

ORIGINAL RESEARCH

Factors of U.S. Hospitals Associated with Improved Profit Margins: An Observational Study

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BACKGROUND: Hospitals face financial pressure from decreased margins from Medicare and Medicaid and lower reimbursement from consolidating insurers.

OBJECTIVES: The objectives of this study are to determine whether hospitals that became more profitable increased revenues or decreased costs more and to examine characteristics associated with improved financial performance over time.

DESIGN: The design of this study is retrospective analyses of U.S. non-federal acute care hospitals between 2003 and 2013.

SUBJECTS: There are 2824 hospitals as subjects of this study.

MAIN MEASURES: The main measures of this study are the change in clinical operating margin, change in revenues per bed, and change in expenses per bed between 2003 and 2013.

KEY RESULTS: Hospitals that became more profitable had a larger magnitude of increases in revenue per bed (about \$113,000 per year [95% confidence interval: \$93,132 to \$133,401]) than of decreases in costs per bed (about -\$10,000 per year [95% confidence interval: -\$28,956 to \$9617]), largely driven by higher non-Medicare reimbursement. Hospitals that improved their margins were larger or joined a hospital system. Not-for-profit status was associated with increases in operating margin, while rural status and having a larger share of Medicare patients were associated with decreases in operating margin. There was no association between improved hospital profitability and changes in diagnosis related group weight, in number of profitable services, or in payer mix. Hospitals that became more profitable were more likely to increase their admissions per bed per year.

CONCLUSIONS: Differential price increases have led to improved margins for some hospitals over time. Where significant price increases are not possible, hospitals will have to become more efficient to maintain profitability.

KEY WORDS: profitability; prestige; market power.

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INTRODUCTION

U.S. hospitals continue to face significant financial pressure. Consolidation of health insurers has put pressure on commercial prices.^{1,2} Medicare margins remain negative,³ and Medicaid margins have fallen substantially.⁴ A recent paper suggests that the share of hospitals with negative margins could rise from one-quarter to 41% in a decade.⁵ Despite these challenges, average hospital margins have remained steady, and at many institutions they have increased. The average hospital's total operating margin rose from 4.3% in 2007, the year before the Great Recession, to about 6.2% in 2014.³

How do hospitals deal with such financial pressures, and, in some cases, thrive? The literature suggests several strategies hospitals have used in the past. Some strategies may increase revenues. One such strategy is to use accounting changes; for example, hospitals might “upcode” a patient into a more severe, and thus more reimbursed, diagnosis related group (DRG).^{6,7} Upcoding was relatively common in the 1990s, but evidence suggests that upcoding is less prevalent now, likely due to increased government focus.⁶ A second such strategy is to provide more profitable services.^{8,9} Technologically-intensive services are reimbursed better, and hospitals historically have been posited to adopt technology to raise revenue.¹⁰ Hospitals have continued to acquire well-reimbursed technologies in recent years,^{11,12} though these are moving to the outpatient setting. Third, hospitals can change the mix of patients served, away from less-reimbursed public insurance enrollees towards better-reimbursed privately insured patients.^{13–15} A fourth revenue-raising strategy is to raise prices. Hospital consolidation has increased markedly, and a rich literature links greater concentration with higher prices.^{16–18} Having greater prestige may also allow a hospital to negotiate higher prices.¹⁹ Other strategies may decrease costs. One such strategy is reducing length of stay. Such reductions were prominent in the 1980s and 1990s when many payers switched to prospective payment systems for inpatient care, but further reductions may be difficult.²⁰

In this study, we use national data to answer three questions. First, how has variation in hospital operating margins changed over time? Second, what are the characteristics of hospitals that increased their operating margin over time? Third, what financial and clinical steps did hospitals take to become profitable?

METHODS

Data

We used data from the Medicare Cost Reports from 2003 to 2013, part of the Healthcare Cost Report Information System (HCRIS). The HCRIS data have been used by the Medicare Payment Advisory Committee (MedPAC) and others to calculate hospital margins.^{3,21} We linked HCRIS data to the American Hospital Association (AHA) annual survey, which provides information on hospital characteristics such as teaching status, and the Center for Medicare and Medicaid Services Impact Files, which provide hospital case-mix information. For a subset of analyses examining length of stay and DRG weight, HCRIS data were also linked to the Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID); all other analyses used our full sample. The states for which SID data were available to us for the examined time period were Colorado, Florida, Kentucky, Maryland, Massachusetts, New Jersey, New York, and Washington.

