Analyzing Short-Term Acute Care Hospitals' Financial Measures Across Key Characteristics, 2016-2019

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Highlights

- Hospitals in the for-profit sector and those in the Midwest exhibited notably higher rates in both Net Revenue Margin to Total Cost for Patient Care and Net Revenue Margin to Patient Revenue. Hospitals in the Northeast and West regions had rates significantly lower than the U.S. averages.
- While for-profit hospitals outperformed the overall estimate in all profitability measures, they were not significantly different in the Burden Cost of Uncompensated and Unreimbursed Care to Total Cost.
- For-profit hospitals had a Net Income to Total Fixed Assets ratio more than double the national average (0.3144 vs. 0.1325). This finding was associated with a lower average Age of Investment.
- Compared with the national averages, southern hospitals had higher rates, whereas Midwest hospitals had lower rates, in both Burden Cost of Uncompensated Care to Total Cost and Burden Cost of Unreimbursed and Uncompensated Care to Total Cost.

Introduction

Standardized hospital financial measures[ii] can provide valuable data for analyzing the overall financial health and efficiency of a hospital and comparing it with others. In terms of financial viability, this brief delves into important metrics that evaluate a hospital's ability to generate revenue exceeding expenses. Beyond profitability, this brief evaluates investment in physical assets and the burden cost of providing uncompensated and unreimbursed services for which hospitals do not receive full or any compensation.

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[ii] Cleverley WO, Cleverley JO, Song P. Essentials of Health Care Finance, 7th ed. Burlington, MA: Jones & Bartlett Learning; 2011.

This statistical brief examines a select set of key measures based on data from the Agency for Healthcare Research and Quality (AHRQ) Hospital Financial Measures Dataset (HFMD) for 2016 and 2019. These measures offer tools for hospitals, governing boards, and public policy analysts to compare hospital financial performance trends with peer group averages and other hospitals over time.

This analysis also examines disparities in financial performance among diverse hospital groups. Factors such as location, size, teaching status, and ownership are examined to provide a nuanced view of hospital financial health. The measures used in this brief are included in Table 1.

For a somewhat larger set of measures and extended discussion of them, refer to the Methodology Report.[iii] This report describes building AHRQ's HFMD using the Centers for Medicare & Medicaid Services (CMS) Hospital Cost Report Public Use File.[iv] It offers a more detailed discussion of various measurement strategies and describes challenges and complications of using these measures.

Table 1. Hospital Financial Measures

Dimension	Definition	Brief Rationale
Profitability	Net Revenue Margin to Total Cost $$\frac{\text{Patient Revenue}^a - \text{Total Cost}^b}{\text{Total Cost}}$$	Markup from cost of patient care services to net revenue. Can indicate motivation and ability to obtain favorable pricing and case-mix and to manage costs.
	Net Revenue Margin to Patient Revenue $$\frac{\text{Patient Revenue} - \text{Total Cost}}{\text{Patient Revenue}}$$	Retention rate for patient revenue after subtracting cost. One indicator of a hospital's competitive strength in pricing and efficiency in its market service area.
	Net Income to General Fund Balance or Equity $$\frac{\text{Net Income}^c}{\text{General Fund Balance}^d}$$	An analog to return on equity in the for-profit sector. When this indicator is high, it indicates a relatively attractive business for raising additional capital.
	Net Income to Total Fixed Assets $$\frac{\text{Net Income}}{\text{Total Fixed Assets}^e}$$	An indicator of hospital's managerial efficiency using the physical assets of the business.

[iii] AHRQ Hospital Financial Measures Database: Methodology Report, forthcoming (e-mail corresponding author for a copy at Rhona.Limcangco@ahrq.hhs.gov).

[iv] Centers for Medicare & Medicaid Services, Hospital Cost Report Public Use File. https://data.cms.gov/provider-compliance/cost-report/hospital-provider-cost-report. Accessed February 16, 2024.

Dimension	Definition	Brief Rationale
Capital Structure	Average Age of Plant and Equipment Investments[f] $$\frac{\text{Accumulated Depreciation}}{\text{Current Depreciation}}$$	Indicator of the financial age of the hospital's fixed assets. The older the average age, the greater the short-term need for capital resources.
Other	Burden Cost of Uncompensated Care[g] $$\frac{\text{Total Uncompensated Care}}{\text{Total Cost}}$$	Measure of hospital care provided for which no payment was received.
	Burden Cost of Unreimbursed and Uncompensated Care[g] to Total Cost $$\frac{\text{Total Unreimbursed and Uncompensated Care}}{\text{Total Cost}}$$	Overall measure of hospital care provided for which no payment was received.

a. Net Revenue from Patient Care Services signals hospital's ability to sustain the current level of patient services without access to outside financing. Patient Revenue has already subtracted discounts from payers and allowances for bad debts.
b. Total Costs excludes nonreimbursable cost centers; Interest Cost and current depreciation are included in Total Cost.
c. Net Income is Net Revenue + all other revenue – other expenses.
d. General Fund Balance is Total Assets – Total Liabilities. Total Fixed Assets have deducted cumulative depreciation.
e. Total Fixed Assets have deducted cumulative depreciation.
f. Calculated as: (Sum of (Land, Improvements, Buildings, Leaseholds, Fixed Equipment, Minor Movable Equipment, HIT Assets) – Net Total Fixed Assets)/Depreciation Cost. Individual asset categories were before depreciation, while Total Fixed Assets was net of accumulated depreciation.
g. Unreimbursed and uncompensated care includes bad debt writeoffs, "free care," uncompensated costs that might be recovered, and unreimbursable care.

Findings

Hospital Groups

Financial reporting can be subject to errors as well as legitimate extreme values. For this report, we did not perform any preprocessing steps to remove outliers or replace them with imputed values to constrict the range of acceptable variation. Instead, we grouped hospitals into categories for each characteristic and calculated group results for each measure. We grouped hospitals as follows:

- Inpatient bed size group (1-99 [small], 100-199 [medium], 200+ [large]),
- Teaching status (teaching was measured as having nonzero medical interns and residents per bed).
- Ownership (for-profit/non-profit),
- Location (urban/rural), and
- Region of the country (Midwest, Northeast, South, and West).

