national average costs by department for heart failure and shock (revisited)

With pressures mounting to contain cost, benchmarking clinical performance becomes increasingly important. Often such analyses are conducted broadly at the overall cost-per-case level by MS-DRG. Although this level of analysis should be helpful in identifying potential savings, another step is needed to determine which cost centers offer the greatest potential. Analyzing cost by department for specific services, therefore, is an important next step.

In the March 2010 issue of hfm, we studied costs by department for the three Medicare severityadjusted DRGs (MS-DRGs) representing claims for heart failure and shock—MS-DRGs 291, 292, and 293. This analysis is intended to be an update of our original study, comparing the FYo8 findings of the previous analysis with the findings for FY12.

Data for our updated analysis of MS-DRGs 291, 292, and 293 were obtained from the FY12 final Medicare Provider Analysis and Review file. Costs were calculated at the claim level using department-specific charge data for these claims and corresponding departmental cost-to-charge ratios from Medicare cost report data for each facility. The data are limited to short-term acute care facilities and exclude claims from outside the United States, distinct part units, and facilities with insufficient cost report data available.

Since publication of the FYo8 data, there have been several changes to the source data. As a result of enhancements to the reporting process and collection of more-detailed information on the revised 2552-10 Medicare cost report forms, we

are now able to break out a number of specialized cost centers from their more general categories, most notably including removing CT and MRI from the category of radiology, cardiac catheterization from cardiology, and implantable devices from medical surgical supplies.

In this analysis, these specialized cost centers are factored into the "All Other" category in the FY12 data. This difference is important to note when comparing the more recent statistics with their FYo8 counterparts, as these changes are likely to affect the results.

The updated information appears to show somewhat stable cost-per-case figures related to medical services. One noteworthy change, however, is a general rise in total bed costs as a percentage of all costs across all three MS-DRGs. It also is interesting to note that, for MS-DRG 291, the percentage of costs for routine beds declined between FYo8 and FY12, whereas the percentage for specialty beds increased. It may be grounds for additional analysis to examine whether this shift towards increased special care (intensive care/coronary intensive care) for the highest acuity MS-DRG is the result of a change in patterns of care, utilization of additional special care capacity resulting from hospital expansion and renovation, or other factors.

This information, along with the prior research, should prove useful to hospitals wanting to examine how their utilization of resources compares with national averages. By incorporating the prior study, it is also possible to examine whether the national trends have occurred locally.

To read the March 2010 Data Trends article referenced above, go to hfma.org/march2010datatrends.

This analysis was performed by American Hospital Directory, Inc. Louisville, Ky. For more information, contact William Shoemaker at wshoemaker@ahd.com.

HEART FAILURE AND SHOCK (FY12)

MS-DRGs FOR

- > MS-DRG 291: Heart failure and shock, with major complication/ comorbidity (relative weight, 1.501)
- > MS-DRG 292: Heart failure and shock, with complication/comorbidity (relative weight, 1.0214)
- > MS-DRG 293: Heart failure and shock, without complication/ comorbidity (relative weight, 0.6756)

NATIONAL AVERAGE COST PER CASE FOR HEART FAILURE AND SHOCK, FY08 COMPARED WITH FY12											
	FY08	MedPAR D	ata	FY12 MedPAR Data*							
MS-DRG	293	292	291	293	292	291					
Total Cost	\$5,038	\$6,882	\$10,235	\$5,400	\$7,841	\$11,437					
Routine Bed	\$763	\$749	\$760	\$994	\$950	\$909					
Special Care Bed	\$1,017	\$1,028	\$1,097	\$1,247	\$1,259	\$1,309					
Total Bed	\$866	\$862	\$908	\$1,067	\$1,062	\$1,087					
Cardiology	\$259	\$274	\$289	\$220	\$235	\$241					
Emergency Department	\$284	\$295	\$323	\$275	\$302	\$340					
ESRD Revenue Setting [†]	\$1	\$8	\$270	\$1	\$6	\$299					
Laboratory	\$460	\$586	\$805	\$467	\$655	\$862					
Pharmacy	\$310	\$504	\$908	\$312	\$545	\$1,000					
Radiology	\$182	\$243	\$328	\$157	\$220	\$286					
Medical Surgical Supplies	\$227	\$342	\$552	\$209	\$319	\$538					
Inhalation Therapy	\$101	\$185	\$355	\$121	\$215	\$536					
Physical Therapy	\$54	\$90	\$125	\$70	\$120	\$155					
All Other	\$213	\$342	\$538	\$273	\$458	\$667					

DEPARTMENTAL COST AS A PERCENTAGE OF TOTAL COSTS FOR HEART FAILURE AND SHOCK, FY08 COMPARED WITH FY12											
	F	Y08 MedPAR D	ata	FY12 MedPAR Data*							
MS-DRG	293	292	291	293	292	291					
Total Cost	\$686,215,412	\$1,386,446,024	\$2,152,349,083	\$495,550,531	\$1,742,500,482	\$2,224,890,285					
Routine Bed	30.56%	30.23%	26.45%	34.03%	31.52%	24.85%					
Special Care Bed	28%	28%	30%	26.99%	29.29%	32.09%					
Total Bed	58%	58%	56%	61.01%	60.80%	56.94%					
Cardiology	5.13%	3.99%	2.83%	4.07%	2.99%	2.11%					
Emergency Department	5.64%	4.29%	3.15%	5.10%	3.85%	2.98%					
ESRD Revenue Setting [†]	0.03%	0.12%	2.64%	0.01%	0.08%	2.61%					
Laboratory	9.14%	8.52%	7.86%	8.64%	8.35%	7.53%					
Pharmacy	6.15%	7.32%	8.87%	5.79%	6.95%	8.75%					
Radiology	3.61%	3.53%	3.20%	2.91%	2.80%	2.50%					
Medical Surgical Supplies	4.51%	4.98%	5.39%	3.87%	4.06%	4.70%					
Inhalation Therapy	2.01%	2.69%	3.47%	2.24%	2.74%	4.69%					
Physical Therapy	1.08%	1.31%	1.22%	1.30%	1.53%	1.36%					
All Other	4.22%	4.97%	5.25%	5.05%	5.85%	5.83%					

^{*}Unlike in the FY08 data, "Cardiology" data does not include cardiac catherization, "Radiology" data does not include CT and MRI, and "Medical Surgical Supplies" data does not include implantable devices. These specialized cost centers are accounted for in the "All Other" category.

[†]ESRD = End-stage renal disease