NC Rural Health Research & Policy Analysis Center

A Comparison of Rural Hospitals with Special Medicare Payment Provisions to Urban and Rural Hospitals Paid Under Prospective Payment

Final Report No. 98

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Executive Summary

The financial performance of rural hospitals has long been a concern to federal and state agencies. Four specific Medicare hospital classifications, each with different payment enhancements and qualification criteria, are available to hospitals that serve rural communities [sole community hospital (SCH), Medicare-dependent hospital (MDH), rural referral center (RRC), and critical access hospital (CAH)]. The perceived benefits of conversion to CAH status have led to calls for expansion of cost-based reimbursement to other rural hospitals that are purported to be under financial pressure. However, the financial performance and condition of these other rural hospitals have not been empirically assessed.

This study compares the financial performance and condition of rural hospitals with special Medicare payment provisions to urban and rural hospitals paid under prospective payment (U-PPS and R-PPS hospitals, respectively). Nine ratios from the three most common categories of ratios used in financial statement analysis (profitability, liquidity, and capital structure) as well as four other ratios that are commonly used to evaluate rural hospital financial performance are assessed.

There are five principal findings from this study:

- *There is variation in financial condition across types of rural hospitals*. It is inaccurate to characterize all rural hospitals as being under financial pressure; rather it appears that some types have many hospitals under a lot of pressure (CAHs, MDHs and R-PPS hospitals), some have some hospitals under pressure (SCHs), and some have few hospitals under pressure (RRCs and RRC/SCHs). The hospitals under a lot of pressure should be of greater concern to policy makers and those concerned with access to hospital care by people who live in rural America.

- *There were substantial differences between CAHs and other hospitals*. On average, CAHs took longer to collect their receivables, received more of their revenue from outpatient business, and had lower levels of allowances and discounts. In terms of profitability, on average, CAHs, MDHs, and R-PPS hospitals were consistently less profitable than other hospital classifications. CAHs had the oldest fixed assets in two of three years. With older plant and equipment, CAHs may in the future have diminished ability to attract patients and retain physicians.

- *RRCs appear to have performed well as a group*. They had greater ability to pay obligations related to long-term debt, principal payments and interest expense. Probably the strongest finding of this study is the higher profitability of RRC/SCHs. These hospitals were better at controlling expenses relative to revenues, generating cash flow from providing patient care services, and avoiding financial distress from negative margins. These findings are likely influenced by the fact that RRCs and RRC/SCHs are the largest type of rural hospital.

- *Substantial differences in cash management exist among hospitals with different payment classifications*. U-PPS hospitals may have greater opportunities for short-term investment of surplus cash, or a higher proportion of U-PPS hospitals may belong to a system. Many systems “sweep” the cash accounts of their affiliated hospitals daily, so fewer dollars are left

on hand, and the hospitals depend upon their corporate office for any short-term credit or liquidity needs.

- *The profitability of all hospitals declined sharply in 2008*. The profitability decline likely reflects the worsening economy and raises 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. It will be important to monitor future rural hospital financial performance to gauge the effects of both the economy and health reform legislation.

The benefit of Medicare cost-based reimbursement for CAHs has led to calls for its expansion to other rural hospital classifications that are purported to be under financial pressure. However, this study has found that CAHs remain relatively less profitable, suggesting that Medicare cost-based reimbursement, while potentially improving Medicare revenues, should not be seen as a panacea for rural hospitals. (Note that this study did not specifically consider the potential effect of changes to reimbursement methods.) The financial performance of CAHs relative to other hospital classifications 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. Therefore, while extending Medicare cost-based reimbursement to other rural hospitals would likely result in financial benefit, the degree of improvement in financial condition to expect is uncertain.

Introduction

The profitability and 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. Some rural hospitals are at greater financial risk under the Medicare inpatient prospective payment system (PPS) because they have a low patient volume. These hospitals may struggle to cover their fixed costs with revenue that depends, in part, on how many patients they see. Many rural hospitals are the only hospital facility in their community and their survival is vital to ensure timely access to health care. For nearly as long as Medicare has paid for hospital services prospectively, Federal law makers have authorized the Medicare program to address the challenges faced by different kinds of rural hospitals with alternative payments and adjustments that address these challenges. There are currently four classifications of rural hospitals that can qualify for special payment provisions under Medicare: Critical Access Hospitals (CAHs), Medicare Dependent Hospitals (MDHs), Sole Community Hospitals (SCHs), and Rural Referral Centers (RRCs).

The majority of rural hospitals are classified as CAHs, which are reimbursed for 101% of their Medicare allowable costs for inpatient and outpatient care. Reimbursement to all other rural hospitals with special Medicare payment provisions is based on either an adjusted PPS payment or a hospital-specific rate calculated from historical costs. Table 1 presents payment methods applied to each classification in greater detail.

Current payment methodologies and eligibility criteria reflect a series of legislative changes which have occurred since the four rural hospital Medicare payment classifications were each originally created. The changes have been primarily to increase reimbursement levels and expand eligibility. The Medicare Modernization Act of 2003 (MMA) increased the maximum average daily census for CAHs from 15 to 25. The MMA also increased CAH payment from 100% of reasonable costs to 101% and permitted CAHs to operate distinct part psychiatric and rehabilitation units that are not counted in the 25-bed limit. The MMA ended states' authority to declare hospitals "necessary providers," which had previously allowed hospitals to qualify for CAH status even when they did not meet distance requirements.

Successive legislative changes have allowed SCHs and MDHs to base their hospital-specific base payment on more recent years' cost per discharge. The most recent updates were in the Deficit Reduction Act of 2005 (DRA) which allows MDHs to use 2002 cost per discharge trended forward, and in the Medicare Improvements for Patients and Providers Act of 2008, which allows SCHs to use their 2006 costs per discharge to determine a hospital specific rate. The DRA also increased the proportion of the difference between the hospital specific rate and the PPS rate that is used in MDH payment from 50% to 75%.

The disproportionate share adjustment available to RRCs and SCHs was increased through the Benefits Improvement and Protection Act of 2000. The percent of additional reimbursement increased again in the MMA, but was also capped at 12% for SCHs.

Table 1: Medicare Payment Classifications of Rural Hospitals

Classification	Payment method	Eligibility criteria
Critical access hospital (CAH)	• Reimbursement is 101 percent of allowable costs for inpatient, outpatient, laboratory, therapy services, and post acute services in swing beds (BBA 1997); • If CAH owns and operates the only ambulance service within 35 miles, this service receives cost-based reimbursement; and • While IPPS and OPPS do not apply, Medicare Part A and B deductible and coinsurance rules do except for pneumococcal pneumonia vaccines, influenza vaccines, related administration of the vaccines, screening mammograms, and clinical diagnostic laboratory tests.	• Distance from nearest like hospital • Size (<25 beds) • Formerly states could declare hospitals "necessary providers" to qualify[1] • Provide 24-hour emergency care • Average LOS<=96 hours

Sole community hospital (SCH)	• Inpatient reimbursement is the greatest aggregate of the federal rate applicable to the hospital or the updated hospital-specific rate based on fiscal year 1982, 1987 (OBRA 1989), 1996 (BBRA 1999), or 2006 costs per discharge (MIPPA 2008);
	• Disproportionate share adjustment (DSH):
	  • If DSH patient percentage (DPP) > 20.2%: Adjustment = 5.88% + .825*(DPP-20.2%)
	  • If DSH patient percentage (DPP) =< 20.2%: Adjustment = 2.5% + .65*(DPP-15%)
	  • Adjustment may not exceed a cap of 12%. (MMA 2003); and
	• Volume decline adjustment: If caseload falls by 5% due to circumstances beyond the SCH's control, it may receive payments necessary to fully compensate for fixed costs (OBRA 1989).
		• > 35 miles from nearest like hospital OR
		• 25-35 miles from nearest like hospital AND
		  • Bed size (<50) OR
		  • Exclusive Medicare service in area OR
		  • Closer hospitals are inaccessible.
		OR
		• Other hospitals are 15-24 miles but are inaccessible
		• Driving time to next hospital >45mins.

Medicare-dependent hospital (MDH)	• Inpatient reimbursement is the PPS rate plus 75% of the amount by which costs per discharge for Medicare patients from 1982, 1987 (OBRA 1993), or 2002 trended forward (DRA 2005) exceed the PPS rate;
	• Disproportionate share adjustment
	  • Same as SCH
	  • No cap (DRA 2005); and
	• Volume decline adjustment: If caseload falls by 5% due to circumstances beyond the MDH's control, it may receive payments necessary to fully compensate for fixed costs (renewed through 2011 in DRA 2005).
		• Rurality
		• Bed size (<100 beds)
		• Not SCH eligible
		• > 60% inpatient discharges to Medicare patients

Rural referral center (RRC)	• Reimbursement is based on the urban PPS rate (OBRA 1989); and
	• Disproportionate share adjustment:
	  • Same as SCH
	  • No cap, and;
	• Exempt from demonstrating two of three criteria for geographic reclassification: Proximity to the redesignation area and that its wages exceed 106 percent of area's average wage.
		• Rurality
		• High case-mix intensity and sufficient supply of specialists
		OR
		• Size (>275 beds)
		OR
		• High referral volume

BBA: Balanced Budget Act; IPPS: Inpatient perspective payment system; OPPS: Outpatient perspective payment system; DRA: Deficit Reduction Act; OBRA: Omnibus Budget Reconciliation Act; BBRA: Balanced Budget Refinement Act.

[1] The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 eliminated this provision, effective January 2006.

Despite the payment augmentations for MDHs, SCHs and RRCs, continued reported financial difficulties for rural hospitals (both those that qualify for special Medicare payment provisions and those that are reimbursed under PPS) have attracted the interest of rural hospital advocates. Several parties, in and outside of Congress, have proposed expanding the cost-based reimbursement that is available to CAHs to other rural hospitals.

In the MMA, Congress instituted a demonstration program for expanding cost-based reimbursement to hospitals with 25-50 beds. The Rural Community Hospital (RCH) Demonstration Program selected a small sample of rural hospitals which may be MDHs, SCHs or rural hospitals paid under PPS. In the first pay period they received reasonable cost-based reimbursement, followed by either the lower of cost-based reimbursement or the previous year's amount updated to the current cost period. For MDHs and SCHs, this provides reimbursement that covers current year costs more closely than the current payment methods.

In its 2009 Legislative and Regulatory Agenda, the National Rural Health Association advocated that Medicare payment to SCHs should be 101% of reasonable costs. Similarly, in its 2009 Rural Agenda, the American Hospital Association advocated extending and expanding the RCH Demonstration Program.

Despite several proposals to expand cost-based reimbursement to rural hospitals other than CAHs, the relative financial performance of rural hospitals with different Medicare payment classification has not been extensively studied. In its 2003 Annual Report to the Congress, the Medicare Payment Advisory Commission published 2000 total margins by hospital classification but no other analyses were undertaken (MedPac, 2003).

Several studies have concluded that CAH conversion improved the financial viability of small rural hospitals. Stensland et al. (2002) showed average total profit margins for converting hospitals increased from -2.5% to 3.7% two years after gaining CAH status. Time series regression models on data from converting hospitals in Nebraska and Oklahoma also detected financial improvements following conversion, controlling for other hospital characteristics (Chen et al., 2004; Li, Schneider, and Ward, 2009). Lawler, Doeksen and Schott (2003) calculated that CAH status was associated with significantly smaller financial losses for the 15 Oklahoma hospitals in their study.

Other studies have investigated rural hospital financial performance. Younis (2003) found that rural and small hospitals face significant factors that hinder performance in comparison to urban and larger hospitals, such as diseconomies of scale. McCue (2007) compared large, rural for-profit and nonprofit hospitals and found that for-profit rural hospitals achieved a greater positive cash flow by focusing on both control of labor costs and operating costs per discharge. McCue and Nayar (2009) compared for-profit and nonprofit RRCs and concluded that for-profit RRCs generated a substantially higher cash flow margin by controlling their operating costs.

This study fills the gap in existing knowledge by comparing the financial performance and condition of rural hospitals with special Medicare payment provisions to hospitals paid under PPS - both urban (U-PPSs) and rural (R-PPSs). More specifically, the profitability, liquidity, and capital structure is compared across classifications over time. Financial distress, measured by the percent of hospitals with negative margins, is also assessed.

Methods

Research Design

The research design is based on standard financial statement analysis. Financial statement analysis involves a number of techniques that extract information contained in an organization's financial statements and combine it in a form that facilitates judgments about the organization's financial condition. The most common technique is ratio analysis which combines data from the balance sheet and the income statement to create single numbers that have easily interpreted financial meaning. This study includes nine ratios from the three most common categories of ratios used in financial statement analysis (profitability, liquidity, and capital structure) as well as four other ratios that are commonly used to assess rural hospital financial performance.

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). Three profitability indicators were used:

- *Total Margin:* Measures the control of expenses relative to revenues.
- *Cash Flow Margin:* Measures the ability to generate cash flow from providing patient care services.
- *Return on Equity:* Measures the net income generated by net assets.

Liquidity. A liquid asset is one that can be quickly converted to cash at the going market price. An analysis of liquidity asks the question "will the organization be able to pay off its debts as they come due over the next year or so?" Liquidity indicators measure the ability to meet cash obligations in a timely manner. Three liquidity indicators were used:

- *Current Ratio:* Measures the number of times short-term obligations can be paid using short-term assets.
- *Days Cash on Hand:* Measures the number of days an organization could operate if no cash was collected or received.
- *Days Revenue in Accounts Receivable:* Measures the number of days that it takes an organization to collect its receivables.

Capital structure. The extent to which an organization uses debt financing, or financial leverage, has three implications. First, debt allows not-for-profit organizations to provide more services than it could if it were financed only by contributed capital and retained earnings. Second, creditors look to the equity to provide a margin of safety, so the higher the proportion of total capital provided by the owners, the less the risk faced by creditors. Third, if the organization earns more on investments financed with borrowed funds than it pays in interest, the return on owner's capital is magnified, or leveraged up. Capital structure indicators measure the extent of debt and equity financing. Three capital structure indicators were used:

- *Equity Financing:* Measures the percentage of total assets financed by equity.
- *Debt Service Coverage:* Measures the ability to pay obligations related to long-term debt, principal payments and interest expense.
- *Long-Term Debt to Capitalization:* Measures the percentage of total capital that is debt.

Other. The analysis also included four other ratios commonly used to evaluate hospital financial performance:

- *Outpatient Revenue to Total Revenue:* Measures the percentage of total revenue that is from outpatient services (including, for example, Rural Health Clinics, free-standing clinics, and home health services).
- *Patient Deductions:* Measures the allowances and discounts per dollar of total patient revenue.
- *Average Age of Plant:* Measures the average accounting age in years of the fixed assets of an organization.
- *Average Daily Census – Acute Beds:* Measures the average number of acute care beds occupied per day.

The standard ratio analysis reveals trends in financial performance by industry segments over time. In addition, the percentage of hospitals with negative total and cash flow margins were analyzed to detect the extent to which hospitals in each classification were likely experiencing financial distress. Although there are no empirically tested thresholds for detecting financial distress, most financial analysts would agree that negative margins are probable signs of financial problems. The difference between negative total margin and cash flow margin is as follows:

- *Negative total margin:* Measures the percentage of all hospitals within a Medicare payment classification that had total expenses greater than total revenue (a total margin less than 0 percent.)
- *Negative cash flow margin:* Measures the percent of hospitals within a Medicare payment classification that had cash outflows greater than cash inflows from providing patient care services (a cash flow margin less than 0 percent.)

For most hospitals over the long run, either a large negative total or cash flow margin is likely indicative of financial distress. For a particular hospital over the short run, however, a large negative total or cash flow margin may not be indicative of financial distress. For example, a hospital could experience an extraordinary expense that results in a negative total or cash flow margin for one year only.

The performance dimensions, indicators, definitions, and Medicare Cost Report accounts are shown in Table 2.

