & DEFORMITY	1,149	20.5%	1.0%	5.0%	26.5%
324	11	URINARY STONES W/O CC	4,214	20.0%	0.3%	5.7%	26.1%
31	1	CONCUSSION AGE >17 W CC	4,435	19.2%	3.1%	5.0%	27.4%
43	2	HYPHEMA	100	17.4%	2.0%	3.5%	23.0%
181	6	G.I. OBSTRUCTION W/O CC	23,320	16.6%	0.2%	7.6%	24.5%
27	1	TRAUMATIC STUPOR & COMA, COMA >1 HR	5,372	16.4%	1.6%	3.7%	21.7%
183	6	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W/O CC	73,354	15.7%	0.9%	7.1%	23.6%
445	21	TRAUMATIC INJURY AGE >17 W/O CC	1,960	15.7%	3.2%	6.8%	25.8%
487	24	OTHER MULTIPLE SIGNIFICANT TRAUMA	4,340	15.6%	1.3%	5.2%	22.1%
84	4	MAJOR CHEST TRAUMA W/O CC	1,150	15.4%	1.1%	8.0%	24.5%
323	11	URINARY STONES W CC, &/OR ESW LITHOTRIPSY	18,754	15.0%	0.4%	5.5%	21.0%
28	1	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W CC	17,681	14.9%	2.3%	3.6%	20.8%
281	9	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W/O CC	5,851	14.7%	3.2%	7.9%	25.7%
275	9	MALIGNANT BREAST DISORDERS W/O CC	169	14.3%	3.1%	9.1%	26.5%
167	6	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	4,237	13.9%	0.0%	1.3%	15.3%
399	16	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC	989	13.8%	1.7%	4.2%	19.6%
455	21	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W/O CC	741	13.7%	1.4%	5.7%	20.8%
414	17	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC	444	13.6%	3.2%	5.3%	22.1%
206	7	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA W/O CC	1,804	13.2%	2.4%	6.8%	22.4%
11	1	NERVOUS SYSTEM NEOPLASMS W/O CC	2,857	12.9%	12.6%	4.8%	30.2%
83	4	MAJOR CHEST TRAUMA W CC	6,149	12.7%	1.0%	6.6%	20.3%
367	13	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC	365	12.4%	0.9%	8.6%	21.8%
47	2	OTHER DISORDERS OF THE EYE AGE >17 W/O CC	1,202	12.3%	7.2%	3.2%	22.7%
326	11	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W/O CC	2,425	12.1%	1.1%	4.4%	17.6%
444	21	TRAUMATIC INJURY AGE >17 W CC	5,449	12.1%	2.2%	5.7%	19.9%
189	6	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W/O CC	11,347	12.0%	0.6%	4.3%	17.0%
369	13	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS	3,285	11.9%	1.0%	8.0%	20.9%
173	6	DIGESTIVE MALIGNANCY W/O CC	2,112	11.6%	1.0%	5.9%	18.6%
319	11	KIDNEY & URINARY TRACT NEOPLASMS W/O CC	358	11.6%	2.7%	7.6%	21.9%
280	9	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W CC	17,614	11.5%	2.2%	6.4%	20.0%
420	18	FEVER OF UNKNOWN ORIGIN AGE >17 W/O CC	2,655	11.5%	2.0%	5.2%	18.7%
165	6	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	2,224	11.4%	0.0%	1.2%	12.7%
182	6	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W CC	236,040	11.3%	0.9%	5.5%	17.8%
178	6	UNCOMPLICATED PEPTIC ULCER W/O CC	2,419	11.3%	0.7%	7.5%	19.6%
17	1	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC	2,696	11.2%	14.5%	3.6%	29.3%
166	6	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	4,672	11.0%	0.1%	2.0%	13.0%
180	6	G.I. OBSTRUCTION W CC	84,287	10.8%	0.4%	6.2%	17.4%
46	2	OTHER DISORDERS OF THE EYE AGE >17 W CC	3,654	10.8%	4.1%	3.1%	18.0%
204	7	DISORDERS OF PANCREAS EXCEPT MALIGNANCY	64,155	10.7%	1.5%	5.2%	17.5%
251	8	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W/O CC	1,837	10.7%	1.7%	9.9%	22.2%
318	11	KIDNEY & URINARY TRACT NEOPLASMS W CC	5,493	10.4%	2.1%	6.4%	18.9%
464	23	SIGNS & SYMPTOMS W/O CC	6,935	10.3%	5.7%	4.4%	20.4%
65	3	DYSEQUILIBRIUM	37,820	10.3%	12.4%	4.0%	26.7%
524	1	TRANSIENT ISCHEMIA	103,634	10.3%	11.6%	3.3%	25.2%
564	1	HEADACHES AGE >17	14,652	10.1%	11.6%	3.9%	25.7%
9	1	SPINAL DISORDERS & INJURIES	1,648	10.1%	8.8%	4.4%	23.4%
10	1	NERVOUS SYSTEM NEOPLASMS W CC	18,044	10.1%	9.0%	7.8%	26.9%
203	7	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS	29,760	10.1%	1.6%	6.5%	18.2%

Appendix G2 (continued)

Top 50 DRGs ranked by regression-targeted services as percent total DRG charges:

DRG num	MDC	DRG name	Raw case count	MRI		CMS_12a	CMS_12
				MRI	CT scan only		
45	2	NEUROLOGICAL EYE DISORDERS	2,571	19.0%	9.1%	4.2%	32.4%
17	1	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC	2,696	14.5%	11.2%	3.6%	29.3%
35	1	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC	7,102	13.1%	9.5%	5.4%	28.0%
13	1	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA	6,544	12.6%	3.5%	2.6%	18.7%
11	1	NERVOUS SYSTEM NEOPLASMS W/O CC	2,857	12.6%	12.9%	4.8%	30.2%
65	3	DYSEQUILIBRIUM	37,820	12.4%	10.3%	4.0%	26.7%
524	1	TRANSIENT ISCHEMIA	103,634	11.6%	10.3%	3.3%	25.2%
564	1	HEADACHES AGE >17	14,652	11.6%	10.1%	3.9%	25.7%
10	1	NERVOUS SYSTEM NEOPLASMS W CC	18,044	9.0%	10.1%	7.8%	26.9%
9	1	SPINAL DISORDERS & INJURIES	1,648	8.8%	10.1%	4.4%	23.4%
243	8	MEDICAL BACK PROBLEMS	93,055	8.8%	9.4%	6.9%	25.1%
14	1	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION	243,794	8.7%	8.3%	3.1%	20.1%
19	1	CRANIAL & PERIPHERAL NERVE DISORDERS W/O CC	7,780	8.5%	7.1%	4.3%	19.9%
15	1	NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT	35,120	8.0%	8.2%	5.8%	21.9%
237	8	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH	1,745	7.8%	6.8%	7.8%	22.4%
34	1	OTHER DISORDERS OF NERVOUS SYSTEM W CC	25,029	7.3%	7.8%	4.2%	19.3%
47	2	OTHER DISORDERS OF THE EYE AGE >17 W/O CC	1,202	7.2%	12.3%	3.2%	22.7%
561	1	NON-BACTERIAL INFECTIONS OF NERVOUS SYSTEM EXCEPT VIRAL MENINGITIS	2,632	7.0%	4.7%	2.9%	14.7%
563	1	SEIZURE AGE > 17 W/O CC	19,540	6.9%	8.4%	2.3%	17.6%
239	8	PATHOLOGICAL FRACTURES & MUSCULOSKELETAL & CONN TISS MALIGNANCY	38,354	6.8%	7.3%	8.7%	22.9%
22	1	HYPERTENSIVE ENCEPHALOPATHY	3,002	6.6%	7.4%	3.3%	17.3%
21	1	VIRAL MENINGITIS	2,046	6.5%	6.6%	3.0%	16.1%
247	8	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE	19,555	6.4%	7.8%	7.9%	22.0%
464	23	SIGNS & SYMPTOMS W/O CC	6,935	5.7%	10.3%	4.4%	20.4%
425	19	ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	12,335	5.6%	8.4%	4.9%	18.8%
142	5	SYNCOPE & COLLAPSE W/O CC	46,121	5.3%	9.8%	6.1%	21.2%
16	1	NONSPECIFIC CEREBROVASCULAR DISORDERS W CC	15,919	5.3%	7.5%	3.3%	16.1%
12	1	DEGENERATIVE NERVOUS SYSTEM DISORDERS	51,217	5.1%	7.4%	3.3%	15.8%
560	1	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM	3,173	5.0%	3.9%	2.4%	11.3%
429	19	ORGANIC DISTURBANCES & MENTAL RETARDATION	22,299	4.8%	8.5%	3.0%	16.3%
562	1	SEIZURE AGE > 17 W CC	49,210	4.8%	7.4%	2.8%	15.0%
3	1	CRANIOTOMY AGE 0-17	4	4.5%	1.6%	0.8%	7.0%
26	1	SEIZURE & HEADACHE AGE 0-17	12	4.5%	2.7%	3.7%	10.9%
18	1	CRANIAL & PERIPHERAL NERVE DISORDERS W CC	30,391	4.5%	5.4%	4.5%	14.5%
245	8	BONE DISEASES & SPECIFIC ARTHROPATHIES W/O CC	5,303	4.5%	4.0%	7.2%	15.7%
432	19	OTHER MENTAL DISORDER DIAGNOSES	363	4.5%	6.8%	3.5%	14.9%
559	1	ACUTE ISCHEMIC STROKE WITH USE OF THROMBOLYTIC AGENT	2,401	4.4%	7.5%	4.6%	16.6%
241	8	CONNECTIVE TISSUE DISORDERS W/O CC	2,522	4.4%	5.4%	5.3%	15.1%
38	2	PRIMARY IRIS PROCEDURES	47	4.2%	4.6%	1.5%	10.3%
134	5	HYPERTENSION	37,372	4.2%	7.4%	6.4%	17.9%
23	1	NONTRAUMATIC STUPOR & COMA	9,695	4.2%	9.6%	3.2%	17.0%
46	2	OTHER DISORDERS OF THE EYE AGE >17 W CC	3,654	4.1%	10.8%	3.1%	18.0%
404	17	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC	3,427	4.1%	7.5%	5.2%	16.7%
248	8	TENDONITIS, MYOSITIS & BURSITIS	14,725	3.9%	6.6%	5.4%	15.9%
141	5	SYNCOPE & COLLAPSE W CC	114,694	3.9%	8.9%	5.2%	18.0%
246	8	NON-SPECIFIC ARTHROPATHIES	1,240	3.8%	5.3%	7.8%	16.9%
32	1	CONCUSSION AGE >17 W/O CC	1,599	3.8%	25.2%	5.9%	34.9%
238	8	OSTEOMYELITIS	8,936	3.7%	2.5%	6.1%	12.3%
233	8	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W CC	16,227	3.5%	4.0%	5.8%	13.3%
301	10	ENDOCRINE DISORDERS W/O CC	3,502	3.5%	7.7%	9.6%	20.9%
531	1	SPINAL PROCEDURES W CC	4,564	3.4%	3.1%	3.1%	9.5%

**Appendix G2 (continued)**  
**Top 50 DRGs ranked by regression-targeted services as percent total DRG charges:**  
**Cardiac catheterization**

DRG num	MDC	DRG name	Raw case count	CMS_10 (all)		
				Cardiac cath only	Other cardiology	All cardiology
125	5	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O COMPLEX DIAG	85,712	34.2%	7.5%	41.6%
556	5	PERCUTANEOUS CARDIOVASC PROC W NON-DRUG-ELUTING STENT W/O MAJ CV DX	23,685	29.9%	14.3%	44.2%
558	5	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W/O MAJ CV DX	170,167	28.5%	10.9%	39.4%
124	5	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH & COMPLEX DIAG	114,099	26.9%	7.0%	33.9%
557	5	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W MAJOR CV DX	108,286	23.5%	10.0%	33.5%
555	5	PERCUTANEOUS CARDIOVASCULAR PROC W MAJOR CV DX	41,449	20.9%	14.6%	35.5%
518	5	PERC CARDIO PROC W/O CORONARY ARTERY STENT OR AMI	22,359	19.9%	27.4%	47.3%
122	5	CIRCULATORY DISORDERS W AMI W/O MAJOR COMP, DISCHARGED ALIVE	49,041	14.8%	8.6%	23.4%
106	5	CORONARY BYPASS W PTCA	3,115	8.9%	5.2%	14.0%
536	5	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK	7,523	8.4%	5.9%	14.3%
548	5	CORONARY BYPASS W CARDIAC CATH W/O MAJOR CV DX	30,209	8.1%	2.7%	10.7%
535	5	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK	7,634	7.4%	5.2%	12.6%
547	5	CORONARY BYPASS W CARDIAC CATH W MAJOR CV DX	30,935	6.4%	2.9%	9.4%
121	5	CIRCULATORY DISORDERS W AMI & MAJOR COMP, DISCHARGED ALIVE	139,738	5.6%	6.7%	12.3%
466	23	AFTERCARE W/O HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	968	5.3%	5.4%	10.7%
104	5	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W CARD CATH	18,986	5.1%	3.2%	8.3%
465	23	AFTERCARE W HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	144	4.1%	4.3%	8.4%
110	5	MAJOR CARDIOVASCULAR PROCEDURES W CC	53,032	3.9%	3.1%	7.0%
551	5	PERMANENT CARDIAC PACEMAKER IMPL W MAJ CV DX OR AICD LEAD OR GNRTR	51,370	3.8%	5.0%	8.8%
577	1	CAROTID ARTERY STENT PROCEDURE	2,431	3.5%	1.6%	5.1%
108	5	OTHER CARDIOTHORACIC PROCEDURES	7,850	3.4%	2.7%	6.1%
100	4	RESPIRATORY SIGNS & SYMPTOMS W/O CC	5,879	3.2%	10.0%	13.2%
552	5	OTHER PERMANENT CARDIAC PACEMAKER IMPLANT W/O MAJOR CV DX	77,491	3.2%	4.9%	8.1%
117	5	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	4,975	2.6%	4.7%	7.3%
525	5	OTHER HEART ASSIST SYSTEM IMPLANT	243	2.6%	2.2%	4.8%
515	5	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH	49,586	2.5%	5.1%	7.6%
468		EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	47,282	2.5%	3.0%	5.5%
467	23	OTHER FACTORS INFLUENCING HEALTH STATUS	867	2.4%	4.1%	6.5%
118	5	CARDIAC PACEMAKER DEVICE REPLACEMENT	6,925	2.3%	3.7%	5.9%
479	5	OTHER VASCULAR PROCEDURES W/O CC	24,654	2.2%	1.1%	3.3%
103	PRE	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	704	2.0%	2.1%	4.1%
133	5	ATHEROSCLEROSIS W/O CC	5,639	1.9%	11.8%	13.8%
123	5	CIRCULATORY DISORDERS W AMI, EXPIRED	28,700	1.9%	5.4%	7.4%
102	4	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O CC	4,428	1.7%	6.7%	8.4%
178	6	UNCOMPLICATED PEPTIC ULCER W/O CC	2,419	1.7%	4.0%	5.7%
553	5	OTHER VASCULAR PROCEDURES W CC W MAJOR CV DX	36,701	1.7%	2.2%	3.8%
99	4	RESPIRATORY SIGNS & SYMPTOMS W CC	19,656	1.7%	7.4%	9.0%
111	5	MAJOR CARDIOVASCULAR PROCEDURES W/O CC	9,599	1.6%	1.3%	2.8%
461	23	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES	2,196	1.6%	1.8%	3.3%
93	4	INTERSTITIAL LUNG DISEASE W/O CC	1,281	1.5%	5.1%	6.6%
183	6	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W/O CC	73,354	1.5%	3.5%	5.0%
315	11	OTHER KIDNEY & URINARY TRACT O.R. PROCEDURES	32,551	1.3%	1.8%	3.1%
533	1	EXTRACRANIAL PROCEDURES W CC	42,395	1.2%	2.1%	3.3%
453	21	COMPLICATIONS OF TREATMENT W/O CC	4,893	1.1%	1.2%	2.3%
554	5	OTHER VASCULAR PROCEDURES W CC W/O MAJOR CV DX	71,370	1.1%	1.3%	2.4%
424	19	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	951	1.0%	2.3%	3.4%
246	8	NON-SPECIFIC ARTHROPATHIES	1,240	0.9%	4.2%	5.1%
291	10	THYROGLOSSAL PROCEDURES	50	0.8%	0.4%	1.2%
427	19	NEUROSES EXCEPT DEPRESSIVE	1,313	0.7%	2.4%	3.1%
119	5	VEIN LIGATION & STRIPPING	923	0.7%	1.7%	2.5%

## **APPENDIX H**

**Appendix H1**  
**Alternative DRG Weights Computed from Original and Adjusted CCRs**

DRG num	MDC	Case type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights <sup>(1)</sup>	Cost-based weights using FY 2007 rules	Incremental CCR-adjusted cost-based weights:				Individual regression-based adjustments		
								Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone
1	1	SURG	CRANIOTOMY AGE >17 W CC	22,105	21,263	3.3974	3.4151	3.4208	3.4213	3.4085	3.3427	3.3762	3.4069	3.3766
2	1	SURG	CRANIOTOMY AGE >17 W/O CC	9,118	9,072	1.9442	1.9411	1.9409	1.9405	1.9299	1.9230	1.9348	1.9294	1.9185
3	1	SURG *	CRANIOTOMY AGE 0-17	4	4	1.3128	1.4231	1.4457	1.4413	1.4291	1.4583	1.4587	1.4368	1.4210
6	1	SURG	CARPAL TUNNEL RELEASE	303	303	0.7305	0.7608	0.7621	0.7618	0.7574	0.7479	0.7486	0.7571	0.7571
7	1	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W CC	13,863	13,569	2.5473	2.5921	2.5975	2.5963	2.5984	2.6510	2.6414	2.5988	2.6077
8	1	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W/O CC	3,164	3,164	1.6174	1.5395	1.5394	1.5388	1.5312	1.6549	1.6001	1.5314	1.5858
9	1	MED	SPINAL DISORDERS & INJURIES	1,648	1,608	1.3171	1.3486	1.3452	1.3443	1.3440	1.3101	1.3342	1.3456	1.3183
10	1	MED	NERVOUS SYSTEM NEOPLASMS W CC	18,044	17,493	1.2193	1.2321	1.2282	1.2279	1.2256	1.2065	1.2185	1.2261	1.2131
11	1	MED	NERVOUS SYSTEM NEOPLASMS W/O CC	2,857	2,812	0.8871	0.8791	0.8754	0.8750	0.8743	0.8435	0.8672	0.8750	0.8500
12	1	MED	DEGENERATIVE NERVOUS SYSTEM DISORDERS	51,217	48,978	0.8687	0.9458	0.9427	0.9422	0.9429	0.9283	0.9395	0.9437	0.9309
13	1	MED	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA	6,544	6,402	0.7969	0.8422	0.8400	0.8397	0.8365	0.8298	0.8351	0.8395	0.8281
14	1	MED	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION	243,794	235,100	1.1885	1.2124	1.2103	1.2093	1.2155	1.1842	1.2073	1.2146	1.1934
15	1	MED	NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT	35,120	34,440	0.9412	0.9536	0.9526	0.9515	0.9580	0.9418	0.9519	0.9577	0.9482
16	1	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W CC	15,919	15,312	1.3044	1.3271	1.3263	1.3251	1.3312	1.3030	1.3220	1.3305	1.3130
17	1	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC	2,696	2,683	0.6939	0.6760	0.6729	0.6721	0.6743	0.6534	0.6728	0.6743	0.6551
18	1	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W CC	30,391	29,911	0.9713	0.9861	0.9864	0.9854	0.9855	0.9778	0.9805	0.9878	0.9805
19	1	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W/O CC	7,780	7,750	0.7050	0.6979	0.6957	0.6951	0.6949	0.6900	0.6938	0.6997	0.6863
21	1	MED	VIRAL MENINGITIS	2,046	2,040	1.4202	1.3465	1.3398	1.3392	1.3385	1.3100	1.3295	1.3379	1.3196
22	1	MED	HYPERTENSIVE ENCEPHALOPATHY	3,002	2,994	1.1037	1.1167	1.1157	1.1142	1.1200	1.0983	1.1134	1.1210	1.1038
23	1	MED	NONTRAUMATIC STUPOR & COMA	9,695	9,672	0.7561	0.7665	0.7617	0.7611	0.7645	0.7437	0.7586	0.7638	0.7504
26	1	MED	SEIZURE & HEADACHE AGE 0-17	12	12	1.7486	1.6491	1.6446	1.6438	1.6363	1.6401	1.6295	1.6474	1.6358
27	1	MED	TRAUMATIC STUPOR & COMA, COMA >1 HR	5,372	5,362	1.2710	1.2854	1.2801	1.2798	1.2788	1.2271	1.2694	1.2778	1.2377
28	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W CC	17,681	17,057	1.2932	1.3552	1.3522	1.3521	1.3549	1.3068	1.3459	1.3539	1.3169
29	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W/O CC	5,838	5,782	0.7216	0.7642	0.7579	0.7575	0.7588	0.7227	0.7558	0.7583	0.7265
31	1	MED	CONCUSSION AGE >17 W CC	4,435	4,430	0.9051	0.9037	0.8980	0.8971	0.8991	0.8613	0.8945	0.8989	0.8663
32	1	MED	CONCUSSION AGE >17 W/O CC	1,599	1,599	0.6120	0.6000	0.5947	0.5938	0.5941	0.5627	0.5930	0.5940	0.5641
34	1	MED	OTHER DISORDERS OF NERVOUS SYSTEM W CC	25,029	24,505	0.9604	0.9913	0.9884	0.9876	0.9900	0.9727	0.9855	0.9903	0.9771
35	1	MED	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC	7,102	7,058	0.6385	0.6465	0.6434	0.6428	0.6438	0.6322	0.6430	0.6444	0.6325
36	2	SURG	RETINAL PROCEDURES	325	325	0.7932	0.7912	0.7924	0.7921	0.7858	0.7692	0.7675	0.7872	0.7861
37	2	SURG	ORBITAL PROCEDURES	1,125	1,125	1.1746	1.1704	1.1688	1.1685	1.1642	1.1418	1.1553	1.1658	1.1490
38	2	SURG	PRIMARY IRIS PROCEDURES	47	47	0.5664	0.6269	0.6225	0.6221	0.6272	0.6191	0.6238	0.6288	0.6208
39	2	SURG	LENS PROCEDURES WITH OR WITHOUT VITRECTOMY	343	343	0.6740	0.6936	0.6949	0.6945	0.6923	0.6835	0.6805	0.6949	0.6928
40	2	SURG	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17	1,228	1,228	0.9183	0.9583	0.9576	0.9572	0.9532	0.9444	0.9456	0.9541	0.9512
42	2	SURG	INTRAOCULAR PROCEDURES EXCEPT RETINA, IRIS & LENS	1,798	1,798	0.7279	0.7311	0.7307	0.7304	0.7256	0.7117	0.7120	0.7280	0.7228
43	2	MED	HYPHEMA	100	100	0.6861	0.7321	0.7269	0.7266	0.7295	0.7030	0.7267	0.7302	0.7051
44	2	MED	ACUTE MAJOR EYE INFECTIONS	1,136	1,129	0.6698	0.7285	0.7262	0.7259	0.7215	0.7067	0.7193	0.7227	0.7076
45	2	MED	NEUROLOGICAL EYE DISORDERS	2,571	2,568	0.7350	0.6954	0.6944	0.6934	0.6967	0.6791	0.6957	0.6976	0.6793
46	2	MED	OTHER DISORDERS OF THE EYE AGE >17 W CC	3,654	3,647	0.7468	0.7798	0.7766	0.7760	0.7760	0.7571	0.7731	0.7764	0.7598
47	2	MED	OTHER DISORDERS OF THE EYE AGE >17 W/O CC	1,202	1,201	0.5353	0.5545	0.5504	0.5500	0.5494	0.5343	0.5486	0.5497	0.5348
49	3	SURG	MAJOR HEAD & NECK PROCEDURES	2,231	2,231	1.6183	1.6017	1.6025	1.6024	1.5954	1.5956	1.5964	1.5939	1.5960
50	3	SURG	SIALOADENECTOMY	1,939	1,939	0.8640	0.8315	0.8316	0.8314	0.8256	0.8066	0.8087	0.8243	0.8248
51	3	SURG	SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY	196	196	0.9198	0.9060	0.9048	0.9046	0.9000	0.8787	0.8843	0.8993	0.8952
52	3	SURG	CLEFT LIP & PALATE REPAIR	200	200	0.7318	0.7076	0.7079	0.7076	0.7057	0.6897	0.6896	0.7054	0.7061
53	3	SURG	SINUS & MASTOID PROCEDURES AGE >17	1,918	1,918	1.2937	1.2573	1.2580	1.2579	1.2523	1.2243	1.2312	1.2520	1.2457
55	3	SURG	MISCELLANEOUS EAR, NOSE, MOUTH & THROAT PROCEDURES	1,226	1,225	0.8912	0.8875	0.8870	0.8868	0.8835	0.8689	0.8715	0.8831	0.8813
56	3	SURG	RHINOPLASTY	396	396	0.8836	0.8722	0.8721	0.8723	0.8700	0.8573	0.8571	0.8706	0.8695
57	3	SURG	T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	673	672	0.9452	0.9231	0.9214	0.9212	0.9192	0.8956	0.9060	0.9167	0.9113
59	3	SURG	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	103	103	0.6509	0.6180	0.6180	0.6177	0.6144	0.5987	0.6036	0.6138	0.6102
60	3	SURG *	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0-17	4	4	1.2176	1.1237	1.1245	1.1240	1.1145	1.0823	1.0941	1.1216	1.0955
61	3	SURG	MYRINGOTOMY W TUBE INSERTION AGE >17	182	182	1.4286	1.4023	1.4050	1.4042	1.4036	1.3757	1.3846	1.4072	1.3911
62	3	SURG *	MYRINGOTOMY W TUBE INSERTION AGE 0-17	3	3	0.3645	0.3500	0.3518	0.3514	0.3484	0.3424	0.3428	0.3485	0.3479
63	3	SURG	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES	2,595	2,592	1.3635	1.3497	1.3486	1.3486	1.3438	1.3382	1.3382	1.3422	1.3454
64	3	MED	EAR, NOSE, MOUTH & THROAT MALIGNANCY	3,016	3,006	1.1933	1.2034	1.2029	1.2031	1.1981	1.1916	1.1860	1.1971	1.2047
65	3	MED	DYSEQUILIBRIUM	37,820	37,813	0.6054	0.6036	0.6001	0.5994	0.6037	0.5890	0.6029	0.6038	0.5898
66	3	MED	EPISTAXIS	7,492	7,485	0.5803	0.6337	0.6301	0.6310	0.6324	0.6268	0.6256	0.6320	0.6341
67	3	MED	EPIGLOTTITIS	346	346	0.7559	0.7724	0.7667	0.7662	0.7660	0.7552	0.7601	0.7647	0.7624

