NOT-FOR-PROFIT HEALTHCARE
ZIEGLER 2020 MEDIAN RATIOS

FALL 2021 • INDUSTRY WHITE PAPER

Ziegler

CAPITAL :: INVESTMENTS :: ADVICE

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INTRODUCTION

Industry professionals typically benchmark financial performance against the median ratios reported by the three primary rating agencies (Moody's, Standard and Poor's ("S&P") and Fitch). However, this approach can create challenges. Each agency follows its own set of rating criteria, which includes both quantitative and subjective qualitative factors in determining an outcome. Furthermore, the reported medians do not necessarily represent a comprehensive array of entities, limiting the ability to properly benchmark or draw analytical conclusions. We believe providing median ratios stratified by revenue gives hospitals and health systems a more informed means for benchmarking and comparative analysis.

In the third annual installment of the Ziegler Not-For-Profit Healthcare Medians, our goal continues to be the same: to provide an analytical tool that creates transparency and enhances benchmarking capabilities for hospitals and health systems. As a result, with the high number of hospitals and health systems in our database, we provided medians by revenue and geographic region in addition to median percentiles to provide additional transparency as seen in the Ziegler 2020 Not-For-Profit Healthcare Medians.

EXECUTIVE SUMMARY

Profitability:

The COVID-19 pandemic had a profound impact on hospital operations. The sudden onset and the severity of the virus caught most hospitals and health systems underprepared. Shortages of personal protective equipment, ventilators and staffing coupled with the influx of severely ill patients led to voluntary or governmentally mandated postponement of non-essential hospital procedures for a prolonged period of time. With fewer elective surgeries and higher margin business being performed, hospital and health system profitability was materially affected throughout the country irrespective of the organization's size.

Despite significant governmental subsidies related to the pandemic, industry-wide operating profit declined by approximately 1.6%, however health systems $1.0 billion and larger demonstrated more resiliency. Similarly, industry-wide Operating EBIDA declined by a 1.8% year over year.

Other measures of profitability were affected negatively by the pandemic, with larger health systems faring relatively better than their smaller counterparts.

Our analysis also examines the impact of CARES Act funding on profitability. When CARES Act funding is excluded from operations, it becomes apparent that smaller hospital benefitted the most on a relative basis. Collectively, the healthcare industry was buoyed by governmental funding and it likely saved many small hospitals.

Geographically, it should come as no surprise that taken as a whole, hospitals and health systems located in the Southwest, where COVID-19 was the mildest, showed the best operating results and the hardest hit Northeast fared the worst.

Leverage:

As expected given the operating challenges described above, maximum annual debt service coverage deteriorated across all organizations, declining to 3.2x from 3.7x in 2019. While all cohorts experienced a decline, hospitals with $1 billion or more in revenue have the healthiest coverage.

Total debt to capitalization tended to remain stable year over year and is generally within a narrow band, except for small hospitals, less than $250 million of revenue, where we note a higher percentage of debt in their overall capital structure. However, this same cohort demonstrated a total debt to EBIDA improvement, perhaps due to CARES Act funding and limited new borrowing. Interestingly organizations of $1 billion or more experienced the largest deterioration in total debt to EBIDA, noting that $5+ billion experienced an increase to 4.1x from 3.1x in 2019, the largest increase of all cohorts analyzed.

Within the geographical breakdown, the Northeast tends to carry a higher relative debt burden than the rest of the country, in line with expectations given its more challenging operating environment.

Liquidity:

Operating liquidity, as measured by days cash on hand, improved overall by 21 days as compared to 2019 as hospitals and health systems were able to recognize CARES Act grant revenue to bolster their balance sheets. All hospital and health systems across all revenue gradations saw improved liquidity, however hospitals and health systems with revenue below $750 million were below the total median of 213 days cash on hand. However, they still increased days cash on hand by over 15 days, with those below $250 million seeing the greatest percentage increase of over 25% to 198 days. In our analysis, we excluded advance prepayments from CMS as those dollars will be repaid back to CMS over time.

As with days cash on hand, cash-to-long-term debt and total debt improved in 2020. With the exception of health systems with revenue between $4 to $5 billion, there was marginal differences in the cash-to debt metrics of those entities with greater than $250 million in revenue. Small hospitals continue to lag their peers despite a 25% improvement in their cash to debt metrics.

The Midwest has displayed the strongest liquidity measurements for days cash on hand, cushion ratio, and cash-to-total debt. The Northeast followed by the Southwest held lower ratios across all liquidity metrics.

Capital Spending:

COVID-19 certainly had a large impact on capital spending by hospitals and health system in 2020. The unknown duration of the pandemic, reduced utilization and an indeterminable revenue base, combined with a need to conserve cash to offset expense structures, which are hard to reduce rapidly, held hospitals and health systems to easily control one variable, capital spending on facilities. However, as the year went on and revenues were offset by governmental intervention and utilization began to recover from the lock down periods across the county, capital spending recovered. Outside of entities with revenues between $750 million to $4 billion, capital expenditures as a percentage of depreciation were significantly lower than 2019.

With generally lower capital spending, average age of plant in 2020 increased. With an increased average age of plant, there is pent up capital demand that will need to be deployed to aging facilities in the coming years.

Hospitals and health systems with revenues above $2 billion held average age of plant, measured in years, below 11.2. Those below $2 billion in revenue all saw their average age of plant increase. Interestingly, those with revenue between $750 million to $1 billion have an average age of plant equal to small hospitals with revenue lower than $250 million.

Year-over-year, the Southeast has shown less of an emphasis on maintaining a younger average age of plant, followed closely by the Northeast in comparison to other regions. However, the Southwest experienced the highest increase in average of plant this past year, 0.6 years, suggesting that capital spending in this region was significantly lower.

METHODOLOGY

The information presented herein is the result of a comprehensive analytical process completed by members of Ziegler's Healthcare Investment Banking Team. The 2020 audited fiscal year-end financial statements of over 600 hospitals determine the 2020 median ratios, and the 2019 median ratios reflect restated financials where applicable. Most importantly, Ziegler utilizes revenue stratifications instead of rating outcomes to create its median ratios.

We believe this provides improved accuracy and benchmarking capabilities. Ziegler defines total revenue as operating revenue plus net non-operating gains and losses.

The table to the right displays the number of hospitals and health systems in our database stratified by nine different revenue ranges. The most significant number of hospitals and health systems fall below $1 billion in revenue. Many of these institutions are either not rated or seek a rating from only one agency. As a result, the respective medians from each rating agency are calculated off an incomplete sample set.

When compared to the rating agencies, the Ziegler Medians encompass nearly 350 hospitals not rated by Moody's, over 200 hospitals not rated by S&P, and over 350 hospitals not rated by Fitch. The table below displays, of the hospitals in our database, what revenue category each Moody's, S&P, and Fitch rating falls into, and how many additional hospitals and health systems Ziegler analyzed. For example, in the $0.50 to $0.75 billion revenue range, Ziegler analyzed 39 entities not rated by Moody's, 24 entities not rated by S&P, and 40 entities not rated by Fitch.

TOTAL REVENUE (BILLIONS)

REVENUE	COUNT
$0.00 - $0.25	130
$0.25 - $0.50	113
$0.50 - $0.75	72
$0.75 - $1.00	46
$1.00 - $2.00	92
$2.00 - $3.00	55
$3.00 - $4.00	22
$4.00 - $5.00	21
$5.00 (+)	51
TOTAL	**602**

TOTAL REVENUE (BILLIONS)

MOODY'S	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	5(+)	TOTAL
Aa	0	0	0	0	7	9	8	5	20	49
A	1	11	18	14	30	17	9	9	14	123
Baa	4	16	12	11	14	2	0	2	2	63
SG	7	8	3	2	3	0	0	0	0	23
Total	**12**	**35**	**33**	**27**	**54**	**28**	**17**	**16**	**36**	**258**
Additional	**118**	**78**	**39**	**19**	**38**	**27**	**5**	**5**	**15**	**344**

TOTAL REVENUE (BILLIONS)

S&P	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	5(+)	TOTAL
AA	0	3	7	4	25	18	9	7	30	103
A	13	35	27	15	26	26	9	8	14	173
BBB	17	20	10	11	14	5	3	4	2	86
SG	12	9	4	3	5	1	0	0	0	34
Total	**42**	**67**	**48**	**33**	**70**	**50**	**21**	**19**	**46**	**396**
Additional	**88**	**46**	**24**	**13**	**22**	**5**	**1**	**2**	**5**	**206**

TOTAL REVENUE (BILLIONS)

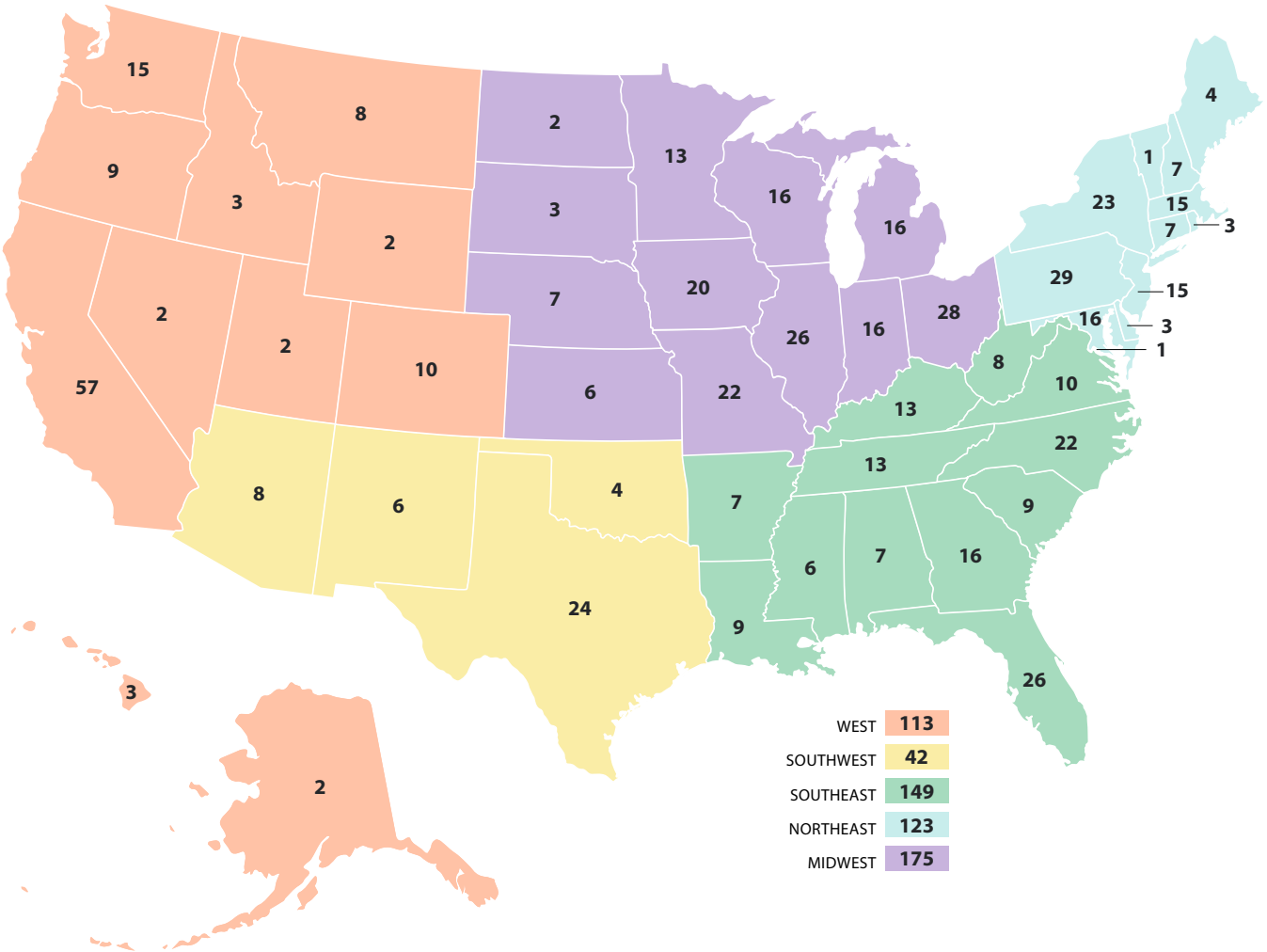
FITCH	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	5(+)	TOTAL
AA	2	7	8	10	21	11	4	4	20	87
A	10	14	14	5	13	8	5	5	3	77
BBB	3	11	6	3	5	2	0	0	2	32
SG	5	3	4	1	3	1	0	0	0	17
Total	**20**	**35**	**32**	**19**	**42**	**22**	**9**	**9**	**25**	**213**
Additional	**110**	**78**	**40**	**27**	**50**	**33**	**13**	**12**	**26**	**389**

Additionally, to provide further clarity within the stratifications, Ziegler included percentile comparison data for each of its medians. Percentile comparison allows for transparency to where one falls when comparing outcomes to a particular ratio. This allows an organization to better understand how it fared positively or negatively to a specific median.

Lastly, we segmented hospitals and health systems by geographic region and hospital type to illustrate how additional factors can impact financial performance. The table to the upper right displays the count of hospitals in six different hospital types, and the graphic below displays the count of hospitals by state and geographic region.