Table 2: Performance Dimensions, Indicators, Definitions, and Medicare Cost Report Accounts

Performance Dimension and Indicator	Definition	Medicare Cost Report Accounts
Profitability		
Total margin	Net income/Total revenues	Worksheet G-3, Line 31/Worksheet G-3, Line 3 + 25
Cash flow margin	((Net income - (contributions, investments and appropriations)) + depreciation + interest) / (Net patient revenue + other income - (contributions, investments, and appropriations))	((Worksheet G-3, Line 31 - (Worksheet G-3, Lines 6,7, 23)) + Worksheet A, Lines 1, 2, 3, 4, Column 3 + Worksheet A, Line 88, Column 3)/(Worksheet G-3, Line 3 + Worksheet G-3, Line 25 - (Worksheet G-3, Lines 6, 7, 23))
Return on equity	Net income / Net assets	Worksheet G-3, Line 31/(Worksheet G, Line 51, Columns 1, 2, 3, 4)
Liquidity		
Current ratio	Current assets / Current liabilities	(Worksheet G, Line 11, Columns 1, 2, 3, 4)/ (Worksheet G, Line 36, Columns 1, 2, 3, 4)
Days cash on hand	(Cash + marketable securities + unrestricted investments) / [(Total expenses-depreciation)/Days in period]	(Worksheet G, Lines 1, 2, 22, Columns 1, 2, 3, 4)/ [((Worksheet A, Line 101, Column 3) - Worksheet A, Lines 1, 2, 3, 4, Column 3))/Days in Period]
Net days revenue in accounts receivable	(Net patient accounts receivable) / (Net patient service revenue / Days in period)	(Worksheet G, Line 4 - "absolute value"6, Column1)/((Worksheet G-3, Line 3)/Days in period)
Capital Structure		
Equity financing	Fund balance / Total assets	(Worksheet G, Line 51, Columns 1, 2, 3, 4)/ (Worksheet G, Line 27, Columns 1, 2, 3, 4)
Debt service coverage*	(Net Income + depreciation + interest) / (Current portion of long-term debt + interest expense)	(Worksheet G-3, Line 31 + Worksheet A, Lines 1, 2, 3, 4, Column 3 + Worksheet A, Line 88, Column 3)/(Worksheet G, Line 31, Columns 1, 2, 3, 4 + Worksheet 8, Line 88, Column 3)
Long-term debt to capitalization	Long-term debt / (Long-term debt + fund balance)	(Worksheet G, Lines 42+31, Columns 1, 2, 3, 4)/(Worksheet G, Lines 42+31, Columns 1, 2, 3, 4 + Worksheet G, Line 51, Columns 1, 2, 3, 4)
Other		
Outpatient revenues to total revenues	Total outpatient revenue / Total patient revenue	Worksheet G-2, Line 25, Column 2/Worksheet G-2, Line 25, Column 3
Patient deductions	(Contractual allowances + discounts) / Gross total patient revenue	Worksheet G-3, Line 2/Worksheet G-3, Line 1
Average age of plant	Accumulated depreciation / Annual depreciation expense	(Worksheet G, Lines 12.01, 13.01, 14.01, 15.01, 16.01, 17.01, 18.01, 19.01, Columns 1, 2, 3, 4)/Worksheet A, Lines 1, 2, 3, 4, Column 3
Average daily census acute beds	Inpatient acute care bed days / Days in period	Worksheet S-3, Part, Line 12 - (Lines 3 + 4 + 11), Column 6/Days in period

Data Sources

Project data came from the Hospital Cost Report Information System (HCRIS). The data are CMS public use files and are obtained regularly by the North Carolina Rural Health Research & Policy Analysis Center as part of an ongoing research portfolio. Longitudinal analytic files were created that included all of the Medicare cost report worksheets required for provider identification and calculation of financial indicators.

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. A preliminary analytical file with the Medicare cost report data for each hospital was created using the following guidelines:

- Hospitals were excluded if they had fewer than 360 days in a cost report period.
- SCH and MDH hospitals were excluded if they had fewer than 360 days as that designation in a given cost report period. CAHs or RRCs did not switch designation within a given cost report period..
- CAH status was determined by a '13' in the 3rd and 4th digits of the hospital's Medicare ID. MDH, RRC and SCH status were identified from Worksheet S-2. Discrepancies were resolved by consulting the Provider Specific File.

There were missing data for some indicators for some hospitals; therefore, the number of hospital cost reports used to identify an indicator median was less than or equal to the total number of hospital cost reports. A final analytical file was created and the financial ratios calculated for each hospital.

Results

Trends in the Number of Hospitals in each Payment Classification

Table 3 shows the number of hospitals by Medicare payment classification between 2000 and 2008, with incomplete data for 2009. The medians reported in this study are for the 90 CAHs in 2000, the 277 MDHs in 2000, and so on. Hospitals in the "OTHER" category are excluded from median calculations because they had no data available, switched hospital type during the year, or reported less than a full year of data. Nevertheless, the table shows that the reported medians are based on the vast majority of hospitals (90-95%) and are sufficient to demonstrate trends in the growth and contraction of different classifications of rural hospitals.

Table 3: Number of Hospitals by Medicare Payment Classification, 2000-2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	90	277	488	684	818	990	1168	1250	1247	798
MDH	277	232	240	227	202	162	120	124	147	114
R-PPS	766	682	542	459	412	331	298	276	252	138
RRC	166	169	166	171	167	183	182	191	195	131
SCH	617	592	522	501	453	404	358	350	330	218
SCH/RRC	57	62	69	75	81	84	87	93	100	60
U-PPS	2503	2458	2388	2386	2370	2345	2345	2335	2308	1202
OTHER	511	563	519	423	447	471	296	231	246	2164
TOTAL	4987	5035	4934	4926	4950	4970	4854	4850	4825	*4825

OTHER - Number of hospitals with no data, that switched type during year, less than a full year of data.

*** Estimated**

CAH = Critical Access Hospital; MDH = Medicare-Dependent Hospital; R-PPS = Rural hospital paid under PPS; SCH = Sole Community Hospital; RRC = Rural Referral Center; U-PPS = Urban hospital paid under PPS

The increase in CAHs and the decrease in R-PPS hospitals are the most substantial changes among rural hospitals between 2000 and 2008. After implementation of the Medicare Rural Hospital Flexibility Program, the number of CAHs increased dramatically each year. The MMA eliminated states' ability to declare additional hospitals as necessary providers as of January 2006. This slowed the CAH conversion rate because most hospitals meeting the distance and size criteria had already converted to CAH status. RRCs also increased between 2000 and 2008, but to a lesser extent. The number of MDHs and U-PPS hospitals was comparatively constant. There were fewer SCHs at the end of the study period. Table 3 suggests that although the total number of hospitals did not change very much over the ten year period, the mix of hospitals changed substantially and most of this change was in hospitals that serve rural communities.

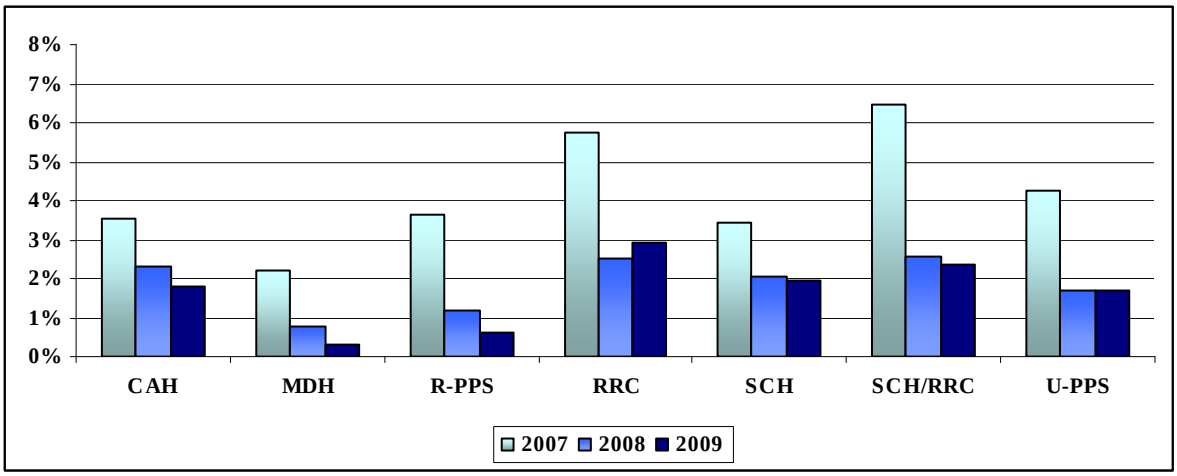
Table 3 also has implications for the analysis of the financial indicators. Because the number of hospitals converting to CAH status leveled off during 2006-2008, the number of Medicare cost reports by payment classification is more stable than in prior years. Financial analysis is more meaningful when the number of Medicare cost reports by payment classification is relatively stable because indicator changes are more likely due to performance changes than to changes in the group of hospitals included in a payment classification. For this reason, the following discussion focuses on 2007-2009. Data on trends over the entire ten year period can be found in the Appendix. Also, the number of Medicare cost reports for hospitals that are both RRCs and MDHs is very small: 5 in 2006, 8 in 2007 and 10 in 2008. These numbers are too small to allow a meaningful interpretation of medians, so they are excluded from the figures and the discussion below.

It can be argued that consistent ranking over three recent, consecutive periods is strong evidence of relative financial performance and condition. Therefore, the results below focus on hospital classifications that had the highest or lowest median value on an indicator in all three years between 2007 and 2009.

Profitability

Figure 1 shows that RRCs as a group had the highest median total margins, whether those classified as a RRC only (median total margin of 2.9% in 2009) or those that were classified as both a RRC and a SCH (median of 2.6% in 2008 and 6.5% in 2007). The classifications with the poorest performance were MDH hospitals, which had the lowest median total margins in 2009 (0.3%), 2008 (0.8%), and 2007 (2.2%).

Figure 1: Total Margin by Medicare Payment Classification, 2007-2009 Medians



Consistent with the results for total margin, RRCs had the highest median cash flow margin in all three years (Figure 2). These findings mean that RRCs as a group have the highest ability to generate cash flow from providing patient services. Median cash margins for RRCs were 8.9%, 8.0%, and 9.7% in 2009, 2008, and 2007, respectively. MDHs had the lowest cash flow margin in all three years (4.8% in 2009, 4.4% in 2008, and 5.7% in 2007).

Figure 2: Cash Flow Margin by Medicare Payment Classification, 2007-2009 Medians

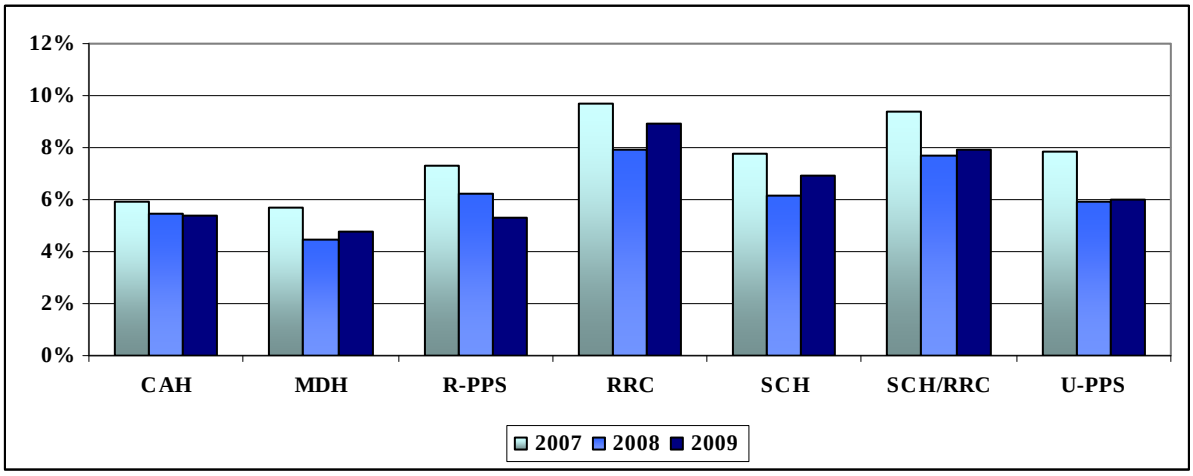
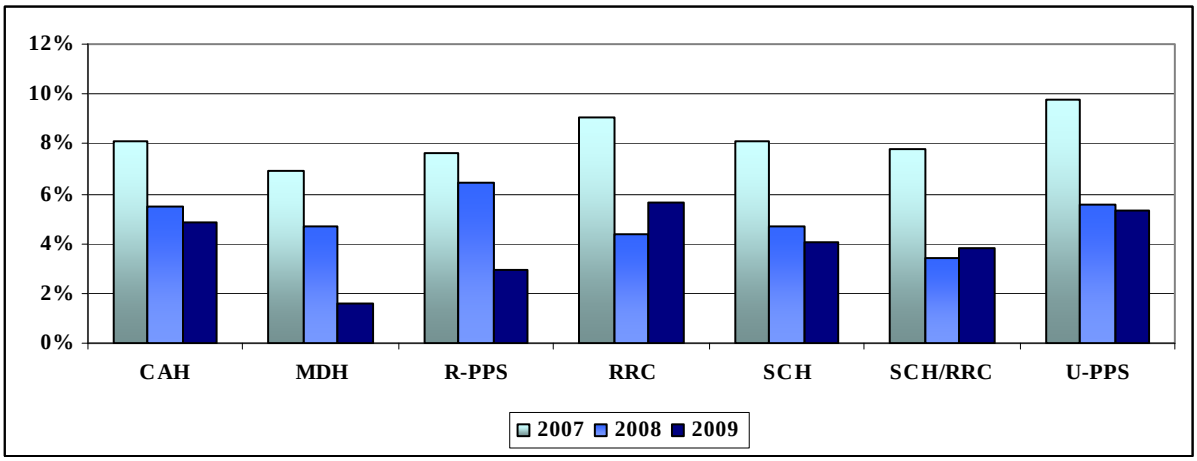


Figure 3 shows that U-PPS hospitals as a group were able to generate the most net income from their net assets, with return on equity of 5.3% in 2009, 5.6% in 2008, and 9.8% in 2007. MDHs had the lowest return on equity in 2009 (1.6%) and 2007 (6.9%), and SCH/RRC hospitals had the lowest return on equity in 2008 (3.4%).

Figure 3: Return on Equity by Medicare Payment Classification, 2007-2009 Medians



Liquidity

In all three years, the median current ratio for each group of hospitals was between 1.8 and 2.7, which is sufficient to meet short-term obligations from short-term assets (Figure 4). SCHs had the highest current ratio in all three years and U-PPS hospitals had the lowest.

Figure 4: Current Ratio by Medicare Payment Classification, 2007-2009 Medians

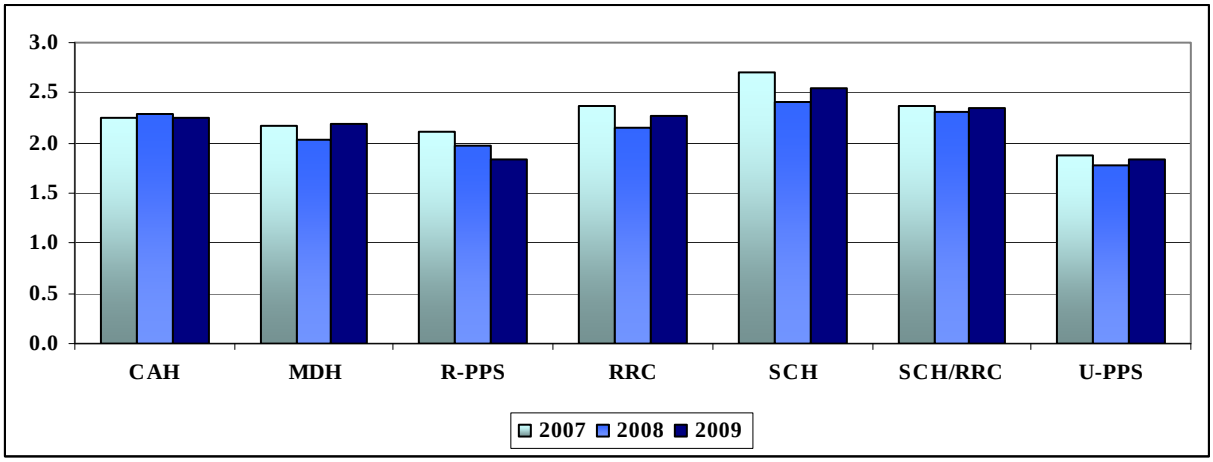
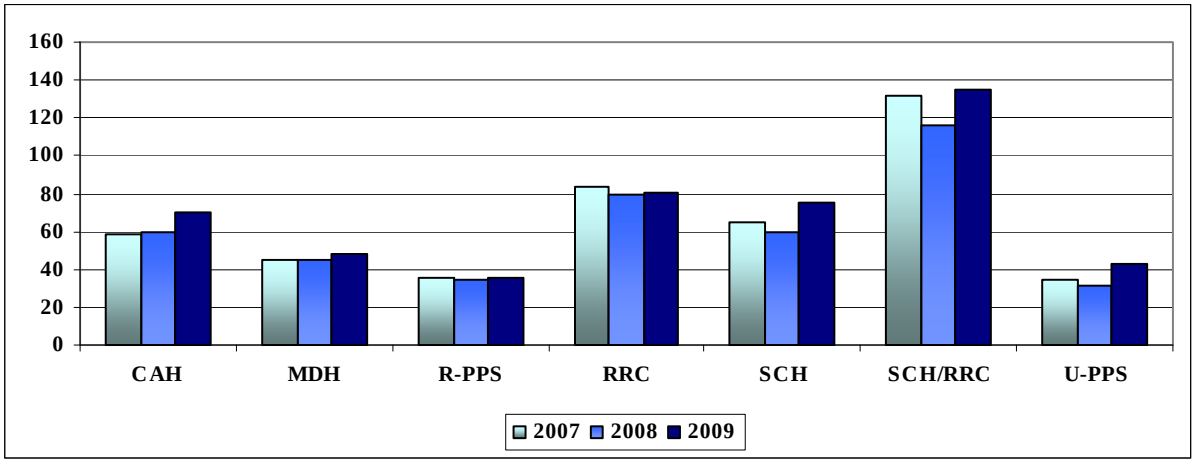


