The Financial Effects of Critical Access Hospital Conversion

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INTRODUCTION

The Balanced Budget Act of 1997 established the Rural Hospital Flexibility Program. The Act required that participating States develop a rural health network and that at least one facility be designated as a Critical Access Hospital (CAH). The provisions of the Balanced Budget Act of 1997 legislation were largely based on both the successful Medical Assistance Facilities (MAF) demonstration project in Montana and the Essential Access Community Hospital and Rural Primary Care Hospital (EACH/RPCH) demonstration project. The criteria for designation as a CAH are:

(I) is a nonprofit or public hospital and is located in a county (or equivalent unit of local government) in a rural area that is located more than a 35-mile drive (or a 15-mile drive if other criteria are met) from a hospital or another facility;

OR

(II) is certified by the State as being a necessary provider of health care services to residents in the area;

AND

(III) makes available 24-hour emergency care services that a State determines are necessary for ensuring access to emergency care services in each area served by a critical access hospital;

AND

(IV) provides not more than 15 (or, in the case of a swing-bed facility, 25) acute care inpatient beds for providing inpatient care for a period not to exceed 96 hours.[1]

[1]Medicare, Medicaid, and Children's Health Provisions of the Balanced Budget Act of 1997, PubLNo. 105-33., (Aug. 05, 1997)

An exception to the 15-bed requirement is made for swing-bed facilities, which are allowed to have up to 25 inpatient beds that can be used interchangeably for acute or SNF-level care, provided that not more than 15 beds are used at any one time for acute care. The facility is also required to meet the conditions of participation for CAHs. Designation by the State is not sufficient for CAH status. To participate and be paid as a CAH, a facility must be certified as a CAH by the Center for Medicare and Medicaid Services (CMS).

Medicare payments for CAH hospitals are determined as follows:

A. Effective for cost reporting periods beginning after October 1, 1997, payment for inpatient services of a CAH is the reasonable cost of providing the services, as determined under applicable Medicare principles of reimbursement, except that following principles do not apply: the lesser of costs or charges (LCC) rule, ceilings on hospital operating costs, and the reasonable compensation equivalent (RCE) limits for physician services to providers.

B. Effective for cost reporting periods beginning after October 1, 1997, payment for outpatient services of a CAH is the reasonable cost of providing the services, as determined under applicable Medicare principles of reimbursement, except that following principle do not apply: the lower of cost or charge rule, the reasonable compensation equivalent limits for physician services to providers, any type of reduction to operating or capital costs, blended payment amounts for ASC, radiology, or other diagnostic services, and the clinical laboratory payment methodology (lesser of actual charge or the fee schedule amount).[2]

Medicare also pays for the costs of providing ambulance services if there is no other service within 35 miles. Eligible Medicare bad debts, until recently, were paid at 100%. CAH providers could also elect the optional method for all outpatient professional service fees. Under this annual billing option, the facility would receive 115% of the normal fee schedule amount. It should be noted that for the years included in this study, no Wisconsin CAH facilities have elected this optional billing method. Swing bed services for both daily care and ancillaries are also cost reimbursed.

For most rural providers, cost reimbursement is typically higher than the payments they would receive from Medicare under the Prospective Payment System (PPS). The lower volume of services in most cases results in Medicare PPS payments less than the related costs of providing the care.

SCOPE OF STUDY

As of the date of this study, Wisconsin has 28 CAH facilities. An additional four hospitals are awaiting Medicare certification. The first hospital received CAH designation October 1, 1999. Table 1 on the next page shows when Wisconsin hospitals received CAH status:

[2] TRANS-LETTER, Hospital Manual (CMS-Pub. 10), Transmittal No. 740, February 1, 1999
415.22 Payment for Services Furnished by a CAH

Table 1: Wisconsin Certified CAH Facilities

YEAR	Number of CAH facilities
1999	3
2000	6
2001	9
2002	8
2003	2

There are 18 hospitals in Wisconsin that acquired Critical Access Hospital (CAH) status prior to January 1, 2002. Our study is to evaluate the impact that CAH status has had on these hospitals from a financial and operational standpoint. To complete our study, we requested specific data from the hospitals involved. We also accessed data available to us through other means.

Two facilities are part of large multi-entities organizations and the financial information included the entire operation. It was not possible to separate the CAH facilities financial data from the other entities so these two hospitals were excluded from the ratio analysis. The goal of the study is to provide an indication of the financial impact CAH status has had on the remaining 16 facilities.

The purpose of our study is to evaluate the financial impact to date that CAH status has had on Wisconsin hospitals. The source of data for the study was Medicare cost reports (both audited and unaudited) and the hospitals audited financial statements. In some cases, internal unaudited statements were used. The financial information was grouped in the calendar year depending on the ending date of the cost report. In other words, if a cost report covered the period July 1, 2000 through June 30, 2001, the information was included in the 2001 year. Because of the short-period cost reports, some hospitals had two cost reports ending in a single year. In those situations, the Prospective Payment System report information was included with the PPS data and the CAH cost report was included with the CAH financial data. No projections or estimates of future performance were used for this project. Our study was completed in the spring of 2003.

Reimbursement Changes in Transition from PPS to CAH

Under PPS, inpatient reimbursement is based on diagnosis related groups (DRGs). Swing bed reimbursement was based on a combination of skilled nursing facility per diems for the nursing care and the Medicare program ancillary costs until July 1 of 2001. At that time swing bed reimbursement became based on the prospective resource-based utilization group (RUGs) methodology. Prior to August 1, 2000, outpatient reimbursement was based on a combination of costs and fee schedules. Outpatient reimbursement is now based on ambulatory payment categories (APCs) and fee schedules.

