### IMPACT OF FY 2008 IPPS REGULATIONS

Changes to the Medicare inpatient prospective payment system (IPPS) by the Centers for Medicare and Medicaid Services (CMS) will significantly affect how hospitals are reimbursed for FY 2008. These changes include the continued phase-in of relative weights based on hospital-specific costs and new Medicare severity-adjusted DRGs (MS-DRGs). The regulations redistribute revenues among medical services and may profoundly affect the bottom line for many hospitals.

The Medicare IPPS pays hospitals on the basis of pre-determined rates. The system includes numerous technical adjustments based on factors such as local area wage differences, a hospital's indigent caseload, and whether a hospital has a teaching program. The system also allows additional payment for cases that are unusually costly, referred to as "outlier" cases.

The complexity of the IPPS makes it difficult to gauge the effects of changes to a particular component of the payment system. Some components are patient-specific, some are hospital-specific, and some are interrelated with other components. It is also difficult to measure effects on specific hospital operations such as shifts in reimbursement among medical services, transfers, etc.

This analysis is based on the FY 2006 MedPAR file that CMS used in promulgating the final regulations for FY 2008 and revisions to phase in certain adjustments. More than 3,400 short term acute care hospitals were included representing more than \$100 billion in IPPS payments per year. IPPS payment was computed on a patient-by-patient basis according to detailed payment regulations for respective fiscal years. Each component of reimbursement was included in calculating payment: the respective DRG definitions, relative weights, hospital blended rates, capital payments, outlier payments, DSH adjustments, IME adjustments, transfer adjustments, etc.

## Reimbursement Redirected from Some Services Such as Cardiovascular Surgery

The resulting computations of IPPS payment were then summarized by medical service. These medical services were defined by groupings of DRGs and were refined for each fiscal year's DRG definitions. It is important to note that the new MS-DRGs for fiscal year 2008 actually cause shifts in utilization among some medical services because of increased specificity.

Results shown in the accompanying table were ranked according to changes in total IPPS reimbursement. The table illustrates that even though overall IPPS reimbursement increases 2.3%, it is not evenly distributed among lines of service. For example, the average IPPS reimbursement per case for cardiovascular surgery declines -0.4% while orthopedic surgery increases 6.8%. These shifts are most likely due to the new MS-DRGs that are intended to account more precisely for differences in severity and relative costs of care among individual cases plus the continued phase-in of relative weights calibrated according to reported hospital costs.

These shifts in reimbursement among medical services mean that a hospital may need to anticipate changes among its medical services even though the net effect on its bottom line may remain relatively unchanged.

	FY2006			FY2007		FY2008			-
Medical	Number	Reimb	Number	Reimb	\$ Chg	Number	Reimb	\$ Chg	
Service	Disch	/ Disch	Disch	/ Disch	(\$ mil)	Disch	/ Disch	(\$ mil)	% Chg
Surg for Malig	118,712	\$10,356	114,046	\$10,104	-\$77.0	98,458	\$10,891	-\$80.0	-6.9%
Cardiovasc Surg	831,243	\$20,968	831,242	\$20,925	-\$35.5	831,242	\$20,847	-\$64.8	-0.4%
Neurosurgery	74,404	\$17,999	74,412	\$18,474	\$35.5	74,487	\$18,873	\$31.1	2.3%
Gynecology	92,011	\$5,348	91,807	\$5,608	\$22.8	93,630	\$5,844	\$32.3	6.3%
Oncology	251,916	\$9,259	251,953	\$9,586	\$82.7	251,774	\$9,742	\$37.7	1.6%
Orthopedics	329,384	\$4,774	329,371	\$5,100	\$107.3	329,374	\$5,310	\$69.3	4.1%
Psychiatry	170,726	\$3,885	170,725	\$4,384	\$85.3	170,730	\$4,838	\$77.4	10.3%
Vascular Surg	265,665	\$12,294	265,681	\$12,673	\$100.9	265,606	\$12,970	\$77.8	2.3%
Neurology	697,095	\$6,218	697,100	\$6,423	\$142.5	697,111	\$6,556	\$93.1	2.1%
Cardiology	2,047,885	\$5,618	2,047,897	\$5,852	\$479.4	2,047,941	\$5,903	\$104.7	0.9%
Urology	733,043	\$6,489	737,953	\$6,870	\$313.0	738,365	\$7,070	\$150.4	3.0%
Pulmonology	1,495,415	\$7,333	1,495,456	\$7,492	\$238.6	1,495,480	\$7,649	\$234.6	2.1%
Surgery	901,005	\$20,747	900,913	\$21,037	\$259.2	914,068	\$21,167	\$395.2	2.1%
Medicine	2,453,444	\$5,934	2,453,580	\$6,280	\$849.8	2,453,860	\$6,495	\$529.3	3.4%
Orthopedic Surg	1,065,414	\$9,419	1,065,408	\$11,218	\$1,916.2	1,065,408	\$11,982	\$813.8	6.8%
TOTAL	11,548,716	\$8,946	11,548,912	\$9,338	\$4,526.2	11,548,912	\$9,556	\$2,517.0	2.3%