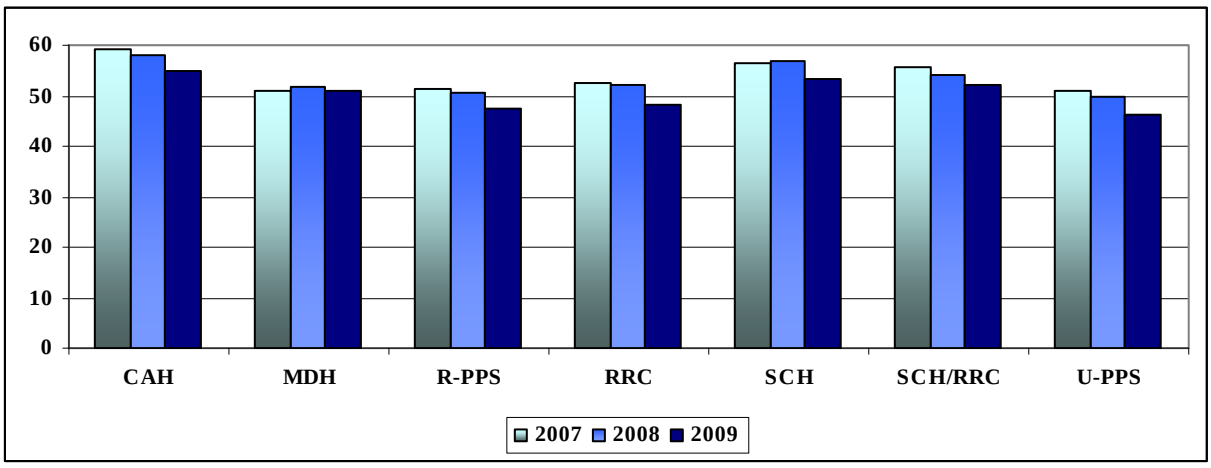
Figure 5 shows that across all three years, SCH/RRCs as a group maintained the greatest amount of days cash on hand and R-PPS hospitals maintained the least. The difference was substantial, with SCH/RRCs having 135 days cash on hand in 2009 (116 in 2008, 132 in 2007) compared with only 36 days in R-PPS hospitals (34 in 2008, 35 in 2007). The difference may be because large hospitals tend to move cash into board-restricted funds, which are not included in the numerator of days cash on hand. Also, many systems regularly transfer or "sweep" the cash from their affiliated hospitals to head office, resulting in low cash balances in the hospitals.

Figure 5: Days Cash on Hand by Medicare Payment Classification, 2007-2009 Medians



While there were not large differences across hospital classifications, in all three years between 2007 and 2009, U-PPSs were fastest at collecting their receivables (Figure 6). U-PPS median days revenue in accounts receivables was 46 (2009), 50 (2008), and 51 (2007). CAHs were the slowest with median days revenue in accounts receivable of 55 (2009), 58 (2008), and 59 (2007).

Figure 6: Days Revenue in Accounts Receivable by Medicare Payment Classification, 2007-2009 Medians



Capital Structure

Across all three years between 2007 and 2009, U-PPS hospitals were best able to finance their total assets by debt, and best able to access debt capital. RRCs were best able to pay obligations related to long-term debt, principal payments and interest expense. MDHs were least able to access debt capital.

Urban PPS hospitals had the lowest equity financing in all three years (Figure 7), with half of their total assets financed by equity (medians of 50.3% 2009, 48.6% in 2008, and 51.5% in 2007). SCHs had the highest median equity financing in 2009 (63.5%) and SCH/RRCs had the highest in 2008 (62.0%) and 2007 (64.8%).

Figure 7: Equity Financing by Medicare Payment Classification, 2007-2009 Medians

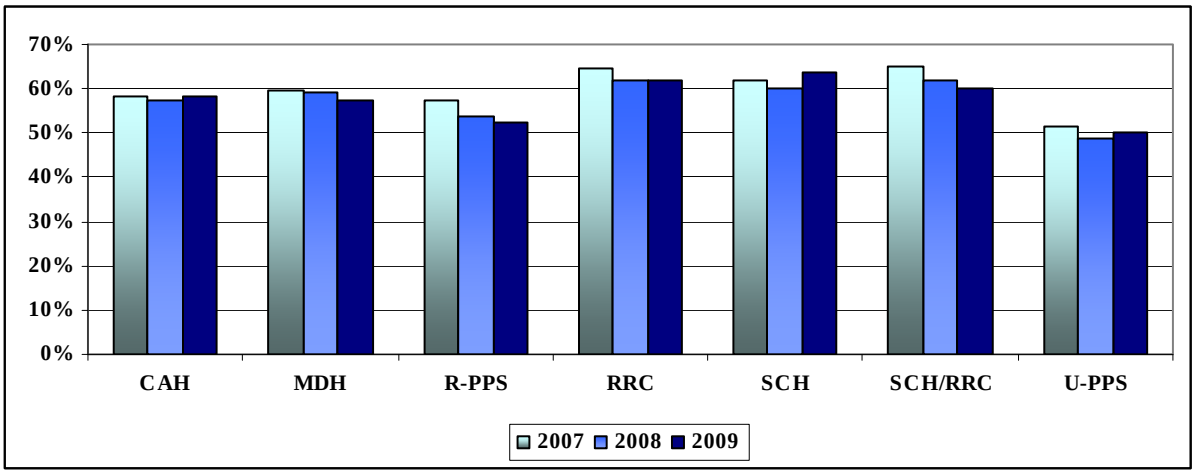


Figure 8 shows that RRCs had the highest debt service coverage in all three years, with income 4.6 times the current portion of long term debt in 2009, 3.7 in 2008, and 5.8 in 2007. MDH hospitals had the lowest debt service coverage in 2009 (2.3), U-PPSs had the lowest debt service coverage in 2008 (2.7), and MDHs had the lowest debt service coverage in 2007 (3.0).

Figure 8: Debt Service Coverage by Medicare Payment Classification, 2007-2009 Medians

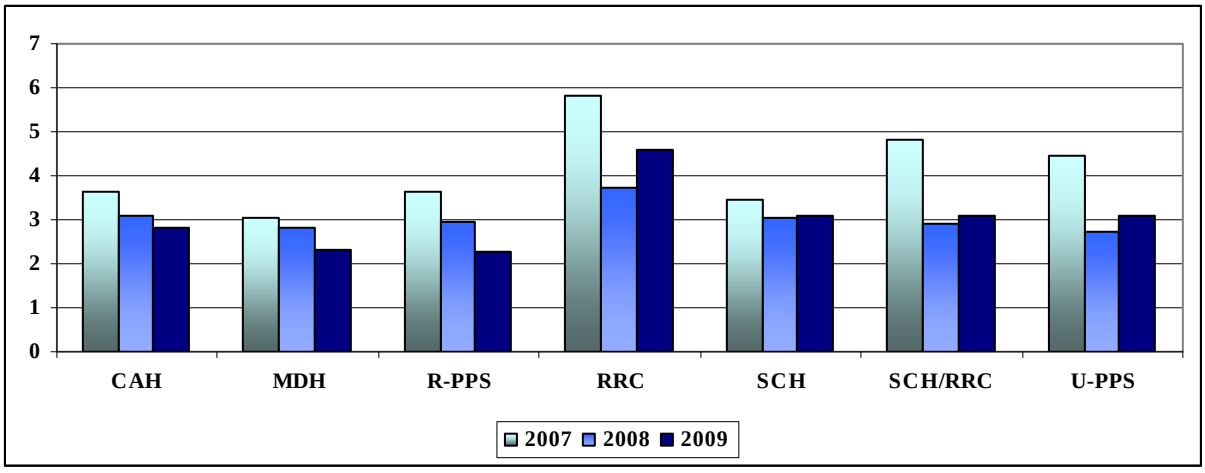
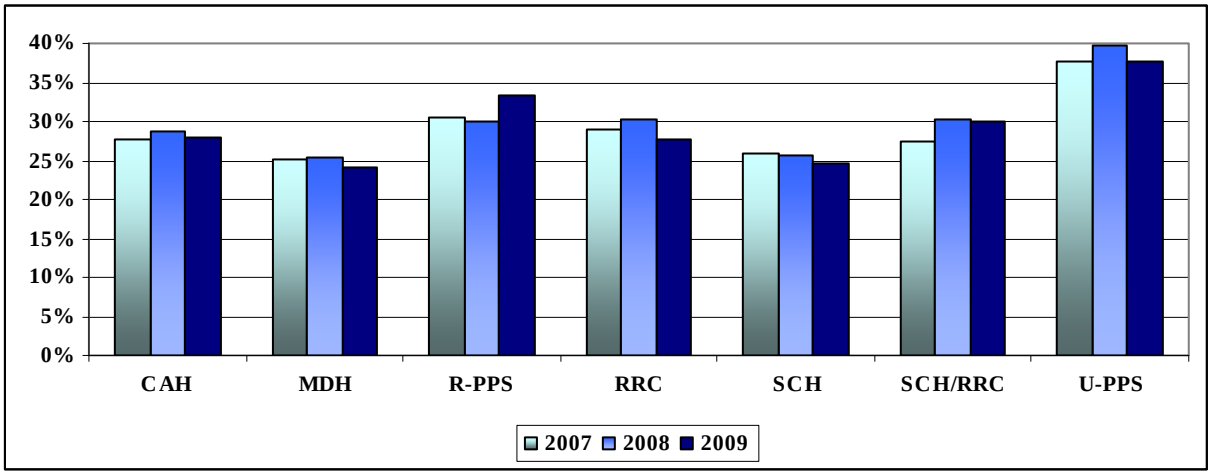


Figure 9 shows that urban PPS hospitals had the highest long-term debt to capitalization in all three years, with debt comprising 37.7% of total capital (2009), 39.6% (2008) and 37.6% (2007). MDHs had the lowest at 24.2% (2009), 25.4% (2008) and 25.1% (2007).

Figure 9: Long-Term Debt to Capitalization by Medicare Payment Classification, 2007-2009 Medians



Other Indicators

Other indicators of rural hospital financial performance and condition show substantial variation across hospital classifications in outpatient revenue to total revenue, patient deductions, and average daily census. CAHs were the most reliant on outpatient revenue, and the median increased across the three years—70.3% in 2009, 69.1% in 2008, and 67.9% in 2007 of patient revenue was from outpatient services (Figure 10). Urban PPS hospitals had the lowest median outpatient revenue to total revenue in all three years (42.4 % in 2009, 41.0% in 2008, and 40.1% in 2007).

Figure 10: Outpatient Revenue to Total Revenue by Medicare Payment Classification, 2007-2009 Medians

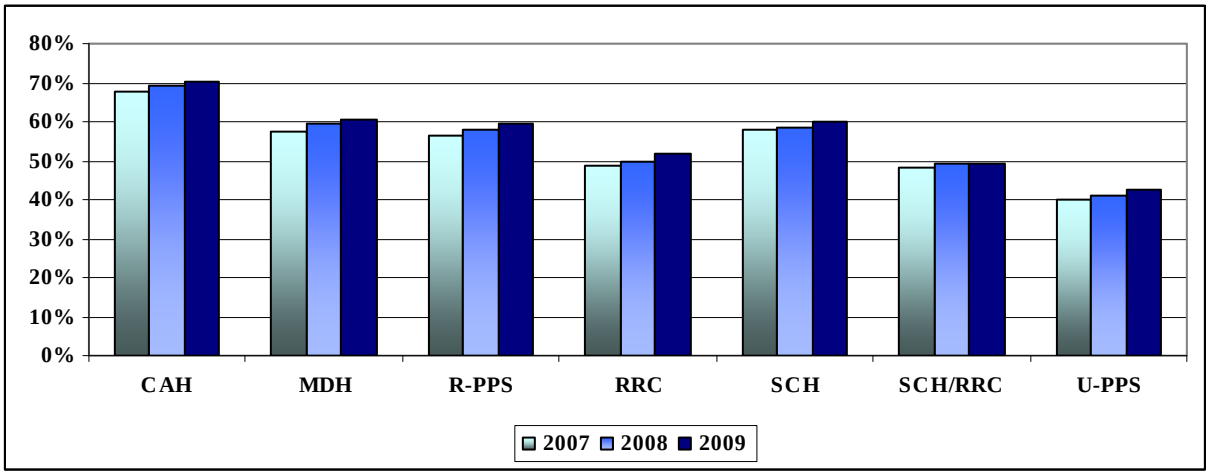
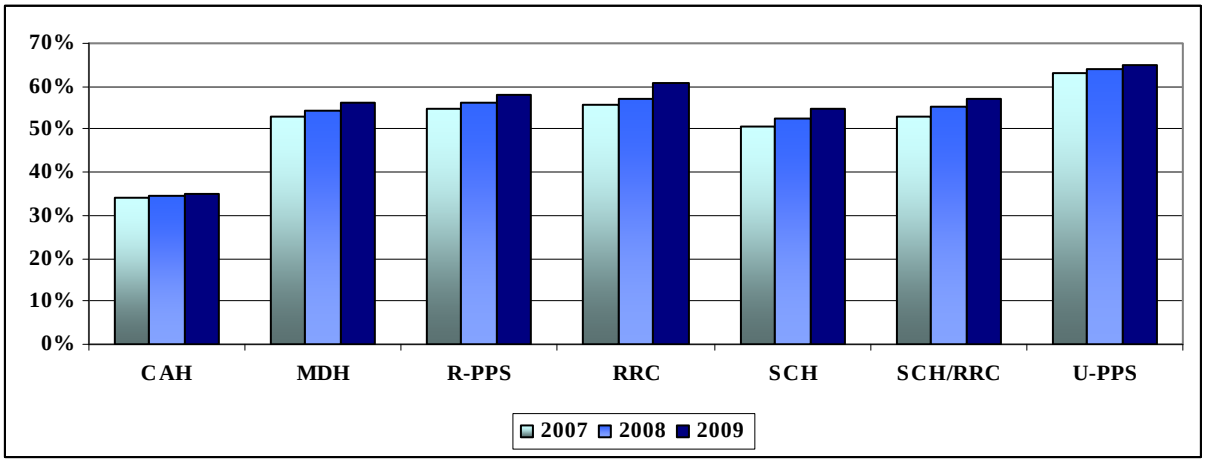


Figure 11 shows that CAHs had the lowest median patient deductions (allowances and discounts per dollar of total patient revenue) in all three years, and the medians were substantially lower than the medians for all other hospital classifications (35.0% in 2009, 34.7% in 2008, and 33.9%

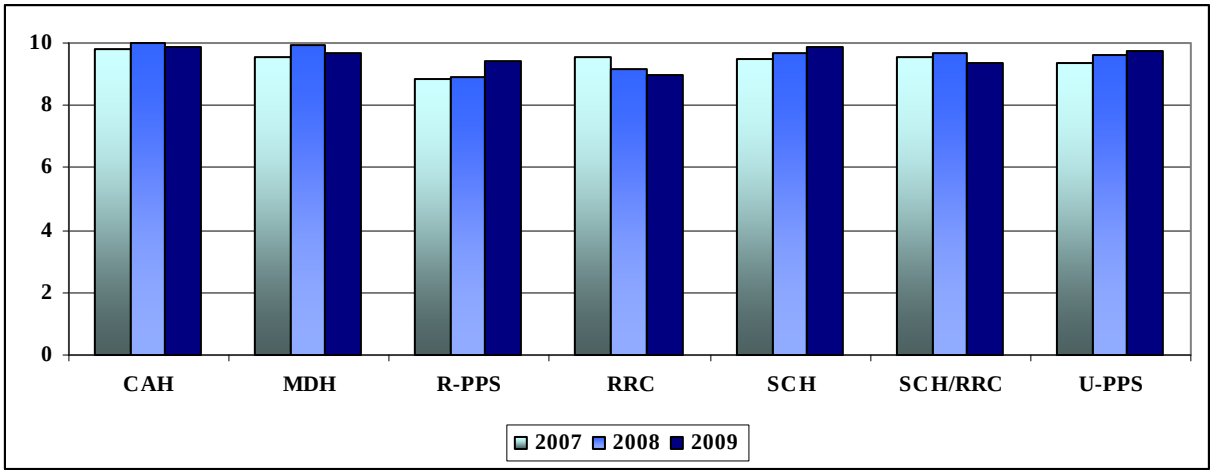
in 2007). Urban PPS hospitals had the highest patient deductions (64.9% in 2009, 64.2% in 2008, and 63.2% in 2007) likely reflecting activity at large inner-city hospitals.