Study Population

Our sample included 2824 hospitals that met the following conditions: they existed in the AHA data from 2003 to 2013; they were hospitals serving medical and surgical patients or were hospitals specializing in cancer, cardiac, or orthopedic care; they were not federal government hospitals; they were not critical access hospitals; and they submitted HCRIS data from 2003 to 2013. Analyses using the SID data included 587 of the above 2824 hospitals.

Study Design, Variables, and Statistical Analyses

Our primary measure of performance was clinical operating margin, defined as net patient revenues minus total operating expenses (e.g., staffing costs, medications) divided by net patient revenue. This measure excludes non-clinical sources of revenue such as donations and investment income.²² While MedPAC uses a total operating margin measure that includes these other sources of revenue, our focus on clinical operations led us to remove them. These margin measures are highly correlated. In 2013, the correlation of clinical operating margin with total operating margin was 0.77, and the correlation of the difference between 2003 and 2013 in clinical operating margin with the difference in total operating margin was 0.78.

We dropped values of operating margin in 2003 or 2013 that were greater than 50% or less than -50% (111 hospitals affected) as these were likely due to reporting errors, replacing missing values with the adjacent year (i.e., 2004 or 2012) when possible (63 hospitals affected).

To address our first question, variation in margins over time, we examined the distribution of margins in 2003 and in 2013. We also examined the percent of hospitals that were in a particular operating margin category in 2003 that remained in that same category in 2013 and the percent that moved to a higher or lower margin category.

We then calculated overall net patient revenues per bed and overall costs per bed as well as Medicare and non-Medicare (private, Medicaid, and uninsured) revenues per bed. We estimated multivariate linear regressions relating these financial variables (our main outcomes) to our main independent variable, which was a categorical variable that took the value of 1 for hospitals in the upper quartile of change in operating margin between 2003 and 2013, -1 for hospitals in the lower quartile of change in operating margin, and 0 for hospitals with a change in operating margin in the middle two quartiles. This categorical variable simulates the change in going from the lowest quartile of change in operating margin (mean change of -19.1%) to the middle two quartiles (mean change of -1.6%) or from the middle two quartiles to the highest quartile (mean change of 12.8%), allowing us to ask whether moving to a higher category of change in operating margin was associated with higher revenues, lower costs, or both. Other hospital characteristics we control for include being a large hospital (> 300 beds), profit and ownership status, rural location, teaching status, percent of admissions from Medicare, percent of admissions from Medicaid, being a specialty hospital, case mix, and state, all of which were measured in 2003.

To address our second question about which hospitals had better financial performance changes, we ran multivariate linear regressions in which our main outcomes were 1) a continuous measure of change in operating margin between 2003 and 2013, and 2) changes between 2003 and 2013 in non-Medicare revenue per bed and in expenses per bed, and our independent variables of interest were hospital characteristics. We focused on two categories of hospital characteristics: hospital prestige and hospital concentration. We defined prestigious hospitals as (1) a teaching hospital (defined as a member of Council of Teaching Hospitals); and (2) a U.S. News and World Reports top hospital in 2003, separated into (a) U.S. News "Honor Roll" hospitals, (b) U.S. News Best Hospitals for cancer, heart and heart surgery, or orthopedics that were not also "Honor Roll" hospitals, and (c) all other hospitals ranked in U.S. News that year. We used two measures for hospital concentration: (1) whether a hospital that was not part of a hospital system in 2003 joined a system prior to 2013 and (2) a hospital's or its hospital system's share of beds in its hospital referral region (HRR) in 2003. We regressed the main outcomes above on these measures of hospital prestige and

hospital concentration in one regression, controlling for other hospital characteristics noted above.