HOSPITAL TYPE

TYPE	COUNT
Children's	26
Critical Access	28
Community Based	184
Health System	318
Hospital District	41
Specialty	5
TOTAL	**602**



ZIEGLER MEDIANS STRATIFIED BY TOTAL REVENUE

The table below provides the 2020 Ziegler Median ratio results stratified by total revenue:

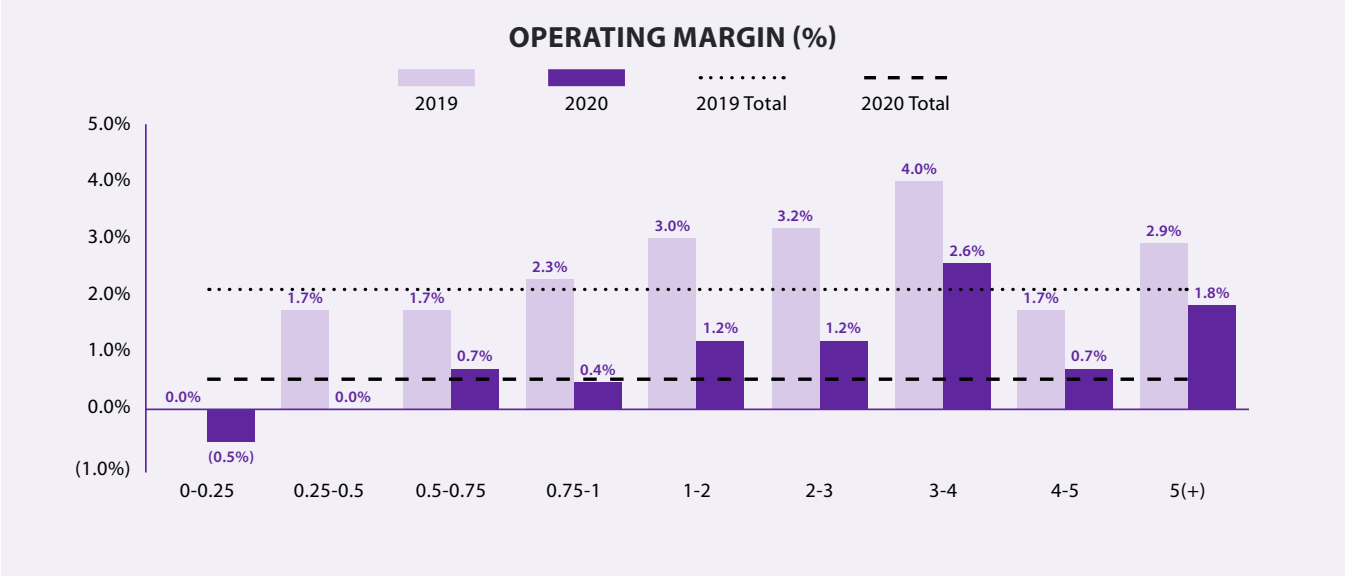
	SAMPLE SIZE >	**130**	**113**	**72**	**46**	**92**	**55**	**22**	**21**	**51**	**602**
		TOTAL REVENUE (BILLIONS)									
		0 - 0.25	**0.25 - 0.5**	**0.5 - 0.75**	**0.75 - 1**	**1 - 2**	**2- 3**	**3 - 4**	**4 - 5**	**5.00 (+)**	**Total**
PROFITABILITY	Operating Margin (%)	(0.5%)	0.0%	0.7%	0.4%	1.2%	1.2%	2.6%	0.7%	1.8%	0.5%
	Operating Margin Excl. CARES Act (%)	(6.7%)	(3.9%)	(4.3%)	(3.4%)	(2.2%)	(2.2%)	(1.0%)	(4.0%)	(2.1%)	(3.8%)
	% of Positive Op. Margin Excl. CARES Act (%)	19.2%	20.4%	26.4%	21.7%	31.5%	30.9%	27.3%	19.0%	35.3%	25.1%
	Operating EBIDA Margin (%)	6.8%	6.5%	6.8%	7.2%	7.0%	6.6%	8.2%	6.3%	5.7%	6.7%
	Excess Margin (%)	1.3%	1.7%	2.3%	2.1%	2.8%	2.7%	4.1%	2.9%	3.5%	2.3%
	EBIDA Margin (%)	8.9%	8.7%	8.7%	8.4%	8.6%	8.5%	9.5%	9.0%	7.7%	8.7%
LEVERAGE	MADS / Total Operating Revenue (%)	3.7%	2.8%	2.8%	2.7%	2.2%	2.4%	2.1%	2.0%	2.0%	2.6%
	MADS Coverage (X)	2.1x	2.8x	3.2x	3.2x	3.8x	3.9x	4.4x	4.6x	3.6x	3.2x
	Long-Term Debt / EBIDA (X)	3.3x	3.3x	3.0x	3.4x	3.6x	3.7x	3.6x	3.8x	3.7x	3.5x
	Long-Term Debt / Capitalization (%)	41.6%	33.2%	29.3%	31.1%	32.4%	33.7%	34.5%	30.8%	34.4%	33.6%
	Total Debt / EBIDA (X)	3.5x	3.5x	3.2x	3.4x	3.6x	3.7x	3.6x	4.2x	4.1x	3.6x
	Total Debt / Capitalization (%)	43.0%	35.4%	30.1%	31.6%	33.6%	33.9%	35.3%	31.7%	34.8%	35.0%
LIQUIDITY	Cash On Hand (Days)	198.3	189.4	200.8	231.0	228.6	223.9	221.7	267.0	227.7	213.3
	Cushion Ratio (X)	12.7x	19.2x	20.3x	27.6x	26.0x	26.1x	27.4x	32.4x	30.4x	22.3x
	Cash-To-Long-Term Debt (%)	127.8%	165.8%	178.2%	182.7%	177.9%	175.0%	173.0%	223.6%	187.7%	167.2%
	Cash-To-Total Debt (%)	112.4%	156.6%	170.1%	178.8%	162.8%	172.3%	167.1%	206.2%	177.4%	159.9%
CAPITAL	Average Age Of Plant (Years)	12.4	13.1	12.4	12.2	11.5	10.6	10.7	11.7	9.7	11.7
	Capital Expenditures / D&A (%)	73.9%	97.7%	114.2%	115.3%	118.6%	130.0%	138.2%	134.5%	143.4%	111.1%
MISC	Medicare Advance Payments ($000s)	6,245	30,917	52,800	67,368	88,919	168,738	248,545	297,105	444,958	39,886
	CARES ACT Rec. / Total Revenue (%)	5.24%	3.78%	3.94%	3.96%	3.45%	3.30%	3.12%	4.15%	3.08%	3.59%
	CARES ACT Funds Recognized ($000s)	4,935	13,100	23,822	33,404	47,288	79,013	102,031	183,166	282,696	24,976

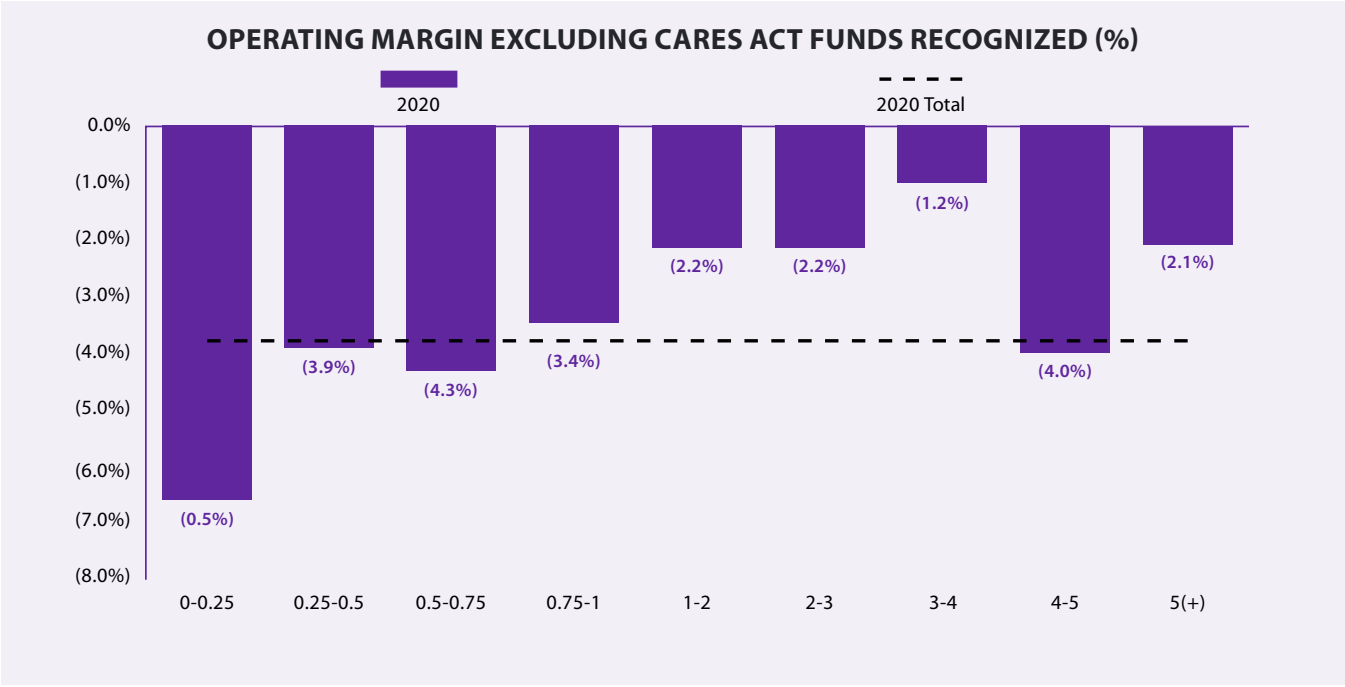
The table below provides the 2019 Ziegler Median ratio results stratified by total revenue:

	SAMPLE SIZE >	**127**	**116**	**74**	**44**	**101**	**52**	**20**	**15**	**53**	**602**
		TOTAL REVENUE (BILLIONS)									
		0 - 0.25	**0.25 - 0.5**	**0.5 - 0.75**	**0.75 - 1**	**1 - 2**	**2- 3**	**3 - 4**	**4 - 5**	**5.00 (+)**	**Total**
PROFITABILITY	Operating Margin (%)	0.0%	1.7%	1.7%	2.3%	3.0%	3.2%	4.0%	1.7%	2.9%	2.1%
	Operating EBIDA Margin (%)	8.1%	8.3%	8.8%	8.2%	9.0%	9.4%	9.7%	6.7%	8.5%	8.5%
	Excess Margin (%)	1.8%	3.8%	3.0%	3.7%	4.6%	4.8%	6.2%	2.8%	5.0%	3.8%
	EBIDA Margin (%)	9.6%	9.8%	9.7%	9.7%	10.9%	10.9%	11.9%	7.8%	10.7%	10.1%
LEVERAGE	MADS / Total Operating Revenue (%)	3.7%	2.8%	2.9%	2.6%	2.2%	2.2%	2.1%	2.1%	2.0%	2.6%
	MADS Coverage (X)	2.5x	3.3x	3.2x	3.8x	4.8x	4.4x	5.9x	3.9x	4.9x	3.7x
	Long-Term Debt / EBIDA (X)	4.1x	3.2x	2.9x	3.2x	3.0x	2.9x	2.6x	3.9x	2.9x	3.1x
	Long-Term Debt / Capitalization (%)	44.3%	34.3%	30.4%	32.7%	30.6%	31.7%	33.5%	32.7%	31.2%	33.7%
	Total Debt / EBIDA (X)	4.3x	3.3x	3.1x	3.4x	3.1x	3.0x	2.7x	3.9x	3.1x	3.2x
	Total Debt / Capitalization (%)	45.2%	35.3%	30.9%	33.1%	31.4%	32.5%	35.7%	33.6%	31.6%	34.6%
LIQUIDITY	Days Cash On Hand	158.0	174.4	175.7	208.3	222.1	196.8	208.1	196.0	229.8	192.3
	Cushion Ratio (X)	10.0x	17.4x	15.4x	20.1x	25.6x	22.3x	26.6x	23.1x	29.1x	19.3x
	Cash-To-Long-Term Debt (%)	97.3%	153.3%	161.0%	162.1%	165.8%	177.0%	176.1%	172.2%	173.6%	157.6%
	Cash-To-Total Debt (%)	87.3%	142.8%	149.5%	158.5%	161.9%	169.7%	169.3%	163.5%	170.8%	150.3%
CAPITAL	Average Age Of Plant (Years)	12.4	13.2	12.4	11.8	11.4	11.0	10.5	11.7	9.7	11.7
	Capital Expenditures / D&A (%)	110.1%	97.8%	117.3%	115.7%	116.5%	133.5%	138.2%	134.5%	139.6%	114.7%

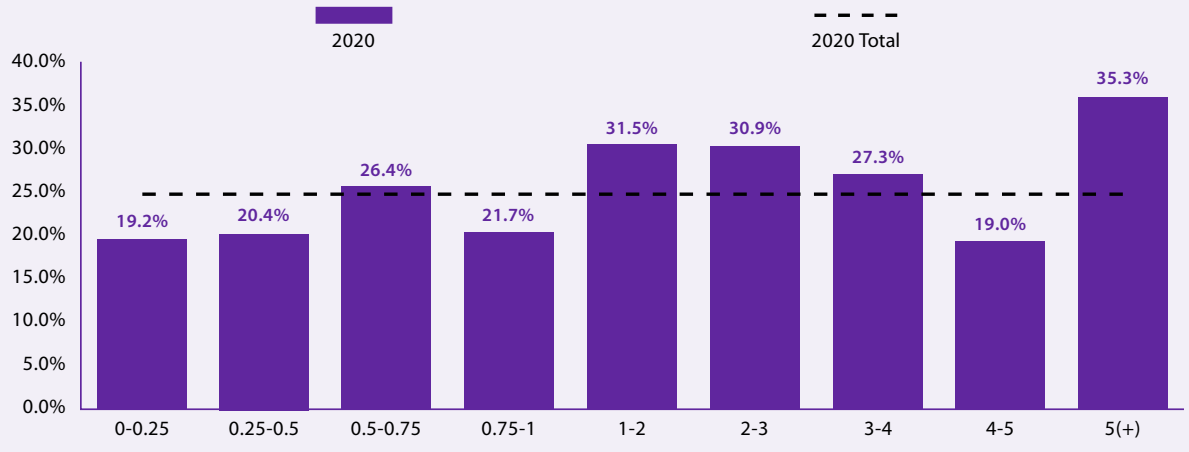
In each section below, we provide comparison of 2020 vs. 2019 median ratio results stratified by revenue for profitability, liquidity, leverage, and capital spending ratios for the hospitals and health systems in our sample set.

