



Peterson-Milbank
Program for Sustainable
Health Care Costs

Guide to Understanding Hospital Spending through Financial Analysis

Analytic Support Resource

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Executive Summary

Hospital spending, a major cost driver at the state and national levels, is expected to continue to outpace spending growth for other types of health care services over the next decade.¹ Fortunately, as states have turned to payer-reported cost growth benchmarking data to understand systemic cost centers and drivers, hospital-reported data are increasingly available to foster fact-based discussions around health system and hospital revenue and cost drivers.

1

Keanan S et al. National Health Expenditure Projections, 2022–31: Growth To Stabilize Once The COVID-19 Public Health Emergency End. Published June 2023. Accessed November 10, 2023. Available at: <https://www.healthaffairs.org/doi/10.1377/hlthaff.2023.00403>

Hospitals and hospital associations assert that spending growth may be necessary to preserve access to critical life-saving services in an environment where many facilities are confronting the lingering financial impact of the COVID-19 pandemic, lower payer-reimbursement distributions, workforce and capital inflation, and other operating challenges that are largely outside of their control.^{2,3} Fortunately, as states have turned to payer-reported cost growth benchmarking data to understand systemic cost centers and drivers, hospital-reported data are increasingly available to foster fact-based discussions around health system and hospital revenue and cost drivers.

This data analytic guide aims to provide state analysts with direction on how to use Audited Financial Statements, IRS Form 990 Filings, and Medicare Cost Reports (MCRs) to better understand the financial health of their local health systems and hospitals. This guide explores the strengths and limitations of these data sources, presents a framework for selecting the appropriate source(s) depending on available resources and analytic needs, and provides analytic instruction. Broadly, users will find that Audited Financial Statements often provide the most robust information on health system financial performance, but may be challenging to work with, while MCRs, made publicly available by the National Academy for State Health Policy in its [Hospital Cost Tool](#), may be quicker and easier to analyze using publicly available data tools, though data may be more limited (e.g., hospital-specific, provide a subset of the financial information).

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- 2 American Hospital Association. Massive Growth in Expenses and Rising Inflation Fuel Continued Financial Challenges for America's Hospitals and Health Systems." Published April 2022. Accessed December 21, 2023. Available at: <https://www.aha.org/system/files/media/file/2022/04/2022-Hospital-Expenses-Increase-Report-One-Pager.pdf>
 - 3 *Health Affairs* Forefront. Priselac TM. The Cost Shift, The Health Care Ecosystem, And Commercial Prices. Published September 25, 2023. Accessed February 6, 2024. Available at: <https://www.healthaffairs.org/content/forefront/cost-shift-health-care-ecosystem-and-commercial-prices>



Background

Hospital spending is a major health care cost driver at the state and national levels. According to the Center for Medicare and Medicaid Services' (CMS) National Health Expenditure forecasts, hospital spending is projected to increase at an average rate of 5.8% annually from 2022 to 2031, outpacing growth in spending on physician and clinical services (5.3%) and prescription drugs (4.6%).⁴

However, hospitals and hospital associations have cautioned that potential policy actions to restrain resources could have unintended consequences, as many health systems and hospitals confront cost drivers outside of their control (e.g., lingering financial challenges due to the COVID-19 pandemic, workforce cost challenges, low Medicare and Medicaid reimbursement rates).^{5,6,7,8} Hospitals have indicated that policies that target their ability to compete and set prices in the private market could result in facility or service-line closures.

To meaningfully engage in fact-based discussions about health care cost growth accountability, states are increasingly seeking a data-driven understanding of hospitals' financial circumstances. Fortunately, states have access to multiple data sources that may be used to understand hospital cost centers, drivers, and profits. It can be, however, challenging to navigate which of these sources to use to answer questions of interest. This guide will serve as an intermediate level "how-to" for states undertaking hospital financial analyses.

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- 5 The Financial Stability of America's Hospitals and Health Systems Is at Risk as the Costs of Caring Continue to Rise. American Hospital Association. Published April 2023. Accessed November 10, 2023. Available at: <https://www.aha.org/costsofcaaring>
 - 6 The Financial Effects of Hospital Workforce Dislocation. Kauffman Hall. Published May 2022. Accessed November 10, 2023. Available at <https://www.kauffmanhall.com/insights/research-report/special-workforce-edition-national-hospital-flash-report>
 - 7 Massive Growth in Expenses and Rising Inflation Fuel Continued Financial Challenges for America's Hospitals and Health Systems. American Hospital Association. Published April 2022. Accessed December 21, 2023. Available at: <https://www.aha.org/system/files/media/file/2022/04/2022-Hospital-Expenses-Increase-Report-One-Pager.pdf>
 - 8 Priselac TM. The Cost Shift, The Health Care Ecosystem, And Commercial Prices. *Health Affairs Forefront*. Published September 25, 2023. Accessed February 6, 2024. Available at: <https://www.healthaffairs.org/content/forefront/cost-shift-health-care-ecosystem-and-commercial-prices>



Hospital Financial Data Source Overview

When embarking on hospital financial analyses, state analysts may consider multiple data sources to examine hospital financial characteristics.⁹ This guide will present an overview of the following three key data sources and considerations for use.¹⁰

9 Some states collect and report state-specific hospital financial information. For example, the Center for Health Information and Analysis in Massachusetts collects **annual and quarterly financial reports** from hospitals, health systems, and affiliated physician organizations.

10 For more information on hospital financial analyses and related data sources, see **"A Community Leader's Guide to Hospital Finance."** Prepared for The Access Project by S. Lane, E. Longstreth, V. Nixon, and N. Kane.

1 Audited Financial Statements are submitted by **nonprofit and for-profit hospitals and health systems** to a variety of entities to obtain and maintain bond financing, support lender and private investor transparency, and aid state and federal oversight. Audited Financial Statements include detailed facility and health system financial data, including data on income, changes in net assets, cash flow, and debt. Audited Financial Statements are discussed in Section IV.

- **Analysts may wish to use Audited Financial Statements** when seeking to:
 - Conduct financial analyses where capable and trained staff are available
 - Analyze a comprehensive set of health system financial metrics (e.g., days cash on hand, investment income, long-term debt, average age of plant)
 - Analyze financial metrics at the health system-level rather than the facility-level
 - Access the most recent financial data possible

2 IRS Form 990 Filings (“990s”) are submitted by **non-governmental nonprofit hospitals and health systems** to the IRS and contain similar, but not directly comparable, information as Audited Financial Statements. IRS Form 990 Filings include data relevant to tax-exemption, including information regarding fund-raising expenses, community benefit spending, and executive compensation. IRS Form 990 Filings are also discussed further in Section IV.

- **Analysts may wish to use IRS Form 990 Filings** when seeking to:
 - Understand financial performance of a health system or individual hospitals (depending on filing status of return), particularly when Audited Financial Statements are not available
 - Understand hospital community benefit, including free care and charitable activities, compensation schedules, and the cost/benefit of fundraising

3 Medicare Cost Reports (MCRs) are submitted by all **nonprofit and for-profit Medicare-certified institutional providers** to CMS and are used for determining government payment rates and other types of funding. MCRs collect detailed financial data, information on facility characteristics, and costs and charges by cost center. Data drawn from MCRs are available in multiple publicly available databases. Section V of this guide will focus on MCR data available through the:

- **CMS Healthcare Provider Cost Reporting Information System (HCRIS)**
- **National Academy for State Health Policy (NASHP) Hospital Cost Tool (HCT)**
- **Analysts may wish to use MCR data via HCRIS** when seeking to:
 - Conduct financial analyses where capable and trained staff are available and have access to sophisticated data analytic tools (e.g., SAS, R)
 - Analyze costs by cost center, identify specific government subsidies, or review data on FTEs that are not available via the NASHP HCT, Audited Financial Statements, or IRS Form 990 Filings

- **Analysts may wish to use MCR data via the NASHP HCT** when seeking to:
 - Conduct financial analyses with limited capable and trained staff
 - Conduct quick comparative analyses across states, health systems, or facilities within a state
 - Analyze financial metrics like profitability, costs, and revenue at the hospital-level when Audited Financial Statements and IRS Form 990 Filings are not available for all facilities of interest
 - Analyze labor and other costs in context and over time
 - Analyze financial metrics (e.g., cost-to-charge ratios, operating profit margin by payer type, RAND 4.0 commercial prices, commercial breakeven points) or facility characteristics (e.g., number of beds, patient discharges, staffing FTEs) that are not included in Audited Financial Statements or IRS Form 990 Filings

Each of these data sources has strengths and limitations, which are discussed throughout this guide and summarized in Table 1.

States should consider their resources and analytic needs when determining which data source(s) to use in their analyses. States may also look for opportunities to engage hospital and health system representatives in assessing the data to provide additional context.

Audited Financial Statements, IRS Form 990 Filings, and MCRs contain overlapping data, but it is important to note that each uses a different methodology, and data are not directly comparable across these data sources. Audited Financial Statements and IRS Form 990 Filings are financial accounting reports designed to help stakeholders understand whether hospital systems generate enough revenue and other sources of income to cover their financial requirements. MCRs are cost accounting reports designed to help the Centers for Medicare and Medicaid Services (CMS) understand detailed costs associated with providing hospital services at the facility level.

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Given these differences, analysts may view these as complimentary data sources. Yet, their differences also make it critical that analysts leverage the same data source(s) when analyzing the finances of multiple hospitals or health systems. If evaluating hospital or health system financial performance against a national median or other comparator, analysts should ensure that data sources and calculations are consistent across data sources.

Note on Proprietary Hospital Financial Data Sources

In addition to the data sources discussed in this guide, there are many proprietary tools that compile and curate hospital financial data to support analyses, including:

- **American Hospital Directory (AHD)** which compiles MCR information and other data for over 7,000 hospitals in a user-friendly format;
- **American Hospital Association Annual Survey Database** which includes hospital financial data as well as detailed hospital operating and utilization measures for facilities and health systems; and
- **Kauffman Hall Hospital Flash Reports** which provide monthly, nationwide hospital financial performance metrics.