**Appendix H1 (continued)**  
**Alternative DRG Weights Computed from Original and Adjusted CCRs**

DRG num	MDC	Case type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights <sup>(1)</sup>	Cost-based weights using FY 2007 rules	Incremental CCR-adjusted cost-based weights:				Individual regression-based adjustments		
								Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone
68	3	MED	OTITIS MEDIA & URI AGE >17 W CC	15,278	15,269	0.6491	0.6623	0.6579	0.6576	0.6570	0.6471	0.6509	0.6572	0.6530
69	3	MED	OTITIS MEDIA & URI AGE >17 W/O CC	4,091	4,090	0.4919	0.5003	0.4950	0.4947	0.4936	0.4834	0.4898	0.4931	0.4877
70	3	MED	OTITIS MEDIA & URI AGE 0-17	21	21	0.3917	0.4293	0.4287	0.4280	0.4316	0.4267	0.4300	0.4337	0.4262
71	3	MED	LARYNGOTRACHEITIS	55	55	0.6197	0.6471	0.6435	0.6431	0.6394	0.6289	0.6315	0.6395	0.6366
72	3	MED	NASAL TRAUMA & DEFORMITY	1,149	1,149	0.7206	0.7346	0.7281	0.7280	0.7308	0.6994	0.7276	0.7304	0.7032
73	3	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE >17	9,048	8,927	0.8392	0.8573	0.8534	0.8530	0.8536	0.8358	0.8457	0.8527	0.8445
74	3	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE 0-17	1	1	0.5799	0.6135	0.6375	0.6344	0.6290	0.6340	0.6320	0.6319	0.6281
75	4	SURG	MAJOR CHEST PROCEDURES	42,362	41,441	2.9578	2.9719	2.9775	2.9778	2.9823	2.9114	2.8983	2.9819	2.9955
76	4	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W CC	44,411	42,765	2.7320	2.6908	2.6953	2.6947	2.6990	2.6791	2.6683	2.7028	2.7057
77	4	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W/O CC	1,954	1,941	1.1719	1.1479	1.1470	1.1464	1.1460	1.1326	1.1299	1.1472	1.1476
78	4	MED	PULMONARY EMBOLISM	44,357	43,181	1.2298	1.2374	1.2366	1.2355	1.2459	1.2246	1.2342	1.2503	1.2319
79	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W CC	150,866	142,924	1.6098	1.6483	1.6431	1.6429	1.6450	1.6169	1.6186	1.6427	1.6454
80	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W/O CC	6,582	6,388	0.8908	0.9438	0.9376	0.9374	0.9344	0.9203	0.9213	0.9330	0.9348
81	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE 0-17	2	2	2.0401	1.9874	1.9861	1.9845	2.0034	2.0357	2.0084	2.0224	2.0116
82	4	MED	RESPIRATORY NEOPLASMS	58,733	57,559	1.3998	1.3851	1.3890	1.3830	1.3828	1.3608	1.3651	1.3863	1.3750
83	4	MED	MAJOR CHEST TRAUMA W CC	6,149	5,996	0.9665	1.0051	0.9994	0.9988	1.0001	0.9762	0.9897	1.0009	0.9858
84	4	MED	MAJOR CHEST TRAUMA W/O CC	1,150	1,139	0.5750	0.6166	0.6097	0.6092	0.6088	0.5948	0.6046	0.6093	0.5985
85	4	MED	PLEURAL EFFUSION W CC	20,168	19,657	1.2231	1.2361	1.2360	1.2357	1.2427	1.2265	1.2261	1.2449	1.2409
86	4	MED	PLEURAL EFFUSION W/O CC	1,587	1,573	0.6760	0.6800	0.6773	0.6770	0.6794	0.6682	0.6709	0.6802	0.6758
87	4	MED	PULMONARY EDEMA & RESPIRATORY FAILURE	85,170	84,899	1.3534	1.3550	1.3493	1.3488	1.3552	1.3383	1.3345	1.3581	1.3561
88	4	MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	385,561	385,169	0.8662	0.8799	0.8743	0.8740	0.8771	0.8670	0.8638	0.8801	0.8773
89	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W CC	499,866	489,438	1.0225	1.0451	1.0400	1.0397	1.0419	1.0273	1.0275	1.0426	1.0408
90	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W/O CC	38,225	37,998	0.6085	0.6319	0.6259	0.6258	0.6241	0.6149	0.6167	0.6237	0.6227
91	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE 0-17	44	44	0.6754	0.6691	0.6728	0.6721	0.6673	0.6595	0.6588	0.6671	0.6683
92	4	MED	INTERSTITIAL LUNG DISEASE W CC	15,191	14,861	1.1775	1.1945	1.1906	1.1902	1.1977	1.1792	1.1818	1.2009	1.1918
93	4	MED	INTERSTITIAL LUNG DISEASE W/O CC	1,281	1,273	0.7370	0.7475	0.7429	0.7426	0.7405	0.7305	0.7350	0.7459	0.7382
94	4	MED	PNEUMOTHORAX W CC	12,426	12,370	1.1275	1.1701	1.1650	1.1647	1.1694	1.1511	1.1495	1.1701	1.1704
95	4	MED	PNEUMOTHORAX W/O CC	1,363	1,360	0.5541	0.5909	0.5848	0.5844	0.5860	0.5803	0.5767	0.5861	0.5894
96	4	MED	BRONCHITIS & ASTHMA AGE >17 W CC	52,952	52,912	0.7219	0.7370	0.7323	0.7320	0.7335	0.7271	0.7248	0.7353	0.7339
97	4	MED	BRONCHITIS & ASTHMA AGE >17 W/O CC	23,267	23,262	0.5386	0.5549	0.5497	0.5494	0.5489	0.5450	0.5425	0.5505	0.5498
98	4	MED	BRONCHITIS & ASTHMA AGE 0-17	9	9	0.4990	0.5359	0.5361	0.5356	0.5310	0.5346	0.5282	0.5334	0.5350
99	4	MED	RESPIRATORY SIGNS & SYMPTOMS W CC	19,656	19,628	0.7097	0.6873	0.6834	0.6830	0.6879	0.6849	0.6819	0.6898	0.6889
100	4	MED	RESPIRATORY SIGNS & SYMPTOMS W/O CC	5,879	5,879	0.5513	0.5125	0.5076	0.5072	0.5109	0.5136	0.5075	0.5125	0.5155
101	4	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W CC	21,122	20,790	0.8461	0.8507	0.8466	0.8461	0.8496	0.8397	0.8405	0.8515	0.8468
102	4	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O CC	4,428	4,428	0.5521	0.5414	0.5358	0.5354	0.5377	0.5356	0.5338	0.5392	0.5380
103	PRE	SURG	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	704	701	16.7008	16.2348	16.4218	16.4559	16.4172	16.4919	16.3870	16.4919	16.4472
104	5	SURG	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W CARD CATH	18,986	17,778	8.1572	7.9273	7.9802	7.9893	7.9926	7.9775	7.9502	8.0016	8.0107
105	5	SURG	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W/O CARD CATH	30,122	28,736	5.9149	5.7923	5.8323	5.8402	5.8345	5.8253	5.8078	5.8405	5.8458
106	5	SURG	CORONARY BYPASS W PTCA	3,115	3,114	6.8897	6.4007	6.4371	6.4446	6.4324	6.2693	6.2432	6.4428	6.4476
108	5	SURG	OTHER CARDIOTHORACIC PROCEDURES	7,850	7,591	5.7413	5.5298	5.5683	5.5751	5.5728	5.3777	5.3561	5.5795	5.5872
110	5	SURG	MAJOR CARDIOVASCULAR PROCEDURES W CC	53,032	52,762	3.7893	3.6779	3.6949	3.6973	3.6889	3.7035	3.6904	3.6871	3.7038
111	5	SURG	MAJOR CARDIOVASCULAR PROCEDURES W/O CC	9,599	9,587	2.5357	2.5021	2.5047	2.5048	2.4921	2.6001	2.5809	2.4885	2.5150
113	5	SURG	AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB & TOE	32,851	27,793	3.2259	3.3531	3.3783	3.3772	3.3700	3.3409	3.3204	3.3696	3.3906
114	5	SURG	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	7,403	6,865	1.6894	1.7768	1.7885	1.7867	1.7803	1.7711	1.7601	1.7806	1.7911
117	5	SURG	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	4,975	4,969	1.3128	1.3391	1.3415	1.3409	1.3505	1.3685	1.3610	1.3498	1.3587
118	5	SURG	CARDIAC PACEMAKER DEVICE REPLACEMENT	6,925	6,925	1.6408	1.6971	1.6970	1.6964	1.6987	1.8728	1.8714	1.6976	1.7016
119	5	SURG	VEIN LIGATION & STRIPPING	923	922	1.3712	1.4094	1.4182	1.4177	1.4128	1.3938	1.3857	1.4137	1.4198
120	5	SURG	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	31,832	30,919	2.2841	2.3660	2.3894	2.3864	2.3901	2.3729	2.3614	2.3941	2.3974
121	5	MED	CIRCULATORY DISORDERS W AMI & MAJOR COMP, DISCHARGED ALIVE	139,738	130,470	1.6022	1.6166	1.6124	1.6121	1.6265	1.6195	1.6097	1.6315	1.6312
122	5	MED	CIRCULATORY DISORDERS W AMI W/O MAJOR COMP, DISCHARGED ALIVE	49,041	47,036	1.0095	0.9687	0.9631	0.9628	0.9706	0.9680	0.9609	0.9747	0.9735
123	5	MED	CIRCULATORY DISORDERS W AMI, EXPIRED	28,700	28,700	1.4774	1.4305	1.4262	1.4261	1.4259	1.4106	1.4076	1.4278	1.4269
124	5	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH & COMPLEX DIAG	114,099	112,839	1.4058	1.2758	1.2734	1.2727	1.2849	1.2803	1.2670	1.2885	1.2945
125	5	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O COMPLEX DIAG	85,712	85,656	1.0988	0.9431	0.9401	0.9395	0.9465	0.9435	0.9321	0.9481	0.9562
126	5	MED	ACUTE & SUBACUTE ENDOCARDITIS	5,089	4,651	2.6620	2.7371	2.7484	2.7470	2.7582	2.7301	2.7353	2.7567	2.7545
127	5	MED	HEART FAILURE & SHOCK	630,619	618,418	1.0089	1.0459	1.0422	1.0417	1.0562	1.0539	1.0451	1.0603	1.0609
128	5	MED	DEEP VEIN THROMBOPHLEBITIS	4,110	4,100	0.7076	0.7861	0.7888	0.7878	0.7855	0.7827	0.7822	0.7887	0.7827

**Appendix H1 (continued)**  
**Alternative DRG Weights Computed from Original and Adjusted CCRs**

DRG num	MDC	Case type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights <sup>(1)</sup>	Cost-based weights using FY 2007 rules	Incremental CCR-adjusted cost-based weights:				Individual regression-based adjustments		
								Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone
129	5	MED	CARDIAC ARREST, UNEXPLAINED	3,263	3,263	1.0086	0.9383	0.9264	0.9261	0.9202	0.9022	0.9082	0.9192	0.9152
130	5	MED	PERIPHERAL VASCULAR DISORDERS W CC	81,469	78,839	0.9269	0.9829	0.9859	0.9850	0.9841	0.9820	0.9770	0.9865	0.9867
131	5	MED	PERIPHERAL VASCULAR DISORDERS W/O CC	21,156	20,797	0.5536	0.6054	0.6065	0.6056	0.6042	0.6056	0.6018	0.6064	0.6058
132	5	MED	ATHEROSCLEROSIS W CC	95,585	95,028	0.6232	0.6195	0.6141	0.6138	0.6225	0.6326	0.6186	0.6251	0.6339
133	5	MED	ATHEROSCLEROSIS W/O CC	5,639	5,639	0.5526	0.5315	0.5264	0.5261	0.5337	0.5481	0.5316	0.5357	0.5481
134	5	MED	HYPERTENSION	37,372	37,353	0.6093	0.6169	0.6123	0.6118	0.6182	0.6139	0.6157	0.6192	0.6155
135	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W CC	6,758	6,687	0.8730	0.9065	0.9047	0.9042	0.9166	0.9110	0.9103	0.9183	0.9156
136	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W/O CC	899	897	0.6030	0.6215	0.6181	0.6177	0.6300	0.6280	0.6265	0.6307	0.6309
138	5	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	190,168	189,328	0.8017	0.8235	0.8188	0.8183	0.8317	0.8313	0.8268	0.8337	0.8343
139	5	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC	68,451	68,451	0.5226	0.5307	0.5253	0.5249	0.5347	0.5393	0.5333	0.5360	0.5394
140	5	MED	ANGINA PECTORIS	29,358	29,358	0.5185	0.5062	0.5011	0.5008	0.5065	0.5155	0.5032	0.5086	0.5167
141	5	MED	SYNCOPE & COLLAPSE W CC	114,694	114,571	0.7491	0.7620	0.7591	0.7593	0.7693	0.7591	0.7673	0.7695	0.7609
142	5	MED	SYNCOPE & COLLAPSE W/O CC	46,121	46,121	0.5977	0.5975	0.5941	0.5933	0.6023	0.5947	0.6019	0.6023	0.5951
143	5	MED	CHEST PAIN	220,210	220,210	0.5737	0.5367	0.5304	0.5301	0.5376	0.5529	0.5351	0.5396	0.5532
144	5	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W CC	93,898	91,790	1.2583	1.2876	1.2959	1.2944	1.2892	1.2892	1.2853	1.3000	1.2999
145	5	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W/O CC	5,127	5,114	0.5913	0.5850	0.5817	0.5813	0.5854	0.5851	0.5811	0.5862	0.5886
146	6	SURG	RECTAL RESECTION W CC	9,791	9,517	2.6108	2.6580	2.6637	2.6646	2.6567	2.5611	2.5816	2.6404	2.6524
147	6	SURG	RECTAL RESECTION W/O CC	2,408	2,390	1.4852	1.5463	1.5468	1.5479	1.5379	1.4729	1.4815	1.5303	1.5367
149	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC	18,079	17,989	1.4138	1.4592	1.4588	1.4588	1.4502	1.3800	1.3914	1.4422	1.4468
150	6	SURG	PERITONEAL ADHESIOLYSIS W CC	21,274	20,853	2.7338	2.7004	2.7000	2.7001	2.6928	2.6135	2.6474	2.6712	2.6807
151	6	SURG	PERITONEAL ADHESIOLYSIS W/O CC	4,887	4,869	1.2903	1.3070	1.3039	1.3037	1.2948	1.2500	1.2670	1.2873	1.2852
152	6	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W CC	4,604	4,601	1.7444	1.7913	1.7948	1.7950	1.7891	1.7360	1.7481	1.7796	1.7865
153	6	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC	1,874	1,874	1.0822	1.1356	1.1353	1.1352	1.1275	1.0850	1.0932	1.1205	1.1264
155	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W/O CC	5,426	5,417	1.2324	1.2380	1.2380	1.2378	1.2311	1.1710	1.1743	1.2267	1.2320
156	6	SURG *	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE 0-17	2	2	4.8659	5.1971	5.4354	5.4586	5.4122	5.3703	5.3526	5.4432	5.3987
157	6	SURG	ANAL & STOMAL PROCEDURES W CC	7,521	7,403	1.3197	1.3321	1.3339	1.3343	1.3301	1.2995	1.3089	1.3257	1.3252
158	6	SURG	ANAL & STOMAL PROCEDURES W/O CC	3,435	3,430	0.6723	0.6756	0.6741	0.6740	0.6695	0.6506	0.6555	0.6670	0.6671
159	6	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W CC	17,474	17,471	1.3509	1.3503	1.3510	1.3507	1.3446	1.3186	1.3269	1.3407	1.3402
160	6	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W/O CC	10,778	10,778	0.8498	0.8546	0.8538	0.8535	0.8475	0.8301	0.8352	0.8451	0.8448
161	6	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W CC	9,419	9,417	1.1723	1.1841	1.1822	1.1822	1.1785	1.1538	1.1635	1.1754	1.1721
162	6	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W/O CC	4,668	4,668	0.6932	0.6970	0.6942	0.6940	0.6889	0.6714	0.6777	0.6871	0.6844
163	6	SURG *	HERNIA PROCEDURES AGE 0-17	8	8	0.5254	0.5323	0.5333	0.5330	0.5356	0.5369	0.5335	0.5383	0.5362
164	6	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC	5,526	5,519	2.1422	2.0619	2.0577	2.0577	2.0515	1.9582	2.0044	2.0411	2.0158
165	6	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	2,224	2,223	1.1947	1.1543	1.1467	1.1465	1.1391	1.0670	1.1038	1.1332	1.1083
166	6	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	4,672	4,672	1.3510	1.2832	1.2779	1.2779	1.2718	1.1955	1.2303	1.2676	1.2412
167	6	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	4,237	4,237	0.9123	0.8523	0.8451	0.8450	0.8386	0.7718	0.8036	0.8358	0.8096
168	3	SURG	MOUTH PROCEDURES W CC	1,496	1,494	1.2671	1.2561	1.2567	1.2567	1.2534	1.2327	1.2388	1.2522	1.2486
169	3	SURG	MOUTH PROCEDURES W/O CC	796	796	0.7804	0.7578	0.7572	0.7570	0.7538	0.7387	0.7424	0.7523	0.7515
170	6	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W CC	16,601	16,054	2.8521	2.8478	2.8625	2.8632	2.8588	2.8264	2.8230	2.8524	2.8686
171	6	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC	1,327	1,322	1.1884	1.1632	1.1625	1.1624	1.1559	1.1326	1.1309	1.1516	1.1620
172	6	MED	DIGESTIVE MALIGNANCY W CC	30,562	29,892	1.3797	1.3950	1.3965	1.3976	1.3940	1.3680	1.3826	1.3913	1.3820
173	6	MED	DIGESTIVE MALIGNANCY W/O CC	2,112	2,099	0.7488	0.7423	0.7414	0.7416	0.7380	0.7209	0.7324	0.7373	0.7273
174	6	MED	G.I. HEMORRHAGE W CC	237,045	236,471	0.9858	1.0176	1.0226	1.0255	1.0283	1.0154	1.0180	1.0259	1.0281
175	6	MED	G.I. HEMORRHAGE W/O CC	27,532	27,514	0.5653	0.5844	0.5820	0.5828	0.5835	0.5751	0.5790	0.5812	0.5819
176	6	MED	COMPLICATED PEPTIC ULCER	13,609	13,431	1.0878	1.0849	1.0844	1.0855	1.0865	1.0661	1.0750	1.0823	1.0819
177	6	MED	UNCOMPLICATED PEPTIC ULCER W CC	7,309	7,305	0.9192	0.8825	0.8803	0.8803	0.8805	0.8628	0.8728	0.8788	0.8722
178	6	MED	UNCOMPLICATED PEPTIC ULCER W/O CC	2,419	2,418	0.7123	0.6616	0.6572	0.6572	0.6569	0.6440	0.6517	0.6554	0.6508
179	6	MED	INFLAMMATORY BOWEL DISEASE	13,275	13,251	1.0495	1.0617	1.0587	1.0589	1.0553	1.0319	1.0491	1.0522	1.0412
180	6	MED	G.I. OBSTRUCTION W CC	84,287	82,980	0.9493	0.9587	0.9526	0.9524	0.9499	0.9265	0.9421	0.9447	0.9396
181	6	MED	G.I. OBSTRUCTION W/O CC	23,320	23,249	0.5630	0.5751	0.5678	0.5676	0.5642	0.5460	0.5618	0.5604	0.5522
182	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W CC	236,040	235,779	0.7711	0.7606	0.7562	0.7559	0.7548	0.7372	0.7499	0.7534	0.7437
183	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W/O CC	73,354	73,335	0.5894	0.5653	0.5596	0.5593	0.5581	0.5422	0.5556	0.5569	0.5459
184	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE 0-17	51	51	0.7000	0.8083	0.8125	0.8111	0.8122	0.8175	0.8132	0.8158	0.8129
185	3	MED	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE >17	5,515	5,508	0.8807	0.8894	0.8870	0.8871	0.8855	0.8690	0.8798	0.8836	0.8767
186	3	MED *	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE 0-17	6	6	0.2708	0.3029	0.3017	0.3016	0.2991	0.2993	0.2997	0.2985	0.2993
187	3	MED	DENTAL EXTRACTIONS & RESTORATIONS	541	541	0.8614	0.8984	0.8992	0.8996	0.8992	0.8885	0.8917	0.8998	0.8954

**Appendix H1 (continued)**  
**Alternative DRG Weights Computed from Original and Adjusted CCRs**

DRG num	Case MDC	Case type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights <sup>(1)</sup>	Cost-based weights using FY 2007 rules	Incremental CCR-adjusted cost-based weights:				Individual regression-based adjustments		
								Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone
188	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W CC	80,123	78,476	1.0503	1.0636	1.0619	1.0623	1.0615	1.0373	1.0513	1.0576	1.0515
189	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W/O CC	11,347	11,291	0.5883	0.5930	0.5882	0.5881	0.5857	0.5680	0.5815	0.5836	0.5744
190	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 0-17	7	7	0.5907	0.6517	0.6579	0.6574	0.6518	0.6335	0.6429	0.6491	0.6451
191	7	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W CC	9,540	9,372	3.7551	3.6690	3.6870	3.6900	3.6780	3.5953	3.6054	3.6680	3.6777
192	7	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W/O CC	1,193	1,187	1.6944	1.6795	1.6817	1.6820	1.6735	1.6172	1.6213	1.6692	1.6735
193	7	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W CC	3,886	3,878	3.2257	3.1880	3.1950	3.1960	3.1878	3.1119	3.1234	3.1734	3.1907
194	7	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W/O CC	409	408	1.6191	1.6147	1.6147	1.6146	1.6051	1.5617	1.5625	1.5987	1.6106
195	7	SURG	CHOLECYSTECTOMY W C.D.E. W CC	2,722	2,714	2.9580	2.8793	2.8796	2.8799	2.8749	2.7966	2.8030	2.8599	2.8834
196	7	SURG	CHOLECYSTECTOMY W C.D.E. W/O CC	563	562	1.5951	1.5686	1.5666	1.5663	1.5571	1.5043	1.5001	1.5505	1.5677
197	7	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W CC	15,394	15,119	2.4851	2.4328	2.4335	2.4339	2.4288	2.3591	2.3707	2.4188	2.4273
198	7	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W/O CC	3,809	3,800	1.1721	1.1658	1.1632	1.1630	1.1559	1.1118	1.1150	1.1516	1.1570
199	7	SURG	HEPATOBIILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY	1,320	1,317	2.2157	2.1967	2.2012	2.2017	2.1921	2.1359	2.1469	2.1823	2.1907
200	7	SURG	HEPATOBIILIARY DIAGNOSTIC PROCEDURE FOR NON-MALIGNANCY	889	883	2.5762	2.4973	2.5063	2.5079	2.5004	2.4381	2.4546	2.4920	2.4923
201	7	SURG	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES	2,425	2,417	3.6107	3.5534	3.5747	3.5755	3.5670	3.5192	3.5243	3.5530	3.5758
202	7	MED	CIRRHOSIS & ALCOHOLIC HEPATITIS	25,340	25,227	1.2870	1.2987	1.3033	1.3053	1.3045	1.2913	1.2930	1.3047	1.3026
203	7	MED	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS	29,760	29,638	1.3413	1.3304	1.3304	1.3308	1.3258	1.2998	1.3133	1.3247	1.3133
204	7	MED	DISORDERS OF PANCREAS EXCEPT MALIGNANCY	64,155	63,849	1.0554	1.0173	1.0124	1.0120	1.0096	0.9815	1.0017	1.0043	0.9947
205	7	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEP A W CC	29,252	28,593	1.1621	1.1740	1.1745	1.1751	1.1747	1.1566	1.1656	1.1741	1.1664
206	7	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEP A W/O CC	1,804	1,793	0.7394	0.7186	0.7159	0.7156	0.7113	0.6935	0.7068	0.7102	0.6993
207	7	MED	DISORDERS OF THE BILIARY TRACT W CC	34,462	33,971	1.1688	1.1261	1.1231	1.1228	1.1212	1.1020	1.1064	1.1185	1.1195
208	7	MED	DISORDERS OF THE BILIARY TRACT W/O CC	8,603	8,575	0.7135	0.6689	0.6642	0.6640	0.6612	0.6498	0.6511	0.6594	0.6618
210	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W CC	119,159	114,810	1.8147	1.8651	1.8657	1.8674	1.8585	1.8699	1.8590	1.8556	1.8723
211	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W/O CC	24,192	23,825	1.2665	1.3230	1.3189	1.3197	1.3101	1.3223	1.3128	1.3073	1.3224
212	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 0-17	5	5	1.3451	1.4153	1.4226	1.4212	1.4192	1.4212	1.4148	1.4216	1.4232
213	8	SURG	AMPUTATION FOR MUSCULOSKELETAL SYSTEM & CONN TISSUE DISORDERS	9,150	8,295	2.0610	2.1449	2.1587	2.1581	2.1481	2.1224	2.1155	2.1488	2.1542
216	8	SURG	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	18,014	17,726	1.8323	1.8247	1.8247	1.8244	1.8129	1.7405	1.7359	1.8133	1.8169
217	8	SURG	WND DEBRID & SKN GRFT EXCEPT HAND, FOR MUSCULOSKELETAL & CONN TISS DIS	14,956	13,437	2.9869	3.1216	3.1337	3.1336	3.1195	3.0918	3.0846	3.1183	3.1278
218	8	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W CC	27,359	26,406	1.6298	1.6528	1.6507	1.6508	1.6417	1.6518	1.6443	1.6403	1.6506
219	8	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W/O CC	19,101	18,955	1.0777	1.0969	1.0925	1.0924	1.0838	1.0953	1.0886	1.0818	1.0925
223	8	SURG	MAJOR SHOULDER/ELBOW PROC, OR OTHER UPPER EXTREMITY PROC W CC	12,053	12,052	1.1210	1.1171	1.1151	1.1149	1.1083	1.1037	1.1023	1.1069	1.1111
224	8	SURG	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC, W/O CC	9,247	9,247	0.8454	0.8353	0.8327	0.8325	0.8259	0.8206	0.8180	0.8243	0.8302
225	8	SURG	FOOT PROCEDURES	5,855	5,735	1.1875	1.2269	1.2288	1.2282	1.2206	1.2150	1.2093	1.2195	1.2273
226	8	SURG	SOFT TISSUE PROCEDURES W CC	6,199	5,992	1.5399	1.5591	1.5624	1.5622	1.5548	1.5338	1.5354	1.5545	1.5535
227	8	SURG	SOFT TISSUE PROCEDURES W/O CC	4,468	4,459	0.8414	0.8519	0.8514	0.8512	0.8446	0.8331	0.8336	0.8432	0.8455
228	8	SURG	MAJOR THUMB OR JOINT PROC, OR OTH HAND OR WRIST PROC W CC	2,388	2,387	1.0829	1.0906	1.0894	1.0890	1.0825	1.0826	1.0809	1.0817	1.0849
229	8	SURG	HAND OR WRIST PROC, EXCEPT MAJOR JOINT PROC, W/O CC	996	996	0.6994	0.7061	0.7017	0.7014	0.6960	0.6892	0.6875	0.6941	0.6996
230	8	SURG	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES OF HIP & FEMUR	2,325	2,324	1.3064	1.3298	1.3335	1.3341	1.3255	1.3114	1.3055	1.3248	1.3321
232	8	SURG	ARTHROSCOPY	540	540	0.9658	0.9688	0.9689	0.9687	0.9635	0.9392	0.9395	0.9619	0.9647
233	8	SURG	OTHER MUSCULOSKELETAL SYS & CONN TISS O.R. PROC W CC	16,227	16,004	1.8171	1.8298	1.8316	1.8310	1.8229	1.7907	1.7852	1.8235	1.8276
234	8	SURG	OTHER MUSCULOSKELETAL SYS & CONN TISS O.R. PROC W/O CC	7,937	7,937	1.2402	1.2421	1.2416	1.2411	1.2318	1.2004	1.1943	1.2311	1.2385
235	8	MED	FRACTURES OF FEMUR	4,473	4,218	0.7524	0.8305	0.8269	0.8269	0.8229	0.8213	0.8150	0.8233	0.8288
236	8	MED	FRACTURES OF HIP & PELVIS	38,224	36,530	0.7155	0.7867	0.7816	0.7814	0.7782	0.7710	0.7729	0.7788	0.7758
237	8	MED	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH	1,745	1,744	0.6156	0.6731	0.6679	0.6676	0.6638	0.6610	0.6611	0.6647	0.6629
238	8	MED	OSTEOMYELITIS	8,936	8,250	1.3973	1.4880	1.4905	1.4896	1.4827	1.4818	1.4710	1.4840	1.4921
239	8	MED	PATHOLOGICAL FRACTURES & MUSCULOSKELETAL & CONN TISS MALIGNANCY	38,354	36,556	1.0632	1.1153	1.1125	1.1123	1.1076	1.1038	1.1010	1.1100	1.1079
240	8	MED	CONNECTIVE TISSUE DISORDERS W CC	11,713	11,429	1.3171	1.3317	1.3409	1.3417	1.3410	1.3329	1.3325	1.3451	1.3372
241	8	MED	CONNECTIVE TISSUE DISORDERS W/O CC	2,522	2,509	0.6524	0.6676	0.6664	0.6666	0.6638	0.6650	0.6627	0.6681	0.6619
242	8	MED	SEPTIC ARTHRITIS	2,494	2,453	1.1003	1.1528	1.1527	1.1522	1.1480	1.1442	1.1398	1.1476	1.1527
243	8	MED	MEDICAL BACK PROBLEMS	93,055	92,854	0.7582	0.7971	0.7935	0.7929	0.7902	0.7798	0.7867	0.7915	0.7820
244	8	MED	BONE DISEASES & SPECIFIC ARTHROPATHIES W CC	15,368	15,126	0.7010	0.7683	0.7657	0.7652	0.7630	0.7646	0.7605	0.7641	0.7660
245	8	MED	BONE DISEASES & SPECIFIC ARTHROPATHIES W/O CC	5,303	5,275	0.4547	0.5145	0.5116	0.5113	0.5086	0.5108	0.5079	0.5088	0.5112
246	8	MED	NON-SPECIFIC ARTHROPATHIES	1,240	1,239	0.5942	0.6208	0.6181	0.6175	0.6172	0.6189	0.6152	0.6182	0.6199
247	8	MED	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE	19,555	19,545	0.5764	0.6022	0.5991	0.5985	0.5973	0.5949	0.5954	0.5985	0.5957
248	8	MED	TENDONITIS, MYOSITIS & BURSITIS	14,725	14,695	0.8445	0.8892	0.8855	0.8850	0.8863	0.8763	0.8819	0.8853	0.8817
249	8	MED	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	12,544	12,496	0.6844	0.7405	0.7357	0.7355	0.7312	0.7324	0.7243	0.7313	0.7391
250	8	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W CC	3,828	3,750	0.6723	0.7206	0.7149	0.7145	0.7131	0.7081	0.7090	0.7135	0.7118