Table 2 presents the characteristics of short-term hospitals in 2016 and 2019. Each year, about 4,600 short-term hospitals were included in the cohort. Of these, approximately 59% were small and 20% large hospitals, more than 70% were non-teaching, 80% were non-profit, and 60% were in urban settings. Geographically, 30% of the hospitals were located in the Midwest, 39% in the South, and 19% in the West, showcasing a diverse distribution across different regions. Teaching hospitals were approximately 27% of all hospitals throughout this period.

Table 2. Characteristics of Hospitals, 2016 and 2019

	2016		2019	
	Percent	**Number**	**Percent**	**Number**
All hospitals	100	4,661	100	4,569
Bed Size				
1-99	58.7	2,735	59.1	2,702
100-199	21.3	992	20.2	925
200+	20.0	934	20.6	942
Teaching Status				
Teaching	26.1	1,217	28.1	1,285
Non-teaching	73.9	3,444	71.9	3284
Ownership				
For-profit	20.0	933	18.7	855
Non-profit	80.0	3,728	81.3	3,714
Location				
Rural	39.6	1,844	39.5	1,805
Urban	60.4	2,817	60.5	2,764
Region [a]				
Midwest	29.8	1,388	29.7	1,359
Northeast	12.3	572	12.2	558
South	38.7	1,803	38.2	1,746
West	19.3	898	19.8	906

Source: Agency for Healthcare Research and Quality, Hospital Financial Measures Dataset, 2016-2019.
Note: Hospitals in Puerto Rico and the Virgin Islands were grouped in the South. Hospitals in Guam and the Marshall Islands were grouped in the West.

Group Ratios for Financial Measures

For each hospital group, we calculated group financial ratios by dividing the sum of the numerator by the sum of the denominator using SAS Proc Surveymeans with the ratio option that computes standard errors for the ratios.[v] We compared group ratios with the overall ratio for all hospitals to determine significant differences using the t-test.

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[v] SAS/STAT® 12.1 User's Guide: The SURVEYMEANS Procedure (Chapter). Cary, NC: SAS Institute; 2012. https://support.sas.com/documentation/onlinedoc/stat/121/ surveymeans.pdf. Accessed February 16, 2024.

Figures 1 to 6 present the group ratios and confidence intervals of hospitals by individual characteristics. The discussion in the text below is illustrative of the detailed findings and an attempt to briefly summarize some observations. We focused on 2016 and 2019 results. All differences highlighted in this report meet or exceed the 0.05 significance level.

Descriptive Results for Profitability Measures

Figure 1 illustrates results for net revenue margin to total cost (NRMTC). From 2016 to 2019, the overall rate remained essentially steady. The NRMTC decreased from 2016 to 2019 for all groups except for-profit (0.2737 vs. 0.2796) and hospitals in the West (0.1094 vs. 0.1219). The overall estimate for 2019 was 0.1965. In 2019, four groups differed significantly from the overall value: two lower (Northeast and West) and two higher (Midwest, for-profit).

For-profit hospitals generally are subject to income and sales taxes that in most states are not assessed on non-profit hospitals. For hospitals with the same total cost of patient services, net revenue would have to be in the range of 20% to 30% higher in for-profit than non-profit hospitals (depending on the state and assuming no tax credits or allowances) to achieve the same after-tax margin. The differences shown here are not adjusted for income and sales taxes actually paid, since those data are not collected.

Figure 2 illustrates results for net revenue margin to patient revenue. In both 2016 and 2019, hospitals in the for-profit sector and those in the Midwest exhibited notably higher rates (0.225 and 0.215, respectively) compared with the overall estimate (0.1854). In contrast, hospitals in the Northeast had rates significantly lower (0.1385) than the overall estimate.

Figure 3 shows results for net income to general fund balance (NIGFB), a ratio generally described in the financial media as "return on equity." The overall rate for NIGFB in 2019 was 0.0849. Compared with the overall rate in 2019, three groups were significantly lower (0.0551 for Northeast, 0.0621 for medium, and 0.0633 for Midwest). Two groups were significantly higher (0.1093 for South and 0.1341 for for-profit).

In 2016, compared with the overall rate (0.0986), for-profit hospitals were significantly higher (0.1508). Since the NIGFB includes other sources of income beyond services to patients, one might expect no correlation or even an inverse correlation with the net revenue margin to total cost. The figures show that for-profit hospitals were higher on both measures in both years, while hospitals in the Northeast were lower on both measures in 2019. Hospitals in the Midwest offer an illustration of a group that had higher NRMTC but lower NIGFB in 2019.

Figure 4 provides results for net income to total fixed assets[vi] (NITFA or "asset turnover"). The overall estimate in 2019 was 0.1325. A higher rate was observed in the South and in for-profit hospitals across the 2 years. Four groups were significantly different from the overall estimate, two lower (medium and Northeast) and two higher (for-profit and South).

Among the two groups with asset turnover below the overall estimate in 2019, the rates were 0.0991 and 0.0656, respectively. Among the two groups above the overall estimate, the rates were 0.3144 and 0.1922, respectively.

In 2019, for-profit hospitals exhibited remarkably high values across all profitability measures, while hospitals in the Northeast consistently displayed significantly lower figures across these measures. Notably, for for-profit hospitals, the most substantial variation was observed between 2016 and 2019 in NIGFB.

Furthermore, medium-sized hospitals stood out in 2019, with significantly lower values in both NITFA and NIGFB compared with the overall estimates, indicating distinctive financial trends within this category.

Descriptive Results for Capital Structure Measure

Figure 5 reports the average age of plant and equipment investments (AAI), estimated by the ratio of accumulated depreciation for fixed assets to current annual depreciation. The overall estimate was 12.4440 in 2019. The ratio rose gently from 2016 to 2019. Of the five groups with significantly different AAIs from the overall estimate in 2019, three were lower (for-profit, South, and West) and one was higher (Midwest).