TABLE 1. Comparison of Key Features of Hospital Financial Data Sources

Data Source					
	Audited Financial Statements	IRS Form 990 Filings	HCRIS Data	Medicare Cost Reports (MCRs)	
				NASHP Hospital Cost Tool (HCT)	
Reporting Entities	Nonprofit (public and private) and publicly owned for-profit hospitals and health systems	Private nonprofit hospitals	Medicare-certified institutional providers		
Purpose	Used as the reporting standard on which lending, bond ratings, and other capital market decisions are based; used by some state regulators to review hospital finances	Used by the IRS to collect information about tax exempt organizations	Used by CMS for determining government payment rates and other types of funding		
Strengths	<ul style="list-style-type: none"> • Most detailed hospital financial reporting; used by bond rating agencies¹¹ • Reports at the health system level, including all holdings of the health system; some also include data at the facility or entity level • Data available within three to six months of the end of a hospital/system's fiscal year; quarterly unaudited data available during the fiscal year • Financial metrics reported using Generally Accepted Accounting Principles (GAAP) • Detailed footnotes describing reporting policies and practices 	<ul style="list-style-type: none"> • Data available for all private nonprofit hospitals • Includes some information on community-benefit spending not captured in other data sources 	<ul style="list-style-type: none"> • Readily available for hospitals in all 50 states • Includes consolidated historical data supporting trend analyses • Can be linked to other data sources using hospital CMS Certification Numbers (CCNs) • Publicly available data documentation • Federally standardized data source • Can easily stratify analyses by state 	<ul style="list-style-type: none"> • Includes detailed data on facility cost drivers not included in other data sources • Provides more analytic flexibility than NASHP HCT 	<ul style="list-style-type: none"> • User-friendly online tool that can easily generate visualizations • Includes calculated and value-added data fields not available via HCRIS data • Excel spreadsheets containing key data elements available to download • Includes a hospital cost calculator that allows reference to MCR fields and formulas for the HCT • Addresses changes to hospital system affiliations

11 Kane N, Berenson R et al. Why Policymakers Should Use Audited Financial Statements to Assess Health Systems' Financial Health. J. Health Care Finance. Published Summer 2021. Accessed December 21, 2023. Available at <https://www.healthfinancejournal.com/index.php/johcf/article/view/265>

Data Source				
Medicare Cost Reports (MCRs)				
	Audited Financial Statements	IRS Form 990 Filings	HCRIS Data	NASHP Hospital Cost Tool (HCT)
Limitations	<ul style="list-style-type: none"> • May not be publicly available for all hospitals in all states • Health systems vary in terms of how financial metrics are reported and analysts will need to standardize data before undertaking comparative analyses • Data are stored in PDFs • Often do not include data on facility characteristics (e.g., bed count, detailed labor costs) • Reports information at consolidated level (i.e., “Salaries” may include employees of hospitals, insurance company, for profit businesses, foundations) 	<ul style="list-style-type: none"> • Financial metrics not reported using GAAP • Data lag (up to two years) • Missing financial metrics that are available in Audited Financial Statements (e.g., unrealized gains, losses) • Some are submitted at the system level, while others are submitted individually; do not always clearly disclose which entities are included and whether information is captured at the hospital-, system- or system subset-level • Data unavailable for for-profit institutions and government-owned institutions 	<ul style="list-style-type: none"> • Data are not audited • Financial metrics not reported using GAAP standards and hospitals follow CMS established MCR instructions to complete their MCRs¹² • Does not include cash flow statement • Missing key financial metrics (e.g., liquidity, debt capacity and solvency, and capital investments) • Data lag (up to two years)¹³ • Data are only available at facility level 	<ul style="list-style-type: none"> • Does not include all fields captured in raw HCRIS data
			<ul style="list-style-type: none"> • Requires software to analyze (e.g., R, SAS) • Data structure and field names not intuitive. Includes data dictionary 	

12 Variation may exist in how hospital interpret and utilize the MCR instructions.

13 Asper F. Understanding the Data. ResDac. Published 2013. Accessed December 21, 2023. Available at <https://resdac.org/sites/datadocumentation.resdac.org/files/Understanding%20the%20Data%20%28Slides%29.pdf>



Approaching Hospital Financial Data Analyses: Audited Financial Statements and IRS Form 990 Filings

Audited Financial Statements are trusted public sources of information on hospital and health system financial performance.¹⁴

Most health care systems are required to produce Audited Financial Statements to raise capital through credit or equity (in the case of for-profit systems) markets. They are made available for bondholders and are sometimes also collected by states. Audited Financial Statements provide detailed information about a health system's financial health and operations, use a consistent scheme to report data (Generally Accepted Accounting Principles, or GAAP¹⁵), and must be certified by external experts. Health systems can be legally liable for inaccurate or misleading information in their Audited Financial Statements.

Audited Financial Statements include four statements, produced annually approximately three to six months following the end of the hospital's fiscal year:

- **Consolidated health system balance sheet:** Information related to the health system's assets (e.g., cash; property, plant, and equipment), liabilities (e.g., long-term debt, pension obligations), and net assets (equity).
- **Consolidated health system income statement and changes in net assets:** Income and expenses for the fiscal year under review (e.g., revenue and expenses for all owned entities, including hospitals, for-profit companies, affiliated entities, joint ventures, subsidiaries), unrealized gains and losses, and transfers to other entities.
- **Consolidated health system cash flow statements:** Funds flowing into and out of the organization during the fiscal year under review (e.g., cash generated by or used for operating activities; financing activities; investment activities).
- **Footnotes to the financial statements of the health system and its member hospitals:** Detailed discussion of information contained in the three previous statements. Footnotes often contain more detail regarding hospital characteristics, major changes to the organization's finances during the past fiscal year, strategic initiatives and investments, and information pertinent to future financial health (e.g., long-term debt; pension and retiree health obligations).

For most purposes, *health system* consolidated financial reports provide more robust information on financial performance than reports from individual hospitals comprising a system, because the financial viability of any one hospital in a system often depends more on the system's overall financial health than on that of the member hospital. However, complementary information available in MCRs or IRS Form 990 Filings may help more fully explain specific hospital financial indicators that affect overall hospital or health system performance.

For most purposes, *health system* consolidated financial reports provide more robust information on financial performance than reports from individual hospitals comprising a system, because the financial viability of any one hospital in a system often depends more on the system's overall financial health than on that of the member hospital.

15 Most hospitals use standards for GAAP set by the Financial Accounting Standards Board (FASB); governmental hospitals use standards for GAAP set by the Governmental Accounting Standards Board, which applies to state and local governments.

While Audited Financial Statements of health systems provide detailed financial reporting and users can expect accuracy and external review, they can be time consuming to standardize and analyze and require adequate financial literacy including basic accounting knowledge. They are also not universally available from public sources, though most are publicly available. Audited Financial Statements do not include specific hospital revenue and expense detail, unless unconsolidated supplemental schedules are included; the footnotes to the financial statements often provide greater detail, though the contents are less standardized.

1. Engaging with Audited Financial Statements to Assess Hospital Finances

Data Access

Several national sources make hospital Audited Financial Statements available to the public, including but not limited to:

- **The Electronic Municipal Market Access (EMMA)** system, a free source of financial information for large nonprofit hospitals.
- **Digital Assurance Certification (DAC) Bond**, which helps municipal bond issuers, including hospitals, meet their ongoing disclosure requirements.
- **The Federal Audit Clearinghouse**, a web-based system operated by the federal government which posts required audits from non-federal entities that expend \$750,000 or more in federal awards in a fiscal year, as required by the Single Audit Act.
- **The Electronic Data Gathering, Analysis, and Retrieval system (EDGAR)**, an electronic database of required Securities and Exchange Commission (SEC) filings by public for-profit companies.¹⁶

Additional Information regarding these data sources and how to access them is included in Appendix B.

In some states, hospitals are required to file Audited Financial Statements and other financial reports to a state agency (e.g., agencies that regulate hospitals and other providers; health care authorities or health care policy agencies; or state health data agencies). Appendix B provides several examples of the types of Audited Financial Statement data collected by agencies in Oregon, Colorado, and Maine.

Analysts should note that the data sources above include PDF versions of Audited Financial Statements. Analysts may extract data from these PDFs into Excel workbooks to facilitate analyses more easily. Additional details on how to transfer data from PDFs into Excel workbooks are included in Appendix D.

¹⁶ In limited circumstances, privately held hospitals and systems may be required to do the same if they are material costumer or affiliates of publicly traded companies, representing a significant percentage of the publicly traded company's revenue.

Using Audited Financial Statements to Understand Hospital Financial Status

States or analysts may seek out hospital and health system Audited Financial Statements to understand a health system or stand-alone hospital's current finances and its future outlook. The detail, accuracy, and health system-level reporting from Audited Financial Statements makes them valuable data sources.

Analysis of hospital Audited Financial Statements requires a basic understanding of financial accounting and financial statements, financial analysis, and hospitals. Ideally, states should have an assigned professional with an MBA or accounting degree who is familiar with the analysis of Audited Financial Statements and has some understanding of how hospitals and health systems operate.

Key aspects of hospital finances that can be analyzed from Audited Financial Statements include **profitability, liquidity, debt capacity and solvency, and capital investment**. Eight key financial indicators,¹⁷ two in each domain, are outlined in Table 2 below, along with national median ranges ("reference ranges") against which analysts may compare hospital or health system data. These reference ranges are informed by Fitch Ratings national medians for more than 200 non-profit hospitals and health systems from 2013–2022 (most recent data available).¹⁸ **The reference ranges provide an indicator of relative financial health, but do not necessarily represent a desirable or undesirable level of financial performance.** Indicators are discussed more in Appendix A.

Key aspects of hospital finances that can be analyzed from Audited Financial Statements include **profitability, liquidity, debt capacity and solvency, and capital investment**.

17 The eight key financial indicators discussed in this report were selected in consultation with Dr. Nancy Kane, Professor of Health Policy and Management, Emerita, Harvard T.H. Chan School of Public Health.

