# APPENDIX

# Distributional impacts of options for case-mix refinement and teaching hospital payment



# Distributional impacts of options for case-mix refinement and teaching hospital payment

This appendix provides additional information from our analyses in Chapter 3 on improving Medicare's payments for inpatient care and for teaching hospitals. These tables show the distributions for hospitals within each provider group of the estimated effects of the case-mix refinement and teaching hospital payment options examined in the chapter. The distribution estimates reflect the policy options' effects on:

- payment accuracy measured by the gain or loss per case—the average difference between case-level payments and costs,
- Medicare inpatient payments,
- total revenues, and
- financial performance measured by providers' Medicare inpatient and total margins.

Tables B-1 and B-2 show distributional information on the effects of the case-mix refinement and outlier financing policy options. The next six tables (B-3 through B-8) show the distributional impacts of the three teaching hospital payment policies. The final three tables (B-9 through B-11) show additional data on the combined impacts of the case-mix refinement and teaching hospital payment policies we are recommending.

The distributional information provides a broad picture of how our policy recommendations would affect individual providers. In Table B-1 under option A, for instance, the value at the 10<sup>th</sup> percentile indicates that 10 percent of hospitals would see payments fall by at least 8.3 percent; the value at the 90<sup>th</sup> percentile shows that another 10 percent would see payments rise by at least 4.4

percent. Under option B, payments would decline somewhat less at the 10<sup>th</sup> percentile (6.7 percent).

The distribution tables show how hospitals rank on the variables we examined. In Table B-1, hospitals were ranked by the percentage change in Medicare inpatient payments. The percentiles (10<sup>th</sup>, 25<sup>th</sup>, and so on) show the proportions of hospitals at or below the displayed values. Because the various policy options will have different effects for individual hospitals, the set of providers ranked at or below a given percentile of the distribution may differ among policy options. Consequently, the percentile values under different policy options describe how the distribution of values would change, rather than what might happen for any individual hospital.

#### Variation among hospitals in percentage change in inpatient payments under alternative policies

Percentage change in inpatient payments compared with current policy at percentile

		ercentile	ntile		
Hospital type and option	10th	25th	50th	75th	90th
All hospitals					
Option A	-8.3%	-4.8%	-1.4%	1.6%	4.4%
Option B	-6.7	-3.6	-0.6	2.1	4.7
Geographic location:					
Large urban					
Option A	-5.1	-2.1	0.5	3.2	6.2
Option B	-4.0	-1.7	0.7	3.2	5.5
Other urban					
Option A	-6.4	-3.6	-1.0	1.7	4.3
Option B	-5.1	-2.5	-0.1	2.3	4.6
All rural					
Option A	-9.9	-6.9	-3.4	-0.1	2.8
Option B	-8.2	-5.2	-2.2	0.9	3.6
Rural referral					
Option A	-5.9	-3.8	-1.4	1.3	3.2
Option B	-5.2	-3.0	-0.8	1.5	3.3
Sole community	0.2	0.0	0.0	1.0	0.0
Option A	-10.2	-7.1	-3.5	0.2	3.2
Option B	-10.1	-6.9	-3.2	0.0	3.3
Other rural	10.1	0.7	0.2	0.0	0.0
Option A	-10.2	-7.1	-3.9	-0.6	2.3
Option B	-7.6	-4.8	-1.9	1.1	3.7
Teaching status:	7.0	4.0	1.7	1.1	5.7
Academic medical center					
	-3.2	-1.4	0.8	3.0	5.4
Option A Option B	-3.2	-2.2	-0.1	3.0 1.3	3.9
1	-3.4	-2.2	-0.1	1.5	3.9
Other teaching 51-100 residents	2.4	1.0	0.0	2 (	4 (
Option A	-3.6	-1.8	0.2	2.6	4.6
Option B	-3.3	-2.0	0.5	2.5	4.9
Other teaching 10-50 residents		0.1	0.7	2.0	
Option A	-4.6	-2.1	0.7	3.2	6.4
Option B	-4.1	-4.6	0.7	3.1	5.3
Nonteaching		<b>F</b> /			
Option A	-9.0	-5.6	-2.2	1.1	4.0
Option B	-7.3	-4.1	-1.0	1.8	4.5
Outlier prevalence:					
High outlier (top decile)			_	_	
Option A	-4.2	-1.7	0.9	3.5	6.8
Option B	-4.2	-1.7	0.7	2.9	5.8
Other (lower nine deciles)					
Option A	-8.5	-5.1	-1.7	1.3	4.2
Option B	-6.8	-3.7	-0.7	1.9	4.5

Note: Inpatient payments equal the sum of PPS payments plus inpatient direct graduate medical education payments for all cases in each hospital group. Current policy: DRGs and weights calculated by conventional methods. Option A: refined DRGs and relative value weights. Option B: option A plus DRG-specific outlier offsets.