For our third question—changes in hospital clinical characteristics associated with operating margin increases—our main outcomes of interest were (1) changes in average DRG weight; (2) changes in the number of profitable services or technology; (3) changes in hospital capacity utilization and length of stay; and (4) changes in payer mix. In separate regressions, we regressed these main outcomes on our categorical variable of quartile of change in operating margin, controlling for other hospital characteristics noted above. For DRG weight, we used the SID data to calculate the difference in the average DRG weight of an admission between 2003 and 2013. For profitable services or technology, we identified 14 services or technologies present in the AHA data between 2003 and 2013 that have been previously identified in the literature as profitable²³ and calculated the difference in number of these services or technologies between 2003 and 2013. We measured hospital capacity utilization as the average number of admissions per bed per year. For length of stay, we used the SID data to calculate the difference in average length of stay between 2003 and 2013. For payer mix, we used AHA data to calculate the difference in percent of admissions that were from Medicare, Medicaid, and other sources (private and uninsured) between 2003 and 2013.

Values were normalized to 2013 dollars using the consumer price index. Analyses were conducted using Stata 15.0 and used robust standard errors. Study approval was obtained from the National Bureau of Economic Research.

RESULTS

In 2013, the average hospital had a clinical operating margin of -2.7% . By comparison, total operating margin that year in our sample averaged 5.0% . (This differs from the margin reported by MedPAC because we examine a different set of hospitals.) The distribution of clinical operating margins in 2003 and in 2013 is shown in Figure 1. The standard deviation of margins was significantly higher in 2013 (13.6%) than in 2003 (10.6%) (p value for difference < 0.001). One quarter of hospitals in 2013 had margins of more than 5% , and the top 5% of hospitals had margins of more than 18% . The average hospital had a decrease in margin of -2.4% between 2003 and 2013.

Most hospitals did not move far in the operating margin distribution. The correlation between operating margin in 2003 and operating margin in 2013 was 0.44 . For those in the lowest quartile of operating margin in 2003, 43% stayed in the lowest quartile in 2013; most of the rest moved to the middle quartiles. Similarly, 49% of hospitals in the highest quartile in 2003 remained in that quartile in 2013 (online Appendix Table 1).

We found that moving to a higher category of change in operating margin was associated with increases in revenues

per bed, not with decreases in costs per bed (Fig. 2). Moving from a lower category of change in operating margin to a higher one was associated with an increase in revenues per bed of about $\$113,000$ per year (95% confidence interval [CI]: $\$93,132$ to $\$133,401$). Most of this revenue increase came from non-Medicare payers. Non-Medicare revenue rose by about $\$96,000$ per bed (95% CI: $\$79,348$ to $\$111,867$); Medicare revenue increases were about one-fifth as large. Moving to a higher category of change in operating margin was associated with decreases in expenses per bed of about $-\$10,000$ that did not reach statistical significance (95% CI: $-\$28,956$ to $\$9617$).

Characteristics of Hospitals that Improved Their Operating Margin

Table 1 shows hospital characteristics in 2003 and how these vary across categories of changes in operating margin. The average hospital has 225 beds. Rural hospitals composed 10% of the sample. Medicare made up 45% of admissions and Medicaid made up 17% .

Rural hospitals were less likely to be in the highest quartile of changes in operating margin compared to the lowest quartile. There was a slightly higher percentage of publicly insured patients (Medicare and Medicaid) in hospitals in the lowest quartile of changes in operating margin compared to the highest quartile. Teaching hospitals were more likely to be in the highest quartile than the lowest quartile. Hospitals that scored higher on U.S. News for cancer, heart and heart surgery, or orthopedics were more likely to be in the highest quartile than the lowest quartile. Hospitals or their affiliated hospital systems with a larger share of beds in its region in 2003 were more likely to be in the highest quartile than the lowest quartile.

Table 2 shows regression results of hospital characteristics associated with margin increases. The dependent variable in the first column is continuous change in operating margin between 2003 and 2013. Being an “Honor Roll” hospital was associated with operating margin decreases (-0.061 [$p = 0.004$]). Joining a hospital system (0.018 [$p = 0.01$]) and having a larger share of beds in one’s HRR (0.079 [$p < 0.001$]) were associated with operating margin increases. Not-for-profit status was associated with operating margin increases, while rural status was associated with operating margin declines. Hospitals with a high percent of Medicare patients were more likely to have margin declines.