18 Median performance for not-for-profit health systems for 2013–2022 is provided with the permission of Fitch Ratings. This period is exceptional due to the COVID-19 pandemic, due to the impact of the pandemic on health care utilization patterns and due to pandemic-related policies (e.g., federal relief grants, Medicare advanced payments, and tax deferrals). In its July 2023 review of 2022 hospital performance, Fitch observed that "2023 medians (using audited 2022 data) largely show sizable and widespread deterioration in operating margins and balance sheet metrics, a stark contrast to last year" and "While we believe 2023 financial results will be better than those of 2022, this will not represent a full rebound, given the tremendous ongoing pressures on many credits in the sector." Fitch Ratings. "2023 Median Ratios: Not-for-Profit Hospitals and Healthcare Systems." Accessed December 27, 2023. Available at: <https://www.fitchratings.com/research/us-public-finance/2023-median-ratios-not-for-profit-hospitals-healthcare-systems-25-07-2023>

TABLE 2. Key Financial Indicators with Reference Ranges

Key Financial Indicators	Key Questions for States	Reference Range
Profitability		
Operating EBITDA ¹⁹ Margin	Are the hospital's core activities profitable, excluding financing and tax expenses?	8-10%
Total EBITDA Margin	Are the hospital's total activities profitable (including non-operating activities), excluding financing and tax expenses?	10-12%
Liquidity		
Days Cash on Hand (all unrestricted sources)	For how long could the hospital operate and pay its bills without additional income?	100-200
Days in Accounts Receivable	How long does it take the hospital to collect payments from payers and patients?	40-50
Debt Capacity & Solvency		
EBITDA Debt Service Coverage	Are the hospital's earnings enough to pay its debt?	3-4
Long-Term Debt to Capitalization	How much debt does the hospital hold, compared to its available assets?	35-40%
Capital Investment		
Capital Expenditures to Depreciation	Is the hospital replacing fixed assets as they age and investing in new assets?	105-115%
Average Age of Plant (Years)	How old, on average, are the hospital's fixed assets?	10-12

To support state analysts in standardizing and analyzing Audited Financial Statements and calculating the eight key financial performance indicators, analysts may refer to the accompanying Bailit Health attachments to this guide – the [Hospital Financial Analysis Template](#) and [Guide to Understanding Hospital Spending through Financial Analysis – Analytic Support Resource: Illustrative Case Studies](#). The *Hospital Financial Analysis Template* includes step-by-step instructions for users working with tables extracted from Audited Financial Statements, including how to add raw data tables to the analysis template and how to standardize Audited Financial Statement data using the categories provided to produce the key indicators listed above. The *Hospital Financial Analysis Case Studies* include three brief case studies analyzing Audited Financial Statements for major health systems and comparing the results to these reference ranges as examples of how analysts might interpret their findings.

¹⁹ EBITDA = Expenses Before Interest, Taxes, Depreciation, and Amortization.

FIGURE 1. Hospital Financial Analysis Template



Hospital Financial Analysis Template

This **Hospital Financial Analysis Template** is a companion to *the Guide to Understanding Hospital Spending through Financial Analysis*, developed by Manatt Health Strategies and Bailit Health with support from the Peterson-Milbank Program for Sustainable Health Care Costs.

Health System Name (State), Date Range

Enter Unit (dollars or thousands) here

Fill in Health System Name, State, and most current year in

	NAME State YEAR	NAME State NA	NAME State NA	NAME State NA	NAME State NA	NAME State NA	Navigate to...
							Key Ratios and Financial In
							Balance Sheet
							Income Statement
							Raw Data

ASSETS

	NAME State YEAR	NAME State NA	NAME State NA	NAME State NA	NAME State NA	NAME State NA	NOTES
Current Assets							
Cash and investments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	- Examples: Cash in hand, b
Current assets - limited use	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	- Examples: Funds set aside
Net patient accounts receivable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	- Examples: Outstanding pa
Current assets with donor restrictions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	- Examples: Pledges receiva
Other current assets	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	- Examples: Prepaid expend
Total Current Assets - Fill from Balance Sheet	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	- GREEN background indicat

State Analyses at Work

Oregon Health Authority Hospital Reporting Program

The Oregon Health Authority’s Hospital Reporting Program collects, maintains, and analyzes hospital financial and utilization data to inform policymaking. The program maintains three datasets: Databank, a database of self-reported hospital financial and utilization information; Audited Hospital Financial Data; and Hospital Community Benefit Data. The data are used to produce regular reports that are available through the agency’s [website](#).

- OHA’s [brief](#) summarizing the Q2 2023 update of the Oregon Hospital Financial and Utilization Dashboard found that acute care hospital total operating revenue and net patient revenue grew faster than total operating expenses.
 - Compared to Q2 2022, total operating revenue and net patient revenue increased 12 percent, respectively, while total operating expenses increased six percent.
- The brief also found that both operating and total margins were positive in Q2 2023 for the first time in five quarters, indicating collective profitability of acute hospitals in the state.

Colorado Department of Health Care Financing Hospital Expenditure Reports

The Colorado Department of Health Care Financing and Policy collects data on historic and recent Audited Financial Statements and Medicare Cost Reports, historic and recent financial and utilization metrics, acquisition transactions, and affiliation transactions, and considerable other hospital information. The agency produces an annual Hospital Expenditure Report that draws from Medicare Cost Reports, Audited Financial Statements, and the completion of a [data submission template](#).

- The [2023 Hospital Expenditure Report](#) assessed trends in hospital financials from 2014 to 2021. During this period, hospital patient revenues grew faster than operating expenses.
- Uncompensated care decreased from 2015 to 2018 but increased consistently from 2019 to 2021, driven by increases in charity care.
- The report also noted a shift in payer mix from commercial to public programs, but noted this trend was not consistent across hospital groups in the state.

After state analysts have standardized Audited Financial Statement data and calculated performance for each metric, they can begin to draw conclusions from their analyses. States should consider performance in totality, and not make a summary assessment of health system performance based on one metric alone. For example, two health systems who experience 1% operating losses for the most recent year may be at different risks of distress: Health System X, with a 3% total margin gain, 300 days cash on hand, and a relatively low level of debt may be at less risk of distress than Health System Y, which had a breakeven total margin, only 60 days cash on hand, and high levels of debt. It is also important to understand the degree to which profitability depends on government subsidies such as Medicaid Supplemental Funding, COVID-19 relief grants, or local government tax revenues. These are not “guaranteed” recurring revenue sources because they are subject to annual state and local government budget determinations.

When assessing performance, analysts should also consider financial performance *over time*, typically three to five years; operating margin and total margin can demonstrate significant volatility from year-to-year and short-term performance can be misleading. Looking at trends over several years provides a more accurate picture of the financial health of the system, especially for the metrics of EBITDA Margin, Days Cash on Hand, and capital expenditure measures.

Analysts may also consider the relationship between the eight key metrics. For example:

- A high level of long-term debt (as demonstrated in Long-Term Debt to Total Capitalization) is a generally unfavorable indicator unless the Debt Service Ratio is high; potentially indicating high cash flow from operations and the ability to carry more debt.
- A higher number of Days Cash on Hand is a generally favorable indicator, unless the Capital Expenditures to Depreciation Ratio is very low or Average Age of Plant is very high (old); this may indicate insufficient investment in facilities, technology, and equipment.
 - Major rating agencies consider 90%–120% to be adequate or the baseline expectation for Capital Expenditures to Depreciation, noting that under 100%, assets are depreciating faster than the health system is investing in them.^{20,21} A three- or five-year average can help analysts consider investment over time.

20 To calculate Cumulative Capital Expenditures to Depreciation, divide the sum of all capital expenditures during the years of interest by the sum of depreciation over those same years. Multiply by 100 to convert to a percentage.

Cumulative Capital Expenditures to Depreciation = (Sum of Capital Expenditures) / (Sum of Depreciation Expenditures) x 100.

21 Fitch Ratings uses 120% over five years as its “baseline” assumption when rating hospitals and health systems. Standard & Poor classifies single-year Capital Expenditures to Depreciation of 100%–120% as “adequate” for stand-alone hospitals; the range is 90%–110% for health systems. Note that high interest rates may impact health systems’ ability and willingness to finance capital projects, which may lead to higher Average Age of Plant ranges; U.S. Not-For-Profit Hospitals and Health Systems Rating Criteria. Fitch Ratings.

- A lower number of Days Cash on Hand is a generally unfavorable indicator, unless the Audited Financial Statement demonstrates that cash has been used for significant strategic or capital investments.
 - Major rating agencies consider Days Cash on Hand below 75–110 to be a risk factor, regardless of recent investments.²²
 - Conversely, very high Days Cash on Hand indicates that the entity has accumulated a large amount of cash assets, which may run counter to state affordability goals.

Areas for Additional Analysis

Audited Financial Statements offer a wealth of information, and states and analysts may wish to delve further into this data or use other data sources to add context to their review. This additional analysis may require more advanced analyst experience and accounting knowledge.

Some examples of additional topics for analysis include:

- Look for major fluctuations in key financial indicators over several years. If there are major swings, what is the source?
- Identify the source of the health system’s EBIDTA margin. Is the hospital profitable based on its operations (providing patient care)? How much is the hospital relying on temporary or unpredictable funding sources (e.g., COVID-19 grants or Medicare prepayments, selling assets, fundraising) to achieve a positive margin?
 - Important sources of nonrecurring revenues are disclosed in footnotes explaining Other Operating Revenue or Nonoperating Revenue/Expense (e.g., write-offs, one-time restructuring costs). Analysts can look at EBIDTA margin with and without these one-time funds to understand the extent to which the health system’s performance is dependent on these sources of revenue.

Published November 18, 2020. Accessed January 23, 2024. Available at: <https://www.fitchratings.com/research/us-public-finance/us-not-for-profit-hospitals-health-systems-rating-criteria-18-11-2020>; Criteria| Governments | U.S. Public Finance: U.S. And Canadian Not-For-Profit Acute Care Health Care Organizations. S&P Global. Published April 1, 2022. Accessed January 23, 2024. Available at: <https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/10407192>

22 Fitch Ratings considers DCOH below 75 to be weak performance; DCOH above 75 is considered neutral. Standard & Poor classifies DCOH under 110 as “vulnerable” for stand-alone hospitals; for health systems, the threshold is 100 DCOH; U.S. Not-For-Profit Hospitals and Health Systems Rating Criteria. Fitch Ratings. Published November 18, 2020. Accessed January 23, 2024. Available at <https://www.fitchratings.com/research/us-public-finance/us-not-for-profit-hospitals-health-systems-rating-criteria-18-11-2020>; Criteria| Governments | U.S. Public Finance: U.S. And Canadian Not-For-Profit Acute Care Health Care Organizations. S&P Global. Published April 1, 2022. Accessed January 23, 2024. Available at: <https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/10407192>

- Examine which of the health system’s assets are restricted (legally reserved for another purpose, e.g., pension obligations). How much cash is restricted, versus truly available in case of a sudden major need?
- Look to the entity’s IRS Form 990 to assess spending on community benefit and free or discounted care. How does this compare to the hospital’s overall margin?
- Using the NASHP HCT, look at the RAND 4.0 Commercial Price. How do health systems’ commercial prices compare to Medicare and to one another?
- Review credit ratings reports from major rating agencies (Fitch, Moody’s, or Standard & Poor) for insight into rating agencies’ observations and forecasts for the health system(s) under review. These are often available alongside other bond issuance filings via EMMA or DAC Bond.

