Assessing the Financial Health of Mississippi's Independent County-Owned Rural Hospitals

PERFORMANCE AUDIT
ISSUED December 13, 2017

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Glossary of Terms

Accumulated Depreciation (%)	Measures the average age of an organization's fixed assets. The lower the value, the newer a business's buildings and equipment. A low average age typically means that the organization is using current technology and that it will not require large capital expenditures in the near future.[1]
Average Daily Census	Measures inpatient volume based on the average number of patients treated during a given period of time. In most situations, a higher average daily census is better because it spreads fixed costs over a greater number of patients, thereby increasing profitability. Formula: Total number of inpatient services for a given period divided by the total number of days in the same period.[2]
Charity Care	Financial assistance that is offered to patients who are unable to pay in full for medically necessary health care services as allowed under federal, state, and local laws.[3]
Critical Access Hospital	A designation given to certain rural hospitals by the Centers for Medicare and Medicaid Services to reduce the financial vulnerability of rural hospitals and improve access to healthcare by keeping essential services in rural communities through cost-based Medicare reimbursement. Criteria include: 25 or fewer acute care inpatient beds; located more than 35 miles from another hospital; maintains an average length of stay of 96 hours or less for acute care patients; and provides 24/7 emergency care services.[4]
Days Cash on Hand	Measures the number of days that an organization could continue to pay its average daily cash obligations with no new cash resources becoming available. High values imply

[1] Carpenter, L. C. & Reiter, K. L. (2015). *Healthcare Finance: An Introduction to Accounting and Financial Management*. Retrieved from http://www.ache.org/pubs/hap_companion/gapenski_finance/online%20appendix%20a.pdf

[2] Jones & Bartlett Learning (n.d.). *Basic Statistical Data Used in Acute Care Facilities*. Retrieved from http://www.jblearning.com/samples/0763750344/45561_CH01.pdf

[3] Definition obtained from the Audited Financial Statements of the audit population.

[4] Centers for Medicare & Medicaid Services (n.d.). Critical Access Hospitals. Retrieved from https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandComplianc/CAHs.html

	higher liquidity and hence are viewed favorably by creditors.[5]
Debt Financing (%)	Measures the proportion of debt financing in a business's overall capital structure. The higher the debt ratio, the greater the amount of debt financing. For example, a debt ratio of 50 percent indicates that half of the business's assets are financed with debt.[6]
Health Professional Shortage Area	Areas designated by the U.S. Department of Health & Human Services as having shortages of primary medical care, dental or mental health providers.[7]
Medically Underserved Area	Areas or populations designated by the U.S. Department of Health & Human Services as having too few primary care providers, high infant mortality, high poverty or a high elderly population.[8]
Net Position	Net position consists of net investment in capital assets, restricted and unrestricted. The net investment in capital assets consists of capital assets net of accumulated depreciation and the outstanding balances of any related debt that is attributable to the acquisition of the capital asset. Restricted net position consists of those resources that are externally restricted by creditors, grantors, contributors or laws and regulations or those restricted by constitutional provisions and enabling legislation. Unrestricted net position consists of all other resources.[9]
Occupancy Rate	Measures inpatient volume as a percentage by comparing the number of patients treated over a given period of time to the total number of beds available for the same period of time. The higher the occupancy rate, the better, unless it is so high that the hospital does not have the capacity to deal with emergency situations.[10]

[5] Carpenter, L. C. & Reiter, K. L. (2015). *Healthcare Finance: An Introduction to Accounting and Financial Management*. Retrieved from http://www.ache.org/pubs/hap_companion/gapenski_finance/online%20appendix%20a.pdf

[6] Ibid

[7] Health Resources & Services Administration Data Warehouse (2017). *Health Professional Shortage Area (HPSA) Find*. Retrieved from https://datawarehouse.hrsa.gov/tools/analyzers/HpsaFindResults.aspx

[8] Health Resources & Services Administration Data Warehouse (2017). *Medically Underserved Area (MUA) Find*. Retrieved from https://datawarehouse.hrsa.gov/tools/analyzers/MuaSearchResults.aspx

[9] Definition obtained from the Audited Financial Statements of the audit population.

[10] Jones & Bartlett Learning (n.d.). *Basic Statistical Data Used in Acute Care Facilities*. Retrieved from http://www.jblearning.com/samples/0763750344/45561_CH01.pdf

Supply Chain	Supply chain is a management term encompassing decision-making about what types of supplies and equipment are necessary, product analysis, purchasing agreements, inventory management, product utilization, disposal and payment.[11]
Total Margin (%)	Measures total profitability as a percentage of total revenues. In other words, it measures the ability of a business to control expenses. The higher the total margin the better. Note that total margin includes both operating and non-operating revenue, so a provider could be operating at a loss and if non-operating revenue were large enough, still show a positive total margin. Also, note that net income (and hence total margin) includes deductions for interest expense and taxes.[12]

[11] Govern, P. (2005). Plan in place to reduce cost of supplies. Retrieved from http://www.mc.vanderbilt.edu/reporter/index.html?ID=4289

[12] Carpenter, L. C. & Reiter, K. L. (2015). *Healthcare Finance: An Introduction to Accounting and Financial Management.* Retrieved from http://www.ache.org/pubs/hap_companion/gapenski_finance/online%20appendix%20a.pdf

Mississippi Office of the State Auditor

Stacey E. Pickering

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Introduction

Mississippi's independent publicly owned rural hospitals play a critical role in providing medical care to citizens residing in rural areas. The Mississippi Legislature acknowledged the importance of rural hospitals in the Rural Health Availability Act (Miss. Code Ann. § 41-9-303, 2004) by declaring the following:

- In rural areas, access to health care is limited and the quality of health care is adversely affected by inadequate reimbursement and collection rates and difficulty in recruiting and retaining skilled health professionals.
- There is limited, if any, overlap in the geographic service areas of Mississippi rural hospitals.
- Rural hospitals' financial stability is threatened by patient migration to general acute care and specialty hospitals in urban areas.
- The availability of quality health care in rural areas is essential to the economic and social viability of rural communities.

The purpose of the Rural Health Availability Act was to provide rural hospitals with the authority to enter into cooperative agreements with other entities in order to improve the availability and quality of health care, as well as enhance the likelihood that rural hospitals can remain open. While the legal landscape in which rural hospitals operate has changed since the Rural Health Availability Act was first promulgated, their importance to rural communities has not changed. In order for rural hospitals to remain open, they must perform well financially.

Rural hospitals face numerous financial challenges as they provide care for some of our State's most vulnerable citizens. They serve a community that tends to be older, poorer, sicker, and more dependent on public insurance programs than their urban counterparts.[13] Since rural residents are more reliant on public insurance, rural hospitals are more susceptible to changes to Medicaid, Medicare, and the Children's Health Insurance Program (CHIP). In fact, decreases in Medicare reimbursements, rate

[13] National Organization of State Offices of Rural Health (2016). State Office of Rural Health Roadmap for Working with Vulnerable Hospitals. Retrieved from https://nosorh.org/wp-content/uploads/2016/11/SORH-Roadmap.pdf

freezes or other reductions to Medicaid, and transitions to Medicaid managed care have all been cited by the Kaiser Foundation as factors that typically contribute to the closure of rural hospitals.[14] Other factors include, privately insured patients going elsewhere for care, slow adaptation to new payment and service models, and corporate business decisions.[15] When rural hospitals close, the economy and residents suffer as the community begins to erode. According to a 2016 study by the Kaiser Foundation, the closure of a rural hospital results in the following:

- reduced access to emergency care;
- physicians and other providers leaving the community immediately following closure;
- access to primary care declining, if not offered by others in the community;
- job losses; and
- rural communities struggling to attract new industry and employers to the area.[16]

Since 2010, five (5) rural hospitals have closed their doors and have not reopened as of September 29, 2017.[17] In light of these closures, it is even more important for stakeholders to be aware of the financial health of Mississippi's independent county-owned rural hospitals, a group which makes up 16.8% of the 113 hospital facilities licensed by the Mississippi State Department of Health as of January 2017.[18] Therefore, OSA staff analyzed the audited financial statements of nineteen (19) county-owned, general medical/surgical hospitals identified as rural, according to the Federal Office of Rural Health Policy, which are not owned or leased by another entity according to license applications submitted to the Mississippi State Department of Health. See Appendix A for additional information regarding audit population selection criteria.

In order to evaluate the financial health of the audit population, OSA utilized the Financial Strength Index® (FSI®). The FSI® is a proprietary method developed by William O. Cleverley specifically for assessing the financial health of hospitals. OSA staff calculated scores for each hospital in the audit population from FY2009-16 based on the FSI® formula developed by Cleverley. The calculation is comprised of four individual components (outlined below) normalized by a historical industry average that allows the individual equations to be added together.[19] The components are summed, scored, and categorized on a scaled score range. The national median is represented by a score of zero (0).

[14] Rudowitz, R., Paradise, J., & Antonisse, L. (2016). The Henry J. Kaiser Family Foundation. *A Look at Rural Hospital Closures and Implications for Access to Care: Three Case Studies*. Retrieved from https://www.kff.org/report-section/a-look-at-rural-hospital-closures-and-implications-for-access-to-care-three-case-studies-issue-brief/

[15] Ibid

[16] Ibid

[17] University of North Carolina, The Cecil G. Sheps Center for Health Services Research (n.d.). *82 Rural Hospital Closures: January 2010 - Present*. Retrieved from http://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/

[18] Mississippi State Department of Health (2017). Directory of Mississippi Health Facilities. Retrieved from https://www.msdh.ms.gov/msdhsite/_static/30,0,83,613.html

[19] Cleverley, W. and Cameron, A., "Financial Strength IndexTM: A Measure of Overall Financial Health," Executive Insights, January 2003.

Four components:

1. Total Margin (%)
2. Days Cash on Hand
3. Debt Financing (%)
4. Accumulated Depreciation (%)

The total margin is a measure of profitability, days cash on hand is a measure of liquidity, debt financing is a measure of financial leverage, and accumulated depreciation is a proxy measure for the age of physical facilities.[20]

Scaled Score Ranges:

1.	> 3.0	(Excellent)
2.	0 to 3.0	(Good)
3.	-2.0 to 0	(Fair)
4.	< -2.0	(Poor)

According to Cleverley, "…the FSI® implies that firms with large profits, great liquidity, low levels of debt, and new physical facilities are in excellent financial condition."[21] See Appendix A for additional information regarding the FSI®.

It should be noted that each hospital's score stands on its own. The purpose of this report is not to compare scores but to display how individual hospitals are performing. Additionally, the scores of those hospitals who participate in the Public Employees' Retirement System (PERS) were negatively impacted by a recent Governmental Accounting Standards Board change related to the reporting of pensions that will taper off over a period of time. OSA attempted to display this change and explain its impact when relevant.

Limitations. The FSI® should be seen as a starting point in analyzing the financial health of hospitals since it is limited in its general application to all hospitals given the wide variation in structure and financing habits of each organization.[22] Past FSI® scores are not indicative of future performance.

[20] Cleverley, W. and Cameron, A., "Financial Strength IndexTM: A Measure of Overall Financial Health," Executive Insights, January 2003.

[21] Cleverley, W. (2002). Who is responsible for business failures? *Healthcare Financial Management, 56*, 46-52.

[22] Semritc, A.V. (2009). *Indicators of Financial Solvency in U.S. Hospitals and Health Systems: A Systematic Review of the Literature*. Retrieved from http://www.dissertations.wsu.edu/Thesis/Spring2009/A_Semritc_042909.pdf

How are Mississippi's independent county-owned rural hospitals performing financially?

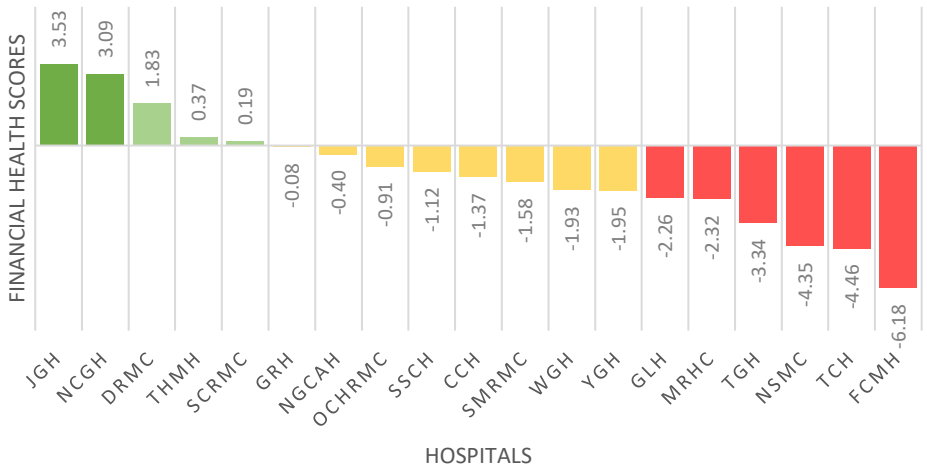
OSA staff analyzed the audited financial statements of nineteen (19) independent county-owned rural general medical/surgical hospitals in Mississippi. Exhibit 1 shows the hospitals audited along with an identifier used in forthcoming exhibits/narrative. Exhibit 2 shows the FY2016 FSI® scores of each hospital audited and is color-coded to reflect the scoring ranges.

Exhibit 1
Hospital Identifiers

ID	Hospital Name
JGH	Jasper General Hospital
NCGH	Neshoba County General Hospital
DRMC	Delta Regional Medical Center
THMH	Tyler Holmes Memorial Hospital
SCRMC	South Central Regional Medical Center
GRH	George Regional Hospital
NGCAH	Noxubee General Critical Access Hospital
OCHRMC	Oktibbeha County Hospital Regional Medical Center
SSCH	South Sunflower County Hospital
CCH	Covington County Hospital

ID	Hospital Name
SMRMC	Southwest MS Regional Medical Center
WGH	Wayne General Hospital
YGH	Yalobusha General Hospital
GLH	Greenwood Leflore Hospital
MRHC	Magnolia Regional Health Center
TGH	Tallahatchie General Hospital
NSMC	North Sunflower Medical Center
TCH	Tippah County Hospital
FCMH	Franklin County Memorial Hospital

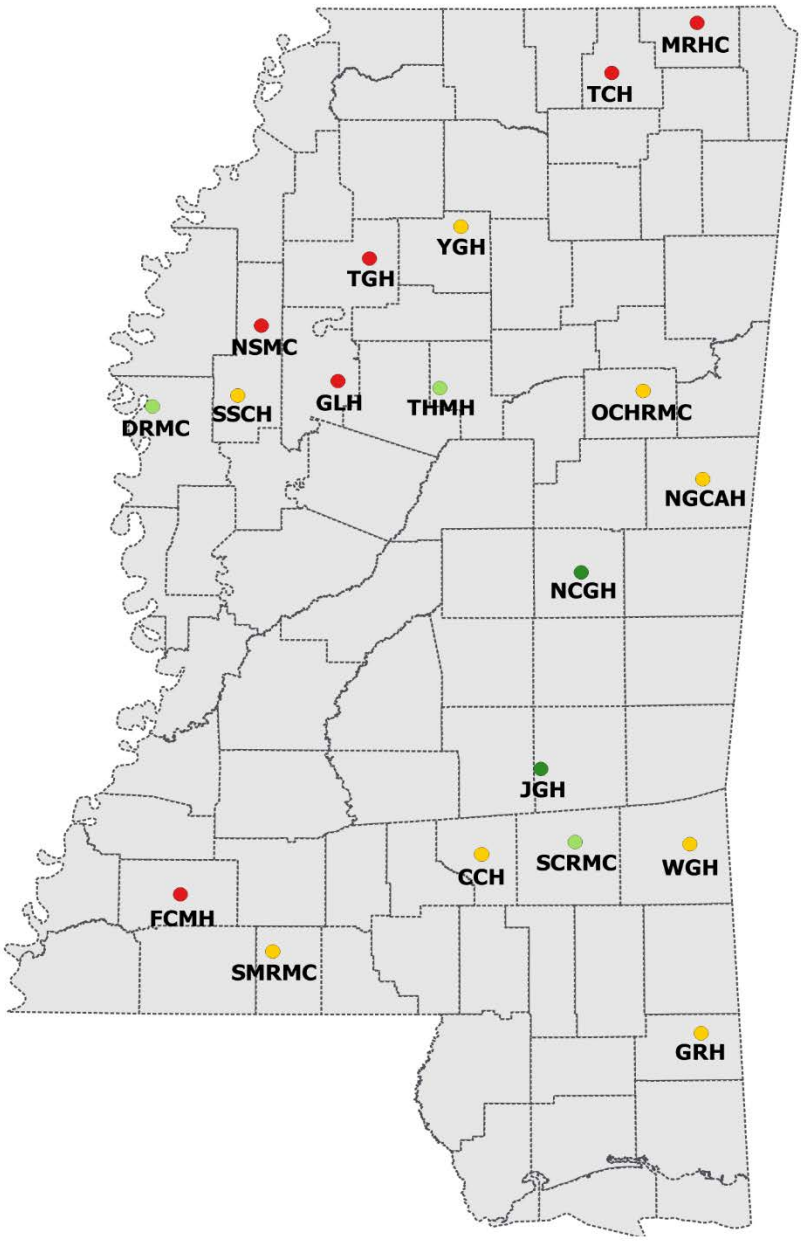
Exhibit 2
FSI® Scores (FY 2016)



Source: Prepared by state auditor's staff using audited financial statements from the audit population.