**Appendix H1 (continued)**  
**Alternative DRG Weights Computed from Original and Adjusted CCRs**

DRG num	Case MDC	Case type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights <sup>(1)</sup>	Cost-based weights using FY 2007 rules	Incremental CCR-adjusted cost-based weights:				Individual regression-based adjustments		
								Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone
251	8	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W/O CC	1,837	1,822	0.4809	0.5201	0.5132	0.5129	0.5110	0.5080	0.5088	0.5110	0.5103
253	8	MED	FX, SPRN, STRN & DISL OF UPARM,LOWLEG EX FOOT AGE >17 W CC	23,076	22,353	0.7520	0.8189	0.8143	0.8139	0.8120	0.8071	0.8061	0.8127	0.8123
254	8	MED	FX, SPRN, STRN & DISL OF UPARM,LOWLEG EX FOOT AGE >17 W/O CC	9,312	9,165	0.4682	0.5373	0.5309	0.5306	0.5277	0.5273	0.5255	0.5280	0.5293
256	8	MED	OTHER MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE DIAGNOSES	6,749	6,571	0.8050	0.8612	0.8605	0.8599	0.8567	0.8493	0.8506	0.8568	0.8552
257	9	SURG	TOTAL MASTECTOMY FOR MALIGNANCY W CC	12,362	12,362	0.8815	0.8526	0.8535	0.8535	0.8479	0.8277	0.8264	0.8466	0.8504
258	9	SURG	TOTAL MASTECTOMY FOR MALIGNANCY W/O CC	10,604	10,604	0.7176	0.6839	0.6840	0.6838	0.6783	0.6626	0.6608	0.6769	0.6814
259	9	SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY W CC	2,575	2,575	0.9568	0.9113	0.9123	0.9121	0.9065	0.8976	0.8900	0.9063	0.9142
260	9	SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY W/O CC	2,492	2,492	0.6948	0.6433	0.6440	0.6437	0.6388	0.6320	0.6222	0.6382	0.6490
261	9	SURG	BREAST PROC FOR NON-MALIGNANCY EXCEPT BIOPSY & LOCAL EXCISION	1,427	1,427	0.9248	0.8999	0.9010	0.9008	0.8941	0.8775	0.8788	0.8926	0.8943
262	9	SURG	BREAST BIOPSY & LOCAL EXCISION FOR NON-MALIGNANCY	574	574	0.9330	0.9489	0.9502	0.9499	0.9445	0.9352	0.9320	0.9439	0.9483
263	9	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W CC	21,013	18,772	2.0123	2.1643	2.1704	2.1697	2.1588	2.1277	2.1262	2.1561	2.1629
264	9	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W/O CC	3,553	3,370	1.0578	1.1379	1.1377	1.1373	1.1286	1.1068	1.1091	1.1251	1.1297
265	9	SURG	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W CC	3,813	3,671	1.5081	1.5683	1.5718	1.5718	1.5650	1.5380	1.5392	1.5643	1.5644
266	9	SURG	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W/O CC	2,054	2,043	0.8703	0.8860	0.8860	0.8858	0.8795	0.8644	0.8646	0.8784	0.8804
267	9	SURG	PERIANAL & PILONIDAL PROCEDURES	251	251	0.8743	0.8917	0.8930	0.8927	0.8891	0.8686	0.8731	0.8873	0.8864
268	9	SURG	SKIN, SUBCUTANEOUS TISSUE & BREAST PLASTIC PROCEDURES	908	908	1.1375	1.1264	1.1293	1.1293	1.1238	1.0971	1.1000	1.1225	1.1223
269	9	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W CC	10,043	9,530	1.7238	1.7706	1.7762	1.7756	1.7677	1.7452	1.7433	1.7658	1.7716
270	9	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W/O CC	2,362	2,334	0.8201	0.8316	0.8305	0.8302	0.8244	0.8087	0.8117	0.8221	0.8237
271	9	MED	SKIN ULCERS	19,600	18,284	1.0084	1.1078	1.1088	1.1082	1.1028	1.0931	1.0901	1.1017	1.1068
272	9	MED	MAJOR SKIN DISORDERS W CC	5,593	5,479	0.9598	1.0182	1.0162	1.0159	1.0140	1.0040	1.0069	1.0151	1.0099
273	9	MED	MAJOR SKIN DISORDERS W/O CC	1,203	1,197	0.5803	0.6172	0.6136	0.6131	0.6110	0.6053	0.6089	0.6124	0.6061
274	9	MED	MALIGNANT BREAST DISORDERS W CC	2,046	2,042	1.1008	1.1218	1.1211	1.1215	1.1178	1.1019	1.1088	1.1199	1.1089
275	9	MED	MALIGNANT BREAST DISORDERS W/O CC	169	169	0.5514	0.5648	0.5629	0.5629	0.5609	0.5523	0.5581	0.5625	0.5536
276	9	MED	NON-MALIGANT BREAST DISORDERS	1,426	1,425	0.6986	0.7487	0.7472	0.7468	0.7438	0.7400	0.7388	0.7427	0.7460
277	9	MED	CELLULITIS AGE >17 W CC	107,912	105,132	0.8476	0.9256	0.9250	0.9243	0.9207	0.9151	0.9147	0.9204	0.9215
278	9	MED	CELLULITIS AGE >17 W/O CC	30,874	30,599	0.5373	0.6053	0.6032	0.6026	0.5986	0.5948	0.5961	0.5970	0.5988
279	9	MED *	CELLULITIS AGE 0-17	3	3	0.4567	0.4720	0.4781	0.4762	0.4721	0.4775	0.4728	0.4742	0.4747
280	9	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W CC	17,614	17,245	0.7249	0.7721	0.7686	0.7685	0.7678	0.7541	0.7635	0.7682	0.7581
281	9	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W/O CC	5,851	5,805	0.5031	0.5426	0.5367	0.5364	0.5347	0.5242	0.5332	0.5347	0.5258
283	9	MED	MINOR SKIN DISORDERS W CC	6,022	5,920	0.7111	0.7648	0.7627	0.7623	0.7613	0.7558	0.7567	0.7625	0.7592
284	9	MED	MINOR SKIN DISORDERS W/O CC	1,643	1,637	0.4561	0.5011	0.4971	0.4968	0.4951	0.4910	0.4931	0.4956	0.4924
285	10	SURG	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DISORDERS	7,358	6,774	2.1172	2.2146	2.2249	2.2237	2.2142	2.2043	2.1888	2.2150	2.2288
286	10	SURG	ADRENAL & PITUITARY PROCEDURES	2,466	2,466	1.8424	1.8042	1.8072	1.8071	1.7995	1.7501	1.7561	1.7978	1.7951
287	10	SURG	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DISORDERS	5,150	4,738	1.8818	2.0307	2.0368	2.0356	2.0287	2.0174	2.0072	2.0294	2.0382
288	10	SURG	O.R. PROCEDURES FOR OBESITY	9,913	9,913	1.8895	1.8478	1.8483	1.8482	1.8377	1.7205	1.7191	1.8353	1.8413
289	10	SURG	PARATHYROID PROCEDURES	6,051	6,051	0.8742	0.8253	0.8266	0.8262	0.8217	0.8059	0.8045	0.8209	0.8238
290	10	SURG	THYROID PROCEDURES	10,776	10,776	0.8463	0.8099	0.8102	0.8100	0.8054	0.7817	0.7829	0.8042	0.8052
291	10	SURG	THYROGLOSSAL PROCEDURES	50	50	0.6371	0.6234	0.6232	0.6230	0.6233	0.6111	0.6118	0.6229	0.6230
292	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W CC	6,848	6,599	2.5699	2.6242	2.6412	2.6389	2.6359	2.6269	2.6062	2.6351	2.6573
293	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W/O CC	307	305	1.4234	1.4051	1.4062	1.4056	1.4006	1.3944	1.3794	1.3988	1.4173
294	10	MED	DIABETES AGE >35	88,637	87,097	0.7450	0.7909	0.7864	0.7859	0.7874	0.7797	0.7825	0.7864	0.7855
295	10	MED	DIABETES AGE 0-35	3,752	3,747	0.7091	0.7217	0.7158	0.7152	0.7144	0.7078	0.7099	0.7122	0.7144
296	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W CC	228,622	224,394	0.7906	0.8326	0.8292	0.8289	0.8298	0.8170	0.8236	0.8275	0.8254
297	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W/O CC	39,075	38,846	0.4888	0.5214	0.5163	0.5161	0.5161	0.5063	0.5139	0.5137	0.5108
298	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE 0-17	86	86	0.5775	0.6831	0.6905	0.6887	0.6854	0.6865	0.6844	0.6871	0.6859
299	10	MED	INBORN ERRORS OF METABOLISM	1,280	1,279	1.0737	1.0227	1.0218	1.0215	1.0183	1.0125	1.0133	1.0303	1.0149
300	10	MED	ENDOCRINE DISORDERS W CC	20,114	19,659	1.0607	1.0962	1.0923	1.0920	1.0970	1.0815	1.0901	1.0970	1.0884
301	10	MED	ENDOCRINE DISORDERS W/O CC	3,502	3,492	0.6110	0.6181	0.6141	0.6138	0.6165	0.6192	0.6151	0.6182	0.6189
302	11	SURG	KIDNEY TRANSPLANT	8,398	8,396	3.0741	2.8376	2.8563	2.8566	2.8452	2.8584	2.8119	2.8774	2.8592
303	11	SURG	KIDNEY AND URETER PROCEDURES FOR NEOPLASM	18,225	18,220	1.8741	1.8823	1.8884	1.8891	1.8808	1.8186	1.8204	1.8751	1.8846
304	11	SURG	KIDNEY AND URETER PROCEDURES FOR NON-NEOPLASM WITHOUT CC	12,477	12,151	2.2617	2.2660	2.2787	2.2784	2.2724	2.2274	2.2257	2.2708	2.2896
305	11	SURG	KIDNEY AND URETER PROCEDURES FOR NON-NEOPLASM WITHOUT CC	2,594	2,584	1.1405	1.1154	1.1172	1.1168	1.1086	1.0699	1.0613	1.1051	1.1206
306	11	SURG	PROSTATECTOMY W CC	5,534	5,533	1.2671	1.3106	1.3116	1.3119	1.3079	1.2738	1.2819	1.3013	1.3064
307	11	SURG	PROSTATECTOMY W/O CC	1,855	1,855	0.6291	0.6260	0.6261	0.6261	0.6211	0.5946	0.5999	0.6163	0.6206
308	11	SURG	MINOR BLADDER PROCEDURES W CC	5,125	5,122	1.3468	1.3769	1.3788	1.3794	1.3722	1.3533	1.3600	1.3670	1.3706
309	11	SURG	MINOR BLADDER PROCEDURES W/O CC	2,869	2,869	0.8885	0.8838	0.8832	0.8831	0.8759	0.8888	0.8923	0.8733	0.8750

**Appendix H1 (continued)**  
**Alternative DRG Weights Computed from Original and Adjusted CCRs**

DRG num	Case MDC type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights <sup>(1)</sup>	Cost-based weights using FY 2007 rules	Incremental CCR-adjusted cost-based weights:				Individual regression-based adjustments			
							Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone	
310	11	SURG	TRANSURETHRAL PROCEDURES W CC	23,959	23,954	1.1538	1.1557	1.1560	1.1563	1.1514	1.1175	1.1292	1.1477	1.1434
311	11	SURG	TRANSURETHRAL PROCEDURES W/O CC	5,616	5,616	0.6482	0.6346	0.6338	0.6335	0.6287	0.6038	0.6106	0.6262	0.6244
312	11	SURG	URETHRAL PROCEDURES, AGE >17 W CC	1,276	1,275	1.1090	1.1333	1.1328	1.1328	1.1286	1.1059	1.1108	1.1258	1.1265
313	11	SURG	URETHRAL PROCEDURES, AGE >17 W/O CC	488	488	0.7074	0.7086	0.7083	0.7082	0.7025	0.6859	0.6887	0.6996	0.7025
315	11	SURG	OTHER KIDNEY & URINARY TRACT O.R. PROCEDURES	32,551	32,542	2.0037	2.0172	2.0379	2.0353	2.0342	2.0523	2.0205	2.0361	2.0639
316	11	MED	RENAL FAILURE	182,854	178,136	1.2227	1.2696	1.2728	1.2721	1.2773	1.2680	1.2662	1.2768	1.2795
317	11	MED	ADMIT FOR RENAL DIALYSIS	2,366	2,365	0.7981	0.8209	0.8445	0.8410	0.8384	0.8361	0.8289	0.8402	0.8438
318	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W CC	5,493	5,465	1.1522	1.1622	1.1628	1.1635	1.1601	1.1361	1.1492	1.1590	1.1481
319	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W/O CC	358	358	0.6313	0.6089	0.6091	0.6091	0.6046	0.5885	0.5964	0.6034	0.5979
320	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W CC	206,671	201,058	0.8429	0.8886	0.8828	0.8826	0.8817	0.8662	0.8741	0.8794	0.8760
321	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W/O CC	28,834	28,627	0.5609	0.5922	0.5862	0.5860	0.5837	0.5717	0.5806	0.5820	0.5766
322	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE 0-17	48	48	0.6238	0.6100	0.6090	0.6083	0.6049	0.6009	0.6032	0.6033	0.6041
323	11	MED	URINARY STONES W CC, &/OR ESW LITHOTRIPSY	18,754	18,736	0.8162	0.7878	0.7866	0.7857	0.7815	0.7522	0.7735	0.7790	0.7627
324	11	MED	URINARY STONES W/O CC	4,214	4,214	0.5155	0.4868	0.4817	0.4814	0.4779	0.4516	0.4717	0.4757	0.4600
325	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W CC	9,078	9,064	0.6464	0.6929	0.6896	0.6900	0.6883	0.6734	0.6821	0.6869	0.6811
326	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W/O CC	2,425	2,424	0.4454	0.4783	0.4741	0.4741	0.4715	0.4573	0.4678	0.4698	0.4628
327	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE 0-17	6	6	0.2291	0.2146	0.2125	0.2125	0.2107	0.2173	0.2090	0.2147	0.2149
328	11	MED	URETHRAL STRICTURE AGE >17 W CC	547	547	0.6972	0.7129	0.7103	0.7101	0.7060	0.6907	0.6955	0.7040	0.7032
329	11	MED	URETHRAL STRICTURE AGE >17 W/O CC	53	53	0.4778	0.4856	0.4833	0.4831	0.4803	0.4742	0.4703	0.4793	0.4851
331	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W CC	50,499	49,427	1.0415	1.0679	1.0699	1.0694	1.0691	1.0599	1.0597	1.0701	1.0684
332	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W/O CC	3,517	3,503	0.5995	0.5985	0.5975	0.5972	0.5953	0.5896	0.5906	0.5957	0.5940
333	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 0-17	213	212	0.8616	0.8750	0.8831	0.8822	0.8810	0.8918	0.8801	0.8877	0.8860
334	12	SURG	MAJOR MALE PELVIC PROCEDURES W CC	8,590	8,589	1.3629	1.3383	1.3422	1.3432	1.3348	1.2847	1.2915	1.3283	1.3346
335	12	SURG	MAJOR MALE PELVIC PROCEDURES W/O CC	10,870	10,870	1.1034	1.0644	1.0655	1.0658	1.0576	1.0093	1.0141	1.0528	1.0575
336	12	SURG	TRANSURETHRAL PROSTATECTOMY W CC	27,394	27,391	0.8111	0.8210	0.8216	0.8218	0.8169	0.7884	0.7947	0.8109	0.8165
337	12	SURG	TRANSURETHRAL PROSTATECTOMY W/O CC	20,734	20,734	0.5813	0.5799	0.5798	0.5797	0.5751	0.5505	0.5557	0.5700	0.5751
338	12	SURG	TESTES PROCEDURES, FOR MALIGNANCY	624	624	1.3856	1.3725	1.3748	1.3756	1.3705	1.3442	1.3493	1.3669	1.3689
339	12	SURG	TESTES PROCEDURES, NON-MALIGNANCY AGE >17	1,147	1,146	1.1722	1.1856	1.1862	1.1859	1.1799	1.1559	1.1624	1.1744	1.1789
341	12	SURG	PENIS PROCEDURES	2,889	2,889	1.2451	1.2469	1.2473	1.2470	1.2382	1.2849	1.2899	1.2347	1.2369
342	12	SURG	CIRCUMCISION AGE >17	428	428	0.7501	0.7510	0.7504	0.7503	0.7450	0.7217	0.7268	0.7399	0.7450
344	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY	2,241	2,241	1.1995	1.0832	1.0841	1.0845	1.0774	1.1383	1.0784	1.0752	1.1392
345	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIGNANCY	1,281	1,281	1.0990	1.1201	1.1201	1.1203	1.1146	1.0849	1.0939	1.1093	1.1108
346	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W CC	3,643	3,635	1.0544	1.0898	1.0899	1.0907	1.0870	1.0760	1.0779	1.0873	1.0847
347	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W/O CC	200	200	0.5670	0.5611	0.5607	0.5609	0.5574	0.5582	0.5521	0.5580	0.5629
348	12	MED	BENIGN PROSTATIC HYPERTROPHY W CC	3,890	3,886	0.7079	0.7514	0.7469	0.7468	0.7449	0.7299	0.7382	0.7429	0.7387
349	12	MED	BENIGN PROSTATIC HYPERTROPHY W/O CC	493	493	0.4264	0.4593	0.4564	0.4562	0.4539	0.4456	0.4502	0.4527	0.4504
350	12	MED	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM	6,524	6,515	0.7402	0.7671	0.7633	0.7630	0.7595	0.7492	0.7540	0.7577	0.7564
352	12	MED	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES	1,001	998	0.7212	0.7440	0.7422	0.7422	0.7398	0.7257	0.7322	0.7378	0.7353
353	13	SURG	PELVIC EVISCERATION, RADICAL HYSTERECTOMY & RADICAL VULVECTOMY	2,675	2,675	1.6590	1.6561	1.6611	1.6620	1.6528	1.6102	1.6191	1.6446	1.6521
354	13	SURG	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W CC	7,108	7,106	1.4106	1.4215	1.4248	1.4252	1.4181	1.3852	1.3898	1.4144	1.4170
355	13	SURG	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W/O CC	4,540	4,540	0.8797	0.8775	0.8774	0.8773	0.8705	0.8423	0.8455	0.8681	0.8696
356	13	SURG	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	20,604	20,604	0.7489	0.7328	0.7326	0.7326	0.7267	0.7160	0.7186	0.7242	0.7266
357	13	SURG	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY	5,100	5,098	2.0906	2.0668	2.0741	2.0757	2.0649	2.0136	2.0227	2.0570	2.0637
358	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W CC	18,981	18,978	1.0904	1.0758	1.0769	1.0771	1.0701	1.0396	1.0440	1.0668	1.0689
359	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC	25,835	25,835	0.8065	0.7924	0.7921	0.7920	0.7856	0.7606	0.7637	0.7828	0.7852
360	13	SURG	VAGINA, CERVIX & VULVA PROCEDURES	12,936	12,936	0.8339	0.8176	0.8175	0.8174	0.8112	0.7992	0.8023	0.8088	0.8105
361	13	SURG	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	240	240	1.1781	1.1415	1.1423	1.1426	1.1333	1.0905	1.0954	1.1310	1.1307
363	13	SURG	D&C, CONIZATION & RADIO-IMPLANT, FOR MALIGNANCY	2,034	2,033	1.0124	0.9685	0.9695	0.9700	0.9646	1.0010	0.9568	0.9642	1.0089
364	13	SURG	D&C, CONIZATION EXCEPT FOR MALIGNANCY	1,722	1,722	0.8544	0.8741	0.8741	0.8746	0.8706	0.8569	0.8606	0.8693	0.8681
365	13	SURG	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES	1,468	1,465	1.9159	1.8897	1.8937	1.8942	1.8836	1.8391	1.8494	1.8766	1.8804
366	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W CC	4,223	4,172	1.1815	1.1816	1.1820	1.1827	1.1770	1.1600	1.1679	1.1775	1.1685
367	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC	365	364	0.5678	0.5719	0.5698	0.5699	0.5669	0.5574	0.5644	0.5648	0.5620
368	13	MED	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM	3,778	3,768	1.1289	1.1600	1.1569	1.1566	1.1545	1.1307	1.1428	1.1531	1.1438
369	13	MED	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS	3,285	3,281	0.6338	0.6459	0.6439	0.6440	0.6416	0.6317	0.6381	0.6411	0.6357
370	14	SURG	CESAREAN SECTION W CC	1,810	1,809	0.7962	0.9538	0.9572	0.9569	0.9502	0.9373	0.9390	0.9477	0.9510
371	14	SURG	CESAREAN SECTION W/O CC	2,242	2,241	0.5954	0.7382	0.7392	0.7389	0.7327	0.7181	0.7211	0.7295	0.7328