2. Engaging with IRS 990s to Assess Hospital Finances

As an additional resource, analysts may be able to assess hospital financial performance using IRS Form 990 Filings, which are tax returns for tax-exempt organizations.²³ IRS Form 990 Filings are publicly available and summarize tax-exempt organizations’ finances, executive compensation, charitable and community benefit spending, and governance practices. While they include information regarding hospital revenue, expenses, and assets, IRS Form 990 Filings do not contain the exact same information as Audited Financial Statements. IRS Form 990 Filings use a blend of GAAP and tax basis accounting, while Audited Financial Statements are prepared strictly in accordance with GAAP, and financial metrics are not directly comparable across these data sources. Tax-exempt hospitals and systems are also required to include a Schedule H form with their 990, showing how their activities benefit the public. Together, IRS Form 990 Filings and Schedule H forms are particularly valuable for assessing organizations’ charitable activities, including community benefit and collection policies. IRS Form 990 Filings are the only source mentioned in this guide that track community benefit spending.

23 This refers to “tax-exempt” hospitals rather than “nonprofit” hospitals. While nonprofit hospitals are generally tax-exempt, these statuses are distinct. Some tax-exempt entities may still pay taxes on their unrelated business income.

This guide primarily focuses on analyses leveraging Audited Financial Statements, given that these capture more robust financial metrics at the health system level relative to IRS Form 990 Filings. However, IRS Form 990 Filings represent an alternative means for assessing hospital financial performance when Audited Financial Statements are unavailable. IRS Form 990 Filings are subject to several notable limitations, including:

- Some IRS Form 990 Filings are submitted on behalf of a group where there is a relationship between multiple facilities, but others are submitted individually; IRS Form 990 Filings do not always disclose which entities are included and whether information is captured at the hospital-, system-, or system subset level;
- Within Audited Financial Statements, investment income is reported net of investment expenses. However, on IRS Form 990 Filings, investment income is not net of expenses;
- Unrealized Gains and Losses are not captured on IRS Form 990 Filings but are typically included in Audited Financial Statements; and
- IRS Form 990 Filings are often not available for one to two years after the end of the organization's fiscal year.



Approaching Hospital Financial Data Analyses: MCRs

Medicare-certified institutional providers are required to submit MCRs to CMS every hospital fiscal year. Common types of Medicare-certified institutional providers include:

- Hospitals
- Skilled nursing facilities
- Renal facilities
- Federally Qualified Health Centers

CMS uses data from MCRs for determining government payment rates and other types of funding. This guide is focused on hospital MCRs,²⁴ which capture facility-level data on hospital costs, information on financial characteristics like profitability and revenue, and data on facility characteristics like payer-mix, patient discharges, and bed count.

MCRs can be used to investigate facility-level:^{25,26}

- Profitability and revenue²⁷
- Payer mix and profitability by line of business
- Cost centers and labor force
- Cost-to-charge ratios
- Receipt of government subsidies (e.g., graduate medical education (GME) funding, COVID-19 relief funding, separate payments)²⁸
- Charity care, bad debt, uninsured patient costs
- Labor costs

MCR data are available from several sources, including:

- Directly from CMS via the Healthcare Provider Cost Reporting Information System (HCRIS), which includes raw, unedited MCR data
- NASHP via their Hospital Cost Tool (HCT), which captures key metrics from MCR data in a user-friendly format and offers numerous, supplemental calculated and value-added fields developed by NASHP experts

HCRIS and the NASHP HCT each have utility depending on the user's data needs and capabilities to conduct more detailed data analyses. For example, HCRIS data includes hospital revenue and cost information, but not profit margin, while the NASHP HCT reports calculated profit margins. Analysts will likely find that analyzing MCR data via the NASHP HCT is more user-friendly and faster than analyzing HCRIS data, though the full HCRIS dataset provides additional hospital information. Appendix D provides a comparison of key MCR fields that are available via the NASHP HCT and HCRIS.

24 CMS uses different types of MCRs for different types of Medicare-certified institutional providers (e.g., hospitals, skilled nursing facilities, renal facilities).

25 Bai G, Zare H, Hyman D. Evaluation of Unreimbursed Medicaid Costs Among Nonprofit and For-Profit US Hospitals. Published February 12, 2022. Accessed December 21, 2023. Available at: <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2789009>

26 Rosko M, Guerrazzi-Young C, Al-Amin M. Rural Hospitals' Profitability: Which Special Programs Matter? Published Winter 2023. Accessed December 21, 2023. Available at: <https://healthfinancejournal.com/index.php/johcf/article/view/293>

27 Operating margins calculated from MCR data may not include nonpatient service revenue, such as research and grants. If analysts wish to explicitly capture these revenue sources when calculating profit margins, they may need to utilize Audited Financial Statements.

28 Some facilities may not report local government subsidies consistently, which can be material sources of operating support for public hospitals.

This section provides an overview of the NASHP HCT and HCRIS, including the type of information that can be gleaned from these tools, how to access the data, and examples of previous analyses from states and researchers leveraging these sources.

1. Engaging with MCR data via the NASHP HCT

NASHP is a nonprofit organization dedicated to developing state health policy innovations. The NASHP HCT includes key fields from hospital MCR data, presenting them in a user-friendly interface along with several calculated and value-added metrics developed by NASHP and other stakeholders to provide added context. NASHP developed the HCT to allow policymakers and researchers to quickly access and compare data on hospital costs, charges, profits, and other information from MCRs.²⁹

Data Access

The NASHP HCT includes an interactive online data dashboard that can quickly generate data tables and visuals on individual hospital financial metrics as well as comparisons across hospitals and states. The tool allows users to stratify results by hospital characteristics (e.g., beds count, ownership type³⁰). The online interactive HCT can be accessed via the [NASHP website](#). Analysts may also refer to supporting materials, including hospital-level Excel data sets, detailed [variable definitions](#), and a [Hospital Cost Calculator](#).³¹

The NASHP HCT online tool supports analyses at different levels of granularity (e.g., facility-level, health system level, by bed size, and state level). Analysts should note that the functionality on these tabs is limited by the available filter options. If analysts need to develop a visualization or conduct an analysis that is not readily available, then they may download the full hospital-level dataset to conduct their own analyses (e.g., developing a figure that shows trends in operating costs for all for-profit hospitals in one state relative to trends in a peer state).

Using MCR Data via the NASHP HCT to Understand Hospital Financial Status

Analysts may choose to use the NASHP HCT for hospital financial analyses when:

- Audited Financial Statements are unavailable
- Limited time or resources are available to conduct the analysis
- The analysis requires metrics that are not captured in Audited Financial Statements or directly via HCRIS (e.g., payer mix, operating profit margin by line of business)

29 Rakotaniaina A. What Can Policymakers Do: Using NASHP's Hospital Cost Tool 2.0. Published December 2022. Accessed December 21, 2023. Available at: <https://nashp.org/what-can-policymakers-do-using-nashps-hospital-cost-tool-2-0/>

30 For example, governmental, for-profit, or nonprofit.

31 The Hospital Cost Tool Calculator provides users detailed cost centers or worksheets of the MCRs from which the HCT calculates reported values and populates data visualizations for its measures.

- Seeking to analyze hospital specific performance over time or analyze hospitals at the state or health system-levels
- Reviewing a hospital's payer mix and charity care costs over time
- Seeking to understand underlying cost trends (e.g., proportion of total operating costs attributable to direct patient care)

The NASHP HCT includes data on hospital operational characteristics that are not captured in Audited Financial Statements, including characteristics like the number of patient beds, total adjusted discharges,³² and payer-mix.³³ The NASHP HCT also includes numerous financial fields that are not captured in Audited Financial Statements. For example, Audited Financial Statements include robust data on hospital and health system operating profit margins but do not include data on profit margins by line of business. The NASHP HCT also allows specific data from component hospitals in the system to be analyzed in depth to determine what may be contributing to an overall system's performance.

The NASHP HCT uses data included in MCRs to estimate operating profit margins associated with the following lines of business:³⁴

- Medicaid
- Medicare
- Medicare Advantage
- Commercial
- SCHIP / low-income government programs

Payer-mix adjusted profit margins by line of business are also available via the NASHP HCT and account for variability in the insurance composition of hospital patient population. Analysts can view trends in operating profit margins by line of business using the 'View a Single Hospital' Tab on the NASHP HCT online tool, or they can use the downloadable hospital-level dataset to conduct deeper dives, like comparing trends in payer-mix adjusted operating profit margin by line of business among facilities in their state relative to peer states. The most recent version of the NASHP Cost tool includes additional metrics for hospitals, including labor costs (both direct patient care and labor costs not related to patient care). The tool provides a comparison of labor costs to capital-related costs, other operating costs, and additional operating costs not related to

32 Adjusted patient discharges are defined in the [NASHP Hospital-Level Dataset Definitions](#) as "calculated inpatient and outpatient hospital discharges. Computed by multiplying inpatient volume by an outpatient factor. Outpatient Factor = Hospital Charges divided by Inpatient Hospital Charges."

33 Analysts may consider pulling these data from the NASHP HCT and merging them with data on financial performance pulled from Audited Financial Statements to stratify financial analyses by operational characteristics (e.g., comparing days cash on hand among facilities with 200+ beds relative to other facilities).

34 Analysts should note that the operating profit margins by line of business included in the NASHP HCT are estimates and may not be consistent with metrics calculated from other data sources. Analysts should review the NASHP HCT Data Dictionary to understand how these estimates are generated and to assess their suitability for use.

patient care (also called Medicare disallowed costs). These data are presented in both dollar amounts and as a distribution of expenses. Users can review costs in context, as a share of all service expenses for any hospital over time and to evaluate whether the share of any category of these expenses has increased over time, giving policymakers the ability to pinpoint categories that may need to be examined further.