In addition to determining the FY2016 FSI® score for each hospital, OSA staff also analyzed their scores over time from FY2009 through FY2016 in order to determine a general trend line for each hospital to see if they are generally improving or worsening. Exhibit 3 shows the location and score of each hospital audited, along with the direction of their trend line over time.

Exhibit 3



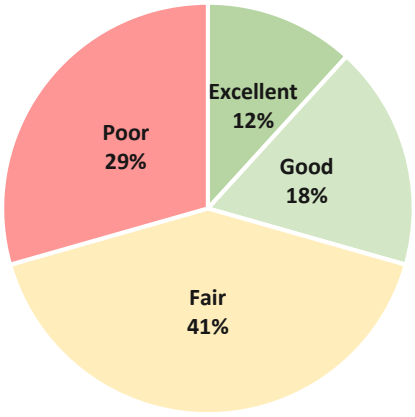
Hospital ID	FY2016 FSI® Score	2009-16 Trend
JGH	● Excellent	↓
NCGH	● Excellent	↑
DRMC	● Good	↑
THMH	● Good	↓
SCRMC	● Good	↓
GRH	● Fair	↓
NGCAH	● Fair	↑
OCHRMC	● Fair	↓
SSCH	● Fair	↓
CCH	● Fair	↓
SMRMC	● Fair	↓
WGH	● Fair	↓
YGH	● Fair	↓
GLH	● Poor	↓
MRHC	● Poor	↓
TGH	● Poor	↑
NSMC	● Poor	↓
TCH	● Poor	↓
FCMH	● Poor	↓

Source: Prepared by state auditor's staff using audited financial statements from audit population.

Performance Trend Key	
↑	Improving
↓	Worsening

Seventy-percent (70%) of Mississippi's independent county-owned rural hospitals scored below the national median on the Financial Strength Index® or FSI®. Twenty-nine percent (29%) scored poor, indicating that there are critical financial issues or controls that need to be managed. Exhibit 4 shows the percentage of the audit population that scored either excellent, good, fair, or poor in fiscal year (FY) 2016.

Exhibit 4
FSI® Scores (FY2016)



Source: Prepared by state auditor's staff using audited financial statements from audit population.

Twelve percent (12%) of the hospitals audited were in "Excellent" financial health in FY2016.

Hospitals that scored "Excellent" and therefore well above the national median in FY2016 include:

- Jasper General Hospital (JGH) with a score of 3.53 and
- Neshoba County General Hospital (NCGH) with a score of 3.09.

Although both hospitals performed well above the national median, NCGH has an upward trend line, meaning that the hospital's financial performance has generally improved over time, while JGH has generally worsened. See the section titled Brief Analyses of Hospitals that Scored "Fair" or Better for hospital specific analyses, including an interpretation of scores and time series plots.

Eighteen percent (18%) of the hospitals audited were in "Good" financial health in FY2016.

Hospitals that scored "Good" and therefore above the national median in FY2016 include:

- Delta Regional Medical Center (DRMC) with a score of 1.83;
- South Central Regional Medical Center (SCRMC) with a score of 0.19; and
- Tyler Holmes Memorial Hospital (THMH) with a score of 0.37.

DRMC is the only hospital in this scoring range with an upward trend line, meaning that the hospital's financial performance has generally improved over time. The other two hospitals, SCRMC and THMH both have financial health scores from FY2009 to FY2016 that have generally worsened over time. See the section titled Brief Analyses of Hospitals that Scored "Fair" or Better for hospital specific analyses, including an interpretation of scores and time series plots.

Forty-one percent (41%) of the hospitals audited were in "Fair" financial health in FY2016.

Hospitals that scored "Fair" and therefore below the national median in FY2016 include:

- Covington County Hospital (CCH) with a score of -1.37;
- George Regional Hospital (GRH) with a score of -0.08;
- Noxubee General Critical Access Hospital (NGCAH) with a score of -0.40;
- Oktibbeha County Hospital Regional Medical Center (OCHRMC) with a score of -0.91;
- South Sunflower County Hospital (SSCH) with a score of -1.12;
- Southwest MS Regional Medical Center (SMRMC) with a score of -1.58;
- Wayne General Hospital (WGH) with a score of -1.93; and
- Yalobusha General Hospital (YGH) with a score of -1.95.

NGCAH has an upward trend line, so its financial health has generally improved over time. Alternatively, the other hospitals in this scoring range have a downward trend line, so their financial health has generally worsened over time. See the section titled Brief Analyses of Hospitals that Scored "Fair" or Better for hospital specific analyses, including an interpretation of scores and time series plots.

Twenty-nine percent (29%) of the hospitals audited were in "Poor" financial health in FY2016.

Hospitals that scored "Poor" and therefore well below the national median include:

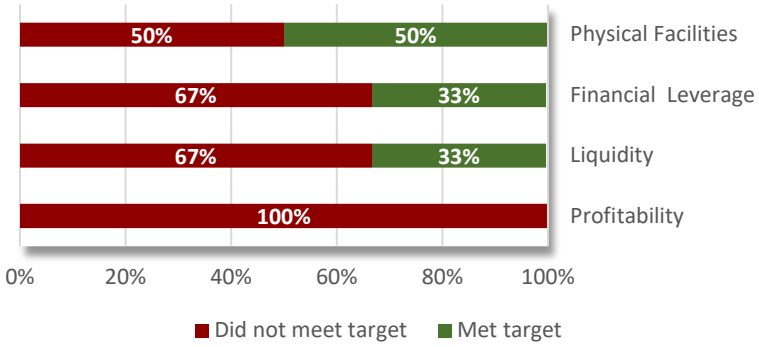
- Franklin County Memorial Hospital (FCMH) with a score of -6.18;
- Greenwood Leflore Hospital (GLH) with a score of -2.26;
- Magnolia Regional Health Center (MRHC) with a score of -2.32;
- North Sunflower Medical Center (NSMC) with a score of -4.35;
- Tallahatchie General Hospital (TGH) with a score of -3.34; and
- Tippah County Hospital (TCH) with a score of -4.46.

TGH is the only hospital in this scoring range with an upward trend line, so the hospital's financial performance has generally improved over time (except FY2016). The other hospitals have a downward trend, so their financial health has generally worsened. See the following section for hospital specific analyses, including a breakdown of hospital and community characteristics, time series plots, and an interpretation.

What factors contributed to hospitals receiving a "Poor" FSI® score?

Low profitability levels were a leading factor for "Poor" scorers in FY2016 as all six (6) of the "Poor" scoring hospitals had profitability scores that did not meet targeted levels. Four (4) of the six (6) or sixty-seven percent (67%) had liquidity and financial leverage scores that did not meet targeted levels. Three (3) out of six (6) or fifty-percent (50%) had physical facilities scores that did not meet targeted levels. Exhibit 5 shows how the six (6) "Poor" scoring hospitals fared on the individual components of the FSI®.

Exhibit 5
Components of FSI® for "Poor" Performers in FY2016



Source: Prepared by state auditor's staff using audited financial statements from audit population.

Given that profit ultimately affects the other three components of the FSI®, it is the strongest determinant of financial strength. If a hospital has a negative profit margin, then administrators will not have the resources needed to decrease debt, increase cash, or acquire new facilities and/or equipment. Since profit is a matter of higher revenues over costs, identifying revenue and cost drivers is imperative to understanding why some hospitals received a "Poor" score. Exhibit 6 provides a few examples of revenue and cost drivers.

Exhibit 6
Revenue and Cost Driver Examples

Revenue Drivers		Cost Drivers	
Operating Revenues	***Nonoperating Revenues***	***Operating Expenses***	***Nonoperating Expenses***
Net patient service revenues	Interest/Dividend income	Salaries and benefits	Unrealized loss on investment
Electronic health records incentive	Grants	Supplies and drugs	Interest expense
	Contributions	Insurance	Loss on sale of equipment
	Unrealized gain on investment	Depreciation and amortization	

Source: Prepared by state auditor's staff using audited financial statements from audit population.

Some revenue/cost drivers are within the control of administrators, but others are not. As noted in the introduction, the hospitals audited tend to be located in areas with higher rates of population loss, public insurance dependents, and chronic conditions. The following subsections contain analyses of hospitals that scored "Poor" on the FSI®. These analyses are intended to display the characteristics that define the community within which each hospital operates and to better understand why each hospital received a "Poor" score.

FRANKLIN COUNTY MEMORIAL HOSPITAL (FCMH)

Hospital & Community Characteristics

- Franklin County:
  - Population of 7,782 (2016 estimate)[23]
  - Designated as a Health Professional Shortage Area & Medically Underserved Area[24]

- Neighboring Counties/Hospitals:
  - *Jefferson County*, Jefferson County Hospital (34 min. from FCMH);
  - *Lincoln County*, King's Daughters Medical Center (39 min. from FCMH)
  - *Amite and Wilkinson Counties*, Field Health Systems (52 min. from FCMH);
  - *Adams County*, Merit Health Natchez (45 minutes from FCMH); and
  - *Pike County*, Southwest Mississippi Regional Medical Center (44 minutes from FCMH) and Beacham Memorial Hospital (52 minutes from FCMH).

- Hospital Highlights:
  - Designated as a Critical Access Hospital (25 beds, fully set up and staffed) (MSDH)
  - Average length of stay: 2.81 days (FY2015, MSDH)
  - Average daily census: 1.16 patients (FY2015, MSDH)
  - Occupancy rate: 4.62% of capacity (FY2015, MSDH)
  - 222 staff members (169 full-time, 53 part-time) (FY2016, FCMH)
  - Charity care provided: $95,000 (FY2016, FCMH)
  - Write-offs due to non-payment: $708,785 (FY2016, FCMH)
  - Payer types: Medicare 51%; Medicaid 2%; Self-pay & other insurers 47% (FY2016, FCMH)

As shown in Exhibit 7, Franklin County has experienced an estimated decrease in population of 4.1% (324 people) from 2010 to 2016. Residents in Franklin County tend to be older than residents in Mississippi and the U.S. in general at 18.7% of the population. There are 15.1% of residents under 65 years of age lacking health insurance and 20.6% of the total population living in poverty.

Exhibit 7
Community Characteristics of Franklin County

	Franklin	MS	US
Population percent change from 2010-16	-4.1%	0.7%	4.7%
Age 65+, percent, July 1, 2016	18.7%	15.1%	15.2%
Persons without health insurance, under 65 yrs., percent*	15.1%	13.9%	10.1%
Persons in poverty, percent*	20.6%	20.8%	12.7%

Source: U.S. Census Bureau (July 1, 2016, estimate).
*This geographic level of poverty and health estimates is not comparable to other geographic levels of these estimates.

[23] U.S. Census Bureau (July 1, 2016, estimate). *QuickFacts.* Retrieved from https://www.census.gov/quickfacts/fact/table/franklincountymississippi,US/POP010210
[24] U.S. Department of Health & Human Services, HRSA Data Warehouse (2017). *Shortage Areas.* Retrieved from https://datawarehouse.hrsa.gov/topics/shortageAreas.aspx

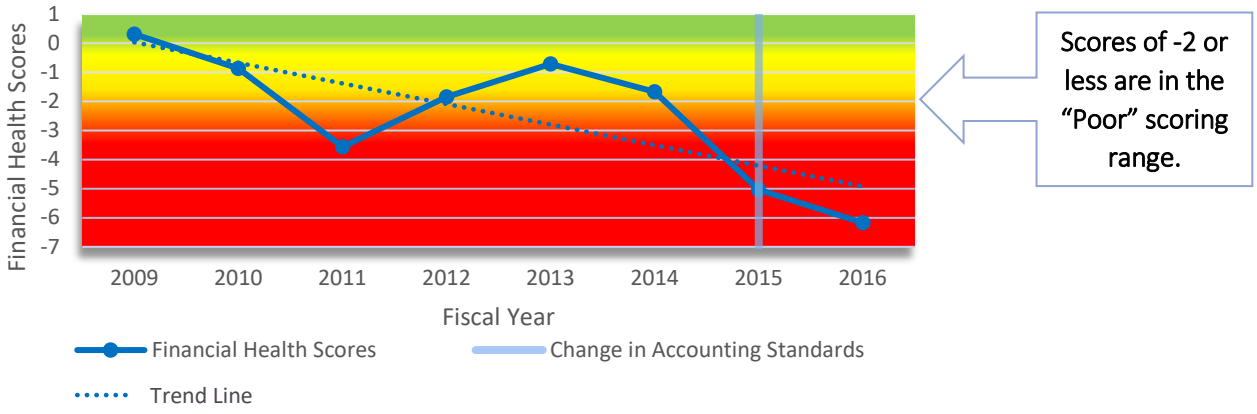
Most Recent FSI® Results

Annual FSI® Score (FY2016) = -6.18 (Poor)

FSI® Results over Time

Exhibit 8 shows FCMH's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of FCMH's FSI® scores by year, the blue dotted line displays the general trend or direction of the FSI® scores over time, and the vertical light blue line represents the year in which a change in accounting standards had a material impact on the hospital's financial health score, which is explained in more detail below.

Exhibit 8
Time Series Plot of Financial Health for FCMH (FY2009-16)



Source: Prepared by state auditor's staff using audited financial statements from FCMH.

Interpretation

In FY2016, FCMH's FSI® score declined by 23% from its FY2015 score of -5.03 to -6.18, which partially reflects the application of Governmental Accounting Standards Board (GASB) Statement Numbers 68[25] and 71[26]. The changes in accounting standards resulted in a total decrease in net position of $16.2 million in FY2015. In addition, deferred costs of $3.3 million in FY2016 caused a decrease in the hospital's unrestricted net position that will continue through FY2020. Although FCMH's scores have generally worsened over time, the hospital has primarily maintained a financial health score of "Fair" prior to the change in accounting standards.

[25] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 68 Accounting and Financial Reporting for Pensions*. Retrieved from http://www.gasb.org/jsp/GASB/Pronouncement_C/GASBSummaryPage&cid=1176160219492

[26] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 71 Pension Transition for Contributions Made Subsequent to the Measurement Date – amendment of GASB No. 68*. Retrieved from http://gasb.org/cs/ContentServer?c=Pronouncement_C&pagename=GASB%2FPronouncement_C%2FGASBSummaryPage&cid=1176163785801

Exhibit 9 shows the FSI® scores and the associated component scores for FCMH from FY2009-16, along with the preferred directions and targets.

Exhibit 9
Financial Strength Index® and Component Scores for FCMH

FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Financial Strength Index Score (Higher is better, Target 0+)							
0.31	-0.86	-3.57	-1.84	-0.71	-1.67	-5.03	-6.18
Profitability: Total Margin (Higher is better; Target 4.0%)							
3.67%	1.96%	-5.06%	1.02%	3.80%	0.82%	3.37%	-2.94%
Liquidity: Days Cash on Hand (Higher is better; Target 50%)							
69.08%	48.29%	6.21%	14.36%	41.39%	19.36%	17.40%	39.46%
Financial Leverage: Debt Financing (Lower is better; Target 50%)							
21.24%	46.28%	51.24%	46.55%	46.61%	41.20%	236.33%	244.52%
Physical Facilities: Accumulated Depreciation (Lower is better; Target 50%)							
78.13%	69.79%	69.99%	72.71%	78.05%	71.84%	74.87%	67.00%

Source: Prepared by state auditor's staff using audited financial statements from FCMH.

Based on FCMH's individual component scores on the FSI®, the hospital's financial leverage and profitability scores are of most concern. While FCMH did not meet the targets for any of the component scores in FY2016, their financial leverage and profitability scores moved in the wrong direction and are therefore in need of immediate attention. As noted in the introduction to this section, hospitals must increase revenue or funding sources and implement cost containment strategies in order to have the resources to pay down debt. However, these challenges are amplified in a rural county like Franklin that has experienced some population loss, has a higher percentage of older residents (compared to the State as a whole) who have greater and more complex health issues, as well as residents who may not be able to afford care. General recommendations to address some of the issues noted above are located in the section titled Recommendations at the end of this report. However, recommendations specific to FCMH are outlined below.

Recommendation for FCMH: Based on OSA's analysis of the FCMH's occupancy rate and the total number of full-time employees, there appears to be a difference between supply (staff) and demand (patients). The occupancy rate has decreased from FY2009-15, while the number of full-time staff members has increased with the exception of FY2016 when two full-time positions were vacated. As a result, OSA recommends a review of the number of full-time employees in order to determine whether the appropriate number of individuals are employed to meet patients' needs while maintaining standards of patient care and positive patient outcomes. If fewer staff members are needed, the decrease in staff will lower salary and benefit costs, which will increase the amount of cash available and help move the financial leverage and profitability scores in the right direction.