**Appendix H1 (continued)**  
**Alternative DRG Weights Computed from Original and Adjusted CCRs**

DRG num	MDC	Case type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights <sup>(1)</sup>	Cost-based weights using FY 2007 rules	Incremental CCR-adjusted cost-based weights:				Individual regression-based adjustments		
								Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone
372	14	MED	VAGINAL DELIVERY W COMPLICATING DIAGNOSES	1,163	1,163	0.4793	0.5883	0.5905	0.5902	0.5857	0.5793	0.5806	0.5839	0.5862
373	14	MED	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	4,595	4,595	0.3509	0.4500	0.4511	0.4508	0.4471	0.4404	0.4422	0.4453	0.4472
374	14	SURG	VAGINAL DELIVERY W STERILIZATION &/OR D&C	113	113	0.6095	0.7283	0.7303	0.7303	0.7241	0.7166	0.7167	0.7234	0.7246
375	14	SURG	VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL &/OR D&C	9	9	1.4021	1.5951	1.6067	1.6072	1.6002	1.5923	1.5794	1.5963	1.6169
376	14	MED	POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE	395	395	0.5484	0.5642	0.5611	0.5609	0.5587	0.5496	0.5553	0.5583	0.5534
377	14	SURG	POSTPARTUM & POST ABORTION DIAGNOSES W O.R. PROCEDURE	95	95	1.2460	1.2376	1.2370	1.2376	1.2289	1.2079	1.2236	1.2246	1.2176
378	14	MED	ECTOPIC PREGNANCY	179	179	0.7306	0.7220	0.7174	0.7179	0.7129	0.6943	0.6909	0.7100	0.7192
379	14	MED	THREATENED ABORTION	471	471	0.3612	0.4158	0.4196	0.4189	0.4166	0.4184	0.4156	0.4140	0.4219
380	14	MED	ABORTION W/O D&C	90	90	0.4000	0.4038	0.4020	0.4021	0.3995	0.4020	0.3972	0.4002	0.4036
381	14	SURG	ABORTION W D&C, ASPIRATION CURETTAGE OR HYSTEROTOMY	156	156	0.6491	0.6275	0.6255	0.6256	0.6233	0.6192	0.6154	0.6217	0.6288
382	14	MED	FALSE LABOR	39	39	0.1710	0.1927	0.1983	0.1973	0.1956	0.1954	0.1952	0.1943	0.1972
383	14	MED	OTHER ANTEPARTUM DIAGNOSES W MEDICAL COMPLICATIONS	2,290	2,283	0.4679	0.5256	0.5261	0.5258	0.5234	0.5242	0.5214	0.5216	0.5281
384	14	MED	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	121	121	0.3021	0.3321	0.3340	0.3335	0.3320	0.3315	0.3295	0.3298	0.3362
392	16	SURG	SPLENECTOMY AGE >17	1,985	1,980	2.9349	2.8010	2.8263	2.8340	2.8224	2.7444	2.7498	2.8297	2.8095
394	16	SURG	OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS	2,541	2,540	1.7715	1.7858	1.7973	1.7991	1.7976	1.7754	1.8006	1.7971	
395	16	MED	RED BLOOD CELL DISORDERS AGE >17	91,202	89,702	0.7564	0.7837	0.7901	0.7931	0.7932	0.7844	0.7866	0.7929	0.7914
396	16	MED	RED BLOOD CELL DISORDERS AGE 0-17	11	11	0.4504	0.4189	0.4287	0.4281	0.4245	0.4183	0.4220	0.4314	0.4137
397	16	MED	COAGULATION DISORDERS	15,508	15,455	1.2713	1.2240	1.2361	1.2406	1.2396	1.2443	1.2334	1.2562	1.2339
398	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W CC	6,043	6,020	1.0899	1.0886	1.0904	1.0912	1.0909	1.0700	1.0827	1.0918	1.0773
399	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC	989	987	0.6526	0.6448	0.6430	0.6434	0.6425	0.6256	0.6404	0.6438	0.6265
401	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W CC	6,001	5,831	2.8962	2.8057	2.8188	2.8207	2.8126	2.7899	2.7936	2.8226	2.7988
402	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W/O CC	1,309	1,299	1.1354	1.0725	1.0725	1.0725	1.0660	1.0428	1.0541	1.0681	1.0525
403	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W CC	29,455	28,579	1.7922	1.7636	1.7775	1.7816	1.7773	1.7687	1.7658	1.7869	1.7705
404	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC	3,427	3,403	0.9146	0.8941	0.8976	0.8988	0.8941	0.8893	0.8905	0.9001	0.8868
406	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W CC	2,102	2,100	2.6609	2.6295	2.6396	2.6418	2.6348	2.5753	2.5838	2.6272	2.6338
407	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W/O CC	554	554	1.1712	1.1612	1.1624	1.1625	1.1568	1.1284	1.1302	1.1538	1.1580
408	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R.PROC	1,905	1,904	2.1763	2.0769	2.0859	2.0876	2.0764	2.0800	2.0604	2.0835	2.0888
409	17	MED	RADIOTHERAPY	1,613	1,612	1.1725	1.1804	1.1818	1.1818	1.1737	1.2535	1.1698	1.1797	1.2510
410	17	MED	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS	26,485	26,483	1.0904	0.9604	0.9628	0.9631	0.9563	0.9887	0.9534	0.9792	0.9684
411	17	MED *	HISTORY OF MALIGNANCY W/O ENDOSCOPY	4	4	0.3302	0.2684	0.2690	0.2688	0.2665	0.2540	0.2652	0.2680	0.2538
412	17	MED *	HISTORY OF MALIGNANCY W ENDOSCOPY	12	12	0.7748	0.8370	0.8372	0.8372	0.8508	0.8487	0.8438	0.8529	0.8534
413	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W CC	5,145	5,112	1.3149	1.3172	1.3174	1.3177	1.3132	1.2896	1.3014	1.3133	1.3013
414	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC	444	442	0.7482	0.7596	0.7577	0.7576	0.7550	0.7356	0.7506	0.7565	0.7385
417	18	MED	SEPTICEMIA AGE 0-17	29	29	0.9306	0.9403	0.9485	0.9467	0.9401	0.9427	0.9320	0.9451	0.9456
418	18	MED	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS	27,021	25,833	1.0629	1.1226	1.1222	1.1218	1.1193	1.0988	1.1092	1.1180	1.1102
419	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W CC	15,598	15,549	0.8273	0.8309	0.8291	0.8287	0.8270	0.8151	0.8225	0.8273	0.8194
420	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W/O CC	2,655	2,653	0.5989	0.6032	0.5982	0.5980	0.5957	0.5826	0.5934	0.5947	0.5860
421	18	MED	VIRAL ILLNESS AGE >17	11,059	11,056	0.7247	0.7295	0.7253	0.7250	0.7245	0.7141	0.7205	0.7241	0.7184
422	18	MED	VIRAL ILLNESS & FEVER OF UNKNOWN ORIGIN AGE 0-17	53	53	0.4461	0.4753	0.4777	0.4769	0.4749	0.4791	0.4740	0.4791	0.4758
423	18	MED	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES	8,177	7,958	1.7783	1.7564	1.7608	1.7607	1.7597	1.7401	1.7428	1.7637	1.7530
424	19	SURG	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	951	948	2.0284	2.1633	2.1689	2.1673	2.1612	2.1730	2.1752	2.1621	2.1581
425	19	MED	ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	12,335	12,319	0.6110	0.6225	0.6184	0.6178	0.6191	0.6098	0.6165	0.6197	0.6118
426	19	MED	DEPRESSIVE NEUROSES	3,758	3,753	0.4680	0.5680	0.5653	0.5648	0.5621	0.5602	0.5621	0.5631	0.5592
427	19	MED	NEUROSES EXCEPT DEPRESSIVE	1,313	1,313	0.5126	0.6241	0.6208	0.6203	0.6174	0.6168	0.6180	0.6188	0.6148
428	19	MED	DISORDERS OF PERSONALITY & IMPULSE CONTROL	739	736	0.6368	0.8510	0.8512	0.8502	0.8445	0.8448	0.8457	0.8464	0.8417
429	19	MED	ORGANIC DISTURBANCES & MENTAL RETARDATION	22,299	21,248	0.7858	0.8816	0.8779	0.8772	0.8768	0.8609	0.8743	0.8769	0.8635
430	19	MED	PSYCHOSES	66,511	64,507	0.6385	0.8775	0.8761	0.8754	0.8689	0.8716	0.8716	0.8717	0.8661
431	19	MED	CHILDHOOD MENTAL DISORDERS	296	295	0.5264	0.6770	0.6751	0.6746	0.6700	0.6709	0.6713	0.6733	0.6663
432	19	MED	OTHER MENTAL DISORDER DIAGNOSES	363	363	0.6029	0.6654	0.6626	0.6620	0.6607	0.6530	0.6598	0.6607	0.6539
433	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA	4,444	4,444	0.2875	0.3530	0.3499	0.3497	0.3482	0.3473	0.3486	0.3485	0.3466
439	21	SURG	SKIN GRAFTS FOR INJURIES	1,554	1,553	1.7313	1.8124	1.8179	1.8180	1.8104	1.7825	1.7814	1.8109	1.8109
440	21	SURG	WOUND DEBRIDEMENTS FOR INJURIES	4,770	4,463	1.7145	1.7961	1.8015	1.8013	1.7946	1.7628	1.7644	1.7928	1.7948
441	21	SURG	HAND PROCEDURES FOR INJURIES	688	688	0.9158	0.9108	0.9063	0.9061	0.8999	0.8869	0.8860	0.8987	0.9019
442	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W CC	16,814	16,221	2.4466	2.4338	2.4487	2.4488	2.4418	2.4031	2.4070	2.4371	2.4425
443	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W/O CC	3,181	3,159	1.0065	1.0125	1.0121	1.0121	1.0065	0.9923	0.9931	1.0039	1.0083
444	21	MED	TRAUMATIC INJURY AGE >17 W CC	5,449	5,344	0.7374	0.7707	0.7668	0.7664	0.7664	0.7492	0.7617	0.7663	0.7541

**Appendix H1 (continued)**  
**Alternative DRG Weights Computed from Original and Adjusted CCRs**

DRG num	MDC	Case type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights <sup>(1)</sup>	Cost-based weights using FY 2007 rules	Incremental CCR-adjusted cost-based weights:				Individual regression-based adjustments		
								Separate emergency	Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone
445	21	MED	TRAUMATIC INJURY AGE >17 W/O CC	1,960	1,950	0.5009	0.5295	0.5240	0.5237	0.5227	0.5090	0.5208	0.5224	0.5112
447	21	MED	ALLERGIC REACTIONS AGE >17	5,681	5,681	0.5260	0.5563	0.5488	0.5485	0.5498	0.5459	0.5453	0.5507	0.5496
449	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W CC	36,276	36,183	0.8402	0.8505	0.8429	0.8425	0.8437	0.8316	0.8367	0.8434	0.8387
450	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W/O CC	6,679	6,679	0.4398	0.4548	0.4465	0.4463	0.4468	0.4403	0.4440	0.4465	0.4433
452	21	MED	COMPLICATIONS OF TREATMENT W CC	25,763	25,664	0.9984	1.0234	1.0280	1.0284	1.0270	1.0106	1.0159	1.0258	1.0229
453	21	MED	COMPLICATIONS OF TREATMENT W/O CC	4,893	4,892	0.5072	0.5315	0.5295	0.5296	0.5280	0.5166	0.5216	0.5265	0.5245
454	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W CC	3,784	3,779	0.7816	0.8082	0.8031	0.8029	0.8050	0.7894	0.7989	0.8035	0.7970
455	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W/O CC	741	741	0.4660	0.4812	0.4766	0.4759	0.4766	0.4654	0.4750	0.4762	0.4673
461	23	SURG	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES	2,196	2,196	1.3718	1.3965	1.4006	1.4002	1.3951	1.3892	1.3885	1.3941	1.3966
462	23	MED	REHABILITATION	3,104	2,910	0.8786	1.2522	1.2567	1.2557	1.2455	1.2490	1.2472	1.2479	1.2451
463	23	MED	SIGNS & SYMPTOMS W CC	29,814	29,282	0.6884	0.7175	0.7149	0.7145	0.7159	0.7034	0.7120	0.7163	0.7071
464	23	MED	SIGNS & SYMPTOMS W/O CC	6,935	6,872	0.5196	0.5394	0.5357	0.5353	0.5360	0.5249	0.5344	0.5360	0.5266
465	23	MED	AFTERCARE W HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	144	144	0.5111	0.5439	0.5456	0.5452	0.5441	0.5423	0.5403	0.5453	0.5448
466	23	MED	AFTERCARE W/O HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	968	967	0.5742	0.6040	0.6055	0.6053	0.6069	0.6048	0.6008	0.6077	0.6101
467	23	MED	OTHER FACTORS INFLUENCING HEALTH STATUS	867	867	0.4654	0.4779	0.4757	0.4755	0.4740	0.4681	0.4708	0.4734	0.4719
468		SURG	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	47,282	44,743	3.9530	3.9385	3.9520	3.9519	3.9561	3.9697	3.9667	3.9539	3.9612
470		**	UNGROUPABLE	19	19	0.8871	0.9261	0.9059	0.9247	0.9168	0.8864	0.8958	0.9100	0.9143
471	8	SURG	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY	13,947	13,617	2.9889	3.0926	3.0975	3.0993	3.0754	3.2589	3.2630	3.0709	3.0761
473	17	MED	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE >17	7,873	7,667	3.2949	3.2103	3.2736	3.2941	3.2785	3.2776	3.2622	3.2974	3.2750
476		SURG	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	2,800	2,795	2.1198	2.2453	2.2457	2.2462	2.2505	2.2078	2.2132	2.2466	2.2489
477		SURG	NON-EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	26,528	25,897	2.0079	2.0188	2.0224	2.0221	2.0237	1.9914	1.9953	2.0232	2.0202
479	5	SURG	OTHER VASCULAR PROCEDURES W/O CC	24,654	24,653	1.4564	1.3891	1.3922	1.3916	1.3861	1.4149	1.3670	1.3859	1.4339
480	PRE	SURG	LIVER TRANSPLANT AND/OR INTESTINAL TRANSPLANT	994	994	8.4004	7.7956	7.9646	8.0070	7.9597	7.8807	7.8287	7.9902	7.9807
481	PRE	SURG	BONE MARROW TRANSPLANT	1,078	1,078	6.0545	6.1928	6.2856	6.3087	6.3124	6.3676	6.3153	6.3544	6.3225
482	PRE	SURG	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES	4,629	4,155	3.3255	3.3950	3.3998	3.3997	3.3970	3.3391	3.3338	3.3959	3.4034
484	24	SURG	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	411	409	5.2972	5.1225	5.1400	5.1430	5.1137	5.0039	5.0788	5.1094	5.0434
485	24	SURG	LIMB REATTACHMENT, HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	3,399	2,987	3.4277	3.4260	3.4328	3.4354	3.4212	3.4141	3.4269	3.4168	3.4131
486	24	SURG	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	2,286	2,271	4.6941	4.5310	4.5565	4.5619	4.5407	4.4629	4.4997	4.5388	4.5059
487	24	MED	OTHER MULTIPLE SIGNIFICANT TRAUMA	4,340	4,142	1.8700	1.8615	1.8609	1.8613	1.8590	1.7897	1.8393	1.8580	1.8105
488	25	SURG	HIV W EXTENSIVE O.R. PROCEDURE	743	742	4.7841	4.6718	4.7048	4.7051	4.6929	4.6613	4.6532	4.7084	4.6855
489	25	MED	HIV W MAJOR RELATED CONDITION	12,470	12,442	1.7762	1.7593	1.7604	1.7606	1.7553	1.7424	1.7450	1.7597	1.7483
490	25	MED	HIV W OR W/O OTHER RELATED CONDITION	4,603	4,596	0.9885	0.9987	0.9989	0.9992	0.9956	0.9863	0.9920	0.9978	0.9878
491	8	SURG	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF UPPER EXTREMITY	20,270	20,269	1.6831	1.6969	1.6966	1.6968	1.6837	1.7652	1.7662	1.6817	1.6850
492	17	MED	CHEMOTHERAPY W ACUTE LEUKEMIA OR W USE OF HI DOSE CHEMOAGENT	3,561	3,560	3.5322	3.3536	3.4135	3.4321	3.4123	3.4575	3.4046	3.4569	3.4205
493	7	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W CC	56,599	56,553	1.7873	1.7078	1.7051	1.7049	1.6999	1.6406	1.6437	1.6941	1.7024
494	7	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC	22,834	22,833	1.0447	0.9931	0.9891	0.9888	0.9824	0.9366	0.9361	0.9791	0.9860
495	PRE	SURG	LUNG TRANSPLANT	300	300	8.0358	7.3665	7.3964	7.4026	7.3955	7.3341	7.2279	7.4615	7.4350
496	8	SURG	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	3,099	3,095	6.3799	6.4598	6.4718	6.4733	6.4299	6.9126	6.9113	6.4258	6.4363
497	8	SURG	SPINAL FUSION EXCEPT CERVICAL W CC	27,685	27,311	3.7234	3.7616	3.7671	3.7679	3.7413	4.0209	4.0204	3.7380	3.7458
498	8	SURG	SPINAL FUSION EXCEPT CERVICAL W/O CC	18,685	18,627	2.9275	2.9635	2.9641	2.9642	2.9406	3.1902	3.1888	2.9375	2.9457
499	8	SURG	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W CC	33,081	33,077	1.3317	1.3273	1.3285	1.3284	1.3204	1.2986	1.2957	1.3201	1.3236
500	8	SURG	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W/O CC	43,738	43,738	0.9036	0.8809	0.8808	0.8806	0.8739	0.8555	0.8519	0.8734	0.8779
501	8	SURG	KNEE PROCEDURES W PDX OF INFECTION W CC	2,997	2,703	2.5990	2.6184	2.6282	2.6287	2.6160	2.5930	2.5849	2.6149	2.6251
502	8	SURG	KNEE PROCEDURES W PDX OF INFECTION W/O CC	701	678	1.4031	1.4242	1.4242	1.4243	1.4132	1.3942	1.3919	1.4104	1.4182
503	8	SURG	KNEE PROCEDURES W/O PDX OF INFECTION	5,321	5,321	1.1770	1.2029	1.2034	1.2034	1.1946	1.1881	1.1881	1.1929	1.1964
504	22	SURG	EXTEN. BURNS OR FULL THICKNESS BURN W/MV 96+HRS W/SKIN GFT	172	172	10.6712	10.9962	11.0589	11.0644	10.9903	10.8104	10.7606	11.0179	11.0118
505	22	MED	EXTEN. BURNS OR FULL THICKNESS BURN W/MV 96+HRS W/O SKIN GFT	157	157	2.5244	2.5839	2.5917	2.5929	2.5720	2.5308	2.5186	2.5786	2.5775
506	22	SURG	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W/O CC OR SIG TRAUMA	863	863	3.6135	4.0693	4.0871	4.0857	4.0696	4.0026	3.9939	4.0762	4.0716
507	22	SURG	FULL THICKNESS BURN W SKIN GRFT OR INHAL INJ W/O CC OR SIG TRAUMA	274	274	1.8180	2.1141	2.1210	2.1195	2.1069	2.0651	2.0633	2.1090	2.1065
508	22	MED	FULL THICKNESS BURN W/O SKIN GRFT OR INHAL INJ W/O CC OR SIG TRAUMA	609	597	1.2630	1.4312	1.4320	1.4315	1.4253	1.4059	1.4067	1.4243	1.4255
509	22	MED	FULL THICKNESS BURN W/O SKIN GRFT OR INH INJ W/O CC OR SIG TRAUMA	137	136	0.8346	1.0297	1.0246	1.0243	1.0177	1.0045	1.0047	1.0170	1.0182
510	22	MED	NON-EXTENSIVE BURNS W CC OR SIGNIFICANT TRAUMA	1,615	1,607	1.1445	1.2803	1.2789	1.2783	1.2732	1.2582	1.2563	1.2741	1.2742
511	22	MED	NON-EXTENSIVE BURNS W/O CC OR SIGNIFICANT TRAUMA	558	556	0.6447	0.7745	0.7718	0.7713	0.7680	0.7562	0.7565	0.7682	0.7676
512	PRE	SURG	SIMULTANEOUS PANCREAS/KIDNEY TRANSPLANT	402	402	5.5755	5.0080	5.0449	5.0513	5.0187	4.9777	4.9414	5.0441	5.0293
513	PRE	SURG	PANCREAS TRANSPLANT	195	195	4.1876	3.8242	3.8436	3.8465	3.8244	3.8183	3.7716	3.8640	3.8313
515	5	SURG	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH	49,586	49,571	5.3230	5.3784	5.3778	5.3766	5.3523	6.1729	6.1679	5.3509	5.3604

**Appendix H1 (continued)**  
**Alternative DRG Weights Computed from Original and Adjusted CCRs**

DRG num	Case MDC	Case type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights <sup>(1)</sup>	Cost-based weights using FY 2007 rules	Incremental CCR-adjusted cost-based weights:				Individual regression-based adjustments		
								Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone
518	5	SURG	PERC CARDIO PROC W/O CORONARY ARTERY STENT OR AMI	22,359	22,338	1.6999	1.4633	1.4626	1.4622	1.4635	1.4026	1.3978	1.4656	1.4661
519	8	SURG	CERVICAL SPINAL FUSION W CC	11,057	11,055	2.4971	2.4874	2.4901	2.4894	2.4751	2.5902	2.5885	2.4742	2.4779
520	8	SURG	CERVICAL SPINAL FUSION W/O CC	14,632	14,632	1.7400	1.7122	1.7125	1.7120	1.6989	1.8049	1.8006	1.6978	1.7045
521	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE W CC	29,416	28,724	0.6614	0.7526	0.7487	0.7483	0.7472	0.7388	0.7451	0.7474	0.7406
522	20	MED	ALC/DRUG ABUSE OR DEPEND W REHABILITATION THERAPY W/O CC	4,965	4,898	0.4526	0.6895	0.6892	0.6889	0.6831	0.6866	0.6858	0.6847	0.6823
523	20	MED	ALC/DRUG ABUSE OR DEPEND W/O REHABILITATION THERAPY W/O CC	14,026	14,002	0.3739	0.4749	0.4719	0.4716	0.4694	0.4675	0.4700	0.4698	0.4664
524	1	MED	TRANSIENT ISCHEMIA	103,634	103,580	0.7280	0.7178	0.7163	0.7152	0.7213	0.7019	0.7195	0.7217	0.7035
525	5	SURG	OTHER HEART ASSIST SYSTEM IMPLANT	243	233	11.9662	11.5361	11.7104	11.7493	11.6793	11.4909	11.4650	11.6949	11.6891
528	1	SURG	INTRACRANIAL VASCULAR PROC W PDX HEMORRHAGE	1,641	1,632	6.9385	6.8084	6.8425	6.8390	6.8000	6.8258	6.7436	6.8080	6.8738
529	1	SURG	VENTRICULAR SHUNT PROCEDURES W CC	4,345	4,078	2.1290	2.1949	2.1952	2.1947	2.1891	2.1751	2.1935	2.1875	2.1725
530	1	SURG	VENTRICULAR SHUNT PROCEDURES W/O CC	2,853	2,828	1.2148	1.2296	1.2290	1.2287	1.2217	1.2304	1.2405	1.2202	1.2132
531	1	SURG	SPINAL PROCEDURES W CC	4,564	4,405	3.1122	3.1089	3.1174	3.1168	3.1037	3.1226	3.1287	3.1056	3.0956
532	1	SURG	SPINAL PROCEDURES W/O CC	2,483	2,477	1.4222	1.4358	1.4367	1.4362	1.4275	1.4510	1.4517	1.4272	1.4271
533	1	SURG	EXTRACRANIAL PROCEDURES W CC	42,395	42,393	1.4979	1.4498	1.4529	1.4524	1.4512	1.4346	1.4235	1.4492	1.4641
534	1	SURG	EXTRACRANIAL PROCEDURES W/O CC	38,873	38,873	0.9989	0.9516	0.9524	0.9521	0.9483	0.9325	0.9251	0.9462	0.9578
535	5	SURG	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK	7,634	7,631	7.6067	7.5517	7.5551	7.5532	7.5368	8.3650	8.3465	7.5422	7.5516
536	5	SURG	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK	7,523	7,521	6.6402	6.5491	6.5517	6.5499	6.5308	7.2898	7.2785	6.5321	6.5424
537	8	SURG	LOCAL EXCIS & REMOV OF INT FIX DEV EXCEPT HIP & FEMUR W CC	8,196	7,925	1.7808	1.7981	1.8026	1.7928	1.8030	1.7770	1.7712	1.7925	1.7988
538	8	SURG	LOCAL EXCIS & REMOV OF INT FIX DEV EXCEPT HIP & FEMUR W/O CC	4,862	4,855	1.0013	0.9960	0.9966	0.9965	0.9888	0.9767	0.9746	0.9879	0.9918
539	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR OR PROCEDURE W CC	4,666	4,662	3.0942	3.0032	3.0182	3.0216	3.0116	2.9547	2.9652	3.0096	3.0031
540	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR OR PROCEDURE W/O CC	1,455	1,455	1.1718	1.1491	1.1492	1.1493	1.1424	1.1113	1.1162	1.1418	1.1382
541	PRE	SURG	ECMO OR TRACH W MV 96+HRS OR PDX EXC FACE, MOUTH & NECK W MAJ O.R.	21,643	18,969	19.2842	18.6317	18.7629	18.7708	18.6944	18.4890	18.4541	18.7027	18.7204
542	PRE	SURG	TRACH W MV 96+HRS OR PDX EXC FACE, MOUTH & NECK W/O MAJ O.R.	21,116	17,634	12.8086	12.5970	12.6401	12.6398	12.5991	12.4908	12.4524	12.6143	12.6218
543	1	SURG	CRANIOTOMY W MAJOR DEVICE IMPLANT OR ACUTE COMPLEX CNS PRINCIPAL DIAGNOSI	5,219	5,083	4.3439	4.2739	4.2801	4.2800	4.2609	4.1925	4.2222	4.2640	4.2282
544	8	SURG	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	404,171	400,129	1.9671	2.0311	2.0323	2.0331	2.0179	2.0968	2.0975	2.0148	2.0204
545	8	SURG	REVISION OF HIP OR KNEE REPLACEMENT	40,723	39,909	2.5291	2.5914	2.5962	2.5978	2.5782	2.7002	2.6992	2.5755	2.5822
546	8	SURG	SPINAL FUSION EXC CERV WITH CURVATURE OF THE SPINE OR MALIG	2,095	2,085	5.3445	5.3894	5.4037	5.4061	5.3724	5.7591	5.7598	5.3682	5.3769
547	5	SURG	CORONARY BYPASS W CARDIAC CATH W MAJOR CV DX	30,935	27,986	6.4779	6.1414	6.1763	6.1815	6.1860	6.0014	5.9749	6.1916	6.2063
548	5	SURG	CORONARY BYPASS W CARDIAC CATH W/O MAJOR CV DX	30,209	25,947	5.3070	4.9906	5.0161	5.0199	5.0265	4.8363	4.8167	5.0263	5.0456
549	5	SURG	CORONARY BYPASS W/O CARDIAC CATH W MAJOR CV DX	12,558	11,152	5.3929	5.2496	5.2852	5.2907	5.2944	5.1288	5.1086	5.2998	5.3088
550	5	SURG	CORONARY BYPASS W/O CARDIAC CATH W/O MAJOR CV DX	32,049	26,817	4.1791	4.0372	4.0595	4.0632	4.0644	3.8926	3.8817	4.0642	4.0750
551	5	SURG	PERMANENT CARDIAC PACEMAKER IMPL W MAJ CV DX OR AICD LEAD OR GNRTR	51,370	48,858	3.1745	3.2406	3.2402	3.2402	3.2464	3.5201	3.5093	3.2471	3.2571
552	5	SURG	OTHER PERMANENT CARDIAC PACEMAKER IMPLANT W/O MAJOR CV DX	77,491	77,386	2.0715	2.1075	2.1058	2.1050	2.1071	2.3266	2.3204	2.1057	2.1153
553	5	SURG	OTHER VASCULAR PROCEDURES W CC W MAJOR CV DX	36,701	36,112	2.9168	2.9107	2.9320	2.9302	2.9324	2.9449	2.8957	2.9362	2.9775
554	5	SURG	OTHER VASCULAR PROCEDURES W CC W/O MAJOR CV DX	71,370	69,979	2.0674	2.0443	2.0557	2.0546	2.0492	2.0672	2.0195	2.0504	2.0954
555	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W MAJOR CV DX	41,449	41,413	2.3676	2.1326	2.1316	2.1310	2.1339	2.1171	2.1050	2.1409	2.1389
556	5	SURG	PERCUTANEOUS CARDIOVASC PROC W NON-DRUG-ELUTING STENT W/O MAJ CV DX	23,685	23,685	1.8959	1.6043	1.6040	1.6035	1.6000	1.6168	1.6066	1.6050	1.6052
557	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W MAJOR CV DX	108,286	108,249	2.8395	2.5613	2.5597	2.5590	2.5566	2.6490	2.6383	2.5643	2.5597
558	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W/O MAJ CV DX	170,167	170,167	2.1946	1.9089	1.9078	1.9073	1.9013	1.9964	1.9886	1.9061	1.9045
559	1	MED	ACUTE ISCHEMIC STROKE WITH USE OF THROMBOLYTIC AGENT	2,401	2,360	2.2264	2.1887	2.1831	2.1815	2.1818	2.1574	2.1633	2.1979	2.1598
560	1	MED	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM	3,173	2,918	3.0346	2.8491	2.8604	2.8599	2.8574	2.8439	2.8391	2.8845	2.8350
561	1	MED	NON-BACTERIAL INFECTIONS OF NERVOUS SYSTEM EXCEPT VIRAL MENINGITIS	2,632	2,464	2.4140	2.3421	2.3417	2.3409	2.3386	2.3014	2.3222	2.3399	2.3167
562	1	MED	SEIZURE AGE > 17 W CC	49,210	48,276	1.0095	1.0297	1.0244	1.0237	1.0285	1.0066	1.0218	1.0281	1.0136
563	1	MED	SEIZURE AGE > 17 W/O CC	19,540	19,434	0.6267	0.6399	0.6346	0.6342	0.6378	0.6238	0.6364	0.6378	0.6253
564	1	MED	HEADACHES AGE >17	14,652	14,537	0.6927	0.6769	0.6727	0.6721	0.6722	0.6554	0.6701	0.6732	0.6566
565	4	MED	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT 96+ HOURS	41,790	41,410	5.0661	4.9314	4.9365	4.9362	4.9208	4.8819	4.8640	4.9268	4.9326
566	4	MED	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT < 96 HOURS	63,900	60,757	2.4204	2.3401	2.3334	2.3329	2.3295	2.3043	2.2980	2.3324	2.3329
567	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROC AGE > 17 W CC W MAJOR GI DX	9,947	9,752	5.0122	4.8303	4.8524	4.8577	4.8457	4.7178	4.7567	4.8149	4.8377
568	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES PROC AGE > 17 W CC W/O MAJOR C	15,552	15,084	3.3092	3.2944	3.3023	3.3035	3.2978	3.2018	3.2133	3.2836	3.3004
569	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC W MAJOR GI DX	56,829	55,565	4.1757	4.0669	4.0769	4.0791	4.0683	3.9358	3.9821	4.0389	4.0514
570	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC W/O MAJOR GI DX	67,586	65,039	2.6372	2.6524	2.6580	2.6591	2.6518	2.5565	2.5780	2.6367	2.6454
571	6	MED	MAJOR ESOPHAGEAL DISORDERS	10,239	10,205	1.0681	1.0687	1.0703	1.0721	1.0731	1.0576	1.0616	1.0704	1.0719
572	8	MED	MAJOR GASTROINTESTINAL DISORDERS AND PERITONEAL INFECTIONS	42,874	42,788	1.2345	1.3018	1.2999	1.2996	1.2979	1.2728	1.2885	1.2955	1.2845
573	11	SURG	MAJOR BLADDER PROCEDURES	6,194	6,192	3.0541	3.0601	3.0722	3.0744	3.0627	2.9839	3.0474	3.0622	
574	16	MED	MAJOR HEMATOLOGIC/IMMUNOLOGIC DIAG EXC SICKLE CELL CRISIS & COAGUL	24,402	24,262	1.2229	1.1992	1.2117	1.2165	1.2122	1.2092	1.2064	1.2191	1.2082
575	18	MED	SEPTICEMIA W MV96+ HOURS AGE >17	8,808	8,794	5.9281	5.6475	5.6702	5.6715	5.6511	5.5894	5.5879	5.6454	5.6581

