A Financial Comparison of Rural Hospitals With Special Medicare Payment Provisions to Hospitals Paid Under Prospective Payment

George H. Pink, Ph.D., Rebecca T. Slifkin, Ph.D., and Hilda A. Howard, B.S.

BACKGROUND

The financial performance of rural hospitals has long been a concern to federal and state agencies as well as banks, creditors, bond rating firms, and regulators. For these reasons, Federal law makers have created and modified special payments categories under the Medicare program to address the challenges faced by different types of rural hospitals, recognizing that many are the only health facility in their community and their survival is vital to ensure access to health care.

There are currently four classifications of rural hospitals that can qualify for special payment provsions under Medicare: Critical Access Hospitals (CAHs), Medicare Dependent Hospitals (MDHs), Sole Community Hospitals (SCHs), and Rural Referral Centers (RRCs). This Findings Brief compares the profitability of the hospitals with these classifications to urban and rural hospitals paid under prospective payment (U-PPS and R-PPS, respectively) over a recent three-year period. Standard financial statement analysis is used to determine the median profitability of each group of hospitals and negative margins are assessed as a sign of financial distress.

KEY FINDINGS

- Substantial variation in financial condition and performance exists among hospitals with different payment classifications
- Rural referral centers have performed relatively better over time in comparison to other hospitals.
- Profitability declined sharply in 2008 across all payment classifications.
- Critical Access Hospitals, despite receiving 101% of costs for Medicare patients, did not perform well as a group.

PROFITABILITY

The extent to which a hospital is profitable is the net result of both reimbursement and managerial policies, reflecting the combined effects of liquidity, asset management, and debt on operating results. Profitability indicators measure the ability to generate the financial return required to replace assets, meet increases in service demands, and compensate investors (in the case of a for-profit organization).

Table 1 shows three measures of profitability: total margin, cash flow margin, and return on equity. Total margin (net income / total revenue) measures the control of expenses relative to revenues, and expresses the profit a hospital makes as a proportion of revenue brought in. For example, a 5% margin means the hospital makes 5 cents of profit on every dollar of total revenue. Because the margin is a proportion, two hospitals with the same margin can have vastly different absolute dollars of profit. For example, a hospital with a 5% margin and 10 million in total revenues will have \$500,000 in profit, whereas a hospital with the same margin but only 5 million in revenue will only have \$250,000.

Table 1: Profitability

	Median Total Margin			Median Cash Flow Margin			Median Return on Equity		
	2006	2007	2008	2006	2007	2008	2006	2007	2008
CAH	3.6%	3.6%	2.4%	5.9%	5.9%	5.6%	8.0%	8.1%	5.7%
MDH	2.2%	3.2%	1.7%	6.2%	5.9%	4.7%	6.8%	7.9%	4.5%
R-PPS	4.1%	3.2%	1.2%	8.1%	7.3%	6.1%	8.1%	7.3%	5.4%
SCH	3.9%	3.5%	2.2%	8.3%	7.9%	6.1%	7.5%	8.1%	4.6%
RRC	5.4%	5.5%	2.9%	10.1%	9.0%	7.6%	9.1%	9.7%	5.0%
RRC/	6.1%	6.8%	2.7%	10.3%	9.6%	8.4%	8.6%	7.4%	3.8%
SCH									
U-PPS	4.0%	4.3%	2.0%	7.8%	7.9%	6.2%	9.7%	9.8%	5.7%

Rural Referral Center as a group had the highest median total margins, whether those classified as a RRC only (median total margin of 2.9% in 2008) or those that were classified as both a RRC and a SCH (median of 6.8% in 2007 and 6.1% in 2006). R-PPS hospitals had the lowest median total margin in 2008 (1.2%). Figure 1 graphically depicts the differences in total margin among hospital classifications.

8% 7% 6% 5% 4% 3% 2% 1% 0% CAH **MDH** R-PPS RRC RRC/SCH **U-PPS** SCH **□** 2006 **■** 2007 **■** 2008

Figure 1: Total Margin by Medicare Payment Classification, 2006-2008 Medians

Rural referral centers also had the highest median cash flow margin¹, which measures the ability to generate

2

¹ [((net income - (contributions, investments and appropriations)) + depreciation + interest) / (net patient revenue + other income -(contributions, investments, and appropriations))]

cash flow from providing patient care services. RRCs that also had SCH status had the best performance, with median cash margins of 10.3%, 9.6%, and 8.4% in 2006, 2007 and 2008 respectively. MDHs had the lowest cash flow margin in 2008 (4.7%) and CAHs had the lowest cash flow margin in 2007 and 2006 (5.9% in each year).