The relationship between AAI and NITFA follows an inverse pattern. Specifically, for-profit hospitals and hospitals in the South displayed significantly lower AAI values. However, these hospitals demonstrated notably higher net income concerning their total fixed assets, indicating a financial contrast. The same inverse relationship was observed between NIGFB and AAI. Hospitals in the Midwest showed significantly higher AAI and lower NIGFB compared with the overall estimates.

[vi] Net income to total fixed assets provides a managerial indicator of effectiveness that does not consider the liabilities incurred to establish and modernize facilities and equipment. Three cautions must be noted about this measure. First, some hospital assets may appear on the books of a parent organization such as a university, local government, or holding company or an outside investor in the private sector. Second, because maintaining fixed assets can become more costly over time, an explanatory model for asset turnover could test for the effect of a measure of "age of investment," such as the one reported in Figure 5. Finally, because liabilities are ignored, more income could be required to pay interest to debt holders.

Descriptive Results for Other Measures

Figure 6 reports group results for two methods of assessing the cost of uncompensated care in relation to total cost of care. The first measure includes only specific groups of patients for whom no revenue is received, while the second and larger measure also includes unreimbursed costs for patients with coverage from third-party payers, government programs, and patient payments.

The discussion here will be limited to the larger measure of the burden cost of unreimbursed and uncompensated care to total cost. The discussion also will be limited to 2019's measure of the burden of unreimbursed and uncompensated care to total cost (UUCTC) and burden cost of uncompensated care to total cost (UCTC).

The overall rate for UUCTC was 0.0858 whereas UCTC was 0.05. The overall groups had a remarkably tight confidence interval around the estimate. One group was significantly lower (Midwest), and two groups (South, small) were significantly higher than the overall rate of UUCTC. The group with UUCTC below the overall estimate had a rate of 0.0728 (Midwest). The groups with relatively higher rates had UUCTC results of 0.0915 (small) and 0.1018 (South).

Hospitals in the Midwest showed significantly lower UCTC and UUCTC rates compared with the overall averages. An intriguing observation can be made by comparing the significant trends in UUCTC rates with the group-specific results for overall profitability. Among all groups, only hospitals in the Midwest, characterized by a relatively low UUCTC rate, exhibited relatively low profitability (NIGFB). Conversely, hospitals in the South, identified with a relatively high UUCTC rate, demonstrated relatively high NIGFB.

Potential Implications

Standardized hospital financial measures offer a valuable tool to analyze variations in hospital behavior and the impact of many factors in hospitals' environment. These factors include cost pressures, payer mix and reimbursement policies, demographic changes, and technology changes.

A particular hospital can compare itself with a group over time with similar characteristics. In our study, we constructed comparisons of groups by particular characteristics, using a select set of indicators from AHRQ's HFMD.

It is important to note that our analysis, although descriptive, highlights the need for further research, particularly with respect to multivariate analyses. For example, regional differences could reflect influences such as the generosity of public assistance programs, and their effects might be correlated with hospital ownership and whether

hospitals have a teaching mission or an especially large burden of uncompensated care. It might be possible to tease out the separate contributions in a multivariate model.

The interaction of teaching and bed size was not explored here and could be separately important in different directions. Future research, using multivariate analysis, would use individual hospital performance and could use a variety of methods for down-weighting extreme outliers.[vii]

Furthermore, the data available from the AHRQ HFMD only cover years preceding the COVID-19 public health emergency (PHE). This emergency significantly disrupted hospital operations, leading to increased expenses for services, cleaning supplies, and overall labor costs.[viii] However, many hospitals received financial assistance from the federal government, including through the Coronavirus Aid, Relief, and Economic Security Act (CARES Act),[ix] which helped offset some of these costs.

Recent findings have indicated that CARES Act relief funds played a crucial role in mitigating losses and improving financial performance for hospitals.[x] [xi] As newer data are released by AHRQ, updating these measures to capture changes that occurred during the PHE will help in analyzing trends before and after the pandemic.

[vii] Mihaylova B, Briggs A, O'Hagan A, Thompson SG. Review of statistical methods for analysing healthcare resources and costs. Health Econ. 2011;20(8):897-916. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3470917/. Accessed February 16, 2024.

[viii] American Hospital Association. Hospitals and Health Systems Continue To Face Unprecedented Financial Challenges due to COVID-19. June 2020. https://www.aha.org/system/files/media/file/2020/06/aha-covid19-financial-impact-report.pdf. Accessed February 16, 2024.

[ix] U.S. Government Accountability Office. COVID-19: Opportunities To Improve Federal Response and Recovery Efforts. GAO-20-625. June 25, 2020. https://www.gao.gov/products/gao-20-625. Accessed February 16, 2024.

[x] Wang Y, Witman AE, Cho DD, Watson ED. Financial outcomes associated with the COVID-19 pandemic in California hospitals. JAMA Health Forum. 2022;3(9):e223056. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9508652/. Accessed February 16, 2024.

[xi] Gidwani R, Damberg CL. Changes in U.S. hospital financial performance during the COVID-19 public health emergency. JAMA Health Forum. 2023;4(7):e231928. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10349333/. Accessed February 16, 2024.