GREENWOOD LEFLORE HOSPITAL (GLH)

Hospital & Community Characteristics

- Leflore County:
  - Population of 29,856 (2016 estimate)[27]
  - Designated as a Health Professional Shortage Area & Medically Underserved Area[28]

- Neighboring Counties/Hospitals:
  - *Montgomery County*, Tyler Holmes Memorial Hospital (32 min. from GLH);
  - *Sunflower County*, South Sunflower County Hospital (34 min. from GLH) and North Sunflower Medical Center (36 min. from GLH);
  - *Grenada County*, University of MS Medical Center (45 min. from GLH);
  - *Holmes County*, Holmes County Hospital & Clinics (45 min. from GLH);
  - *Tallahatchie County*, Tallahatchie General Hospital (53 min. from GLH); and
  - *Carroll and Humphreys Counties*, No hospitals

- Hospital Highlights:
  - Capacity: 188 licensed acute care beds, 144 set up and staffed (FY2015, MSDH)
  - Average length of stay: 4.03 days (FY2015, MSDH)
  - Average daily census: 68.04 patients (FY2015, MSDH)
  - Occupancy rate: 36.19% of capacity (FY2015, MSDH)
  - 964 staff members (741 full-time, 223 part-time) (FY2016, GLH)
  - Charity care provided: $1.5 million (FY2016, GLH)
  - Write-offs due to non-payment: $35.3 million (FY2016, GLH)
  - Payer types: Medicare 29%; Medicaid 14%; Self-pay 35%; Blue Cross 5%; and Other insurers 17% (FY2016, GLH)

As shown in Exhibit 10, Leflore County has experienced an estimated decrease in population of 7.8% (2,328 people) from 2010 to 2016. Residents who are age 65 or older make up 13.7% of the population, which is less than estimates for the U.S. and Mississippi. There are 16.4% of residents under 65 years of age lacking health insurance and 42.3% of the total population living in poverty.

Exhibit 10
Community Characteristics of Leflore County

	Leflore	MS	US
Population percent change from 2010-16	-7.8%	0.7%	4.7%
Age 65+, percent, July 1, 2016	13.7%	15.1%	15.2%
Persons without health insurance, under 65 yrs., percent*	16.4%	13.9%	10.1%
Persons in poverty, percent*	42.3%	20.8%	12.7%

Source: U.S. Census Bureau (July 1, 2016, estimate).
*This geographic level of poverty and health estimates is not comparable to other geographic levels of these estimates.

[27] U.S. Census Bureau (July 1, 2016, estimate). *QuickFacts*. Retrieved from https://www.census.gov/quickfacts/fact/table/leflorecountymississippi,US/POP010210
[28] U.S. Department of Health & Human Services, HRSA Data Warehouse (2017). *Shortage Areas.* Retrieved from https://datawarehouse.hrsa.gov/topics/shortageAreas.aspx

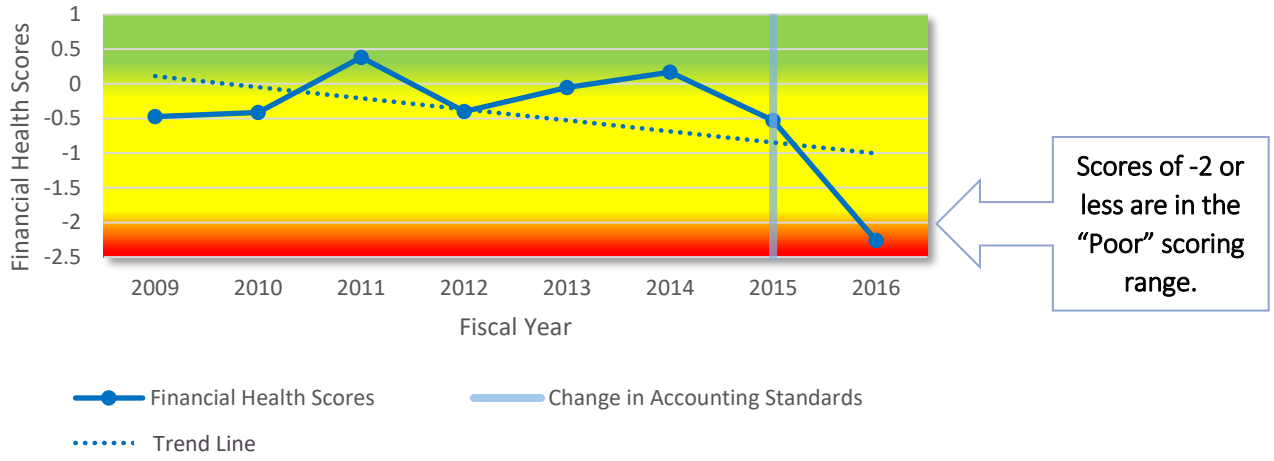
Most Recent FSI® Results

Annual FSI® Score (FY2016) = -2.26 (Poor)

FSI® Results over Time

Exhibit 11 shows GLH's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of GLH's FSI® scores by year, the blue dotted line displays the general trend or direction of the FSI® scores over time, and the vertical light blue line represents the year in which there was a change in accounting standards that had a material impact on the hospital's financial health score, which is explained in more detail below.

Exhibit 11
Time Series Plot of Financial Health for GLH



Source: Prepared by state auditor's staff using audited financial statements from GLH.

Interpretation

In FY2016, GLH's FSI® score declined by 327% from its FY2015 score of -0.53 to -2.26 primarily due to the FY2015 adoption of Governmental Accounting Standards Board (GASB) Statement Numbers 68[29] and 71[30]. The changes in accounting standards resulted in a total decrease in beginning net position of $15.9 million. Although GLH's scores have generally worsened over time, the hospital has primarily maintained financial health scores in the "Fair" or "Good" scoring ranges prior to the change in accounting standards.

[29] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 68 Accounting and Financial Reporting for Pensions*. Retrieved from http://www.gasb.org/jsp/GASB/Pronouncement_C/GASBSummaryPage&cid=1176160219492

[30] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 71 Pension Transition for Contributions Made Subsequent to the Measurement Date – amendment of GASB No. 68*. Retrieved from http://gasb.org/cs/ContentServer?c=Pronouncement_C&pagename=GASB%2FPronouncement_C%2FGASBSummaryPage&cid=1176163785801

Exhibit 12 shows the FSI® scores and the associated component scores for GLH from FY2009-16, along with the preferred directions and targets.

Exhibit 12
Financial Strength Index and Component Scores for GLH

FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Financial Strength Index Score (Higher is better, Target 0+)							
-0.47	-0.41	0.38	-0.40	-0.05	0.17	-0.53	-2.26
Profitability: Total Margin (Higher is better; Target 4.0%)							
1.83%	2.96%	2.56%	0.06%	-0.47%	1.19%	0.87%	-4.66%
Liquidity: Days Cash on Hand (Higher is better; Target 50%)							
28.89%	20.69%	71.47%	62.84%	88.14%	74.32%	58.43%	42.98%
Financial Leverage: Debt Financing (Lower is better; Target 50%)							
18.03%	16.23%	18.96%	18.43%	17.98%	10.76%	24.12%	24.29%
Physical Facilities: Accumulated Depreciation (Lower is better; Target 50%)							
57.43%	62.03%	65.38%	65.24%	66.90%	69.97%	71.71%	73.56%

Source: Prepared by state auditor's staff using audited financial statements from GLH.

GLH only met the target for one of the component scores in FY2016, which was financial leverage. The hospital's liquidity score for FY2016 is near the target level even though it declined from the previous year. GLH's physical facilities and profitability scores were neither close to their targets nor moving in the right direction, which indicates a need for immediate attention. As noted in the introduction to this section, hospitals must increase revenue or funding sources and implement cost containment strategies in order to have the resources to invest in newer facilities and equipment. However, these challenges are amplified in a rural county like Leflore that has experienced population loss, has a higher percentage of residents under the age of 65 who lack health insurance (compared to the State as a whole), and a large percentage of residents in poverty who may not be able to afford care. General recommendations to address some of the issues noted above are located in the section titled Recommendations at the end of this report. However, recommendations specific to GLH are outlined below.

Recommendation for GLH: Based on OSA's analysis of the GLH's total accumulated depreciation expense, there appears to be a considerable amount of cost due to equipment. In FY2016, GLH's equipment cost the hospital $117.5 million. As a result, OSA recommends performing an evaluation of the hospital's equipment in order to determine whether or not any of the items can be sold. Any equipment that is sold will ultimately decrease depreciation expenses and move the physical facilities score in the right direction.

MAGNOLIA REGIONAL HEALTH CENTER (MRHC)

Hospital & Community Characteristics

- Alcorn County:
  - Population of 37,304 (2016 estimate)[31]
  - Designated as a Health Professional Shortage Area & Medically Underserved Area[32]

- Neighboring Mississippi Counties/Hospitals:
  - *Prentiss County*, Baptist Memorial Hospital – Booneville (27 min. from MRHC);
  - *Tishomingo County*, North Mississippi Medical Center – Iuka (31 min. from MRHC); and
  - *Tippah County*, Tippah County Hospital (38 min. from MRHC).

- Hospital Highlights:
  - Capacity: 181 licensed acute care beds, 181 set up and staffed (FY2015, MSDH)
  - Average length of stay: 4.25 days (FY2015, MSDH)
  - Average daily census: 87.58 patients (FY2015, MSDH)
  - Occupancy rate: 48.39% of capacity (FY2015, MSDH)
  - 1733 staff members (1410 full-time, 323 part-time) (FY2016, MRHC)
  - Charity care provided: $1.9 million (FY2016, MRHC)
  - Write-offs due to non-payment: $46.5 million (FY2016, MRHC)
  - Payer types: Medicare 31%; Medicaid 14%; Self-pay 26%; and Other insurers 28% (FY2016, MRHC)

As shown in Exhibit 13, Alcorn County's population has slightly increased from 2010 to 2016. Residents of Alcorn County tend to be older than residents in Mississippi and the U.S. in general at 17.3% of the population. There are 15.3% of residents under 65 years of age lacking health insurance and 19.6% of the total population living in poverty.

Exhibit 13
Community Characteristics of Alcorn County

	Alcorn	MS	US
Population percent change from 2010-16	0.7%	0.7%	4.7%
Age 65+, percent, July 1, 2016	17.3%	15.1%	15.2%
Persons without health insurance, under 65 yrs., percent*	15.3%	13.9%	10.1%
Persons in poverty, percent*	19.6%	20.8%	12.7%

Source: U.S. Census Bureau (July 1, 2016, estimate).
*This geographic level of poverty and health estimates is not comparable to other geographic levels of these estimates.

[31] U.S. Census Bureau (July 1, 2016, estimate). *QuickFacts.* Retrieved from https://www.census.gov/quickfacts/fact/table/alcorncountymississippi,US/POP010210
[32] U.S. Department of Health & Human Services, HRSA Data Warehouse (2017). *Shortage Areas.* Retrieved from https://datawarehouse.hrsa.gov/topics/shortageAreas.aspx

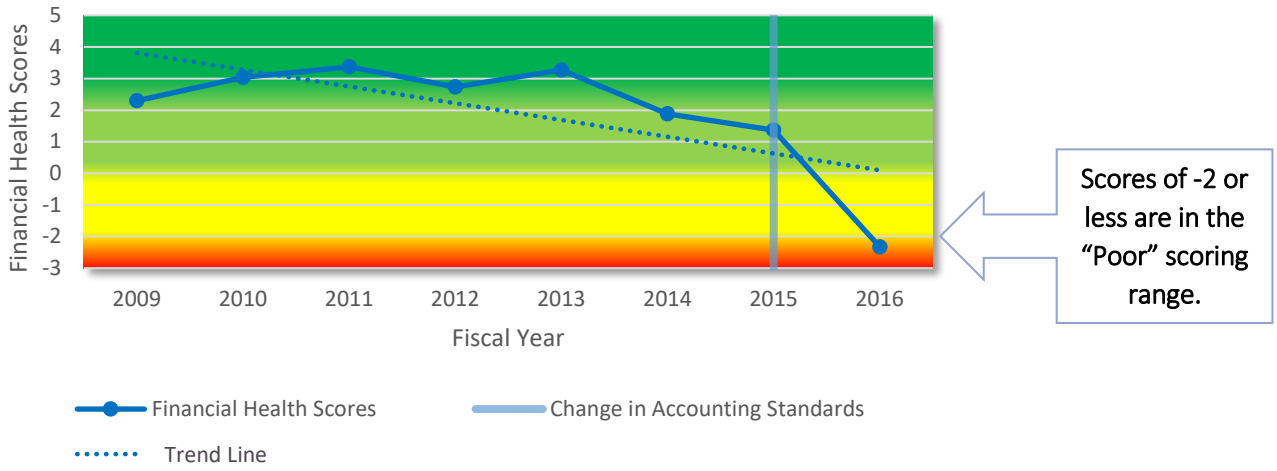
Most Recent FSI® Results

Annual FSI® Score (FY2016) = -2.32 (Poor)

FSI® Results over Time

Exhibit 14 shows MRHC's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of MRHC's FSI® scores by year, the blue dotted line displays the general trend or direction of the FSI® scores over time, and the vertical light blue line represents the year in which there was a change in accounting standards that had a material impact on the hospital's financial health score, which is explained in more detail below.

Exhibit 14
Time Series Plot of Financial Health for MRHC



Source: Prepared by state auditor's staff using audited financial statements from MRHC.

Interpretation

In FY2016, MRHC's FSI® score declined by 265% from its FY2015 score of 1.39 to -2.32 primarily due to the FY2015 adoption of Governmental Accounting Standards Board (GASB) Statement Numbers 68[33] and 71[34]. The changes in accounting standards resulted in a total decrease in net position of $13.7 million. Although MRHC's scores have generally worsened over time, the hospital has primarily maintained financial health scores in the "Good" or "Excellent" scoring ranges prior to the change in accounting standards.

[33] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 68 Accounting and Financial Reporting for Pensions*. Retrieved from http://www.gasb.org/jsp/GASB/Pronouncement_C/GASBSummaryPage&cid=1176160219492

[34] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 71 Pension Transition for Contributions Made Subsequent to the Measurement Date – amendment of GASB No. 68*. Retrieved from http://gasb.org/cs/ContentServer?c=Pronouncement_C&pagename=GASB%2FPronouncement_C%2FGASBSummaryPage&cid=1176163785801

Exhibit 15 shows the FSI® scores and the associated component scores for MRHC from FY2009-16, along with the preferred directions and targets.

Exhibit 15
Financial Strength Index and Component Scores for MRHC

FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Financial Strength Index Score (Higher is better, Target 0+)							
2.30	3.04	3.37	2.73	3.27	1.89	1.37	-2.32
Profitability: Total Margin (Higher is better; Target 4.0%)							
6.37%	6.35%	5.34%	1.79%	2.87%	3.03%	2.32%	-7.41%
Liquidity: Days Cash on Hand (Higher is better; Target 50%)							
132.72%	171.31%	205.06%	208.30%	220.38%	196.69%	179.93%	124.39%
Financial Leverage: Debt Financing (Lower is better; Target 50%)							
52.35%	49.35%	51.13%	50.88%	49.22%	92.86%	91.12%	97.57%
Physical Facilities: Accumulated Depreciation (Lower is better; Target 50%)							
45.21%	49.50%	52.22%	43.31%	43.62%	47.25%	49.29%	50.41%

Source: Prepared by state auditor's staff using audited financial statements from MRHC.

MRHC only met the target for one of the component scores in FY2016, which was liquidity with a score well above the target. The hospital's physical facilities score is near the target level even though it increased from the previous year, while MRHC's financial leverage and profitability scores were neither near their targets nor moving in the right direction. As noted in the introduction to this section, hospitals must increase revenue or funding sources and implement cost containment strategies in order to have the resources to pay down debt. However, these challenges are amplified in a rural county like Alcorn that has a higher percentage of older residents (compared to the State as a whole) who have greater and more complex health issues, a higher percentage of residents under the age of 65 who lack health insurance (compared to the State as a whole), and residents who may not be able to afford care. General recommendations to address some of the issues noted above are located in the section titled Recommendations at the end of this report. However, recommendations specific to MRHC are outlined below.

Recommendation for MRHC: Based on OSA's analysis of the MRHC's financial statements, the hospital appears to have a fair amount of liquid assets with a liquidity score of 124.93%, which is well above the 50% target. As a result, OSA recommends an assessment of these assets to determine if it would be more prudent to utilize those resources to minimize the hospital's operational debt and thereby lower their financial leverage score. A reduction of debt will also serve to reduce the perceived risk associated with organizations that have higher financial leverage scores.

NORTH SUNFLOWER MEDICAL CENTER (NSMC)

Hospital & Community Characteristics

- Sunflower County:
  - Population of 26,407 (2016 estimate)[35]
  - Designated as a Health Professional Shortage Area & Medically Underserved Area[36]

- Neighboring Counties/Hospitals:
  - *Bolivar County*, Bolivar Medical Center (12 min. from NSMC);
  - *Sunflower County*, South Sunflower County Hospital (27 min. from NSMC);
  - *Leflore County*, Greenwood Leflore Hospital (36 min. from NSMC);
  - *Coahoma County*, Merit Health Northwest Mississippi (41 min. from NSMC);
  - *Tallahatchie County*, Tallahatchie General Hospital (48 min. from NSMC);
  - *Washington County*, Delta Regional Medical Center (54 min. from NSMC); and
  - *Humphreys County*, No hospital.