The second and third columns of Table 2 examine how these hospital characteristics are associated with changes in non-Medicare revenue per bed and expenses per bed. Non-Medicare revenues per bed increased significantly in teaching hospitals, hospitals on the U.S. News “Honor Roll,” and hospitals noted for cancer, heart and heart surgery, or orthopedics. Meanwhile, being a teaching hospital and an “Honor Roll” hospital were associated with large increases in expenses per bed, while for-profit status was associated with large decreases in expenses per bed.

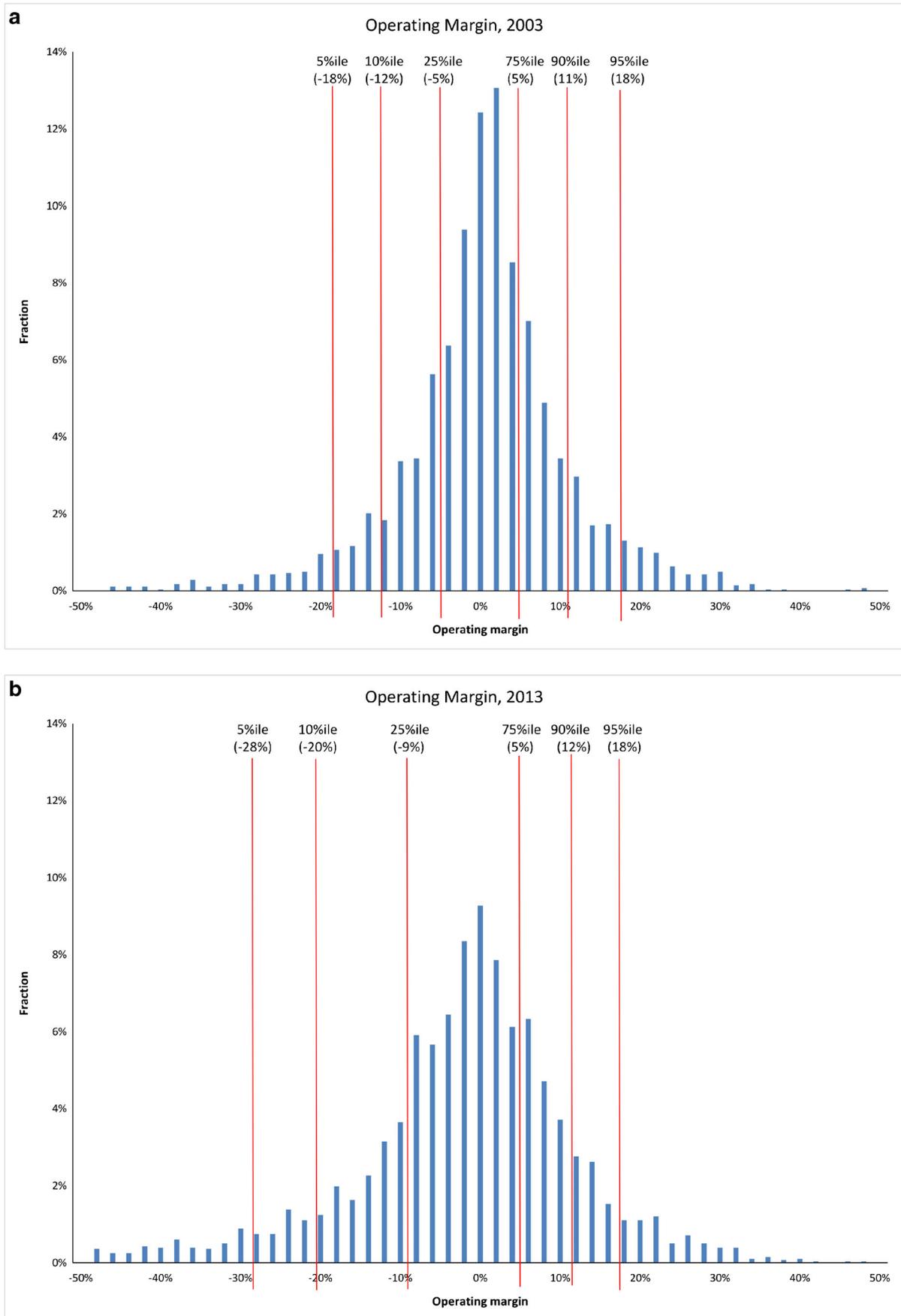


Fig. 1 Distribution of operating margin in 2003 and in 2013. Source: Authors' analysis of Healthcare Cost Report Information System data