Source: MedPAC analysis of 1997 data from Medicare hospital inpatient claims and hospitals' cost reports.

#### Variation among hospitals in Medicare inpatient margins under alternative policies

	Medicare inpatient margin value at percentile						
Hospital type and option	10th	25th	50th	75th	90th		
All hospitals							
Current policy	-10.7%	0.5%	10.6%	20.3%	29.8%		
Option A	-13.2	-1.4	8.9	19.2	28.3		
Option B	-11.7	-0.4	9.8	19.7	28.6		
Geographic location:							
Large urban							
Current policy	-6.9	3.9	13.5	22.9	32.0		
Option A	-6.4	3.8	13.6	23.1	32.9		
Option B	-5.9	4.4	14.0	23.1	32.4		
Other urban							
Current policy	-10.5	-0.1	8.8	17.3	26.8		
Option A	-11.5	-0.2	8.0	16.6	25.3		
Option B	-9.9	0.3	8.9	17.2	26.0		
Rural referral							
Current policy	-5.0	1.8	10.3	18.5	24.9		
Option A	-6.6	0.5	8.8	16.6	24.7		
Option B	-5.2	0.9	9.4	17.2	24.7		
Sole community							
Current policy	-11.5	-0.4	9.7	21.9	32.4		
Option A	-16.3	-4.2	7.1	18.9	28.9		
Option B	-16.3	-4.2	7.1	19.4	29.9		
Other rural							
Current policy	-15.2	-2.3	9.3	20.4	30.3		
Option A	-20.7	-6.0	5.2	17.2	26.4		
Option B	-18.0	-4.3	7.3	18.9	27.8		
Teaching status:							
Academic medical center							
Current policy	10.4	15.9	20.9	29.2	34.3		
Option A	10.9	15.9	20.7	28.5	35.4		
Option B	10.1	15.7	19.9	27.7	34.2		
Other teaching 51-100 residents							
Current policy	3.1	9.7	15.3	22.0	27.5		
Option A	3.3	9.9	15.0	21.8	29.4		
Option B	3.6	9.7	15.5	21.7	28.2		
Other teaching 10-50 residents							
Current policy	-3.5	4.4	12.7	19.8	26.9		
Option A	-3.7	4.5	12.3	19.5	28.3		
Option B	-2.6	4.4	12.6	19.6	27.9		
Nonteaching							
Current policy	-12.5	-1.4	9.4	19.8	29.7		
Option A	-15.9	-3.5	7.3	17.9	27.4		
Option B	-14.4	-2.6	8.3	18.8	28.1		
Outlier prevalence:							
High outlier (top decile)					_		
Current policy	-24.1	-7.9	5.2	17.2	26.5		
Option A	-22.9	-7.9	6.3	17.5	28.4		
Option B	-22.2	-7.8	5.6	17.4	27.2		
Other (lower nine deciles)							
Current policy	-9.1	1.2	10.9	20.6	30.1		
Option A	-12.0	-0.6	9.2	19.3	28.3		
Option B	-10.2	0.4	10.1	20.0	28.9		

Note: Medicare inpatient margins equal Medicare inpatient revenues minus inpatient costs as a percentage of Medicare inpatient revenues. Margins reflect payments and costs for both PPS and inpatient direct graduate medical education programs. Current policy: DRGs and weights calculated by conventional methods. Option A: refined DRGs and relative value weights. Option B: option A plus DRG-specific outlier offsets.

Source: MedPAC analysis of 1997 data from Medicare hospital inpatient claims and hospitals' cost reports.