**Appendix H1 (continued)**  
**Alternative DRG Weights Computed from Original and Adjusted CCRs**

DRG num	MDC	Case type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights <sup>(1)</sup>	Cost-based weights using FY 2007 rules	Incremental CCR-adjusted cost-based weights:				Individual regression-based adjustments		
								Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone
576	18	MED	SEPTICEMIA W/O MV96+ HOURS AGE >17	243,162	236,420	1.5462	1.5665	1.5643	1.5643	1.5646	1.5384	1.5460	1.5607	1.5608
577	1	SURG	CAROTID ARTERY STENT PROCEDURE	2,431	2,431	1.7265	1.6400	1.6435	1.6428	1.6349	1.6477	1.5908	1.6358	1.6906
578	18	SURG	INFECTIOUS & PARASITIC DISEASES W OR PROCEDURE	30,959	29,449	4.5946	4.5532	4.5762	4.5765	4.5705	4.5038	4.5091	4.5627	4.5728
579	18	SURG	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W OR PROCEDURE	19,311	16,473	2.8990	2.9576	2.9686	2.9686	2.9613	2.9132	2.9197	2.9575	2.9587
Totals All DRGs				11,140,200	10,937,136									
MINIMUM VALUE				1	1	0.1710	0.1927	0.1983	0.1973	0.1956	0.1954	0.195	0.194	0.197
25th percentile				1,448	1,448	0.7068	0.7284	0.7259	0.7257	0.7234	0.7075	0.718	0.723	0.714
MEDIAN				5,113	5,026	1.0549	1.0640	1.0637	1.0641	1.0596	1.0384	1.047	1.059	1.055
75th percentile				19,771	19,092	1.7244	1.6997	1.6990	1.6988	1.6987	1.7244	1.723	1.695	1.702
MAXIMUM VALUE				630,619	618,418	19.2842	18.6317	18.7629	18.7708	18.6944	18.4890	18.454	18.703	18.720

<sup>(1)</sup> Estimates of charge-based weights, constructed using cost-to-charge ratios rather than per-diem costs for inpatient nursing services.

**Appendix H2**  
**Percent Change in DRG Weights Computed from Original and Adjusted CCRs**

DRG	Case MDC	Case type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights <sup>(1)</sup>	Cost-based weights using FY 2007 rules	Incremental percent change from CCR adjustment:				Individual regression-based adjustments		
								Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone
1	1	SURG	CRANIOTOMY AGE >17 W CC	22,263	21,263	3.3974	3.4151	0.2%	0.0%	-0.4%	-1.9%	-0.9%	0.0%	-0.9%
2	1	SURG	CRANIOTOMY AGE >17 W/O CC	9,118	9,072	1.9442	1.9411	0.0%	0.0%	-0.5%	-0.4%	0.3%	0.0%	-0.6%
3	1	SURG *	CRANIOTOMY AGE 0-17	4	4	1.3128	1.4231	1.6%	-0.3%	-0.9%	2.0%	2.1%	0.5%	-0.6%
6	1	SURG	CARPAL TUNNEL RELEASE	303	303	0.7305	0.7608	0.2%	0.0%	-0.6%	-1.3%	-1.2%	0.0%	0.0%
7	1	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W CC	13,863	13,569	2.5473	2.5921	0.2%	0.0%	0.1%	2.0%	1.7%	0.0%	0.4%
8	1	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W/O CC	3,164	3,164	1.6174	1.5395	0.0%	0.0%	-0.5%	8.1%	4.5%	0.0%	3.6%
9	1	MED	SPINAL DISORDERS & INJURIES	1,648	1,608	1.3171	1.3486	-0.2%	-0.1%	0.0%	-2.5%	-0.7%	0.1%	-1.9%
10	1	MED	NERVOUS SYSTEM NEOPLASMS W CC	18,044	17,493	1.2193	1.2321	-0.3%	0.0%	-0.2%	-1.6%	-0.6%	0.0%	-1.0%
11	1	MED	NERVOUS SYSTEM NEOPLASMS W/O CC	2,857	2,812	0.8871	0.8791	-0.4%	0.0%	-0.1%	-3.5%	-0.8%	0.1%	-2.8%
12	1	MED	DEGENERATIVE NERVOUS SYSTEM DISORDERS	51,217	48,978	0.8687	0.9458	-0.3%	-0.1%	0.1%	-1.5%	-0.4%	0.0%	-1.3%
13	1	MED	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA	6,544	6,402	0.7969	0.8422	-0.3%	0.0%	-0.4%	-0.8%	-0.2%	0.4%	-1.0%
14	1	MED	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION	243,794	235,100	1.1885	1.2124	-0.2%	-0.1%	0.5%	-2.6%	-0.7%	-0.1%	-1.8%
15	1	MED	NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT	35,120	34,440	0.9412	0.9536	-0.1%	-0.1%	0.7%	-1.7%	-0.6%	0.0%	-1.0%
16	1	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W CC	15,919	15,312	1.3044	1.3271	-0.1%	-0.1%	0.5%	-2.1%	-0.7%	-0.1%	-1.4%
17	1	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC	2,696	2,683	0.6939	0.6760	-0.5%	-0.1%	0.3%	-3.1%	-0.2%	0.0%	-2.9%
18	1	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W CC	30,391	29,911	0.9713	0.9861	0.0%	-0.1%	0.0%	-0.8%	-0.5%	0.2%	-0.5%
19	1	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W/O CC	7,780	7,750	0.7050	0.6979	-0.3%	-0.1%	0.0%	-0.7%	-0.2%	0.7%	-1.2%
21	1	MED	VIRAL MENINGITIS	2,046	2,040	1.4202	1.3465	-0.5%	0.0%	-0.1%	-2.1%	-0.7%	0.0%	-1.4%
22	1	MED	HYPERTENSIVE ENCEPHALOPATHY	3,002	2,994	1.1037	1.1167	-0.1%	-0.1%	0.5%	-1.9%	-0.6%	0.1%	-1.4%
23	1	MED	NONTRAUMATIC STUPOR & COMA	9,695	9,672	0.7561	0.7665	-0.6%	-0.1%	0.5%	-2.7%	-0.8%	-0.1%	-1.8%
26	1	MED	SEIZURE & HEADACHE AGE 0-17	12	12	1.7486	1.6491	-0.3%	0.0%	-0.5%	0.2%	-0.4%	0.7%	0.0%
27	1	MED	TRAUMATIC STUPOR & COMA, COMA >1 HR	5,372	5,362	1.2710	1.2854	-0.4%	0.0%	-0.1%	-4.0%	-0.7%	-0.1%	-3.2%
28	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W CC	17,681	17,057	1.2932	1.3552	-0.2%	0.0%	0.2%	-3.6%	-0.7%	-0.1%	-2.8%
29	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W/O CC	5,838	5,782	0.7216	0.7642	-0.8%	-0.1%	0.2%	-4.8%	-0.4%	-0.1%	-4.3%
31	1	MED	CONCUSSION AGE >17 W CC	4,435	4,430	0.9051	0.9037	-0.6%	-0.1%	0.2%	-4.2%	-0.5%	0.0%	-3.7%
32	1	MED	CONCUSSION AGE >17 W/O CC	1,599	1,599	0.6120	0.6000	-0.9%	-0.2%	0.1%	-5.3%	-0.200%	0.0%	-5.1%
34	1	MED	OTHER DISORDERS OF NERVOUS SYSTEM W CC	25,029	24,505	0.9604	0.9913	-0.3%	-0.1%	0.2%	-1.7%	-0.5%	0.0%	-1.3%
35	1	MED	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC	7,102	7,058	0.6385	0.6465	-0.5%	-0.1%	0.2%	-1.8%	-0.1%	0.1%	-1.8%
36	2	SURG	RETINAL PROCEDURES	325	325	0.7932	0.7912	0.2%	0.0%	-0.8%	-2.1%	-2.3%	0.2%	0.0%
37	2	SURG	ORBITAL PROCEDURES	1,125	1,125	1.1746	1.1704	-0.1%	0.0%	-0.4%	-1.9%	-0.8%	0.1%	-1.3%
38	2	SURG	PRIMARY IRIS PROCEDURES	47	47	0.5664	0.6269	-0.7%	-0.1%	0.8%	-1.3%	-0.5%	0.3%	-1.0%
39	2	SURG	LENS PROCEDURES WITH OR WITHOUT VITRECTOMY	343	343	0.6740	0.6936	0.2%	-0.1%	-0.3%	-1.3%	-1.7%	0.4%	0.1%
40	2	SURG	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17	1,228	1,228	0.9183	0.9583	-0.1%	0.0%	-0.4%	-0.9%	-0.8%	0.1%	-0.2%
42	2	SURG	INTRAOCULAR PROCEDURES EXCEPT RETINA, IRIS & LENS	1,798	1,798	0.7279	0.7311	-0.1%	0.0%	-0.7%	-1.9%	-1.9%	0.3%	-0.4%
43	2	MED	HYPHEMA	100	100	0.6861	0.7321	-0.7%	0.0%	0.4%	-3.6%	-0.4%	0.1%	-3.3%
44	2	MED	ACUTE MAJOR EYE INFECTIONS	1,136	1,129	0.6698	0.7285	-0.3%	0.0%	-0.6%	-2.1%	-0.3%	0.2%	-1.9%
45	2	MED	NEUROLOGICAL EYE DISORDERS	2,571	2,568	0.7350	0.6954	-0.1%	-0.1%	0.5%	-2.5%	-0.1%	0.1%	-2.5%
46	2	MED	OTHER DISORDERS OF THE EYE AGE >17 W CC	3,654	3,647	0.7468	0.7798	-0.4%	-0.1%	0.0%	-2.4%	-0.4%	0.0%	-2.1%
47	2	MED	OTHER DISORDERS OF THE EYE AGE >17 W/O CC	1,202	1,201	0.5353	0.5545	-0.7%	-0.1%	-0.1%	-2.8%	-0.1%	0.1%	-2.7%
49	3	SURG	MAJOR HEAD & NECK PROCEDURES	2,231	2,231	1.6183	1.6017	0.0%	0.0%	-0.4%	0.0%	0.1%	-0.1%	0.0%
50	3	SURG	SIALOADENECTOMY	1,939	1,939	0.8640	0.8315	0.0%	0.0%	-0.7%	-2.3%	-2.1%	-0.2%	-0.1%
51	3	SURG	SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY	196	196	0.9198	0.9060	-0.1%	0.0%	-0.5%	-2.4%	-1.7%	-0.1%	-0.5%
52	3	SURG	CLEFT LIP & PALATE REPAIR	200	200	0.7318	0.7076	0.0%	0.0%	-0.3%	-2.3%	-2.3%	0.0%	0.1%
53	3	SURG	SINUS & MASTOID PROCEDURES AGE >17	1,918	1,918	1.2937	1.2573	0.1%	0.0%	-0.4%	-2.2%	-1.7%	0.0%	-0.5%
55	3	SURG	MISCELLANEOUS EAR, NOSE, MOUTH & THROAT PROCEDURES	1,226	1,225	0.8912	0.8875	-0.1%	0.0%	-0.4%	-1.6%	-1.4%	0.0%	-0.3%
56	3	SURG	RHINOPLASTY	396	396	0.8836	0.8722	0.0%	0.0%	-0.3%	-1.5%	-1.5%	0.1%	-0.1%
57	3	SURG	T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	673	672	0.9452	0.9231	-0.2%	0.0%	-0.2%	-2.6%	-1.4%	-0.3%	-0.9%
59	3	SURG	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	103	103	0.6509	0.6180	0.0%	0.0%	-0.5%	-2.6%	-1.8%	-0.1%	-0.7%
60	3	SURG *	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0-17	4	4	1.2176	1.1237	0.1%	0.0%	-0.9%	-2.9%	-1.8%	0.6%	-1.7%
61	3	SURG	MYRINGOTOMY W TUBE INSERTION AGE >17	182	182	1.4286	1.4023	0.2%	-0.1%	0.0%	-2.0%	-1.4%	0.3%	-0.9%
62	3	SURG *	MYRINGOTOMY W TUBE INSERTION AGE 0-17	3	3	0.3645	0.3500	0.5%	-0.1%	-0.9%	-1.7%	-1.6%	0.0%	-0.1%
63	3	SURG	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES	2,595	2,592	1.3635	1.3497	-0.1%	0.0%	-0.4%	-0.4%	-0.4%	-0.1%	0.1%

**Appendix H2 (continued)**  
**Percent Change in DRG Weights Computed from Original and Adjusted CCRs**

DRG num	Case MDC type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights	Cost-based weights using FY 2007 rules	Incremental percent change from CCR adjustment:				Individual regression-based adjustments			
							Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone	
64	3	MED	EAR, NOSE, MOUTH & THROAT MALIGNANCY	3,016	3,006	1.1933	1.2034	0.0%	0.0%	-0.4%	-0.5%	-1.0%	-0.1%	0.5%
65	3	MED	DYSEQUILIBRIUM	37,820	37,813	0.6054	0.6036	-0.6%	-0.1%	0.7%	-2.4%	-0.1%	0.0%	-2.3%
66	3	MED	EPISTAXIS	7,492	7,485	0.5803	0.6337	-0.6%	0.1%	0.2%	-0.9%	-1.1%	-0.1%	0.3%
67	3	MED	EPIGLOTTITIS	346	346	0.7559	0.7724	-0.7%	-0.1%	0.0%	-1.4%	-0.8%	-0.2%	-0.5%
68	3	MED	OTITIS MEDIA & URI AGE >17 W CC	15,278	15,269	0.6491	0.6623	-0.7%	-0.1%	-0.1%	-1.5%	-0.9%	0.0%	-0.6%
69	3	MED	OTITIS MEDIA & URI AGE >17 W/O CC	4,091	4,090	0.4919	0.5003	-1.1%	-0.1%	-0.2%	-2.1%	-0.8%	-0.1%	-1.2%
70	3	MED	OTITIS MEDIA & URI AGE 0-17	21	21	0.3917	0.4293	-0.2%	-0.1%	0.8%	-1.1%	-0.4%	0.5%	-1.2%
71	3	MED	LARYNGOTRACHEITIS	55	55	0.6197	0.6471	-0.6%	-0.1%	-0.6%	-1.6%	-1.2%	0.0%	-0.4%
72	3	MED	NASAL TRAUMA & DEFORMITY	1,149	1,149	0.7206	0.7346	-0.9%	0.0%	0.4%	-4.3%	-0.4%	-0.1%	-3.8%
73	3	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE >17	9,048	8,927	0.8392	0.8573	-0.5%	0.0%	0.1%	-2.1%	-0.9%	-0.1%	-1.1%
74	3	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE 0-17	1	1	0.5799	0.6135	3.9%	-0.5%	-0.9%	0.8%	0.5%	0.5%	-0.1%
75	4	SURG	MAJOR CHEST PROCEDURES	42,362	41,441	2.9578	2.9719	0.2%	0.0%	0.2%	-2.4%	-2.8%	0.0%	0.4%
76	4	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W CC	44,411	42,765	2.7320	2.6908	0.2%	0.0%	0.2%	-0.7%	-1.1%	0.1%	0.3%
77	4	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W/O CC	1,954	1,941	1.1719	1.1479	-0.1%	0.0%	0.0%	-1.2%	-1.4%	0.1%	0.1%
78	4	MED	PULMONARY EMBOLISM	44,357	43,181	1.2298	1.2374	-0.1%	-0.1%	0.8%	-1.7%	-0.9%	0.4%	-1.1%
79	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W CC	150,866	142,924	1.6098	1.6483	-0.3%	0.0%	0.1%	-1.7%	-1.6%	-0.1%	0.0%
80	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W/O CC	6,582	6,388	0.8908	0.9438	-0.7%	0.0%	-0.3%	-1.5%	-1.4%	-0.2%	0.0%
81	4	MED *	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE 0-17	2	2	2.0401	1.9874	-0.1%	-0.1%	1.0%	1.6%	0.2%	0.9%	0.4%
82	4	MED	RESPIRATORY NEOPLASMS	58,733	57,559	1.3998	1.3851	-0.2%	0.0%	0.0%	-1.6%	-1.3%	0.3%	-0.6%
83	4	MED	MAJOR CHEST TRAUMA W CC	6,149	5,996	0.9665	1.0051	-0.6%	-0.1%	0.1%	-2.4%	-1.0%	0.1%	-1.4%
84	4	MED	MAJOR CHEST TRAUMA W/O CC	1,150	1,139	0.5750	0.6166	-1.1%	-0.1%	-0.1%	-2.3%	-0.7%	0.1%	-1.7%
85	4	MED	PLEURAL EFFUSION W CC	20,168	19,657	1.2231	1.2361	0.0%	0.0%	0.6%	-1.3%	-1.3%	0.2%	-0.1%
86	4	MED	PLEURAL EFFUSION W/O CC	1,587	1,573	0.6760	0.6800	-0.4%	0.0%	0.3%	-1.6%	-1.2%	0.1%	-0.5%
87	4	MED	PULMONARY EDEMA & RESPIRATORY FAILURE	85,170	84,899	1.3534	1.3550	-0.4%	0.0%	0.5%	-1.2%	-1.5%	0.2%	0.1%
88	4	MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	385,561	385,169	0.8662	0.8799	-0.6%	0.0%	0.3%	-1.1%	-1.5%	0.3%	0.0%
89	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W CC	499,866	489,438	1.0225	1.0451	-0.5%	0.0%	0.2%	-1.4%	-1.4%	0.1%	-0.1%
90	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W/O CC	38,225	37,998	0.6085	0.6319	-0.9%	0.0%	-0.3%	-1.5%	-1.2%	-0.1%	-0.2%
91	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE 0-17	44	44	0.6754	0.6691	0.6%	-0.1%	-0.7%	-1.2%	-1.3%	0.0%	0.1%
92	4	MED	INTERSTITIAL LUNG DISEASE W CC	15,191	14,861	1.1775	1.1945	-0.3%	0.0%	0.6%	-1.5%	-1.3%	0.3%	-0.5%
93	4	MED	INTERSTITIAL LUNG DISEASE W/O CC	1,281	1,273	0.7370	0.7475	-0.6%	0.0%	0.2%	-1.9%	-1.3%	0.2%	-0.8%
94	4	MED	PNEUMOTHORAX W CC	12,426	12,370	1.1275	1.1701	-0.4%	0.0%	0.4%	-1.6%	-1.7%	0.1%	0.1%
95	4	MED	PNEUMOTHORAX W/O CC	1,363	1,360	0.5541	0.5909	-1.0%	-0.1%	0.3%	-1.0%	-1.6%	0.0%	0.6%
96	4	MED	BRONCHITIS & ASTHMA AGE >17 W CC	52,952	52,912	0.7219	0.7370	-0.6%	0.0%	0.2%	-0.9%	-1.2%	0.2%	0.1%
97	4	MED	BRONCHITIS & ASTHMA AGE >17 W/O CC	23,267	23,262	0.5386	0.5549	-0.9%	0.0%	-0.1%	-0.7%	-1.2%	0.3%	0.2%
98	4	MED	BRONCHITIS & ASTHMA AGE 0-17	9	9	0.4990	0.5359	0.0%	-0.1%	-0.9%	0.7%	-0.5%	0.4%	0.7%
99	4	MED	RESPIRATORY SIGNS & SYMPTOMS W CC	19,656	19,628	0.7097	0.6873	-0.6%	-0.1%	0.7%	-0.4%	-0.9%	0.3%	0.2%
100	4	MED	RESPIRATORY SIGNS & SYMPTOMS W/O CC	5,879	5,879	0.5513	0.5125	-1.0%	-0.1%	0.7%	0.5%	-0.7%	0.3%	0.9%
101	4	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W CC	21,122	20,790	0.8461	0.8507	-0.5%	-0.1%	0.4%	-1.2%	-1.1%	0.2%	-0.3%
102	4	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O CC	4,428	4,428	0.5521	0.5414	-1.0%	-0.1%	0.4%	-0.4%	-0.7%	0.3%	0.1%
103	PRE	SURG	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	704	701	16.7008	16.2348	1.2%	0.2%	-0.2%	0.5%	-0.2%	0.5%	0.2%
104	5	SURG	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W CARD CATH	18,986	17,778	8.1572	7.9273	0.7%	0.1%	0.0%	-0.2%	-0.5%	0.1%	0.2%
105	5	SURG	CARDIAC VALVE & OTH MAJOR CARDIOTHORACIC PROC W/O CARD CATH	30,122	28,736	5.9149	5.7923	0.7%	0.1%	-0.1%	-0.2%	-0.5%	0.1%	0.2%
106	5	SURG	CORONARY BYPASS W PTCA	3,115	3,114	6.8897	6.4007	0.6%	0.1%	-0.2%	-2.5%	-2.9%	0.2%	0.2%
108	5	SURG	OTHER CARDIOTHORACIC PROCEDURES	7,850	7,591	5.7413	5.5298	0.7%	0.1%	0.0%	-3.5%	-3.9%	0.1%	0.3%
110	5	SURG	MAJOR CARDIOVASCULAR PROCEDURES W CC	53,032	52,762	3.7893	3.6779	0.5%	0.1%	-0.2%	0.4%	0.0%	-0.1%	0.4%
111	5	SURG	MAJOR CARDIOVASCULAR PROCEDURES W/O CC	9,599	9,587	2.5357	2.5021	0.1%	0.0%	-0.5%	4.3%	3.6%	-0.1%	0.9%
113	5	SURG	AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB & TOE	32,851	27,793	3.2259	3.3531	0.8%	0.0%	-0.2%	-0.9%	-1.5%	0.0%	0.6%
114	5	SURG	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	7,403	6,865	1.6894	1.7768	0.7%	-0.1%	-0.4%	-0.5%	-1.1%	0.0%	0.6%
117	5	SURG	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	4,975	4,969	1.3128	1.3391	0.2%	0.0%	0.7%	1.3%	0.8%	-0.1%	0.6%
118	5	SURG	CARDIAC PACEMAKER DEVICE REPLACEMENT	6,925	6,925	1.6408	1.6971	0.0%	0.0%	0.1%	10.3%	10.2%	-0.1%	0.2%
119	5	SURG	VEIN LIGATION & STRIPPING	923	922	1.3712	1.4094	0.6%	0.0%	-0.3%	-1.3%	-1.9%	0.1%	0.5%
120	5	SURG	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	31,832	30,919	2.2841	2.3660	1.0%	-0.1%	0.2%	-0.7%	-1.2%	0.2%	0.3%