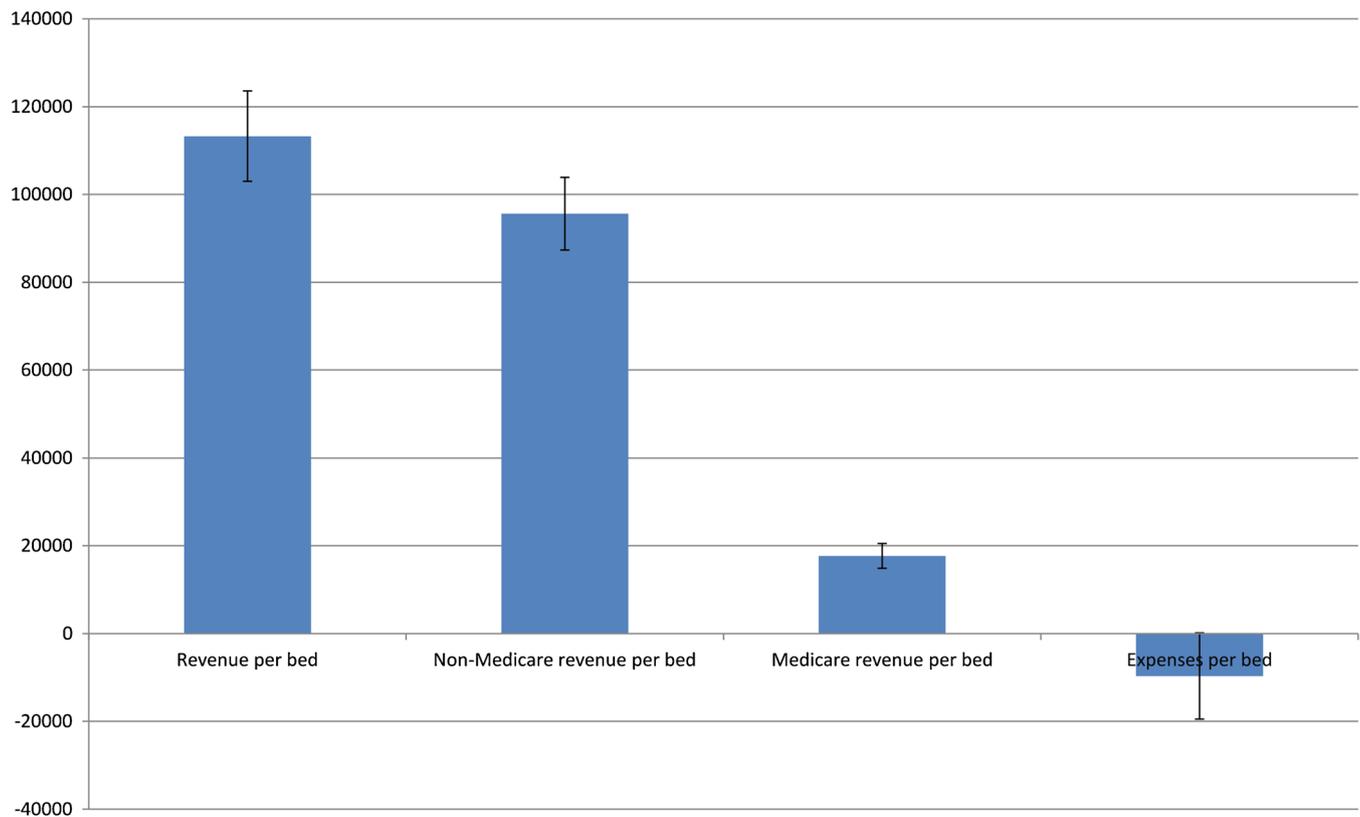


Fig. 2 Changes in revenues and expenses per bed for hospitals with increases in operating margin between 2003 and 2013. Source: Authors' analyses of Healthcare Cost Report Information System data, American Hospital Association (AHA) annual surveys, and Center for Medicare and Medicaid Services (CMS) Impact Files. Notes: Each bar represents a separate multivariate linear regression in which "Change in Operating Margin Category" is the main independent variable. "Change in Operating Margin Category" is an indicator variable that takes the value of 1 for hospitals with a change in operating margin in the highest quartile, -1 for hospitals with a change in operating margin in the lowest quartile, and 0 for hospitals in the middle quartiles. Models adjust for hospital size (a binary variable for hospitals with greater than 300 beds) in 2003, profit and ownership status in 2003, location (urban versus rural), teaching status (member of Council of Teaching Hospitals) in 2003, percent admissions from Medicare in 2003, percent admissions from Medicaid in 2003, specialty (cancer, cardiac, or orthopedic) hospital in 2003, case-mix index in 2003, and state. Values were normalized to 2013 dollars using the consumer price index. Error bars represent standard errors

Clinical Changes

When testing hypotheses regarding what hospitals may have done to increase their operating margins (Table 3), moving to a higher category of change in operating margin was not associated with increases in DRG weight or number of profitable services. There were also no significant changes in payer mix associated with moving to a higher category of change in operating margin. There was an association between moving to a higher category and decreased length of stay that approached statistical significance (-0.070 [$p = 0.057$]). Hospitals that moved to a higher category were more likely to increase their admissions per bed per year (2.41 [$p < 0.001$]). This increase is 5% of the average number of admissions per bed in 2003, while non-Medicare revenues per bed increased 55% for the top quartile hospitals.

DISCUSSION

Understanding the financial situation of hospitals is critical at a time of major health system change. Several studies show the

harmful effects that reimbursement pressure can cause; financial pressure has been associated with lower process quality and with closure.²⁴⁻²⁸ Research on successful survival has not been as well-explored. In this paper, we consider characteristics of hospitals that have done well and investigate what actions hospitals have taken to improve their financial performance.