## Variation among hospitals in per case gain or loss under current policy and alternative payments to teaching hospitals

		Per case gain or loss at percentile					
Hospital type and option	10th	25th	50th	75th	90th		
All hospitals							
Current policy	-\$1,023	-\$334	\$313	\$941	\$1,656		
Option 1	-1,031	341	308	936	1,651		
Option 2	-946	-277	369	977	1,668		
Option 3	-1,038	-349	295	904	1,558		
Geographic location:							
Large urban							
Current policy	-1,111	-277	529	1,448	2,669		
Option 1	-1,110	-296	525	1,403	2,644		
Option 2	-991	-168	624	1,469	2,575		
Option 3	-1,151	-312	463	1,327	2,377		
Other urban							
Current policy	-1,128	-436	265	888	1,587		
Option 1	-1,100	-439	270	886	1,596		
Option 2	-1,074	-393	306	904	1,543		
Option 3	-1,141	-462	252	847	1,471		
Rural	.,	102	202	017	1,171		
Current policy	-902	-317	244	742	1,189		
Option 1	-896	-314	244	743	1,189		
Option 2	-852	-263	289	784	1,232		
Option 3	-889	-307	251	751	1,198		
Teaching status:	887	507	201	751	1,170		
Academic medical center							
Current policy	360	1,305	1,972	3,240	4,115		
	479		2,049				
Option 1		1,267		3,369	4,556		
Option 2	-379 -546	659	1,467	2,762	3,727		
Option 3	-540	407	1,329	2,518	3,508		
Other teaching >100 residents	200	( 2 2	1 500	2 700	2.075		
Current policy	-299	632	1,582	2,708	3,975		
Option 1	-373	529	1,466	2,552	3,468		
Option 2	-490	271	1,190	2,100	3,211		
Option 3	-749	169	1,002	1,903	2,961		
Other teaching 51-100 residents							
Current policy	-216	496	1,077	1,861	2,886		
Option 1	-336	421	1,002	1,862	2,815		
Option 2	-471	302	904	1,728	2,564		
Option 3	-590	127	751	1,564	2,430		
Other teaching 10-50 residents							
Current policy	-1,002	-241	449	1,233	2,001		
Option 1	-1,057	-322	375	1,194	2,017		
Option 2	-1,040	-312	425	1,213	2,037		
Option 3	-1,143	-414	299	1,058	1,941		
Other teaching <10 residents							
Current policy	-1,122	-455	285	1,013	1,980		
Option 1	-1,100	-458	261	995	1,968		
Option 2	-1,060	-386	328	1,063	2,105		
Option 3	-1,152	-497	233	989	1,977		
Nonteaching							
Current policy	-1,071	-383	238	796	1,318		
Option 1	-1,064	-377	241	796	1,320		
Option 2	-961	-305	316	868	1,421		
Option 3	-1,043	-367	256	810	1,347		

Note: Gains refers to the difference between payments and costs. Costs include inpatient direct graduate medical education (GME) costs for residents. Current policy reflects longrun BBA policies for Medicare DSH and IME payments and includes payments for inpatient direct GME expenses for residents. Option 1: Inpatient direct GME costs folded into PPS payment rates, holding aggregate payments and special payments to teaching hospitals constant. Option 2: Inpatient direct GME costs folded into PPS payment rates, holding aggregate payments constant and with the teaching hospital subsidy redistributed across all hospitals. Option 3: Inpatient direct GME costs folded into PPS payment rates with no constraint on aggregate payments and no teaching hospital subsidy.

Source: MedPAC analysis of a 40 percent sample of 1997 Medicare claims data.



#### Variation among hospitals in change in per case payments under alternative payments to teaching hospitals

	compared with current policy at percentile							
Hospital type and option	10th	25th	50th	75th	90th			
All hospitals								
Option 1	-\$25	\$0	\$2	\$7	\$16			
Option 2	-52	34	53	101	193			
Option 3	-167	-2	11	19	45			
Geographic location:								
Large urban								
Option 1	-169	0	5	12	53			
Option 2	-318	51	168	203	244			
Option 3	-545	-113	39	48	58			
Other urban								
Option 1	-49	0	5	10	26			
Option 2	-137	38	60	76	90			
Option 3	-214	-9	13	16	20			
Rural								
Option 1	0	0	1	3	6			
Option 2	-3	32	43	53	65			
Option 3	-5	4	10	12	14			
Teaching status:								
Academic medical center								
Option 1	-617	-294	19	443	1,066			
Option 2	-1,202	-828	-538	-260	26			
Option 3	-1,436	-1,027	-782	-481	-155			
Other teaching >100 residents								
Option 1	-620	-266	-59	80	301			
Option 2	-979	-605	-307	-137	20			
Option 3	-1,221	-845	-507	-290	-168			
Other teaching 51-100 residents								
Option 1	-342	-173	-74	43	201			
Option 2	-473	-316	-178	-74	77			
Option 3	-640	-473	-320	-196	-101			
Other teaching 10-50 residents								
Option 1	-271	-121	-29	40	98			
Option 2	-318	-149	-21	76	156			
Option 3	-430	-268	-120	-44	5			
Other teaching <10 residents								
Option 1	-73	-20	2	17	40			
Option 2	-31	40	79	179	227			
Option 3	-112	-24	5	27	47			
Nonteaching								
Option 1	0	0	3	6	10			
Option 2	18	41	56	110	194			
Option 3	2	9	12	25	47			