CAH facilities are paid costs for acute care, swing bed and outpatient services. Table 2 indicates the changes in reimbursement experienced by the 16 CAH facilities included in this study as they transitioned from PPS hospitals to CAH status. In 1997 all 16 facilities were PPS hospitals, and by 2002 all had converted to CAH status. The years 1999 through 2001 are the transition years. Table 2 also provides an indication of the failure of PPS reimbursement for this type of facility. During the years preceding any of the hospitals included in the study becoming a CAH, this

group of hospitals was experiencing Medicare reimbursement that was less then the cost of the services provided.

In order for the ratios to be consistent for PPS and CAH payment systems, outpatient costs, payments, and charges in Table 2 does not include data for Medicare outpatient laboratory services. Under the PPS system, most Medicare outpatient laboratory tests are paid based on a fee schedule. CAH facilities are paid costs for Medicare outpatient laboratory services. In general, Medicare laboratory fee schedule reimbursement is less than cost. For 2002, all facilities had converted to CAH status resulting in Medicare payments equaling costs.

Table 2: Medicare Acute, Swing Bed, and Outpatient Costs and Payments

Description	1997	1998	1999	2000	2001	2002
Medicare Reimbursements						
Inpatient						
Acute % Payment/Costs	92.18%	88.88%	85.37%	89.48%	95.14%	100.00%
Swing Bed % Payment/Costs	31.83%	32.23%	32.83%	42.05%	64.59%	100.00%
Swing Bed Per Diem	$247.71	$272.55	$293.83	$316.64	$542.70	$876.41
Outpatient						
O/P % Costs To Charges	58.14%	55.25%	53.06%	52.52%	53.57%	57.19%
O/P % Payment To Charges	51.62%	47.91%	46.88%	47.49%	51.22%	57.19%

Obviously, many other factors contribute to the entities financial performance. Financial ratio analysis was determined to be a key evaluation tool in the study. A discussion of the ratios selected for this project follows.

FINANCIAL RATIOS

The following ratios were selected for the study:

Table 3: Financial Ratios and Description

RATIO	DESCRIPTION
Current Ratio	This ratio measures the hospital's ability to meet its current liabilities with its current assets (assets expected to be realized in cash during the fiscal year). A ratio of 1.0 or higher indicates that all current liabilities could be adequately covered by the hospital's existing current assets.
Days in Accounts Receivable (net)	This ratio measures the average number of days in the collection period. A larger number of days represent cash that is unavailable for use in operations.
Days Cash on Hand	The number of days of expenses that the hospital can currently cover with its available cash.
Total Margin	This ratio evaluates the overall profitability of the hospital using both operating surplus (loss) and non-operating surplus (loss).
Return on Equity	Expression of net income relative to total equity.
Average Age of Plant	Age of plant is the average age of property, plant and equipment owned by the hospital.
Debt Financing Percent	Measures relationship of debts to assets.
Fixed Asset Turnover	Provides an indication of the efficiency with which the hospital uses its fixed assets to generate revenues.
Long-Term Debt to Equity	Measures hospital's burden of debt and the ability for additional borrowing.
Cash Flow to Total Debt	This ratio reflects the amount of cash flow being applied to total outstanding debt (all current liabilities in addition to long-term debt) and reflects how much cash can be applied to debt repayment. The lower this ratio, the more likely a hospital will be unable to meet debt payments of interest and principal and the higher the likelihood of violating any debt covenants.
Deduction Ratio	The deduction percentage measures the proportion of total patient charges that are given up as discounts and allowances.

Table 4 describes how each financial ratio is calculated:

Table 4: Financial Ratio Calculation

RATIO	CALCULATION
Current Ratio	Current assets/Current liabilities
Days in Accounts Receivable (net)	Net accounts receivable/Net patient revenue per day
Days Cash on Hand	Cash/(Operating expenses less deprecation/365)
Total Margin	Excess of revenue over expenses/Total revenue
Return on Equity	Excess of revenues over expenses/Net Assets
Average Age of Plant	Accumulated depreciation/Depreciation expense
Debt Financing Percent	Total liabilities/Total assets
Fixed Asset Turnover	Total revenue/Net plant, property & equipment
Long-Term Debt to Equity	Total long-term debt/Net assets
Cash Flow to Total Debt	Excess of revenues over expenses + depreciation/Total long-term debt
Deduction Ratio	Total patient revenue-net patient revenue/Total patient revenue
Financial Strength Index	See discussion below

The financial strength index (FSI) is a financial measure that reflects an organization's overall financial condition. The FSI encompasses four major components of an entity's financial condition: liquidity, profitability, capital structure, and physical plant age. The formula for the FSI uses four financial ratios from an organization's balance sheet and income statement.