Figure 11: Patient Deductions by Medicare Payment Classification, 2007-2009 Medians



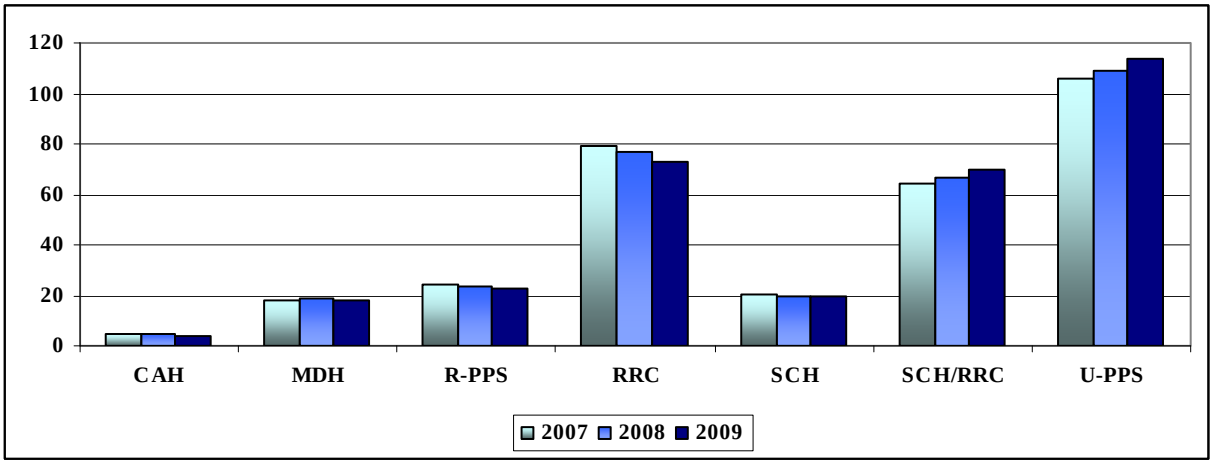
There was not much variation across hospital classifications in terms of average age of plant, with values for all hospital classification ranging between 8.9 and 10 years (Figure 12). Rural PPS hospitals had the lowest average age of plant in 2007 and 2008. CAHs had the highest average age of plant in 2007, CAH and MDHs shared the highest age of plant in 2008 and CAH and SCHs shared the highest average age of plant in 2009.

Figure 12: Average Age of Plant by Medicare Payment Classification, 2007-2009 Medians



Median average daily census in acute beds varied across classifications as would be expected given the qualifications of each group (Figure 13). Urban PPS hospitals had the highest median average daily census in all three years (114.0 in 2009, 109.0 in 2008, and 106.1 in 2007,) and CAHs had the lowest (4.2 in 2009, 4.4 in 2008, and 4.4 in 2008,).

Figure 13: Average Daily Census – Acute Beds by Medicare Payment Classification, 2007-2009 Medians



Financial Distress

The preceding figures show medians across hospital classifications. While instructive for assessing the status of an industry group as a whole, they provide limited information on the proportion of hospitals within each group that might be in financial distress. Figures 14 and 15 supply this information by showing the percent of hospitals in each classification with negative total and cash flow margins, respectively.

The percentage of hospitals with negative total margins increased dramatically for all classifications in 2008, likely reflecting the impact of the weakening economy (Figure 14). MDHs had the highest percent of hospitals with a negative total margins in 2009 (45.9%) and 2008 (44.2%) and R-PPS hospitals had the highest percent in 2007 (33.3%). RRCs, whether combined with SCH status or not, had the smallest percentage of financially distressed hospitals with a negative total margin – for RRCs, 27.1% in 2009, 31.4% in 2008, and 13.1% in 2007. Similar trends are evident in cash flow margin (Figure 15).

Figure 14: Percent of Hospitals with Negative Total Margin by Medicare Payment Classification, 2007-2009 Medians

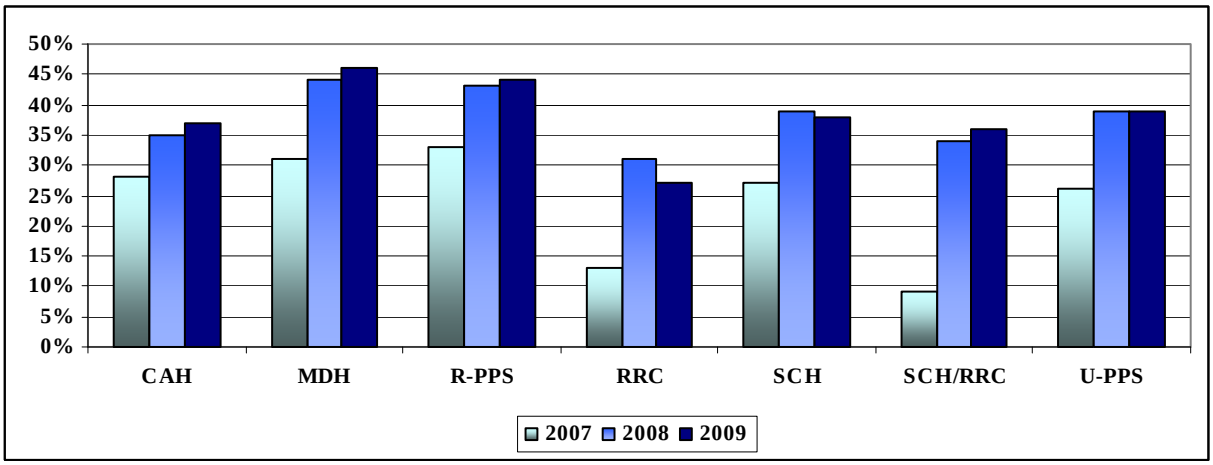
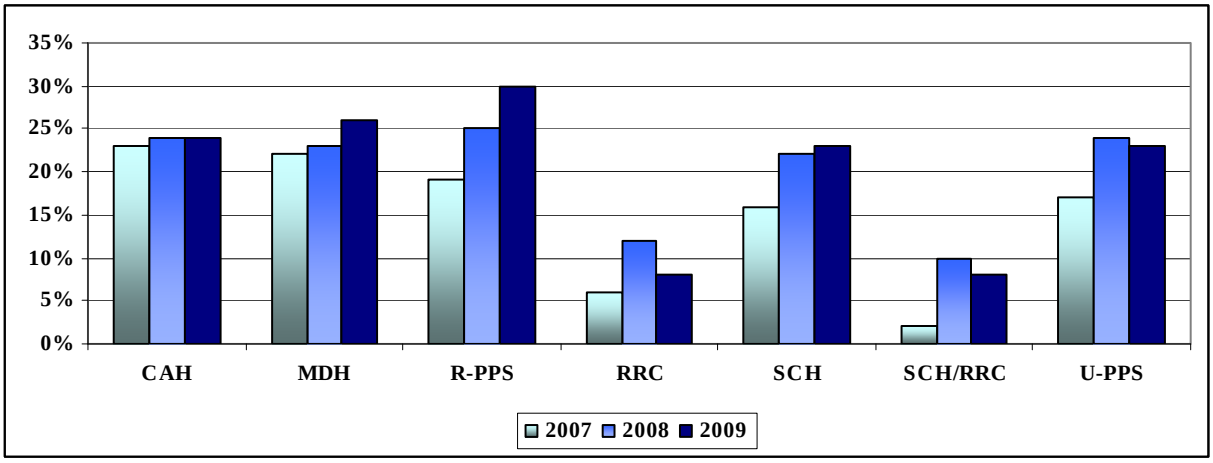


Figure 15: Percent of Hospitals with Negative Cash Flow Margin by Medicare Payment Classification, 2007-2009 Medians



Discussion and Conclusions

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 five principal findings from this study.

There is variation in financial condition among rural hospitals. It is inaccurate to characterize all rural hospitals as being under financial pressure; rather it appears that some groups are under a lot of pressure (CAHs, MDHs and R-PPS hospitals), some groups are under a little pressure (SCHs), and some groups have done quite well (RRCs and SCH/RRCs). The hospitals under a lot of pressure should be of greater concern to policy makers and those concerned with access to hospital care by people who live in rural America.

There were substantial differences between CAHs and other hospitals. On average, CAHs took longer to collect their receivables, received more of their revenue from outpatients, and had lower levels of allowances and discounts. In terms of profitability, on average, CAHs, MDHs, and R-PPS hospitals were consistently less profitable than other hospital classifications. In all three years, the lowest median total margin and cash flow margin and the highest percent of hospitals with a negative total margin or cash flow margin was always a CAH, MDH, or R-PPS hospital. In addition, CAHs had the oldest fixed assets in two of three years. Policymakers should be concerned that CAHs possess older plant and equipment, which in the future may hamper their ability to attract patients and retain physicians.

In contrast, *RRCs appear to have performed well as a group*. They had greater ability to pay obligations related to long-term debt, principal payments and interest expense. In addition, as a group, RRCs and SCH/RRCs were consistently more profitable. In all three years, the group with the highest total margin and cash flow was always a RRC or SCH/RRC. SCH/RRC also had the highest days cash on hand and the lowest percentage of hospitals with a negative total margin and negative cash flow margin. Probably the strongest finding of this study is the higher profitability of SCH/RRCs. SCH/RRCs were better at controlling expenses relative to revenues, generating cash flow from providing patient care services, and avoiding financial distress from

negative margins. These findings are likely influenced by the fact that RRCs and SCH/RRCs are the largest type of rural hospital. More patient activity generates higher revenue and spreads fixed costs over more patients. Furthermore, hospitals with less patient activity experience greater volatility (on a percentage basis) in revenue and costs, making them more vulnerable to financial distress. RRCs and SCH/RRCs may also be better able to maintain an effective mix of medical, nursing, and other staff that can meet local patient demand, reducing the number of patients who travel to obtain care at other hospitals.

Substantial differences in cash management exist among hospitals with different payment classifications. The median 2009 days cash on hand ranged from 36 days for R-PPS hospitals and 43 days for U-PPS hospitals to 135 days for SCH/RRCs, a fourfold difference. Given the profitability of R-PPS hospitals stated above, these hospitals may simply have more cash problems compared to other hospitals. U-PPS hospitals may have greater opportunities for short-term investment of surplus cash, or a higher proportion of U-PPS hospitals may belong to a system. Many systems utilize their corporate banks to sweep the cash accounts of their affiliated hospitals daily, so fewer dollars are left on hand, and the hospitals depend upon their corporate office for any short-term credit or liquidity needs.

Despite the variation between hospital classifications, *the profitability of all hospitals declined sharply in 2008*. Total margin, cash flow margin, and return on equity for all hospitals were substantially lower in 2008 than 2007. In addition, debt service coverage for all hospitals was substantially lower in 2008 than 2007, probably a consequence of lower profitability. In 2009, profitability continued to decline, particularly for CAHs and R-PPS hospitals, putting further financial pressure on these rural hospitals. 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. It will be important to monitor future rural hospital financial performance to gauge the effects of both the economy and any changes in the healthcare industry, including health reform implementation.

The benefit of Medicare cost-based reimbursement for CAHs has led to calls for its expansion to other rural hospital classifications that are purported to be under financial pressure. However, this study has found that CAHs remain relatively less profitable, suggesting that Medicare cost-based reimbursement, while potentially improving Medicare revenues, should not be seen as a panacea for rural hospitals. The financial performance of CAHs relative to other hospital classifications 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. Therefore, while extending Medicare cost-based reimbursement to other rural hospitals would likely result in financial benefit, the degree of improvement in financial condition to expect is uncertain.

Extension of cost-based reimbursement to rural hospitals other than CAHs may have financial consequences that differ from CAHs; such consequences were beyond the scope of this particular study. A previous study (Pink et al, 2007) found that CAHs with higher net patient revenue had a higher median total margin, cash flow margin, return on equity, days cash on hand, debt service coverage ratio, and long-term debt to capitalization in comparison to CAHs with lower net patient revenue. Thus, profitability was positively associated with size as measured by net patient revenue. If most rural hospitals other than CAHs are larger than CAHs,

then cost-based reimbursement may be beneficial, depending on hospital location, characteristics of the population, and many other factors that ultimately influence financial performance.

There are two limitations to this study. First, the study is descriptive and does not formally test the determinants of financial performance nor does it control for factors that may affect financial performance, such as on hospital location, characteristics of the population, and payer mix. Second, although this study uses medians which avoid problems with outlier observations, there are known data quality problems with Medicare Cost Report data.

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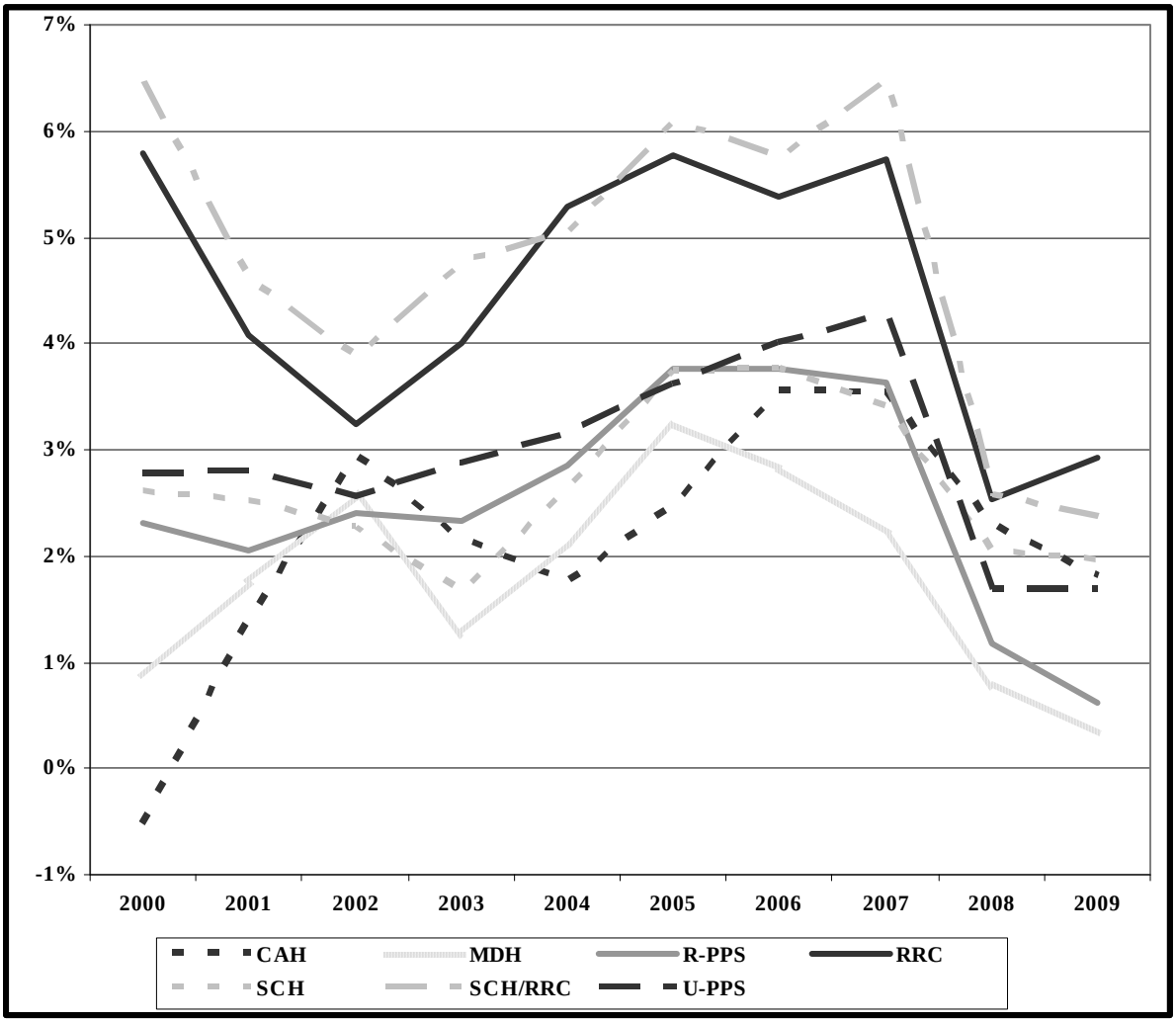
Appendices

Graphs and tables of financial indicators
by Medicare Payment Classification
1998-2008 Medians