Change in per case payments compared with current policy at percentile

Note: Change in payments is relative to a current policy that reflects long run BBA policies for Medicare DSH and IME payments and includes payments for inpatient direct graduate medical education (GME) expenses for residents. Option 1: Inpatient direct GME costs folded into PPS payment rates, holding aggregate payments and special payments to leaching hospitals constant. Option 2: Inpatient direct GME costs folded into PPS payment rates, holding aggregate payments constant and with the teaching hospital subsidy redistributed across all hospitals. Option 3: Inpatient direct GME costs folded into PPS payment rates with no constraint on aggregate payments and no teaching hospital subsidy.

Source: MedPAC analysis of a 40 percent sample of 1997 Medicare claims data.

#### Variation among hospitals in percentage change in Medicare inpatient payments under alternative payments to teaching hospitals

Percentage change in Medicare inpatient payments compared with current policy at percentile

	compared with current policy at percentile					
Hospital type and option	10th	25th	50th	75th	90th	
All hospitals						
Option 1	-0.3%	0.0%	0.0%	O.1%	0.2%	
Option 2	-0.7	0.7	1.2	1.4	3.0	
Option 3	-2.1	0.0	0.3	0.3	0.7	
Geographic location:						
Large urban						
Option 1	-1.8	0.0	0.1	0.2	0.6	
Option 2	-3.0	0.6	2.9	3.0	3.0	
Option 3	-5.1	-1.5	0.7	0.7	0.7	
Other urban						
Option 1	-0.7	0.0	0.1	0.2	0.4	
Option 2	-1.8	0.7	1.2	1.2	1.3	
Option 3	-2.7	-0.1	0.3	0.3	0.3	
Rural						
Option 1	0.0	0.0	0.0	0.1	0.1	
Option 2	-0.1	1.0	1.1	1.2	1.2	
Option 3	-0.1	0.1	0.3	0.3	0.3	
Rural referral						
Option 1	0.0	0.0	0.1	0.1	0.2	
Option 2	-0.1	1.1	1.2	1.2	1.3	
Option 3	-0.3	0.2	0.3	0.3	0.3	
Sole community	0.0	0.12	0.0	0.0	0.0	
Option 1	0.0	0.0	0.0	0.0	0.1	
Option 2	-0.1	-0.1	0.8	1.1	1.	
Option 3	-0.1	-0.1	0.0	0.3	0.3	
Other rural	0.1	0.1	0.0	0.0	0.5	
Option 1	0.0	0.0	0.0	0.1	0.1	
Option 2	0.5	1.1	1.1	1.2	1.3	
Option 3	0.1	0.3	0.3	0.3	0.3	
Teaching status:	0.1	0.0	0.5	0.0	0.0	
Academic medical center						
Option 1	-4.3	-2.2	0.2	3.3	7.7	
Option 2	-7.9	-6.2	-4.4	-2.0	0.2	
Option 3	-9.7	-7.6	-6.2	-3.6	-1.3	
•	=9.7	-7.0	-0.2	-3.0	-1.5	
Other teaching >100 residents	1 4	2.4	0 5	0.7	0 E	
Option 1	-4.6	-2.4	-0.5	0.7	2.5	
Option 2	-7.4	-5.2	-2.8	-1.3	0.2	
Option 3	-9.4	-7.1	-4.6	-3.1	-1.7	
Other teaching 51-100 residents	0.7	1.0	0.0	0.5	0.1	
Option 1	-3.7	-1.8	-0.8	0.5	2.1	
Option 2	-5.5	-3.5	-1.9	-0.8	0.8	
Option 3	-7.4	-4.9	-3.8	-2.3	-1.0	
Other teaching 10-50 residents						
Option 1	-3.7	-1.6	-0.4	0.5	1.2	
Option 2	-4.3	-1.9	-0.3	0.9	2.0	
Option 3	-5.5	-3.6	-1.6	-0.6	0.1	
Other teaching <10 residents						
Option 1	-1.2	-0.3	0.0	0.2	0.5	
Option 2	-0.6	0.6	1.2	2.6	2.9	
Option 3	-1.7	-0.4	0.1	0.4	0.7	
Nonteaching						
Option 1	0.0	0.0	0.0	0.1	0.2	
Option 2	0.5	1.1	1.2	2.1	3.0	
Option 3	0.1	0.3	0.3	0.4	0.7	