Table 5: FSI Dimensions and Measures

Dimensions of Financial Strength	Measured by
Profits	Total margin
Liquidity	Days cash on hand
Debt expense	Debt financing %
Age of physical facilities	Average age of plant

Each of the four measures is "normalized" around a predefined average for the measure. Adding the four measures creates a composite indicator of total financial strength. Thus, the formula for calculating the FSI is as follows:

FSI = [(Total Margin - 4.0) / 4.0] + [(Days Cash on Hand - 50) / 50]
+ [(50 - Debt Financing Percent) / 50] + [(9.0 - Average Age of Plant) / 9.0]

Organizations that have high margins, lots of cash, little debt, and new facilities are in better financial condition and have higher FSI. On the other hand, entities with losses, little cash, lots of debt, and old physical facilities have lower ratios. Table 6 is a suggested guide to rate FSI:

Table 6: FSI Rating Guide

Score	Financial Health
Greater than 3	Excellent
0 to 3	Good
-2 to 0	Fair
Less than -2	Poor

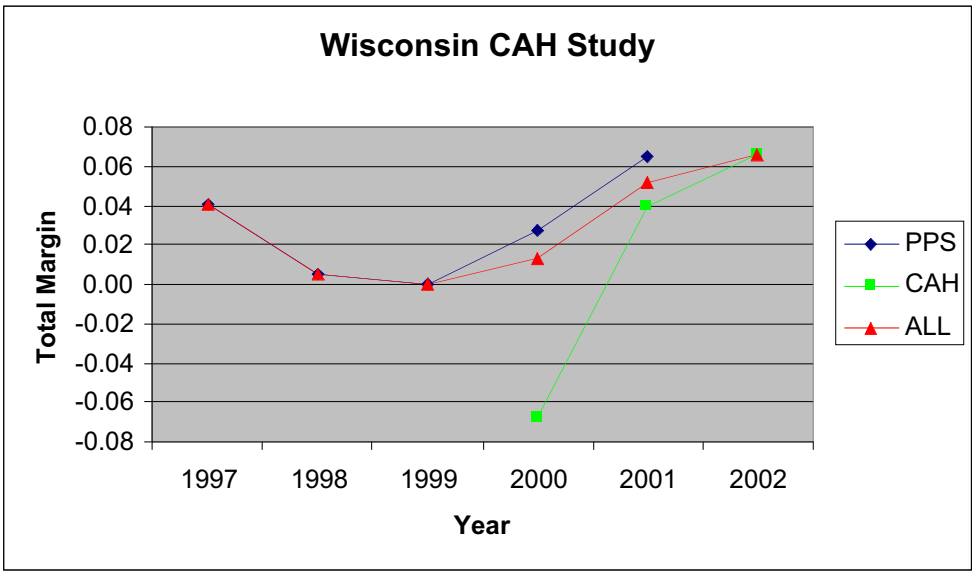
FSI seeks to combine the effects of four financial performance ratios in order to reveal the impact of changes in the organization. If one area of the organization's finances improves but others regress, the FSI will properly reflect the tradeoff. For example, if an entity increased its cash position simply by issuing additional debt, the improvement in days cash on hand will be offset by the increase in debt financing percent. No single financial measure, however, is capable of assessing the financial health of an organization.[3]

FINANCIAL IMPACT

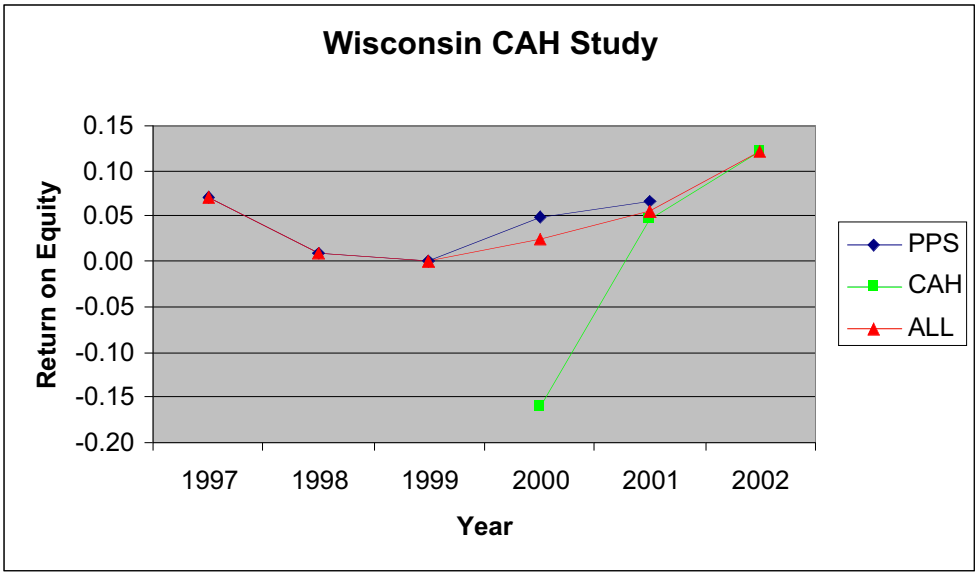
Although the CAH program is in it's relatively infancy, early indications are that the financial impact on Critical Access Hospitals has been positive. The analysis of various ratios indicates improvement in financial performance in a number of key areas. The following graphs were based on financial information from CAH facilities. Most data was taken from the Medicare cost

[3] SOURCE: "The Financial Strength Index: A Measure of a Firm's Overall Financial Health," by William O. Cleverley, Ph.D., President, Cleverley & Associates, and Andrew E. Cameron, Ph.D., MBA, Assistant Professor, Ohio State University. Published in the January 2003 issue of HFMA's new newsletter, Executive Insights.