- Hospital Highlights:
  - Designated as a Critical Access Hospital (35 beds, fully set up and staffed) (MSDH)
  - Average length of stay: 7.39 (FY2015, MSDH)
  - Average daily census: 22.78 (FY2015, MSDH)
  - Occupancy rate: 65.08 (FY2015, MSDH)
  - 818 staff members (657 full-time, 161 part-time) (FY2016, NSMC)
  - Charity care provided: $743,000 (FY2016, NSMC)
  - Write offs due to non-payment: $2.3 million (FY2016, NSMC)
  - Payer types: Medicare 31%; Medicaid 14%; Self-pay & other insurers 55% (FY2016, NSMC)

As shown in Exhibit 16, Sunflower County has experienced an estimated decrease in population of 10.1% (2,667) people from 2010 to 2016. Residents who are age 65 or older make up 12.7% of the population, which is less than estimates for the U.S. and Mississippi. There are 16.0% of residents under 65 years of age lacking health insurance and 39.3% of the total population living in poverty.

Exhibit 16
Community Characteristics of Sunflower County

	Sunflower	MS	US
Population percent change from 2010-16	-10.1%	0.7%	4.7%
Age 65+, percent, July 1, 2016	12.7%	15.1%	15.2%
Persons without health insurance, under 65 yrs., percent*	16.0%	13.9%	10.1%
Persons in poverty, percent*	39.3%	20.8%	12.7%

Source: U.S. Census Bureau (July 1, 2016, estimate).
*This geographic level of poverty and health estimates is not comparable to other geographic levels of these estimates.

[35] U.S. Census Bureau (July 1, 2016, estimate). *QuickFacts.* Retrieved from https://www.census.gov/quickfacts/fact/table/sunflowercountymississippi,US/POP010210
[36] U.S. Department of Health & Human Services, HRSA Data Warehouse (2017). *Shortage Areas.* Retrieved from https://datawarehouse.hrsa.gov/topics/shortageAreas.aspx

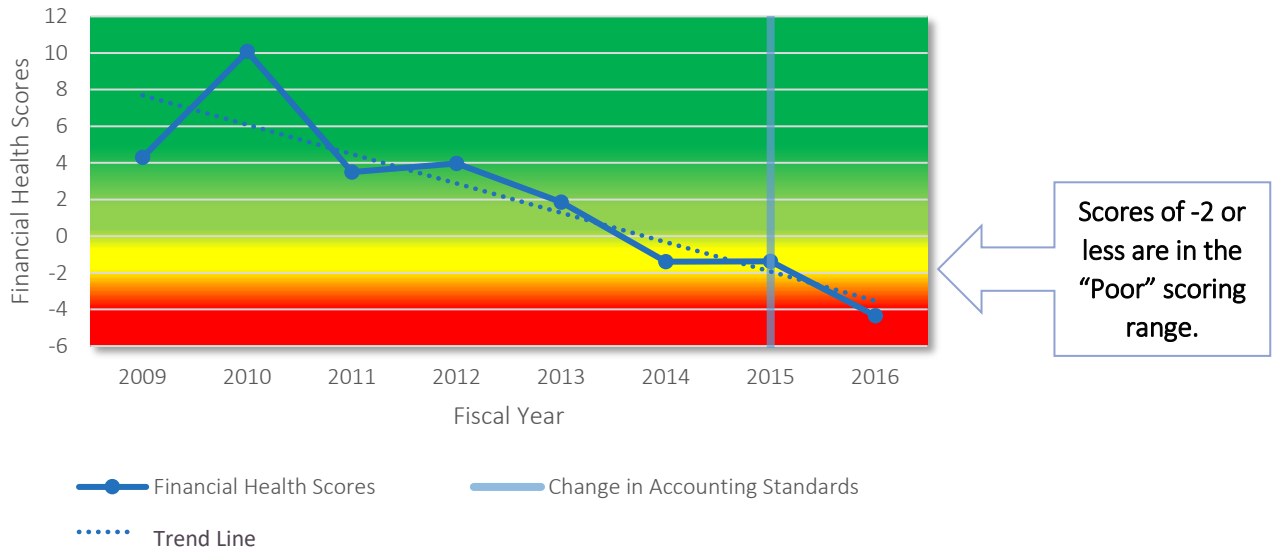
Most Recent FSI® Results

Annual FSI® Score (FY2016) = -4.35 (Poor)

FSI® Results over Time

Exhibit 16 shows NSMC's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of NSMC's FSI® scores by year, the blue dotted line displays the general trend or direction of the FSI® scores over time, and the vertical light blue line represents the year in which there was a change in accounting standards that had a material impact on the hospital's financial health score, which is explained in more detail below.

Exhibit 16
Time Series Plot of Financial Health for NSMC



Source: Prepared by state auditor's staff using audited financial statements from NSMC.

Interpretation

In FY2016, NSMC's FSI® score declined by 215% from its FY2015 score of -1.38 to -4.35, which partially reflects the application of Governmental Accounting Standards Board (GASB) Statement Numbers 68[37] and 71[38]. The hospital's net position decreased by $7.8 million in FY2016 due to operating losses stemming from increased pension expenses related to GASB changes, as well as increases in the cost of supplies and drugs and other operating expenses. NSMC's scores have generally worsened over time with scores ranging from "Excellent" to "Fair" prior to the change in accounting standards.

[37] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 68 Accounting and Financial Reporting for Pensions*. Retrieved from http://www.gasb.org/jsp/GASB/Pronouncement_C/GASBSummaryPage&cid=1176160219492

[38] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 71 Pension Transition for Contributions Made Subsequent to the Measurement Date – amendment of GASB No. 68*. Retrieved from http://gasb.org/cs/ContentServer?c=Pronouncement_C&pagename=GASB%2FPronouncement_C%2FGASBSummaryPage&cid=1176163785801

Exhibit 17 shows the FSI® scores and the associated component scores for NSMC from FY2009-16, along with the preferred directions and targets.

Exhibit 17
Financial Strength Index and Component Scores for NSMC

FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Financial Strength Index Score (Higher is better, Target 0+)							
4.31	10.08	3.50	3.98	1.86	-1.40	-1.38	-4.35
Profitability: Total Margin (Higher is better; Target 4.0%)							
12.90%	28.20%	3.87%	8.83%	3.23%	-2.13%	-2.45%	-11.75%
Liquidity: Days Cash on Hand (Higher is better; Target 50%)							
151.77%	222.00%	189.44%	157.28%	123.61%	88.39%	108.86%	102.15%
Financial Leverage: Debt Financing (Lower is better; Target 50%)							
30.93%	21.82%	27.66%	31.80%	27.67%	95.58%	104.26%	122.33%
Physical Facilities: Accumulated Depreciation (Lower is better; Target 50%)							
66.62%	48.59%	34.97%	37.12%	43.26%	35.96%	43.00%	50.22%

Source: Prepared by state auditor's staff using audited financial statements from NSMC.

NSMC met the targets for two of the four component scores in FY2016, which are liquidity and physical facilities. The hospital's profitability and financial leverage scores, however, are far removed from their targets and are responsible for NSMC's low overall score. As noted in the introduction to this section, hospitals must increase revenue or funding sources and implement cost containment strategies in order to boost profitability. However, these challenges are amplified in a rural county like Sunflower that has experienced population loss, a higher percentage of residents under the age of 65 who lack health insurance (compared to the State as a whole), and a large percentage of residents in poverty who may not be able to afford care. General recommendations to address some of the issues noted above are located in the section titled Recommendations at the end of this report. However, recommendations specific to NSMC are outlined below.

Recommendation for NSMC: Based on OSA's analysis of the NSMC's operating expenses, the two line items that increased the most from the previous year are salaries and benefits and supplies and drugs. Since the cost of salaries and benefits has been affected by a change in accounting standards, OSA focused on supplies and drugs. OSA recommends a comprehensive review of the supply chain in order to uncover opportunities to reduce costs, such as standardization to increase the amount of bulk purchases (which are typically cheaper) and ensuring inventory is being managed efficiently. If the findings of a comprehensive review are carried out in a disciplined manner that holds those responsible for the supply chain accountable, then the hospital may be able to reduce their costs for supplies and drugs without compromising patient health and outcomes, which will help move NSMC's profitability score in the right direction.

TALLAHATCHIE GENERAL HOSPITAL (TGH)

Hospital & Community Characteristics

- Tallahatchie County:
  - Population of 14,394 (2016 estimate)[39]
  - Designated as a Health Professional Shortage Area & Medically Underserved Area[40]

- Neighboring Counties/Hospitals:
  - *Panola County*, Merit Health Batesville (32 min. from TGH);
  - *Yalobusha County*, Yalobusha General Hospital (35 min. from TGH);
  - *Grenada County*, University of MS Medical Center – Grenada (40 min. from TGH);
  - *Sunflower County*, North Sunflower Medical Center (49 min. from TGH);
  - *Coahoma County*, Merit Health Northwest Mississippi (50 min. from TGH);
  - *Quitman County*, No hospital.

- Hospital Highlights:
  - Designated as a Critical Access Hospital (18 beds, fully set up and staffed) (MSDH)
  - Average length of stay: 2.1 days (FY2015, MSDH)
  - Average daily census: 1.16 patients (FY2015, MSDH)
  - Occupancy rate: 6.45% of capacity (FY2015, MSDH)
  - 544 staff members (458 full-time, 86 part-time) (FY2016, TGH)
  - Charity care provided: $0 (FY2016, TGH)
  - Write-offs due to non-payment: $2.2 million (FY2016, TGH)
  - Payer types: Medicare 36%; Medicaid 14%; Self-pay & other insurers 50% (FY2016, TGH)
  - Required by Hill-Burton Act to provide free or reduced cost health care.[41] See Appendix B for additional information regarding the Hill-Burton Act.

As shown in Exhibit 18, Tallahatchie County experienced a decrease in population of 6.4% (921) people from 2010 to 2016. Residents who are age 65 or older make up 14.2% of the population, which is less than estimates for the U.S. and Mississippi. There are 16.4% of residents under 65 years of age lacking insurance and 32.9% of the total population living in poverty.

Exhibit 18- Community Characteristics of Tallahatchie County

	Tallahatchie	MS	US
Population percent change from 2010-16	-6.4%	0.7%	4.7%
Age 65+, percent, July 1, 2016	14.2%	15.1%	15.2%
Persons without health insurance, under 65 yrs., percent*	16.4%	13.9%	10.1%
Persons in poverty, percent*	32.9%	20.8%	12.7%

Source: U.S. Census Bureau (July 1, 2016, estimate). *This geographic level of poverty and health estimates is not comparable to other geographic levels.

[39] U.S. Census Bureau (July 1, 2016, estimate). *QuickFacts.* Retrieved from https://www.census.gov/quickfacts/fact/table/tallahatchiecountymississippi,US/POP010210

[40] U.S. Department of Health & Human Services, HRSA Data Warehouse (2017). *Shortage Areas.* Retrieved from https://datawarehouse.hrsa.gov/topics/shortageAreas.aspx

[41] U.S. Department of Health & Human Services, HRSA (2017). *Hill-Burton Facilities Obligated to Provide Free of Reduced-Cost Health Care.* https://www.hrsa.gov/get-health-care/affordable/hill-burton/facilities.html

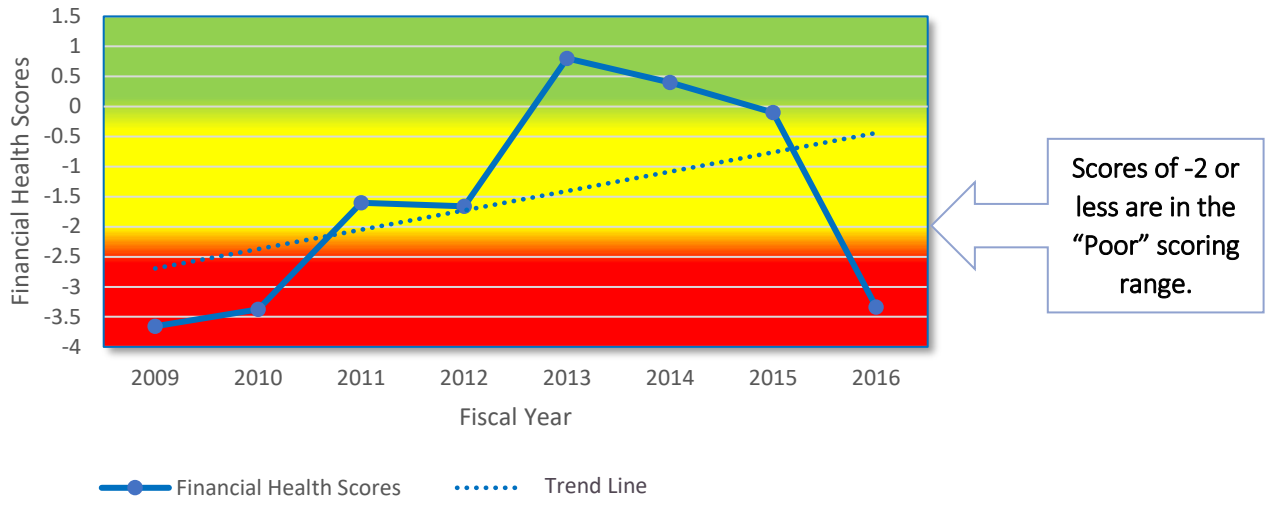
Most Recent FSI® Results

Annual FSI® Score (FY2016) = -3.34 (Poor)

FSI® Results over Time

Exhibit 19 shows TGH's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of TGH's FSI® scores by year and the blue dotted line displays the general trend or direction of the FSI® scores over time. TGH does not participate in the State Employee Retirement System and therefore, was not affected by the change in accounting standards regarding pension expenses that impacted many of the other hospitals under review.

Exhibit 19
Time Series Plot of Financial Health for TGH



Source: Prepared by state auditor's staff using audited financial statements from TGH.

Interpretation

In FY2016, TGH's FSI® declined by approximately three (3) points from its FY2015 score of -0.10 to -3.34 primarily due to an increase in operating expenses of $4.1 million from the previous year, resulting in an operating loss of $2 million. TGH's scores have generally improved over time with scores ranging from "Poor" to "Good" prior to FY2016.

Exhibit 20 shows the FSI® scores and the associated component scores for TGH from FY2009-16, along with the preferred directions and targets.

Exhibit 20
Financial Strength Index and Component Scores for TGH

FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Financial Strength Index Score (Higher is better, Target 0+)							
-3.66	-3.38	-1.60	-1.66	0.80	0.40	-0.10	-3.34
Profitability: Total Margin (Higher is better; Target 4.0%)							
-6.14%	-4.53%	2.42%	1.83%	10.11%	4.97%	3.14%	-6.46%
Liquidity: Days Cash on Hand (Higher is better; Target 50%)							
0.86%	1.63%	8.44%	8.56%	11.60%	52.94%	52.05%	21.14%
Financial Leverage: Debt Financing (Lower is better; Target 50%)							
77.97%	82.62%	86.86%	82.82%	66.69%	58.10%	57.07%	65.39%
Physical Facilities: Accumulated Depreciation (Lower is better; Target 50%)							
29.02%	31.30%	31.86%	31.58%	31.20%	36.94%	39.26%	42.01%

Source: Prepared by state auditor's staff using audited financial statements from TGH.

TGH only met the target for one of the component scores in FY2016, which was physical facilities with a score of 42.01%. The other three components (profitability, liquidity, and financial leverage) all moved in the wrong direction from the previous year and are not close to hitting their targets. As noted in the introduction to this section, hospitals must increase revenue or funding sources and implement cost containment strategies in order to have the resources to improve profitability and thereby liquidity and debt levels. However, these challenges are amplified in a rural county like Tallahatchie that has experienced population loss, a higher percentage of residents under the age of 65 who lack health insurance (compared to the State as a whole), and a large percentage of residents in poverty who may not be able to afford care. General recommendations to address some of the issues noted above are located in the section titled Recommendations at the end of this report. However, recommendations specific to TGH are outlined below.

Recommendation for TGH: Based on OSA's analysis of the TGH's occupancy rate and the total number of full-time employees, there appears to be a difference between supply (staff) and demand (patients). The occupancy rate began a steady decline in FY2011 from an occupancy rate of 28.01 to a rate of 6.45 in FY2015; while the number of full-time staff members has primarily increased going from 102 full-time staff members to 379. As a result, OSA recommends a review of the number of full-time employees in order to determine whether the appropriate number of individuals are employed to meet patient's needs while maintaining standards of patient care and positive patient outcomes. If fewer staff members are needed, the decrease in staff will lower salary and benefit costs, which will increase the amount of cash available and help move the financial leverage and profitability scores in the right direction.