Figure 1. Net Revenue Margin to Total Cost, Hospital Characteristics, by Year, 2016 and 2019
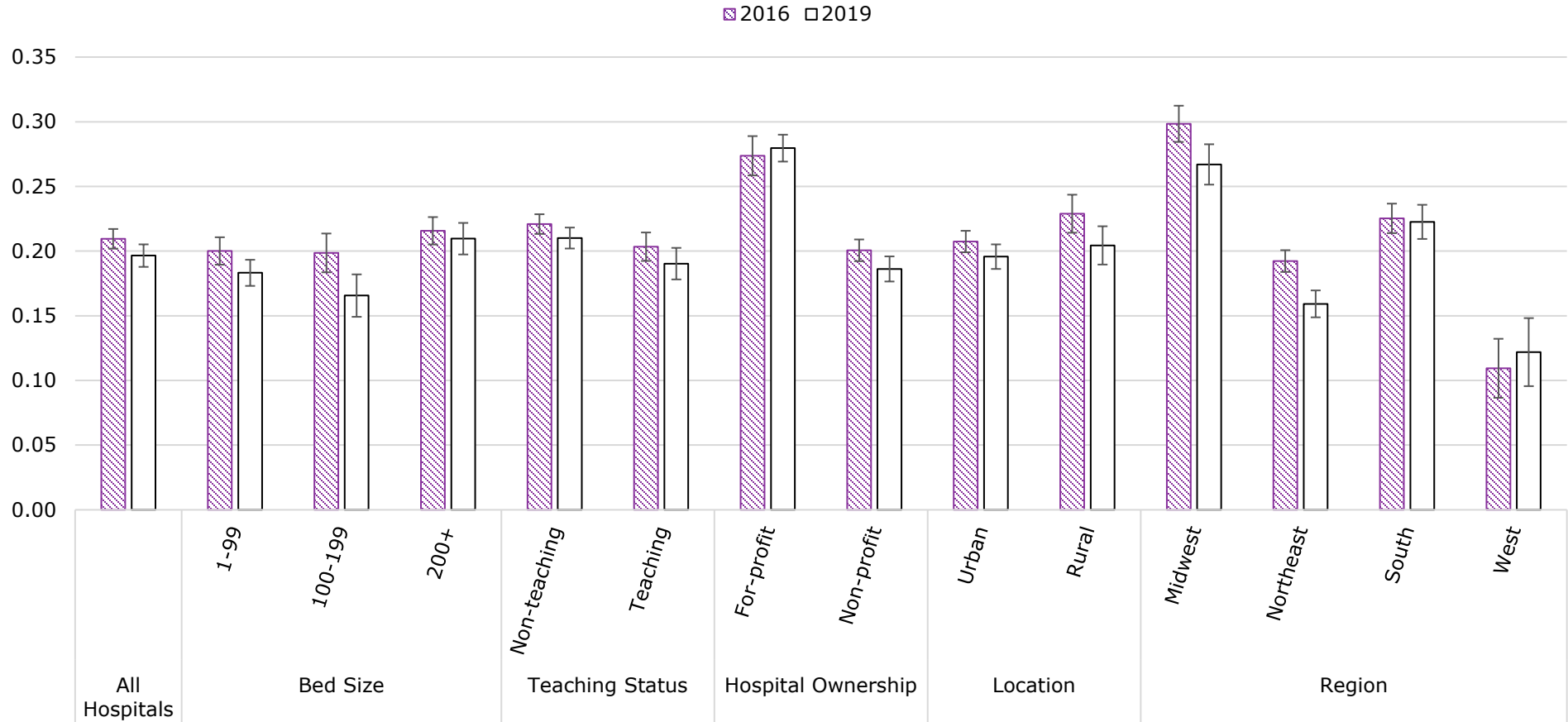
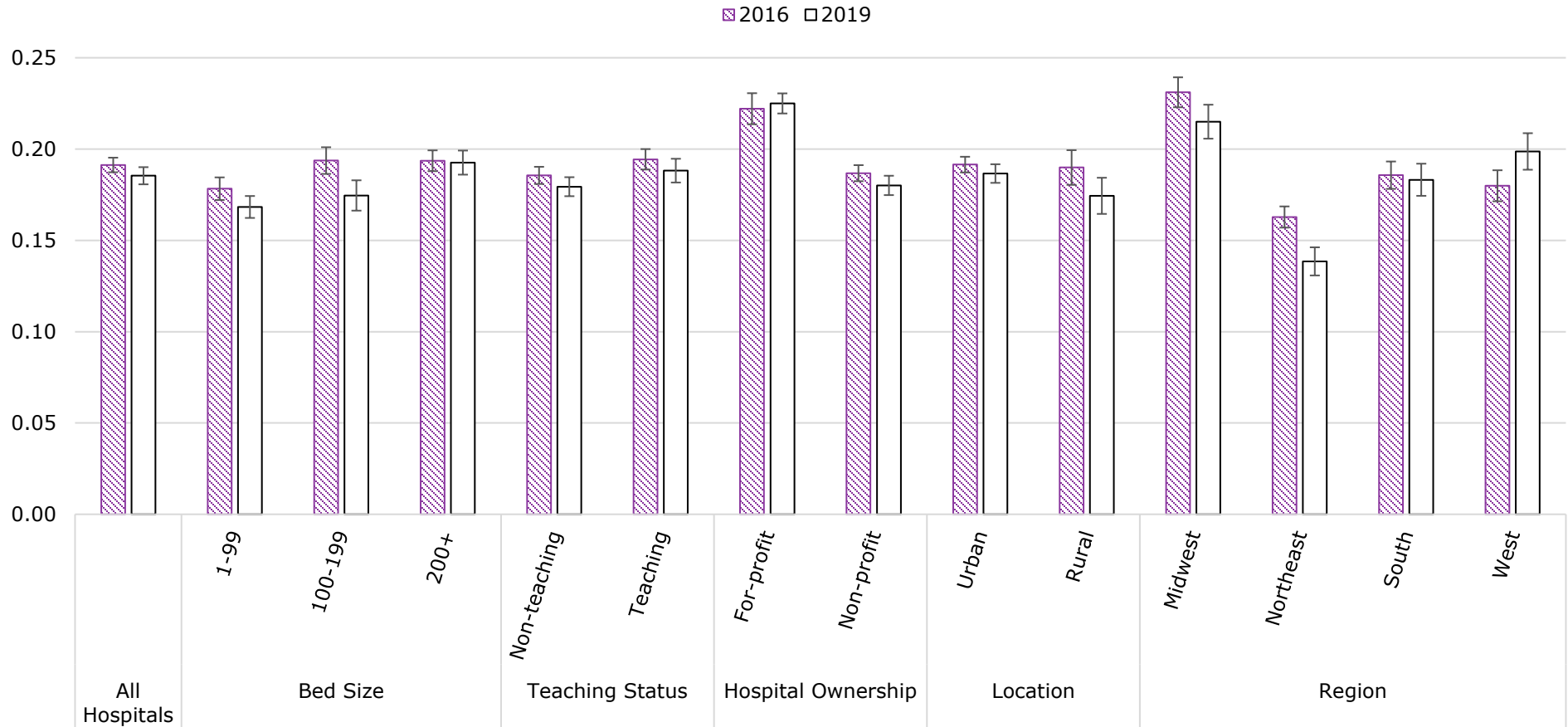|	All Hospitals	Bed Size			Teaching Status		Hospital Ownership		Location		Region			
		1-99	100-199	200+	Non-teaching	Teaching	For-profit	Non-profit	Urban	Rural	Midwest	North-east	South	West
2016	0.2095	0.2001	0.1986	0.2157	0.2209	0.2034	0.2737***	0.2006	0.2074	0.2289	0.2984***	0.1923	0.2253	0.1094***
2019	0.1965	0.1832	0.1656	0.2096	0.2101	0.1903	0.2796***	0.1862	0.1957	0.2044	0.2670***	0.1592**	0.2226	0.1219**

