

Supplementary Online Content

Khullar D, Bond AM, Schpero WL. COVID-19 and the financial health of US hospitals. *JAMA*. doi:10.1001/jama.2020.6269

eTable 1. Financial Performance of U.S. Hospitals, 2018

eTable 2. Characteristics of U.S. Hospitals By Level of Financial Vulnerability, 2018

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Financial Performance of U.S. Hospitals, 2018

	Mean	Standard Deviation	5th Percentile	25th Percentile	50th Percentile	75th Percentile	95th Percentile	N
Panel A: Measures of Financial Liquidity								
Operating Margin (%)	1.1	16.4	-21.7	-4.4	2.0	8.4	22.3	4,164
Current Asset-to-Liability Ratio	3.6	8.8	0.4	1.3	2.1	3.5	10.1	3,934
Days Cash-On-Hand	120.9	234.8	0.0	7.6	53.4	158.2	429.9	3,309
Days in Net Accounts Receivable	58.2	55.3	30.7	41.4	49.2	60.2	100.1	4,081
Panel B: Measures of Outpatient Revenue and Surgical Volume								
Outpatient Share of Revenue (%)	62.9	17.2	34.1	49.9	64.0	76.9	88.4	4,157
Surgical Procedures Per 100 Discharges	57.1	167.9	0.0	19.7	33.4	55.8	138.5	4,199

Authors' review of data from the RAND Corporation Healthcare Provider Cost Reporting Information System (HCRIS) files. Sample reflects all short-term, general, non-federal hospitals in the United States that reported on at least 1 of 4 measures of financial liquidity (operating margin [defined as the difference between operating revenue and operating expenses, divided by operating revenue], current asset-to-liability ratio [a measure of a hospital's ability to pay its short-term debt obligations], days cash-on-hand [defined as the number of days a hospital can continue to pay its operating expenses], and days in net accounts receivable [defined as how long payment is outstanding before it is collected]) and 1 of 2 measures of revenue source (outpatient share of revenue and surgical procedures per 100 discharges) in 2018. Financial outcomes that were outside of allowed ranges (e.g., negative days cash on hand) or more than three standard deviations from the mean were excluded.

eTable 2. Characteristics of U.S. Hospitals By Level of Financial Vulnerability, 2018

	Financial Vulnerability			Mean Difference: High - Low (95% CI)
	High	Medium	Low	
Panel A: Characteristics by Composite Measure of Financial Liquidity				
Member of System (%)	59.5	66.5	73.5	-14.0 (-17.4 to -10.5)
Non-Profit (%)	50.4	65.7	66.0	-15.6 (-19.2 to -12.0)
Government (Non-Federal, %)	30.0	18.6	17.2	12.8 (9.7 to 15.9)
Teaching Hospital (%)	22.0	29.8	30.0	-8.0 (-11.3 to -4.8)
Critical Access Hospital (%)	34.8	29.4	24.7	10.1 (6.8 to 13.5)
Safety-Net Hospital (%)	25.0	23.6	25.1	-0.1 (-3.4 to 3.2)
Rural (%)	57.4	48.3	41.1	16.3 (12.7 to 20.0)
Small Hospital (1-50 Beds, %)	53.2	41.0	35.1	18.1 (14.5 to 21.7)
Medium Hospital (51-200 Beds, %)	29.6	29.8	32.3	-2.7 (-6.1 to 0.8)
Large Hospital (>200 Beds, %)	17.1	29.2	32.6	-15.4 (-18.6 to -12.3)
Occupancy (%)	40.1	48.6	51.2	-11.1 (-12.7 to -9.5)
N	1,401	1,401	1,400	
Panel B: Characteristics by Composite Measure of Outpatient Revenue Share and Surgical Volume				
Member of System (%)	50.7	67.2	81.6	-30.9 (-34.2 to -27.6)
Non-Profit (%)	56.1	64.0	62.0	-5.8 (-9.4 to -2.2)
Government (Non-Federal, %)	33.0	21.0	11.9	21.1 (18.1 to 24.1)
Teaching Hospital (%)	4.4	24.7	52.6	-48.2 (-51.0 to -45.3)
Critical Access Hospital (%)	62.9	21.5	4.6	58.2 (55.5 to 61.0)
Safety-Net Hospital (%)	13.7	24.7	35.0	-21.3 (-24.5 to -18.2)
Rural (%)	85.1	50.9	10.8	74.4 (71.9 to 76.8)
Small Hospital (1-50 Beds, %)	85.6	35.7	8.1	77.6 (75.3 to 79.9)
Medium Hospital (51-200 Beds, %)	13.9	45.5	32.3	-18.4 (-21.5 to -15.4)
Large Hospital (>200 Beds, %)	0.4	18.8	59.6	-59.2 (-61.8 to -56.6)
Occupancy (%)	30.1	47.3	62.5	-32.5 (-33.7 to -31.2)
N	1,400	1,401	1,401	

Authors' review of data from the RAND Corporation Healthcare Provider Cost Reporting Information System (HCRIS) files and American Hospital Association Annual Survey. Sample reflects all short-term, general, non-federal hospitals in the United States that reported on at least 1 of 4 measures of financial liquidity (operating margin [defined as the difference between operating revenue and operating expenses, divided by operating revenue], current asset-to-liability ratio [a measure of a hospital's ability to pay its short-term debt obligations], days cash-on-hand [defined as the number of days a hospital can continue to pay its operating expenses], and days in net accounts receivable [defined as how long payment is outstanding before it is collected]) and 1 of 2 measures of revenue source (outpatient share of revenue and surgical procedures per 100 discharges) in 2018. Financial outcomes that were outside of allowed ranges (e.g., negative days cash on hand) or more than 3 standard deviations from the mean were excluded. The hospital financial composite measures reflect the mean of the 4 standardized measures of financial liquidity and the mean of the 2 standardized measures of revenue source. High, medium, and low categories reflect tertiles across the composite measures. High financial vulnerability represents low financial liquidity for Panel A and represents high outpatient revenue share and surgical volume for Panel B. Safety-net hospital status was not available for 119 hospitals and occupancy rate was not available for 7 hospitals.