Additionally, the latest version of the HCT includes a revised [Hospital Cost Calculator](#), which includes references to MCR worksheets (i.e., details on where information can be found on individual MCR worksheets) for labor and capital, financial investments, and expense allocations, among other variables included in the HCT.

The NASHP HCT also provides several value-added measures to help users understand the relative prices hospitals charge and what level of reimbursement they need to financially “break even”:

- RAND 4.0 commercial prices measure how much commercial insurers pay for hospital services relative to Medicare payers.³⁵
- The commercial breakeven point is calculated by NASHP using MCR data and represents the rates that a hospital would need to charge commercial payers relative to Medicare to cover service expenses.

Analysts can compare differences in RAND 4.0 commercial prices and NASHP commercial breakeven points for specific hospitals and health systems using the ‘Compare Among Hospitals’ tab on the NASHP HCT online dashboard.³⁶ Analysts may also use the downloadable hospital-level dataset to conduct deeper dives on these metrics. For example, analysts may calculate the average difference between RAND 4.0 commercial prices and NASHP commercial breakeven points stratified by hospital ownership type to assess “reasonableness” and identify potential opportunities for rate negotiation.

35 This metric was developed by RAND as part of their study to assess prices paid to hospitals by private health plans and is included in the NASHP HCT as a value-added metric.

36 For more information on comparing the NASHP commercial breakeven to RAND commercial prices, see “[Understanding NASHP’s Hospital Cost Tool: Commercial Breakeven.](#)”

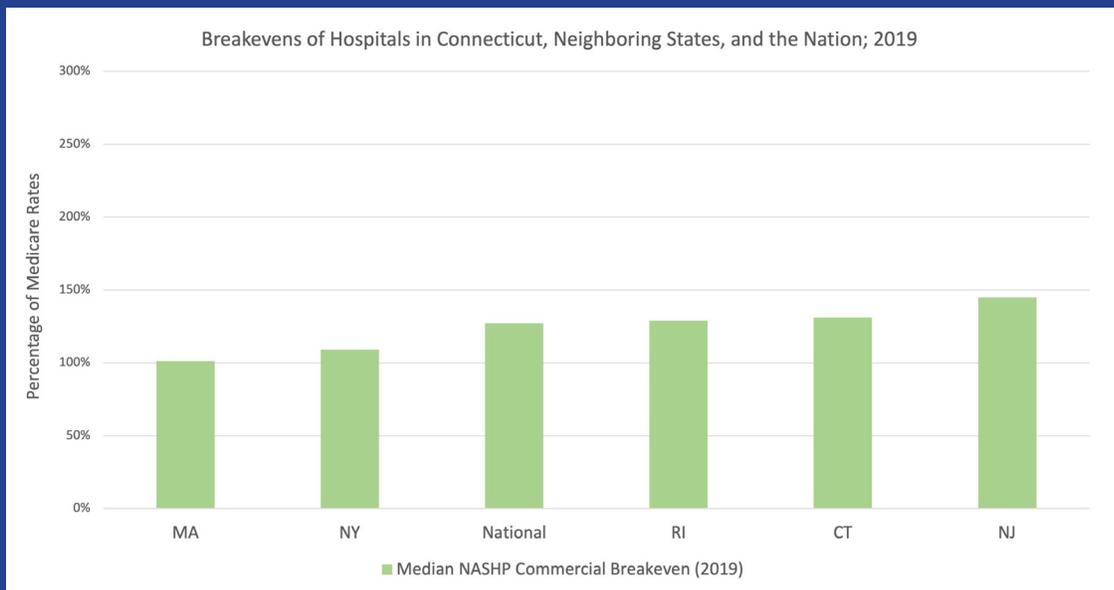
State Analyses at Work

NASHP Hospital Cost Tool Analysis of Acute Care and Critical Access Hospitals in Connecticut

In 2022, NASHP analysts used the HCT to compare the commercial breakeven point and RAND 3.0 commercial prices at hospitals in Connecticut to neighboring states. NASHP's analysis found that:

- Hospitals in Connecticut had higher median commercial breakeven points than hospitals nationwide, as well as geographically proximate hospitals in Massachusetts and New York (*demonstrated in Figure 2 below*).
- Many hospitals with the highest commercial breakeven points and RAND 3.0 prices were located closer to the New York City metropolitan area.

FIGURE 2. Median NASHP Commercial Breakevens of Hospitals in Connecticut, Neighboring States, and the Nation



Health Care Consolidations: Harms and Remedies

In 2023, Texas 2036, a data-driven bipartisan nonprofit organization, used the NASHP HCT to examine the impact of hospital market consolidation in Texas. The analysis found that Texas hospitals with fewer than 50 beds had smaller differences between their RAND 4.0 commercial prices and commercial breakeven points relative to other hospitals in the state, suggesting that smaller hospitals may be more constrained in commercial rate negotiations. Texas 2036 also used data from the HCT to develop dashboards for each congressional district in the state to profile local hospital financial performance. These data sparked support for and eventual passage of HB 711, which aims to improve competition in the state's health care market by prohibiting anti-competitive contract terms.

2. Engaging with MCR data via HCRIS to Assess Hospital Cost Drivers

HCRIS data captures raw, unedited data from MCRs as reported by health facilities to CMS. Analyzing HCRIS data can be labor-intensive, and requires analytic tools like SAS, SQL, or R. To answer some MCR-supported analytic questions, analysts may choose to use NASHP HCT to analyze data from MCRs rather than working with HCRIS data directly. However, analysts may need to analyze HCRIS data if they are seeking to analyze detailed information related to hospital cost centers, certain staffing, receipt of government payments, or other metrics that are not included in the NASHP HCT and mentioned in the [NASHP Hospital Cost Calculator](#).

Data Access

Analysts interested in examining hospital MCRs via HCRIS should plan to use the Hospital 2552-2010 MCR data files. MCR data from HCRIS can be downloaded for free from the CMS website in two formats, including:

- Excel-based public use files (PUFs), which are a series of relational datasets that capture all data elements from every MCR worksheet can be linked using MCR report numbers.³⁷ These data files can be downloaded from the [CMS Cost Reports by Fiscal Year website](#), and additional documentation on the structure of these data files is available from [Resdac](#), and can also be downloaded from the [CMS website](#).
- SAS data files, which include one row per cost report and contain a limited subset of MCR fields. SAS datasets as well as additional documentation regarding these datasets can be found on the [CMS Hospital 2552-2010 Form website](#).

If analysts have experience with SAS, they may choose that file format for analytic ease of use. Analysts should consider using the Excel-based PUFs if they need to analyze MCR fields that are not captured in the SAS data files³⁸ or if they do not have SAS access or coding experience.

Using MCR Data via HCRIS to Understand Hospital Costs

While the NASHP HCT includes some information on hospital costs, it includes a subset of detailed information on hospital cost centers that is available via HCRIS. For example, while NASHP includes aggregated information on direct patient care labor and other labor costs taken from the MCRs, HCRIS offers more detailed raw data on labor costs, as well as costs associated with inpatient, outpatient, and ancillary cost centers. This information may help analysts assess the types of cost drivers that are in/out of hospitals' direct and unilateral control. Analysts can

37 HCRIS PUF files include one dataset capturing high-level report information (e.g., hospital identifier, report number), a dataset capturing numeric MCR fields (e.g., net profit, number of beds), and a dataset capturing character MCR fields (e.g., hospital name, hospital county).

38 For example, the HCRIS SAS data files may not include data on cost centers for all hospital sub-providers (e.g., inpatient rehabilitation or psychiatric units), but this data is captured in the Excel-based PUFs.

review MCR Worksheet S-3 Parts II and III and Worksheet B to better understand the types of labor costs and cost centers respectively, that are captured in the HCRIS data.³⁹ Analysts may consider using MCR data via HCRIS to conduct several deep dives on hospital cost drivers, including:

- Calculating the share of hospital costs attributable to each cost center, and examining how the proportions associated with each cost center change over time
- Calculating the proportion of a hospital's total labor costs attributable to residents and interns to investigate potential staffing challenges.

HCRIS data also include information on government subsidies to hospitals that are not specifically broken out in the NASHP HCT but are instead captured in the aggregate, including Graduate Medical Education (GME) funding, disproportionate share hospital (DSH) payments, and Medicaid supplemental payments. These data can help analysts understand the share of hospital revenue attributable to government subsidies vs. other sources. Analysts can review MCR Worksheet S-10 Part I, Worksheet E-4, and Worksheet G-3 to better understand the types of government subsidies that are captured in HCRIS. Analysts may consider using these data to:

- Examine variation in the share of hospital revenue attributable to government subsidies across states or different types of hospitals
- Estimate the potential impact of changes to policies governing specific government subsidies

³⁹ Analysts can download example pdfs of the MCR Hospital 2552-2010 forms and instructions for completing the forms from the [CMS website](#) in 'Chapter 40-(T21) – Hospital & Hospital Health Care (Form CMS 2552-10).'

Analyses at Work

Charity Care Provision by US Nonprofit Hospitals

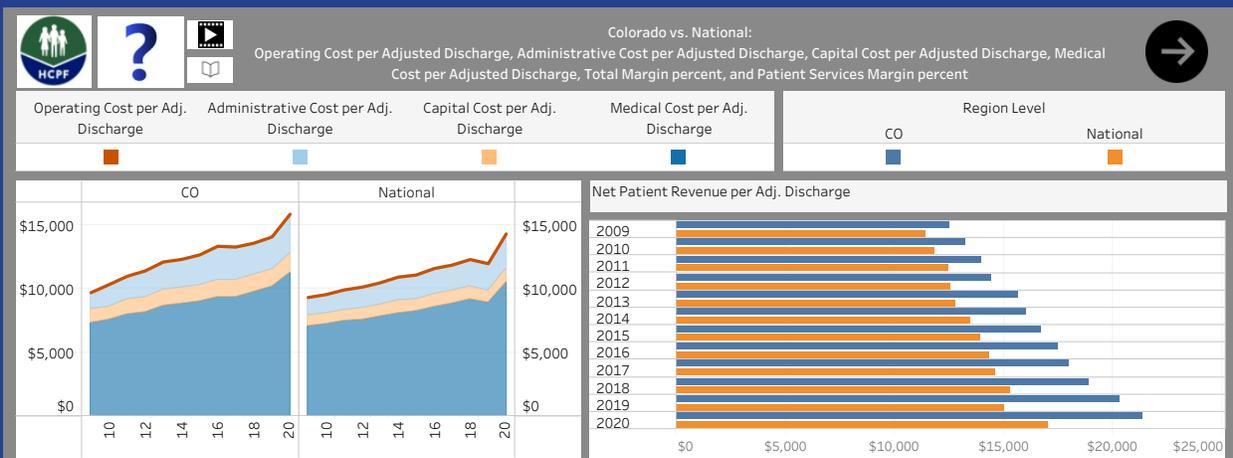
In 2020, Dr. Ge Bai, Farah Yehia, and Gerald Anderson used HCRIS data to analyze the share of overall net income and charity care among hospitals nationally, particularly exploring charity care rates for nonprofit facilities. Using MCR data via HCRIS, they examined over 2,500 hospitals across the United States to assess the share of charity care attributable to uninsured and underinsured patients, and in relation to overall net income. They found:

- Nonprofit hospitals generated \$47.9 billion in overall net income and provided \$14.2 billion in charity care, most of which was for uninsured patients (\$9.7 billion)
- The ratio of charity care to overall net income was lowest among hospitals with the highest levels of overall net income, suggesting that these facilities may be able to expand financial assistance programs for uninsured and underinsured patients.