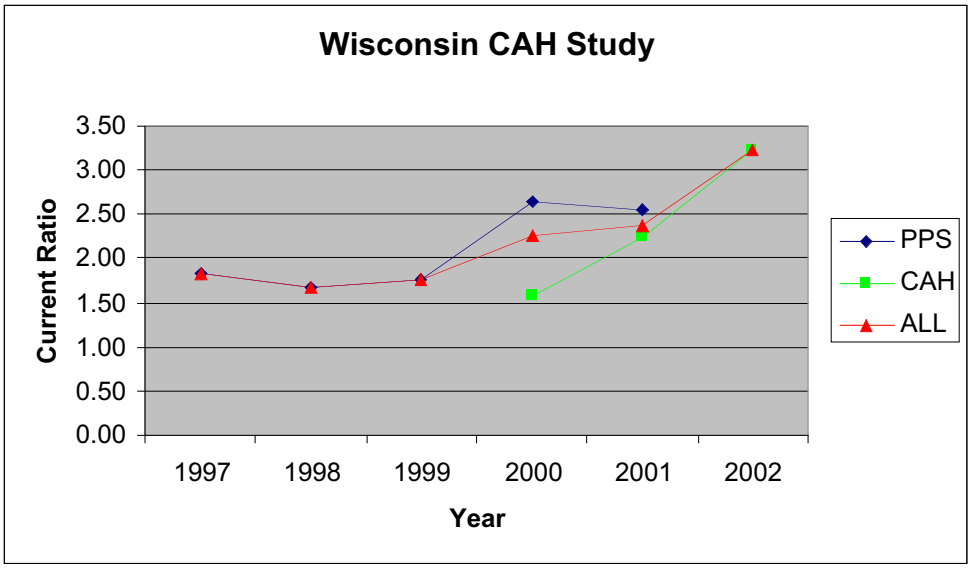
reports. For years 1997, 1998, and 1999, all facilities in the study were paid under PPS. Therefore, the graphs for "Total" and "PPS" overlay. For 2002, all data is for CAH facilities so "Total" and "CAH" are the same. Since the effective dates of CAH status and the normal fiscal year were different, the facilities were required to file final short-period cost reports under the Prospective Payment System or PPS. Because of the short-period reports, the facilities balance sheet and income statement information was derived from the G-series worksheets of the Medicare cost reports. As mentioned previously, the facility may have data split between PPS and CAH designations. The cost report data was grouped by year based on the fiscal year end date. The graphs of various ratios clearly indicates improvement in the following areas:



Total Margin represents the percent of Net Income to Net Patient Revenue. High Total Margin percentages and increasing trends are favorable financial indicators. The graph clearly shows that in 1997, 1998, and 1999, the hospitals Total Margin were declining. In 1997, the hospitals had Total Margin of 4%. By 1999, the percent had fallen to 0%. In 2000, the first year with CAH data, there was a small improvement in "All" to over 1%. By 2002, the "All" Total Margin percent had climbed to 6%. The chart clearly shows that hospitals were struggling under Medicare PPS to remain profitable. The chart also indicates that the early converters to CAH status had negative total margins (more than 6% in 2000).



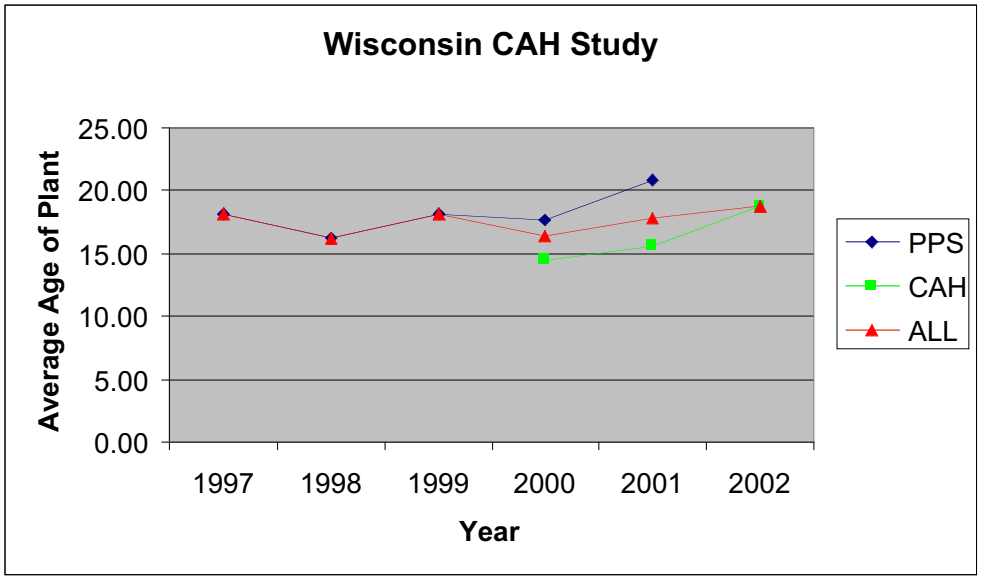
Another financial ratio related closely to Total Margin is Return on Equity. This ratio is calculated by dividing Net Income by Equity. Equity is also referred to as "Net Assets" which is Total Assets minus Liabilities. This graph again shows declining Returns on Equity for 1997, 1998, and 1999. The chart clearly shows Total Margins improved under CAH status in 2001 and 2002.