We reach several key findings. First, there is wide variation in operating margin over time. The distribution of operating margins has become more dispersed in the past decade. Thus, focusing only on the average hospital misses a good deal of variation.

Second, hospitals that became more profitable primarily did so by increasing the revenue they took in, especially from non-Medicare (likely private) payers, not by cutting expenses. Higher revenue can come from higher prices or from greater volume of services. Hospitals with increases in operating margin had modest increases in admissions per bed and modest decreases in length of stay, but there was no association with increases in DRG weight. Results were broadly similar when using admissions as a denominator (online Appendix Tables 2 and 3). Like revenue per bed, revenue per admission

Table 1 Hospital Characteristics by Change in Operating Margin from 2003 to 2013

	Total (N = 2824)	Change in operating margin, 2003–13			p value
		Lowest quartile (N = 706)	Middle quartiles (N = 1412)	Highest quartile (N = 706)	
Mean operating margin, 2003	−0.4%	3.6%	0.3%	−5.8%	< 0.001
Mean operating margin, 2013	−2.7%	−15.5%	−1.2%	7.0%	< 0.001
Mean change in operating margin	−2.4%	−19.1%	−1.6%	12.8%	< 0.001
Interquartile range of change in operating margin	−8.8 to 5.1	−23.9 to −12.0	−4.8 to 1.6	7.4 to 16.2	
Hospital prestige					
Teaching hospital in 2003	9.0%	4.7%	10.1%	11.0%	< 0.001
US News ranking, 2003					
Honor Roll	0.6%	0.3%	0.9%	0.1%	0.04
Best hospital for cancer, heart and heart surgery, or orthopedics	2.8%	0.6%	3.8%	3.3%	< 0.001
Other ranked hospital	2.2%	1.4%	2.6%	2.0%	0.19
Hospital concentration					
Joined a hospital system between 2003 and 2013	12.8%	10.9%	12.9%	14.4%	0.14
Share of beds in 2003	15.5%	12.0%	16.1%	18.0%	< 0.001
Other hospital characteristics in 2003					
Number of beds	225	171	245	241	< 0.001
Profit category					
Nonfederal government	15.9%	22.8%	14.5%	11.8%	< 0.001
Not for profit	67.7%	56.5%	72.8%	68.6%	< 0.001
For profit	16.4%	20.7%	12.7%	19.7%	< 0.001
Rural	10.0%	19.7%	6.9%	6.2%	< 0.001
% Medicare admits	44.8%	46.9%	44.9%	42.4%	< 0.001
% Medicaid admits	16.9%	18.2%	16.3%	17.0%	< 0.001
Specialty (cancer, cardiac, or orthopedic) hospital	0.5%	0.4%	0.3%	1.1%	0.04
Case-mix index	1.33	1.24	1.36	1.37	< 0.001