Projected Change in Total IPPS Reimbursement by Medical Service

## Rural and Smaller Hospitals Disadvantaged

IPPS payment data were then summarized by type of hospital (i.e. urban or rural) and by bed size (i.e. number of acute care beds available). Rural hospitals reclassified by CMS as urban were tabulated as urban.

Data indicate that larger hospitals tend to fare better under the new regulations than smaller hospitals. Hospitals with fewer than 100 beds realize a 1.6% increase in IPPS payment while hospitals with 100 beds or more realize a 2.4% increase.

There are two general characteristics that may help to explain this tendency. First, larger hospitals tend to attract more resource-intensive patients. Since the new MS-DRGs will allocate more payment to higher weighted severity levels there will be a corresponding shift of reimbursement. Second, the continued phase-in of relative weights based on costs will cause some redistribution of reimbursement.

Since rural hospitals tend to be smaller, rural hospitals as a group are expected to experience an increase of only 1.3% in IPPS reimbursement versus a 2.5% increase for urban hospitals. (These projections are based on short-term acute care hospitals only and do not include Critical Access Hospitals.)

	Sjeeled II I S I ayment by 010a		FY200		FY2008		
	Number	IPPS Payment	IPPS Payment	% Change	IPPS Payment	% Change	
Type/Beds	Hospitals	(\$ million)	(\$ million)	Inc/(Dec)	(\$ million)	Inc/(Dec)	
Urban		• • •	· · · ·	· · ·	· · · · ·		
0-99 beds	658	\$3,974.7	\$4,222.1	6.2%	\$4,332.4	2.6%	
100-199	879	\$17,669.1	\$18,697.3	5.8%	\$19,219.9	2.8%	
200-299	491	\$20,352.3	\$21,358.2	4.9%	\$21,888.4	2.5%	
300-499	418	\$27,760.7	\$28,872.8	4.0%	\$29,657.9	2.7%	
500 +	187	\$24,848.5	\$25,617.3	3.1%	\$26,145.1	2.1%	
Total Urban	2,633	\$94,605.2	\$98,767.6	4.4%	\$101,243.8	2.5%	
Rural							
0-49 beds	430	\$1,270.3	\$1,319.8	3.9%	\$1,302.9	-1.3%	
50-99	374	\$3,238.8	\$3,400.5	5.0%	\$3,453.6	1.6%	
100-149	140	\$2,277.7	\$2,363.3	3.8%	\$2,407.4	1.9%	
150-199	66	\$1,831.0	\$1,896.0	3.5%	\$1,920.3	1.3%	
200 +	48	\$2,300.7	\$2,388.8	3.8%	\$2,429.0	1.7%	
Total Rural	1,058	\$10,918.5	\$11,368.3	4.1%	\$11,513.2	1.3%	
Total	3,691	\$105,523.8	\$110,135.9	4.4%	\$112,757.0	2.4%	
10(0)	5,051	ψ100,020.0	ψ <sup>110</sup> ,100.0	7.770	ψ112,707.0	2.470	

Projected IPPS Payment by Urban vs Rural Classification and by Number of Acute Beds

# Teaching Hospitals Receive a Boost In Case Mix Index

IPPS payment data were also summarized for teaching versus non-teaching hospitals. Teaching hospitals were further categorized based on those with 0-99 interns and residents versus those with 100 or more.

		FY2007			FY2008			
	Number	IPPS Payment		IPPS Payment		% Chg	% Chg	
<b>Teaching Status</b>	Hospitals	(\$ million)	CMI	(\$ million)	CMI	(Pmt)	(CMI)	
Non-Teaching	2,401	\$44,828	1.4033	\$45,843	1.4036	2.3%	0.0%	
Teaching 0-99	813	\$37,225	1.5813	\$38,149	1.5933	2.5%	0.8%	
Teaching 100+	234	\$25,747	1.7624	\$26,247	1.7860	1.9%	1.3%	
Total	3,448	\$107,800	1.5222	\$110,239	1.5221	2.3%	0.5%	

Projected IPPS Payment for Teaching vs. Non-Teaching Hospitals

The preceding table shows that the case mix index (CMI) is greater for teaching hospitals versus non-teaching hospitals. It further shows that the CMI increased more for teaching hospitals than for non-teaching hospitals. The higher CMI is likely due to the types of cases treated since teaching hospitals generally admit more resource-intensive patients. The higher increase in CMI for teaching hospitals is likely due to new MS-DRGs that account more precisely for resource consumption.