TIPPAH COUNTY HOSPITAL (TCH)

Hospital & Community Characteristics

- Tippah County:
  - Population of 22,190 (2016 estimate)[42]
  - Designated as a Health Professional Shortage Area & Medically Underserved Area[43]

- Neighboring Counties/Hospitals:
  - *Union County*, Baptist Memorial Hospital – Union County (27 min. from TCH)
  - *Prentiss County*, Baptist Memorial Hospital – Booneville (33 min. from TCH)
  - *Alcorn County*, Magnolia Regional Health Center (36 min. from TCH)
  - *Marshall County*, Alliance Health Care System (48 min. from TCH)
  - *Benton County*, No hospital

- Hospital Highlights:
  - Designated as a Critical Access Hospital (25 beds, fully set up and staffed) (MSDH)
  - Average length of stay: 6.37 days (FY2015, MSDH)
  - Average daily census: 9.67 patients (FY2015, MSDH)
  - Occupancy rate: 38.68% of capacity (FY2015, MSDH)
  - 263 staff members (144 full-time, 119 part-time) (FY2016, TCH)
  - Charity care provided: $102,350 (FY2016, TCH)
  - Write-offs due to non-payment: $3.2 million (FY2016, TCH)
  - Payer types: Medicare 40%; Medicaid 7%; Self-pay & other insurers 53% (FY2016, TCH)

As shown in Exhibit 21, Tippah County has experienced a slight decrease in population from 2010 to 2016. Residents of Tippah County tend to be older than residents in Mississippi and the U.S. in general at 16.2% of the population. There are 16.9% of residents under 65 years of age lacking insurance and 18.2% of the total population living in poverty.

Exhibit 21
Community Characteristics of Tippah County

	Tippah	MS	US
Population percent change from 2010-16	-0.2%	0.7%	4.7%
Age 65+, percent, July 1, 2016	16.2%	15.1%	15.2%
Persons without health insurance, under 65 yrs., percent*	16.9%	13.9%	10.1%
Persons in poverty, percent*	18.2%	20.8%	12.7%

Source: U.S. Census Bureau (July 1, 2016, estimate).
*This geographic level of poverty and health estimates is not comparable to other geographic levels of these estimates.

[42] U.S. Census Bureau (July 1, 2016, estimate). *QuickFacts.* Retrieved from https://www.census.gov/quickfacts/fact/table/tippahcountymississippi,US/POP010210
[43] U.S. Department of Health & Human Services, HRSA Data Warehouse (2017). *Shortage Areas.* Retrieved from https://datawarehouse.hrsa.gov/topics/shortageAreas.aspx

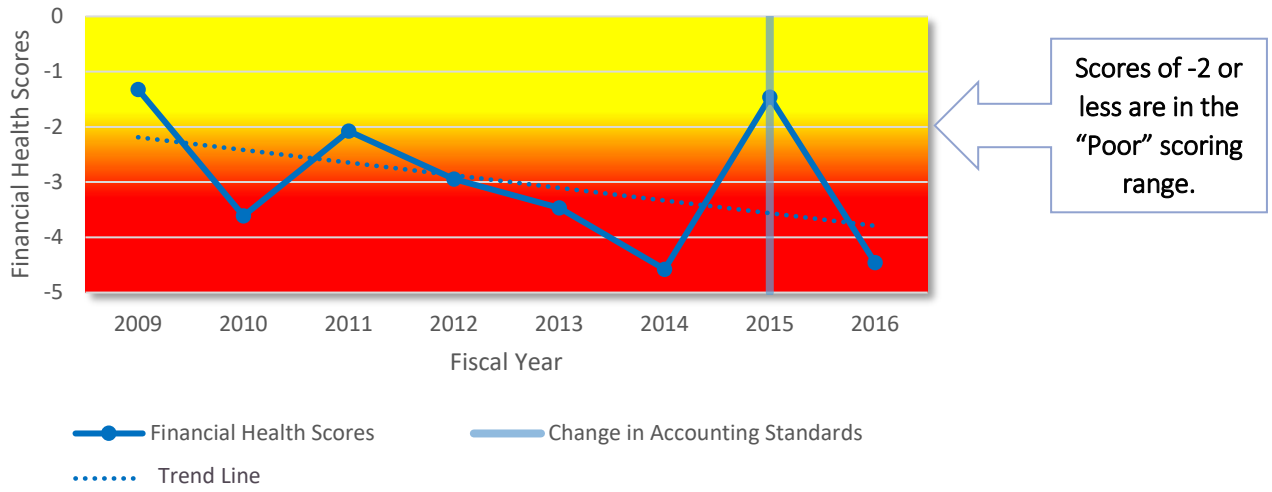
Most Recent FSI® Results

Annual FSI® Score (FY2016) = -4.46 (Poor)

FSI® Results over Time

Exhibit 22 shows TCH's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of TCH's FSI® scores by year, the blue dotted line displays the general trend or direction of the FSI® scores over time, and the vertical light blue line represents the year in which there was a change in accounting standards that had an impact on the hospital's financial health score, which is explained in more detail below.

Exhibit 22
Time Series Plot of Financial Health for TCH



Source: Prepared by state auditor's staff using audited financial statements from TCH.

Interpretation

In FY2016, TCH's FSI® score declined by 204% from its FY2015 score of -1.46 to -4.46, which partially reflects the impact of the application of Governmental Accounting Standards Board (GASB) Statement Numbers 68[44] and 71[45]. These changes have resulted in an unrestricted net position deficit of $8.7 million for FY2016 due to pension deferments that will continue to have an impact on the hospital's unrestricted net position over the next three (3) to four (4) years. TCH's scores have generally worsened over time and have primarily been in the "Poor" scoring range even before the change in accounting standards with the exception of FY2015 in which the hospital received a score in the "Fair" scoring range partly due to a brief improvement in liquidity.

[44] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 68 Accounting and Financial Reporting for Pensions*. Retrieved from http://www.gasb.org/jsp/GASB/Pronouncement_C/GASBSummaryPage&cid=1176160219492

[45] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 71 Pension Transition for Contributions Made Subsequent to the Measurement Date – amendment of GASB No. 68*. Retrieved from http://gasb.org/cs/ContentServer?c=Pronouncement_C&pagename=GASB%2FPronouncement_C%2FGASBSummaryPage&cid=1176163785801

Exhibit 23 shows the FSI® scores and the associated component scores for TCH from FY2009-16, along with the preferred directions and targets.

Exhibit 23
Financial Strength Index and Component Scores for TCH

FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Financial Strength Index Score (Higher is better, Target 0+)							
-1.32	-3.61	-2.08	-2.94	-3.47	-4.58	-1.46	-4.46
Profitability: Total Margin (Higher is better; Target 4.0%)							
-3.65%	-8.25%	-1.40%	-5.56%	-6.82%	4.13%	8.49%	-0.03%
Liquidity: Days Cash on Hand (Higher is better; Target 50%)							
67.74%	10.72%	15.59%	25.84%	19.61%	8.79%	80.29%	38.37%
Financial Leverage: Debt Financing (Lower is better; Target 50%)							
15.23%	13.71%	32.07%	31.50%	33.07%	212.57%	179.69%	178.59%
Physical Facilities: Accumulated Depreciation (Lower is better; Target 50%)							
73.00%	74.40%	69.77%	72.09%	74.52%	76.72%	79.89%	82.26%

Source: Prepared by state auditor's staff using audited financial statements from TCH.

TCH did not meet the targets for any of the component scores in FY2016, three of which worsened from the previous year (profitability, liquidity, and physical facilities). Although TCH's financial leverage improved slightly, the score of 178.59% is still far higher than the target of 50%. It should be noted that after removing the net pension liability due to GASB changes, the hospital still had an FY2016 financial leverage score well above the target. As noted in the introduction to this section, hospitals must increase revenue or funding sources and implement cost containment strategies in order to improve profitability and thereby, the other components. However, these challenges are amplified in a rural county like Tippah that has a higher percentage of older residents (compared to the State as a whole) with greater and more complex health issues, a higher percentage of residents under the age of 65 who lack health insurance (compared to the State as a whole), and residents who may not be able to afford care. General recommendations to address some of the issues noted above are located in the section titled Recommendations at the end of this report.

Brief Analyses of Hospitals that Scored "Fair" or Better

COVINGTON COUNTY HOSPITAL (CCH)

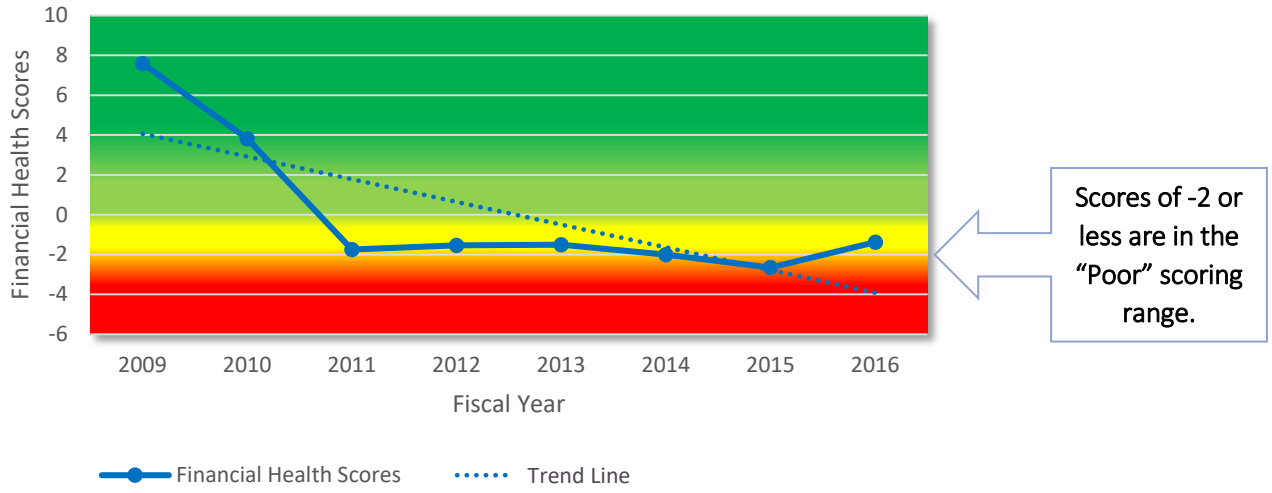
Most Recent FSI® Results

Annual FSI® Score (FY2016) = -1.37 (Fair)

FSI® Results over Time

Exhibit 24 shows CCH's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of CCH's FSI® scores by year and the blue dotted line displays the general trend or direction of the FSI® scores over time.

Exhibit 24
Time Series Plot of Financial Health for CCH



Source: Prepared by state auditor's staff using audited financial statements from CCH.

Interpretation

In FY2016, CCH's FSI® score increased by 48% from its FY2015 score of -2.65 to -1.37 primarily due to an increase in net position of $1.5 million from the previous year, which can partially be attributed to a decrease in operating expenses of $1.3 million. CCH's scores have generally worsened over time with scores ranging from "Excellent" to "Poor" prior to FY2016.

CCH did not meet the following individual component targets for FY2016:

- Profitability (Total Margin) Target (>/=4.0%) Score (-0.37%)
- Liquidity (Days Cash on Hand) Target (>/=50%) Score (48.91%)
- Physical Facilities (Accumulated Depreciation) Target (</=50%) Score (65.84%)

DELTA REGIONAL MEDICAL CENTER (DRMC)

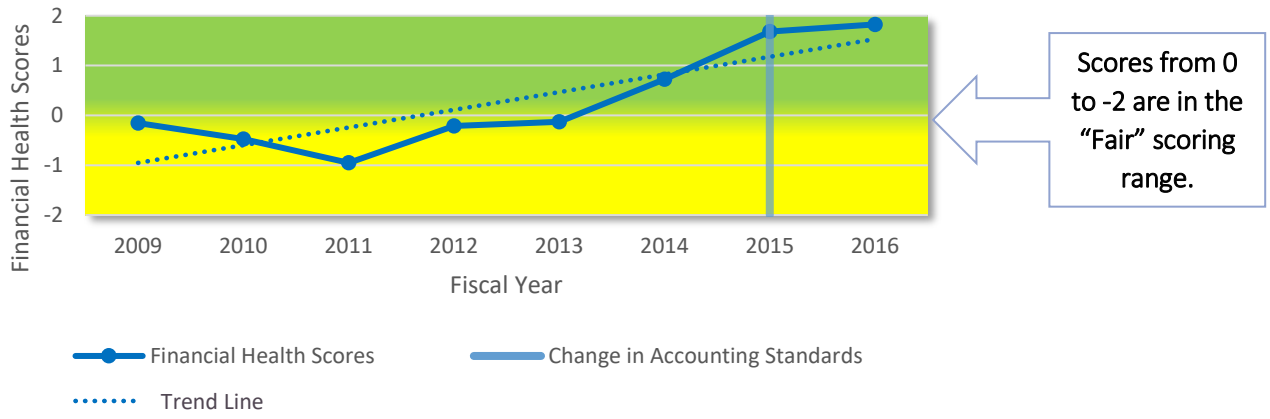
Most Recent FSI® Results

Annual FSI® Score (FY2016) = 1.83 (Good)

FSI® Results over Time

Exhibit 25 shows DRMC's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of DRMC's FSI® scores by year, the blue dotted line displays the general trend or direction of the FSI® scores over time, and the vertical light blue line represents the year in which there was a change in accounting standards that had an impact on the hospital, which is explained in more detail below.

Exhibit 25
Time Series Plot of Financial Health for DRMC



Source: Prepared by state auditor's staff using audited financial statements from DRMC.

Interpretation

In FY2016, DRMC's FSI® score increased by 9% from its FY2015 score of 1.68 to 1.83, primarily due to an increase in net position of $4.2 million. Even though DRMC experienced a cumulative decrease in net position of $8.3 million due to the application of Governmental Accounting Standards Board (GASB) Statement Numbers 68[46] and 71[47], DRMC's scores have generally improved over time from FY2009-16 with scores of either "Fair" or "Good."

DRMC did not meet the following individual component targets for FY2016:

- Profitability (Total Margin) Target (>/=4.0%) Score (3.35%)
- Physical Facilities (Accumulated Depreciation) Target (</=50%) Score (70.31%)

[46] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 68 Accounting and Financial Reporting for Pensions*. Retrieved from http://www.gasb.org/jsp/GASB/Pronouncement_C/GASBSummaryPage&cid=1176160219492

[47] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 71 Pension Transition for Contributions Made Subsequent to the Measurement Date – amendment of GASB No. 68*. Retrieved from http://gasb.org/cs/ContentServer?c=Pronouncement_C&pagename=GASB%2FPronouncement_C%2FGASBSummaryPage&cid=1176163785801

GEORGE REGIONAL HOSPITAL (GRH)

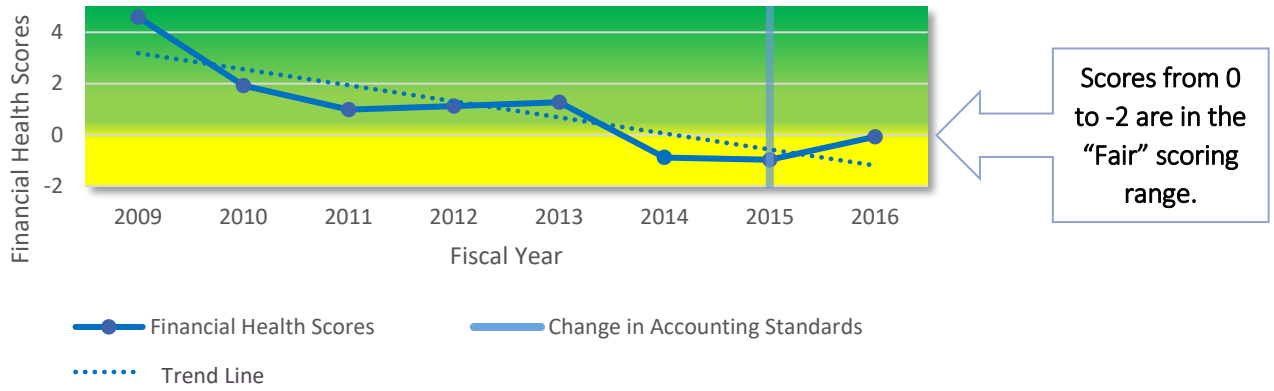
Most Recent FSI® Results

Annual FSI® Score (FY2016) = -0.08 (Fair)

FSI® Results over Time

Exhibit 26 shows GRH's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of GRH's FSI® scores by year, the blue dotted line displays the general trend or direction of the FSI® scores over time, and the vertical light blue line represents the year in which there was a change in accounting standards that had an impact on the hospital, which is explained in more detail below.

Exhibit 26
Time Series Plot of Financial Health for GRH



Source: Prepared by state auditor's staff using audited financial statements from GRH.