Note: Payment changes made relative to current policy that reflects long-run BBA policies for Medicare DSH and IME payments and includes payments for inpatient direct graduate medical education (GME) expenses for residents. Option 1: Inpatient direct GME costs folded into PPS payment rates, holding aggregate payments and special payments to teaching hospitals constant. Option 2: Inpatient direct GME costs folded into PPS payment rates, holding aggregate payments constant and with the teaching hospital subsidy redistributed across all hospitals. Option 3: Inpatient direct GME costs folded into PPS payment rates with no constraint on aggregate payments and no teaching hospital subsidy.

Source: MedPAC analysis of 1997 Medicare claims data.

166 Distributional impacts of options for case-mix refinement and teaching hospital payment

#### Variation among hospitals in percentage change in total revenue under alternative payments to teaching hospitals

	Percentage change in total revenue compared with current policy at percentile						
Hospital type and option	10th	25th	50th	75th	90th		
All hospitals							
Option 1	-0.1%	0.0%	0.0%	0.0%	0.1%		
Option 2	-0.1	0.1	0.3	0.4	0.7		
Option 3	-0.4	0.0	0.1	0.1	0.2		
Geographic location:							
Large urban							
Option 1	-0.4	0.0	0.0	0.0	0.1		
Option 2	-0.6	0.1	0.6	0.8	1.0		
Option 3	-1.1	-0.3	0.1	0.2	0.2		
Other urban							
Option 1	-0.1	0.0	0.0	0.0	0.1		
Option 2	-0.4	0.1	0.2	0.3	0.4		
Option 3	-0.6	0.0	0.0	0.1	0.1		
Rural	010	010	010	0.1	0.11		
Option 1	0.0	0.0	0.0	0.0	0.0		
Option 2	0.0	0.1	0.2	0.3	0.4		
Option 3	0.0	0.0	0.0	0.1	0.1		
Teaching status:	0.0	0.0	0.0	0.1	0.1		
Academic medical center							
Option 1	-1.0	-0.5	0.0	0.8	1.4		
Option 2	-1.8	-1.3	-0.7	-0.3	0.1		
Option 3	-2.1	-1.6	-1.0	-0.6	-0.3		
Other teaching >100 residents	2.1	1.0	1.0	0.0	0.5		
-	-1.0	-0.4	-0.1	0.2	0.7		
Option 1	-1.0 -1.8	-0.4 -1.1	-0.6	-0.2	0.7		
Option 2 Option 3							
1	-2.4	-1.6	-1.0	-0.6	-0.3		
Other teaching 51-100 residents	0.7	0.4	0.1	0.1			
Option 1	-0.7	-0.4	-0.1	0.1	0.5		
Option 2	-1.2	-0.8	-0.4	-0.1	0.2		
Option 3	-1.7	-1.2	-0.8	-0.5	-0.2		
Other teaching 10-50 residents	0.0	0.0	0.1	0.1	0.0		
Option 1	-0.8	-0.3	-0.1	0.1	0.3		
Option 2	-0.8	-0.4	0.0	0.2	0.4		
Option 3	-1.2	-0.7	-0.4	-0.2	0.0		
Other teaching <10 residents							
Option 1	-0.2	-0.1	0.0	0.0	0.1		
Option 2	-0.1	0.1	0.3	0.6	0.8		
Option 3	-0.3	-0.1	0.0	0.1	0.2		
Nonteaching							
Option 1	0.0	0.0	0.0	0.0	0.0		
Option 2	0.0	0.2	0.3	0.4	0.8		
Option 3	0.0	0.0	0.1	0.1	0.2		

Note: Payment changes made relative to current policy that reflects long-run BBA policies for Medicare DSH and IME payments and includes payments for inpatient direct graduate medical education (GME) expenses for residents. Option 1: Inpatient direct GME costs folded into PPS payment rates, holding aggregate payments and special payments to teaching hospitals constant. Option 2: Inpatient direct GME costs folded into PPS payment rates, holding aggregate payments constant and with the teaching hospital subsidy redistributed across all hospitals. Option 3: Inpatient direct GME costs folded into PPS payment rates with no constraint on aggregate payments and no teaching hospital subsidy.