Profitability:

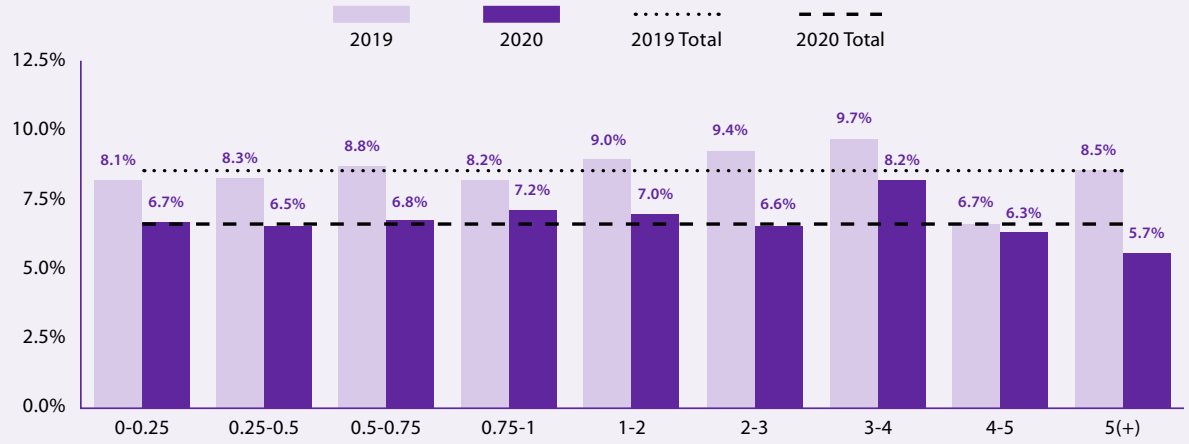


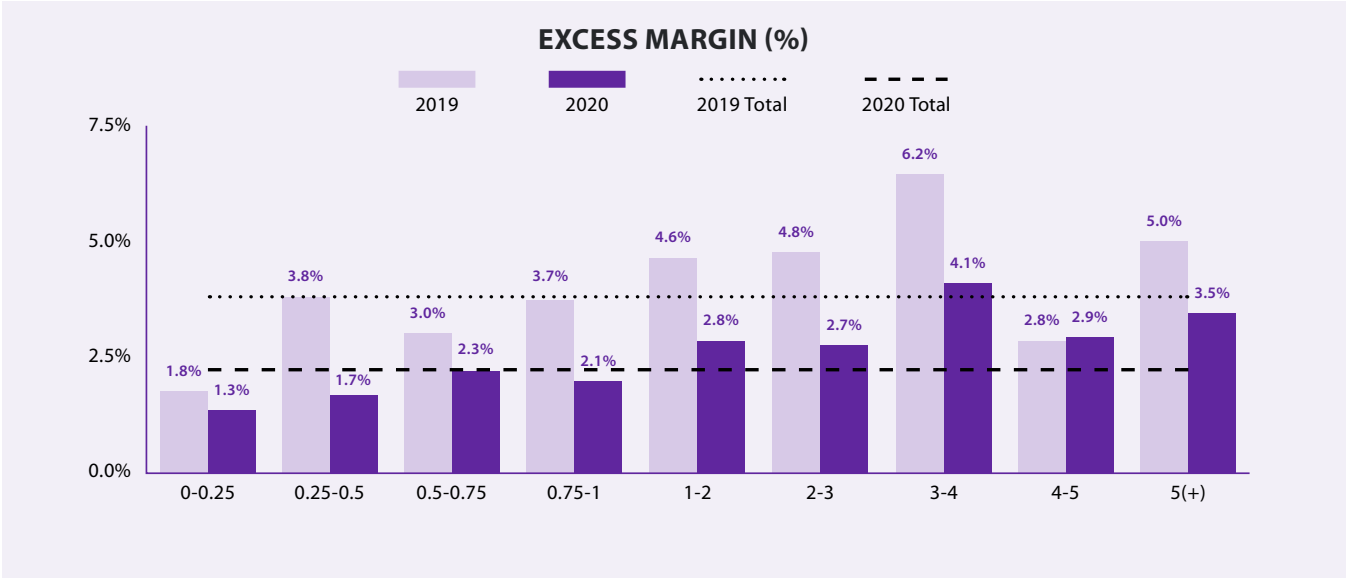


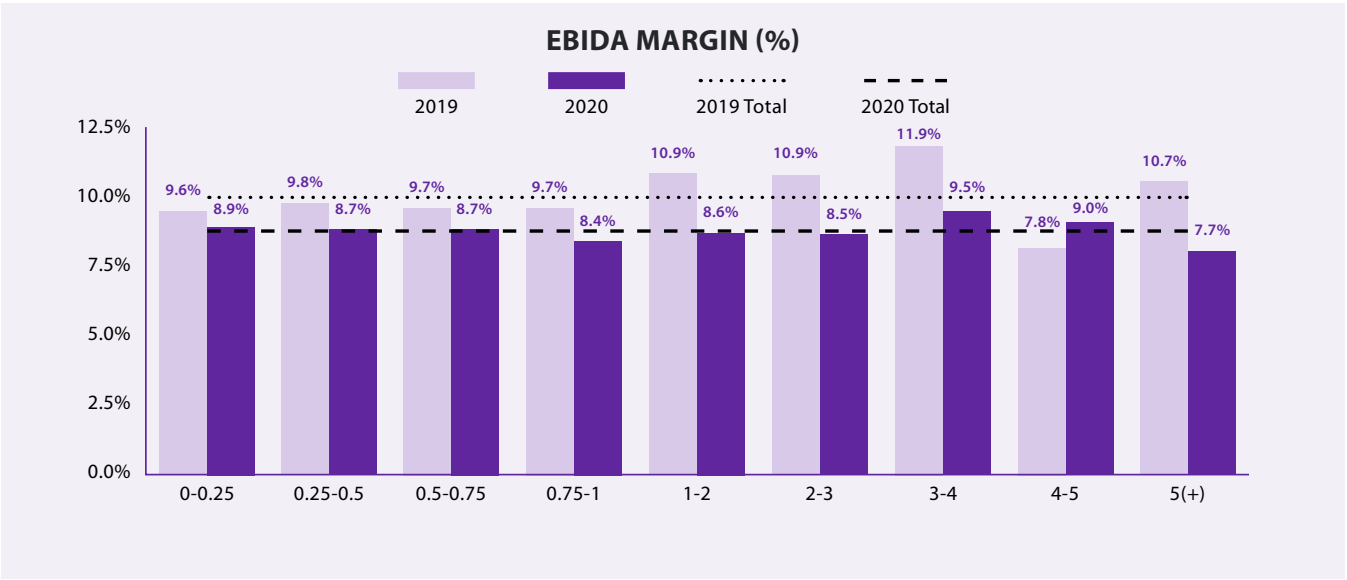
% OF POSITIVE OPERATING MARGIN EXCLUDING CARES ACT FUNDS RECOGNIZED (%)



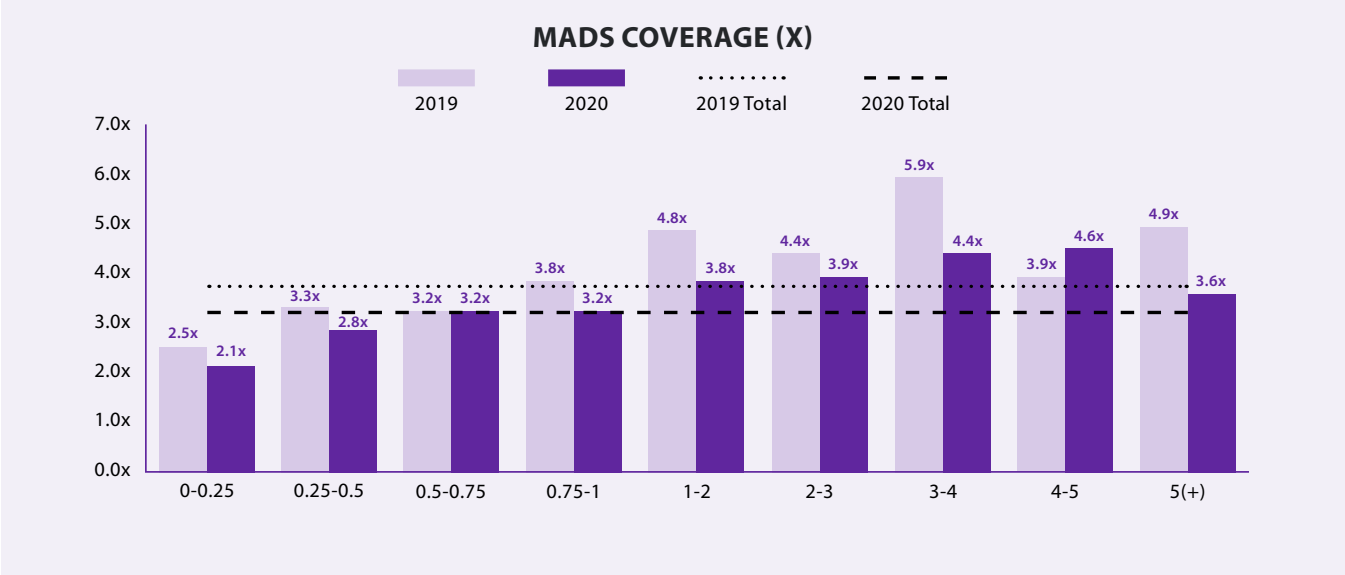
OPERATING EBIDA MARGIN (%)

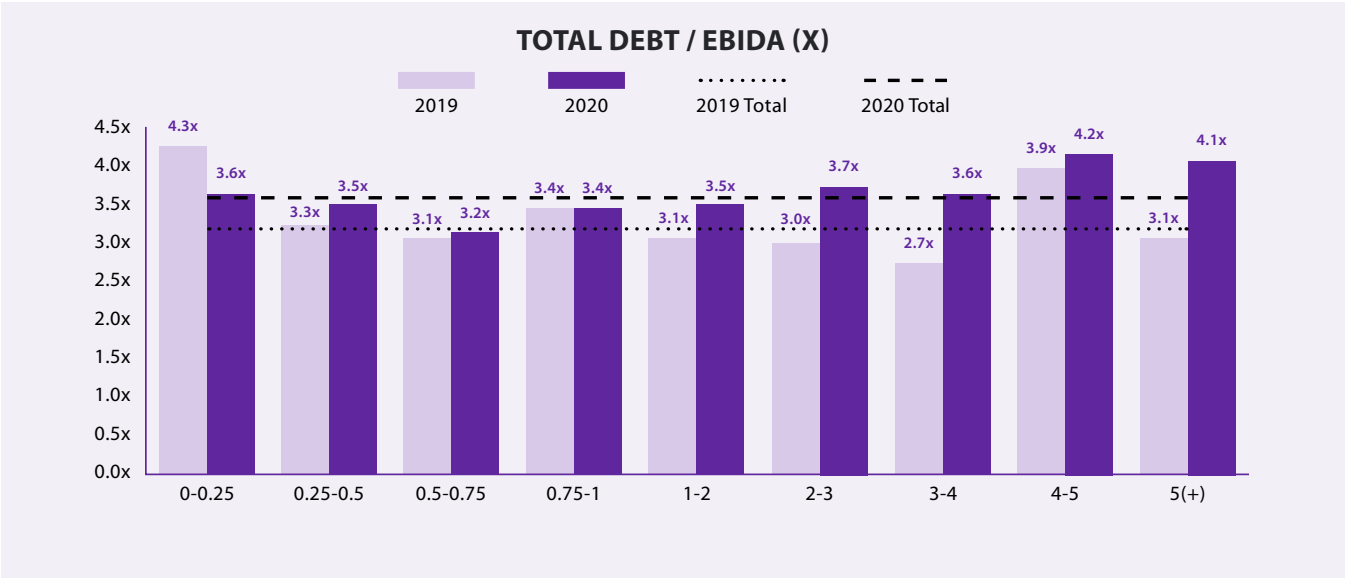


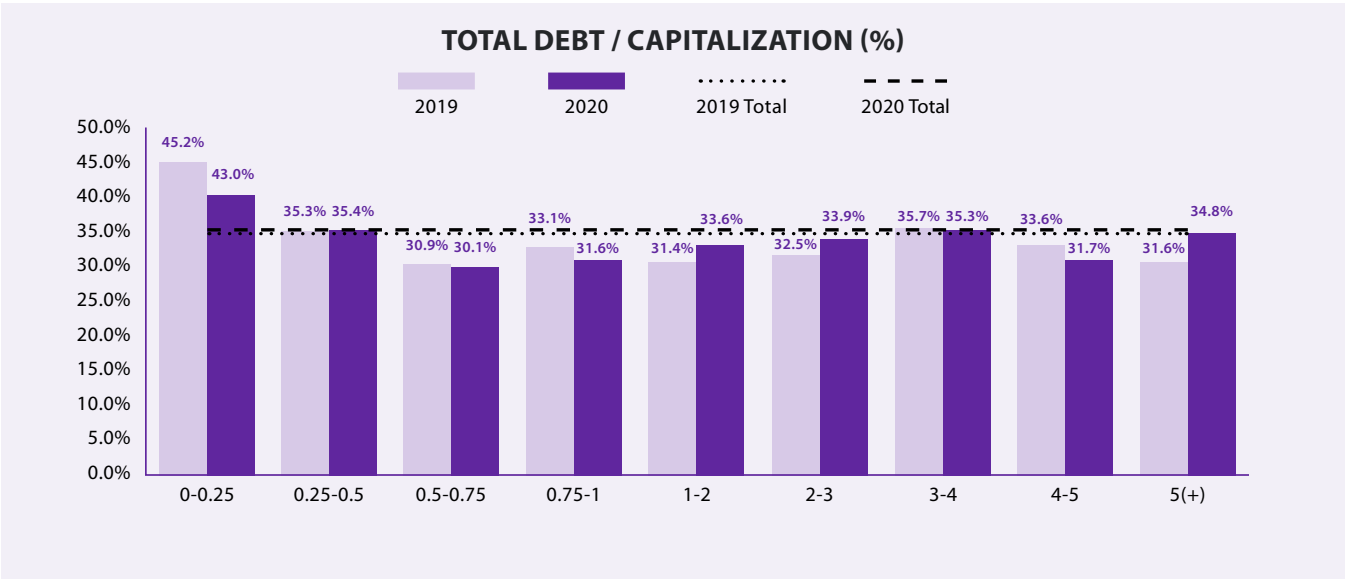

EXCESS MARGIN (%)
2019
2020
2019 Total
2020 Total
7.5%
5.0%
2.5%
0.0%
1.8%
1.3%
3.8%
1.7%
3.0%
2.3%
3.7%
2.1%
4.6%
2.8%
4.8%
2.7%
6.2%
4.1%
2.8%
2.9%
5.0%
3.5%
0-0.25
0.25-0.5
0.5-0.75
0.75-1
1-2
2-3
3-4
4-5
5(+)


EBIDA MARGIN (%)
2019
2020
2019 Total
2020 Total
12.5%
10.0%
7.5%
5.0%
2.5%
0.0%
9.6%
8.9%
9.8%
8.7%
9.7%
8.7%
9.7%
8.4%
10.9%
8.6%
10.9%
8.5%
11.9%
9.5%
7.8%
9.0%
10.7%
7.7%
0-0.25
0.25-0.5
0.5-0.75
0.75-1
1-2
2-3
3-4
4-5
5(+)