Interpretation

In FY2016, GRH's FSI® score increased by 92% from its FY2015 score of -0.97 to -0.08, primarily due to an increase in net position of $303,537. Even though GRH's FY2016 score improved from the previous year, the hospital's scores have generally worsened over time from FY2009-16 with scores ranging from "Excellent" to "Fair." In FY2015, GRH adopted Governmental Accounting Standards Board (GASB) Statement Numbers 68[48] and 71[49], but it did not have an impact on the hospital's financial position since the hospital does not participate in the State's retirement system.

GRH did not meet the following individual component targets for FY2016:

- Profitability (Total Margin) Target (>/=4.0%) Score (0.65%)
- Physical Facilities (Accumulated Depreciation) Target (</=50%) Score (59.01%)

[48] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 68 Accounting and Financial Reporting for Pensions*. Retrieved from http://www.gasb.org/jsp/GASB/Pronouncement_C/GASBSummaryPage&cid=1176160219492

[49] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 71 Pension Transition for Contributions Made Subsequent to the Measurement Date – amendment of GASB No. 68*. Retrieved from http://gasb.org/cs/ContentServer?c=Pronouncement_C&pagename=GASB%2FPronouncement_C%2FGASBSummaryPage&cid=1176163785801

JASPER GENERAL HOSPITAL (JGH)

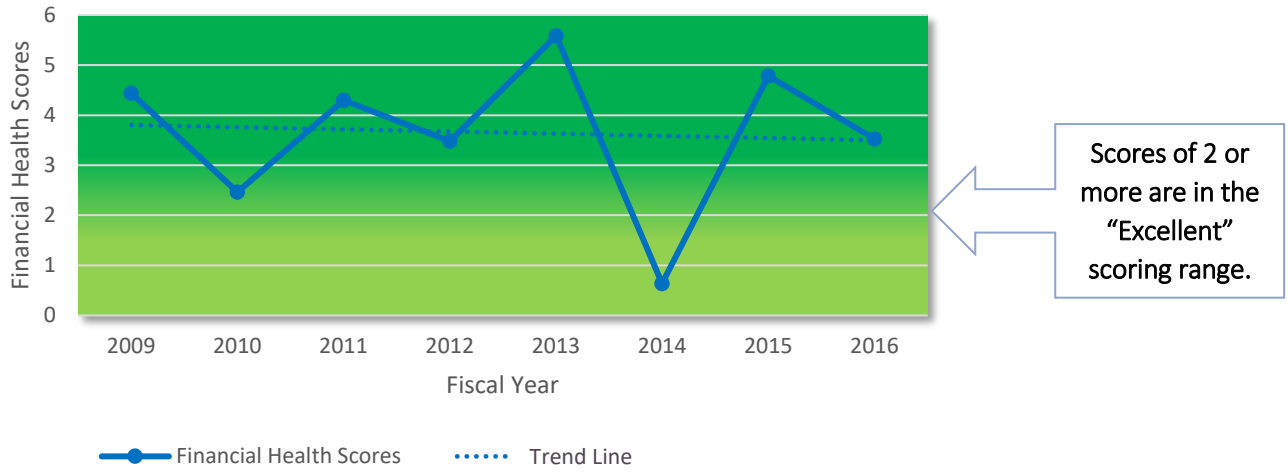
Most Recent FSI® Results

Annual FSI® Score (FY2016) = 3.53 (Excellent)

FSI® Results over Time

Exhibit 27 shows JGH's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of JGH's FSI® scores by year and the blue dotted line displays the general trend or direction of the FSI® scores over time.

Exhibit 27
Time Series Plot of Financial Health for JGH



Source: Prepared by state auditor's staff using audited financial statements from JGH.

Interpretation

In FY2016, JGH's FSI® score decreased by 26% from its FY2015 score of 4.79 to 3.53, partially due to a decrease in net income of $368,951. JGH has primarily maintained a score of "Excellent" from FY2009-16. The hospital's score dipped into the "Fair" scoring range in FY2014, a fluctuation that caused an otherwise positive or steady trend line to shift into one that has generally worsened over time.

JGH did not meet the following individual component targets for FY2016:

- Physical Facilities (Accumulated Depreciation) Target (</=50%) Score (60.57%)

NESHOBA COUNTY GENERAL HOSPITAL (NCGH)

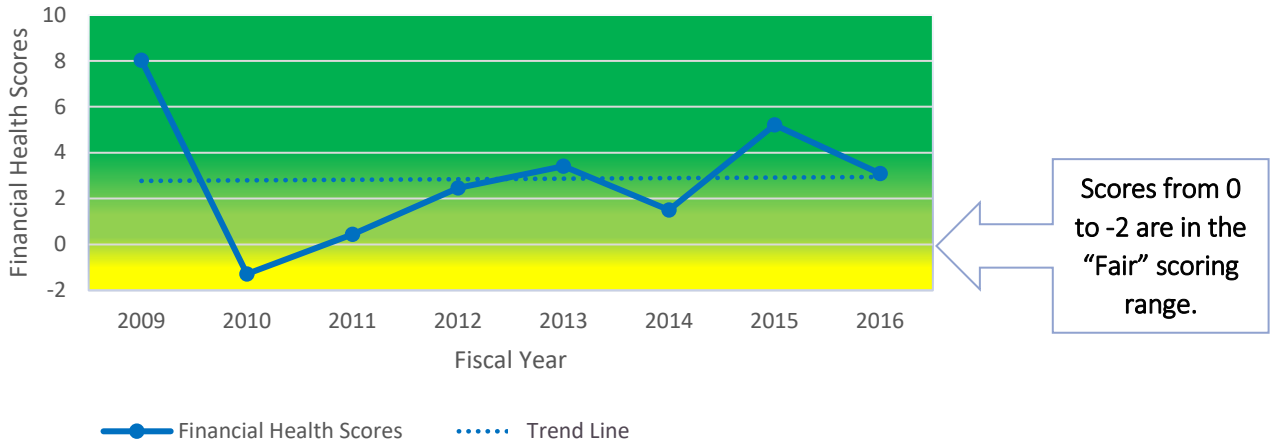
Most Recent FSI® Results

Annual FSI® Score (FY2016) = 3.09 (Excellent)

FSI® Results over Time

Exhibit 28 shows NCGH's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of NCGH's FSI® scores by year and the blue dotted line displays the general trend or direction of the FSI® scores over time.

Exhibit 28
Time Series Plot of Financial Health for NCGH



Source: Prepared by state auditor's staff using audited financial statements from NCGH.

Interpretation

In FY2016, NCGH's FSI® score decreased by 41% from its FY2015 score of 5.21 to 3.09, partially due to a decrease in net income of $2.5 million from the previous year. NCGH has primarily maintained a score of "Excellent" or "Good" from FY2009-16. The hospital's score dipped into the "Fair" scoring range in FY2010, a fluctuation on an otherwise steady trend line that has shown some slight improvement over time from FY2009-16 despite the most recent decrease.

NCGH did not meet the following individual component targets for FY2016:

- Physical Facilities (Accumulated Depreciation) Target (</=50%) Score (54.55%)

NOXUBEE GENERAL CRITICAL ACCESS HOSPITAL (NGCAH)

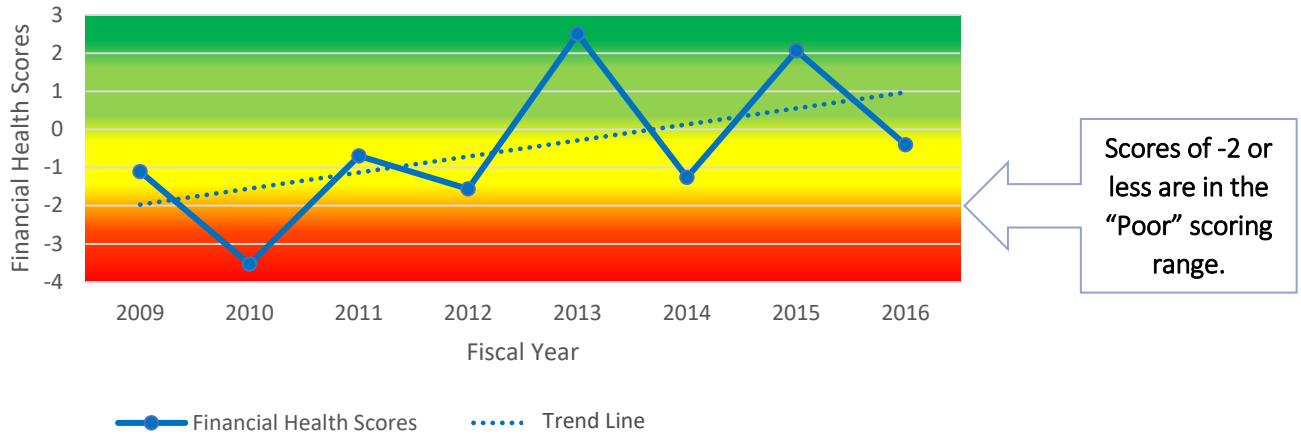
Most Recent FSI® Results

Annual FSI® Score (FY2016) = -0.40 (Fair)

FSI® Results over Time

Exhibit 29 shows NGCAH's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of NGCAH's FSI® scores by year and the blue dotted line displays the general trend or direction of the FSI® scores over time.

Exhibit 29
Time Series Plot of Financial Health for NGCAH



Source: Prepared by state auditor's staff using audited financial statements from NGCAH.

Interpretation

In FY2016, NGCAH's FSI® score declined by 119% from its FY2015 score of 2.07 to -0.40, partially due to a decrease in net position of $1.5 million from the previous year. NGCAH has fluctuated between scores in the "Fair" and "Excellent" scoring ranges from FY2009-16. The hospital's score dipped into the "Poor" scoring range in FY2010, but has generally improved over time from FY2009-16 despite the most recent decrease.

NGCAH did not meet the following individual component targets for FY2016:

- Profitability (Total Margin) Target (>/=4.0%) Score (-0.70%)
- Physical Facilities (Accumulated Depreciation) Target (</=50%) Score (82.76%)

OCH REGIONAL MEDICAL CENTER (OCHRMC)

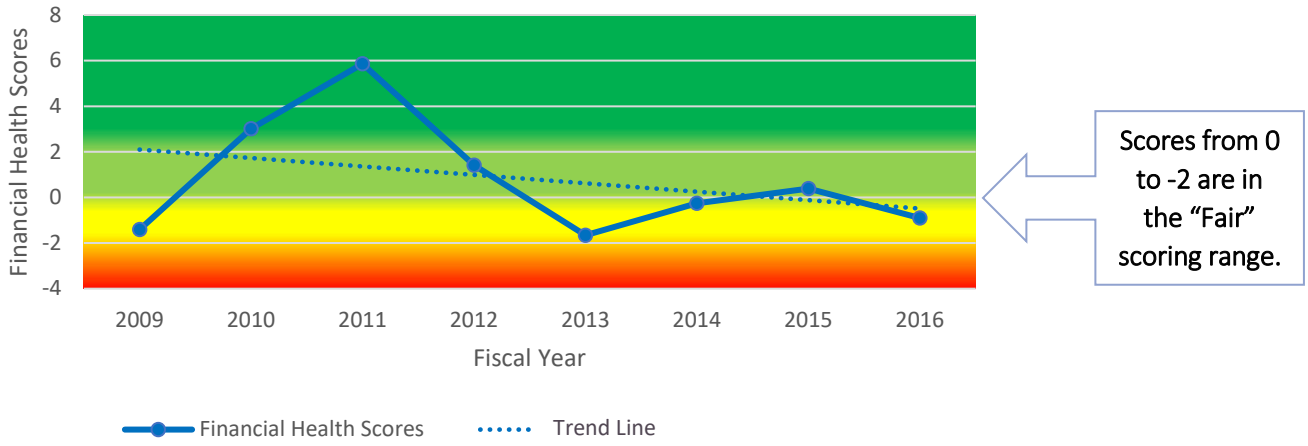
Most Recent FSI® Results

Annual FSI® Score (FY2016) = -0.91 (Fair)

FSI® Results over Time

Exhibit 30 shows OCHRMC's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of OCHRMC's FSI® scores by year and the blue dotted line displays the general trend or direction of the FSI® scores over time.

Exhibit 30
Time Series Plot of Financial Health for OCHRMC



Source: Prepared by state auditor's staff using audited financial statements from OCHRMC.

Interpretation

In FY2016, OCHRMC's FSI® score declined from its FY2015 score of 0.39 to -0.91 primarily due to a decrease in net position of $3 million from the previous year. OCHRMC's scores have generally worsened over time from FY2009-16 with scores ranging from "Excellent" to "Fair."

OCHRMC did not meet the following individual component targets for FY2016:

- Profitability (Total Margin) Target (>/=4.0%) Score (-0.26%)
- Liquidity (Days Cash on Hand) Target (>/=50%) Score (32.46%)
- Physical Facilities (Accumulated Depreciation) Target (</=50%) Score (55.24%)

SOUTH CENTRAL REGIONAL MEDICAL CENTER (SCRMC)

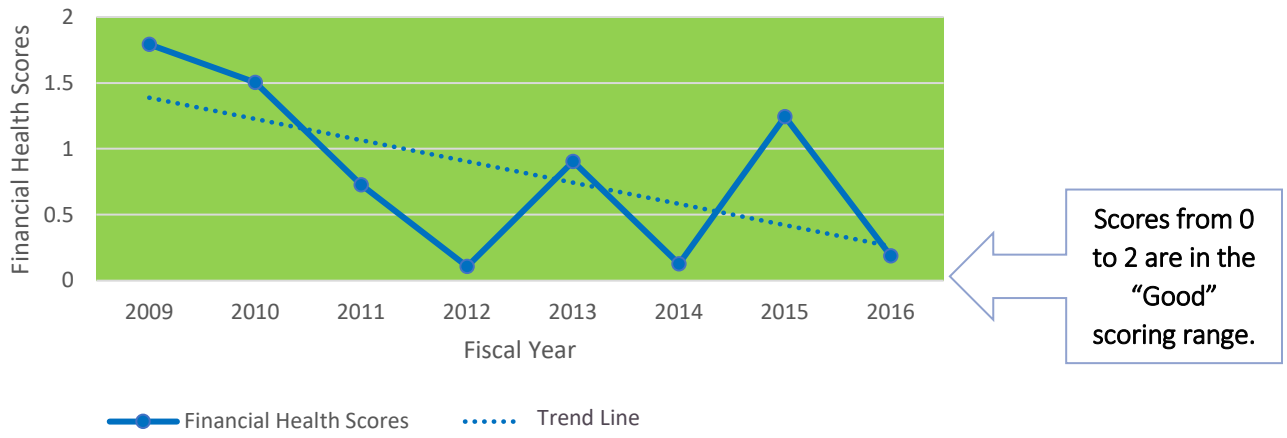
Most Recent FSI® Results

Annual FSI® Score (FY2016) = 0.19 (Good)

FSI® Results over Time

Exhibit 31 shows SCRMC's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of SCRMC's FSI® scores by year and the blue dotted line displays the general trend or direction of the FSI® scores over time.

Exhibit 31
Time Series Plot of Financial Health for SCRMC



Source: Prepared by state auditor's staff using audited financial statements from SCRMC.

Interpretation

In FY2016, SCRMC's FSI® score declined by 85% from its FY2015 score of 1.24 to 0.19 primarily due to a decrease in net position of $3.7 million from the previous year. SCRMC's scores have generally worsened over time from FY2009-16 while maintaining scores in the "Good" scoring range.

SCRMC did not meet the following individual component targets for FY2016:

- Profitability (Total Margin) Target (>/=4.0%) Score (0.79%)
- Physical Facilities (Accumulated Depreciation) Target (</=50%) Score (61.09%)

SOUTH SUNFLOWER COUNTY HOSPITAL (SSCH)

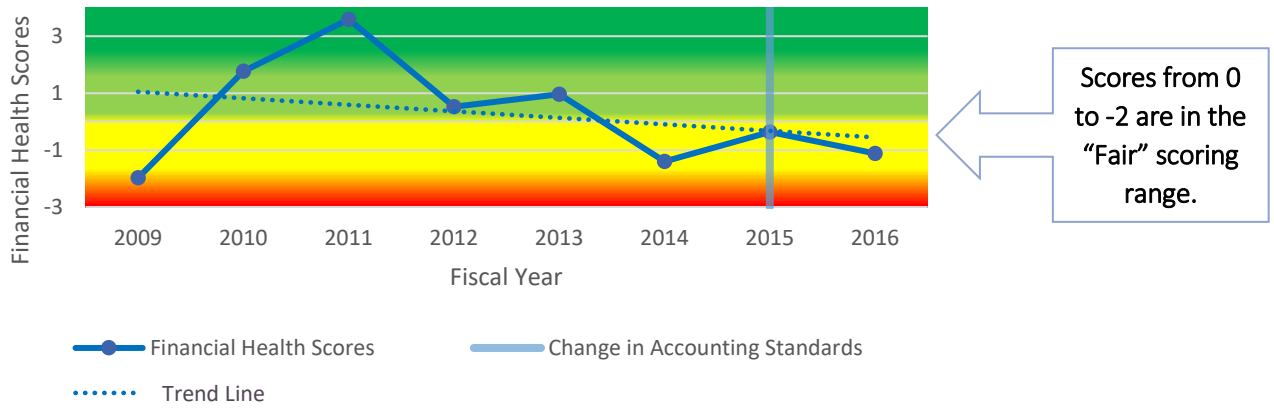
Most Recent FSI® Results

Annual FSI® Score (FY2016) = -1.12 (Fair)

FSI® Results over Time

Exhibit 32 shows SSCH's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of SSCH's FSI® scores by year, the blue dotted line displays the general trend or direction of the FSI® scores over time, and the vertical light blue line represents the year in which there was a change in accounting standards that had an impact on the hospital, which is explained in more detail below.