Colorado Department of Health Care Policy & Financing Hospital Cost Reporting Tool

In 2020, the Colorado Department of Health Care Policy and Financing (HCPF) utilized HCRIS data as the primary source for their Hospital Cost Reporting Tool. The tool was created in 2017 to provide hospital cost, price, profit, and utilization information to consumers. The dashboard profiles several HCRIS metrics, including operating costs, net patient revenue, profit margins, and patient discharges, and allows users to segment analyses at the national, state, and regional levels, and by hospital and hospital system (acute care hospitals only). Figure 3 below compares operating, administrative, and capital costs, and net patient service revenue per adjusted discharge for Colorado to national averages.

FIGURE 3. Colorado Department of Health Care Policy & Financing Hospital Cost Reporting Tool





Conclusion

Hospital Audited Financial Statements, IRS Form 990 filings, and MCRs are valuable data sources for states seeking to better understand the financial health and sustainability of their health systems and hospitals. By considering the strengths and limitations of each data source, along with their own analytic capabilities, expertise, and policy purposes, policymakers can use these sources individually and in tandem to gain a clearer and more comprehensive view of hospital and health system financial performance to drive fact-based policymaking.



Peterson-Milbank
Program for Sustainable
Health Care Costs

Appendices

Appendix A: Defining and Calculating Key Financial Indicators from Audited Financial Statements and IRS Form 990 Filings

This section describes and provides formulas for each of the eight key financial indicators presented in Section IV. These metrics rely largely on data that can be gathered from the Balance Sheet (sometimes also known as the Statement of Financial Position) and Income Statement (sometimes also known as the Statement of Activities or Statement of Operations), along with information contained in the Footnotes to the Audited Financial Statements. One metric requires data from the Cash Flow Statement. The description of each measure includes national median ranges (“reference ranges”) against which analysts may compare hospital or health system data. Reference ranges are informed by Fitch Ratings national medians for more than 200 non-profit hospitals and health systems from 2013–2022 (most recent data available).⁴⁰ **The reference ranges provide an indicator of relative financial health, but do not necessarily represent a desirable or undesirable level of financial performance.**

To further support states in standardizing and analyzing Audited Financial Statements and calculating the eight key financial performance indicators, analysts may refer to the [Hospital Financial Analysis Template](#), an accompanying attachment to this guide. The template includes step-by-step instructions for users working with tables extracted from Audited Financial Statements, including how to add raw data tables to the template and how to standardize Audited Financial Statement data to calculate the key indicators shown below.

KEY TERMS

EBITDA: Earnings from Operations Before Interest, Taxes, Depreciation, and Amortization.

Operating Revenue and Expenses: Revenue and expenses related to the hospital’s core business of providing health care services to patients. Examples include income from patient care and expenses from labor and supplies.

Non-Operating Revenue and Expenses: Revenue and expenses not related to the hospital’s core business. Examples include revenue and expenses related to parking and cafeteria. Notably, hospital 340B revenue and investment income are classified as *non-operating revenue*.

Depreciation and Amortization: Application of the expense of a business asset over multiple accounting years. Depreciation is used for tangible assets, while amortization is used for intangible assets. Example: A CT scanner purchased for \$100,000 with an expected lifespan of five years may be depreciated at 20% per year.

40 Median performance for not-for-profit health systems for 2013–2022 is provided with permission of Fitch Ratings. 2023 Median Ratios: Not-for-Profit Hospitals and Healthcare Systems. Fitch Ratings. Published July 25, 2023. Accessed December 27, 2023. Available at: <https://www.fitchratings.com/research/us-public-finance/2023-median-ratios-not-for-profit-hospitals-healthcare-systems-25-07-2023>

Profitability

Operating EBITDA Margin (%)
Key question for states: Are the hospital's <i>core activities</i> profitable, excluding financing and tax expenses?
Description: Operating EBITDA Margin represents the earnings a hospital generates from its core operating activities before accounting for interest expenses, income taxes, and non-cash expenses such as depreciation and amortization. Earnings should exclude investment income and other sources of non-operating income. This metric can be useful for assessing the profitability of a hospital's core operations without the influence of financing factors (interest, taxes, depreciation, amortization).
Formula: Operating EBITDA Margin = ((Net Operating Income + Interest Expense + Tax Expense + Depreciation + Amortization Expense) / Operating Revenue) x 100
Reference Range: 8–10%.
Note: Calculation excludes "Investment returns on net assets without donor restrictions (portion included in operating revenue ONLY)" (row 117) and non-recurring expenses (row 86).
Total EBITDA Margin (%)
Key question for states: Are the hospital's total activities profitable (including non-operating activities), excluding financing and tax expenses?
Description: Total EBITDA Margin is a financial metric used to evaluate the overall operating performance and profitability of the entity for both the core business as well as non-core, usually "passive" activities such as investment income and philanthropy. Total EBITDA Margin represents the overall earnings a hospital generates from both core and peripheral activities before accounting for interest expenses, income taxes, and non-cash expenses such as depreciation and amortization.
Formula: Total EBITDA Margin = ((Net Income (removing unrealized gains or losses in the value of financial assets such as stocks and bonds) + Interest Expense + Tax Expense + Depreciation + Amortization Expenses) / (Operating Revenue + Non-Operating Revenue)) x 100
Reference Range: 10–12%.
Note: Calculation excludes "Investment returns on net assets without donor restrictions (portion included in operating revenue ONLY)" (row 117), non-recurring expenses (rows 86 and 98), and unrealized gains (losses)(row 97).

Liquidity

Days Cash on Hand (all unrestricted sources) (# days)
Key question for states: How long could the hospital operate and pay its bills without additional income?
Description: Days Cash on Hand is a financial metric that measures the number of days a hospital can continue to operate using its financial assets (unrestricted cash and investments) without any additional cash inflows. It is calculated by dividing the total unrestricted cash and investments by the average daily operating expenses of the hospital.
Formula: Days Cash on Hand = (Cash and Cash Equivalents + unrestricted investments) / (Average Daily Operating Expenses)
Reference Range: 100–200.
Notes: <ul style="list-style-type: none">• Cash and Cash Equivalents refer to the total amount of cash and other financial assets that can be converted into cash, such as short-term investments, treasury bills, and commercial paper, as well as stocks and bonds reported as “noncurrent.” It should exclude donor-restricted or trustee-held funds (such as reserves legally /contractually required for debt service, self-insurance, and risk-based reserves) but include Board-designated and other unrestricted investments.• Average Daily Operating Expenses refer to the average amount of money a hospital spends on its daily operations, such as salaries, rent, utilities, and other expenses (excluding non-cash items like depreciation and amortization). It is calculated by dividing Operating Expenses by 365.
Days in Accounts Receivable (# days)
Key question for states: How long does it take the hospital to collect payments from payers and patients?
Description: Days in Accounts Receivable (Days in AR) is a financial metric that measures the average number of days it takes for a hospital to collect payment from its customers or clients (in this case, payers and patients) after providing a service or making a sale on credit. It is a key indicator of how efficiently a hospital manages its accounts receivable, which are amounts owed to it by payers or patients for goods or services provided; a lower value for Days in AR represents better financial performance.
Formula: Days in AR = Total Accounts Receivable (net) / (Net Patient Revenue / 365)
Reference Range: 40–50. Lower value indicates more favorable financial performance for this measure.
Note: Sometimes Audited Financial Statements list Patient Accounts Receivable separately from other types of expected payments (e.g., donor contributions). If so, this metric should be limited to Patient Account Receivables.

Debt Capacity and Solvency

EDITA Debt Service Coverage (ratio)
<p>Key question for states: Are the hospital's earnings high enough to pay its debt?</p>
<p>Description: EBITDA Debt Service Coverage is a financial metric that measures a hospital's ability to pay its debt obligations. It is calculated by dividing the hospital's total EBITDA by its debt service. Debt service refers to the amount of money required to pay the principal and interest on outstanding long-term debt. A higher ratio indicates that a hospital is more capable of servicing its debts. Some analysts also calculate this ratio using Operating EBITDA.</p>
<p>Formula: EBITDA Debt Service Coverage = EBITDA / (prior year Current Long-Term Debt + current year Interest Expense)</p>
<p>Reference Range: 3-4.</p>
<p>Note: Calculation excludes unrealized gains (losses) on investments (row 97).</p>
Long-Term Debt to Total Capitalization (%)
<p>Key question for states: How much debt does the hospital hold compared to its available assets?</p>
<p>Description: Long-Term Debt to Total Capitalization is a ratio that measures the total amount of outstanding long-term debt as a percentage of the firm's total capitalization. Total capitalization means the hospital's total available assets (unrestricted assets), minus the hospital's total liabilities. The ratio is an indicator of the hospital's leverage, or level of debt used to purchase assets. A higher ratio indicates a higher degree of leverage, which could mean greater financial risk if the hospital struggles to meet its debt service obligations; a lower ratio indicates that the hospital is less reliant on debt and represents stronger financial performance.</p>
<p>Formula: Long-Term Debt to Total Capitalization = (Total Long-Term Debt / (Total Long-Term Debt + Shareholders' Equity)) x 100</p>
<p>Reference Range: 35-40%. Lower value indicates more favorable financial performance for this measure.</p>
<p>Note: The term "Shareholders Equity" is used in for-profit organizations. Not-for-profit organizations use the term "Net Assets."</p>

Capital Investment

Capital Expenditures to Depreciation (%)

Key question for states: Is the hospital replacing fixed assets as they age and investing in new assets?