## Variation among hospitals in Medicare inpatient margins under current policy and alternative payments to teaching hospitals

		M	edicare inpatient ma	rgin at percentile	
Hospital type and option	10th	25th	50th	75th	90th
All hospitals					
Current policy	-10.7%	0.5%	10.6%	20.3%	29.8%
Option 1	-10.8	0.5	10.6	20.2	29.7
Option 2	-9.3	1.6	11.4	21.0	30.2
Option 3	-10.7	0.4	10.3	20.0	29.3
Geographic location:					
Large urban					
Current policy	-6.9	3.9	13.5	22.9	32.0
Option 1	-7.0	3.6	13.3	22.5	31.6
Option 2	-4.8	5.6	14.7	23.1	32.5
Option 3	-7.2	3.2	12.9	21.6	31.0
Other urban		012	1217	2110	0110
Current policy	-10.5	-0.1	8.8	17.3	26.8
Option 1	-10.3	0.0	8.6	17.4	26.8
Option 2	-9.5	0.3	9.2	17.5	26.7
Option 3	-10.6	-0.7	8.4	16.8	26.3
Rural	-10.0	-0.7	0.4	10.0	20.3
Current policy	10.0	-1.5	9.3	20.2	20.0
1 5	-13.3			20.2	30.0
Option 1	-13.3	-1.5	9.3	20.3	30.0
Option 2	-12.3	-0.5	9.9	20.9	30.6
Option 3	-13.3	-1.3	9.3	20.4	30.1
Teaching status:					
Academic medical center					
Current policy	10.4	15.9	20.9	29.2	34.3
Option 1	11.1	16.8	20.5	28.3	34.6
Option 2	6.8	12.0	17.8	24.4	32.6
Option 3	6.0	10.5	16.3	23.6	31.3
Other teaching >100 residents					
Current policy	4.7	12.8	21.1	29.2	38.0
Option 1	3.9	12.3	20.8	27.5	37.3
Option 2	2.4	9.6	17.9	25.5	35.1
Option 3	0.7	7.8	16.8	24.3	33.7
Other teaching 51-100 residents					
Current policy	3.1	9.7	15.3	22.0	27.5
Option 1	2.3	7.9	14.9	21.4	27.4
Option 2	1.4	6.8	14.3	19.7	26.5
Option 3	-0.7	5.4	12.6	18.6	24.9
Other teaching 10-50 residents					
Current policy	-3.5	4.4	12.7	19.8	26.9
Option 1	-5.2	3.9	11.7	19.4	26.2
Option 2	-4.4	3.9	11.7	20.0	26.2
Option 3	-6.7	2.6	10.4	18.6	25.1
Other teaching $<10$ residents	0.7	2.0	10.4	10.0	20.1
Current policy	-7.8	2.3	9.4	18.5	27.4
	-7.8	2.3	9.2	18.2	27.4
Option 1					
Option 2	-6.5	3.2	10.4	19.7	28.2
Option 3	-8.3	1.9	9.3	18.1	27.4
Nonteaching	40 5	<i>.</i>	o <i>i</i>	10.0	~~ -
Current policy	-12.5	-1.4	9.4	19.8	29.7
Option 1	-12.4	-1.3	9.5	19.8	29.7
Option 2	-11.0	0.0	10.8	20.9	30.6
Option 3	-12.2	-1.0	9.8	20.1	29.8

Note: Estimated inpatient margins reflect both payments and costs under PPS for indpatient direct graduate medical education (GME) programs. Current policy: Hospital payment under long-run BBA teaching and DSH policies. Option 1: Inpatient direct GME costs folded into PPS payment rates, holding aggregate payments and special payments to teaching hospitals constant. Option 2: Inpatient direct GME costs folded into PPS payment rates, holding aggregate payments constant and with the teaching hospital subsidy redistributed across all hospitals. Option 3: Inpatient direct GME costs folded into PPS payment rates with no constraint on aggregate payments and no teaching hospital subsidy.