Source: Authors' analyses of Healthcare Cost Report Information System (HCRIS) data, American Hospital Association (AHA) annual surveys, and Center for Medicare and Medicaid Services (CMS) Impact Files

Notes: Teaching hospital refers to member of Council of Teaching Hospitals. U.S. News "Honor Roll" hospital refers to hospitals that were ranked at least two standard deviations above the mean in at least six specialties by U.S. News and World Reports. "Best Hospital for cancer, heart and heart surgery, or orthopedics" refers to hospitals that were ranked in the top 50 in cancer, heart and heart surgery, and/or orthopedics by U.S. News and World Reports but were not in the Honor Roll. Other ranked hospitals were ranked in the top 50 in at least one of the other specialties but were not in one of the other two categories. Share of beds in system is relative to the hospital referral region (HRR). p values refer to ANOVA for means and chi-square tests for categories

for the top quartile hospitals also rose by much more than admissions per bed. We found very few differences between hospitals with increases in profitability and those without such increases in availability of profitable services and technology. Our data do not provide firm evidence on the use of such technology, but we suspect that technology use is not a major driver. Almost 80% of the increase in revenue for hospitals with large margin increases comes from non-Medicare payers. Yet Medicare accounts for half of all hospital admissions and a quarter of all outpatient visits,²⁹ so we do not think that increases in procedure use that led to such revenue increases would be so concentrated in the non-Medicare population.

Selden et al. recently documented widening divergence between private and public (Medicare and Medicaid) payment rates for inpatient hospital stays since 2001.³⁰ Our findings

suggest that this divergence may be due to hospitals raising prices on private insurers. Further evidence in support of this comes from the variables measuring prestige and consolidation. Teaching hospitals, U.S. News "Honor Roll" hospitals, and those hospitals recognized by U.S. News as being good in cancer, cardiology, or orthopedics had large increases in non-Medicare revenue. Many of them also had large increases in expenses (particularly Honor Roll hospitals), so that overall operating margins remained modest. While we do not measure prices directly, other evidence suggests that these institutions may have raised prices. For example, recent reports suggest that the prices paid by insurers to hospitals in Massachusetts,³¹ and in the United States more generally,³² are unrelated to quality of care but correlated with the hospital's market position. Similarly, studies have found that hospitals that merge have large increases in their price.^{16,33}

Table 2 The Association of Hospital Characteristics and Operating Margin Changes

Independent variable	Dependent variable					
	Change in operating margin		Change in non-Medicare revenue per bed (\$)		Change in expenses per bed (\$)	
	Coefficient	p value	Coefficient	p value	Coefficient	p value
Hospital prestige						
Teaching hospital in 2003	0.009	0.36	81,717	0.001	52,806	0.045
US News ranking, 2003						
Honor Roll	-0.061	0.004	382,489	0.005	510,024	<0.001
Best hospital for cancer, heart and heart surgery, or orthopedics	0.014	0.29	98,447	0.008	67,992	0.08
Other ranked hospital	-0.018	0.20	29,155	0.47	51,870	0.25
Hospital concentration						
Joined a hospital system between 2003 and 2013	0.018	0.01	9348	0.58	-270	0.99
Share of beds in 2003	0.079	<0.001	38,461	0.32	-12,318	0.79
Other hospital characteristics (data in 2003)						
Large hospital (>300 beds)	-0.002	0.79	26,110	0.08	38,959	0.03
Not for profit	0.023	0.004	16,755	0.29	3688	0.85
For profit	0.017	0.08	-39,147	0.050	-83,489	0.001
Rural	-0.046	<0.001	-52,638	0.007	-56,146	0.02
% Medicare admits	-0.100	<0.001	169,708	0.02	224,106	0.01
% Medicaid admits	-0.017	0.56	44,566	0.55	117,724	0.21
Specialty (cancer, cardiac, or orthopedic) hospital	0.011	0.80	225,276	0.08	148,613	0.14
Case-mix index	0.037	0.03	-21,135	0.52	-66,527	0.08
N	2824		2824		2824	