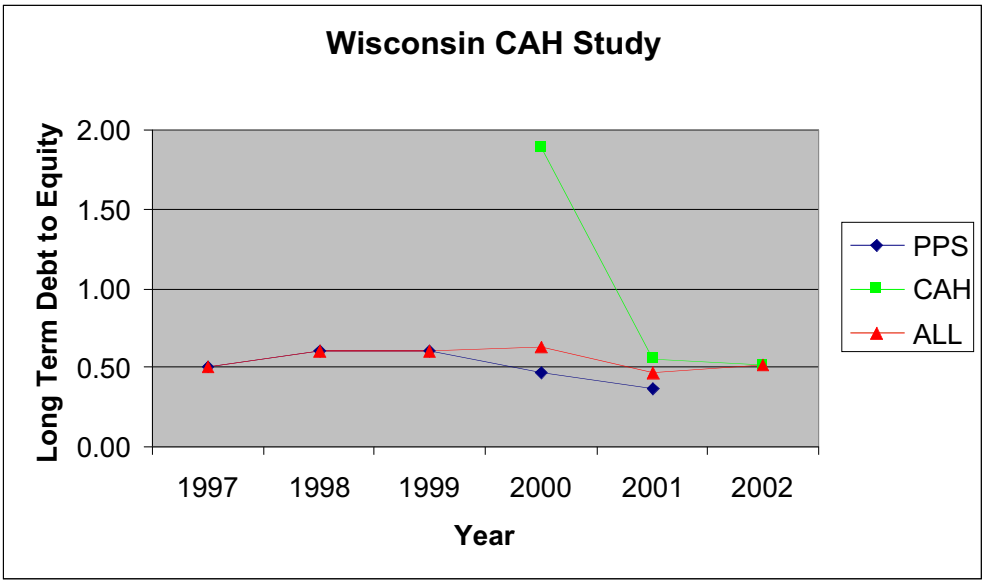
This graph shows improvement in the ratio of current assets to current liabilities. **CURRENT ASSETS** are those assets of a company that are reasonably expected to be realized in cash, or sold, or consumed during the normal operating cycle of the business (usually one year). Such assets include cash, accounts receivable due usually within one year, short-term investments,

inventories, and prepaid expenses. **CURRENT LIABILITIES** are liabilities to be paid within one year of the balance sheet date.

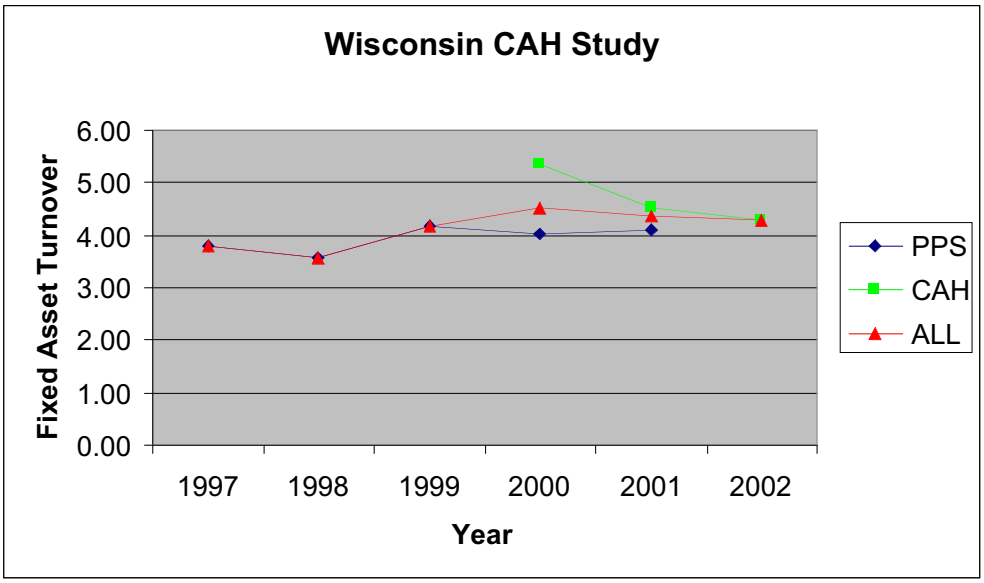
Increasing trends for the Current Ratio is favorable. In the first year of CAH data (2000), there was significant gap between CAH and PPS facilities. As more facilities became CAH providers, the gap narrows in 2001. It is important to point out the general upward trend of the Current Ratio for "All" providers. This indicates hospitals have improved their liquidity positions as measured by the Current Ratio under CAH reimbursement.



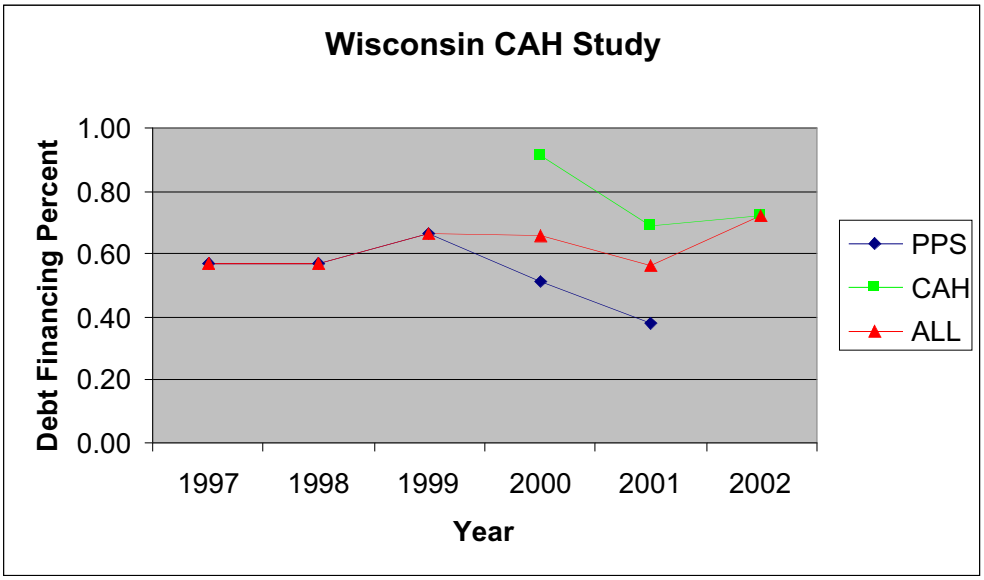
Average Age of Plant is calculated by dividing Accumulated Depreciation by Depreciation Expense. Lower ratios are favorable as are decreasing trends. The chart shows fairly high average age of plant ratios for all entities for all years. This would indicate that capital improvements have been postponed due to limited resources. This ratio may decrease for CAH facilities over the next several years due to the Medicare principle of cost reimbursement.