#### Variation among hospitals in total margins under current policy and alternative payments to teaching hospitals

	Total margin at percentile						
Hospital type and option	10th	25th	50th	75th	90th		
All hospitals							
Current policy	-7.1%	-0.4%	4.2%	8.8%	14.1%		
Option 1	-7.3	-0.5	4.2	8.9	14.1		
Option 2	-7.0	-0.3	4.5	9.1	14.4		
Option 3	-7.3	-0.6	4.2	8.8	14.1		
Geographic location:							
Large urban							
Current policy	-9.0	-1.3	3.3	8.2	14.0		
Option 1	-9.0	-1.4	3.3	8.2	14.0		
Option 2	-8.6	-1.3	3.7	8.5	14.5		
Option 3	-9.3	-1.9	3.2	8.1	14.0		
Other urban	7.0	1.7	0.2	0.1	14.0		
Current policy	-6.6	0.0	4.9	9.6	14.5		
Option 1	-6.8	0.0	5.0	9.7	14.7		
Option 2	-6.5	0.0	5.1	9.8	14.7		
Option 3	-6.8		4.8	9.6	14.5		
Rural	-0.0	-0.2	4.0	9.0	14.0		
Current policy	-6.4	-0.1	4.5	9.1	13.8		
Option 1	-6.3	-0.1	4.5	9.1	13.8		
Option 2	-6.2	0.1	4.6	9.3	14.0		
Option 3	-6.3	-0.1	4.5	9.1	13.9		
Teaching status:							
Academic medical center							
Current policy	-3.7	-1.0	2.4	7.4	9.7		
Option 1	-3.8	-1.3	2.0	7.5	10.5		
Option 2	-4.7	-2.3	1.0	6.3	9.5		
Option 3	-4.9	-2.4	0.6	5.9	8.8		
Other teaching >100 residents							
Current policy	-4.5	-0.3	2.3	6.4	10.7		
Option 1	-4.6	-0.8	2.3	6.0	11.4		
Option 2	-5.0	-1.3	1.7	5.4	10.6		
Option 3	-5.6	-1.8	1.4	4.9	10.4		
Other teaching 51-100 residents							
Current policy	-5.8	0.0	4.0	8.3	12.7		
Option 1	-5.8	-0.5	3.8	8.4	12.3		
Option 2	-6.2	-1.3	3.4	7.9	12.1		
Option 3	-6.5	-1.9	3.1	7.7	11.9		
Other teaching 10-50 residents							
Current policy	-5.0	0.0	4.5	8.7	13.9		
Option 1	-5.4	-0.5	4.4	8.4	13.8		
Option 2	-5.0	-0.4	4.4	8.7	13.8		
Option 3	-5.6	-0.6	4.0	8.3	13.3		
Other teaching $<10$ residents	5.0	0.0	4.0	0.5	10.0		
Current policy	-9.4	-0.3	4.8	9.0	14.2		
Option 1	-10.0	-0.3	5.0	9.0	14.2		
Option 2	-9.2	-0.3	5.1	9.0	14.2		
	-9.2 -9.9						
Option 3	- 9.9	-0.3	4.8	9.0	14.2		
Nonteaching	7 4	0.4	1 2	0.1	110		
Current policy	-7.4	-0.4	4.3	9.1	14.2		
Option 1	-7.4	-0.4	4.3	9.1	14.3		
Option 2	-7.0	-0.1	4.6	9.3	14.7		
Option 3	-7.3	-0.3	4.4	9.1	14.4		

Note: Estimated total hospital margins adjusted to reflect long-run BBA payment policy changes for Medicare DSH and IME payments. Current policy: Total inpatient margin under long-run BBA teaching and DSH policies. Option 1: Inpatient direct graduate medical education (GME) costs folded into PPS payment rates, holding aggregate payments and special payments to teaching hospitals constant. Option 2: Inpatient direct GME costs folded into PPS payment rates, holding aggregate payments constant and with the teaching hospital subsidy redistributed across all hospitals. Option 3: Inpatient direct GME costs folded into PPS payment rates with no constraint on aggregate payments and no teaching hospital subsidy.

