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Impact of Conversion to Critical Access Hospital Status on Hospital Financial Performance and Condition

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Introduction

During the 1980s and early 1990s, a number of rural hospitals closed across the United States.[1] Many believed that these closings were due in large part to an inability of small hospitals to maintain financial stability under the Medicare Prospective Payment System (PPS). In response, the Medicare Rural Hospital Flexibility Program was created in the Balanced Budget Act of 1997. This program allows small rural hospitals meeting specific criteria, including bedsize of 25 or less, to convert to a Critical Access Hospital (CAH) and, among other benefits, receive cost-based reimbursement from Medicare for inpatient and outpatient services.

Cost-based reimbursement was predicted to lead to a net increase in patient revenue and greater stability in cash flows by assuring that CAHs will not lose money on Medicare patients, which was one of the challenges small rural hospitals faced under PPS. The change to cost-based reimbursement could be expected to affect measured financial performance and condition of hospitals in at least three ways: (1) higher profitability if increases in patient revenue exceed the increases in hospital costs, (2) higher liquidity if current assets and long-term investments increase because of higher and more stable cash flows from operations, and (3) higher proportions of debt in capital structures if borrowing capacities increase because of higher profitability and liquidity. From a management perspective, cost-based reimbursement was predicted to relieve hospital managers of a constant focus on immediate survival so attention could be turned to performance improvement strategies for long-term financial health and providing necessary health care services to their community.

This policy brief considers how the financial performance and condition of Critical Access Hospitals changed post conversion. Findings include the following:

- ***Most CAHs had higher profitability after conversion than before conversion.***
- ***About half of CAHs had higher liquidity after conversion than before conversion.***
- ***Most CAHs had greater ability to meet debt obligations after conversion than before conversion.***
- ***CAHs providing long-term care were less likely to improve their profitability than CAHs not providing long-term care.***

Approach

With the assistance of technical advisors and feedback from CAH administrators, 20 financial ratios were developed that are useful in assessing the financial performance of CAHs.[2] This policy brief analyzes seven of these ratios associated with (1) profitability (the ability to generate revenue exceeding costs), (2) liquidity (the ability to meet timely cash needs), and (3) capital structure (the extent of debt financing and the ability to meet debt obligations). Each of 747 hospitals[a] were classified as having "better performance after conversion" or "worse performance after conversion" by comparing the ratio two years prior to conversion to the value two years after conversion.[b]

CAH Financial Performance and Condition Post-Conversion

Table 1 shows the percent of hospitals with improved financial performance and condition after conversion to a CAH.

Over half of CAHs improved on all three profitability indicators—total margin, cash flow margin, and return on equity. Perhaps most

Table 1.
Percent of Hospitals with Improved Financial Performance and Condition after Conversion to a CAH

Dimension / Ratio	Percent of CAHs with Improved Performance in Ratio	Percent of CAHs with Improved Performance in all Ratios in Dimension
Profitability		51.3%**
Total Margin	60.9%**	
Cash Flow Margin	63.8%**	
Return on Equity	58.1%**	
Liquidity		20.9%**
Current Ratio	51.4%	
Days Cash on Hand	49.2%	
Days Revenue in Accts Receivable†	64.4%**	
Capital Structure		
Debt Service Coverage	62.2%**	

† For Days Revenue in A/R, larger values are considered lower performance.

** Statistically significantly different from 50% at 1%. For the dimension tests, value tested against 1/8, the expected value given a random 50% independent chance of improvement in each of the component ratios.

a *The analysis included all CAHs with two years of post-conversion cost report data.*

b *Data for one and three years post conversion were also examined. Statistics, unless otherwise noted, apply to the 2/2 year comparisons. Generalizations refer to trends observed in all three time frame analyses.*

encouraging was that almost two-thirds of hospitals had improved cash flow margins after conversion, a result that would likely be favorably viewed by lenders.

Approximately one-half of hospitals had improved current ratios and days cash on hand, but most interesting was that almost two-thirds of hospitals had improved days revenue in accounts receivable, a result that indicates much better collections efforts. Almost two-thirds of hospitals had improved debt service coverage, indicating an enhanced ability to manage debt payments.

Conversion had the greatest effect on profitability **one** year post conversion, on capital structure **two** years post conversion, and on liquidity **three** years post conversion (data not shown). This finding is consistent with CAHs using their increased profitability to finance capital expansion.