Changes in CMI, however, are not proportionate to the projected changes in IPPS payment. This discrepancy is affected by several components of payment, but most significantly by payment for outliers. Because MS-DRGs introduce more categories for higher levels of severity, some patients that qualified as outliers prior to FY 2008 are classified into higher weighted MS-DRGs

but are not qualified for outlier payment. The number of outlier cases is projected to decrease 2.1% and total outlier payment is projected to decrease 8.5% from FY 2007 to FY 2008 due to regulatory changes.

This shift in outlier payment contributes to the disproportionate change in IPPS payment for large teaching programs that have the highest levels of severity under MS-DRGs. The shift is an indication that CMS may need to reexamine the equity of payment for the costliest cases.

## Reduced Transfer Adjustments Forecasted

Under the Medicare IPPS, reimbursement is reduced for certain cases that are transferred to other facilities for continuing care. These cases may include patients requiring treatment in facilities not available at the admitting hospital or those sent to another facility for post acute care.

There are three types of effected transfers:

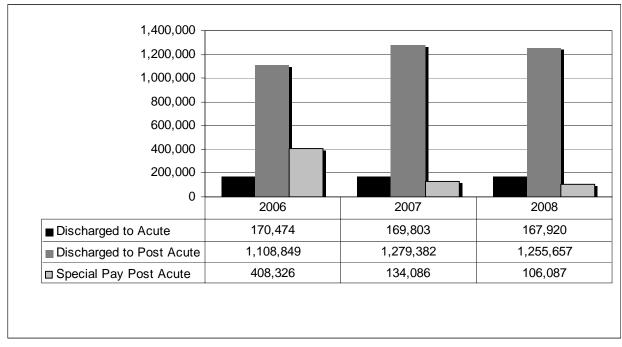
- Transfers to another acute care hospital
- Designated MS-DRGs transferred to a post acute care setting
- Designated special pay MS-DRGs transferred to a post acute care setting

For these cases, reimbursement is reduced on a case if the covered days preceding the transfer are less than the published Geometric Mean Length of Stay (GMLOS) of the assigned MS-DRG. Reimbursement is based on a per diem rate that is calculated as a hospital's normal reimbursement for the MS-DRG divided by the GMLOS.

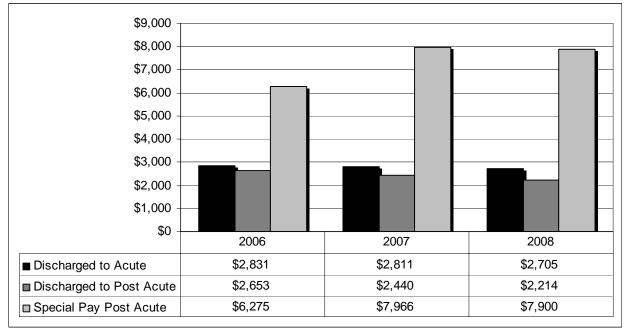
For transfers to another acute care hospital and for designated MS-DRGs transferred to a post acute setting, the hospital receives double the per diem rate for the first day of stay plus the per diem rate for each subsequent day prior to the transfer. For special pay MS-DRGs transferred to a post acute setting, the hospital receives the per diem rate for the first day plus one-half the per diem rate for each subsequent day prior to the transfer.

The difference between the normal MS-DRG payment and the per-diem payment is referred to as the *transfer adjustment*. IPPS payment data reveal that from FY 2007 to FY 2008 there are reductions in both the number of cases receiving transfer adjustments and in the average transfer adjustment amount for each of the three types of transfers.

#### National trend in number of transfers by type



### National trend in average transfer adjustment amount per case by type



Projections further show the frequency of transfers by medical service and the percentage change in transfer adjustments from FY2007 to FY2008.