p value <0.001=*** <0.01=** <0.05 =* (group ratio compared with all hospitals for each year).
Source: Agency for Healthcare Research and Quality, Hospital Financial Measures Database, 2016 and 2019.
Note: Hospitals in Puerto Rico and the Virgin Islands were grouped in the South. Hospitals in Guam and the Marshall Islands were grouped in the West.

Figure 2. Net Revenue Margin to Patient Revenue, Hospital Characteristics, by Year, 2016 and 2019
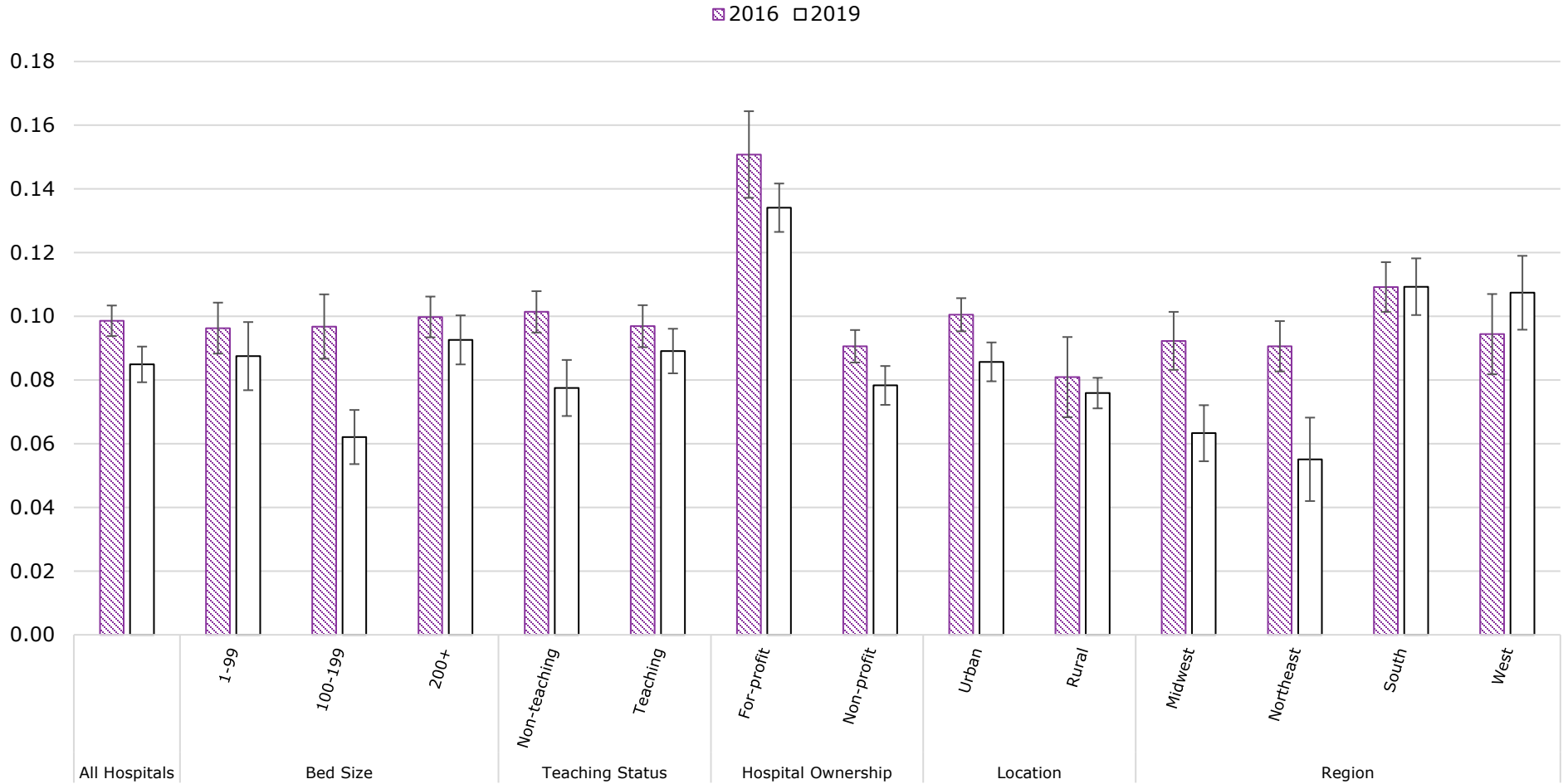

	All Hospitals	Bed Size			Teaching Status		Hospital Ownership		Location		Region			
		1-99	100-199	200+	Non-teaching	Teaching	For-profit	Non-profit	Urban	Rural	Midwest	Northeast	South	West
2016	0.1913	0.1783	0.1937	0.1936	0.1856	0.1944	0.2221**	0.1868	0.1915	0.1899	0.2311***	0.1628***	0.1857	0.1799
2019	0.1854	0.1683*	0.1746	0.1926	0.1794	0.1882	0.2250***	0.1801	0.1866	0.1744	0.2150**	0.1385***	0.1832	0.1987

p value <0.001 =*** <0.01 ** <0.05 =* (group ratios compared with all hospitals for each year).
Source: Agency for Healthcare Research and Quality, Hospital Financial Measures Database, 2016 and 2019.
Note: Hospitals in Puerto Rico and the Virgin Islands were grouped in the South. Hospitals in Guam and the Marshall Islands were grouped in the West.