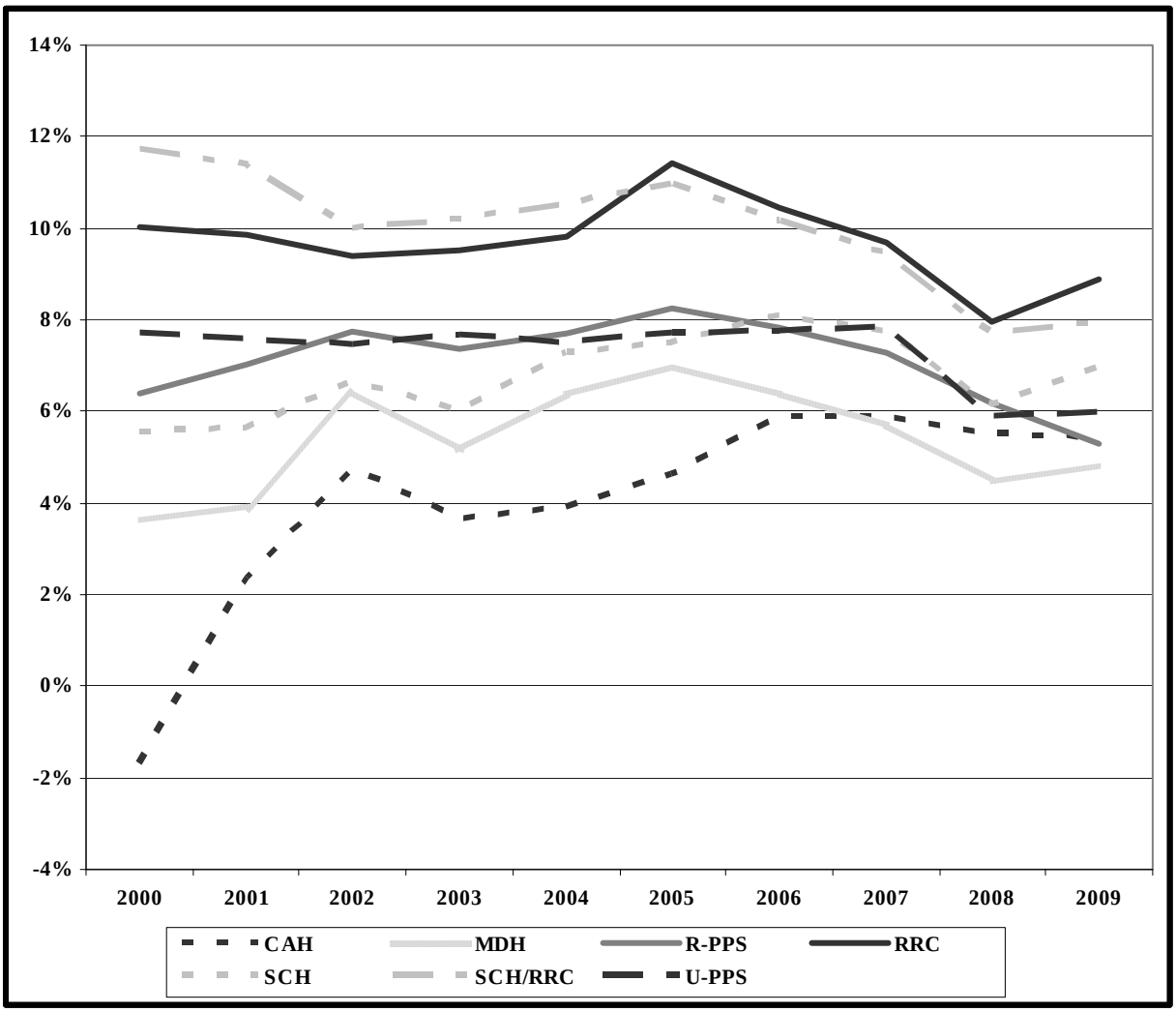
Total Margin
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	-0.5%	1.4%	2.9%	2.2%	1.8%	2.5%	3.6%	3.5%	2.3%	1.8%
MDH	0.9%	1.8%	2.6%	1.3%	2.1%	3.2%	2.8%	2.2%	0.8%	0.3%
R-PPS	2.3%	2.0%	2.4%	2.3%	2.8%	3.8%	3.8%	3.6%	1.2%	0.6%
RRC	5.8%	4.1%	3.2%	4.0%	5.3%	5.8%	5.4%	5.7%	2.5%	2.9%
SCH	2.6%	2.5%	2.3%	1.7%	2.6%	3.8%	3.8%	3.4%	2.0%	2.0%
SCH/RRC	6.5%	4.6%	3.9%	4.8%	5.1%	6.1%	5.8%	6.5%	2.6%	2.4%
U-PPS	2.8%	2.8%	2.6%	2.9%	3.2%	3.6%	4.0%	4.3%	1.7%	1.7%

CAH	Critical Access Hospital
MDH	Medicare-Dependent Hospital
R-PPS	Rural hospital paid under PPS
RRC	Rural Referral Center
SCH	Sole Community Hospital
SCH/RRC	Sole Community Hospital/ Rural Referral Center
U-PPS	Urban hospital paid under PPS

Cash Flow Margin
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	-1.7%	2.4%	4.7%	3.6%	3.9%	4.6%	5.9%	5.9%	5.5%	5.4%
MDH	3.6%	3.9%	6.4%	5.1%	6.3%	7.0%	6.4%	5.7%	4.4%	4.8%
R-PPS	6.4%	7.0%	7.7%	7.4%	7.7%	8.2%	7.8%	7.3%	6.2%	5.3%
RRC	10.0%	9.9%	9.4%	9.5%	9.8%	11.4%	10.4%	9.7%	8.0%	8.9%
SCH	5.6%	5.7%	6.6%	6.0%	7.3%	7.5%	8.1%	7.7%	6.1%	7.0%
SCH/RRC	11.7%	11.4%	10.0%	10.2%	10.6%	11.0%	10.2%	9.4%	7.7%	7.9%
U-PPS	7.7%	7.6%	7.4%	7.7%	7.5%	7.7%	7.7%	7.8%	5.9%	6.0%

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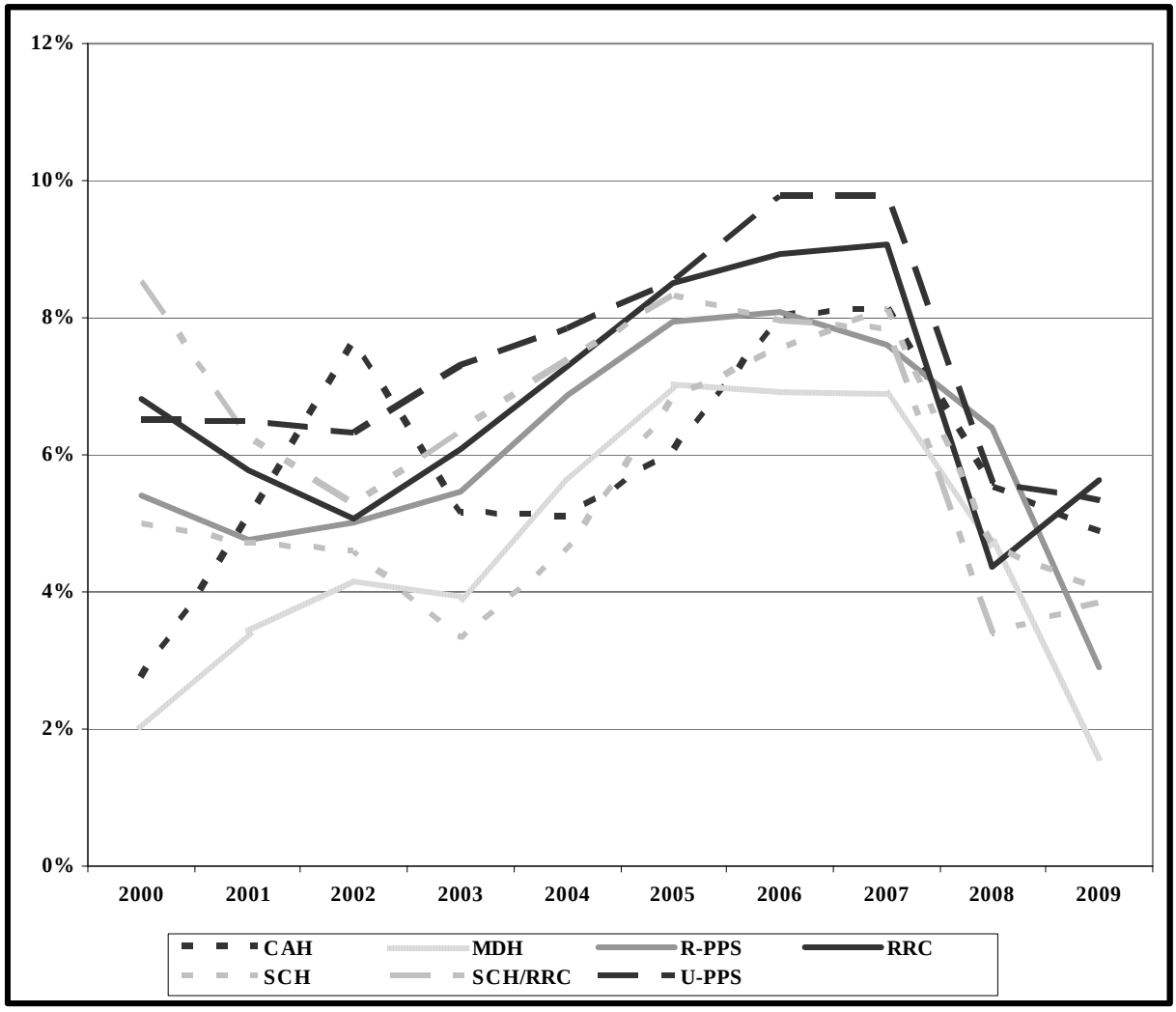
RRC	Rural Referral Center
SCH	Sole Community Hospital
SCH/RRC	Sole Community Hospital/ Rural Referral Center
U-PPS	Urban hospital paid under PPS

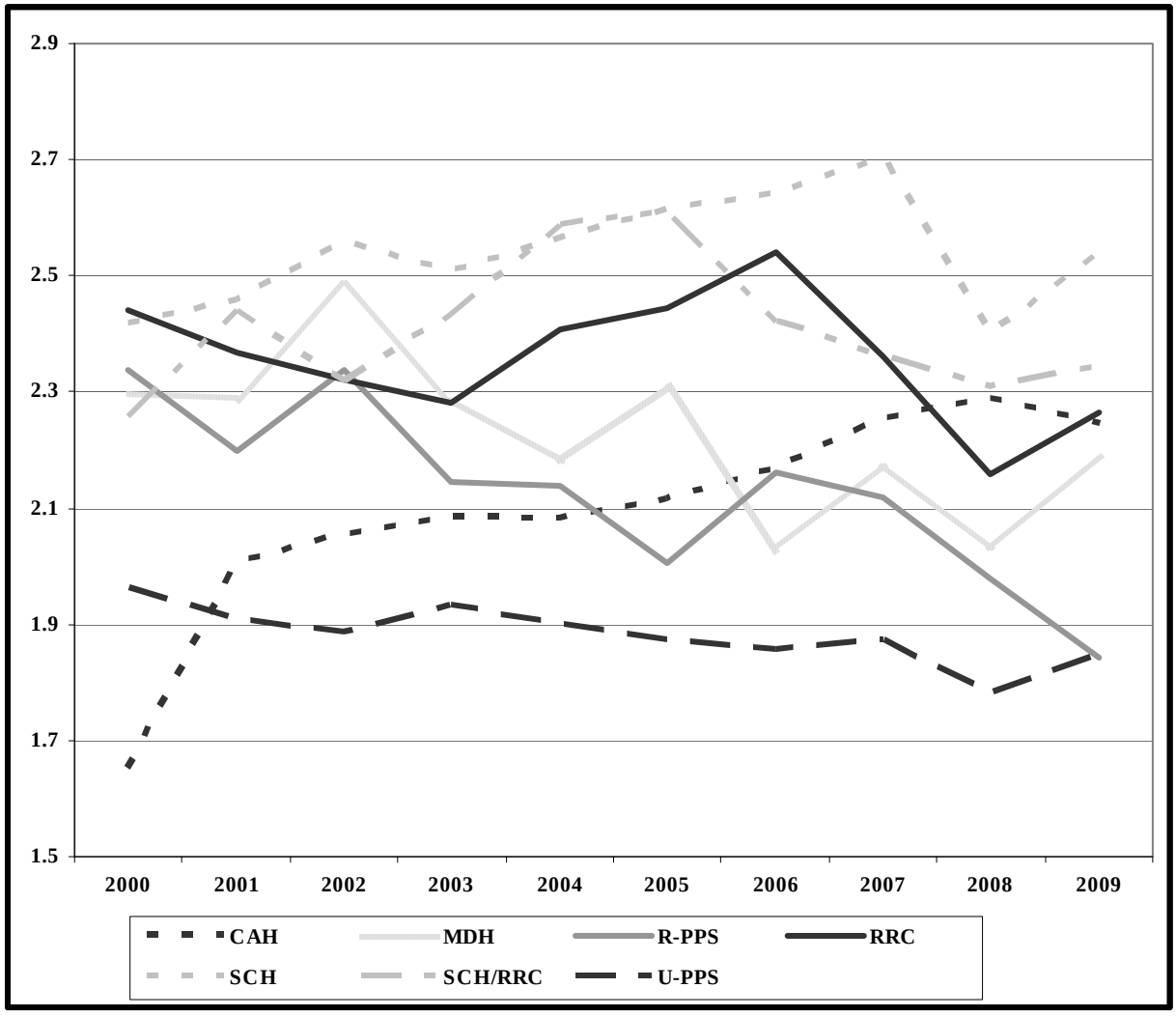
Return on Equity
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	2.8%	5.1%	7.7%	5.2%	5.1%	6.1%	8.0%	8.1%	5.5%	4.9%
MDH	2.0%	3.4%	4.2%	3.9%	5.6%	7.0%	6.9%	6.9%	4.7%	1.6%
R-PPS	5.4%	4.8%	5.0%	5.5%	6.9%	7.9%	8.1%	7.6%	6.4%	2.9%
RRC	6.8%	5.8%	5.1%	6.1%	7.3%	8.5%	8.9%	9.1%	4.4%	5.6%
SCH	5.0%	4.7%	4.6%	3.3%	4.7%	6.8%	7.5%	8.1%	4.7%	4.0%
SCH/RRC	8.5%	6.3%	5.3%	6.4%	7.4%	8.3%	7.9%	7.8%	3.4%	3.8%
U-PPS	6.5%	6.5%	6.3%	7.3%	7.8%	8.5%	9.8%	9.8%	5.6%	5.3%

CAH	Critical Access Hospital
MDH	Medicare-Dependent Hospital
R-PPS	Rural hospital paid under PPS
RRC	Rural Referral Center
SCH	Sole Community Hospital
SCH/RRC	Sole Community Hospital/ Rural Referral Center
U-PPS	Urban hospital paid under PPS

Current Ratio
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	1.7	2.0	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.2
MDH	2.3	2.3	2.5	2.3	2.2	2.3	2.0	2.2	2.0	2.2
R-PPS	2.3	2.2	2.3	2.1	2.1	2.0	2.2	2.1	2.0	1.8
RRC	2.4	2.4	2.3	2.3	2.4	2.4	2.5	2.4	2.2	2.3
SCH	2.4	2.5	2.6	2.5	2.6	2.6	2.6	2.7	2.4	2.5
SCH/RRC	2.3	2.4	2.3	2.4	2.6	2.6	2.4	2.4	2.3	2.3
U-PPS	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8

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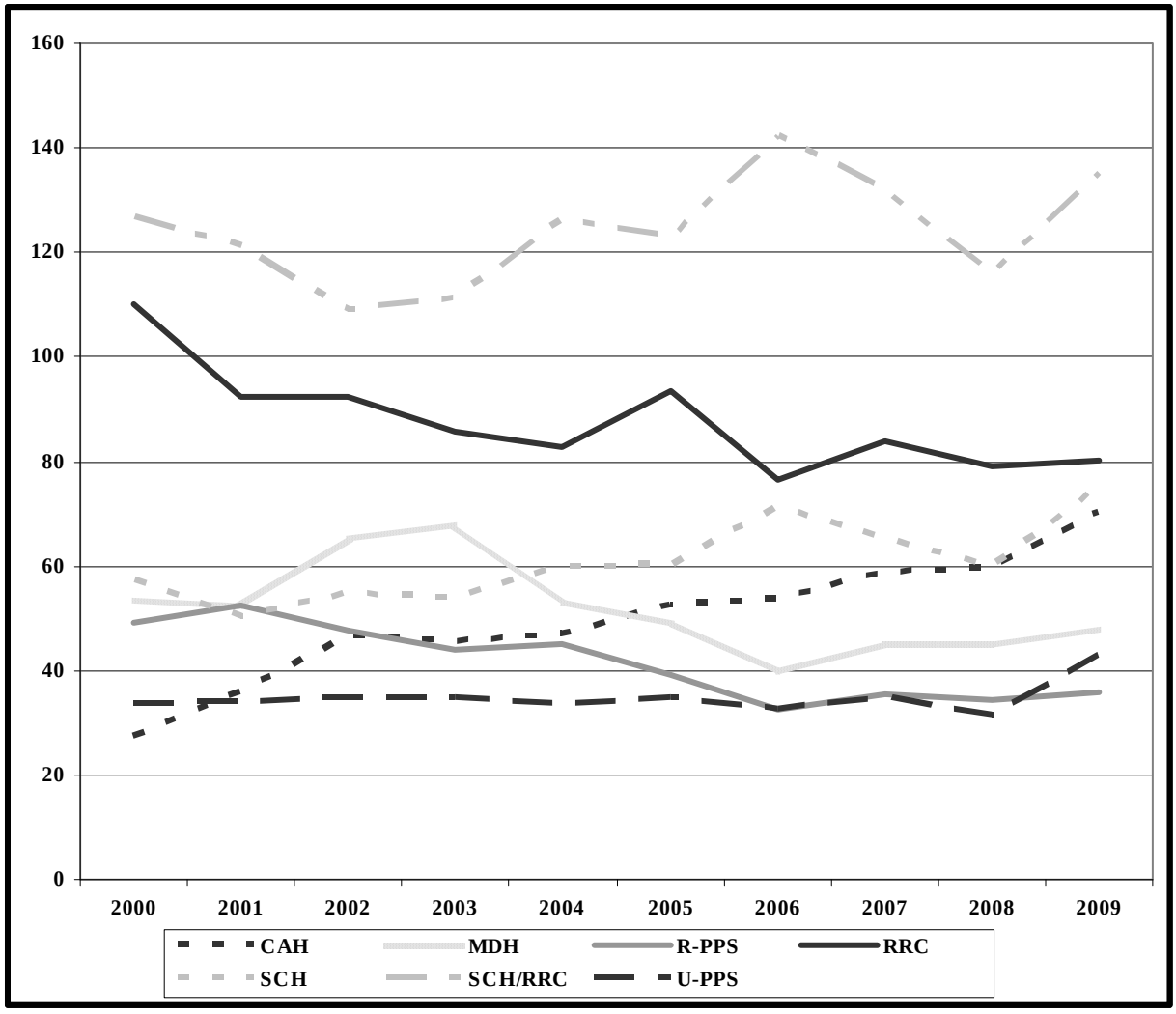
SCH	Sole Community Hospital
SCH/RRC	Sole Community Hospital/ Rural Referral Center
U-PPS	Urban hospital paid under PPS