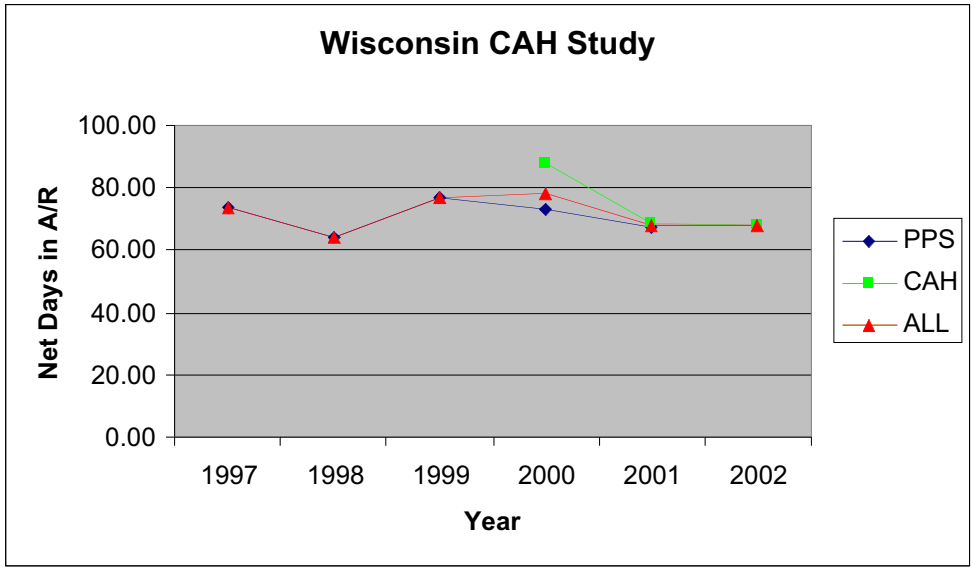
Long Term Debt to Equity ratio is long term debt divided by "Equity" also referred to "Net Assets". This ratio measures the entities burden of long-term debt and the ability to borrow additional funds. Low values are favorable. In 2000 and 2001, CAH facilities had a higher debt financing percent than the PPS entities. "All" facilities showed a slight increase in 2002.



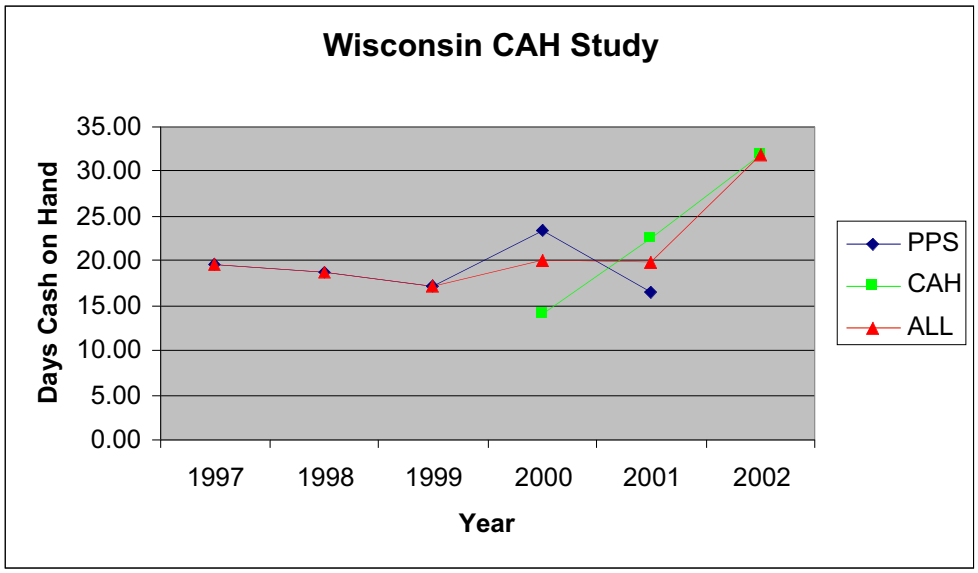
The Fixed Asset Turnover ratio is calculated by dividing gross revenue by the book value of property and equipment less accumulated depreciation. Higher ratios are favorable. Higher Fixed Asset Turnover ratios indicate assets are used more efficiently to provide patient services.



