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cost analysis: STACHs versus LTACHs

With continuing pressures to contain costs and the adoption of the accountable care organization (ACO) model of vertical integration, a closer look at post-acute care is occurring for many short-term acute care hospitals (STACHs). One such examination is evaluating appropriate usage of long-term acute care hospitals (LTACHs) for medically complex patients who require extended stays.

LTACHs are designed to deliver care for these patients at a lower cost than would be possible if the patients received care in STACHs for the same duration. This analysis attempts to quantify these efficiencies by examining Medicare Severity DRGs (MS-DRGs) commonly discharged by STACHs to LTACHs for continuing care.

To conduct this analysis, claims from the FY13 proposed rule Medicare Provider Analysis and Review file were examined and combined with corresponding Medicare cost report data to estimate the cost of care. A list of the most

commonly discharged MS-DRGs from a STACH to LTACH setting was developed on the basis of a preliminary review of the claims data. Those codes were then applied to STACH and LTACH claims for patients discharged to home with lengths of stay of 15 or more days.

A review of the average length of stay (ALOS) among cases for each MS-DRG with stays of 154 or more days found that the differences in ALOS between LTACHs and STACHs are substantial for codes 870, 853, and 207, but the differences are much less pronounced among other MS-DRGs.

The study also compared estimated costs to a facility for providing care with the amount paid under the Medicare inpatient prospective payment system for claims. Costs and payment on a per diem basis were used for the purposes of comparison. The data make clear that STACHs require substantially more resources to handle such claims

MS-DRG: NUMBER OF CASES WITH STAYS OF 15 OR MORE DAYS AND AVERAGE LENGTH OF STAY (ALOS)

MS-DRG	LTACH Cases	STACH Cases	LTACH ALOS	STACH ALOS
004: Tracheostomy with mechanical ventilation 96+ hrs or principal diagnosis except face, mouth, and neck without major operating room (OR) procedure	30	243	37.60	35.77
177: Respiratory infections and inflammations with major complication or comorbidity (MCC)	283	761	23.81	20.19
193: Simple pneumonia and pleurisy with MCC	146	705	21.23	19.76
207: Respiratory system diagnosis with ventilator support 96+ hrs	416	784	33.61	21.51
208: Respiratory system diagnosis with ventilator support <96 hrs	99	521	22.00	20.67
291: Heart failure and shock with MCC	104	904	23.24	19.64
853: Infectious and parasitic diseases with OR procedure with MCC	84	1236	37.15	23.11
870: Septicemia or severe sepsis with mechanical ventilation 96+ hrs	39	575	40.64	21.86
871: Septicemia or severe sepsis without mechanical ventilation 96+ hrs with MCC	587	2407	25.17	20.79

COMPARISON OF COST TO DELIVER CARE WITH AMOUNT PAID BY MEDICARE

MS-DRG	LTACH Cost per Day	STACH Cost per Day	LTACH Payment per Day	STACH Payment per Day	LTACH Margin per Day	STACH Margin per Day
004	\$1,819	\$2,636	\$2,139	\$2,297	\$320	-\$339
177	\$1,276	\$1,861	\$1,391	\$861	\$116	-\$1,000
193	\$1,235	\$1,784	\$1,278	\$709	\$43	-\$1,075
207	\$1,670	\$2,540	\$1,892	\$1,896	\$222	-\$645
208	\$1,565	\$2,152	\$1,793	\$1,029	\$228	-\$1,124
291	\$1,299	\$1,884	\$1,352	\$752	\$53	-\$1,132
853	\$1,441	\$2,461	\$1,593	\$1,841	\$152	-\$621
870	\$1,569	\$2,870	\$1,769	\$2,120	\$200	-\$750
871	\$1,257	\$2,018	\$1,273	\$941	\$15	-\$1,077

than do their LTACH counterparts. The data also indicate that LTACHs have an advantage on the bottom line: STACHs incur a net loss from these MS-DRGs, while LTACHs stand to profit from delivering similar care in a different setting.

For many STACHs, these long-stay claims result in an outlier payment due to extensive resource consumption. A look at STACH claims for patient stays of 15 or more days (where the patient was discharged home) that resulted in an outlier payment discloses not only that patients representing outlier claims occupy acute care beds significantly longer, but also that the outlier payment falls well short of compensating for the added costs of care, causing the facilities to lose more money on a per diem basis than they do for

non-outliers. Historically, some have contended that achieving an outlier payment for these types of claims helps to cover costs; however, the data suggest such a strategy is actually detrimental.

These data demonstrate that it may be in a STACH's interest to investigate how it manages patients with long lengths of stay and whether there may be advantages to working more closely with an LTACH for the care of such patients. ACOs may find these data useful in their consideration of incorporating an LTACH into their continuum-of-care planning. ■

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

COMPARISON OF MARGINS PER DAY FOR SHORT-TERM ACUTE CARE HOSPITALS: NON-OUTLIER VERSUS OUTLIER CASES

MS-DRG	Total Cases	Percentage Outlier Cases	Non-Outlier ALOS	Outlier ALOS	Total Margin per Day	Non-Outlier Margin per Day	Outlier Margin per Day
004	243	25.51%	29.80	53.21	-\$338.85	-\$76.92	-\$767.11
177	761	29.57%	18.43	24.40	-\$999.64	-\$845.04	-\$1,277.69
193	705	36.45%	17.92	22.97	-\$1,074.87	-\$968.58	-\$1,219.43
207	784	24.87%	19.40	27.88	-\$644.68	-\$425.49	-\$1,105.47
208	521	46.26%	17.88	23.92	-\$1,123.68	-\$971.74	-\$1,255.67
291	904	33.08%	18.21	22.52	-\$1,132.27	-\$950.65	-\$1,429.43
853	1236	28.72%	19.79	31.34	-\$620.68	-\$370.11	-\$1,013.36
870	575	28.00%	19.05	29.08	-\$750.42	-\$555.34	-\$1,079.03
871	2407	40.42%	18.75	23.81	-\$1,077.35	-\$883.39	-\$1,302.42