Source: Authors' analyses of Healthcare Cost Report Information System (HCRIS) data, American Hospital Association (AHA) annual surveys, and Center for Medicare and Medicaid Services (CMS) Impact Files

Notes: "Change in Operating Margin" is a continuous variable that is the difference in operating margin between 2003 and 2013. Teaching hospital refers to member of Council of Teaching Hospitals. U.S. News "Honor Roll" hospital refers to hospitals that were ranked at least two standard deviations above the mean in at least six specialties by U.S. News and World Reports. "Best Hospital for cancer, heart and heart surgery, or orthopedics" refers to hospitals that were ranked in the top 50 in cancer, heart and heart surgery, and/or orthopedics by U.S. News and World Reports but were not in the Honor Roll. Other ranked hospitals were ranked in the top 50 in at least one of the other specialties but were not in one of the other two categories. Share of beds in system is relative to the hospital referral region (HRR). For profit category, nonfederal government is the reference category. Regressions include state dummy variables (not reported). Values were normalized to 2013 dollars using the consumer price index

Table 3 The Association of Change in Operating Margin Category and Characteristics of Hospital Operation

	Change in operating margin category		N	R ²
	Coefficient	p value		
Change in admission per bed per year	2.41	<0.001	2824	0.10
Change in technology	-0.037	0.50	2538	0.06
Change in percent Medicare	-0.003	0.26	2824	0.31
Change in percent Medicaid	0.0001	0.95	2824	0.30
Change in other payers	0.003	0.32	2824	0.44
Change in length of stay	-0.070	0.057	587	0.11
Change in DRG weight	0.012	0.13	587	0.10

Source: Authors' analyses of Healthcare Cost Report Information System (HCRIS) data, Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID), American Hospital Association (AHA) annual surveys, and Center for Medicare and Medicaid Services (CMS) Impact Files

Notes: Each row represents a separate multivariate linear regression in which "Change in Operating Margin Category" is the main independent variable. "Change in Operating Margin Category" is an indicator variable that takes the value of 1 for hospitals with a change in operating margin in the highest quartile, -1 for hospitals with a change in operating margin in the lowest quartile, and 0 for hospitals in the middle quartiles. Models adjust for hospital size (a binary variable for hospitals with greater than 300 beds) in 2003, profit and ownership status in 2003, location (urban versus rural), teaching status (member of Council of Teaching Hospitals) in 2003, percent admissions from Medicare in 2003, percent admissions from Medicaid in 2003, specialty (cancer, cardiac, or orthopedic) hospital in 2003, case-mix index in 2003, and state. Regressions with change in DRG (diagnosis-related group) weight and with change in length of stay used the SID data along with the AHA data; the other regressions did not use the SID data

Our study has several limitations. The data on hospital costs come from self-reports. While they are widely used by groups such as MedPAC, the data are not uniformly audited. Further, debt payments may be included at the hospital level for some institutions but taken out of the hospital level (and recorded at the system level) for others. For some of our conclusions, causality is unknown. For example, hospitals that join a system may have bought other hospitals or been acquired because they were profitable, leading to an association between consolidation and margins that is a result of reverse causality. Collections may have improved in hospitals whose operating margins increased, but we are unable to measure this. Analyses on DRG and length of stay used a smaller sample of states and hospitals; there may have been significant associations if a larger sample had been used. Finally, we could not separate out Medicaid revenues from other non-Medicare revenues.

In sum, our research suggests that differential price increases may contribute to the growing divergence of hospital margins in the past decade. While this explanation may explain the recent period, it may be more difficult to command higher prices in the future, as the increasing prevalence of patient cost sharing and a move towards more restrictive payments by insurers may constrain what even the most prestigious hospitals can charge. For hospitals to stay profitable, they may have to do what few have done to date—control their costs.

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Compliance with ethical standards:

Conflict of Interest: The authors declare that they do not have a conflict of interest.

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