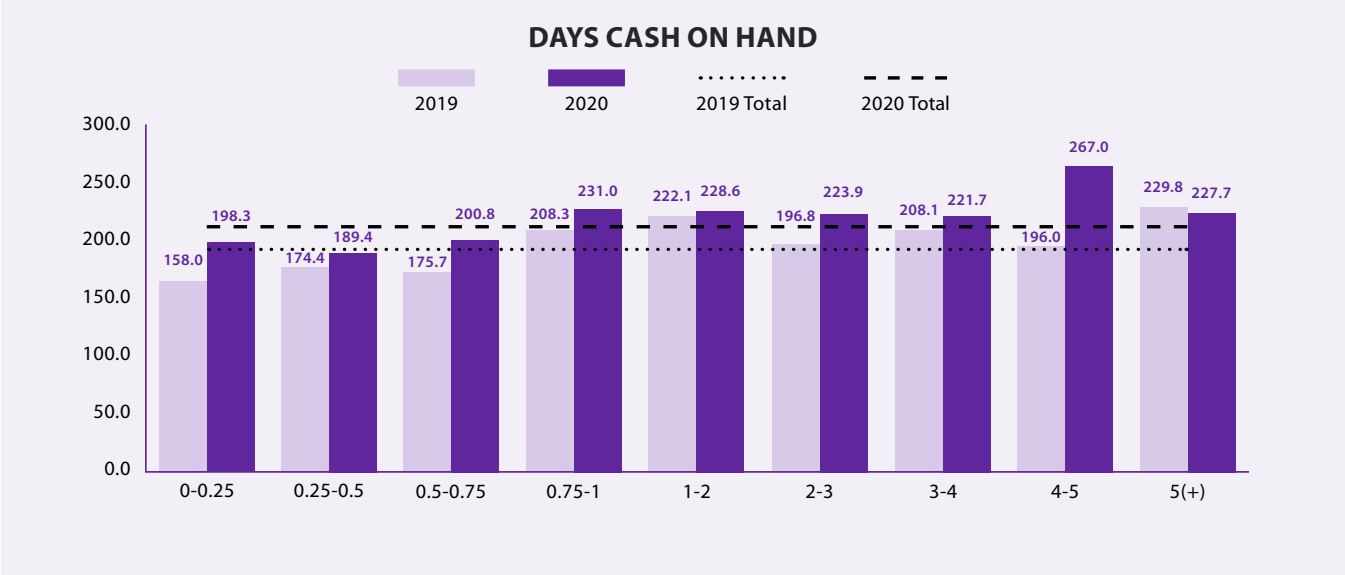
Leverage:

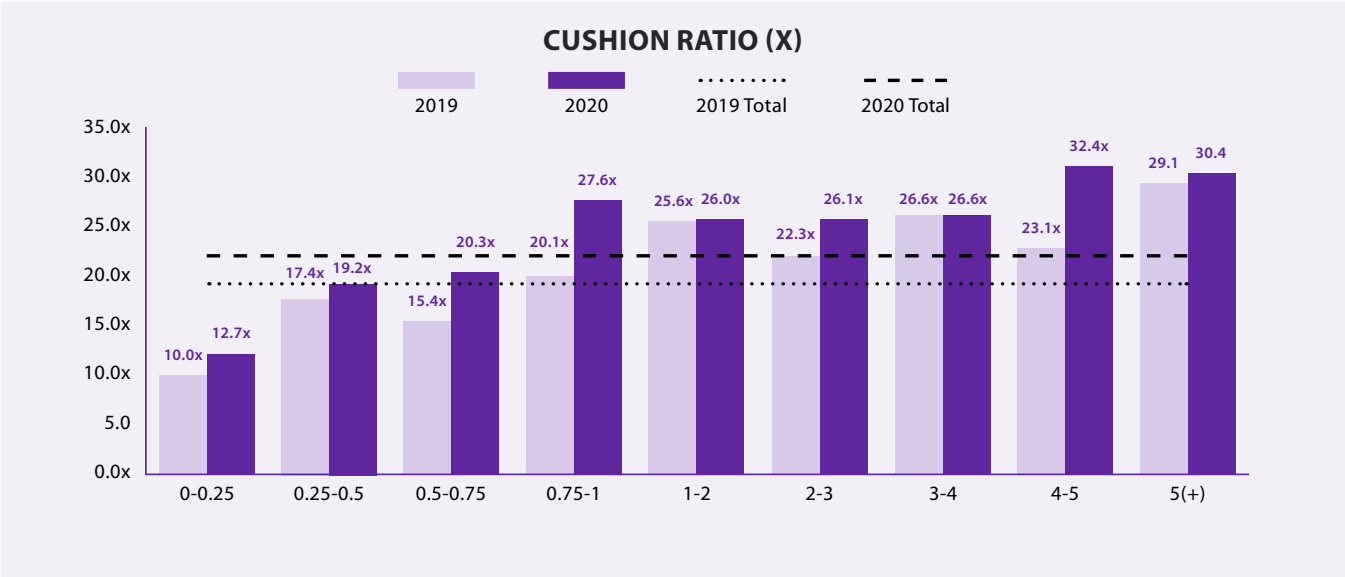

MADS COVERAGE (X)
2019
2020
2019 Total
2020 Total
7.0x
6.0x
5.0x
4.0x
3.0x
2.0x
1.0x
0.0x
2.5x
2.1x
3.3x
2.8x
3.2x
3.2x
3.8x
3.2x
4.8x
3.8x
4.4x
3.9x
5.9x
4.4x
3.9x
4.6x
4.9x
3.6x
0-0.25
0.25-0.5
0.5-0.75
0.75-1
1-2
2-3
3-4
4-5
5(+)

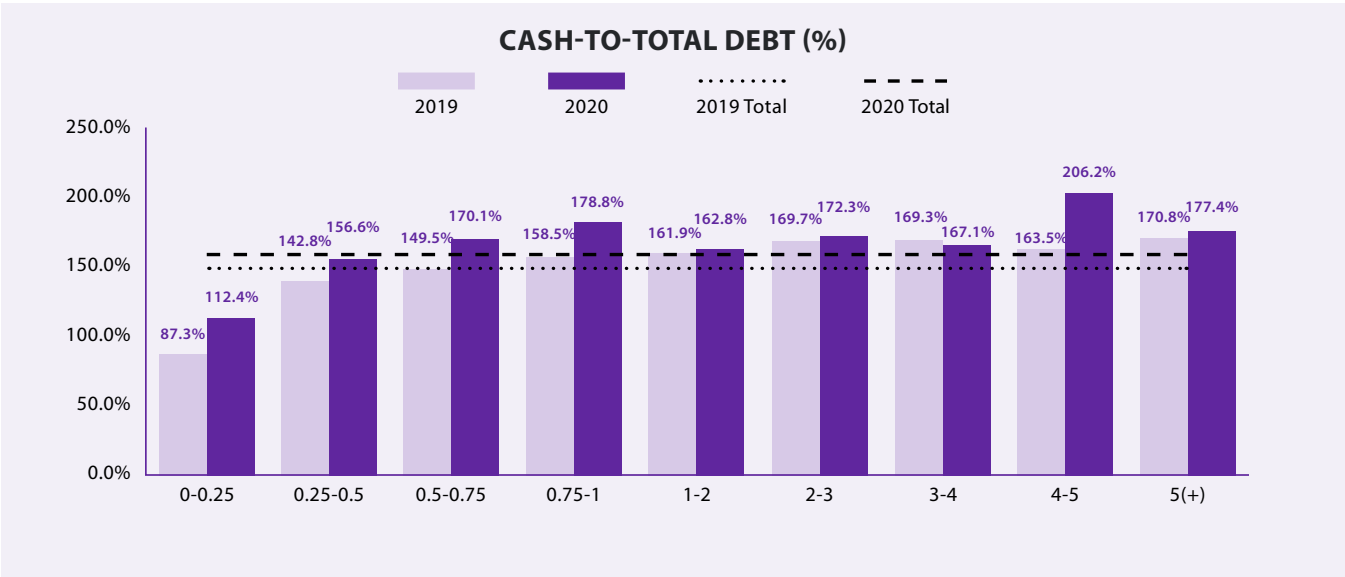

TOTAL DEBT / EBIDA (X)
2019
2020
2019 Total
2020 Total
4.5x
4.0x
3.5x
3.0x
2.5x
2.0x
1.5x
1.0x
0.5x
0.0x
4.3x
3.6x
3.3x
3.5x
3.1x
3.2x
3.4x
3.4x
3.1x
3.5x
3.0x
3.7x
2.7x
3.6x
3.9x
4.2x
3.1x
4.1x
0-0.25
0.25-0.5
0.5-0.75
0.75-1
1-2
2-3
3-4
4-5
5(+)


TOTAL DEBT / CAPITALIZATION (%)
2019
2020
2019 Total
2020 Total
50.0%
45.0%
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
45.2%
43.0%
35.3%
35.4%
30.9%
30.1%
33.1%
31.6%
31.4%
33.6%
32.5%
33.9%
35.7%
35.3%
33.6%
31.7%
31.6%
34.8%
0-0.25
0.25-0.5
0.5-0.75
0.75-1
1-2
2-3
3-4
4-5
5(+)

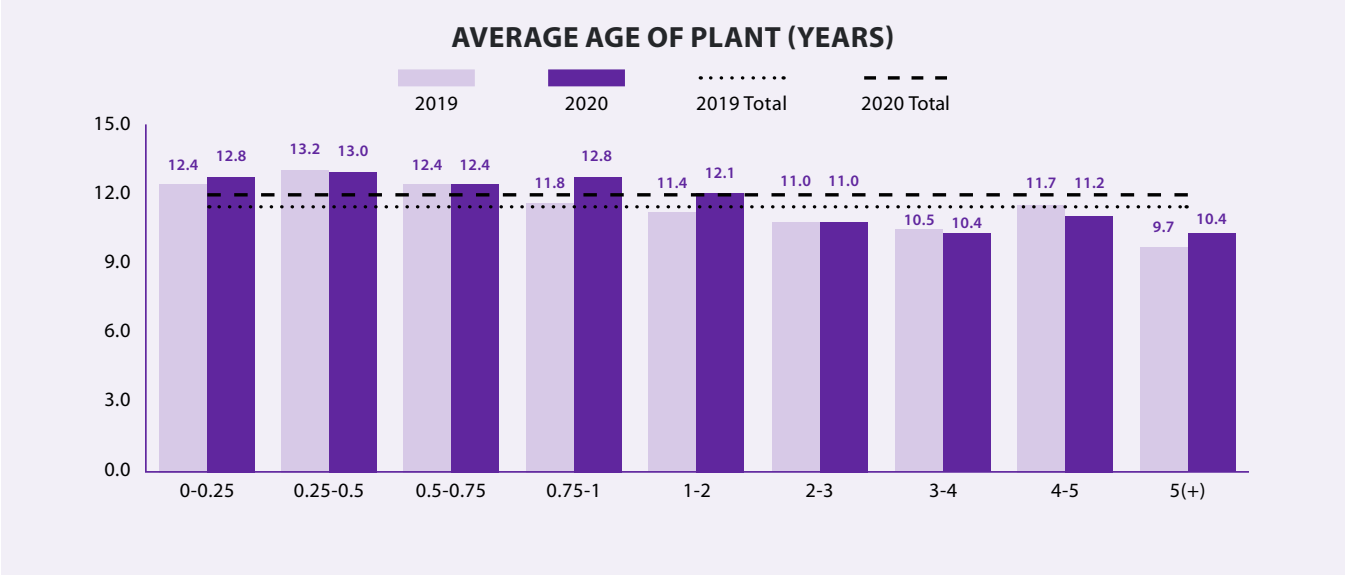
Liquidity:

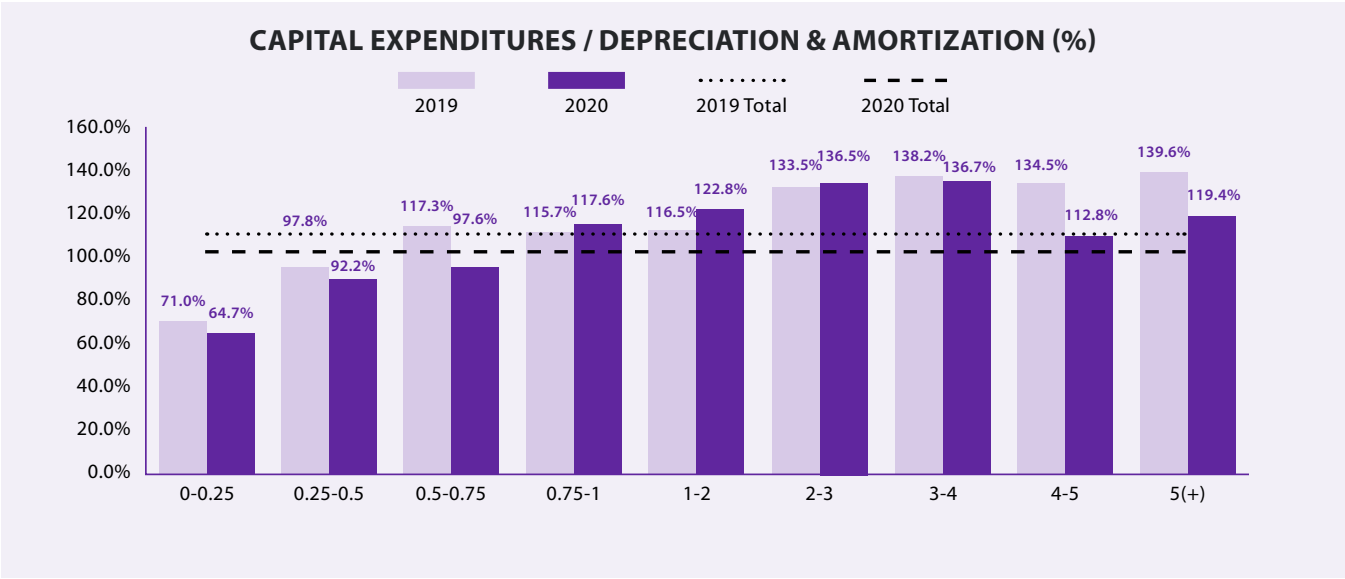

DAYS CASH ON HAND
2019
2020
2019 Total
2020 Total
300.0
250.0
200.0
150.0
100.0
50.0
0.0
158.0
198.3
174.4
189.4
175.7
200.8
208.3
231.0
222.1
228.6
196.8
223.9
208.1
221.7
196.0
267.0
229.8
227.7
0-0.25
0.25-0.5
0.5-0.75
0.75-1
1-2
2-3
3-4
4-5
5(+)


CUSHION RATIO (X)
2019
2020
2019 Total
2020 Total
35.0x
30.0x
25.0x
20.0x
15.0x
10.0x
5.0
0.0x
10.0x
12.7x
17.4x
19.2x
15.4x
20.3x
20.1x
27.6x
25.6x
26.0x
22.3x
26.1x
26.6x
26.6x
23.1x
32.4x
29.1
30.4
0-0.25
0.25-0.5
0.5-0.75
0.75-1
1-2
2-3
3-4
4-5
5(+)


CASH-TO-TOTAL DEBT (%)
2019
2020
2019 Total
2020 Total
250.0%
200.0%
150.0%
100.0%
50.0%
0.0%
87.3%
112.4%
142.8%
156.6%
149.5%
170.1%
158.5%
178.8%
161.9%
162.8%
169.7%
172.3%
169.3%
167.1%
163.5%
206.2%
170.8%
177.4%
0-0.25
0.25-0.5
0.5-0.75
0.75-1
1-2
2-3
3-4
4-5
5(+)

Capital Spending:





ZIEGLER MEDIAN PERCENTILES

The goal of this white paper is simple: to provide an accurate and transparent source for hospitals and health systems to benchmark financial performance. As mentioned earlier, the median is just the mid-point, and there are entities who fall above and below that outcome. The ability to see where one falls within the rating agency medians is, at this point, non-existent from the rating agencies. With the tables provided below, hospitals, health systems, investors, and credit analysts have access to one of the more useful tools available to the healthcare industry today. Health systems and hospitals measure their performance almost daily but lack an accurate comparison point. Now, a healthcare credit can, for example, calculate their Operating EBIDA Margin, and see what percentile they fall in for their respective revenue category.