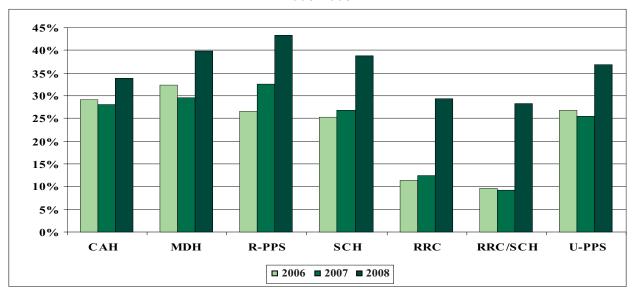
Return on equity² measures the net income generated by equity investment (net assets). For example, a 3.5% return on equity means the hospital generates 3.5 cents of profit for each dollar of equity investment. Urban PPS hospitals generated the most net income from equity investments, with return on equity of 9.7% in 2006, 9.8% in 2007, and 5.7% in 2008.

FINANCIAL DISTRESS

Although there are no empirically tested thresholds for detecting financial distress, most financial analysts would agree that for most hospitals over the long run, a large negative total margin is likely indicative of financial distress. In the short run, however, a hospital could experience an extraordinary expense that results in a negative total margin for one year only, and might not indicate financial distress.

Figure 2 shows the percentage of all hospitals within each payment classification that had negative total margins. Rural PPS hospitals had the highest percent of hospitals with a negative total margin in 2008 (43%) and 2007 (33%). RRCs had the smallest percentage of hospitals with negative total margin, but saw the largest increases between 2007 and 2008. RRCs jumped from 13% with negative margins in 2007 to 29% in 2008, and RRC/SCHs increased from only 9% in 2007 to 28% in 2008. However, the percentage of hospitals with negative total margins increased dramatically for all classifications in 2008, likely reflecting the impact of the economy.

Figure 2: Percent of Hospitals with Negative Total Margin by Medicare Payment Classification, 2006-2008



-

² (net income / net assets)

DISCUSSION

This study compares the financial performance and condition of the rural hospitals with special Medicare payment provisions to urban hospitals and other rural hospitals paid under prospective payment over a recent three-year period. There are four principal findings from this study.

Substantial variation in financial condition and performance was present among hospitals with different payment classifications. It is inaccurate to characterize all rural hospitals as being under financial pressure; rather it appears that some are under a lot of pressure (CAHs, MDHs and R-PPS hospitals), some are under a little pressure (SCHs), and some have done quite well (RRCs and RRC/SCHs).

RRCs have performed better over time in comparison to hospitals with other payment classifications. Probably the strongest finding of this study is the consistently higher profitability of RRC/SCHs, exceeding not only all other types of rural hospitals, but also urban PPS hospitals. In all three years, the group with the highest total margin and cash flow was always a RRC or RRC/SCH. RRC/SCHs also had the lowest percentage of hospitals with a negative total margin and negative cash flow margin.

Profitability declined sharply in 2008 across all hospital payment classifications. Total margin, cash flow margin, and return on equity for all hospitals were substantially lower in 2008 than 2007. These trends, which likely reflect the worsening economy, raise concern for the hospital industry as a whole. Even RRCs, the strongest performers as a group, appear to have substantially deteriorated financial positions in 2008.

CAHs, despite receiving 101% of costs for Medicare patients, did not perform well as a group. The relatively poor financial performance suggests that low volumes, payment from other payers (private insurance, Medicaid, and self pay), and uncompensated care still have a substantial impact on the financial condition of these hospitals.

It will be important to monitor future rural hospital financial performance to gauge the effects of both the economy and health reform legislation.

STUDY METHOD

The research design is based on standard financial statement analysis. Data came from the CMS Hospital Cost Report Information System (HCRIS) and included all hospitals with at least 360 days in a cost report period. The financial indicator definitions and Medicare cost report account codes for them were verified with a technical adviser and compared to other sources of financial ratios.

Complete information about this study (Final Report #97) can be accessed at: http://www.shepscenter.unc.edu/research_programs/rural_program/pub_reports.html