Days Cash on Hand
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	27	36	46	46	47	52	54	59	59	70
MDH	53	52	65	68	53	49	39	45	45	48
R-PPS	49	52	48	44	45	39	33	35	34	36
RRC	110	92	92	86	83	93	76	84	79	80
SCH	57	50	55	54	60	60	71	65	60	75
SCH/RRC	127	121	109	111	126	123	142	132	116	135
U-PPS	34	34	35	35	34	35	32	35	31	43

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MDH	Medicare-Dependent Hospital
R-PPS	Rural hospital paid under PPS
RRC	Rural Referral Center
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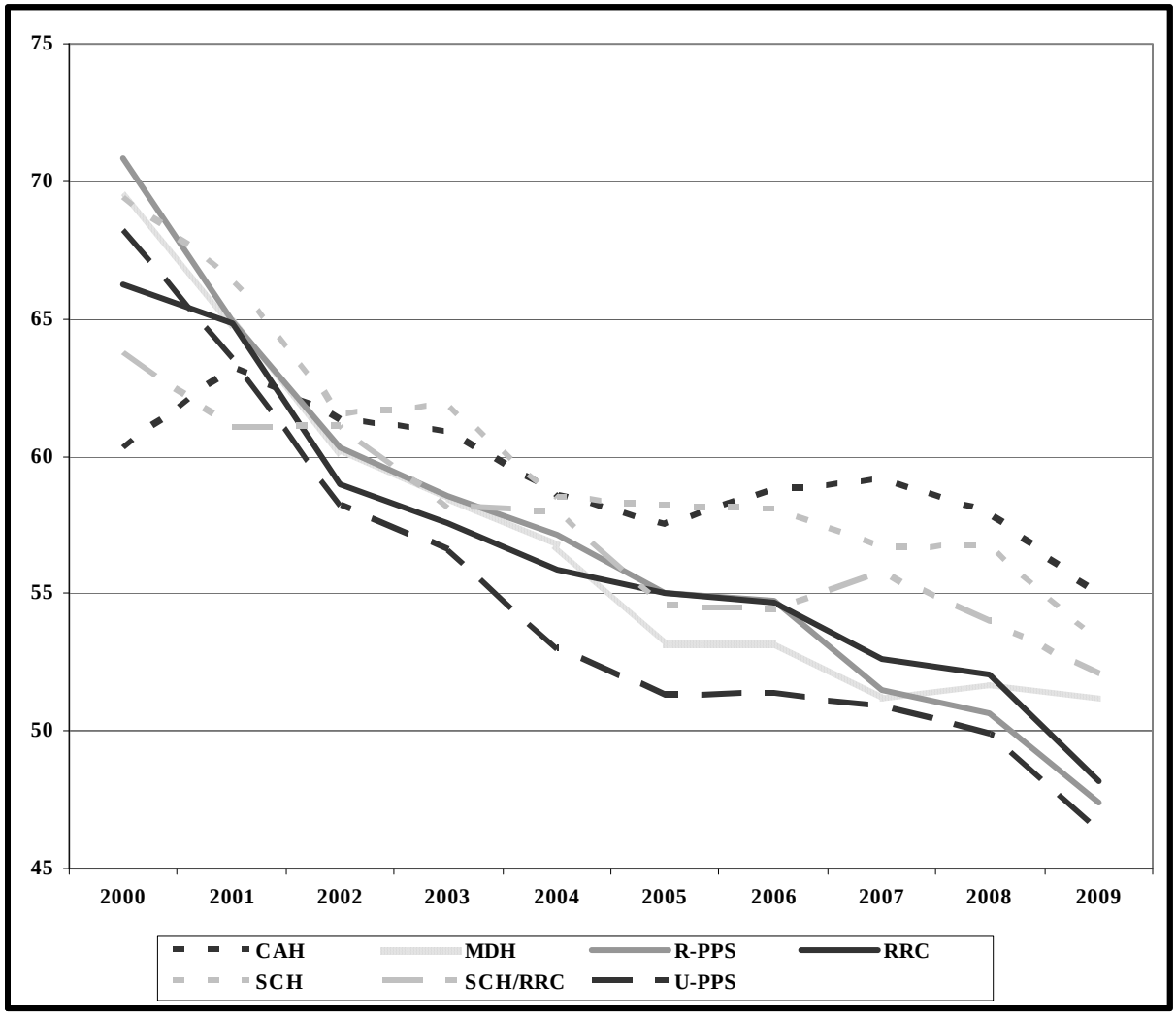
SCH/RRC	Sole Community Hospital/ Rural Referral Center
U-PPS	Urban hospital paid under PPS

Days Revenue in Accounts Receivable
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	60	63	61	61	59	58	59	59	58	55
MDH	69	65	60	58	57	53	53	51	52	51
R-PPS	71	65	60	59	57	55	55	52	51	47
RRC	66	65	59	58	56	55	55	53	52	48
SCH	69	66	62	62	58	58	58	57	57	53
SCH/RRC	64	61	61	58	58	55	54	56	54	52
U-PPS	68	64	58	57	53	51	51	51	50	46

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MDH	Medicare-Dependent Hospital
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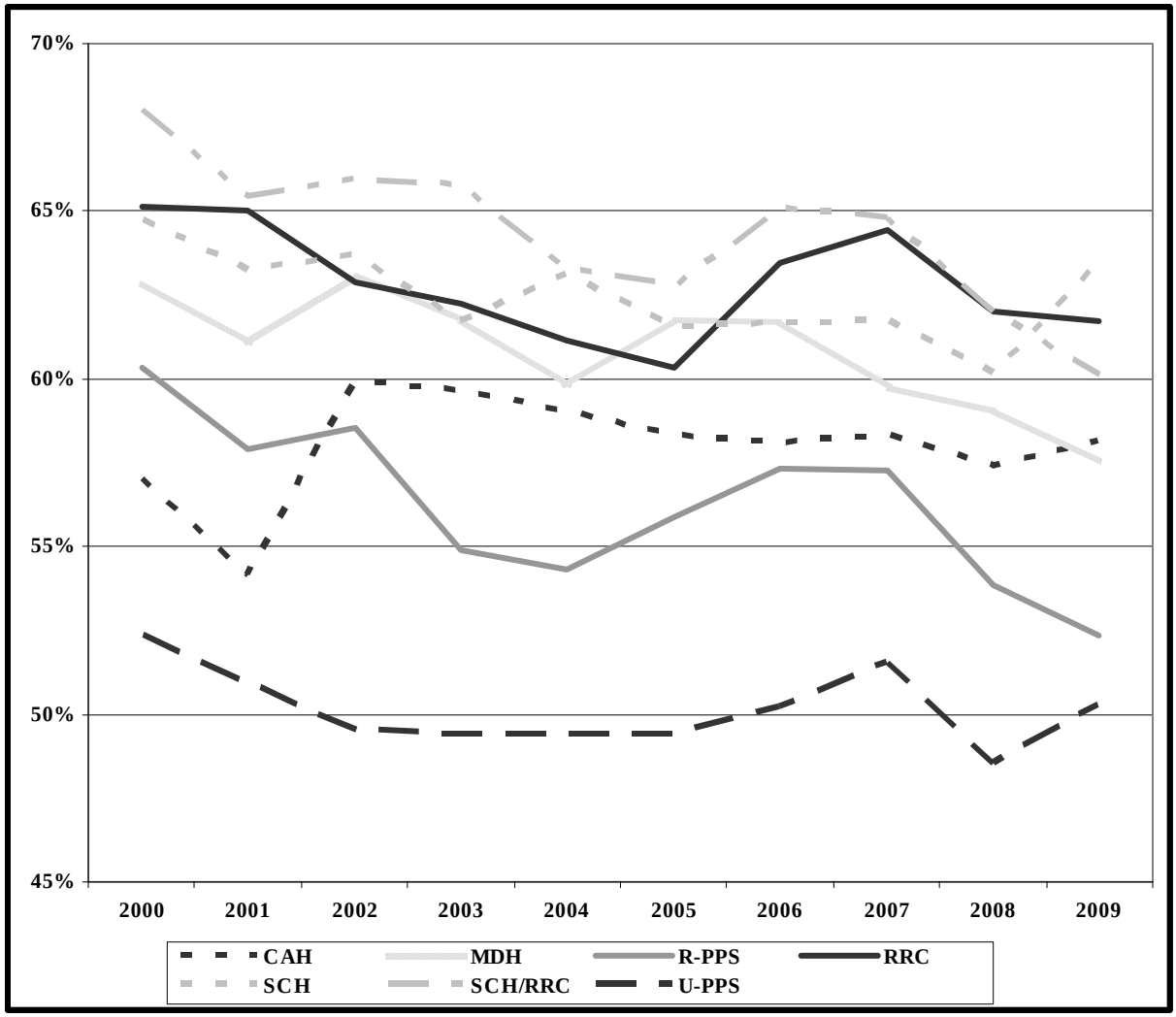
SCH	Sole Community Hospital
SCH/RRC	Sole Community Hospital/ Rural Referral Center
U-PPS	Urban hospital paid under PPS

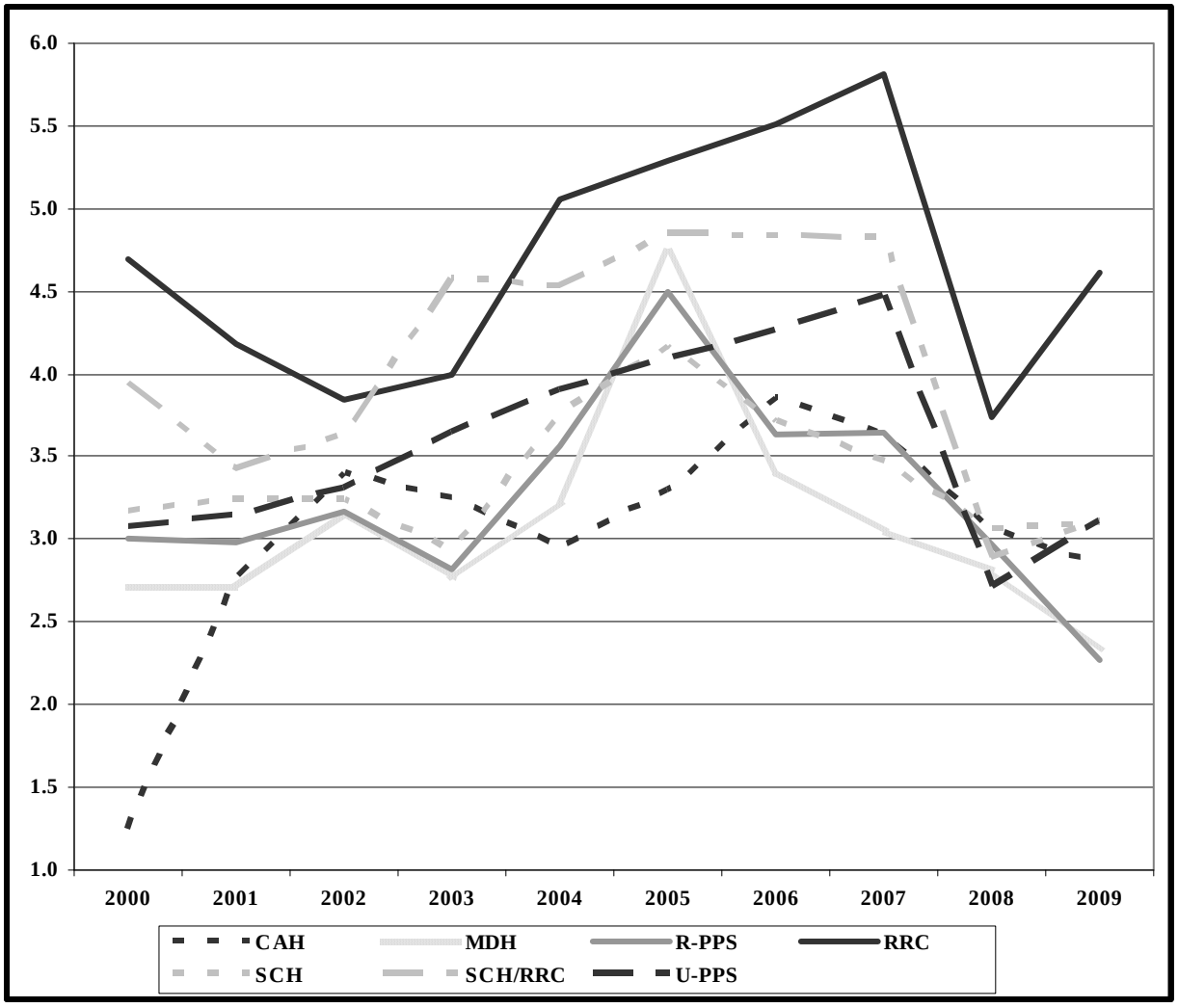
Equity Financing
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	57.0%	54.1%	60.0%	59.6%	59.0%	58.3%	58.1%	58.3%	57.4%	58.1%
MDH	62.8%	61.0%	63.1%	61.7%	59.7%	61.7%	61.7%	59.7%	59.0%	57.5%
R-PPS	60.3%	57.9%	58.5%	54.9%	54.3%	55.9%	57.3%	57.3%	53.9%	52.3%
RRC	65.1%	65.1%	62.9%	62.2%	61.2%	60.3%	63.5%	64.5%	62.0%	61.7%
SCH	64.7%	63.3%	63.7%	61.7%	63.1%	61.6%	61.7%	61.7%	60.1%	63.5%
SCH/RRC	68.0%	65.4%	66.0%	65.8%	63.3%	62.8%	65.1%	64.8%	62.0%	60.1%
U-PPS	52.4%	50.9%	49.5%	49.4%	49.4%	49.4%	50.2%	51.5%	48.6%	50.3%

CAH	Critical Access Hospital
MDH	Medicare-Dependent Hospital
R-PPS	Rural hospital paid under PPS
RRC	Rural Referral Center
SCH	Sole Community Hospital
SCH/RRC	Sole Community Hospital/ Rural Referral Center
U-PPS	Urban hospital paid under PPS