The following tables display percentiles by revenue for profitability, leverage, liquidity, and capital spending ratios for the health systems and hospitals in our sample set. The 90th percentile means one is within the top 10%, the 75th percentile means one is within the top 25%. The 50th percentile also represents the mid-point or median ratio result. The range between the 90th and 10th percentile and the 75th and the 25th percentile is also provided, and a narrower range can be interpreted as less variation among results.

OPERATING MARGIN (%)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	5(+)	TOTAL
90%	7.8%	6.5%	5.5%	5.1%	6.6%	5.8%	4.7%	4.5%	5.3%	6.2%
75%	2.7%	2.8%	2.8%	3.2%	4.2%	3.1%	3.2%	3.3%	3.4%	3.2%
50%	(0.5%)	0.0%	0.7%	0.4%	1.2%	1.2%	2.6%	0.7%	1.8%	0.5%
25%	(8.3%)	(3.1%)	(3.0%)	(3.1%)	(1.8%)	(1.1%)	(0.8%)	(1.6%)	(2.1%)	(2.9%)
10%	(12.7%)	(8.3%)	(8.4%)	(6.4%)	(6.4%)	(3.5%)	(4.1%)	(2.9%)	(5.8%)	(9.1%)
Range (75%-25%)	**11.0%**	**5.9%**	**5.8%**	**6.2%**	**6.0%**	**4.2%**	**4.1%**	**4.9%**	**5.5%**	**6.1%**
Range (90%-10%)	**20.6%**	**14.9%**	**13.9%**	**11.5%**	**13.0%**	**9.3%**	**8.8%**	**7.4%**	**11.1%**	**15.3%**

OPERATING EBIDA MARGIN (%)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	5(+)	TOTAL
90%	17.7%	12.7%	12.1%	11.9%	12.2%	11.8%	10.2%	11.0%	11.6%	12.5%
75%	10.2%	9.6%	9.8%	9.6%	9.8%	9.6%	9.3%	8.2%	9.1%	9.7%
50%	6.8%	6.5%	6.8%	7.2%	7.0%	6.6%	8.2%	6.3%	5.7%	6.7%
25%	1.9%	3.1%	3.9%	2.8%	3.9%	4.6%	4.4%	4.2%	4.1%	3.5%
10%	(3.2%)	(1.7%)	(1.2%)	(0.3%)	(0.2%)	2.5%	2.1%	3.3%	(0.4%)	(1.1%)
Range (75%-25%)	**8.3%**	**6.6%**	**6.0%**	**6.8%**	**6.0%**	**5.0%**	**4.9%**	**4.0%**	**5.0%**	**6.2%**
Range (90%-10%)	**20.9%**	**14.4%**	**13.3%**	**12.2%**	**12.4%**	**9.3%**	**8.0%**	**7.6%**	**12.0%**	**13.6%**

EXCESS MARGIN (%)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	5(+)	TOTAL
90%	9.8%	8.8%	7.3%	7.9%	8.1%	8.9%	10.1%	7.0%	7.7%	9.1%
75%	5.3%	5.3%	4.6%	5.6%	5.8%	5.5%	5.9%	5.0%	5.2%	5.6%
50%	1.3%	1.7%	2.3%	2.1%	2.8%	2.7%	4.1%	2.9%	3.5%	2.3%
25%	(3.9%)	(0.9%)	(0.8%)	(1.5%)	(0.6%)	1.0%	0.9%	0.5%	(0.9%)	(1.0%)
10%	(10.5%)	(6.3%)	(5.4%)	(5.2%)	(4.8%)	(1.6%)	(1.4%)	(1.4%)	(3.8%)	(6.6%)
Range (75%-25%)	**9.3%**	**6.2%**	**5.4%**	**7.1%**	**6.4%**	**4.5%**	**5.0%**	**4.5%**	**6.1%**	**6.6%**
Range (90%-10%)	**20.3%**	**15.1%**	**12.7%**	**13.1%**	**13.0%**	**10.5%**	**11.5%**	**8.3%**	**11.5%**	**15.7%**

EBIDA MARGIN (%)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	5(+)	TOTAL
90%	19.9%	16.5%	13.9%	15.0%	13.9%	14.2%	16.0%	13.6%	14.4%	16.0%
75%	13.9%	11.6%	11.6%	10.9%	11.7%	12.5%	11.1%	10.3%	10.5%	11.8%
50%	8.9%	8.7%	8.7%	8.4%	8.6%	8.5%	9.5%	9.0%	7.7%	8.7%
25%	3.9%	4.7%	5.4%	4.8%	5.9%	6.0%	5.9%	5.5%	5.1%	5.1%
10%	(1.6%)	(0.2%)	0.4%	0.9%	1.2%	4.0%	4.3%	4.3%	1.9%	0.4%
Range (75%-25%)	**9.9%**	**6.9%**	**6.2%**	**6.1%**	**5.9%**	**6.5%**	**5.3%**	**4.8%**	**5.3%**	**6.7%**
Range (90%-10%)	**21.6%**	**16.7%**	**13.4%**	**14.0%**	**12.7%**	**10.1%**	**11.7%**	**9.3%**	**12.5%**	**15.6%**

MADS / TOTAL OPERATING REVENUE (%)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	5(+)	TOTAL
90%	10.3%	4.8%	4.1%	3.9%	3.7%	3.8%	3.0%	2.9%	3.0%	5.1%
75%	5.9%	3.6%	3.5%	3.3%	2.9%	3.2%	2.6%	2.6%	2.5%	3.5%
50%	3.7%	2.8%	2.8%	2.7%	2.2%	2.4%	2.1%	2.0%	2.0%	2.6%
25%	2.6%	2.1%	2.1%	2.0%	1.9%	1.8%	1.8%	1.7%	1.7%	1.9%
10%	1.8%	1.4%	1.6%	1.7%	1.4%	1.6%	1.7%	1.3%	1.2%	1.5%
Range (75%-25%)	**3.2%**	**1.4%**	**1.4%**	**1.3%**	**1.0%**	**1.4%**	**0.8%**	**0.9%**	**0.8%**	**1.6%**
Range (90%-10%)	**8.5%**	**3.4%**	**2.5%**	**2.3%**	**2.3%**	**2.2%**	**1.4%**	**1.5%**	**1.8%**	**3.6%**

MADS COVERAGE (X)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	5(+)	TOTAL
90%	0.0x	8.0x	6.5x	7.1x	7.2x	7.8x	6.4x	7.6x	9.6x	7.3x
75%	3.4x	4.3x	4.7x	4.9x	5.8x	5.5x	6.2x	5.5x	6.1x	5.2x
50%	2.1x	2.8x	3.2x	3.2x	3.8x	3.9x	4.4x	4.6x	3.6x	3.2x
25%	0.7x	1.7x	2.0x	1.5x	1.9x	2.4x	2.9x	3.0x	2.2x	1.7x
10%	(0.4x)	(0.1x)	0.1x	0.2x	0.5x	1.3x	1.8x	1.8x	0.6x	0.1x
Range (75%-25%)	**2.7x**	**2.6x**	**2.7x**	**3.4x**	**3.9x**	**3.1x**	**3.3x**	**2.5x**	**3.9x**	**3.4x**
Range (90%-10%)	**0.4x**	**8.2x**	**6.3x**	**7.0x**	**6.7x**	**6.5x**	**4.6x**	**5.8x**	**9.0x**	**7.2x**

LONG-TERM DEBT / EBIDA (X)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	5(+)	TOTAL
90%	10.5x	8.4x	8.1x	11.3x	9.8x	8.7x	7.5x	8.8x	13.7x	9.6x
75%	6.6x	5.9x	4.9x	5.7x	6.0x	6.0x	5.2x	5.0x	6.6x	6.0x
50%	3.3x	3.3x	3.0x	3.4x	3.6x	3.7x	3.6x	3.8x	3.7x	3.5x
25%	1.7x	1.8x	1.9x	2.1x	2.2x	2.7x	2.8x	2.5x	2.4x	2.0x
10%	(6.8x)	(0.4x)	0.5x	(1.4x)	1.5x	1.9x	1.8x	1.9x	1.3x	0.6x
Range (75%-25%)	**4.8x**	**4.2x**	**3.0x**	**3.6x**	**3.8x**	**3.3x**	**2.4x**	**2.5x**	**4.2x**	**4.0x**
Range (90%-10%)	**17.3x**	**8.8x**	**7.6x**	**12.7x**	**8.3x**	**6.8x**	**5.7x**	**6.9x**	**12.5x**	**9.0x**

LONG-TERM DEBT / CAPITALIZATION (%)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	5(+)	TOTAL
90%	99.1%	62.8%	57.3%	58.6%	55.9%	56.4%	43.2%	57.0%	45.1%	68.6%
75%	70.6%	48.6%	43.4%	46.7%	45.8%	41.4%	41.3%	45.8%	38.1%	47.5%
50%	41.6%	33.2%	29.3%	31.1%	32.4%	33.7%	34.5%	30.8%	34.4%	33.6%
25%	27.7%	22.3%	19.7%	24.2%	23.4%	25.8%	28.3%	22.2%	22.4%	23.6%
10%	18.3%	17.8%	13.7%	18.2%	18.5%	20.7%	22.5%	16.8%	17.1%	17.4%
Range (75%-25%)	**43.0%**	**26.3%**	**23.7%**	**22.5%**	**22.4%**	**15.5%**	**13.0%**	**23.6%**	**15.6%**	**23.9%**
Range (90%-10%)	**80.8%**	**45.0%**	**43.6%**	**40.4%**	**37.4%**	**35.7%**	**20.6%**	**40.1%**	**28.0%**	**51.2%**

LONG-TERM DEBT / CAPITALIZATION (PENSION ADJUSTED) (%)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	5(+)	TOTAL
90%	111.5%	79.7%	66.6%	66.2%	60.4%	58.4%	50.1%	57.0%	49.2%	69.6%
75%	76.1%	62.9%	59.8%	54.5%	50.6%	46.2%	47.6%	49.9%	43.4%	50.8%
50%	40.3%	35.9%	43.1%	36.9%	39.1%	37.9%	40.0%	30.5%	37.5%	38.4%
25%	29.6%	28.7%	29.6%	28.1%	28.9%	29.7%	34.4%	24.6%	31.4%	29.0%
10%	25.8%	23.2%	21.5%	24.6%	25.3%	23.8%	30.2%	17.9%	23.0%	22.9%
Range (75%-25%)	**46.4%**	**34.2%**	**30.2%**	**26.4%**	**21.7%**	**16.5%**	**13.2%**	**25.3%**	**12.0%**	**21.8%**
Range (90%-10%)	**85.6%**	**56.5%**	**45.1%**	**41.6%**	**35.0%**	**34.6%**	**19.9%**	**39.1%**	**26.1%**	**46.7%**

TOTAL DEBT / EBIDA (X)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	5(+)	TOTAL
90%	10.7x	8.9x	8.3x	11.6x	10.0x	8.9x	7.7x	8.9x	14.0x	9.7x
75%	7.1x	6.2x	5.4x	5.9x	6.1x	6.1x	5.4x	5.1x	6.9x	6.2x
50%	3.5x	3.5x	3.2x	3.4x	3.6x	3.7x	3.6x	4.2x	4.1x	3.6x
25%	1.9x	1.8x	2.0x	2.1x	2.2x	2.8x	2.9x	2.6x	2.5x	2.1x
10%	(10.1x)	(0.5x)	0.6x	(1.4x)	1.6x	2.1x	2.0x	1.9x	1.3x	0.7x
Range (75%-25%)	**5.1x**	**4.4x**	**3.4x**	**3.8x**	**3.9x**	**3.3x**	**2.5x**	**2.4x**	**4.4x**	**4.0x**
Range (90%-10%)	**20.7x**	**9.4X**	**7.7X**	**13.0X**	**8.3X**	**6.8X**	**5.7X**	**7.0X**	**12.7X**	**9.0X**

TOTAL DEBT / CAPITALIZATION (%)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	5(+)	TOTAL
90%	99.1%	64.0%	58.5%	58.8%	56.5%	56.9%	43.7%	57.3%	45.5%	70.0%
75%	72.6%	50.1%	44.4%	47.4%	46.0%	42.6%	41.8%	45.9%	38.9%	48.1%
50%	43.0%	35.4%	30.1%	31.6%	33.6%	33.9%	35.3%	31.7%	34.8%	35.0%
25%	28.7%	22.7%	20.1%	24.8%	23.8%	26.6%	29.5%	22.3%	22.9%	24.5%
10%	19.6%	19.2%	14.8%	18.9%	19.0%	21.3%	22.9%	17.1%	17.3%	18.3%
Range (75%-25%)	**43.9%**	**27.4%**	**24.3%**	**22.6%**	**22.1%**	**16.0%**	**12.3%**	**23.6%**	**15.9%**	**23.6%**
Range (90%-10%)	**79.5%**	**44.9%**	**43.7%**	**39.9%**	**37.5%**	**35.6%**	**20.8%**	**40.2%**	**28.2%**	**51.7%**