**Appendix H2 (continued)**  
**Percent Change in DRG Weights Computed from Original and Adjusted CCRs**

DRG num	Case MDC type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights	Cost-based weights using FY 2007 rules	Incremental percent change from CCR adjustment:				Individual regression-based adjustments			
							Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone	
121	5	MED	CIRCULATORY DISORDERS W AMI & MAJOR COMP, DISCHARGED ALIVE	139,738	130,470	1.6022	1.6166	-0.3%	0.0%	0.9%	-0.4%	-1.0%	0.3%	0.3%
122	5	MED	CIRCULATORY DISORDERS W AMI W/O MAJOR COMP, DISCHARGED ALIVE	49,041	47,036	1.0095	0.9687	-0.6%	0.0%	0.8%	-0.3%	-1.0%	0.4%	0.3%
123	5	MED	CIRCULATORY DISORDERS W AMI, EXPIRED	28,700	28,700	1.4774	1.4305	-0.3%	0.0%	0.0%	-1.1%	-1.3%	0.1%	0.1%
124	5	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH & COMPLEX DIAG	114,099	112,839	1.4058	1.2758	-0.2%	-0.1%	1.0%	-0.4%	-1.4%	0.3%	0.7%
125	5	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O COMPLEX DIAG	85,712	85,656	1.0988	0.9431	-0.3%	-0.1%	0.7%	-0.3%	-1.5%	0.2%	1.0%
126	5	MED	ACUTE & SUBACUTE ENDOCARDITIS	5,089	4,651	2.6620	2.7371	0.4%	-0.1%	0.4%	-1.0%	-0.8%	-0.1%	-0.1%
127	5	MED	HEART FAILURE & SHOCK	630,619	618,418	1.0089	1.0459	-0.4%	0.0%	1.4%	-0.2%	-1.0%	0.4%	0.4%
128	5	MED	DEEP VEIN THROMBOPHLEBITIS	4,110	4,100	0.7076	0.7861	0.3%	-0.1%	-0.3%	-0.4%	-0.4%	0.4%	-0.4%
129	5	MED	CARDIAC ARREST, UNEXPLAINED	3,263	3,263	1.0086	0.9383	-1.3%	0.0%	-0.6%	-2.0%	-1.3%	-0.1%	-0.5%
130	5	MED	PERIPHERAL VASCULAR DISORDERS W CC	81,469	78,839	0.9269	0.9829	0.3%	-0.1%	-0.1%	-0.2%	-0.7%	0.2%	0.3%
131	5	MED	PERIPHERAL VASCULAR DISORDERS W/O CC	21,156	20,797	0.5536	0.6054	0.2%	-0.1%	-0.2%	0.2%	-0.4%	0.4%	0.3%
132	5	MED	ATHEROSCLEROSIS W CC	95,585	95,028	0.6232	0.6195	-0.9%	0.0%	1.4%	1.6%	-0.6%	0.4%	1.8%
133	5	MED	ATHEROSCLEROSIS W/O CC	5,639	5,639	0.5526	0.5315	-0.9%	-0.1%	1.4%	2.7%	-0.4%	0.4%	2.7%
134	5	MED	HYPERTENSION	37,372	37,353	0.6093	0.6169	-0.7%	-0.1%	1.0%	-0.7%	-0.4%	0.2%	-0.4%
135	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W CC	6,758	6,687	0.8730	0.9065	-0.2%	-0.1%	1.4%	-0.6%	-0.7%	0.2%	-0.1%
136	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W/O CC	899	897	0.6030	0.6215	-0.5%	-0.1%	2.0%	-0.3%	-0.6%	0.1%	0.1%
138	5	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	190,168	189,328	0.8017	0.8235	-0.6%	-0.1%	1.6%	-0.1%	-0.6%	0.2%	0.3%
139	5	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC	68,451	68,451	0.5226	0.5307	-1.0%	-0.1%	1.9%	0.9%	-0.3%	0.2%	0.9%
140	5	MED	ANGINA PECTORIS	29,358	29,358	0.5185	0.5062	-1.0%	0.0%	1.1%	1.8%	-0.7%	0.4%	2.0%
141	5	MED	SYNCOPE & COLLAPSE W CC	114,694	114,571	0.7491	0.7620	-0.4%	-0.1%	1.5%	-1.3%	-0.3%	0.0%	-1.1%
142	5	MED	SYNCOPE & COLLAPSE W/O CC	46,121	46,121	0.5977	0.5975	-0.6%	-0.1%	1.5%	-1.3%	-0.1%	0.0%	-1.2%
143	5	MED	CHEST PAIN	220,210	220,210	0.5737	0.5367	-1.2%	-0.1%	1.4%	2.9%	-0.5%	0.4%	2.9%
144	5	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W CC	93,898	91,790	1.2583	1.2876	0.6%	-0.1%	0.3%	-0.7%	-1.0%	0.2%	0.1%
145	5	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W/O CC	5,127	5,114	0.5913	0.5850	-0.6%	-0.1%	0.7%	-0.1%	-0.7%	0.1%	0.5%
146	6	SURG	RECTAL RESECTION W CC	9,791	9,517	2.6108	2.6580	0.2%	0.0%	-0.3%	-3.6%	-2.8%	-0.6%	-0.2%
147	6	SURG	RECTAL RESECTION W/O CC	2,408	2,390	1.4852	1.5463	0.0%	0.0%	-0.6%	-4.2%	-3.7%	-0.5%	-0.1%
149	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC	18,079	17,989	1.4138	1.4592	0.0%	0.0%	-0.6%	-4.8%	-4.1%	-0.6%	-0.2%
150	6	SURG	PERITONEAL ADHESIOLYSIS W CC	21,274	20,853	2.7338	2.7004	0.0%	0.0%	-0.3%	-2.9%	-1.7%	-0.8%	-0.5%
151	6	SURG	PERITONEAL ADHESIOLYSIS W/O CC	4,869	4,869	1.2903	1.3070	-0.2%	0.0%	-0.2%	-3.5%	-2.1%	-0.6%	-0.7%
152	6	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W CC	4,604	4,601	1.7444	1.7913	0.2%	0.0%	-0.3%	-3.0%	-2.3%	-0.5%	-0.1%
153	6	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC	1,874	1,874	1.0822	1.1356	0.0%	0.0%	-0.7%	-3.8%	-3.0%	-0.6%	-0.1%
155	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W/O CC	5,426	5,417	1.2324	1.2380	0.0%	0.0%	-0.5%	-4.9%	-4.6%	-0.4%	0.1%
156	6	SURG *	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE 0-17	2	2	4.8659	5.1971	4.6%	0.4%	-0.9%	-0.8%	-1.1%	0.6%	-0.2%
157	6	SURG	ANAL & STOMAL PROCEDURES W CC	7,521	7,403	1.3197	1.3321	0.1%	0.0%	-0.3%	-2.3%	-1.6%	-0.3%	-0.4%
158	6	SURG	ANAL & STOMAL PROCEDURES W/O CC	3,435	3,430	0.6723	0.6756	-0.2%	0.0%	-0.7%	-2.8%	-2.1%	-0.4%	-0.4%
159	6	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W CC	17,474	17,471	1.3509	1.3503	0.0%	0.0%	-0.5%	-1.9%	-1.3%	-0.3%	-0.3%
160	6	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W/O CC	10,778	10,778	0.8498	0.8546	-0.1%	0.0%	-0.7%	-2.0%	-1.5%	-0.3%	-0.3%
161	6	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W CC	9,419	9,417	1.1723	1.1841	-0.2%	0.0%	-0.3%	-2.1%	-1.3%	-0.3%	-0.5%
162	6	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W/O CC	4,668	4,668	0.6932	0.6970	-0.4%	0.0%	-0.7%	-2.5%	-1.6%	-0.3%	-0.6%
163	6	SURG *	HERNIA PROCEDURES AGE 0-17	8	8	0.5254	0.5323	0.2%	-0.1%	0.5%	0.2%	-0.4%	0.5%	0.1%
164	6	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC	5,526	5,519	2.1422	2.0619	-0.2%	0.0%	-0.3%	-4.6%	-2.3%	-0.5%	-1.7%
165	6	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	2,224	2,223	1.1947	1.1543	-0.7%	0.0%	-0.6%	-6.3%	-3.1%	-0.5%	-2.7%
166	6	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	4,672	4,672	1.3510	1.2832	-0.4%	0.0%	-0.5%	-6.0%	-3.3%	-0.3%	-2.4%
167	6	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	4,237	4,237	0.9123	0.8523	-0.8%	0.0%	-0.8%	-8.0%	-4.2%	-0.3%	-3.5%
168	3	SURG	MOUTH PROCEDURES W CC	1,496	1,494	1.2671	1.2561	0.0%	0.0%	-0.3%	-1.7%	-1.2%	-0.1%	-0.4%
169	3	SURG	MOUTH PROCEDURES W/O CC	796	796	0.7804	0.7578	-0.1%	0.0%	-0.4%	-2.0%	-1.5%	-0.2%	-0.3%
170	6	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W CC	16,601	16,054	2.8521	2.8478	0.5%	0.0%	-0.2%	-1.1%	-1.3%	-0.2%	0.3%
171	6	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC	1,327	1,322	1.1884	1.1632	-0.1%	0.0%	-0.6%	-2.0%	-2.2%	-0.4%	0.5%
172	6	MED	DIGESTIVE MALIGNANCY W CC	30,562	29,892	1.3797	1.3950	0.1%	0.1%	-0.3%	-1.9%	-0.8%	-0.2%	-0.9%
173	6	MED	DIGESTIVE MALIGNANCY W/O CC	2,112	2,099	0.7488	0.7423	-0.1%	0.0%	-0.5%	-2.3%	-0.8%	-0.1%	-1.5%
174	6	MED	G.I. HEMORRHAGE W CC	237,045	236,471	0.9858	1.0176	0.5%	0.3%	0.3%	-1.3%	-1.0%	-0.2%	0.0%
175	6	MED	G.I. HEMORRHAGE W/O CC	27,532	27,514	0.5653	0.5844	-0.4%	0.1%	0.1%	-1.4%	-0.8%	-0.4%	-0.3%

**Appendix H2 (continued)**  
**Percent Change in DRG Weights Computed from Original and Adjusted CCRs**

DRG num	Case MDC type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights	Cost-based weights using FY 2007 rules	Incremental percent change from CCR adjustment:				Individual regression-based adjustments			
							Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone	
176	6	MED	COMPLICATED PEPTIC ULCER	13,609	13,431	1.0878	1.0849	0.0%	0.1%	0.1%	-1.9%	-1.1%	-0.4%	-0.4%
177	6	MED	UNCOMPLICATED PEPTIC ULCER W CC	7,309	7,305	0.9192	0.8825	-0.2%	0.0%	0.0%	-2.0%	-0.9%	-0.2%	-0.9%
178	6	MED	UNCOMPLICATED PEPTIC ULCER W/O CC	2,419	2,418	0.7123	0.6616	-0.7%	0.0%	0.0%	-2.0%	-0.8%	-0.2%	-0.9%
179	6	MED	INFLAMMATORY BOWEL DISEASE	13,275	13,251	1.0495	1.0617	-0.3%	0.0%	-0.3%	-2.2%	-0.6%	-0.3%	-1.3%
180	6	MED	G.I. OBSTRUCTION W CC	84,287	82,980	0.9493	0.9587	-0.6%	0.0%	-0.3%	-2.5%	-0.8%	-0.6%	-1.1%
181	6	MED	G.I. OBSTRUCTION W/O CC	23,320	23,249	0.5630	0.5751	-1.3%	0.0%	-0.6%	-3.2%	-0.4%	-0.7%	-2.1%
182	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W CC	236,040	235,779	0.7711	0.7606	-0.6%	0.0%	-0.1%	-2.3%	-0.7%	-0.2%	-1.5%
183	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W/O CC	73,354	73,335	0.5894	0.5653	-1.0%	0.0%	-0.2%	-2.8%	-0.5%	-0.2%	-2.2%
184	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE 0-17	51	51	0.7000	0.8083	0.5%	-0.2%	0.1%	0.6%	0.1%	0.4%	0.1%
185	3	MED	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE >17	5,515	5,508	0.8807	0.8894	-0.3%	0.0%	-0.2%	-1.9%	-0.6%	-0.2%	-1.0%
186	3	MED *	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE 0-17	6	6	0.2708	0.3029	-0.4%	0.0%	-0.9%	0.1%	0.2%	-0.2%	0.1%
187	3	MED	DENTAL EXTRACTIONS & RESTORATIONS	541	541	0.8614	0.8984	0.1%	0.0%	0.0%	-1.2%	-0.8%	0.1%	-0.4%
188	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W CC	80,123	78,476	1.0503	1.0636	-0.2%	0.0%	-0.1%	-2.3%	-1.0%	-0.4%	-0.9%
189	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W/O CC	11,347	11,291	0.5883	0.5930	-0.8%	0.0%	-0.4%	-3.0%	-0.7%	-0.4%	-1.9%
190	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 0-17	7	7	0.5907	0.6517	0.9%	-0.1%	-0.9%	-2.8%	-1.4%	-0.4%	-1.0%
191	7	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W CC	9,540	9,372	3.7551	3.6690	0.5%	0.1%	-0.3%	-2.2%	-2.0%	-0.3%	0.0%
192	7	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W/O CC	1,193	1,187	1.6944	1.6795	0.1%	0.0%	-0.5%	-3.4%	-3.1%	-0.3%	0.0%
193	7	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W CC	3,886	3,878	3.2257	3.1880	0.2%	0.0%	-0.3%	-2.4%	-2.0%	-0.5%	0.1%
194	7	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W/O CC	409	408	1.6191	1.6147	0.0%	0.0%	-0.6%	-2.7%	-2.7%	-0.4%	0.3%
195	7	SURG	CHOLECYSTECTOMY W C.D.E. W CC	2,722	2,714	2.9580	2.8793	0.0%	0.0%	-0.2%	-2.7%	-2.5%	-0.5%	0.3%
196	7	SURG	CHOLECYSTECTOMY W C.D.E. W/O CC	563	562	1.5951	1.5686	-0.1%	0.0%	-0.6%	-3.4%	-3.7%	-0.4%	0.7%
197	7	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W CC	15,394	15,119	2.4851	2.4328	0.0%	0.0%	-0.2%	-2.9%	-2.4%	-0.4%	-0.1%
198	7	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W/O CC	3,809	3,800	1.1721	1.1658	-0.2%	0.0%	-0.6%	-3.8%	-3.5%	-0.4%	0.1%
199	7	SURG	HEPATOBIILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY	1,320	1,317	2.2157	2.1967	0.2%	0.0%	-0.4%	-2.6%	-2.1%	-0.4%	-0.1%
200	7	SURG	HEPATOBIILIARY DIAGNOSTIC PROCEDURE FOR NON-MALIGNANCY	889	883	2.5762	2.4973	0.4%	0.1%	-0.3%	-2.5%	-1.8%	-0.3%	-0.3%
201	7	SURG	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES	2,425	2,417	3.6107	3.5534	0.6%	0.0%	-0.2%	-1.3%	-1.2%	-0.4%	0.2%
202	7	MED	CIRRHOISIS & ALCOHOLIC HEPATITIS	25,340	25,227	1.2870	1.2987	0.4%	0.2%	-0.1%	-1.0%	-0.9%	0.0%	-0.1%
203	7	MED	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS	29,760	29,638	1.3413	1.3304	0.0%	0.0%	-0.4%	-2.0%	-0.9%	-0.1%	-0.9%
204	7	MED	DISORDERS OF PANCREAS EXCEPT MALIGNANCY	64,155	63,849	1.0554	1.0173	-0.5%	0.0%	-0.2%	-2.8%	-0.8%	-0.5%	-1.5%
205	7	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA W CC	29,252	28,593	1.1621	1.1740	0.0%	0.0%	0.0%	-1.5%	-0.8%	-0.1%	-0.7%
206	7	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA W/O CC	1,804	1,793	0.7394	0.7186	-0.4%	0.0%	-0.6%	-2.5%	-0.6%	-0.2%	-1.7%
207	7	MED	DISORDERS OF THE BILIARY TRACT W CC	34,462	33,971	1.1688	1.1261	-0.3%	0.0%	-0.1%	-1.7%	-1.3%	-0.2%	-0.2%
208	7	MED	DISORDERS OF THE BILIARY TRACT W/O CC	8,603	8,575	0.7135	0.6689	-0.7%	0.0%	-0.4%	-1.7%	-1.5%	-0.3%	0.1%
210	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W CC	119,159	114,810	1.8147	1.8651	0.0%	0.1%	-0.5%	0.6%	0.0%	-0.2%	0.7%
211	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W/O CC	24,192	23,825	1.2665	1.3230	-0.3%	0.1%	-0.7%	0.9%	0.2%	-0.2%	0.9%
212	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 0-17	5	5	1.3451	1.4153	0.5%	-0.1%	-0.1%	0.1%	-0.3%	0.2%	0.3%
213	8	SURG	AMPUTATION FOR MUSCULOSKELETAL SYSTEM & CONN TISSUE DISORDERS	9,150	8,295	2.0610	2.1449	0.6%	0.0%	-0.5%	-1.2%	-1.5%	0.0%	0.3%
216	8	SURG	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	18,014	17,726	1.8323	1.8247	0.0%	0.0%	-0.6%	-4.0%	-4.2%	0.0%	0.2%
217	8	SURG	WND DEBRID & SKN GRFT EXCEPT HAND,FOR MUSCULET & CONN TISS DIS	14,956	13,437	2.9869	3.1216	0.4%	0.0%	-0.4%	-0.9%	-1.1%	0.0%	0.3%
218	8	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR AGE >17 W CC	27,359	26,406	1.6298	1.6528	-0.1%	0.0%	-0.5%	0.6%	0.2%	-0.1%	0.5%
219	8	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR AGE >17 W/O CC	19,101	18,955	1.0777	1.0969	-0.4%	0.0%	-0.8%	1.1%	0.4%	-0.2%	0.8%
223	8	SURG	MAJOR SHOULDER/ELBOW PROC, OR OTHER UPPER EXTREMITY PROC W CC	12,053	12,052	1.1210	1.1171	-0.2%	0.0%	-0.6%	-0.4%	-0.5%	-0.1%	0.3%
224	8	SURG	SHOULDER,ELBOW OR FOREARM PROC,EXC MAJOR JOINT PROC, W/O CC	9,247	9,247	0.8454	0.8353	-0.3%	0.0%	-0.8%	-0.6%	-1.0%	-0.2%	0.5%
225	8	SURG	FOOT PROCEDURES	5,855	5,735	1.1875	1.2269	0.2%	0.0%	-0.6%	-0.5%	-0.9%	-0.1%	0.5%
226	8	SURG	SOFT TISSUE PROCEDURES W CC	6,199	5,992	1.5399	1.5591	0.2%	0.0%	-0.5%	-1.4%	-1.2%	0.0%	-0.1%
227	8	SURG	SOFT TISSUE PROCEDURES W/O CC	4,468	4,459	0.8414	0.8519	-0.1%	0.0%	-0.8%	-1.4%	-1.3%	-0.2%	0.1%
228	8	SURG	MAJOR THUMB OR JOINT PROC,OR OTH HAND OR WRIST PROC W CC	2,388	2,387	1.0829	1.0906	-0.1%	0.0%	-0.6%	0.0%	-0.1%	-0.1%	0.2%
229	8	SURG	HAND OR WRIST PROC, EXCEPT MAJOR JOINT PROC, W/O CC	996	996	0.6994	0.7061	-0.6%	0.0%	-0.8%	-1.0%	-1.2%	-0.3%	0.5%
230	8	SURG	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES OF HIP & FEMUR	2,325	2,324	1.3064	1.3298	0.3%	0.0%	-0.6%	-1.1%	-1.5%	-0.1%	0.5%
232	8	SURG	ARTHROSCOPY	540	540	0.9658	0.9688	0.0%	0.0%	-0.5%	-2.5%	-2.5%	-0.2%	0.1%
233	8	SURG	OTHER MUSCULOSKELETAL SYS & CONN TISS O.R. PROC W CC	16,227	16,004	1.8171	1.8298	0.1%	0.0%	-0.4%	-1.8%	-2.1%	0.0%	0.3%
234	8	SURG	OTHER MUSCULOSKELETAL SYS & CONN TISS O.R. PROC W/O CC	7,937	7,937	1.2402	1.2421	0.0%	0.0%	-0.8%	-2.6%	-3.0%	-0.1%	0.5%

**Appendix H2 (continued)**  
**Percent Change in DRG Weights Computed from Original and Adjusted CCRs**

DRG num	Case MDC	Case type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights	Cost-based weights using FY 2007 rules	Incremental percent change from CCR adjustment:				Individual regression-based adjustments		
								Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone
235	8	MED	FRACTURES OF FEMUR	4,473	4,218	0.7524	0.8305	-0.4%	0.0%	-0.5%	-0.2%	-1.0%	0.0%	0.7%
236	8	MED	FRACTURES OF HIP & PELVIS	38,224	36,530	0.7155	0.7867	-0.6%	0.0%	-0.4%	-0.9%	-0.7%	0.1%	-0.3%
237	8	MED	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH	1,745	1,744	0.6156	0.6731	-0.8%	-0.1%	-0.6%	-0.4%	-0.4%	0.1%	-0.1%
238	8	MED	OSTEOMYELITIS	8,936	8,250	1.3973	1.4880	0.2%	-0.1%	-0.5%	-0.1%	-0.8%	0.1%	0.6%
239	8	MED	PATHOLOGICAL FRACTURES & MUSCULOSKELETAL & CONN TISS MALIGNANCY	38,354	36,556	1.0632	1.1153	-0.3%	0.0%	-0.4%	-0.3%	-0.6%	0.2%	0.0%
240	8	MED	CONNECTIVE TISSUE DISORDERS W CC	11,713	11,429	1.3171	1.3317	0.7%	0.1%	-0.1%	-0.6%	-0.6%	0.3%	-0.3%
241	8	MED	CONNECTIVE TISSUE DISORDERS W/O CC	2,522	2,509	0.6524	0.6676	-0.2%	0.0%	-0.4%	0.2%	-0.2%	0.6%	-0.3%
242	8	MED	SEPTIC ARTHRITIS	2,494	2,453	1.1003	1.1528	0.0%	0.0%	-0.4%	-0.3%	-0.7%	0.0%	0.4%
243	8	MED	MEDICAL BACK PROBLEMS	93,055	92,854	0.7582	0.7971	-0.5%	-0.1%	-0.3%	-1.3%	-0.4%	0.2%	-1.0%
244	8	MED	BONE DISEASES & SPECIFIC ARTHROPATHIES W CC	15,368	15,126	0.7010	0.7683	-0.3%	-0.1%	-0.3%	0.2%	-0.3%	0.1%	0.4%
245	8	MED	BONE DISEASES & SPECIFIC ARTHROPATHIES W/O CC	5,303	5,275	0.4547	0.5145	-0.6%	-0.1%	-0.5%	0.4%	-0.1%	0.1%	0.5%
246	8	MED	NON-SPECIFIC ARTHROPATHIES	1,240	1,239	0.5942	0.6208	-0.4%	-0.1%	0.0%	0.3%	-0.3%	0.2%	0.4%
247	8	MED	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE	19,555	19,545	0.5764	0.6022	-0.5%	-0.1%	-0.2%	-0.4%	-0.3%	0.2%	-0.3%
248	8	MED	TENDONITIS, MYOSITIS & BURSITIS	14,725	14,695	0.8445	0.8892	-0.4%	-0.1%	0.1%	-1.1%	-0.5%	-0.1%	-0.5%
249	8	MED	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	12,544	12,496	0.6844	0.7405	-0.6%	0.0%	-0.6%	0.2%	-1.0%	0.0%	1.1%
250	8	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W CC	3,828	3,750	0.6723	0.7206	-0.8%	-0.1%	-0.2%	-0.7%	-0.6%	0.1%	-0.2%
251	8	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W/O CC	1,837	1,822	0.4809	0.5201	-1.3%	-0.1%	-0.4%	-0.6%	-0.4%	0.0%	-0.1%
253	8	MED	FX, SPRN, STRN & DISL OF UPARM,LOWLEG EX FOOT AGE >17 W CC	23,076	22,353	0.7520	0.8189	-0.6%	0.0%	-0.2%	-0.6%	-0.7%	0.1%	0.0%
254	8	MED	FX, SPRN, STRN & DISL OF UPARM,LOWLEG EX FOOT AGE >17 W/O CC	9,312	9,165	0.4682	0.5373	-1.2%	-0.1%	-0.5%	-0.1%	-0.4%	0.1%	0.3%
256	8	MED	OTHER MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE DIAGNOSES	6,749	6,571	0.8050	0.8612	-0.1%	-0.1%	-0.4%	-0.9%	-0.7%	0.0%	-0.2%
257	9	SURG	TOTAL MASTECTOMY FOR MALIGNANCY W CC	12,362	12,362	0.8815	0.8526	0.1%	0.0%	-0.7%	-2.4%	-2.5%	-0.2%	0.3%
258	9	SURG	TOTAL MASTECTOMY FOR MALIGNANCY W/O CC	10,604	10,604	0.7176	0.6839	0.0%	0.0%	-0.8%	-2.3%	-2.6%	-0.2%	0.5%
259	9	SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY W CC	2,575	2,575	0.9568	0.9113	0.1%	0.0%	-0.6%	-1.0%	-1.8%	0.0%	0.9%
260	9	SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY W/O CC	2,492	2,492	0.6948	0.6433	0.1%	0.0%	-0.8%	-1.1%	-2.6%	-0.1%	1.6%
261	9	SURG	BREAST PROC FOR NON-MALIGNANCY EXCEPT BIOPSY & LOCAL EXCISION	1,427	1,427	0.9248	0.8999	0.1%	0.0%	-0.7%	-1.9%	-1.7%	-0.2%	0.0%
262	9	SURG	BREAST BIOPSY & LOCAL EXCISION FOR NON-MALIGNANCY	574	574	0.9330	0.9489	0.1%	0.0%	-0.6%	-1.0%	-1.3%	-0.1%	0.4%
263	9	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W CC	21,013	18,772	2.0123	2.1643	0.3%	0.0%	-0.5%	-1.4%	-1.5%	-0.1%	0.2%
264	9	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W/O CC	3,553	3,370	1.0578	1.1379	0.0%	0.0%	-0.8%	-1.9%	-1.7%	-0.3%	0.1%
265	9	SURG	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W CC	3,813	3,671	1.5081	1.5683	0.2%	0.0%	-0.4%	-1.7%	-1.6%	0.0%	0.0%
266	9	SURG	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W/O CC	2,054	2,043	0.8703	0.8860	0.0%	0.0%	-0.7%	-1.7%	-1.7%	-0.1%	0.1%
267	9	SURG	PERIANAL & PILONIDAL PROCEDURES	251	251	0.8743	0.8917	0.1%	0.0%	-0.4%	-2.3%	-1.8%	-0.2%	-0.3%
268	9	SURG	SKIN, SUBCUTANEOUS TISSUE & BREAST PLASTIC PROCEDURES	908	908	1.1375	1.1264	0.3%	0.0%	-0.5%	-2.4%	-2.1%	-0.1%	-0.1%
269	9	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W CC	10,043	9,530	1.7238	1.7706	0.3%	0.0%	-0.4%	-1.3%	-1.4%	-0.1%	0.2%
270	9	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W/O CC	2,362	2,334	0.8201	0.8316	-0.1%	0.0%	-0.7%	-1.9%	-1.5%	-0.3%	-0.1%
271	9	MED	SKIN ULCERS	19,600	18,284	1.0084	1.1078	0.1%	-0.1%	-0.5%	-0.9%	-1.1%	-0.1%	0.4%
272	9	MED	MAJOR SKIN DISORDERS W CC	5,593	5,479	0.9598	1.0182	-0.2%	0.0%	-0.2%	-1.0%	-0.7%	0.1%	-0.4%
273	9	MED	MAJOR SKIN DISORDERS W/O CC	1,203	1,197	0.5803	0.6172	-0.6%	-0.1%	-0.3%	-0.9%	-0.3%	0.2%	-0.8%
274	9	MED	MALIGNANT BREAST DISORDERS W CC	2,046	2,042	1.1008	1.1218	-0.1%	0.0%	-0.3%	-1.4%	-0.8%	0.2%	-0.8%
275	9	MED	MALIGNANT BREAST DISORDERS W/O CC	169	169	0.5514	0.5648	-0.3%	0.0%	-0.4%	-1.5%	-0.5%	0.3%	-1.3%
276	9	MED	NON-MALIGNANT BREAST DISORDERS	1,426	1,425	0.6986	0.7487	-0.2%	-0.1%	-0.4%	-0.5%	-0.7%	-0.1%	0.3%
277	9	MED	CELLULITIS AGE >17 W CC	107,912	105,132	0.8476	0.9256	-0.1%	-0.1%	-0.4%	-0.6%	-0.7%	0.0%	0.1%
278	9	MED	CELLULITIS AGE >17 W/O CC	30,874	30,599	0.5373	0.6053	-0.3%	-0.1%	-0.7%	-0.6%	-0.4%	-0.3%	0.0%
279	9	MED *	CELLULITIS AGE 0-17	3	3	0.4567	0.4720	1.3%	-0.4%	-0.9%	1.1%	0.1%	0.4%	0.5%
280	9	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W CC	17,614	17,245	0.7249	0.7721	-0.4%	0.0%	-0.1%	-1.8%	-0.6%	0.0%	-1.3%
281	9	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W/O CC	5,851	5,805	0.5031	0.5426	-1.1%	-0.1%	-0.3%	-2.0%	-0.3%	0.0%	-1.7%
283	9	MED	MINOR SKIN DISORDERS W CC	6,022	5,920	0.7111	0.7648	-0.3%	-0.1%	-0.1%	-0.7%	-0.6%	0.2%	-0.3%
284	9	MED	MINOR SKIN DISORDERS W/O CC	1,643	1,637	0.4561	0.5011	-0.8%	-0.1%	-0.3%	-0.8%	-0.4%	0.1%	-0.5%
285	10	SURG	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DISORDERS	7,358	6,774	2.1172	2.2146	0.5%	-0.1%	-0.4%	-0.4%	-1.1%	0.0%	0.7%
286	10	SURG	ADRENAL & PITUITARY PROCEDURES	2,466	2,466	1.8424	1.8042	0.2%	0.0%	-0.4%	-2.7%	-2.4%	-0.1%	-0.2%
287	10	SURG	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DISORDERS	5,150	4,738	1.8818	2.0307	0.3%	-0.1%	-0.3%	-0.6%	-1.1%	0.0%	0.5%
288	10	SURG	O.R. PROCEDURES FOR OBESITY	9,913	9,913	1.8895	1.8478	0.0%	0.0%	-0.6%	-6.4%	-6.5%	-0.1%	0.2%
289	10	SURG	PARATHYROID PROCEDURES	6,051	6,051	0.8742	0.8253	0.2%	0.0%	-0.5%	-1.9%	-2.1%	-0.1%	0.3%