Exhibit 32
Time Series Plot of Financial Health for SSCH



Source: Prepared by state auditor's staff using audited financial statements from SSCH.

Interpretation

In FY2016, SSCH's FSI® score decreased 205% from its FY2015 score of -0.37 to -1.12 primarily due to an increase in total liabilities of $2.6 million. The hospital's increase in total liabilities in FY2016 is part of a cumulative increase of $15.7 million from pensions related to the application of Governmental Accounting Standards Board (GASB) Statement Numbers 68[50] and 71[51]. SSCH's scores have generally worsened over time from FY2009-16 with scores ranging from "Excellent" to "Fair."

SSCH did not meet the following individual component targets for FY2016:

- Financial Leverage (Debt Financing) Target (</=50%) Score (80.54%)
- Physical Facilities (Accumulated Depreciation) Target (</=50%) Score (67.46%)

[50] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 68 Accounting and Financial Reporting for Pensions*. Retrieved from http://www.gasb.org/jsp/GASB/Pronouncement_C/GASBSummaryPage&cid=1176160219492

[51] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 71 Pension Transition for Contributions Made Subsequent to the Measurement Date – amendment of GASB No. 68*. Retrieved from http://gasb.org/cs/ContentServer?c=Pronouncement_C&pagename=GASB%2FPronouncement_C%2FGASBSummaryPage&cid=1176163785801

SOUTHWEST MS REGIONAL MEDICAL CENTER (SMRMC)

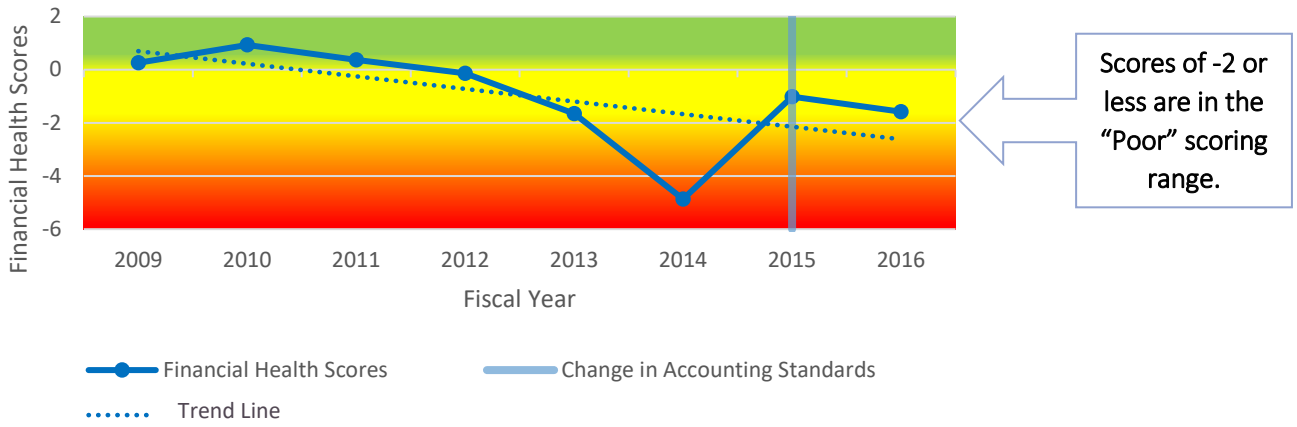
Most Recent FSI® Results

Annual FSI® Score (FY2016) = -1.58 (Fair)

FSI® Results over Time

Exhibit 33 shows SMRMC's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of SMRMC's FSI® scores by year, the blue dotted line displays the general trend or direction of the FSI® scores over time, and the vertical light blue line represents the year in which there was a change in accounting standards that had an impact on the hospital, which is explained in more detail below.

Exhibit 33
Time Series Plot of Financial Health for SMRMC



Source: Prepared by state auditor's staff using audited financial statements from SMRMC.

Interpretation

In FY2016, SMRMC's FSI® score decreased by 56% from its FY2015 score of -1.01 to -1.58 partially due to a decrease in net position of $1.1 million. In FY2015, SMRMC adopted Governmental Accounting Standards Board (GASB) Statement Number 68[52] which impacted the reporting of the hospital's defined contribution plan. The hospital reported contributions of $833,915 in FY2016. SMRMC's scores have generally worsened over time from FY2009-16 with scores ranging from "Good" to "Poor."

SMRMC did not meet the following individual component targets for FY2016:

- Profitability (Total Margin) Target (>/=4.0%) Score (0.17%)
- Liquidity (Days Cash on Hand) Target (>/=50%) Score (43.05%)
- Physical Facilities (Accumulated Depreciation) Target (</=50%) Score (79.31%)

[52] Governmental Accounting Standards Board (GASB). *Summary of Statement No. 68 Accounting and Financial Reporting for Pensions*. Retrieved from http://www.gasb.org/jsp/GASB/Pronouncement_C/GASBSummaryPage&cid=1176160219492

TYLER HOLMES MEMORIAL HOSPITAL (THMH)

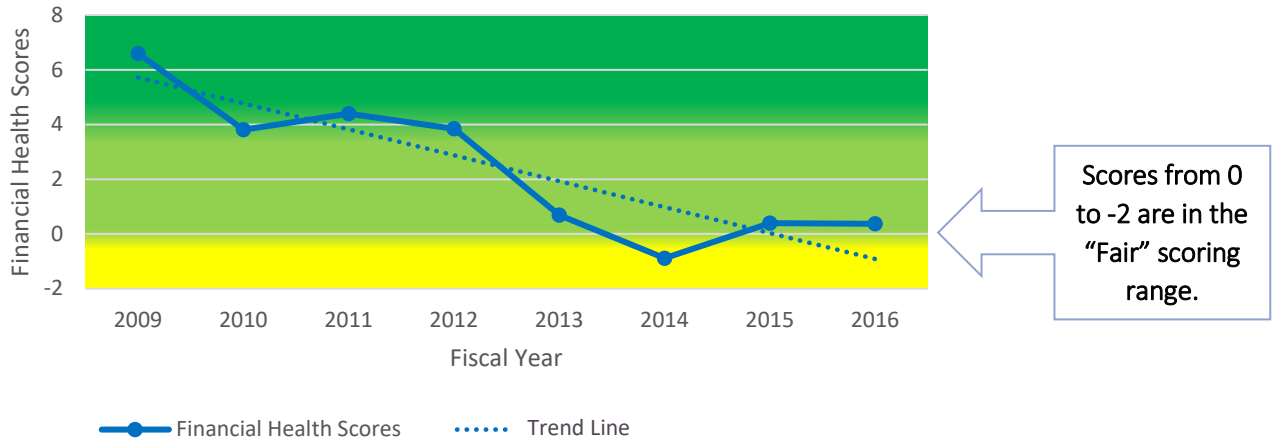
Most Recent FSI® Results

Annual FSI® Score (FY2016) = 0.37 (Good)

FSI® Results over Time

Exhibit 34 shows THMH's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of THMH's FSI® scores by year and the blue dotted line displays the general trend or direction of the FSI® scores over time.

Exhibit 34
Time Series Plot of Financial Health for THMH



Source: Prepared by state auditor's staff using audited financial statements from THMH.

Interpretation

In FY2016, THMH's FSI® score declined by 6% from its FY2015 score of 0.40 to 0.37 partially due to a decrease in net capital assets of $437,423 from the previous year. THMH's scores have generally worsened over time from FY2009-16 with scores ranging from "Excellent" to "Fair."

THMH did not meet the following individual component targets for FY2016:

- Profitability (Total Margin) Target (>/=4.0%) Score (-4.58%)
- Physical Facilities (Accumulated Depreciation) Target (</=50%) Score (78.80%)

WAYNE GENERAL HOSPITAL (WGH)

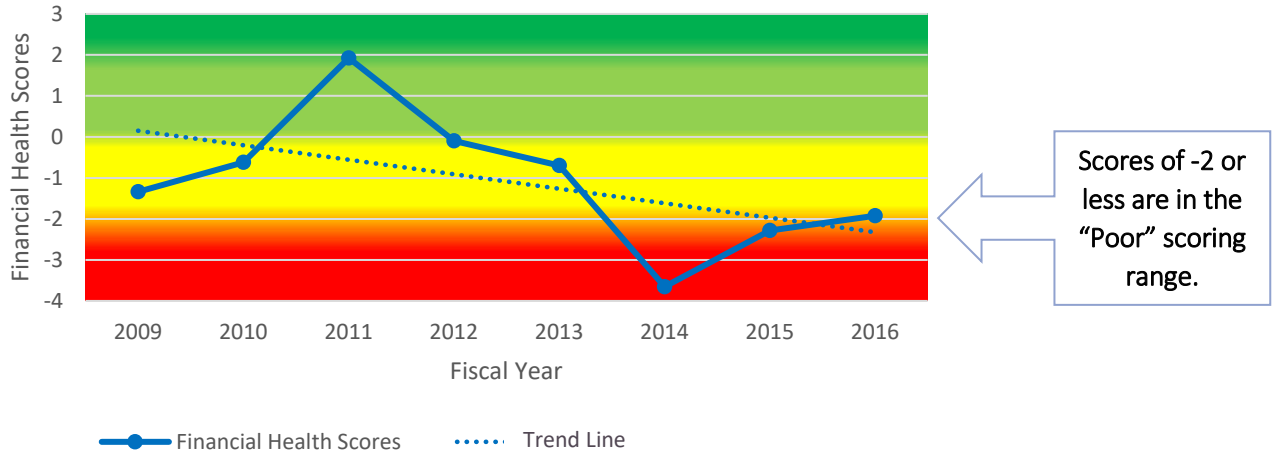
Most Recent FSI® Results

Annual FSI® Score (FY2016) = -1.93 (Fair)

FSI® Results over Time

Exhibit 35 shows WGH's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of WGH's FSI® scores by year and the blue dotted line displays the general trend or direction of the FSI® scores over time.

Exhibit 35
Time Series Plot of Financial Health for WGH



Source: Prepared by state auditor's staff using audited financial statements from WGH.

Interpretation

In FY2016, WGH's FSI® score increased by 15% from its FY2015 score of -2.28 to -1.93 partially due to a decrease in net capital assets of $619,742 from the previous year. WGH's scores have generally worsened over time from FY2009-16 with scores ranging from "Good" to "Poor."

WGH did not meet the following individual component targets for FY2016:

- Profitability (Total Margin) Target (>/=4.0%) Score (-4.76%)
- Liquidity (Days Cash on Hand) Target (>/=50%) Score (46.63%)
- Physical Facilities (Accumulated Depreciation) Target (</=50%) Score (69.13%)

YALOBUSHA GENERAL HOSPITAL (YGH)

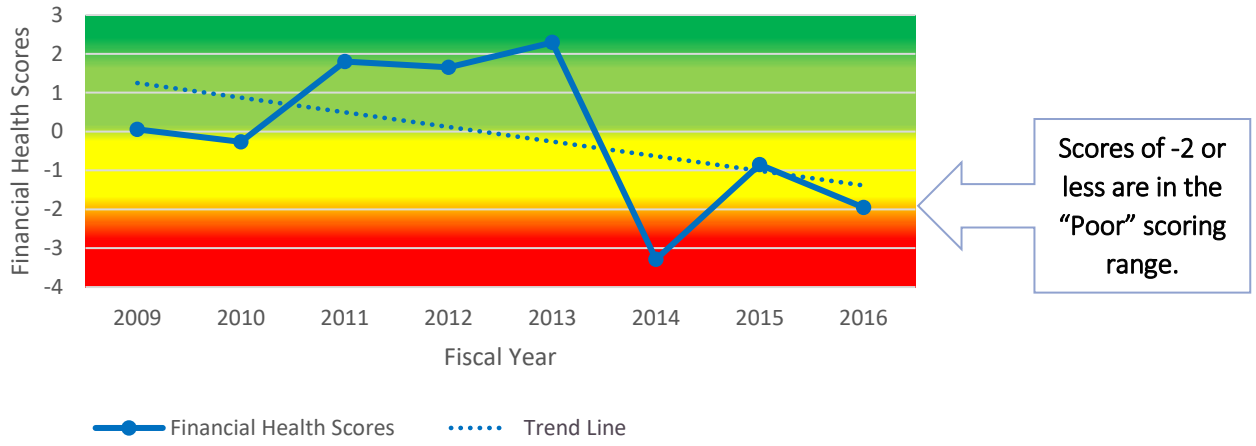
Most Recent FSI® Results

Annual FSI® Score (FY2016) = -1.95 (Fair)

FSI® Results over Time

Exhibit 36 shows YGH's financial health (FSI®) scores from FY2009-16. The solid dark blue line is a plot of YGH's FSI® scores by year and the blue dotted line displays the general trend or direction of the FSI® scores over time.

Exhibit 36
Time Series Plot of Financial Health for YGH



Source: Prepared by state auditor's staff using audited financial statements from YGH.

Interpretation

In FY2016, YGH's FSI® score decreased by 130% from its FY2015 score of -0.85 to -1.95 partially due to a decrease in net position of $688,091 from the previous year. YGH's scores have generally worsened over time from FY2009-16 with scores ranging from "Excellent" to "Poor."

YGH did not meet the following individual component targets for FY2016:

- Profitability (Total Margin) Target (>/=4.0%) Score (-3.22%)
- Liquidity (Days Cash on Hand) Target (>/=50%) Score (13.38%)

Recommendations

Hospitals that have endured continuously low financial performance generally have three options:

- closure;
- acquisition or merger; or
- improve financial performance.

For hospitals that fit this description and seek to improve their financial performance, OSA has provided a brief list of recommendations. Please note, this list is not exhaustive and may not be appropriate for every hospital's unique circumstances. The recommendations are not directed at a specific hospital and are simply a collection of standards/guidelines that may improve the financial performance of those hospitals that have not implemented some or any of the strategies listed.

Recommendation 1: In order to encourage locals to utilize a hospital's services rather than those of a competitor, OSA recommends evaluating patient statistics and the needs of the community compared to the services offered. Based on the results, develop a strategic plan to resolve identified issues. According to the Kaiser Foundation, a leading cause of rural hospital closures is privately insured patients taking their business elsewhere, which is typically prompted by a perception in the community that the hospital provides poor or low quality service. This may be due to a lack of investment in infrastructure, bad customer service, a lack of information in the community regarding services, physician referrals out of the area, patients who had to go to another facility for specialty care, such as surgery or obstetrics, or high readmission rates. Even if a hospital has not seen a reduction in privately insured patients, they may still suffer from the issues outlined above. Some ideas to resolve patient migration to competitors or simply to improve the community's perception of the hospital include the following:

- conduct a community health assessment,
- establish physician/hospital partnerships and strategic community alliances,
- implement customer service training/programs,
- invest in upgraded marketing/communication tools and messages, and
- develop a proactive plan to change community perceptions.[53]

Depending on hospitals' readmission rates, the plan might include the implementation of an evidence-based program to reduce potentially preventable readmissions. (Program options have been identified by the Flex Monitoring Group, a consortium of the Rural Health Research Centers at the Universities of Minnesota, North Carolina-Chapel Hill, and Southern Maine.)[54] In addition, establishing and taking full advantage of telemedicine programs may help increase business, while also improving patient satisfaction.

[53] National Rural Health Resource Center (2013). *Sustaining the Financial Viability of Critical Access Hospitals*. Retrieved from http://www.healthforum-edu.com/rural/PDF/2013/10RL13hillkaufmann.pdf

[54] Distel, E., Casey, M., & Prasad, S. (2016). *Reducing Potentially-Preventable Readmissions in Critical Access Hospitals*. Retrieved from http://www.flexmonitoring.org/wp-content/uploads/2016/03/PB43-readmissions.pdf

Recommendation 2: In order to improve hospitals' processes, OSA recommends following the best practices established by the National Rural Health Center (NRHC) for revenue cycle management, which promotes a patient centered revenue cycle and includes standards for the following: scheduling and pre-registration; patient registration and admissions; emergency room admissions; charge capture; timely filing of claims; billing and collections; denial management; and the monitoring of revenue cycle metrics.[55] At the very least, reviewing the standards established by the NRHC may inspire a new way of operating that will prove beneficial to both patients and hospitals.