TOTAL DEBT / CAPITALIZATION (PENSION ADJUSTED) (%)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	>5	TOTAL
90%	111.0%	80.7%	67.1%	66.4%	61.2%	58.9%	50.5%	57.3%	49.5%	70.9%
75%	81.3%	63.7%	60.4%	55.2%	51.3%	46.7%	48.0%	50.3%	44.0%	51.3%
50%	42.9%	36.7%	44.1%	39.2%	39.7%	39.0%	40.2%	31.1%	37.9%	39.3%
25%	32.5%	29.3%	30.5%	29.2%	29.3%	30.1%	34.6%	25.5%	31.7%	29.6%
10%	27.2%	24.2%	22.0%	25.2%	26.0%	24.0%	31.4%	18.2%	23.4%	23.3%
Range (75%-25%)	**48.8%**	**34.4%**	**29.9%**	**26.1%**	**22.0%**	**16.6%**	**13.4%**	**24.8%**	**12.3%**	**21.7%**
Range (90%-10%)	**83.8%**	**56.4%**	**45.1%**	**41.2%**	**35.2%**	**34.8%**	**19.1%**	**39.1%**	**26.0%**	**47.6%**

DAYS CASH ON HAND

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	>5	TOTAL
90%	436.5	366.7	407.4	389.7	378.0	437.2	367.1	612.0	424.3	419.4
75%	292.5	292.5	298.7	332.4	298.1	291.6	327.5	351.7	291.5	297.7
50%	198.3	189.4	200.8	231.0	228.6	223.9	221.7	267.0	227.7	213.3
25%	108.2	119.3	131.2	151.0	159.6	177.6	158.9	171.3	177.1	143.1
10%	66.9	68.9	76.6	96.7	120.7	131.1	144.8	135.8	136.5	89.2
Range (75%-25%)	**184.3**	**173.2**	**167.5**	**181.4**	**138.4**	**114.1**	**168.7**	**180.4**	**114.5**	**154.6**
Range (90%-10%)	**369.6**	**297.9**	**330.8**	**293.1**	**257.3**	**306.2**	**222.3**	**476.2**	**287.8**	**330.2**

CUSHION RATIO (X)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	>5	TOTAL
90%	34.7x	41.5x	41.9x	49.0x	44.4x	55.2x	43.6x	64.3x	61.6x	48.3x
75%	24.9x	29.1x	31.0x	38.5x	35.7x	38.5x	32.0x	54.5x	42.8x	33.0x
50%	12.7x	19.2x	20.3x	27.6x	26.0x	26.1x	27.4x	32.4x	30.4x	22.3x
25%	5.9x	11.0x	12.0x	13.7x	18.8x	17.6x	20.8x	24.0x	21.7x	12.9x
10%	2.7x	6.6x	6.1x	7.3x	14.1x	13.9x	17.5x	15.5x	17.7x	6.3x
Range (75%-25%)	**19.1x**	**18.2x**	**19.0x**	**24.8x**	**16.9x**	**20.9x**	**11.1x**	**30.5x**	**21.1x**	**20.1x**
Range (90%-10%)	**32.0x**	**35.0X**	**35.9X**	**41.7X**	**30.3X**	**41.3X**	**26.1X**	**48.9X**	**43.8X**	**42.0X**

CASH-TO-LONG-TERM DEBT (%)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	>5	TOTAL
90%	318.6%	402.0%	409.8%	395.2%	322.2%	368.1%	313.9%	396.8%	401.0%	375.7%
75%	250.7%	279.9%	272.5%	275.2%	264.6%	235.3%	253.8%	310.6%	255.1%	264.2%
50%	127.8%	165.8%	178.2%	182.7%	177.9%	175.0%	173.0%	223.6%	187.7%	167.2%
25%	61.2%	95.3%	98.7%	116.8%	123.1%	125.9%	129.5%	125.8%	147.9%	101.2%
10%	27.7%	62.3%	51.4%	57.4%	96.5%	92.1%	102.0%	88.6%	105.1%	57.7%
Range (75%-25%)	**189.6%**	**184.6%**	**173.8%**	**158.4%**	**141.5%**	**109.4%**	**124.3%**	**184.8%**	**107.3%**	**162.9%**
Range (90%-10%)	**291.0%**	**339.7%**	**358.4%**	**337.7%**	**225.7%**	**275.9%**	**211.9%**	**308.2%**	**295.9%**	**318.0%**

CASH-TO-TOTAL DEBT (%)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	>5	TOTAL
90%	306.2%	368.8%	394.1%	373.8%	313.8%	362.3%	305.7%	383.1%	394.3%	359.0%
75%	227.9%	256.7%	260.2%	265.7%	255.2%	223.1%	244.4%	308.9%	248.4%	251.2%
50%	112.4%	156.6%	170.1%	178.8%	162.8%	172.3%	167.1%	206.2%	177.4%	159.9%
25%	58.7%	90.8%	92.1%	103.7%	121.3%	123.9%	125.6%	125.3%	142.8%	96.7%
10%	26.5%	60.1%	47.5%	56.6%	94.0%	90.5%	100.4%	87.9%	98.2%	55.0%
Range (75%-25%)	**169.1%**	**165.9%**	**168.1%**	**162.0%**	**133.8%**	**99.2%**	**118.8%**	**183.6%**	**105.7%**	**154.4%**
Range (90%-10%)	**279.7%**	**308.7%**	**346.6%**	**317.2%**	**219.8%**	**271.8%**	**205.3%**	**295.1%**	**296.1%**	**304.0%**

AVERAGE AGE OF PLANT (YEARS)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	>5	TOTAL
90%	20.8	19.2	17.8	17.1	16.2	15.7	12.6	15.2	13.9	17.6
75%	16.9	15.7	15.1	15.2	13.8	13.2	11.8	12.4	12.1	14.9
50%	12.8	13.0	12.4	12.8	12.1	11.0	10.4	11.2	10.4	12.0
25%	10.6	10.2	10.5	10.4	10.2	9.3	9.6	10.1	8.6	9.9
10%	8.7	8.6	8.5	8.9	9.3	8.1	8.0	7.6	7.6	8.4
Range (75%-25%)	**6.4**	**5.5**	**4.6**	**4.8**	**3.6**	**3.9**	**2.3**	**2.2**	**3.5**	**4.9**
Range (90%-10%)	**12.1**	**10.6**	**9.3**	**8.2**	**6.9**	**7.5**	**4.6**	**7.6**	**6.2**	**9.2**

CAPITAL EXPENDITURES / DEPRECIATION & AMORTIZATION (%)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	>5	TOTAL
90%	174.5%	295.7%	238.5%	219.4%	215.9%	260.8%	204.3%	207.8%	184.6%	230.3%
75%	108.2%	160.1%	143.2%	144.9%	170.7%	179.0%	175.5%	147.8%	145.5%	152.8%
50%	64.7%	92.2%	97.6%	117.6%	122.8%	136.5%	136.7%	112.8%	119.4%	106.6%
25%	34.2%	62.5%	65.1%	83.0%	97.3%	96.7%	111.6%	83.8%	92.7%	67.4%
10%	13.4%	42.8%	44.2%	52.5%	67.5%	72.9%	89.9%	71.5%	76.0%	39.0%
Range (75%-25%)	**74.1%**	**97.6%**	**78.0%**	**61.9%**	**73.3%**	**82.3%**	**63.9%**	**64.0%**	**52.8%**	**85.4%**
Range (90%-10%)	**161.1%**	**252.8%**	**194.3%**	**166.9%**	**148.4%**	**187.9%**	**114.4%**	**136.3%**	**108.6%**	**191.4%**

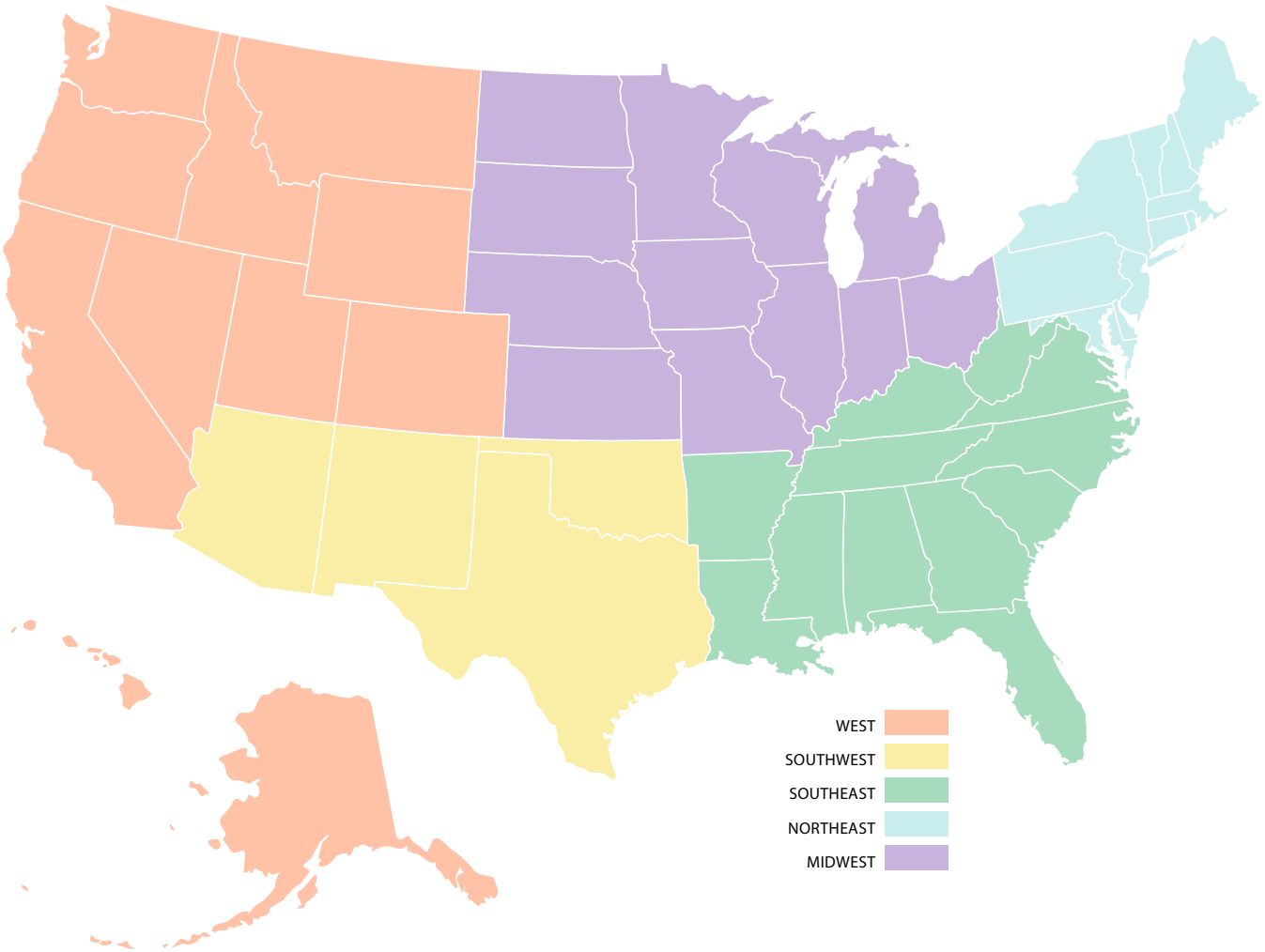
DEFINED BENEFIT PENSION FUNDED STATUS (%)

	TOTAL REVENUE (BILLIONS)									
	0-0.25	0.25-0.5	0.5-0.75	0.75-1	1-2	2-3	3-4	4-5	>5	TOTAL
90%	116.9%	99.4%	96.0%	107.7%	101.4%	100.0%	88.3%	93.6%	97.8%	102.0%
75%	94.3%	92.6%	89.4%	87.5%	92.6%	90.0%	82.9%	88.6%	89.3%	89.6%
50%	81.9%	76.7%	76.3%	81.5%	80.7%	82.5%	71.8%	81.9%	83.5%	79.6%
25%	67.7%	71.6%	67.9%	70.1%	68.0%	74.8%	60.0%	71.3%	67.2%	68.6%
10%	59.5%	62.1%	61.2%	65.3%	60.7%	66.2%	57.3%	68.8%	58.0%	60.8%
Range (75%-25%)	**26.6%**	**21.0%**	**21.5%**	**17.5%**	**24.6%**	**15.2%**	**22.9%**	**17.2%**	**22.1%**	**20.9%**
Range (90%-10%)	**57.4%**	**37.3%**	**34.8%**	**42.5%**	**40.7%**	**33.8%**	**31.0%**	**24.8%**	**39.8%**	**41.2%**

ZIEGLER MEDIANS STRATIFIED BY GEOGRAPHIC REGION

The geographic region of a hospital or health system plays a significant role in benchmarking as financial outcomes can vary greatly by location. States such as Maryland limit Medicare reimbursements, while states such as Alabama have limited commercial competitors. Hospitals in other states can benefit from bed tax programs to offset lower Medicaid payer mix, but also tend to rely on such programs. Demographics within each region can also be beneficial but depends on population growth both in aggregate and within various age brackets. Certificate of Need in respective states can also limit the ability of an entity to expand services and produce increased revenue. All of these factors can affect financial outcomes.

For our analysis, we utilized five common regions; Northeast, Southeast, Midwest, Southwest, and West. The accompanying map below reflects the respective states in each geographic region.