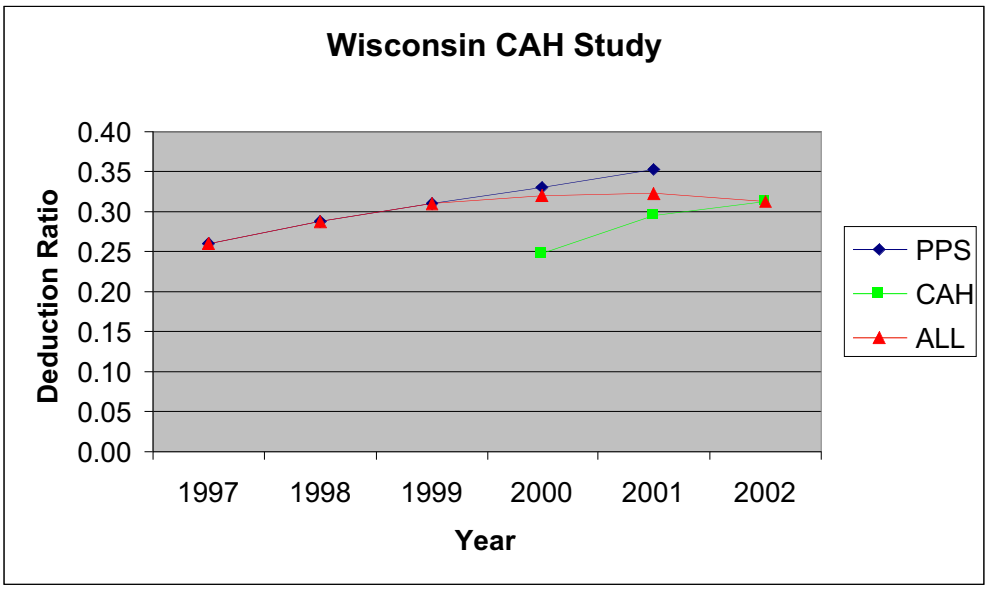
The debt financing percent is calculated by dividing total liabilities by total assets. Low ratios indicate stronger financial position. This ratio measures the relationship between liabilities and assets. The chart indicates there was a slight increase in Debt Financing Percent in 2002 for "All", possibly due to additional borrowing for needed capital improvements.



Net days in Accounts Receivable is a ratio that indicates how quickly services are billed and paid. Generally, low numbers for this ratio are favorable. Decreasing trends show improvement in the collection process… Lower Days in Accounts Receivable usually translates into higher cash account balances. The study group in 2002 for "All" facilities shows 60 days average revenue in net accounts receivable. The early CAH converters in 2000 showed over 80 days in Accounts Receivable. This may be an indication of limited resources to adequately bill and monitor this function.

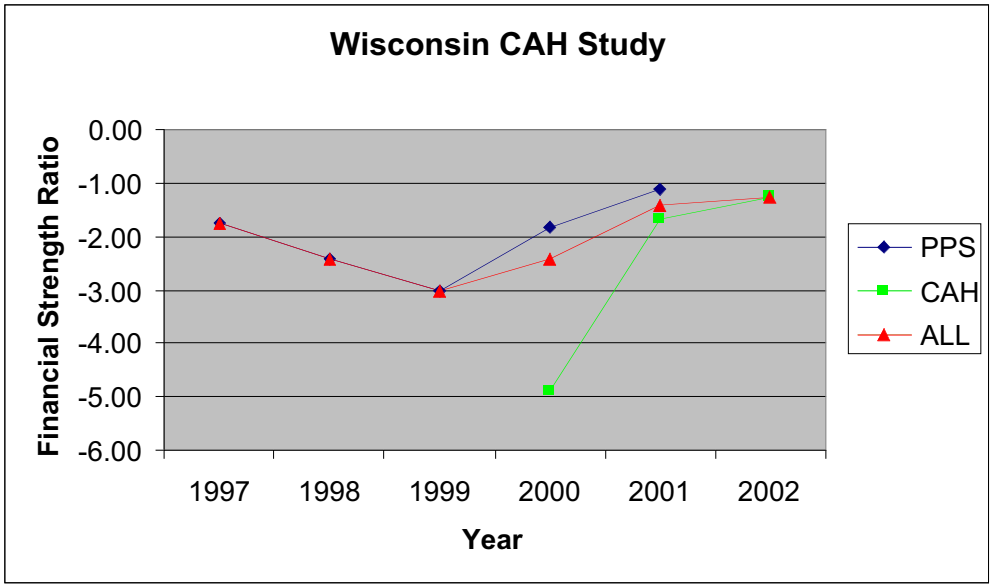


The Days Cash on Hand ratio indicates how many days cash the facility has based on the average daily cash expenditures. High ratios are favorable and an increasing trend in this ratio is also favorable. The chart indicates that in 2000, the early CAH converters had lower Days Cash on Hand than the PPS providers. However, in 2001, the chart indicates the reverse situation. Also, the "All" category for 2002 shows a positive increase in Days Cash on Hand. As mentioned in the Days in Accounts Receivable, effective management of accounts receivable has a positive impact on Days Cash on Hand.



This graph measures the amount of discount facilities "write-off". Stated another way, the deduction ratio shows the percent difference between hospital charges and actual cash paid for services provided. The deductions include government payers such as Medicare and Medicaid,

Health Maintenance Organizations, Preferred Provider Organizations, and private pay discounts (charity care). For 1997, 1998, and 1999, the graph reflects a growing gap between hospital "gross" charges and the "net" charges for services provided. This is a common trend for hospitals over the last several years as charges have outpaced government, third-party, and private payer payment. The graph clearly shows, however, that as hospitals convert to CAH status, the deduction ratio for "All" facilities actually declines for 2000, 2001, and 2002. This trend can be attributed to increased payment under CAH status. Because of the large percentage of Medicare patients (approximately 75% of patient days for all facilities in 2002 were Medicare days), the reduction in "discount" has a dramatic effect on this ratio.