Characteristics that Affect Financial Performance and Condition

Six hospital characteristics were assessed to see if they were associated with increased likelihood of improving financial indicators. The characteristics were (1) net patient revenue, (2) whether the CAH is managed by government, (3) whether the CAH operates a rural health clinic, (4) whether the CAH provides long-term care, (5) whether the CAH converted "early" (2001 or earlier), and (6) geographic region.

Few of these hospital characteristics were associated with a higher likelihood of ratio improvement but there were exceptions. Most notable was that CAHs providing long-term care were less likely to improve their profitability than CAHs not providing long-term care (Figure 1). This is consistent with anecdotal evidence suggesting that many CAHs provide long-term care recognizing that it is likely to adversely affect their finances, but do so because of community need.

There were some other exceptions. Late converters were more likely to improve days revenue in accounts receivable (69 percent of late converters improved compared to 61 percent for early converters). Finally, CAHs in the West were less likely to experience an increase in all profitability ratios than CAHs in other regions of the country.

Conclusions

The Medicare Rural Hospital Flexibility Program was created to increase the financial stability of small rural hospitals. By nearly all accounts the financial condition of converters has improved, in large part due to the enhanced revenues resulting from the transition from PPS to cost-based reimbursement under Medicare. Overall, financial performance and condition improved after hospitals converted to CAH status. Roughly three-fifths of hospitals experienced an increase in profitability and debt service coverage after conversion. Liquidity also improved, although to a lesser degree.

Conversion to CAH status was associated with improved profitability for hospitals without long-term care and those hospitals not located in the West. The regional pattern may indicate different market realities or local management strategies. Liquidity and debt service coverage improvement was generally not significantly associated with hospital characteristics. Although there has been improvement, CAH financial indicators still lag behind those for larger hospitals.

The commensurate decrease in the closure rate of small rural hospitals has been documented.[3] The implicit policy decision inherent in the enabling legislation is a recognition that in order to ensure rural Medicare populations continue to have timely access to quality healthcare, CAHs must receive a higher reimbursement level. This Brief shows that the improvement in measures of profitability have resulted in improvements in other measures, such as increased liquidity. It appears that the increases in revenue have allowed hospitals to transition from a "survival" mode—ensuring that the hospital remains open next year—to a more strategic, long term viewpoint.

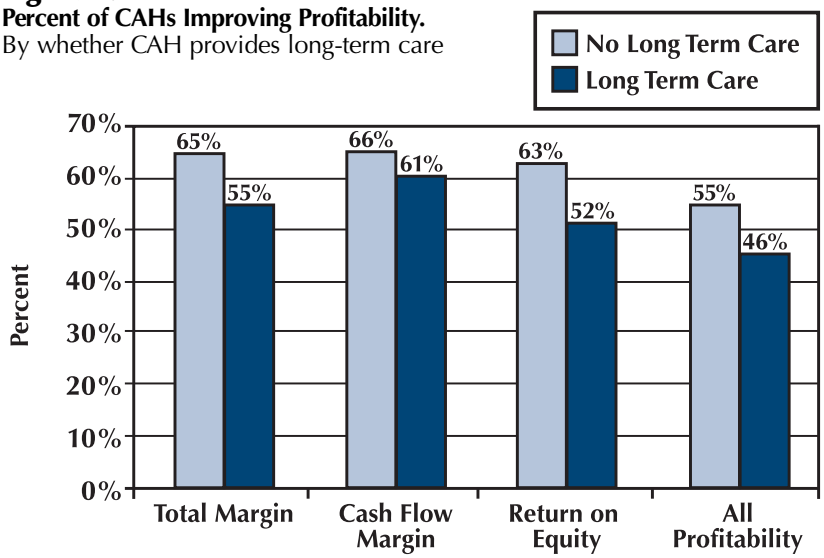
For more information, contact the CAH Financial Indicators Team at CAH.finance@schsr.unc.edu.

1 *Poley ST, Ricketts TC. Fewer hospitals close in the 1990s: Rural hospitals mirror this trend. Findings Brief, NC Rural Health Research and Policy Analysis Center, October 2001.*

2 *Pink GH, Holmes GM, D'Alpe C, Strunk LA, McGee P, Slifkin RT. Financial indicators for critical access hospitals. J Rural Health. 2006;22:229-236.*

3 *Medicare Payment Advisory Committee. Report to the congress: Issues in a modernized Medicare program 2005. Available from: http://www.medpac.gov/publications/congressional_reports/June05_Table_of_Contents.pdf.*

Figure 1:
Percent of CAHs Improving Profitability.
By whether CAH provides long-term care



Comparisons of two years prior to two years post conversion.

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