Figure 3. Net Income to General Fund Balance, Hospital Characteristics, by Year, 2016 and 2019

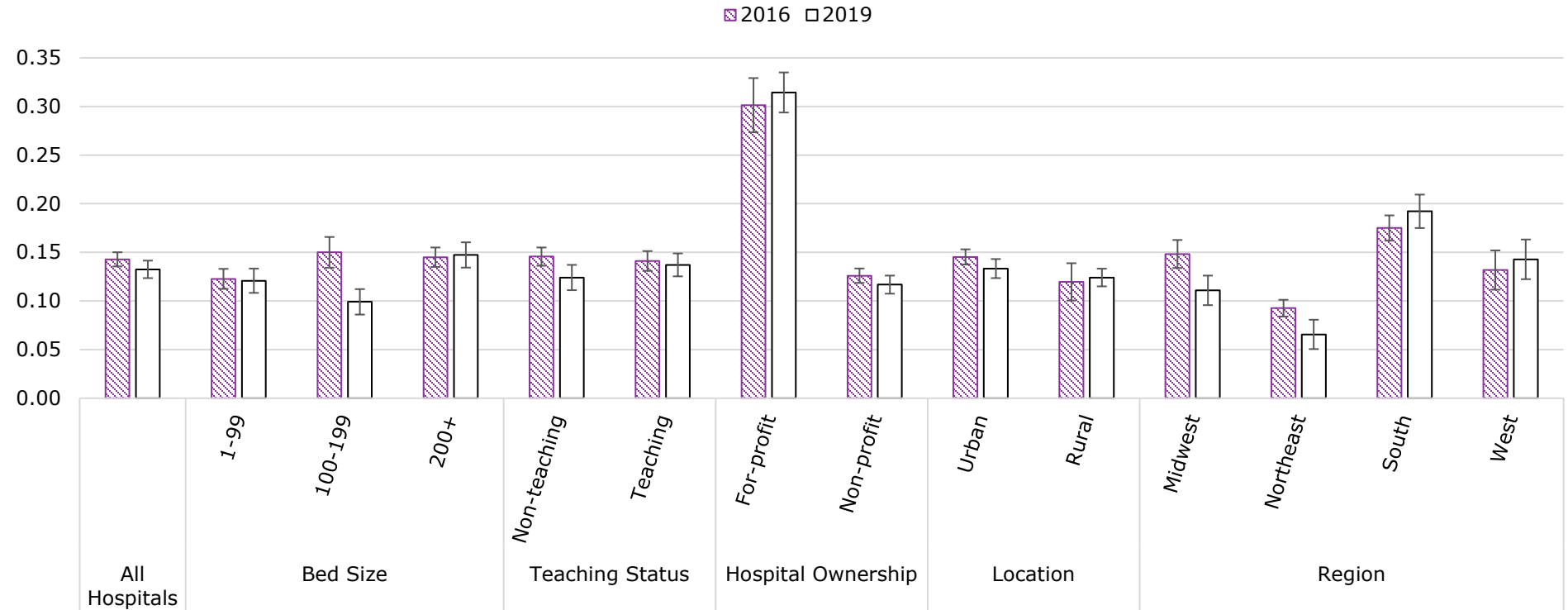|	**All Hospitals**	**Bed Size**			**Teaching Status**		**Hospital Ownership**		**Location**		**Region**			
		1-99	**100-199**	**200+**	**Non-teaching**	**Teaching**	**For-profit**	**Non-profit**	**Urban**	**Rural**	**Midwest**	**Northeast**	**South**	**West**
2016	0.0986	0.0963	0.0968	0.0998	0.1014	0.0969	0.1508***	0.0906	0.1005	0.0809	0.0923	0.0906	0.1092	0.0944
2019	0.0849	0.0875	0.0621*	0.0926	0.0775	0.0891	0.1341***	0.0783	0.0857	0.0759	0.0633*	0.0551*	0.1093*	0.1074

p value <0.001=*** <0.01=** <0.05 =* (group ratios compared with all hospitals for each year).
Source: Agency for Healthcare Research and Quality, Hospital Financial Measures Database, 2016-2019.
Note: Hospitals in Puerto Rico and the Virgin Islands were grouped in the South. Hospitals in Guam and the Marshall Islands were grouped in the West.