Description: The ratio of Capital Expenditures to Depreciation is a financial metric used to assess how much a hospital is investing in its long-term assets, such as property, plant, and equipment (PP&E), relative to the depreciation expense it recognizes on those assets. This ratio provides insight into whether a hospital is investing in maintaining and expanding its productive capacity or simply replacing depreciated assets. It is best to measure this over a three- to five-year period if the information is available, as capital investments are made in multi-year cycles.

Formula: Capital Expenditures to Depreciation = (Capital Expenditures / Depreciation Expense) x 100

Reference Range: 105-115%.

Note: Capital Expenditures are found on the Cash Flow Statement within the organization's Audited Financial Statements. To calculate Cumulative Capital Expenditures to Depreciation, divide the sum of all capital expenditures during the years of interest by the sum of depreciation over those same years. Multiply by 100 to convert to a percentage. Cumulative Capital Expenditures to Depreciation = (Sum of Capital Expenditures) / (Sum of Depreciation Expenditures) x 100.

Average Age of Plant (# years)

Key question for states: How old, on average, are the hospital's fixed assets?

Description: Average Age of Plant is a financial and operational metric used to assess the age of a health system or hospital's assets, particularly those related to delivering patient care. It provides insight into how old the infrastructure of the facilities is on average. This metric includes all the fixed assets that an organization owns. Fixed assets typically include items such as buildings, machinery, equipment, vehicles, and furniture that are necessary for conducting operations. A higher average age of plant may indicate that assets are aging and might require maintenance, repair, replacement, or technological upgrades to remain efficient, effective, and competitive.

Formula: Average Age of Plant = Accumulated Depreciation / Annual Depreciation Expense

Reference Range: 10-12. Lower value indicates more favorable financial performance for this measure.

Appendix B: Instructions for Obtaining Audited Financial Statement and IRS Form 990 Filing Data

How to Obtain Health System and Hospital Audited Financial Statements

1. **National Sources.** Several public sources make hospital Audited Financial Statements available to the public, including the following:
 - a. **EMMA (for Nonprofit Hospitals and Small Systems):** The Electronic Municipal Market Access (“EMMA”) system is a free source of financial information for large nonprofit hospitals. Nonprofit hospitals raise capital by selling debt (tax-exempt bonds), and these financing agreements contractually require hospitals to periodically submit a wealth of information for bondholders – Audited Financial Statements, the bond contract itself (called the “official statement” or “bond prospectus”), and continuing disclosure documents.
How to obtain Audited Financial Statements through EMMA:
 - i. Visit www.emma.msrb.org.
 - ii. Select “Advance Search” in the upper right corner.
 - iii. Identify the state where the system/hospital’s headquarters are located.
 - iv. Enter one to two keywords of the name of the system of interest in the line “Issue Description”; analysts may want to go on the system’s web page to be aware of any other names the hospital may have used in the past (e.g., University of Vermont Health Network is listed under its former name, “Fletcher Allen Medical Center”).
 - v. Use the “purpose” category to identify “Health.”
 - vi. Select an active bond issue (e.g., it has a bond rating; is not very old).
 - vii. When the issue comes up, go to the bottom section, and select the Audited Financial Statements (CAFR) for the years of interest. The other financial data (quarterly; operating) may be of value too.
 - viii. The Official Statement may be a few years old; if it is relatively recent, it provides extensive information, usually in an Appendix, about the System which can be useful/complementary to the Audited Financial Statement.
 - b. **DAC Bond (for Nonprofit Hospitals and Small Systems):** DAC Bond, or Digital Assurance Certification, is a service that helps municipal bond issuers meet their ongoing disclosure requirements. It provides a platform where issuers can post important documents, including Audited Financial Statements, which are then made available to investors and other market participants. Please note that the availability of specific documents may vary depending on the bond issue and the information provided by the issuer. Access to the information requires a login, but setting up an account is free. Please note if the health system or hospital has not issued any recent bonds there will be no information, and analysts should check other source references. How to obtain Audited Financial Statements through DAC Bond:
 - i. Visit [DAC \(dacbond.com\)](http://dacbond.com).

- ii. In the upper right corner, click on register.
- iii. Follow the prompts to set up the login and account.
- iv. Log in.
- v. In the upper left corner, click on "My Dac."
- vi. See the search feature in the right panel and enter the name of the health system or hospital. Alternately, click on the first letter of the entity and search the entities listed.

- c. **Federal Audit Clearinghouse (for For-Profit and Nonprofit Hospitals and Health Systems):** The Federal Audit Clearinghouse is a web-based system operated by the federal government. Non-federal entities that expend \$750,000 or more in federal awards in a fiscal year are required to obtain an annual audit in accordance with the Single Audit Act. The audit reports and related data are submitted by auditees to the Federal Audit Clearinghouse. This information is then made available to federal agencies and the public to promote efficient use of audit resources and to ensure that audits are conducted in accordance with applicable laws and regulations. The Federal Audit Clearinghouse serves as a central repository for audit reports, facilitating federal oversight and ensuring transparency and accountability in the use of federal funds by non-federal entities such as state and local governments, universities, and nonprofit organizations.

Instructions on how to obtain Audited Financial Statements through the Federal Audit Clearinghouse follow below. Please note that, as of November 2023, the site was in the process of being transferred from the US Census Bureau to the General Services Administration. As a result, the instructions are subject to change.

How to obtain Audited Financial Statements through the Federal Audit Clearinghouse:

- i. Visit [The Federal Audit Clearinghouse \(fac.gov\)](https://fac.gov).
- ii. Click on "search for audits."
- iii. On the next screen, use the filters on the left side of the screen to enter your search criteria. Select years of interest using the check boxes, and, in the "Name (Entity, Auditee, or Auditor)" box, enter the entity name. Users can also filter by state.
- iv. Once all search criteria have been entered, click "search" at the top of the left side of the screen.
- v. Search results will populate in the main window. Select a search result by clicking on the "View" icon. On the next screen, click the "Single audit report" icon to download.

- d. **EDGAR (for Public For-Profit Hospitals):** Public for-profit companies are required to make periodic submissions to the Securities and Exchange Commission (SEC).⁴¹ The Electronic Data Gathering, Analysis, and Retrieval system (EDGAR) is an electronic database of these SEC filings. Three forms are worth noting, although there are many others: Companies file Form 10-K annually to inform investors of company finances and operations. Form 10-Q contains similar information to the 10-K but is filed quarterly. Form 8-K is filed when the company experiences a major event such as an acquisition, bankruptcy, or a change in management, among other things. How to obtain Audited Financial Statements through EDGAR:
- i. Visit www.sec.gov/edgar.shtml.
 - ii. Scroll down to “EDGAR Search Tools.”
 - iii. Click on “Company or Fund Name, ticker symbol, CIK, file number, state country, or SIC.”
 - iv. On the following page, enter the Company’s name in the search engine.
 - v. Click on the appropriate company and choose which document(s) to view.
2. **State Filings:** Many states require hospitals to file financial and other data with the state, including Oregon, Colorado, and Maine. Determine if your state is one that collects hospital Audited Financial Statements and learn how to obtain the information from the agency that gathers such filings.
- a. **Example:** The [Oregon Health Authority’s Hospital Reporting Program](#) collects, maintains, and analyzes hospital financial and utilization data to inform policymaking. The program maintains three datasets: *Databank*, a database of self-reported hospital financial and utilization information; *Audited Hospital Financial Data*; and *Hospital Community Benefit Data*. The data are used to produce four regular reports that are available through the agency’s website.
 - b. **Example:** The [Colorado Department of Health Care Financing and Policy](#) collects data on historic and recent Audited Financial Statements and Medicare Cost Reports, historic and recent financial and utilization metrics, acquisition transactions, affiliation transactions, and considerable other hospital information. The agency produces an annual Hospital Expenditure Report that draws from Medicare Cost Reports, Audited Financial Statements, and the completion of a data submission template.
 - c. **Example:** The [Maine Health Data Organization \(MHDO\)](#) is a state agency that collects and provides health care data to the public, researchers, and policy makers. The MHDO collects data from health insurance companies, hospitals, MaineCare (Medicaid), and Medicare. The data includes information on health care claims, costs, quality, and utilization. Unlike agencies in some

41 In limited circumstances, privately held hospitals and systems may be required to do the same if they are material costumers or affiliates of publicly traded companies, representing a significant percentage of the publicly traded company’s revenue.

other states, MHDO does not provide the actual audited financial statements to the public. Instead, it publishes several critical metrics for all hospitals in Maine. This allows for a fair and consistent comparison across all entities. The recent move by MHDO to provide data at the health system level from FY 2021 onward adds another layer of depth to the analysis and understanding of health care in Maine. While the unavailability of Audited Financial Statements is a limitation, the calculated metrics still provide valuable insights into the financial health and performance of these entities ([2018-2022 report](#)).

How to Obtain Health System and Hospital IRS Form 990 Filings

There are two ways to access IRS Form 990 filings.

1. **Association of Health Care Journalists (AHCJ):** The Association of Health Care Journalists (AHCJ) makes IRS Form 990 filings available through its website, <https://hospitalfinances.org/>. It does so with the stated objective of making nonprofit hospital finances easier to access, search, and analyze. How to obtain IRS Form 990 filings from AHCJ:
 - a. Visit <https://hospitalfinances.org/>.
 - b. Scroll down to “Search for a facility” and enter the entity name.
 - c. Click on the desired entity; this will produce summary financial information.
 - d. To access the detailed Form 990 and financial statement information click the provided link to the ProPublica Nonprofit Explorer.
 - e. This page will show some financial highlights with options on the right panel to get Audited Financial Statements if available. Scroll down to the year of interest; in the right panel is an option to view or download the 990.
 - f. Review the full text of the filing or navigate to a specific area of the filing (e.g., Schedule H, which includes information on community benefit, bad debt, and free care) using the “Select a Schedule” dropdown menu.
2. **GuideStar:** GuideStar is a public charity that collects, organizes, and presents information about every single IRS-registered nonprofit organization. It provides as much information as it can about each nonprofit’s mission, legitimacy, impact, reputation, finances, programs, transparency, governance, and more. GuideStar is the world’s largest source of information for nonprofits. How to obtain IRS Form 990 filings from GuideStar:
 - a. Visit www.guidestar.org/.
 - b. Register as a user by following the new account prompts.
 - c. Sign in and enter the entity name into the search bar.
 - d. Click on the desired entity.
 - e. In the lower right, under Tax Forms, click the link to “Show Forms 990.”
 - f. A pop-up will appear with available Form 990 filings by year; click to download.