**Appendix H2 (continued)**  
**Percent Change in DRG Weights Computed from Original and Adjusted CCRs**

DRG num	Case MDC type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights	Cost-based weights using FY 2007 rules	Incremental percent change from CCR adjustment:				Individual regression-based adjustments			
							Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone	
290	10	SURG	THYROID PROCEDURES	10,776	10,776	0.8463	0.8099	0.0%	0.0%	-0.6%	-2.9%	-2.8%	-0.1%	0.0%
291	10	SURG	THYROID PROCEDURES	50	50	0.6371	0.6234	0.0%	0.0%	0.0%	-2.0%	-1.8%	-0.1%	-0.1%
292	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W CC	6,848	6,599	2.5699	2.6242	0.6%	-0.1%	-0.1%	-0.3%	-1.1%	0.0%	0.8%
293	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W/O CC	307	305	1.4234	1.4051	0.1%	0.0%	-0.4%	-0.4%	-1.5%	-0.1%	1.2%
294	10	MED	DIABETES AGE >35	88,637	87,097	0.7450	0.7909	-0.6%	-0.1%	0.2%	-1.0%	-0.6%	-0.1%	-0.2%
295	10	MED	DIABETES AGE 0-35	3,752	3,747	0.7091	0.7217	-0.8%	-0.1%	-0.1%	-0.9%	-0.6%	-0.3%	0.0%
296	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W CC	228,622	224,394	0.7906	0.8326	-0.4%	0.0%	0.1%	-1.5%	-0.7%	-0.3%	-0.5%
297	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W/O CC	39,075	38,846	0.4888	0.5214	-1.0%	0.0%	0.0%	-1.9%	-0.4%	-0.5%	-1.0%
298	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE 0-17	86	86	0.5775	0.6831	1.1%	-0.3%	-0.5%	0.2%	-0.1%	0.2%	0.1%
299	10	MED	INBORN ERRORS OF METABOLISM	1,280	1,279	1.0737	1.0227	-0.1%	0.0%	0.0%	0.3%	-0.5%	1.2%	-0.3%
300	10	MED	ENDOCRINE DISORDERS W CC	20,114	19,659	1.0607	1.0962	-0.3%	0.0%	0.5%	-1.4%	-0.6%	0.0%	-0.8%
301	10	MED	ENDOCRINE DISORDERS W/O CC	3,502	3,492	0.6110	0.6181	-0.6%	0.0%	0.4%	0.4%	-0.2%	0.3%	0.4%
302	11	SURG	KIDNEY TRANSPLANT	8,398	8,396	3.0741	2.8376	0.7%	0.0%	-0.4%	0.5%	-1.2%	1.1%	0.5%
303	11	SURG	KIDNEY AND URETER PROCEDURES FOR NEOPLASM	18,225	18,220	1.8741	1.8823	0.3%	0.0%	-0.4%	-3.3%	-3.2%	-0.3%	0.2%
304	11	SURG	KIDNEY AND URETER PROCEDURES FOR NON-NEOPLASM WITHOUT CC	12,477	12,151	2.2617	2.2660	0.6%	0.0%	-0.3%	-1.4%	-2.1%	-0.1%	0.8%
305	11	SURG	KIDNEY AND URETER PROCEDURES FOR NON-NEOPLASM WITHOUT CC	2,594	2,584	1.1405	1.1154	0.2%	0.0%	-0.7%	-3.5%	-4.3%	-0.3%	1.1%
306	11	SURG	PROSTATECTOMY W CC	5,534	5,533	1.2671	1.3106	0.1%	0.0%	-0.3%	-2.6%	-2.0%	-0.5%	-0.1%
307	11	SURG	PROSTATECTOMY W/O CC	1,855	1,855	0.6291	0.6260	0.0%	0.0%	-0.8%	-4.3%	-3.4%	-0.8%	-0.1%
308	11	SURG	MINOR BLADDER PROCEDURES W CC	5,125	5,122	1.3468	1.3769	0.1%	0.0%	-0.5%	-1.4%	-0.9%	-0.4%	-0.1%
309	11	SURG	MINOR BLADDER PROCEDURES W/O CC	2,869	2,869	0.8885	0.8838	-0.1%	0.0%	-0.8%	1.5%	1.9%	-0.3%	-0.1%
310	11	SURG	TRANSURETHRAL PROCEDURES W CC	23,959	23,954	1.1538	1.1557	0.0%	0.0%	-0.4%	-3.0%	-1.9%	-0.3%	-0.7%
311	11	SURG	TRANSURETHRAL PROCEDURES W/O CC	5,616	5,616	0.6482	0.6346	-0.1%	0.0%	-0.8%	-4.0%	-2.9%	-0.4%	-0.7%
312	11	SURG	URETHRAL PROCEDURES, AGE >17 W CC	1,276	1,275	1.1090	1.1333	0.0%	0.0%	-0.4%	-2.0%	-1.6%	-0.2%	-0.2%
313	11	SURG	URETHRAL PROCEDURES, AGE >17 W/O CC	488	488	0.7074	0.7086	0.0%	0.0%	-0.8%	-2.4%	-2.0%	-0.4%	0.0%
315	11	SURG	OTHER KIDNEY & URINARY TRACT O.R. PROCEDURES	32,551	32,542	2.0037	2.0172	1.0%	-0.1%	-0.1%	0.9%	-0.7%	0.1%	1.5%
316	11	MED	RENAL FAILURE	182,854	178,136	1.2227	1.2696	0.3%	-0.1%	0.4%	-0.7%	-0.9%	0.0%	0.2%
317	11	MED	ADMIT FOR RENAL DIALYSIS	2,366	2,365	0.7981	0.8209	2.9%	-0.4%	-0.3%	-0.3%	-1.1%	0.2%	0.6%
318	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W CC	5,493	5,465	1.1522	1.1622	0.0%	0.1%	-0.3%	-2.1%	-0.9%	-0.1%	-1.0%
319	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W/O CC	358	358	0.6313	0.6089	0.0%	0.0%	-0.7%	-2.7%	-1.4%	-0.2%	-1.1%
320	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W CC	206,671	201,058	0.8429	0.8886	-0.6%	0.0%	-0.1%	-1.8%	-0.9%	-0.3%	-0.6%
321	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W/O CC	28,834	28,627	0.5609	0.5922	-1.0%	0.0%	-0.4%	-2.1%	-0.5%	-0.3%	-1.2%
322	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE 0-17	48	48	0.6238	0.6100	-0.2%	-0.1%	-0.6%	-0.7%	-0.3%	-0.3%	-0.1%
323	11	MED	URINARY STONES W CC, &/OR ESW LITHOTRIPSY	18,754	18,736	0.8162	0.7878	-0.2%	-0.1%	-0.5%	-3.7%	-1.0%	-0.3%	-2.4%
324	11	MED	URINARY STONES W/O CC	4,214	4,214	0.5155	0.4868	-1.0%	-0.1%	-0.7%	-5.5%	-1.3%	-0.5%	-3.7%
325	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W CC	9,078	9,064	0.6464	0.6929	-0.5%	0.1%	-0.2%	-2.2%	-0.9%	-0.2%	-1.0%
326	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W/O CC	2,425	2,424	0.4454	0.4783	-0.9%	0.0%	-0.6%	-3.0%	-0.8%	-0.4%	-1.9%
327	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE 0-17	6	6	0.2291	0.2146	-1.0%	0.0%	-0.9%	3.1%	-0.8%	1.9%	2.0%
328	11	MED	URETHRAL STRICTURE AGE >17 W CC	547	547	0.6972	0.7129	-0.4%	0.0%	-0.6%	-2.2%	-1.5%	-0.3%	-0.4%
329	11	MED	URETHRAL STRICTURE AGE >17 W/O CC	53	53	0.4778	0.4856	-0.5%	0.0%	-0.6%	-1.3%	-2.1%	-0.2%	1.0%
331	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W CC	50,499	49,427	1.0415	1.0679	0.2%	0.0%	0.0%	-0.9%	-0.9%	0.1%	-0.1%
332	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W/O CC	3,517	3,503	0.5995	0.5985	-0.2%	0.0%	-0.3%	-1.0%	-0.8%	0.1%	-0.2%
333	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 0-17	213	212	0.8616	0.8750	0.9%	-0.1%	-0.1%	1.2%	-0.1%	0.8%	0.6%
334	12	SURG	MAJOR MALE PELVIC PROCEDURES W CC	8,590	8,589	1.3629	1.3383	0.3%	0.1%	-0.6%	-3.8%	-3.2%	-0.5%	0.0%
335	12	SURG	MAJOR MALE PELVIC PROCEDURES W/O CC	10,870	10,870	1.1034	1.0644	0.1%	0.0%	-0.8%	-4.6%	-4.1%	-0.5%	0.0%
336	12	SURG	TRANSURETHRAL PROSTATECTOMY W CC	27,394	27,391	0.8111	0.8210	0.1%	0.0%	-0.6%	-3.5%	-2.7%	-0.7%	0.0%
337	12	SURG	TRANSURETHRAL PROSTATECTOMY W/O CC	20,734	20,734	0.5813	0.5799	0.0%	0.0%	-0.8%	-4.3%	-3.4%	-0.9%	0.0%
338	12	SURG	TESTES PROCEDURES, FOR MALIGNANCY	624	624	1.3856	1.3725	0.2%	0.1%	-0.4%	-1.9%	-1.5%	-0.3%	-0.1%
339	12	SURG	TESTES PROCEDURES, NON-MALIGNANCY AGE >17	1,147	1,146	1.1722	1.1856	0.0%	0.0%	-0.5%	-2.0%	-1.5%	-0.5%	-0.1%
341	12	SURG	PENIS PROCEDURES	2,889	2,889	1.2451	1.2469	0.0%	0.0%	-0.7%	3.8%	4.2%	-0.3%	-0.1%
342	12	SURG	CIRCUMCISION AGE >17	428	428	0.7501	0.7510	-0.1%	0.0%	-0.7%	-3.1%	-2.4%	-0.7%	0.0%
344	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY	2,241	2,241	1.1995	1.0832	0.1%	0.0%	-0.7%	5.7%	0.1%	-0.2%	5.7%
345	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIGNANCY	1,281	1,281	1.0990	1.1201	0.0%	0.0%	-0.5%	-2.7%	-1.9%	-0.5%	-0.3%

**Appendix H2 (continued)**  
**Percent Change in DRG Weights Computed from Original and Adjusted CCRs**

DRG num	Case MDC type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights	Cost-based weights using FY 2007 rules	Incremental percent change from CCR adjustment:				Individual regression-based adjustments			
							Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone	
346	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W CC	3,643	3,635	1.0544	1.0898	0.0%	0.1%	-0.3%	-1.0%	-0.8%	0.0%	-0.2%
347	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W/O CC	200	200	0.5670	0.5611	-0.1%	0.0%	-0.6%	0.1%	-1.0%	0.1%	1.0%
348	12	MED	BENIGN PROSTATIC HYPERTROPHY W CC	3,890	3,886	0.7079	0.7514	-0.6%	0.0%	-0.3%	-2.0%	-0.9%	-0.3%	-0.8%
349	12	MED	BENIGN PROSTATIC HYPERTROPHY W/O CC	493	493	0.4264	0.4593	-0.6%	0.0%	-0.5%	-1.8%	-0.8%	-0.3%	-0.8%
350	12	MED	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM	6,524	6,515	0.7402	0.7671	-0.5%	0.0%	-0.5%	-1.4%	-0.7%	-0.2%	-0.4%
352	12	MED	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES	1,001	998	0.7212	0.7440	-0.2%	0.0%	-0.3%	-1.9%	-1.0%	-0.3%	-0.6%
353	13	SURG	PELVIC EVISCERATION, RADICAL HYSTERECTOMY & RADICAL VULVECTOMY	2,675	2,675	1.6590	1.6561	0.3%	0.1%	-0.6%	-2.6%	-2.0%	-0.5%	0.0%
354	13	SURG	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W CC	7,108	7,106	1.4106	1.4215	0.2%	0.0%	-0.5%	-2.3%	-2.0%	-0.3%	-0.1%
355	13	SURG	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W/O CC	4,540	4,540	0.8797	0.8775	0.0%	0.0%	-0.8%	-3.2%	-2.9%	-0.3%	-0.1%
356	13	SURG	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	20,604	20,604	0.7489	0.7328	0.0%	0.0%	-0.8%	-1.5%	-1.1%	-0.3%	0.0%
357	13	SURG	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY	5,100	5,098	2.0906	2.0668	0.4%	0.1%	-0.5%	-2.5%	-2.0%	-0.4%	-0.1%
358	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W CC	18,981	18,978	1.0904	1.0758	0.1%	0.0%	-0.6%	-2.8%	-2.4%	-0.3%	-0.1%
359	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC	25,835	25,835	0.8065	0.7924	0.0%	0.0%	-0.8%	-3.2%	-2.8%	-0.3%	-0.1%
360	13	SURG	VAGINA, CERVIX & VULVA PROCEDURES	12,936	12,936	0.8339	0.8176	0.0%	0.0%	-0.8%	-1.5%	-1.1%	-0.3%	-0.1%
361	13	SURG	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	240	240	1.1781	1.1415	0.1%	0.0%	-0.8%	-3.8%	-3.3%	-0.2%	-0.2%
363	13	SURG	D&C, CONIZATION & RADIO-IMPLANT, FOR MALIGNANCY	2,034	2,033	1.0124	0.9685	0.1%	0.1%	-0.6%	3.8%	-0.8%	0.0%	4.6%
364	13	SURG	D&C, CONIZATION EXCEPT FOR MALIGNANCY	1,722	1,722	0.8544	0.8741	0.0%	0.1%	-0.5%	-1.6%	-1.1%	-0.1%	-0.3%
365	13	SURG	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES	1,468	1,465	1.9159	1.8897	0.2%	0.0%	-0.6%	-2.4%	-1.8%	-0.4%	-0.2%
366	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W CC	4,223	4,172	1.1815	1.1816	0.0%	0.1%	-0.5%	-1.4%	-0.8%	0.0%	-0.7%
367	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC	365	364	0.5678	0.5719	-0.4%	0.0%	-0.5%	-1.7%	-0.4%	-0.4%	-0.9%
368	13	MED	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM	3,778	3,768	1.1289	1.1600	-0.3%	0.0%	-0.2%	-2.1%	-1.0%	-0.1%	-0.9%
369	13	MED	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS	3,285	3,281	0.6338	0.6459	-0.3%	0.0%	-0.4%	-1.5%	-0.5%	-0.1%	-0.9%
370	14	SURG	CESAREAN SECTION W CC	1,810	1,809	0.7962	0.9538	0.4%	0.0%	-0.7%	-1.4%	-1.2%	-0.3%	0.1%
371	14	SURG	CESAREAN SECTION W/O CC	2,242	2,241	0.5954	0.7382	0.1%	0.0%	-0.8%	-2.0%	-1.6%	-0.4%	0.0%
372	14	MED	VAGINAL DELIVERY W COMPLICATING DIAGNOSES	1,163	1,163	0.4793	0.5883	0.4%	-0.1%	-0.8%	-1.1%	-0.9%	-0.3%	0.1%
373	14	MED	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	4,595	4,595	0.3509	0.4500	0.2%	-0.1%	-0.8%	-1.5%	-1.1%	-0.4%	0.0%
374	14	SURG	VAGINAL DELIVERY W STERILIZATION &/OR D&C	113	113	0.6095	0.7283	0.3%	0.0%	-0.9%	-1.0%	-1.0%	-0.1%	0.1%
375	14	SURG	VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL &/OR D&C	9	9	1.4021	1.5951	0.7%	0.0%	-0.4%	-0.5%	-1.3%	-0.2%	1.0%
376	14	MED	POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE	395	395	0.5484	0.5642	-0.5%	0.0%	-0.4%	-1.6%	-0.6%	-0.1%	-0.9%
377	14	SURG	POSTPARTUM & POST ABORTION DIAGNOSES W O.R. PROCEDURE	95	95	1.2460	1.2376	0.0%	0.0%	-0.7%	-1.7%	-0.4%	-0.4%	-0.9%
378	14	MED	ECTOPIC PREGNANCY	179	179	0.7306	0.7220	-0.6%	0.1%	-0.7%	-2.6%	-3.1%	-0.4%	0.9%
379	14	MED	THREATENED ABORTION	471	471	0.3612	0.4158	0.9%	-0.2%	-0.6%	0.4%	-0.2%	-0.6%	1.3%
380	14	MED	ABORTION W/O D&C	90	90	0.4000	0.4038	-0.5%	0.0%	-0.6%	0.6%	-0.6%	0.2%	1.0%
381	14	SURG	ABORTION W D&C, ASPIRATION CURETTAGE OR HYSTEROTOMY	156	156	0.6491	0.6275	-0.3%	0.0%	-0.4%	-0.7%	-1.3%	-0.3%	0.9%
382	14	MED	FALSE LABOR	39	39	0.1710	0.1927	2.9%	-0.5%	-0.9%	-0.1%	-0.2%	-0.7%	0.8%
383	14	MED	OTHER ANTEPARTUM DIAGNOSES W MEDICAL COMPLICATIONS	2,290	2,283	0.4679	0.5256	0.1%	-0.1%	-0.4%	0.1%	-0.4%	-0.4%	0.9%
384	14	MED	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	121	121	0.3021	0.3321	0.6%	-0.1%	-0.5%	-0.2%	-0.8%	-0.7%	1.3%
392	16	SURG	SPLENECTOMY AGE >17	1,985	1,980	2.9349	2.8010	0.9%	0.3%	-0.4%	-2.8%	-2.6%	0.3%	-0.5%
394	16	SURG	OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS	2,541	2,540	1.7715	1.7858	0.6%	0.1%	-0.1%	-1.1%	-1.2%	0.2%	0.0%
395	16	MED	RED BLOOD CELL DISORDERS AGE >17	91,202	89,702	0.7564	0.7837	0.8%	0.4%	0.0%	-1.1%	-0.8%	0.0%	-0.2%
396	16	MED	RED BLOOD CELL DISORDERS AGE 0-17	11	11	0.4504	0.4189	2.3%	-0.1%	-0.9%	-1.5%	-0.6%	1.6%	-2.5%
397	16	MED	COAGULATION DISORDERS	15,508	15,455	1.2713	1.2240	1.0%	0.4%	-0.1%	0.4%	-0.5%	1.3%	-0.5%
398	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W CC	6,043	6,020	1.0899	1.0886	0.2%	0.1%	0.0%	-1.9%	-0.7%	0.1%	-1.2%
399	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC	989	987	0.6526	0.6448	-0.3%	0.1%	-0.1%	-2.6%	-0.3%	0.2%	-2.5%
401	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W CC	6,001	5,831	2.8962	2.8057	0.5%	0.1%	-0.3%	-0.8%	-0.7%	0.4%	-0.5%
402	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W/O CC	1,309	1,299	1.1354	1.0725	0.0%	0.0%	-0.6%	-2.2%	-1.1%	0.2%	-1.3%
403	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W CC	29,455	28,579	1.7922	1.7636	0.8%	0.2%	-0.2%	-0.5%	-0.6%	0.5%	-0.4%
404	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC	3,427	3,403	0.9146	0.8941	0.4%	0.1%	-0.5%	-0.8%	-0.4%	0.7%	-0.8%
406	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W CC	2,102	2,100	2.6609	2.6295	0.4%	0.1%	-0.3%	-2.3%	-1.9%	-0.3%	0.0%
407	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W/O CC	554	554	1.1712	1.1612	0.1%	0.0%	-0.5%	-2.5%	-2.3%	-0.3%	0.1%
408	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R.PROC	1,905	1,904	2.1763	2.0769	0.4%	0.1%	-0.5%	0.2%	-0.8%	0.3%	0.6%
409	17	MED	RADIOTHERAPY	1,613	1,612	1.1725	1.1804	0.1%	0.0%	-0.7%	6.8%	-0.3%	0.5%	6.6%