The table below provides the 2020 Ziegler Median ratio results stratified by geographic region:

		SAMPLE SIZE >	175	123	149	42	113	602
			GEOGRAPHIC REGION					
			Midwest	Northeast	Southeast	Southwest	West	Total
PROFITABILITY	Operating Margin (%)		1.3%	(0.8%)	0.6%	1.7%	0.9%	0.5%
	Operating Margin Excl. CARES Act (%)		(2.8%)	(6.1%)	(3.1%)	(1.2%)	(3.3%)	(3.8%)
	% of Positive Op. Margin Excl. CARES Act (%)		30.9%	8.1%	24.2%	35.7%	31.9%	25.1%
	Operating EBIDA Margin (%)		7.1%	5.0%	7.3%	7.9%	7.8%	6.7%
	Excess Margin (%)		3.5%	0.8%	2.4%	3.5%	2.8%	2.3%
	EBIDA Margin (%)		9.3%	6.4%	9.0%	9.5%	9.8%	8.7%
LEVERAGE	MADS / Total Operating Revenue (%)		2.5%	2.6%	2.5%	2.8%	2.8%	2.6%
	MADS Coverage (X)		3.5x	2.6x	3.3x	3.7x	3.0x	3.2x
	Long-Term Debt / EBIDA (X)		3.1x	3.9x	3.5x	2.9x	3.7x	3.5x
	Long-Term Debt / Capitalization (%)		31.0%	37.4%	33.2%	38.4%	33.7%	33.6%
	Total Debt / EBIDA (X)		3.1x	4.1x	3.6x	3.0x	3.9x	3.6x
	Total Debt / Capitalization (%)		32.0%	37.9%	34.0%	39.6%	34.9%	35.0%
LIQUIDITY	Cash On Hand (Days)		243.5	172.5	222.4	214.1	200.0	213.3
	Cushion Ratio (X)		25.7x	18.9x	23.3x	21.9x	20.1x	22.3x
	Cash-To-Long-Term Debt (%)		192.5%	147.8%	169.5%	152.1%	158.0%	167.2%
	Cash-To-Total Debt (%)		181.8%	142.6%	163.7%	141.8%	150.3%	159.9%
CAPITAL	Average Age Of Plant (Years)		11.8	12.1	12.6	11.6	11.5	12.0
	Capital Expenditures / D&A (%)		104.9%	115.8%	103.6%	109.7%	100.6%	106.6%
MISC	Medicare Advance Payments ($000s)		31,935.0	71,258.9	48,000.0	23,993.5	28,000.0	39,886.0
	CARES ACT Rec. / Total Revenue (%)		3.62%	4.44%	3.51%	2.63%	3.15%	3.59%
	CARES ACT Funds Recognized ($000s)		21,073.0	51,794.0	27,501.0	17,535.4	18,708.1	24,975.9

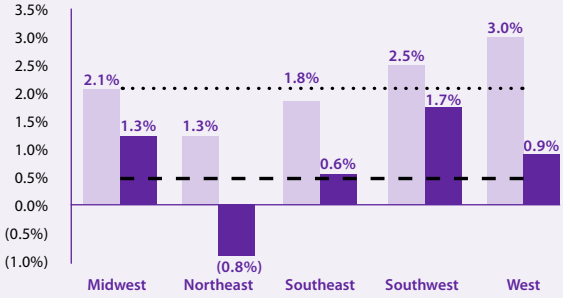
The table below provides the 2019 Ziegler Median ratio results stratified by geographic region:

		SAMPLE SIZE >	175	123	149	42	113	602
			GEOGRAPHIC REGION					
			Midwest	Northeast	Southeast	Southwest	West	Total
PROFITABILITY	Operating Margin (%)		2.1%	1.3%	1.8%	2.5%	3.0%	2.1%
	Operating EBIDA Margin (%)		8.5%	7.2%	8.5%	10.0%	9.4%	8.5%
	Excess Margin (%)		3.8%	3.1%	3.8%	4.0%	4.7%	3.8%
	EBIDA Margin (%)		10.4%	9.1%	10.3%	11.3%	11.6%	10.1%
LEVERAGE	MADS / Total Operating Revenue (%)		2.6%	2.5%	2.5%	2.9%	2.8%	2.6%
	MADS Coverage (X)		3.7x	3.4x	3.8x	3.9x	4.0x	3.7x
	Long-Term Debt / EBIDA (X)		3.0x	3.4x	3.0x	3.0x	3.1x	3.1x
	Long-Term Debt / Capitalization (%)		31.2%	34.7%	34.1%	35.9%	33.9%	33.7%
	Total Debt / EBIDA (X)		3.2x	3.5x	3.2x	3.1x	3.2x	3.2x
	Total Debt / Capitalization (%)		31.8%	36.3%	35.2%	37.2%	34.9%	34.6%
LIQUIDITY	Cash On Hand (Days)		219.5	150.6	192.5	197.4	190.0	192.3
	Cushion Ratio (X)		22.5x	17.4x	18.6x	19.5x	17.4x	19.3x
	Cash-To-Long-Term Debt (%)		175.6%	147.2%	157.9%	153.4%	136.5%	157.6%
	Cash-To-Total Debt (%)		167.3%	140.2%	151.3%	138.5%	133.1%	150.3%
CAPITAL	Average Age Of Plant (Years)		11.4	12.0	12.4	11.0	11.2	11.7
	Capital Expenditures / D&A (%)		112.9%	124.7%	112.6%	98.2%	115.3%	114.7%

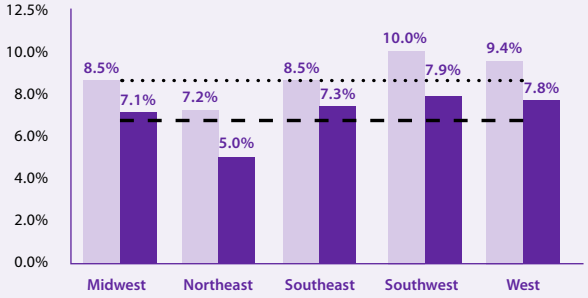
In each section below, we provide commentary on 2020 vs. 2019 median ratio results stratified by geographic region for profitability, liquidity, leverage, and capital spending ratios for the hospitals and health systems in our sample set.

Profitability:

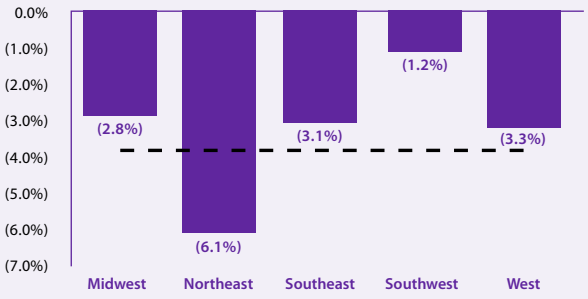
OPERATING MARGIN (%)



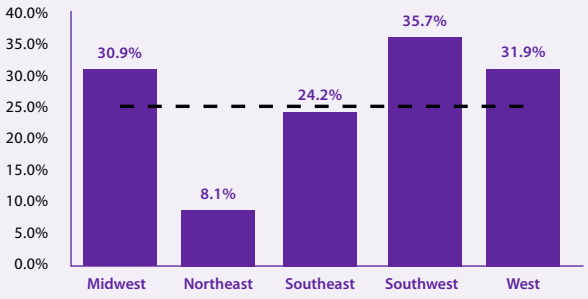
OPERATING EBIDA MARGIN (%)



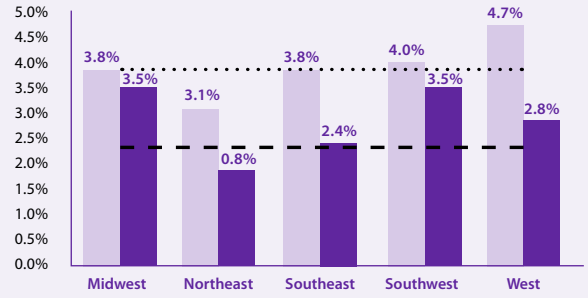
OPERATING MARGIN EXCL. CARES ACT (%)



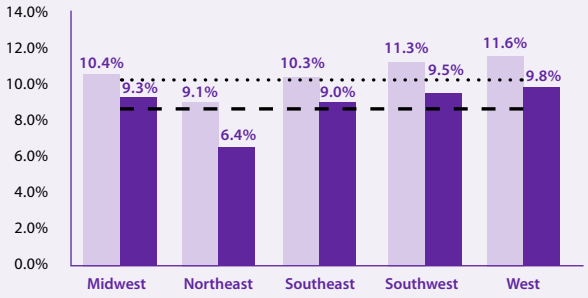
% OF POSITIVE OP. MARGIN EXCL. CARES ACT (%)

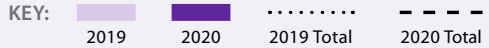


EXCESS MARGIN (%)



EBIDA MARGIN (%)

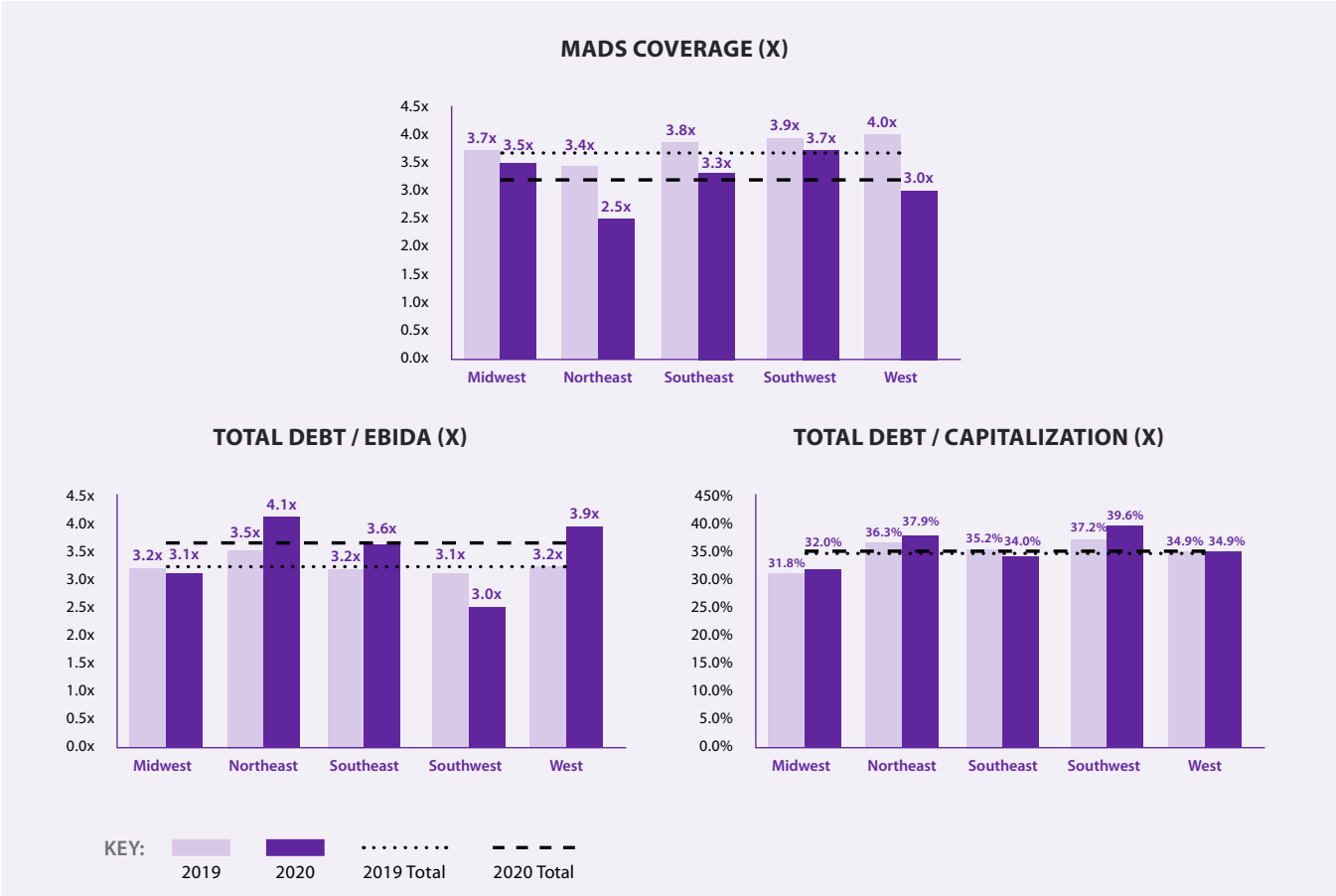




The past year has shown difficulties for the Northeast as displayed in the graphs above. The Northeast has experienced the biggest drops in each profitability category year over year having dropped the median's operating margin by 2.1%, operating EBIDA margin by 2.2%, excess margin by 2.4%, and EBIDA margin by 2.7%. This represents the largest drop from each region in all categories year-over-year. Not only did the Northeast experience the most significant decrease in profitability margins, it was also the worst performer having the lowest margins in each category as well. The West experienced the second highest overall drop in profitability margins having dropped 2.1% and 1.9% in operating margin and excess margin, respectively. Although concerning for both regions, all regions experienced drops in profitability in each category year-over-year; no region could escape the impact COVID-19 had on their profitability margins. Arguably the Midwest weathered the storm most effectively, having the least impact on margins in two of the four categories described above. The Southeast and the Southwest could reasonably defend that they were the second most successful region at effectively navigating this past year given the minimal impact their respective median margins experienced. Year-over-year, operating margin, operating EBIDA margin, excess margin and EBIDA margin total medians dipped by 1.6%, 1.8%, 1.5%, and 1.4%, respectively.

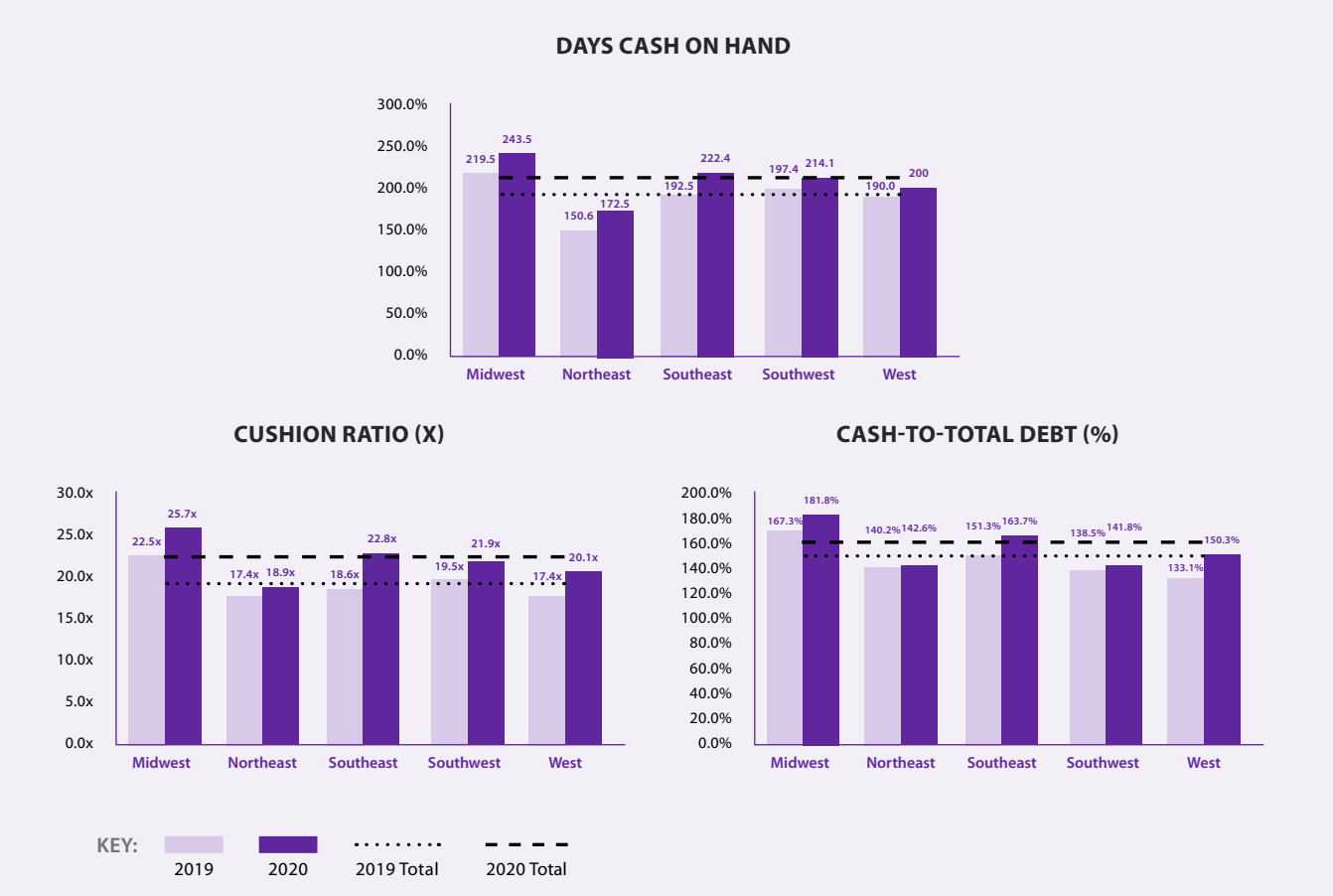
Further proving the difficulty the Northeast faced this past year dealing with COVID-19, the Northeast also produced the lowest median for operating margin excluding CARES Act funds recognized, (6.1%), and percentage of positive operating margin excluding CARES Act funds recognized, 8.1%. CARES Act funds recognized accounted for a 5.3% change in operating margin for the Northeast, which is the most significant amongst all regions. The Southwest experienced the smallest change, 2.9%, when recognizing CARES Act funds.