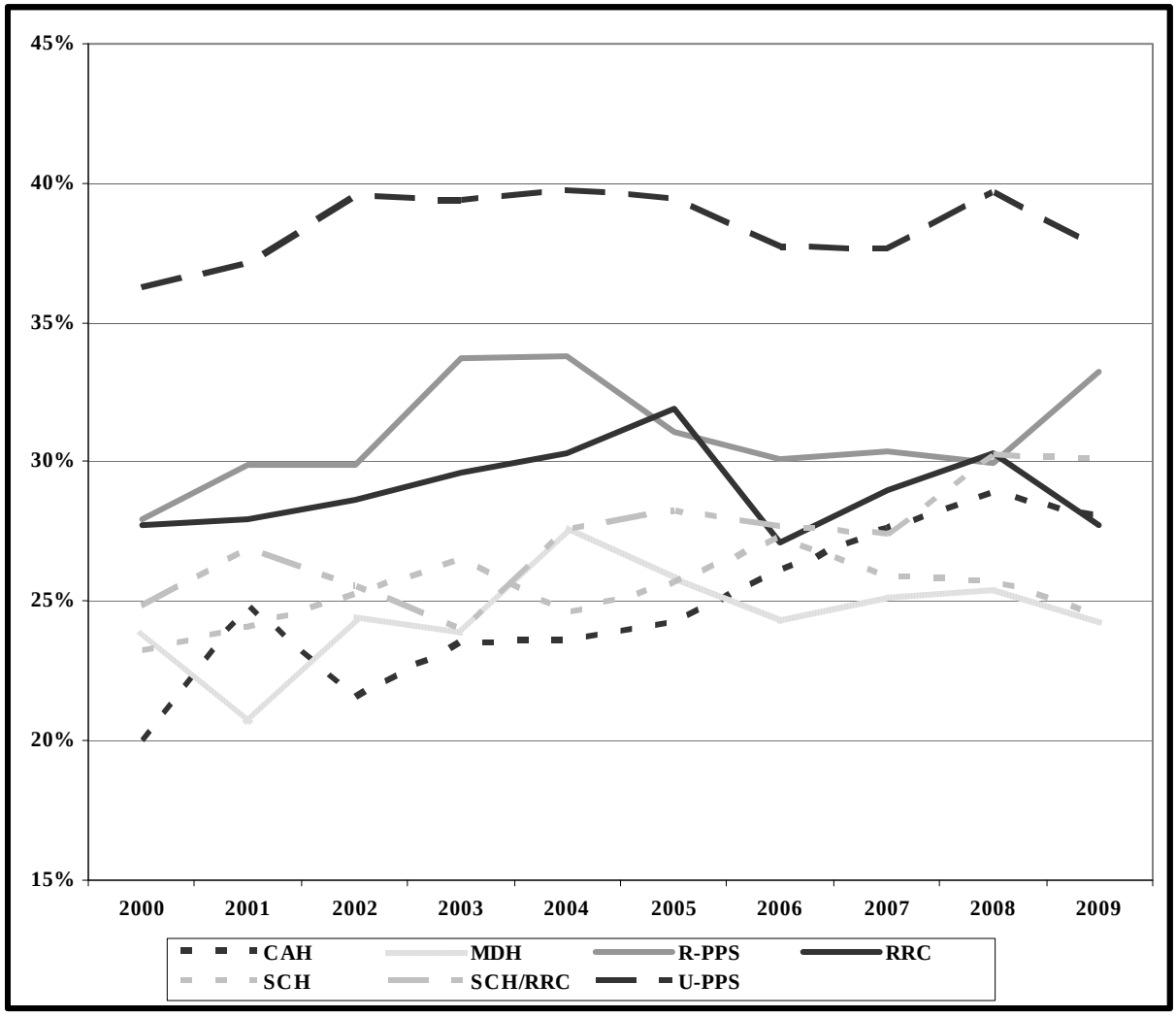
Debt Service Coverage
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	1.2	2.8	3.4	3.2	2.9	3.3	3.9	3.6	3.1	2.8
MDH	2.7	2.7	3.2	2.8	3.2	4.7	3.4	3.0	2.8	2.3
R-PPS	3.0	3.0	3.2	2.8	3.6	4.5	3.6	3.6	3.0	2.3
RRC	4.7	4.2	3.8	4.0	5.1	5.3	5.5	5.8	3.7	4.6
SCH	3.2	3.2	3.2	2.9	3.8	4.2	3.7	3.5	3.1	3.1
SCH/RRC	4.0	3.4	3.6	4.6	4.5	4.8	4.8	4.8	2.9	3.1
U-PPS	3.1	3.1	3.3	3.6	3.9	4.1	4.3	4.5	2.7	3.1

CAH	Critical Access Hospital
MDH	Medicare-Dependent Hospital
R-PPS	Rural hospital paid under PPS
RRC	Rural Referral Center
SCH	Sole Community Hospital
SCH/RRC	Sole Community Hospital/ Rural Referral Center
U-PPS	Urban hospital paid under PPS

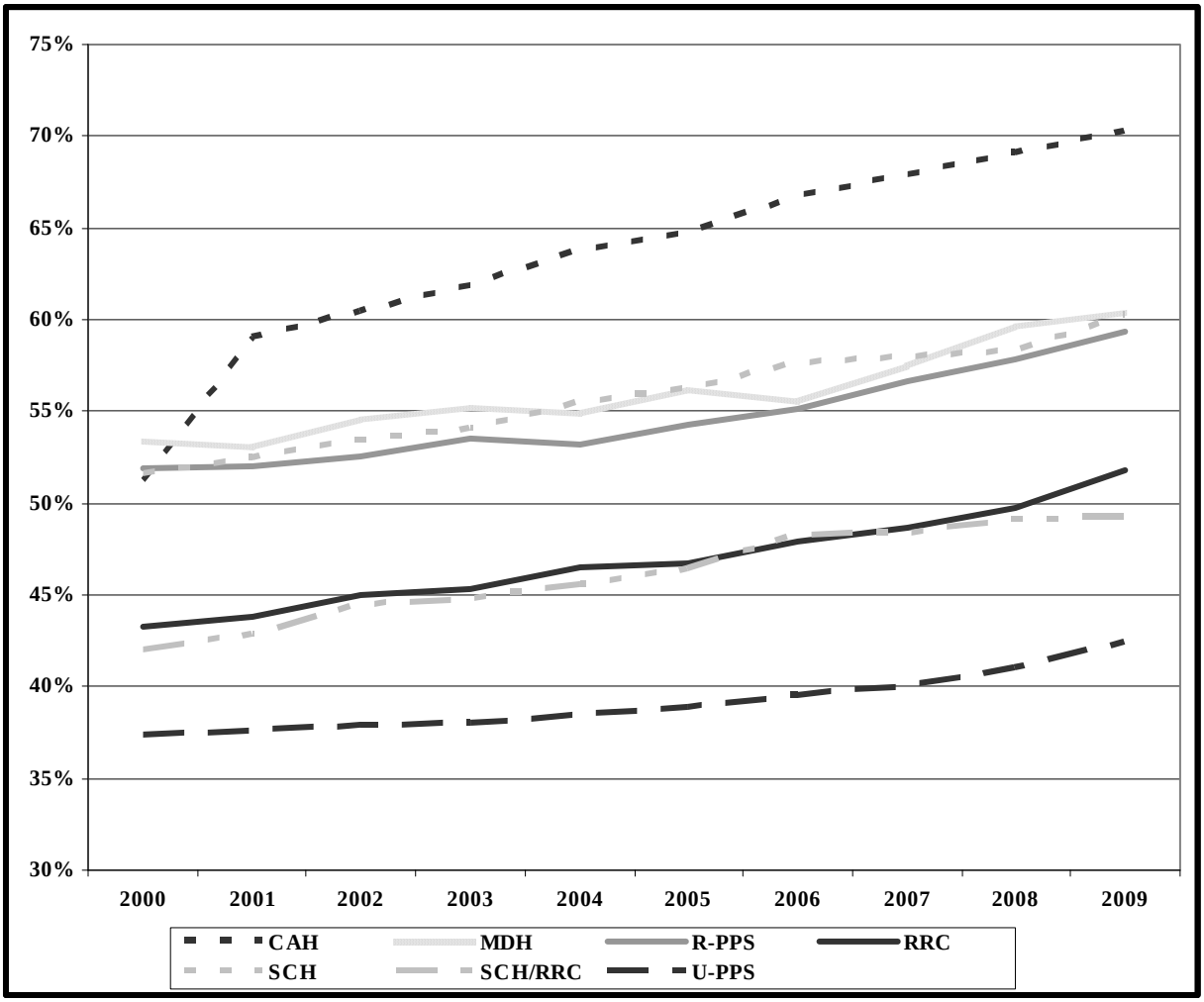
Long-term Debt to Capitalization
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	20.0%	24.9%	21.5%	23.5%	23.6%	24.3%	26.1%	27.6%	28.8%	28.0%
MDH	23.9%	20.7%	24.4%	23.8%	27.6%	25.8%	24.2%	25.1%	25.4%	24.2%
R-PPS	28.0%	29.9%	29.9%	33.8%	33.8%	31.1%	30.1%	30.4%	30.0%	33.2%
RRC	27.8%	28.0%	28.7%	29.6%	30.3%	31.9%	27.1%	29.0%	30.3%	27.8%
SCH	23.2%	24.0%	25.2%	26.5%	24.6%	25.7%	27.3%	25.9%	25.7%	24.5%
SCH/RRC	24.8%	26.8%	25.5%	24.0%	27.6%	28.2%	27.7%	27.4%	30.2%	30.1%
U-PPS	36.3%	37.1%	39.5%	39.4%	39.7%	39.5%	37.7%	37.6%	39.6%	37.7%

CAH	Critical Access Hospital
MDH	Medicare-Dependent Hospital
R-PPS	Rural hospital paid under PPS
RRC	Rural Referral Center
SCH	Sole Community Hospital
SCH/RRC	Sole Community Hospital/ Rural Referral Center
U-PPS	Urban hospital paid under PPS

Outpatient Revenue to Total Revenue
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	51.2%	59.0%	60.4%	61.8%	63.7%	64.7%	66.7%	67.9%	69.1%	70.3%
MDH	53.3%	53.0%	54.5%	55.2%	54.8%	56.1%	55.5%	57.4%	59.6%	60.3%
R-PPS	51.9%	52.0%	52.5%	53.5%	53.2%	54.3%	55.1%	56.6%	57.8%	59.4%
RRC	43.2%	43.8%	45.0%	45.4%	46.5%	46.7%	47.9%	48.7%	49.8%	51.8%
SCH	51.6%	52.4%	53.4%	54.1%	55.5%	56.3%	57.7%	57.9%	58.3%	60.2%
SCH/RRC	42.0%	42.9%	44.5%	44.8%	45.5%	46.4%	48.2%	48.3%	49.1%	49.2%
U-PPS	37.4%	37.6%	37.9%	38.0%	38.4%	38.8%	39.5%	40.1%	41.0%	42.4%

CAH	Critical Access Hospital
MDH	Medicare-Dependent Hospital
R-PPS	Rural hospital paid under PPS
RRC	Rural Referral Center
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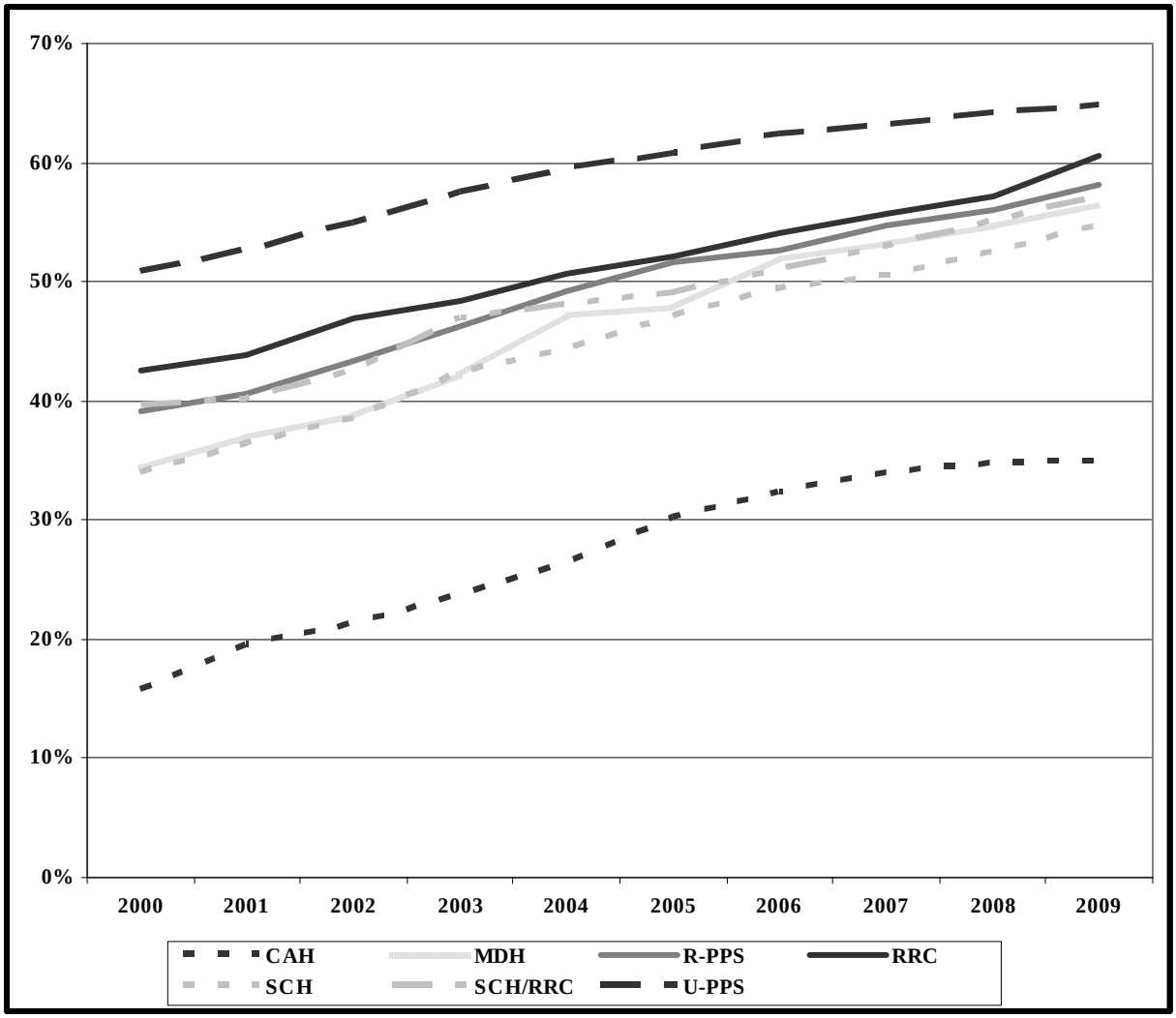
SCH/RRC	Sole Community Hospital/ Rural Referral Center
U-PPS	Urban hospital paid under PPS

Patient Deductions
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	15.8%	19.5%	21.3%	23.7%	26.3%	30.2%	32.3%	33.9%	34.7%	35.0%
MDH	34.2%	36.8%	38.7%	42.1%	47.2%	47.7%	51.8%	53.2%	54.5%	56.4%
R-PPS	39.1%	40.6%	43.3%	46.4%	49.3%	51.7%	52.6%	54.8%	56.1%	58.1%
RRC	42.5%	43.8%	46.9%	48.3%	50.6%	52.1%	54.1%	55.7%	57.1%	60.6%
SCH	33.9%	36.3%	38.5%	42.3%	44.4%	47.1%	49.3%	50.6%	52.4%	54.8%
SCH/RRC	39.6%	40.2%	42.6%	46.9%	48.1%	49.1%	50.9%	53.0%	55.1%	57.2%
U-PPS	50.9%	52.7%	54.9%	57.6%	59.4%	60.7%	62.4%	63.2%	64.2%	64.9%

CAH	Critical Access Hospital
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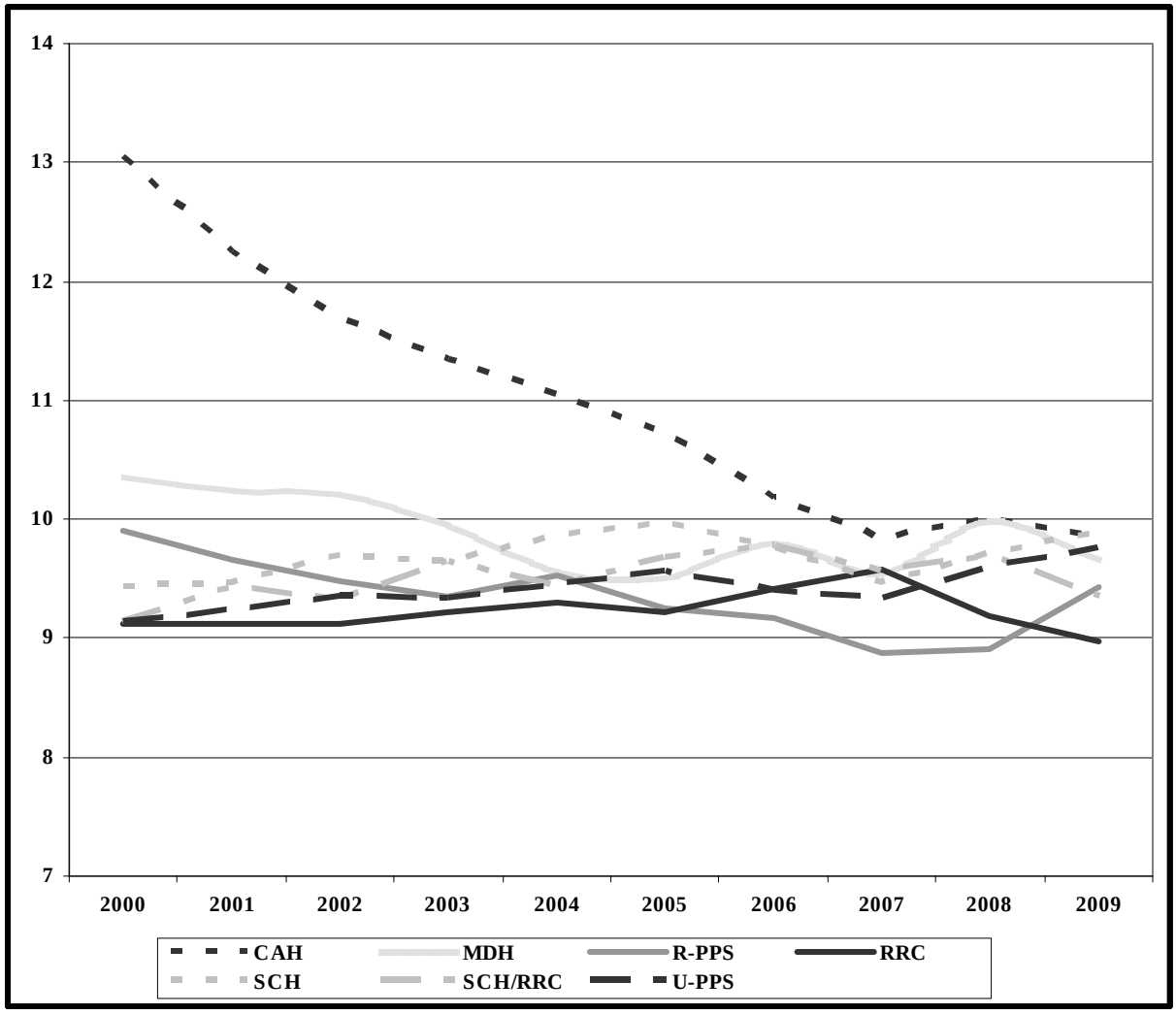
SCH/RRC	Sole Community Hospital/ Rural Referral Center
U-PPS	Urban hospital paid under PPS