Figure 4. Net Income to Total Fixed Assets, Hospital Characteristics, by Year, 2016 and 2019
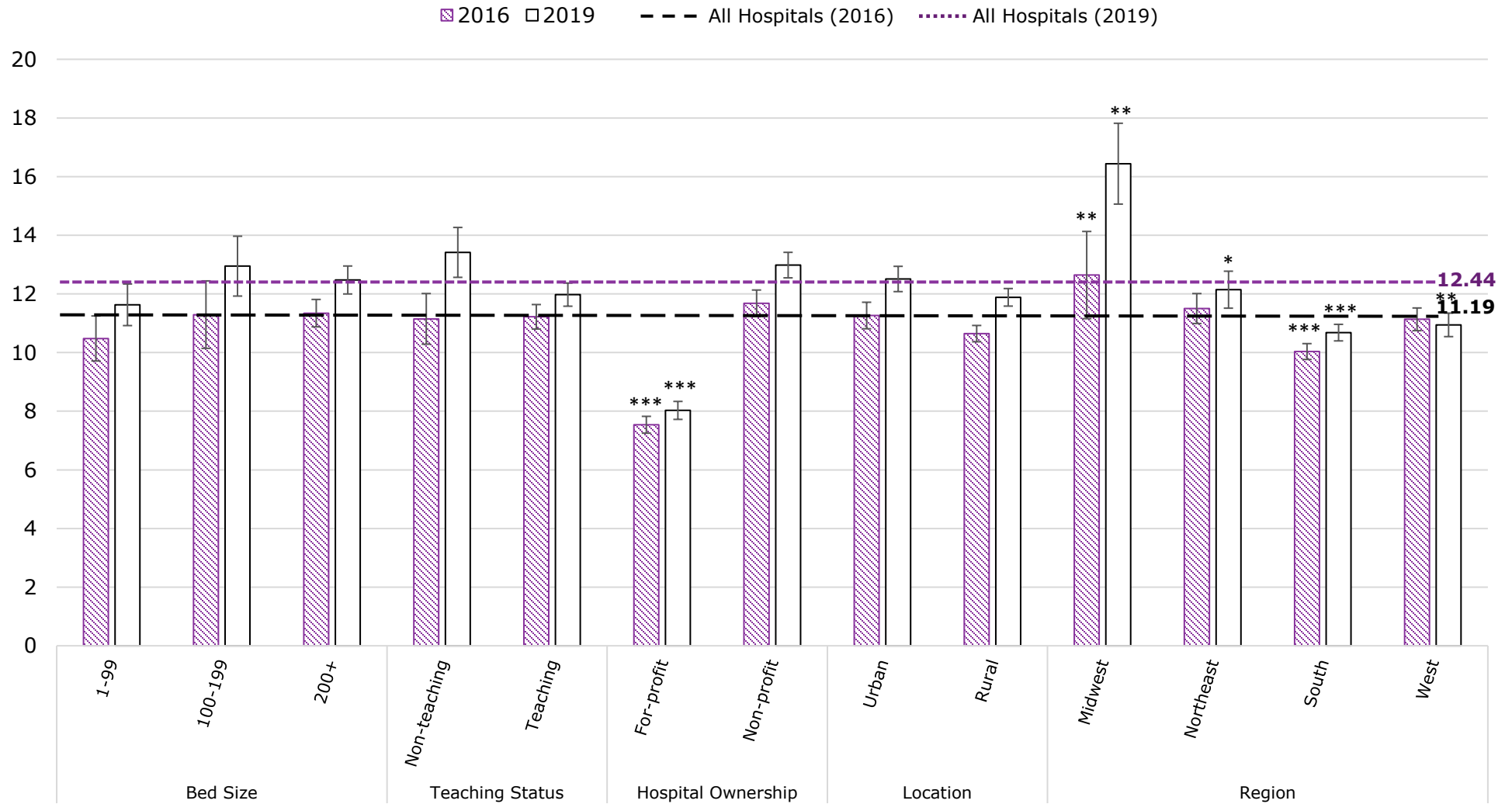

Net Income to Total Fixed Assets

	All Hospitals	**Bed Size**			**Teaching Status**		**Hospital Ownership**		**Location**		**Region**			
		1-99	**100-199**	**200+**	**Non-teaching**	**Teaching**	**For-profit**	**Non-profit**	**Urban**	**Rural**	**Midwest**	**Northeast**	**South**	**West**
2016	0.1428	0.1227	0.1500	0.1450	0.1456	0.1411	0.3013***	0.1260	0.1453	0.1196	0.1483	0.0926***	0.1750*	0.1318
2019	0.1325	0.1208	0.0991*	0.1473	0.1241	0.1371	0.3144***	0.1168	0.1333	0.1241	0.1109	0.0656***	0.1922**	0.1428

p value <0.001=*** <0.01=** <0.05 =* (group ratios compared with all hospitals for each year).
Source: Agency for Healthcare Research and Quality, Hospital Financial Measures Database, 2016 and 2019.
Note: Hospitals in Puerto Rico and the Virgin Islands were grouped in the South. Hospitals in Guam and the Marshall Islands were grouped in the West.

Figure 5. Average Age of Investment, Hospital Characteristics, by Year, 2016 and 2019
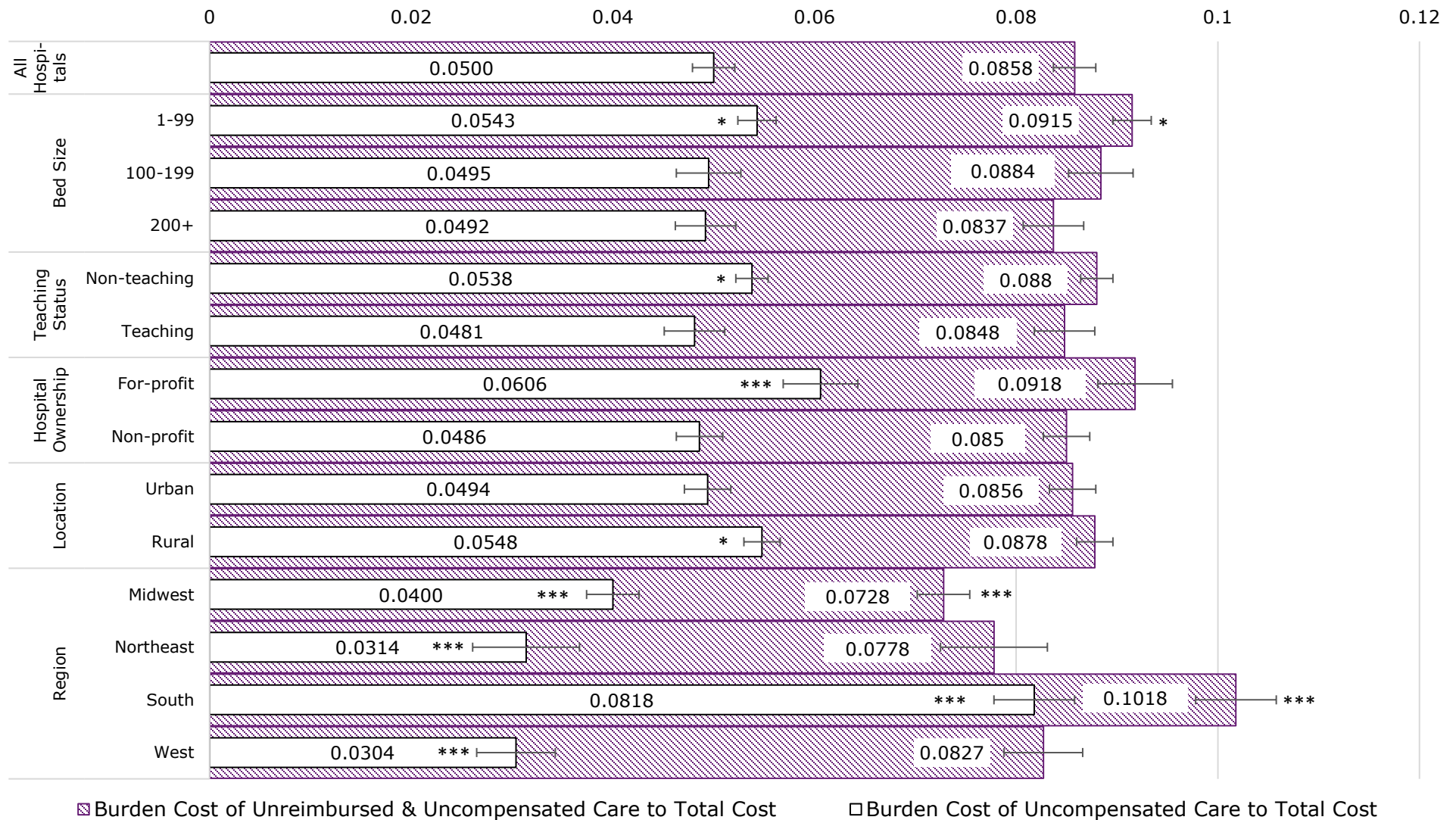