Leverage:



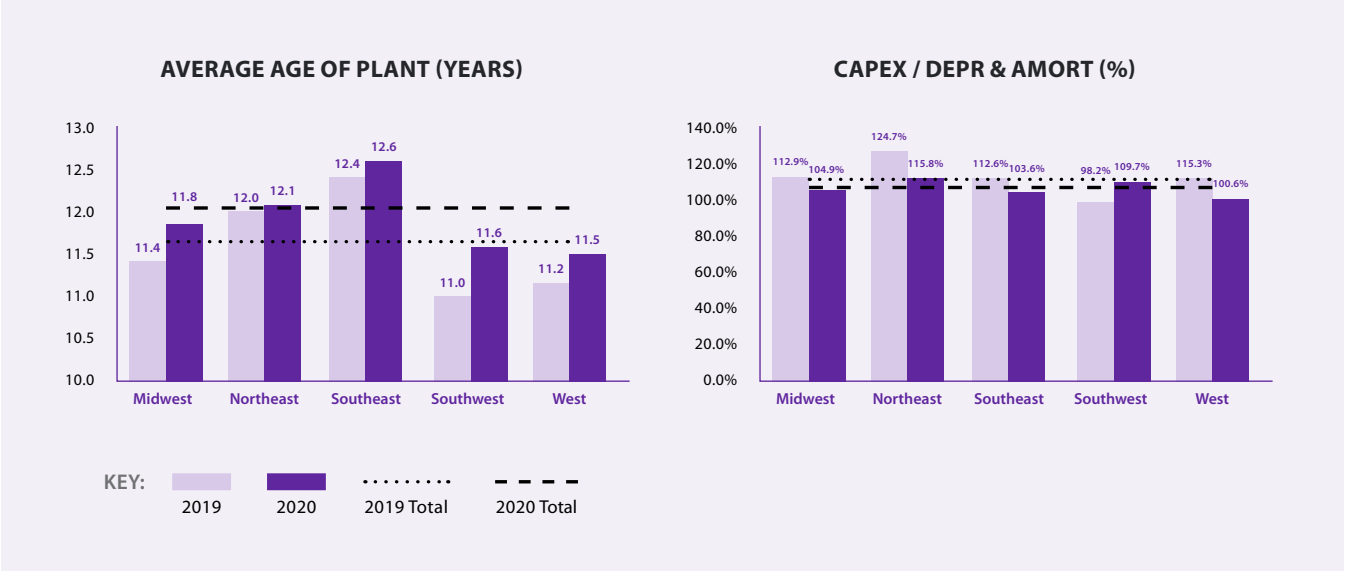
Year-over-year, the aggregate median for MADS coverage decreased by 0.5x coverage and total debt-to-EBIDA increased by 0.4x coverage, indicating an overall weakening of leverage. Meanwhile, the aggregate total debt-to-capitalization median remained relatively stable having only increased by 0.4% from 34.6% in 2019 to 35.0% in 2020. Similar to profitability ratios, the Northeast experience significantly weakening leverage ratios, second only to the West. The Midwest and Southwest had the least impact of MADS coverage having only dropped 0.2x coverage from 2019 to 2020. Year-over-year, the Midwest and the Southwest also experienced the lowest drop of 0.1x coverage in total debt-to-EBIDA. Meanwhile, the West is the only region to maintain a stable total debt-to-capitalization ratio from 2019 to 2020 at 34.9% and the Southeast is the only region to lower their total debt-to-capitalization ratio year-over-year by 1.2%.

Liquidity:



While profitability and leverage weakened from 2019 to 2020, liquidity levels rose in the past year. Aggregate medians for days cash on hand, cushion ratio, and cash-to-total debt each experienced a rise of 21.0 days, 3.1x, and 9.6% in 2020 from 2019, respectively. While each region experienced an increase in liquidity, the Midwest and Southeast both experienced the biggest increase year-over-year. The Midwest has the highest days cash on hand, cushion ratio, and cash-to-total debt in both 2019 and 2020. Meanwhile the Northeast has maintained the lowest and least favorable liquidity ratios in 2020. The Southeast experienced the biggest increase in days cash on hand, 29.9 days, and cushion ratio, 4.2x, from year previous while the West experienced the biggest increase in cash-to-total debt of 17.2%. The Northeast and Southwest saw only marginal increases of cash-to-total debt of 2.4% and 3.3%, respectively. No region's medians experienced a weakening of liquidity ratios, proving that the healthcare sector took a conservative approach as they received funding from the federal government.

Capital Spending:



The ratios provided above only further prove the conservative approach taken by a majority of healthcare providers across the country. While the Southwest experienced the biggest increase in the average age of plant, 0.6 years, the Southwest was also the only region to see an increase of capital expenditures-to depreciation and amortization, of 11.5%. The other four regions had an increase in average age of plants of less than 0.4 years and a decrease in capital expenditures-to-depreciation and amortization.

APPENDIX

The table below provides the 2020 Ziegler Median ratio results stratified by hospital type:

		SAMPLE SIZE >	26	28	184	318	41	5	602
			HOSPITAL TYPE						
			Children's	Critical Access	Community Based	Health System	Hospital District	Specialty	Total
PROFITABILITY	Operating Margin (%)		2.0%	0.6%	0.1%	0.9%	(3.3%)	7.0%	0.5%
	Operating EBIDA Margin (%)		9.6%	8.2%	6.7%	6.6%	6.8%	11.4%	6.7%
	Excess Margin (%)		6.9%	2.2%	2.0%	2.6%	(0.6%)	9.2%	2.3%
	EBIDA Margin (%)		11.8%	10.4%	8.7%	8.1%	9.0%	13.4%	8.7%
LEVERAGE	MADS / Total Operating Revenue (%)		2.4%	5.6%	2.8%	2.3%	4.6%	2.4%	2.6%
	MADS Coverage (X)		5.7x	1.6x	3.0x	3.4x	1.8x	7.9x	3.2x
	Long-Term Debt / EBIDA (X)		2.6x	4.1x	3.3x	3.5x	3.7x	1.8x	3.5x
	Long-Term Debt / Capitalization (%)		18.6%	56.5%	32.2%	32.9%	59.8%	16.4%	33.6%
	Total Debt / EBIDA (X)		2.6x	4.9x	3.5x	3.7x	4.0x	2.1x	3.6x
	Total Debt / Capitalization (%)		19.0%	57.8%	33.6%	33.8%	60.4%	16.7%	35.0%
LIQUIDITY	Cash On Hand (Days)		403.1	230.8	199.9	214.9	177.5	413.8	213.3
	Cushion Ratio (X)		39.4x	9.5x	19.1x	24.9x	10.0x	50.8x	22.3x
	Cash-To-Long-Term Debt (%)		284.2%	137.9%	166.3%	172.5%	81.2%	311.3%	167.2%
	Cash-To-Total Debt (%)		279.3%	118.6%	159.6%	165.9%	76.5%	305.9%	159.9%
CAPTIAL	Average Age Of Plant (Years)		10.1	11.1	12.5	11.9	12.9	8.2	12.0
	Capital Expenditures / D&A (%)		120.5%	55.2%	90.4%	118.3%	57.9%	110.7%	106.6%
MISC	Medicare Advance Payments ($000s)		0.0	144.5	24,842.0	107,539.0	5,699.7	0.0	39,886.0
	CARES ACT Funds Recognized ($000s)		46,552.0	2,445.2	11,958.4	59,908.0	5,500.0	4,178.0	24,975.9

The table below provides the 2019 Ziegler Median ratio results stratified by hospital type:

		SAMPLE SIZE >	26	28	184	318	41	5	602
			HOSPITAL TYPE						
			Children's	Critical Access	Community Based	Health System	Hospital District	Specialty	Total
PROFITABILITY	Operating Margin (%)		6.7%	0.5%	1.0%	2.2%	(1.8%)	6.6%	2.1%
	Operating EBIDA Margin (%)		13.2%	9.1%	8.2%	8.5%	9.1%	12.0%	8.5%
	Excess Margin (%)		9.3%	2.1%	3.3%	4.1%	1.3%	9.4%	3.8%
	EBIDA Margin (%)		15.8%	10.2%	9.6%	10.0%	10.3%	16.4%	10.1%
LEVERAGE	MADS / Total Operating Revenue (%)		2.4%	4.3%	2.9%	2.3%	4.9%	2.3%	2.6%
	MADS Coverage (X)		6.4x	1.9x	3.2x	4.3x	1.9x	7.8x	3.7x
	Long-Term Debt / EBIDA (X)		2.0x	4.5x	3.4x	2.9x	5.1x	2.1x	3.1x
	Long-Term Debt / Capitalization (%)		19.1%	61.6%	32.7%	32.1%	66.8%	17.5%	33.7%
	Total Debt / EBIDA (X)		2.1x	4.7x	3.5x	3.1x	5.6x	2.2x	3.2x
	Total Debt / Capitalization (%)		19.3%	62.8%	34.0%	32.8%	67.1%	17.7%	34.6%
LIQUIDITY	Cash On Hand (Days)		357.2	153.6	186.2	195.7	151.0	419.3	192.3
	Cushion Ratio (X)		43.5x	8.2x	17.8x	22.0x	7.5x	44.7x	19.3x
	Cash-To-Long-Term Debt (%)		286.0%	73.5%	155.7%	166.5%	59.5%	268.7%	157.6%
	Cash-To-Total Debt (%)		279.3%	64.1%	149.5%	158.8%	57.6%	264.4%	150.3%
CAPITAL	Average Age Of Plant (Years)		9.8	10.4	12.4	11.5	11.9	7.2	11.7
	Capital Expenditures / D&A (%)		122.2%	62.4%	100.8%	120.9%	74.1%	129.4%	114.7%

The table below provides a glossary for the ratios tracked in our analysis:

PROFITABILITY

RATIO	DEFINITION	FORMULA
Operating Margin (%)	Measure of profitability indicating the percent of operating income generated from operating revenues after capturing operating expenses	= Operating Income / Total Operating Revenue
Operating EBIDA Margin (%)	Measures operational profitability or operating cash flow as a percentage of operating revenue after excluding non-cash expenses	= Operating EBIDA / Total Operating Revenue
Excess Margin (%)	Profitability metrics that includes revenue from non-patient related care in addition to operating income as a percentage of total revenue	= Excess of Revenue over Expenses (Net Income) / Total Revenue
EBIDA Margin (%)	Measures cash flow after capturing non-operating gains and losses and is calculated as a percentage of total revenue	= Net Revenue Available for Debt Service (EBIDA) / Total Revenue

LEVERAGE

RATIO	DEFINITION	FORMULA
MADS / Total Operating Revenue (%)	Leverage metric reflecting the burden debt service places on operating revenue	= Max Annual Debt Service (MADS) / Total Operating Revenue
MADS Coverage (X)	Measures the number of times cash flow can pay down the largest annual debt service requirement	= Net Revenue Available for Debt Service (EBIDA) / Max Annual Debt Service (MADS)
Long-Term Debt / EBIDA (X)	Compares long-term debt to the amount of cash flow generated and reflects the ability to repay debt obligations	= Long-Term Debt / (Excess of Revenue over Expenses (Net Income) + Depreciation & Amortization + Interest Expense)
Long-Term Debt / Capitalization (%)	Leverage measure reflecting the level of long-term debt to capitalization and provides insights for debt capacity analysis	= Long-Term Debt / (Long-Term Debt + Unrestricted Net Assets (Incl. Noncontrolling Interest))
Total Debt / EBIDA (X)	Compares total debt to the amount of cash flow generated and reflects the ability to repay debt obligations	= Total Debt / (Excess of Revenue over Expenses (Net Income) + Depreciation & Amortization + Interest Expense)
Total Debt / Capitalization (%)	Measure of financial leverage reflecting the level of total debt obligations as a percentage of total capitalization	= Total Debt / (Total Debt + Unrestricted Net Assets (Incl. Noncontrolling Interest))

LIQUIDITY

RATIO	DEFINITION	FORMULA
Days Cash On Hand	Liquidity metric reflecting the number of days on-balance sheet cash can continue to pay operating expenses	= Unrestricted Cash & Investments / [(Total Operating Expenses - Depreciation & Amortization) / 365]
Cushion Ratio (X)	Measures how many times on-balance sheet cash can be used to pay the largest annual debt service requirement	= Unrestricted Cash & Investments / Max Annual Debt Service (MADS)
Cash-To-Long-Term Debt (%)	Measures the ability to pay long-term debt with on-balance sheet cash	= Unrestricted Cash & Investments / Long-Term Debt
Cash-To-Total Debt (%)	Liquidity measure reflecting the amount of times on-balance sheet cash can pay down all debt principal obligations	= Unrestricted Cash & Investments / Total Debt

CAPITAL SPENDING

RATIO	DEFINITION	FORMULA
Average Age Of Plant (Years)	Measures the financial age in years of fixed assets, where an older age suggests greater need of capital reinvestment	= Accumulated Depreciation / Depreciation
Capital Expenditures / Depreciation & Amortization (%)	Measures the amount of investment in fixed assets and indicates the level of future spending needs	= Capital Expenditures / Depreciation & Amortization

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