Recommendation 3: In order to reduce hospitals' expenses, OSA recommends targeted reductions and cuts rather than across-the-board reductions and cuts. A comprehensive analysis of revenues and expenditures may uncover issues that will result in the streamlining of specific programs and/or the elimination of unprofitable service lines. Additionally, hospitals may find it beneficial to partner with nearby competitors or alliance partners to reduce expenses.[56] Investing in an electronic health records system is another option that could help executives efficiently identify which services are either underutilized or not utilized at all. Those services would be prime candidates for reduction or elimination. Hospitals may also consider joining a group purchasing organization that can help them "realize savings and efficiencies by aggregating purchasing volume and using that leverage to negotiate discounts with manufacturers, distributors and other vendors."[57]

Recommendation 4: In order to increase non-operating revenue, OSA recommends actively pursuing grant opportunities, which will provide resources to make necessary changes to improve financial performance. A couple of examples of grant opportunities for rural hospitals can be found at the Rural Health Information Hub website and include the following:

- Rural Economic Development Loan and Grant Program: "Offers loans and grants to assist in the economic development of rural areas, including funds for healthcare facilities and equipment; telecommunications networks; and job creation projects."[58]
- Transforming Clinical Practice Initiative: "Provides technical assistance, education, and support for healthcare providers in rural communities who are preparing for and participating in value-based payment models." [59]

Recommendation 5: In order to establish more efficient and effective policies, processes, and procedures, OSA recommends that hospital executives consider communicating with some of the top scorers in this study, such as Jasper General Hospital and Neshoba County General Hospital. By building a relationship with hospitals that face similar challenges, hospital administrators may discover a new way of doing something with proven success that they can implement at their hospital.

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[55] National Rural Health Recourse Center (2014). Rural Hospital Performance Improvement (RHPI) Project: *Best Practice Concepts in Revenue Cycle Management.* Retrieved from https://www.ruralcenter.org/sites/default/files/rhpi/hitguides/Best%20Practices%20in%20Revenue%20Cycle%20Management.pdf

[56] Langabeer, J. II (2008). *Hospital Turnaround Strategies*. Retrieved from http://journals.lww.com/hcmrjournal/pages/articleviewer.aspx?year=1992&issue=01710&article=00005&type=abstract

[57] Healthcare Supply Chain Association (n.d.). *A Primer on Group Purchasing Organizations: Questions and Answers.* Retrieved from https://c.ymcdn.com/sites/www.supplychainassociation.org/resource/resmgr/research/gpo_primer.pdf

[58] Rural Health Information Hub (2017). *Rural Hospitals Funding & Opportunities*. Retrieved from https://www.ruralhealthinfo.org/topics/hospitals/funding

[59] Ibid

Recommendation for Legislature: In order for some hospitals under review to remain financially viable, they will need resources to support operational changes. Aside from hospitals applying for grants, the Legislature should consider making some monetary resources available for these hospitals. During the 2017 legislative session, House Bill 318 and Senate Bill 2256 were presented that would have provided new grant opportunities, but they did not pass. Therefore, OSA recommends considering a reexamination of this issue and perhaps utilizing the previous bills to adopt relevant language that would provide needed financial resources to hospitals that care for some of Mississippi's most vulnerable citizens.

APPENDIX A: Scope & Methodology

OSA conducted this audit under the provision of §7-7-211 from the Mississippi Code of 1972. The purpose of this audit was to evaluate the financial health of Mississippi's independent county-owned rural hospitals to determine which hospitals are financially vulnerable, the factors leading to a poor financial health score, and recommendations for improvement. The audit covered fiscal years 2009 through 2016. The audit objectives were as follows:

- To determine state and/or federal laws and/or regulations that have impacted or may impact the financial viability of Mississippi's county-owned rural hospitals.

- To evaluate and score the financial performance of Mississippi's county-owned rural hospitals as excellent, good, fair, or poor as defined by the Financial Strength Index® or FSI® developed by William O. Cleverley specifically for the financial analysis of hospitals.

- To determine the factors that impacted each hospital's FSI® score, including the community and hospital characteristics that may affect the financial health of "Poor" performing hospitals, the number of employees and residents who would be impacted should the hospital cease operations, and the distance that residents would then be required to travel to the nearest hospital, which would display the economic and health ramifications of closure.

OSA auditors planned and performed the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for findings and conclusions based on the audit objectives. To answer the objectives, OSA reviewed each hospital's audited financial statements, publicly available data, and statutes/regulations relevant to the audit objectives. OSA then performed the following audit steps:

- Determined audit population based on the following criteria:
  - County-owned, general medical/surgical facilities according to the Mississippi State Department of Health (MSDH).
    - This was done by reviewing MSDH's *Directory of Mississippi Health Facilities* (2017). The hospital facilities coded as 11 were selected as it signifies that those facilities are general medical/surgical facilities with a public ownership status (state or local government).
  - Leased or owned by another entity according to the Mississippi State Department of Health.
    - This was done by reviewing MSDH's *Hospital Annual Applications* (2017) to verify that the county/city owns the physical building (it is not leased) and that the hospital is not owned by another hospital.
  - Qualify as rural under the Federal Office of Rural Health Policy's definition;
    - This was done by reviewing the Health Resources & Services Administration's (HRSA) *Rural Health Grant Eligibility Analyzer* (2015) to determine rural status.

Note: There were six hospitals that were included in the 2014 and 2015 reports that were excluded from the FY2017 report. Those hospitals are listed below along with the audit team's rationale for excluding them from the report.

- Calhoun Health Services in Calhoun County:
  - Renamed Baptist Memorial Hospital - Calhoun
  - According to the 2017 license application provided by MSDH, Baptist Memorial Hospital - Calhoun is a leased property. The lease began on 10/01/2016 and will expire on 09/30/2046.
- Field Memorial Community Hospital in Amite and Wilkinson Counties:
  - Renamed Field Health Systems
  - According to the license application provided by MSDH, Field Health Systems is a leased property. The lease began on 10/7/2015 and will expire on 10/7/2022.
- Grenada Lake Medical Center in Grenada County:
  - Renamed University of Mississippi Medical Center – Grenada
  - According to the 2017 license application provided by MSDH, the hospital is state owned with a lease that began on 01/01/2014 and ends on 12/31/2112.
- Hardy Wilson Memorial Hospital in Copiah County:
  - Renamed Copiah County Medical Center
  - According to the Federal Office of Rural Health Policy, Copiah County Medical Center is not considered rural.
- Montfort Jones Memorial Hospital in Attala County:
  - Renamed Baptist Medical Center - Attala
  - According to the 2017 license application provided by MSDH, Baptist Medical Center - Attala is no longer county owned and is a leased property. The lease began on 06/01/2015 and will expire on 05/31/2032.
- Natchez Regional Medical Center in Adams County:
  - Filed bankruptcy
  - Renamed Merit Health Natchez
  - According to the 2017 license application provided by MSDH, the hospital is listed as a corporation with headquarters in Franklin, TN.

- Determined audit methodology to analyze financial performance as follows:
  - Performed a literature review that included peer-reviewed academic journals, state and federal sources, non-profits, and universities. The literature review displayed the prominence of the Financial Strength Index® (FSI®) as a widely respected tool to assess the financial health of hospitals as it was designed by William O. Cleverley specifically for that purpose. In addition, OSA staff concluded that it was important to retain a level of consistency with the previous two OSA reports on this topic.

- Reviewed and analyzed the audit population's audited financial statements from FY2009 through FY2016 using the Financial Strength Index® (FSI®) developed by William O. Cleverley as follows:
  - The FSI® assesses a hospital's overall financial position through a blended score comprised of four (4) measures that are normalized by a historical industry average.

1. Total margin (TM), which measures profitability (higher is better)

$$\frac{\text{Excess of Revenues over Expenses}}{\text{Total Revenue}} \times 100$$

Excess of Revenues over Expenses = Increase (Decrease) in Net Position/Assets OR Excess of Revenues over (under) Expenses

Total Revenue = Operating Revenue & Non-operating Revenue

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2. Days cash on hand (DCOH), which measures liquidity (higher is better)

$$\frac{\text{Cash \& Cash Equivalents + Long-Term Investments}}{\text{Total Expenses}}$$

Total Expenses = Operating expenses, Non-operating expenses, Provisions for bad debt, and Depreciation

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3. Debt financing (DF) percentage, which measures financial leverage (lower is better)

$$\frac{\text{Total Assets – Net Assets}}{\text{Total Assets}} \times 100$$

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4. Accumulated depreciation (AD), which is a proxy measure for the age of physical facilities (lower is better)

$$\frac{\text{Accumulated Depreciation}}{\text{Property Plant \& Equipment}} \times 100$$

Property Plant & Equipment = Capital assets – Property and equipment

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FSI®

$$\frac{\text{TM} - 4.0}{4.0} + \frac{\text{DCOH} - 50}{50} - \frac{\text{DF\%} - 50}{50} - \frac{\text{AD\%} - 50}{50}$$

Scores = > 3.0 are Excellent, 0 to 3.0 are Good, -2.0 to 0 are Fair, and < -2.0 are Poor.

Note: Zero (0) represents the national median, so hospitals rated good or better are above the national median, while those rated fair or worse are below the national median.

APPENDIX B: Background

Role of Rural Hospitals. Mississippi's independent publicly owned rural hospitals play a critical role in providing medical care to citizens residing in rural areas. The Mississippi Legislature acknowledged the importance of rural hospitals in the Rural Health Availability Act (Miss. Code Ann. § 41-9-303, 2004) by declaring the following:

- In rural areas, access to health care is limited and the quality of health care is adversely affected by inadequate reimbursement and collection rates and difficulty in recruiting and retaining skilled health professionals.
- There is limited, if any, overlap in the geographic service areas of Mississippi rural hospitals.
- Rural hospitals' financial stability is threatened by patient migration to general acute care and specialty hospitals in urban areas.
- The availability of quality health care in rural areas is essential to the economic and social viability of rural communities.

Impact of Closure. Since 2010, five (5) rural hospitals have closed their doors and have not reopened as of September 29, 2017. These hospitals are listed below along with the month and year of closure.

- Patient's Choice Medical Center of Humphreys County (August 2013);
- Kilmichael Hospital of Montgomery County (January 2015);
- Merit Health Natchez-Community Campus of Adams County (November 2015);
- Pioneer Community Hospital of Newton County (December 2015); and
- Quitman County Hospital of Quitman County (September 2016).[60]

According to a 2016 study by the Kaiser Foundation, the factors that typically contribute to the closure of rural hospitals are as follows:

- challenging demographic, social, and economic pressures;
- privately insured patients going elsewhere for care;
- decreases in Medicare reimbursement rates;
- rate freezes or other reductions to Medicaid;
- transitions to Medicaid managed care;
- corporate business decisions; and/or
- slow adaptation to new payment and service models that emphasize preventative and primary care provided in outpatient settings.[61]

When rural hospitals close, the impact effects resident's health, as well as the local economy. Rural hospitals are often the largest employer in a community, so lost jobs, potential business closures, and an increased rate of population decline would result as physicians, physician assistants, nurses and other

[60] University of North Carolina, The Cecil G. Sheps Center for Health Services Research (n.d.). *82 Rural Hospital Closures: January 2010 - Present*. Retrieved from http://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/

[61] Rudowitz, R., Paradise, J., & Antonisse, L. (2016). The Henry J. Kaiser Family Foundation. *A Look at Rural Hospital Closures and Implications for Access to Care: Three Case Studies*. Retrieved from https://www.kff.org/report-section/a-look-at-rural-hospital-closures-and-implications-for-access-to-care-three-case-studies-issue-brief/

health providers leave the community. The loss of jobs and decline in population would result in a decrease in the tax base, which would reduce the resources available for schools and other public services. In addition, residents would be forced to travel to neighboring hospitals, which may be thirty minutes to an hour away, putting resident's health at risk. [62]

Rural vs Urban. The State of Mississippi has a 2016 estimated population of 2.9 million people, with 1.6 million living in rural areas.[63] Compared to urban populations, rural residents tend to be older, poorer, sicker, and more dependent upon public insurance programs, such as Medicare, Medicaid, and the Children's Health Insurance Program (CHIP).[64] The Mississippi State Department of Health's *State Rural Health Plan* states that Mississippi's low national health ranking is due to behavioral risk factors, health disparities, a lack of access, and an inadequate supply of health professionals in underserved areas.[65] Since rural areas are more isolated than urban areas, they tend to have higher rates of health professional shortages as rural communities struggle to attract primary care physicians to their area. Not only do rural areas struggle with access to care due to health professional shortages, but also because rural residents are more likely to lack transportation needed to reach a health care provider. These forces combined create additional challenges for rural hospitals compared to their urban counterparts.

Select Legislation Impacting Rural Hospitals.

Federal Laws

Hill-Burton: The Hill-Burton Act was passed by Congress in 1946. The law, which includes the requirement to provide free or reduced price health care to eligible patients, was established to help citizens with incomes at or below federal poverty guidelines. Tallahatchie General Hospital is the only independent county-owned rural hospital in Mississippi still required to meet the obligations of the Hill-Burton Act.

ACA: The Patient Protection and Affordable Care Act (ACA) was signed into law in 2010. Since passage of the ACA, the number of uninsured has decreased; however, rural hospitals have struggled to meet certain requirements of the law, such as reducing hospital readmissions. "Section 3025 of the Affordable Care Act added section 1886(q) to the Social Security Act, establishing the Hospital Readmissions Reduction Program, which requires the [Centers for Medicare & Medicaid Services] CMS to reduce payments to hospitals with excess readmissions."[66] In addition, rural hospitals must adapt to decreasing Medicaid Disproportionate Share Hospital (DSH) payments for providing care to the uninsured based on the expectation that more individuals will become insured under the ACA. The DSH payment reductions will continue through FY2020.[67]

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[62] Rudowitz, R., Paradise, J., & Antonisse, L. (2016). The Henry J. Kaiser Family Foundation. *A Look at Rural Hospital Closures and Implications for Access to Care: Three Case Studies*. Retrieved from https://www.kff.org/report-section/a-look-at-rural-hospital-closures-and-implications-for-access-to-care-three-case-studies-issue-brief/

[63] Rural Health Information Hub (2015). Mississippi. Retrieved from https://www.ruralhealthinfo.org/states/mississippi

[64] National Organization of State Offices of Rural Health (2016). *State Office of Rural Health Roadmap for Working with Vulnerable Hospitals*. Retrieved from https://nosorh.org/wp-content/uploads/2016/11/SORH-Roadmap.pdf

[65] Mississippi State Department of Health (2015). *Mississippi State Rural Health Plan*. Retrieved from http://msdh.ms.gov/msdhsite/_static/resources/66.pdf

[66] U.S. Department of Health & Human Services (n.d.). Agency for Healthcare Research and Quality. *Reducing Unnecessary Hospital Readmissions: The Role of the Patient Safety Organization.* Retrieved from https://pso.ahrq.gov/Topics

[67] Rudowitz, R. (2013). The Henry J. Kaiser Family Foundation. *How Do Medicaid Disproportionate Share Hospital (DSH) Payments Change Under the ACA?* Retrieved from https://www.kff.org/medicaid/issue-brief/how-do-medicaid-disproportionate-share-hospital-dsh-payments-change-under-the-aca/

Mississippi Laws

Rural Hospital Flexibility Act (1998): According to Miss. Code Ann. §41-9-207, the Mississippi State Department of Health (MSDH) is authorized "…to develop…a rural health-care plan that (a) provides for the creation of one or more rural health networks in Mississippi; (b) promotes regionalization of rural health services in Mississippi; and (c) improves access to hospitals and other health services for rural residents of Mississippi." The Act also places responsibility on MSDH for designating hospitals as critical access hospitals.

Rural Health Availability Act (2004): According to Miss. Code Ann. §41-9-301, "A rural hospital and any corporation, partnership, joint venture or any other entity, all of whose principals are rural hospitals, may negotiate and enter into cooperative agreements with other such persons in the state, subject to receipt of a certificate of public advantage governing the agreement as provided in this act." The intent of the law was to "…improve the availability and quality of health care for Mississippians in rural areas and enhance the likelihood that rural hospitals can remain open."

MississippiCAN: According to Miss. Code Ann. §43-13-117(H), The Mississippi Division of Medicaid (MDOM) "…is authorized to implement (a) a managed care program, (b) a coordinated care program, (c) a coordinated care organization program, (d) a health maintenance organization program, (e) a patient-centered medical home program, (f) an accountable care organization program, (g) provider-sponsored health plan, or (h) any combination of the above programs." The MDOM implemented MississippiCAN, which is a statewide care coordination program intended to improve beneficiary access to medical services, quality of care, and program efficiencies.[68] In 2017, MDOM awarded contracts to three coordinated care organizations, Magnolia Health Plan, Molina Healthcare, and UnitedHealthcare. As of 2016, approximately 65% of Medicaid beneficiaries were enrolled in the MississippiCAN program.[69] An assessment of how these changes have impacted Mississippi's rural hospitals is outside the scope of this project but would be a useful study to ensure tax dollars are being spent efficiently and effectively.

[68] Mississippi Division of Medicaid (n.d.). *Managed Care*. Retrieved from https://medicaid.ms.gov/programs/managed-care/

[69] Mississippi Division of Medicaid (2016). *Annual Report for Fiscal Year 2016.* Retrieved from https://medicaid.ms.gov/wp-content/uploads/2016/12/2016-Fiscal-Year-Annual-Report.pdf