	FY 2007			FY 2008					
Medical	Total	Adjusted Transfers			Total	Adjusted Transfers			
Service	Discharges	#	%	\$ (millions)	Discharges	#	%	\$ (millions)	% Chg
Surgery	900,913	142,527	15.8%	-\$1,360.9	914,068	126,679	13.9%	-\$1,182.2	-13.1%
Ortho Surg	1,065,408	328,924	30.9%	-\$1,179.3	1,065,408	322,659	30.3%	-\$932.7	-20.9%
Cardio Surg	831,242	50,188	6.0%	-\$483.4	831,242	54,977	6.6%	-\$478.2	-1.1%
Pulmonology	1,495,456	163,457	10.9%	-\$353.8	1,495,480	193,334	12.9%	-\$331.	-6.2%
Medicine	2,453,580	243,841	9.9%	-\$335.6	2,453,860	228,882	9.3%	-\$315.8	-5.9%
Cardiology	2,047,897	242,874	11.9%	-\$311.5	2,047,941	229,551	11.2%	-\$277.9	-10.8%
Urology	737,953	116,676	15.8%	-\$124.9	738,365	107,808	14.6%	-\$122.0	-2.4%
Neurology	697,100	131,252	18.8%	-\$137.8	697,111	107,903	15.5%	-\$119.3	-13.4%
Neurosurgery	74,412	13,460	18.1%	-\$82.8	74,487	11,697	15.7%	-\$86.9	5.0%
Orthopedics	329,371	52,996	16.1%	-\$50.3	329,374	76,111	23.1%	-\$60.7	20.7%
Oncology	251,953	21,813	8.7%	-\$48.5	251,774	13,921	5.5%	-\$34.3	-29.3%
Vascular Surg	265,681	17,289	6.5%	-\$72.2	265,606	4,667	1.8%	-\$23.6	-67.3%
Psychiatry	170,725	20,145	11.8%	-\$23.8	170,730	14,565	8.5%	-\$11.5	-51.6%
Surg for Malig	114,046	1,145	1.0%	-\$5.3	98,458	224	0.2%	-\$1.3	-76.0%
Gynecology	91,807	180	0.2%	-\$0.3	93,630	205	0.2%	-\$0.4	27.5%
TOTAL	11,548,912	1,547,013	13.4%	-\$4,570.9	11,548,912	1,493,425	12.9%	-\$3,979.1	-12.9%

Exhibit 3 - Projected adjustments for transfers (all types) by Medical Service

The table shows reclassification of patients among Medical Services that are projected to occur due to changing regulations. It further shows significant changes in the number of transfers for some medical services due to changing transfer thresholds associated with the new MS-DRGs.

Though the study does not reveal any onerous changes in transfer reimbursement under the IPPS regulations for FY 2008 it may be useful for hospitals to compare their own experiences to the approximately \$4 billion in transfer adjustments projected for FY 2008. It may also be useful to compare utilization differences among medical services and the relative frequency of various types of transfers.

## Medicare May Continue to Underpay Hospitals for the Most Costly Cases

The Medicare Act Section 1886(d)(5)(A) calls for 5-6% of total IPPS payments to be paid for outliers. Despite this statutory provision, however, the analysis showed total outlier payments below the provision and declining each year. Though the statute was written before capital payment was phased into the prospective payment system, this study assumes that capital payment should be included in determining "total" payment.

110jected II 15 1 ay	ment for Outliers	as a r creentag	
	Total		
	IPPS	Outliers	Outlier %
FY 2006	\$103.3	\$4.7	4.6%
FY 2007	\$107.8	\$3.9	3.6%
FY 2008	\$110.4	\$3.5	3.2%

Projected IPPS Payment for Outliers as a Percentage of Total (\$billions)

The FY 2008 outlier percentage was subsequently adjusted to account for inflation in charges and corresponding changes in cost to charge ratios. After applying inflation factors used by CMS in the final regulations for FY 2008, the projected outlier percentage still remains less than the statutory provision.

This shortfall occurs despite a reduction in the outlier threshold from \$23,015 to \$22,650 between the proposed and final regulations for FY 2008. These projections indicate that proposed regulations may continue to underpay hospitals for treating unusually costly cases. Each 1% of underpayment represents a national shortfall of more than \$1 billion.

### Summary

Extensive changes to the FY 2008 Medicare Inpatient Prospective Payment System will result in profound changes to the way hospitals are paid. These include both broad program issues effecting the industry overall and operational issues effecting individual hospitals or types of hospitals. Program issues include the appropriateness of outlier payments for the costliest patients. Operational issues include redistributed levels of payment among medical services.

This study helps to identify concerns that may amplify with the implementation of these new regulatory changes. The study technique of isolating components of reimbursement on a claimby-claim basis has enabled the exploration of issues that heretofore would have been difficult to examine.

### TECHNICAL NOTES:

Data are based on the FY 2006 MedPAR, March file. This is a file of 100% of all Medicare fee-for-service claims representing discharges during the 12 months ending September 30, 2006 and billed as of 2/28/2007. This is the same file used by CMS in promulgating final IPPS regulations for FY 2008 and subsequent legislative adjustments. Only short-term acute care hospitals were included and hospitals were excluded if they did not have sufficient data to project IPPS for the periods studied. No adjustments were made to the data to account for inflation among the periods unless noted otherwise.

--- American Hospital Directory® / January 18, 2008