Legend: ▨ 2016 ▢ 2019 – – – All Hospitals (2016) ⋯⋯ All Hospitals (2019)

12.44
11.19

Categories (x-axis):
- Bed Size: 1-99, 100-199, 200+
- Teaching Status: Non-teaching, Teaching
- Hospital Ownership: For-profit ***/***, Non-profit
- Location: Urban, Rural
- Region: Midwest **/**, Northeast */**, South ***/***, West

p value <0.001=*** <0.01=** <0.05 =* (group ratios compared with all hospitals for each year).
Source: Agency for Healthcare Research and Quality, Hospital Financial Measures Database, 2016 and 2019.
Note: Hospitals in Puerto Rico and the Virgin Islands were grouped in the South. Hospitals in Guam and the Marshall Islands were grouped in the West.

Figure 6. Burden Cost of Uncompensated and Unreimbursed Care to Total Cost, Hospital Characteristics (2019[xii])

Category	Subgroup	Burden Cost of Uncompensated Care to Total Cost	Burden Cost of Unreimbursed & Uncompensated Care to Total Cost
All Hospitals		0.0500	0.0858
Bed Size	1-99	0.0543 *	0.0915 *
	100-199	0.0495	0.0884
	200+	0.0492	0.0837
Teaching Status	Non-teaching	0.0538 *	0.088
	Teaching	0.0481	0.0848
Hospital Ownership	For-profit	0.0606 ***	0.0918
	Non-profit	0.0486	0.085
Location	Urban	0.0494	0.0856
	Rural	0.0548 *	0.0878
Region	Midwest	0.0400 ***	0.0728 ***
	Northeast	0.0314 ***	0.0778
	South	0.0818 ***	0.1018 ***
	West	0.0304 ***	0.0827

▨ Burden Cost of Unreimbursed & Uncompensated Care to Total Cost ☐ Burden Cost of Uncompensated Care to Total Cost

p value <0.001=*** <0.01=** <0.05 =* (group ratios compared with all hospitals for each year).
Source: Agency for Healthcare Research and Quality, Hospital Financial Measures Database, 2019.
Note: Hospitals in Puerto Rico and the U.S. Virgin Islands were grouped in the South. Hospitals in Guam and the Marshall Islands were grouped in the West.

[xii] Because the standard errors of the 2016 data exhibit significant variability, this document focuses on the 2019 Burden Cost of Uncompensated and Unreimbursed Care as a proportion of the Total Cost.

Data Source

The information presented in this statistical brief originates from the AHRQ HFMD. The file includes data on facility characteristics, employment, service utilization, and financial accounting of revenues, costs, and balance sheet items. The AHRQ HFMD file was developed using data from CMS Public Use Files.[xiii] The methodology used in creating this database is described in greater detail elsewhere.[xiv]

Definitions

Short-Term Acute Care Hospitals

AHRQ HFMD included short-term acute care hospitals and excluded hospitals categorized as psychiatric, rehabilitation, and long-term care facilities. Hospitals were included if the report covered at least 180 days of operation.

Hospital Teaching Status

A hospital was defined as a teaching hospital if has nonzero medical interns and residents per bed.

Hospital Ownership

We used type of hospital control to define ownership status. For-profit hospitals are proprietary hospitals owned by individuals, corporations, partnerships, and others. Non-profit hospitals include hospitals owned by non-profit organizations, and governments.

Hospital Regions

We defined regions as:

- Northeast: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania
- Midwest: Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas
- South: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, Texas, Puerto Rico, and U.S. Virgin Islands
- West: Alaska, Arizona, California, Colorado, Guam, Hawaii, Idaho, Marshall Islands, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

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[xiii] Centers for Medicare & Medicaid Services, Hospital Cost Report Public Use File. https://data.cms.gov/provider-compliance/cost-report/hospital-provider-cost-report. Accessed February 16, 2024.

[xiv] AHRQ Hospital Financial Measures Database: Methodology Report, forthcoming (e-mail corresponding author for a copy at Rhona.Limcangco@ahrq.hhs.gov).

About Hospital Financial Measures Database (HFMD)

HFMD is a dataset that captures select key measures about hospital performance that can be used to analyze and evaluate the overall financial health, efficiency, and effectiveness of a hospital. It includes data from 2016-2019. AHRQ created HFMD, in part, as a resource to address existing measurement gaps in hospital financial information.

About AHRQ Data Innovations

AHRQ is engaged in several data development activities that have become known as "AHRQ Data Innovations." These activities include identifying data needs and data gaps. In addition, AHRQ is creating new research databases that complement existing databases to address emerging questions in U.S. healthcare delivery. These include the Physician and Physician Practice Research Database (3P-RD), Social Determinants of Health (SDOH) database, and Synthetic Healthcare Database for Research (SyH-DR).

Suggested Citation

AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of healthcare in the United States. We also invite you to tell us how you are using this statistical brief and other Data Innovations products and to share suggestions on how Data Innovations products might be enhanced to further meet your needs. Please email us at DataInnovations@ahrq.hhs.gov or send a letter to the address below:

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