The Financial Strength Index (FSI) combines four different ratios resulting in a single number that takes into account many performance factors to measure the overall entities financial health. Positive numbers indicate stronger financial positions. Increasing trends in this ratio are favorable. The chart indicates a general weakening of the FSI in 1997, 1998, and 1999. After all facilities conversion to CAH status, the FSI in 2002 increased to approximately negative one (–1). Although this shows improvement, a negative one (-1) FSI still indicates only average financial strength. In order to be considered in excellent health, the FSI should be 3 or greater. Because of the cost-based Medicare financing for CAH facilities, this goal may not be attainable.

CHANGES IN SERVICES

As mentioned previously, CAH facilities are reimbursed the cost they incur for services provided to Medicare beneficiaries. Medicare covers most of the patients treated at these facilities. Table 7 shows the Medicare utilization for the study facilities for the indicated years ranged from just under 70% to over 76%:

Table 7: Medicare Utilization (Based on Patient Days)

Year	1997	1998	1999	2000	2001	2002
Utilization	69.87%	73.32%	73.25%	72.75%	74.60%	76.39%

Table 8: Average Length of Stay and Swing-bed Utilization

	1997	1998	1999	2000	2001	2002
Average Total Acute LOS	3.44	3.43	3.22	3.22	3.16	2.91
Average Medicare Acute LOS	3.75	3.49	3.65	3.53	3.45	3.34
Swing-bed days as % of Total Days	31.27%	34.59%	36.61%	36.52%	38.62%	40.19%

Table 8 indicates the average acute length of stay for all patients has declined since 1997. The average length of stay for acute Medicare patients shows a similar trend. This decline in length of stay is consistent with national norms. The Table also shows the percentage of total swing-bed days to total patient days has increased since 1997.

CAH status creates a new set of dynamics management must consider to determine how to take full advantage of cost based payment. Medicare requires full costing (i.e. all related overhead is allocated through the step-down process) to programs paid under separate methodologies such as Home Health, Skilled Nursing Facilities, Rural Health Clinics, Hospices, and any "non-reimbursable" cost centers such as Physician Office Buildings, Gift Shop, Meals on Wheels Programs, and Fund Raising cost centers. Labor and Delivery and Nursery departments have little or no Medicare utilization resulting in minimal if any Medicare reimbursable costs for these services. As a result, CAH facilities, as part of their strategic planning process, must evaluate services to determine which to provide to their communities. Table 8 shows the change in services provided since the 16 study facilities received critical access status:

Table 9: Changes in Services Provided

SERVICES	PRE-CAH	POST-CAH
Skilled Nursing Facilities	8	8
Swing Bed	16	16
Home Health Agency	3	2
Hospice	0	1
Rural Health Clinics	0	2
Ambulance	6	6

Table 8 indicates CAH facilities have made relatively few changes in services but this may be due to the short time under cost based payment. It should also be mentioned facilities may change services for reasons unrelated to critical access status. Management may also be currently evaluating which services to provide. Future studies will provide a clearer picture of possible trends. National studies indicate CAH hospitals are adapting to cost based payment by expanding services such as swing beds, radiological services, outpatient rehabilitation, and rural health clinics. Services that are the most likely to be eliminated are home health and obstetrics.

PROPOSED CHANGES

Several changes to the Critical Access Hospital rules are currently before Congress. Rural Community Hospital Assistance Act of 2003 is one bill currently being debated in the Senate and the House of Representatives. Here are some of the changes being considered:

1. Elimination of the 35-mile restriction known as the "isolation" requirement for cost based payment for ambulance services.

2. CAH facilities could elect to paid for by Periodic Interim Payment, also know as PIP for services provided to Medicare patients.

3. Clarification and flexibility on bed counts for determining CAH eligibility.

4. A return on equity percent would be added to capital payments.

5. CAH facilities would be paid 100% of their allowable Medicare bad debts.

6. Cost reimbursement would be extended to CAH-operated Home Health Agency and Skilled Nursing Facilities.

Another concern that may require legislative remedy is that Medicare managed care organizations currently negotiate payment between the CAH and the managed care plan. The managed care organization is not required to pay CAH's on a cost basis. Most Wisconsin facilities currently have a limited number of Medicare beneficiaries enrolled in managed care plans in their service areas. The issue will become of greater concern if the managed care plans are successful in enrolling more Medicare beneficiaries in rural areas.

Congress is currently debating the legislative proposals and the final changes cannot be determined at this time.

SUMMARY

As discussed previously, the Critical Access Hospital program is fairly new. The lack of experience of CAH facilities makes generalizations about the impact of the program on Wisconsin hospitals difficult. Also, facilities have had limited time to make adjustments in organizational structure and operations to capitalize on CAH status. As financial information becomes available over the next several years, the trend of CAH performance will become clear. In spite of this drawback, the following conclusions can be drawn for the timeframe included in this study:

1. CAH facilities have shown an improvement in financial performance as measured by several key financial ratios.

2. CAH hospitals have shown improvement in the current ratio. Current assets and current liabilities are defined as those items that will be consumed or retired in the next annual cost reporting cycle.

3. Operating margins have improved. This ratio indicates that profitability has improved.

4. Overall financial strength as measured by the "Financial Strength Index" has improved.

5. Facilities have not made significant changes in patient services.

The improvements in financial performance will translate to many changes for CAH facilities and their communities. The cost-based reimbursement principle will allow aging facilities to improve their plant and add new technology. Increased Medicare payments will allow CAH facilities to continue to provide high-quality healthcare services in their communities.