Average Age of Plant
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	13.1	12.3	11.7	11.3	11.1	10.7	10.2	9.8	10.0	9.9
MDH	10.3	10.2	10.2	9.9	9.5	9.5	9.8	9.5	10.0	9.6
R-PPS	9.9	9.7	9.5	9.3	9.5	9.2	9.2	8.9	8.9	9.4
RRC	9.1	9.1	9.1	9.2	9.3	9.2	9.4	9.6	9.2	9.0
SCH	9.4	9.5	9.7	9.6	9.9	10.0	9.8	9.5	9.7	9.9
SCH/RRC	9.1	9.4	9.3	9.6	9.4	9.7	9.8	9.6	9.7	9.3
U-PPS	9.1	9.2	9.3	9.3	9.5	9.6	9.4	9.3	9.6	9.8

CAH	Critical Access Hospital
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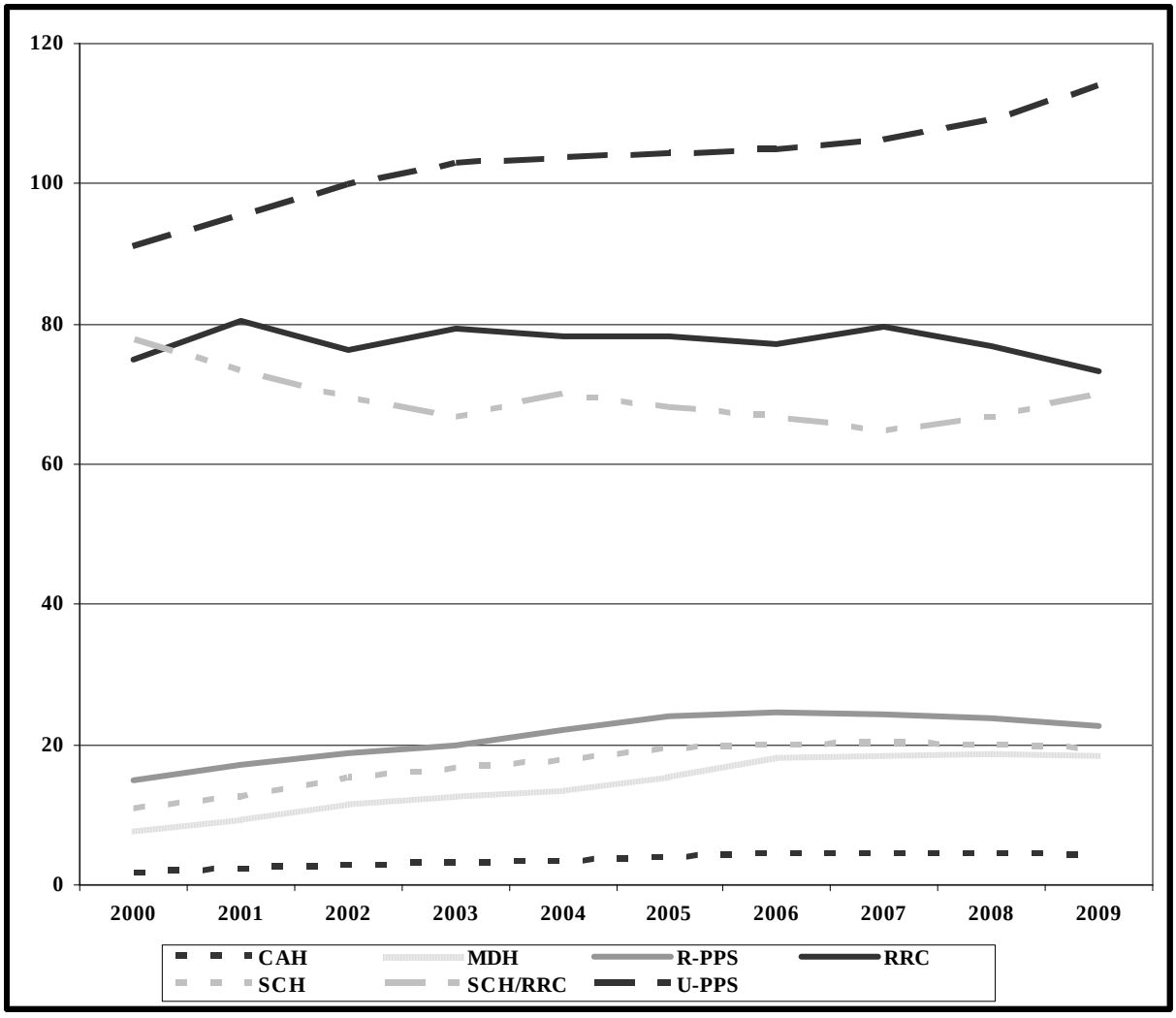
Average Daily Census – Acute Beds
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	1.5	2.2	2.8	3.1	3.4	4.0	4.4	4.4	4.4	4.2
MDH	7.5	9.1	11.3	12.4	13.2	15.2	18.0	18.2	18.6	18.3
R-PPS	14.9	17.3	18.8	20.0	22.2	23.9	24.5	24.3	23.8	22.7
RRC	74.9	80.5	76.3	79.4	78.4	78.2	77.2	79.6	76.9	73.2
SCH	10.9	12.4	15.1	16.7	17.7	19.4	19.9	20.1	19.9	19.4
SCH/RRC	77.6	73.4	69.4	66.7	69.9	67.9	66.6	64.7	66.6	70.0
U-PPS	90.8	95.5	99.7	102.7	103.8	104.1	104.8	106.1	109.0	114.0

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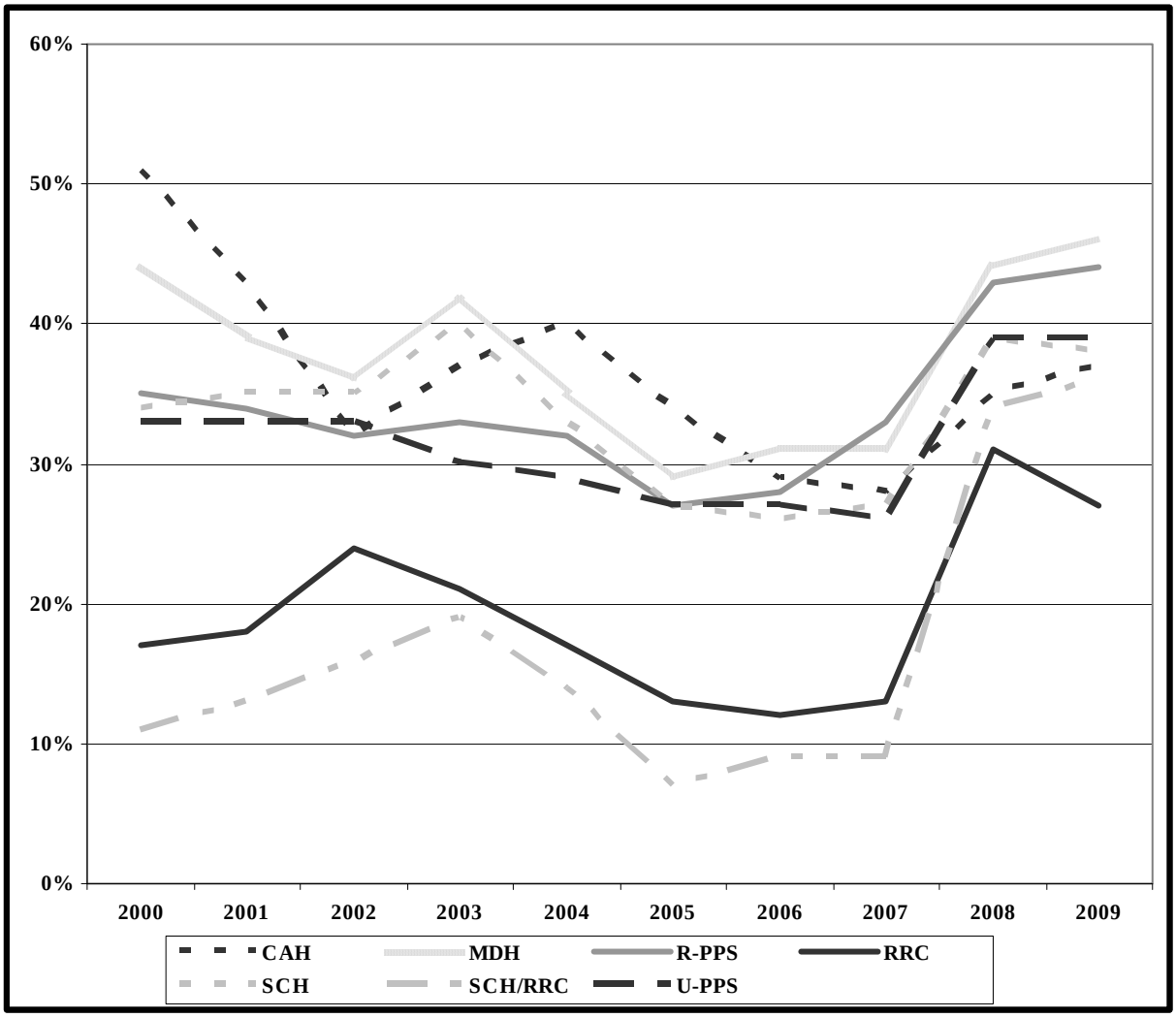
Percent of Hospitals with Negative Total Margin
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	51.1%	42.7%	32.3%	37.1%	39.7%	34.0%	29.0%	28.0%	34.8%	37.3%
MDH	43.8%	39.3%	35.9%	42.8%	35.0%	29.1%	31.0%	31.4%	44.2%	45.9%
R-PPS	35.1%	34.0%	32.4%	33.1%	31.9%	27.4%	27.8%	33.3%	42.6%	44.2%
RRC	17.4%	17.7%	24.1%	20.5%	17.3%	13.1%	11.5%	13.1%	31.4%	27.1%
SCH	33.8%	34.7%	34.6%	39.8%	33.1%	26.5%	25.7%	26.5%	38.7%	38.4%
SCH/RRC	10.5%	12.9%	15.9%	18.6%	13.5%	7.2%	19.2%	8.7%	34.3%	35.5%
U-PPS	33.3%	32.5%	32.7%	29.6%	28.7%	27.2%	26.8%	25.7%	39.0%	38.9%

CAH	Critical Access Hospital
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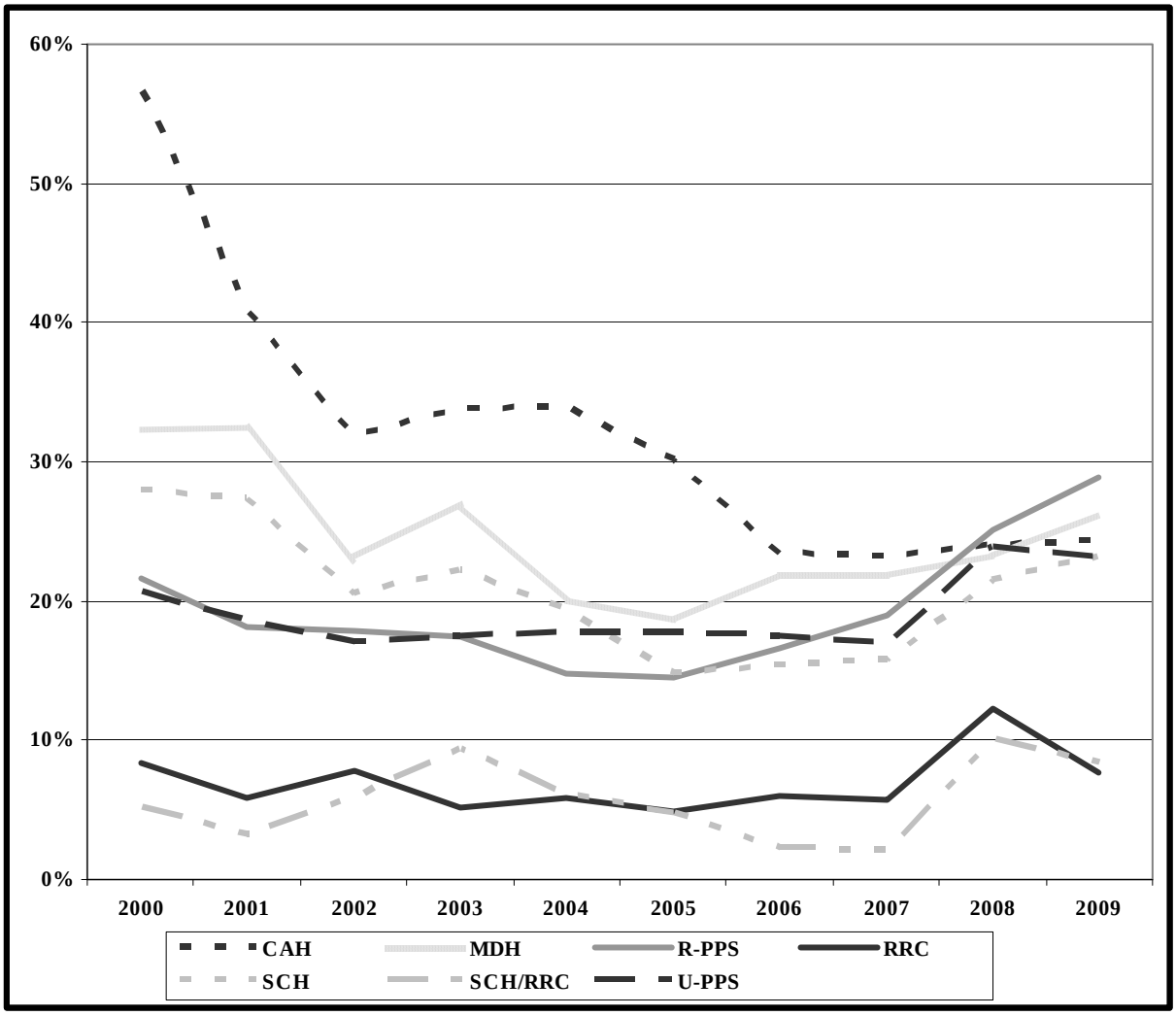
U-PPS	Urban hospital paid under PPS

Percent of Hospitals with Negative Cash Flow Margin
by Medicare Payment Classification
2000-2009 Medians



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAH	56.6%	40.9%	31.8%	33.8%	33.9%	30.1%	23.5%	23.2%	24.0%	24.3%
MDH	32.2%	32.4%	23.0%	26.9%	20.0%	18.6%	21.8%	21.7%	23.1%	26.1%
R-PPS	21.6%	18.1%	17.8%	17.5%	14.8%	14.5%	16.6%	19.0%	25.1%	28.9%
RRC	8.4%	5.9%	7.8%	5.2%	5.9%	4.9%	6.0%	5.7%	12.3%	7.7%
SCH	27.9%	27.4%	20.5%	22.2%	19.4%	14.8%	15.4%	15.7%	21.5%	23.1%
SCH/RRC	5.2%	3.2%	5.8%	9.3%	6.1%	4.8%	2.3%	2.1%	10.1%	8.4%
U-PPS	20.6%	18.5%	17.0%	17.5%	17.7%	17.7%	17.5%	17.0%	23.9%	23.2%

CAH	Critical Access Hospital
MDH	Medicare-Dependent Hospital
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