**Appendix H2 (continued)**  
**Percent Change in DRG Weights Computed from Original and Adjusted CCRs**

DRG num	Case MDC	Case type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights	Cost-based weights using FY 2007 rules	Incremental percent change from CCR adjustment:				Individual regression-based adjustments		
								Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone
410	17	MED	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS	26,485	26,483	1.0904	0.9604	0.2%	0.0%	-0.7%	3.4%	-0.3%	2.4%	1.3%
411	17	MED *	HISTORY OF MALIGNANCY W/O ENDOSCOPY	4	4	0.3302	0.2684	0.2%	-0.1%	-0.9%	-4.7%	-0.5%	0.6%	-4.7%
412	17	MED *	HISTORY OF MALIGNANCY W ENDOSCOPY	12	12	0.7748	0.8370	0.0%	0.0%	1.6%	-0.3%	-0.8%	0.3%	0.3%
413	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W CC	5,145	5,112	1.3149	1.3172	0.0%	0.0%	-0.3%	-1.8%	-0.9%	0.0%	-0.9%
414	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC	444	442	0.7482	0.7596	-0.2%	0.0%	-0.3%	-2.6%	-0.6%	0.2%	-2.2%
417	18	MED	SEPTICEMIA AGE 0-17	29	29	0.9306	0.9403	0.9%	-0.2%	-0.7%	0.3%	-0.9%	0.5%	0.6%
418	18	MED	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS	27,021	25,833	1.0629	1.1226	0.0%	0.0%	-0.2%	-1.8%	-0.9%	-0.1%	-0.8%
419	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W CC	15,598	15,549	0.8273	0.8309	-0.2%	0.0%	-0.2%	-1.4%	-0.5%	0.0%	-0.9%
420	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W/O CC	2,655	2,653	0.5989	0.6032	-0.8%	0.0%	-0.4%	-2.2%	-0.4%	-0.2%	-1.6%
421	18	MED	VIRAL ILLNESS AGE >17	11,059	11,056	0.7247	0.7295	-0.6%	0.0%	-0.1%	-1.4%	-0.5%	0.0%	-0.8%
422	18	MED	VIRAL ILLNESS & FEVER OF UNKNOWN ORIGIN AGE 0-17	53	53	0.4461	0.4753	0.5%	-0.2%	-0.4%	0.9%	-0.2%	0.9%	0.2%
423	18	MED	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES	8,177	7,958	1.7783	1.7564	0.3%	0.0%	-0.1%	-1.1%	-1.0%	0.2%	-0.4%
424	19	SURG	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	951	948	2.0284	2.1633	0.3%	-0.1%	-0.3%	0.5%	0.6%	0.0%	-0.1%
425	19	MED	ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	12,335	12,319	0.6110	0.6225	-0.7%	-0.1%	0.2%	-1.5%	-0.4%	0.1%	-1.2%
426	19	MED	DEPRESSIVE NEUROSES	3,758	3,753	0.4680	0.5680	-0.5%	-0.1%	-0.5%	-0.3%	0.0%	0.2%	-0.5%
427	19	MED	NEUROSES EXCEPT DEPRESSIVE	1,313	1,313	0.5126	0.6241	-0.5%	-0.1%	-0.5%	-0.1%	0.1%	0.2%	-0.4%
428	19	MED	DISORDERS OF PERSONALITY & IMPULSE CONTROL	739	736	0.6368	0.8510	0.0%	-0.1%	-0.7%	0.0%	0.1%	0.2%	-0.3%
429	19	MED	ORGANIC DISTURBANCES & MENTAL RETARDATION	22,299	21,248	0.7858	0.8816	-0.4%	-0.1%	0.0%	-1.8%	-0.3%	0.0%	-1.5%
430	19	MED	PSYCHOSES	66,511	64,507	0.6385	0.8775	-0.2%	-0.1%	-0.7%	0.3%	0.3%	0.3%	-0.3%
431	19	MED	CHILDHOOD MENTAL DISORDERS	296	295	0.5264	0.6770	-0.3%	-0.1%	-0.7%	0.1%	0.2%	0.5%	-0.6%
432	19	MED	OTHER MENTAL DISORDER DIAGNOSES	363	363	0.6029	0.6654	-0.4%	-0.1%	-0.2%	-1.2%	-0.1%	0.0%	-1.0%
433	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA	4,444	4,444	0.2875	0.3530	-0.9%	0.0%	-0.4%	-0.3%	0.1%	0.1%	-0.5%
439	21	SURG	SKIN GRAFTS FOR INJURIES	1,554	1,553	1.7313	1.8124	0.3%	0.0%	-0.4%	-1.5%	-1.6%	0.0%	0.0%
440	21	SURG	WOUND DEBRIDEMENTS FOR INJURIES	4,770	4,463	1.7145	1.7961	0.3%	0.0%	-0.4%	-1.8%	-1.7%	-0.1%	0.0%
441	21	SURG	HAND PROCEDURES FOR INJURIES	688	688	0.9158	0.9108	-0.5%	0.0%	-0.7%	-1.4%	-1.5%	-0.1%	0.2%
442	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W CC	16,814	16,221	2.4466	2.4338	0.6%	0.0%	-0.3%	-1.6%	-1.4%	-0.2%	0.0%
443	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W/O CC	3,181	3,159	1.0065	1.0125	0.0%	0.0%	-0.6%	-1.4%	-1.3%	-0.3%	0.2%
444	21	MED	TRAUMATIC INJURY AGE >17 W CC	5,449	5,344	0.7374	0.7707	-0.5%	-0.1%	0.0%	-2.2%	-0.6%	0.0%	-1.6%
445	21	MED	TRAUMATIC INJURY AGE >17 W/O CC	1,960	1,950	0.5009	0.5295	-1.0%	-0.1%	-0.2%	-2.6%	-0.4%	0.0%	-2.2%
447	21	MED	ALLERGIC REACTIONS AGE >17	5,681	5,681	0.5260	0.5563	-1.4%	-0.1%	0.3%	-0.7%	-0.8%	0.2%	-0.1%
449	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W CC	36,276	36,183	0.8402	0.8505	-0.9%	0.0%	0.1%	-1.4%	-0.8%	0.0%	-0.6%
450	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W/O CC	6,679	6,679	0.4398	0.4548	-1.8%	-0.1%	0.1%	-1.4%	-0.6%	-0.1%	-0.8%
452	21	MED	COMPLICATIONS OF TREATMENT W CC	25,763	25,664	0.9984	1.0234	0.5%	0.0%	-0.1%	-1.6%	-1.1%	-0.1%	-0.4%
453	21	MED	COMPLICATIONS OF TREATMENT W/O CC	4,893	4,892	0.5072	0.5315	-0.4%	0.0%	-0.3%	-2.2%	-1.2%	-0.3%	-0.7%
454	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W CC	3,784	3,779	0.7816	0.8082	-0.6%	0.0%	0.3%	-1.9%	-0.8%	-0.2%	-1.0%
455	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W/O CC	741	741	0.4660	0.4812	-1.0%	-0.1%	0.1%	-2.4%	-0.3%	-0.1%	-1.9%
461	23	SURG	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES	2,196	2,196	1.3718	1.3965	0.3%	0.0%	-0.4%	-0.4%	-0.5%	-0.1%	0.1%
462	23	MED	REHABILITATION	3,104	2,910	0.8786	1.2522	0.4%	-0.1%	-0.8%	0.3%	0.1%	0.2%	0.0%
463	23	MED	SIGNS & SYMPTOMS W CC	29,814	29,282	0.6884	0.7175	-0.4%	-0.1%	0.2%	-1.7%	-0.6%	0.0%	-1.2%
464	23	MED	SIGNS & SYMPTOMS W/O CC	6,935	6,872	0.5196	0.5394	-0.7%	-0.1%	0.1%	-2.1%	-0.3%	0.0%	-1.8%
465	23	MED	AFTERCARE W HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	144	144	0.5111	0.5439	0.3%	-0.1%	-0.2%	-0.3%	-0.7%	0.2%	0.1%
466	23	MED	AFTERCARE W/O HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	968	967	0.5742	0.6040	0.2%	0.0%	0.3%	-0.4%	-1.0%	0.1%	0.5%
467	23	MED	OTHER FACTORS INFLUENCING HEALTH STATUS	867	867	0.4654	0.4779	-0.5%	0.0%	-0.3%	-1.2%	-0.7%	-0.1%	-0.4%
468		SURG	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	47,282	44,743	3.9530	3.9385	0.3%	0.0%	0.1%	0.3%	0.3%	-0.1%	0.1%
470		**	UNGROUPABLE	19	19	0.8871	0.9261	-2.2%	2.1%	-0.9%	-3.3%	-2.3%	-0.7%	-0.3%
471	8	SURG	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY	13,947	13,617	2.9889	3.0926	0.2%	0.1%	-0.8%	6.0%	6.1%	-0.1%	0.0%
473	17	MED	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE >17	7,873	7,667	3.2949	3.2103	2.0%	0.6%	-0.5%	0.0%	-0.5%	0.6%	-0.1%
476		SURG	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	2,800	2,795	2.1198	2.2453	0.0%	0.0%	0.2%	-1.9%	-1.7%	-0.2%	-0.1%
477		SURG	NON-EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	26,528	25,897	2.0079	2.0188	0.2%	0.0%	0.1%	-1.6%	-1.4%	0.0%	-0.2%
479	5	SURG	OTHER VASCULAR PROCEDURES W/O CC	24,654	24,653	1.4564	1.3891	0.2%	0.0%	-0.4%	2.1%	-1.4%	0.0%	3.5%
480	PRE	SURG	LIVER TRANSPLANT AND/OR INTESTINAL TRANSPLANT	994	994	8.4004	7.7956	2.2%	0.5%	-0.6%	-1.0%	-1.6%	0.4%	0.3%
481	PRE	SURG	BONE MARROW TRANSPLANT	1,078	1,078	6.0545	6.1928	1.5%	0.4%	0.1%	0.9%	0.0%	0.7%	0.2%

**Appendix H2 (continued)**  
**Percent Change in DRG Weights Computed from Original and Adjusted CCRs**

DRG num	Case MDC type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights	Cost-based weights using FY 2007 rules	Incremental percent change from CCR adjustment:				Individual regression-based adjustments			
							Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone	
482	PRE	SURG	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES	4,629	4,155	3.3255	3.3950	0.1%	0.0%	-0.1%	-1.7%	-1.9%	0.0%	0.2%
484	24	SURG	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	411	409	5.2972	5.1225	0.3%	0.1%	-0.6%	-2.1%	-0.7%	-0.1%	-1.4%
485	24	SURG	LIMB REATTACHMENT, HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	3,399	2,987	3.4277	3.4260	0.2%	0.1%	-0.4%	-0.2%	0.2%	-0.1%	-0.2%
486	24	SURG	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	2,286	2,271	4.6941	4.5310	0.6%	0.1%	-0.5%	-1.7%	-0.9%	0.0%	-0.8%
487	24	MED	OTHER MULTIPLE SIGNIFICANT TRAUMA	4,340	4,142	1.8700	1.8615	0.0%	0.0%	-0.1%	-3.7%	-1.1%	-0.1%	-2.6%
488	25	SURG	HIV W EXTENSIVE O.R. PROCEDURE	743	742	4.7841	4.6718	0.7%	0.0%	-0.3%	-0.7%	-0.8%	0.3%	-0.2%
489	25	MED	HIV W MAJOR RELATED CONDITION	12,470	12,442	1.7762	1.7593	0.1%	0.0%	-0.3%	-0.7%	-0.6%	0.3%	-0.4%
490	25	MED	HIV W OR W/O OTHER RELATED CONDITION	4,603	4,596	0.9885	0.9987	0.0%	0.0%	-0.4%	-0.9%	-0.4%	0.2%	-0.8%
491	8	SURG	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF UPPER EXTREMITY	20,270	20,269	1.6831	1.6969	0.0%	0.0%	-0.8%	4.8%	4.9%	-0.1%	0.1%
492	17	MED	CHEMOTHERAPY W ACUTE LEUKEMIA OR W USE OF HI DOSE CHEMOAGENT	3,561	3,560	3.5322	3.3536	1.8%	0.5%	-0.6%	1.3%	-0.2%	1.3%	0.2%
493	7	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W CC	56,599	56,553	1.7873	1.7078	-0.2%	0.0%	-0.3%	-3.5%	-3.3%	-0.3%	0.1%
494	7	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC	22,834	22,833	1.0447	0.9931	-0.4%	0.0%	-0.6%	-4.7%	-4.7%	-0.3%	0.4%
495	PRE	SURG	LUNG TRANSPLANT	300	300	8.0358	7.3665	0.4%	0.1%	-0.1%	-0.8%	-2.3%	0.9%	0.5%
496	8	SURG	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	3,099	3,095	6.3799	6.4598	0.2%	0.0%	-0.7%	7.5%	7.5%	-0.1%	0.1%
497	8	SURG	SPINAL FUSION EXCEPT CERVICAL W CC	27,685	27,311	3.7234	3.7616	0.1%	0.0%	-0.7%	7.5%	7.5%	-0.1%	0.1%
498	8	SURG	SPINAL FUSION EXCEPT CERVICAL W/O CC	18,685	18,627	2.9275	2.9635	0.0%	0.0%	-0.8%	8.5%	8.4%	-0.1%	0.2%
499	8	SURG	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W CC	33,081	33,077	1.3317	1.3273	0.1%	0.0%	-0.6%	-1.7%	-1.9%	0.0%	0.2%
500	8	SURG	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W/O CC	43,738	43,738	0.9036	0.8809	0.0%	0.0%	-0.8%	-2.1%	-2.5%	-0.1%	0.5%
501	8	SURG	KNEE PROCEDURES W PDX OF INFECTION W CC	2,997	2,703	2.5990	2.6184	0.4%	0.0%	-0.5%	-0.9%	-1.2%	0.0%	0.3%
502	8	SURG	KNEE PROCEDURES W PDX OF INFECTION W/O CC	701	678	1.4031	1.4242	0.0%	0.0%	-0.8%	-1.3%	-1.5%	-0.2%	0.4%
503	8	SURG	KNEE PROCEDURES W/O PDX OF INFECTION	5,321	5,321	1.1770	1.2029	0.0%	0.0%	-0.7%	-0.5%	-0.5%	-0.1%	0.1%
504	22	SURG	EXTEN. BURNS OR FULL THICKNESS BURN W/MV 96+HRS W/SKIN GFT	172	172	10.6712	10.9962	0.6%	0.0%	-0.7%	-1.6%	-2.1%	0.3%	0.2%
505	22	MED	EXTEN. BURNS OR FULL THICKNESS BURN W/MV 96+HRS W/O SKIN GFT	157	157	2.5244	2.5839	0.3%	0.0%	-0.8%	-1.6%	-2.1%	0.3%	0.2%
506	22	SURG	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W CC OR SIG TRAUMA	863	863	3.6135	4.0693	0.4%	0.0%	-0.4%	-1.6%	-1.9%	0.2%	0.0%
507	22	SURG	FULL THICKNESS BURN W SKIN GRFT OR INHAL INJ W/O CC OR SIG TRAUMA	274	274	1.8180	2.1141	0.3%	-0.1%	-0.6%	-2.0%	-2.1%	0.1%	0.0%
508	22	MED	FULL THICKNESS BURN W/O SKIN GRFT OR INHAL INJ W CC OR SIG TRAUMA	609	597	1.2630	1.4312	0.1%	0.0%	-0.4%	-1.4%	-1.3%	-0.1%	0.0%
509	22	MED	FULL THICKNESS BURN W/O SKIN GRFT OR INH INJ W/O CC OR SIG TRAUMA	137	136	0.8346	1.0297	-0.5%	0.0%	-0.6%	-1.3%	-1.3%	-0.1%	0.1%
510	22	MED	NON-EXTENSIVE BURNS W CC OR SIGNIFICANT TRAUMA	1,615	1,607	1.1445	1.2803	-0.1%	0.0%	-0.4%	-1.2%	-1.3%	0.1%	0.1%
511	22	MED	NON-EXTENSIVE BURNS W/O CC OR SIGNIFICANT TRAUMA	558	556	0.6447	0.7745	-0.3%	-0.1%	-0.4%	-1.5%	-1.5%	0.0%	-0.1%
512	PRE	SURG	SIMULTANEOUS PANCREAS/KIDNEY TRANSPLANT	402	402	5.5755	5.0080	0.7%	0.1%	-0.6%	-0.8%	-1.5%	0.5%	0.2%
513	PRE	SURG	PANCREAS TRANSPLANT	195	195	4.1876	3.8242	0.5%	0.1%	-0.6%	-0.2%	-1.4%	1.0%	0.2%
515	5	SURG	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH	49,586	49,571	5.3230	5.3784	0.0%	0.0%	-0.5%	15.3%	15.2%	0.0%	0.2%
518	5	SURG	PERC CARDIO PROC W/O CORONARY ARTERY STENT OR AMI	22,359	22,338	1.6999	1.4633	0.0%	0.0%	0.1%	-4.2%	-4.5%	0.1%	0.2%
519	8	SURG	CERVICAL SPINAL FUSION W CC	11,057	11,055	2.4971	2.4874	0.1%	0.0%	-0.6%	4.6%	4.6%	0.0%	0.1%
520	8	SURG	CERVICAL SPINAL FUSION W/O CC	14,632	14,632	1.7400	1.7122	0.0%	0.0%	-0.8%	6.2%	6.0%	-0.1%	0.3%
521	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE W CC	29,416	28,724	0.6614	0.7526	-0.5%	-0.1%	-0.1%	-1.1%	-0.3%	0.0%	-0.9%
522	20	MED	ALC/DRUG ABUSE OR DEPEND W REHABILITATION THERAPY W/O CC	4,965	4,898	0.4526	0.6895	0.0%	0.0%	-0.8%	0.5%	0.4%	0.2%	-0.1%
523	20	MED	ALC/DRUG ABUSE OR DEPEND W/O REHABILITATION THERAPY W/O CC	14,026	14,002	0.3739	0.4749	-0.6%	-0.1%	-0.5%	-0.4%	0.1%	0.1%	-0.6%
524	1	MED	TRANSIENT ISCHEMIA	103,634	103,580	0.7280	0.7178	-0.2%	-0.2%	0.8%	-2.7%	-0.3%	0.1%	-2.5%
525	5	SURG	OTHER HEART ASSIST SYSTEM IMPLANT	243	233	11.9662	11.5361	1.5%	0.3%	-0.6%	-1.6%	-1.8%	0.1%	0.1%
528	1	SURG	INTRACRANIAL VASCULAR PROC W PDX HEMORRHAGE	1,641	1,632	6.9385	6.8084	0.5%	-0.1%	-0.6%	0.4%	-0.8%	0.1%	1.1%
529	1	SURG	VENTRICULAR SHUNT PROCEDURES W CC	4,345	4,078	2.1290	2.1949	0.0%	0.0%	-0.3%	-0.6%	0.2%	-0.1%	-0.8%
530	1	SURG	VENTRICULAR SHUNT PROCEDURES W/O CC	2,853	2,828	1.2148	1.2296	-0.1%	0.0%	-0.6%	0.7%	1.5%	-0.1%	-0.7%
531	1	SURG	SPINAL PROCEDURES W CC	4,564	4,405	3.1122	3.1089	0.3%	0.0%	-0.4%	0.6%	0.8%	0.1%	-0.3%
532	1	SURG	SPINAL PROCEDURES W/O CC	2,483	2,477	1.4222	1.4358	0.1%	0.0%	-0.6%	1.6%	1.7%	0.0%	0.0%
533	1	SURG	EXTRACRANIAL PROCEDURES W CC	42,395	42,393	1.4979	1.4498	0.2%	0.0%	-0.1%	-1.1%	-1.9%	-0.1%	0.9%
534	1	SURG	EXTRACRANIAL PROCEDURES W/O CC	38,873	38,873	0.9989	0.9516	0.1%	0.0%	-0.4%	-1.7%	-2.5%	-0.2%	1.0%
535	5	SURG	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK	7,634	7,631	7.6067	7.5517	0.0%	0.0%	-0.2%	11.0%	10.7%	0.1%	0.2%
536	5	SURG	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK	7,523	7,521	6.6402	6.5491	0.0%	0.0%	-0.3%	11.6%	11.4%	0.0%	0.2%
537	8	SURG	LOCAL EXCIS & REMOV OF INT FIX DEV EXCEPT HIP & FEMUR W CC	8,196	7,925	1.7808	1.7981	0.2%	0.0%	-0.6%	-0.9%	-1.2%	0.0%	0.3%
538	8	SURG	LOCAL EXCIS & REMOV OF INT FIX DEV EXCEPT HIP & FEMUR W/O CC	4,862	4,855	1.0013	0.9960	0.1%	0.0%	-0.8%	-1.2%	-1.4%	-0.1%	0.3%
539	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR OR PROCEDURE W CC	4,666	4,662	3.0942	3.0032	0.5%	0.1%	-0.3%	-1.9%	-1.5%	-0.1%	-0.3%

**Appendix H2 (continued)**  
**Percent Change in DRG Weights Computed from Original and Adjusted CCRs**

DRG num	Case MDC type	DRG name	Case count	Transfer-adjusted count (see note)	Charge-based weights	Cost-based weights using FY 2007 rules	Incremental percent change from CCR adjustment:				Individual regression-based adjustments			
							Separate emergency	Plus: Separate blood	Plus: Reclassify intermediate care	Plus: regression adjustments (all)	Devices alone	IV solutions alone	CT/MRI alone	
540	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR OR PROCEDURE W/O CC	1,455	1,455	1.1718	1.1491	0.0%	0.0%	-0.6%	-2.7%	-2.3%	-0.1%	-0.4%
541	PRE	SURG	ECMO OR TRACH W MV 96+HRS OR PDX EXC FACE, MOUTH & NECK W MAJ O.R.	21,643	18,969	19.2842	18.6317	0.7%	0.0%	-0.4%	-1.1%	-1.3%	0.0%	0.1%
542	PRE	SURG	TRACH W MV 96+HRS OR PDX EXC FACE, MOUTH & NECK W/O MAJ O.R.	21,116	17,634	12.8086	12.5970	0.3%	0.0%	-0.3%	-0.9%	-1.2%	0.1%	0.2%
543	1	SURG	CRANIOTOMY W MAJOR DEVICE IMPLANT OR ACUTE COMPLEX CNS PRINCIPAL DIAG	5,219	5,083	4.3439	4.2739	0.1%	0.0%	-0.4%	-1.6%	-0.9%	0.1%	-0.8%
544	8	SURG	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	404,171	400,129	1.9671	2.0311	0.1%	0.0%	-0.7%	3.9%	3.9%	-0.1%	0.1%
545	8	SURG	REVISION OF HIP OR KNEE REPLACEMENT	40,723	39,909	2.5291	2.5914	0.2%	0.1%	-0.8%	4.7%	4.7%	-0.1%	0.2%
546	8	SURG	SPINAL FUSION EXC CERV WITH CURVATURE OF THE SPINE OR MALIG	2,095	2,085	5.3445	5.3894	0.3%	0.0%	-0.6%	7.2%	7.2%	-0.1%	0.1%
547	5	SURG	CORONARY BYPASS W CARDIAC CATH W MAJOR CV DX	30,935	27,986	6.4779	6.1414	0.6%	0.1%	0.1%	-3.0%	-3.4%	0.1%	0.3%
548	5	SURG	CORONARY BYPASS W CARDIAC CATH W/O MAJOR CV DX	30,209	25,947	5.3070	4.9906	0.5%	0.1%	0.1%	-3.8%	-4.2%	0.0%	0.4%
549	5	SURG	CORONARY BYPASS W/O CARDIAC CATH W MAJOR CV DX	12,558	11,152	5.3929	5.2496	0.7%	0.1%	0.1%	-3.1%	-3.5%	0.1%	0.3%
550	5	SURG	CORONARY BYPASS W/O CARDIAC CATH W/O MAJOR CV DX	32,049	26,817	4.1791	4.0372	0.6%	0.1%	0.0%	-4.2%	-4.5%	0.0%	0.3%
551	5	SURG	PERMANENT CARDIAC PACEMAKER IMPL W MAJ CV DX OR AICD LEAD OR GNRTR	51,370	48,858	3.1745	3.2406	0.0%	0.0%	0.2%	8.4%	8.1%	0.0%	0.3%
552	5	SURG	OTHER PERMANENT CARDIAC PACEMAKER IMPLANT W/O MAJOR CV DX	77,491	77,386	2.0715	2.1075	-0.1%	0.0%	0.1%	10.4%	10.1%	-0.1%	0.4%
553	5	SURG	OTHER VASCULAR PROCEDURES W CC W MAJOR CV DX	36,701	36,112	2.9168	2.9107	0.7%	-0.1%	0.1%	0.4%	-1.3%	0.1%	1.5%
554	5	SURG	OTHER VASCULAR PROCEDURES W CC W/O MAJOR CV DX	71,370	69,979	2.0674	2.0443	0.6%	-0.1%	-0.3%	0.9%	-1.4%	0.1%	2.3%
555	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W MAJOR CV DX	41,449	41,413	2.3676	2.1326	0.0%	0.1%	0.1%	-0.8%	-1.4%	0.3%	0.2%
556	5	SURG	PERCUTANEOUS CARDIOVASC PROC W NON-DRUG-ELUTING STENT W/O MAJ CV DX	23,685	23,685	1.8959	1.6043	0.0%	0.0%	-0.2%	1.1%	0.4%	0.3%	0.3%
557	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W MAJOR CV D	108,286	108,249	2.8395	2.5613	-0.1%	0.0%	-0.1%	3.6%	3.2%	0.3%	0.1%
558	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROC W DRUG-ELUTING STENT W/O MAJ CV DX	170,167	170,167	2.1946	1.9089	-0.1%	0.0%	-0.3%	5.0%	4.6%	0.3%	0.2%
559	1	MED	ACUTE ISCHEMIC STROKE WITH USE OF THROMBOLYTIC AGENT	2,401	2,360	2.2264	2.1887	-0.3%	-0.1%	0.0%	-1.1%	-0.8%	0.7%	-1.0%
560	1	MED	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM	3,173	2,918	3.0346	2.8491	0.4%	0.0%	-0.1%	-0.5%	-0.6%	0.9%	-0.8%
561	1	MED	NON-BACTERIAL INFECTIONS OF NERVOUS SYSTEM EXCEPT VIRAL MENINGITIS	2,632	2,464	2.4140	2.3421	0.0%	0.0%	-0.1%	-1.6%	-0.7%	0.1%	-0.9%
562	1	MED	SEIZURE AGE > 17 W CC	49,210	48,276	1.0095	1.0297	-0.5%	-0.1%	0.5%	-2.1%	-0.6%	0.0%	-1.4%
563	1	MED	SEIZURE AGE > 17 W/O CC	19,540	19,434	0.6267	0.6399	-0.8%	-0.1%	0.6%	-2.2%	-0.2%	0.0%	-2.0%
564	1	MED	HEADACHES AGE >17	14,652	14,537	0.6927	0.6769	-0.6%	-0.1%	0.0%	-2.5%	-0.3%	0.1%	-2.3%
565	4	MED	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT 96+ HOURS	41,790	41,410	5.0661	4.9314	0.1%	0.0%	-0.3%	-0.8%	-1.2%	0.1%	0.2%
566	4	MED	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT < 96 HOURS	63,900	60,757	2.4204	2.3401	-0.3%	0.0%	-0.1%	-1.1%	-1.4%	0.1%	0.1%
567	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROC AGE > 17 W CC W MAJOR GI DX	9,947	9,752	5.0122	4.8303	0.5%	0.1%	-0.2%	-2.6%	-1.8%	-0.6%	-0.2%
568	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES PROC AGE > 17 W CC W/O MA	15,552	15,084	3.3092	3.2944	0.2%	0.0%	-0.2%	-2.9%	-2.6%	-0.4%	0.1%
569	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC W MAJOR GI DX	56,829	55,565	4.1757	4.0669	0.2%	0.1%	-0.3%	-3.3%	-2.1%	-0.7%	-0.4%
570	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC W/O MAJOR GI DX	67,586	65,039	2.6372	2.6524	0.2%	0.0%	-0.3%	-3.6%	-2.8%	-0.6%	-0.2%
571	6	MED	MAJOR ESOPHAGEAL DISORDERS	10,239	10,205	1.0681	1.0687	0.1%	0.2%	0.1%	-1.4%	-1.1%	-0.3%	-0.1%
572	8	MED	MAJOR GASTROINTESTINAL DISORDERS AND PERITONEAL INFECTIONS	42,874	42,788	1.2345	1.3018	-0.1%	0.0%	-0.1%	-1.9%	-0.7%	-0.2%	-1.0%
573	11	SURG	MAJOR BLADDER PROCEDURES	6,194	6,192	3.0541	3.0601	0.4%	0.1%	-0.4%	-3.1%	-2.6%	-0.5%	0.0%
574	16	MED	MAJOR HEMATOLOGIC/IMMUNOLOGIC DIAG EXC SICKLE CELL CRISIS & COAGUL	24,402	24,262	1.2229	1.1992	1.0%	0.4%	-0.3%	-0.2%	-0.5%	0.6%	-0.3%
575	18	MED	SEPTICEMIA W MV96+ HOURS AGE >17	8,808	8,794	5.9281	5.6475	0.4%	0.0%	-0.4%	-1.1%	-1.1%	-0.1%	0.1%
576	18	MED	SEPTICEMIA W/O MV96+ HOURS AGE >17	243,162	236,420	1.5462	1.5665	-0.1%	0.0%	0.0%	-1.7%	-1.2%	-0.2%	-0.2%
577	1	SURG	CAROTID ARTERY STENT PROCEDURE	2,431	2,431	1.7265	1.6400	0.2%	0.0%	-0.5%	0.8%	-2.7%	0.1%	3.4%
578	18	SURG	INFECTIOUS & PARASITIC DISEASES W OR PROCEDURE	30,959	29,449	4.5946	4.5532	0.5%	0.0%	-0.1%	-1.5%	-1.3%	-0.2%	0.1%
579	18	SURG	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W OR PROCEDURE	19,311	16,473	2.8990	2.9576	0.4%	0.0%	-0.2%	-1.6%	-1.4%	-0.1%	-0.1%
Totals			All DRGs	11,140,200	10,937,136									
			MINIMUM VALUE	1	1	0.1710	0.1927	-2.2%	-0.5%	-0.9%	-8.0%	-6.5%	-0.9%	-5.1%
			25th percentile	1,448	1,448	0.7068	0.7284	-0.4%	-0.1%	-0.6%	-2.2%	-1.5%	-0.2%	-0.7%
			MEDIAN	5,113	5,026	1.0549	1.0640	0.0%	0.0%	-0.3%	-1.4%	-0.9%	0.0%	-0.1%
			75th percentile	19,771	19,092	1.7244	1.6997	0.2%	0.0%	0.0%	-0.4%	-0.5%	0.1%	0.2%
			MAXIMUM VALUE	630,619	618,418	19.2842	18.6317	4.6%	2.1%	2.0%	15.3%	15.2%	2.4%	6.6%

<sup>(1)</sup> Estimates of charge-based weights, constructed using cost-to-charge ratios rather than per-diem costs for inpatient nursing services.