## Average per case gain or loss under current policy and selected options

		Average gain or loss per case				
Hospital type	Number of hospitals	Current policy	Option B	Option 1	Option B1	
All hospitals	4,720	\$481	\$492	\$484	\$495	
Geographic location:						
Large urban	1,481	739	779	736	782	
Other urban	1,133	319	318	330	327	
Rural	2,106	185	152	189	145	
Rural referral	222	229	222	233	218	
Sole community	619	11	-3	16	-8	
Other rural	1,203	235	171	237	163	
Teaching status:						
Academic medical center	113	1,924	1,853	2,097	2,072	
Other teaching >100 residents	127	1,278	1,327	1,201	1,272	
Other teaching 51-100 residents	120	1,016	1,046	986	1,023	
Other teaching 10-50 residents	366	386	434	367	414	
Other teaching <10 residents	380	237	248	239	245	
Nonteaching	3,614	191	193	198	191	

Note: Gain or loss refers to the difference between payments and costs. Costs include inpatient direct graduate medical education (GME) costs for residents. Current policy reflects long-run BBA policies for Medicare DSH and IME payments and includes payments for inpatient direct GME expenses for residents. Option B: Payments based on APR-DRGs, hospital relative value weights, and DRG-specific outlier offsets. Option 1: Inpatient direct GME costs folded into PPS payment rates, holding aggregate payments and special payments to teaching hospitals constant. Option B1: Combines option B and option 1.

Source: MedPAC analysis of a 40 percent sample of 1997 Medicare claims data.

## Medicare inpatient margins under current policy and selected options

Average Medicare	e inpatient	margin

		••••••				
Hospital type	Number of hospitals	Current policy	-	Option 1	Option B1	
All hospitals	4,173	13.3%	13.3%	13.3%	13.3%	
Geographic location:						
Large urban	1,272	15.8	16.2	15.8	16.2	
Other urban	988	10.8	10.8	11.0	10.9	
Rural	1,913	10.1	8.7	10.1	8.5	
Rural referral	198	10.9	10.2	10.9	10.2	
Sole community	568	10.6	8.1	10.6	7.8	
Other rural	1,093	9.2	7.7	9.3	7.5	
Teaching status:						
Academic medical center	98	20.8	20.5	21.6	21.5	
Other teaching >100 residents	105	18.9	19.2	18.4	18.7	
Other teaching 51-100 residents	101	14.3	14.5	14.0	14.2	
Other teaching 10-50 residents	317	12.2	12.6	12.0	12.3	
Other teaching <10 residents	331	10.5	10.6	10.6	10.5	
Nonteaching	3,221	10.6	10.5	10.7	10.5	

Note: Estimated inpatient margins reflect Medicare payments and costs under PPS and for inpatient direct graduate medical education (GME) programs. Current policy: Hospital payment under long-run BBA teaching and DSH policies. Option B: Payments based on APR-DRGs, hospital relative value weights, and DRG-specific outlier offsets. Option 1: Inpatient direct GME costs folded into PPS payment rates, holding aggregate payments and special payments to teaching hospitals constant. Option B1: Combines option 1.

Source: MedPAC analysis of 1997 Medicare claims and cost report data.

MECIPAC

## Total margins under current policy and selected options

#### Total margin

Hospital type	Number of hospitals	Current policy	Option B	Option 1	Option B1	
All hospitals	4,173	5.4%	5.4%	5.4%	5.4%	
Geographic location:						
Large urban	1,272	4.3	4.4	4.3	4.4	
Other urban	988	6.5	6.5	6.5	6.5	
Rural	1,913	6.9	6.5	6.9	6.5	
Rural referral	198	9.7	9.6	9.7	9.5	
Sole community	568	5.9	5.3	5.9	5.2	
Other rural	1,093	5.1	4.7	5.1	4.7	
Teaching status:						
Academic medical center	98	3.6	3.5	3.8	3.8	
Other teaching >100 residents	105	4.9	4.9	4.7	4.8	
Other teaching 51-100 residents	101	5.6	5.7	5.5	5.6	
Other teaching 10-50 residents	317	5.9	6.0	5.9	5.9	
Other teaching <10 residents	331	4.9	4.9	4.9	4.9	
Nonteaching	3,221	6.0	6.0	6.0	6.0	

Note: Estimated total margins adjusted to reflect long-run BBA payment policy changes for Medicare DSH and IME payments. Current policy: Hospital payment under long-run BBA teaching and DSH policies. Option B: Payments based on APR-DRGs, hospital relative value weights, and DRG-specific outlier offsets. Option 1: Inpatient direct graduate medical education costs folded into PPS payment rates, holding aggregate payments and special payments to teaching hospitals constant. Option B1: Combines option B and option 1.