Appendix C: Key Metrics Available in MCR Data

Table A1 below provides a non-exhaustive list of metrics that may be gleaned from MCR data via HCRIS and / or the NASHP HCT. Notably, the NASHP HCT includes numerous metrics that are not directly reported by hospitals on MCRs but can be calculated from MCR data via HCRIS. For example, HCRIS data includes hospital revenue and cost information, but not profit margin; while the NASHP HCT reports profit margins that have been calculated using HCRIS data. Definitions below are drawn directly from the [NASHP HCT Data Dictionary](#) where possible.

TABLE A1. Key Metrics Available in MCR Data via HCRIS and / or The NASHP HCT

Metric	Definition ⁴²	MCR Data via HCRIS	NASHP HCT
Net Patient Revenue	Gross patient charges, less contractual discounts, bad debt and charity care allowances, and other deductions agreed to by the hospital. Numbers reported from hospital's accounting records.	✓	✓
Operating Expenses	Hospital Operating Expenses, as recorded in hospital accounting system.	✓	✓
Other Income and Expense	Income and Expenses not related to hospital operations, such as investment income, donations and contributions, cafeteria operations, etc.	✓	✓
Net Income (Loss)	Net Patient Revenue, less Operating Expenses, plus Other Income and Expense. Represents earnings retained by the hospital.	✓	✓
Net Profit Margin	Net Income divided by Net Patient Revenue, representing the percentage of Net Patient Revenue retained by the hospital.	✓	✓
Hospital Charge	Total inpatient and outpatient charges for services provided by the hospital, including charity care. Charges are the list prices set by the hospital and similar to Manufacturer Suggested Retail Price in other markets.	✓	✓
Hospital Operating Costs	Portion of Operating Expenses related only to hospital patient care and eligible for reimbursement per Medicare federal regulations, sometimes referred to as Medicare Allowed Costs. Excluded Operating Expenses are referred to as Medicare Disallowed Costs.	✓	✓
Cost-to-Charge Ratio	Hospital Operating Costs reported as a percentage of Hospital Charges.	✓	✓
Net Charity Care Cost	Hospital Operating Costs for providing patient care under hospital's Charity Care policy, less charity care patient payments and restricted grant funds received.	✓	✓
Uninsured and Bad Debt Cost	Hospital Operating Costs for providing patient care that was not reimbursed by uninsured patients or insured patients.	✓	✓
Payer Mix	Percentage of hospital services attributable to each payer type. The NASHP HCT calculates payer mix associated with Medicaid, Medicare, Medicare Advantage, Commercial, SCHIP / low-income government programs, and charity care / uninsured / bad debt.	✓	✓

42 Note: Metrics may be defined and reported differently in MCR data vs. Audited Financial Statements and IRS Form 990 Filings.

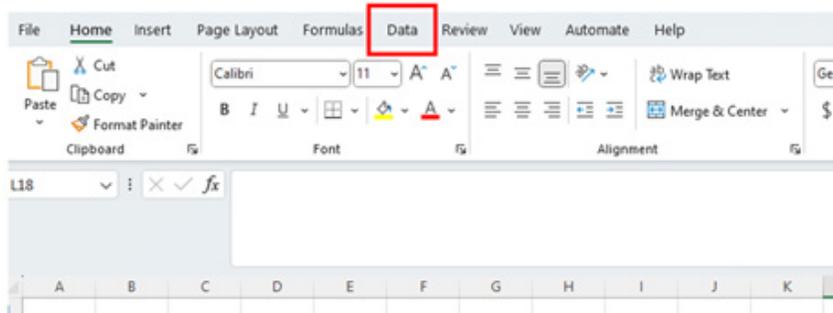
Metric	Definition ⁴²	MCR Data via HCRIS	NASHP HCT
Operating Profit Margin by Payer Type	Operating profit margin attributable to each payer type. Calculated by dividing operating profit for a given payer type by net patient revenue for that payer type. The NASHP HCT calculates operating profit margin associated with Medicaid, Medicare, Medicare Advantage, Commercial, and SCHIP / low-income government programs.	✓	✓
Cost centers	Hospital costs broken out by costs associated with general services (e.g., capital related costs, employee benefits, operation of plant), inpatient routine services (e.g., adult and pediatric routine care, intensive care unit, coronary care unit), ancillary services (e.g., operating room, respiratory therapy, physical therapy, drugs), outpatient services (e.g., clinic, observation beds, emergency room), other reimbursable services (e.g., ambulance, durable medical equipment), special purpose services (e.g., organ acquisition, hospice), and non-reimbursable costs (e.g., research, nonpaid workers).	✓	
Rand 4.0 Commercial Prices	Prices paid for hospital inpatient and outpatient services, based on paid claims from 2018 through 2021 by health plans participating in the 2020 RAND Corporation's Prices Paid to Hospitals by Private Health Plans. Prices reflect the ratio of the actual paid amounts divided by the Medicare allowed amount for the same services provided by the same hospital. ⁴³		✓
NASHP Commercial Breakeven Point	Payment level or rate required from commercial payers (expressed as a percentage of Medicare rates) to allow the hospital to cover maximum expenses, with no profit, for hospital inpatient and outpatient services. Covered expenses include commercial patient hospital operating costs, shortfall or overage from public health programs, charity care and uninsured patient hospital costs, Medicare disallowed costs, and Other Income and Expense.		✓
Number of beds	Total number of beds available to patients	✓	✓
Ownership type	Field indicating whether hospital is owned by a for-profit, nonprofit, or governmental agency.	✓	✓
Discharges⁴⁴	Total number of patient discharges during the reporting period.	✓	
Staffing FTEs	Number of full time equivalent (FTE) positions for employees on payroll, nonpaid workers, and interns and residents.	✓	✓
COVID-19 Public Health Emergency (PHE) Funding	Hospital reported aggregate revenue received for COVID-19 public health emergency (PHE) funding, including both provider relief funds (PRF) and Small Business Association Loan Forgiveness amounts.	✓	✓
Graduate Medical Education (GME) Funding	Federal funding intended to cover Medicare's share of the costs of a hospital's approved medical residency program, including both direct and indirect costs associated with residency programs.	✓	
Medicaid Supplemental Payments	Medicaid payments to providers that are separate from and in addition to payments made for services rendered to Medicaid enrollees. States may provide these payments to hospitals to support quality initiatives, graduate medical education, or safety net facilities among other reasons.	✓	
Disproportionate Share Hospital (DSH) Payments	Statutorily required payments made to hospitals that are intended to offset hospitals' uncompensated care costs and support financial stability.	✓	

43 Definition sourced from <https://employerptp.org/rand/4-0/>.

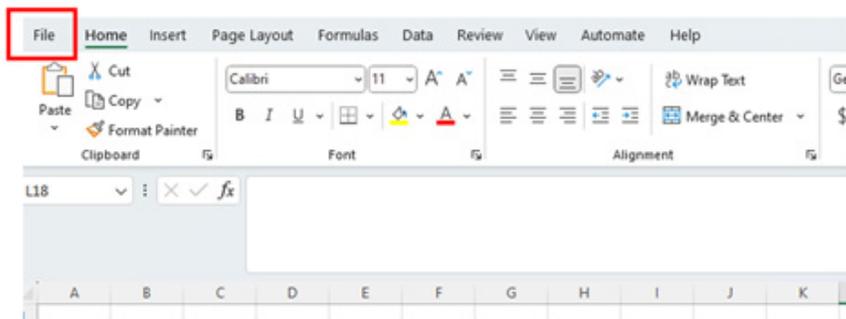
44 NASHP HCT includes Adjusted Patient Discharges, which are calculated inpatient and outpatient hospital discharges. Adjusted Patient Discharges are computed by multiplying inpatient volume by an outpatient factor. Outpatient Factor = Hospital Charges divided by Inpatient Hospital Charges.

Appendix D: Extracting Tables from Audited Financial Statements to Excel

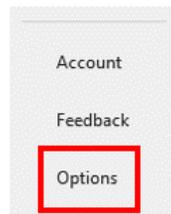
1. Check for a "Data" tab in the Excel header, as shown below. If "Data" tab does not appear, proceed to Step 2. Otherwise, proceed to Step 3.



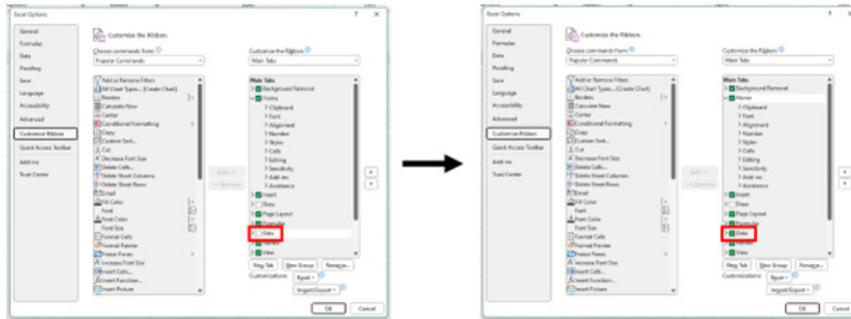
2. If no "Data" tab appears, add the tab:
 - a. Click "File" at the top left corner:



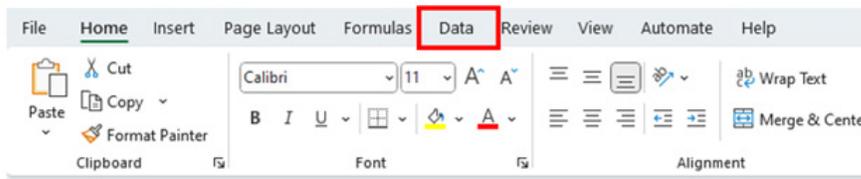
- b. Click "Options" on the bottom left corner:



- c. A pop-up menu will appear. On the left-hand side, click "Customized Ribbon." Click on the box next to "Data" as shown below.

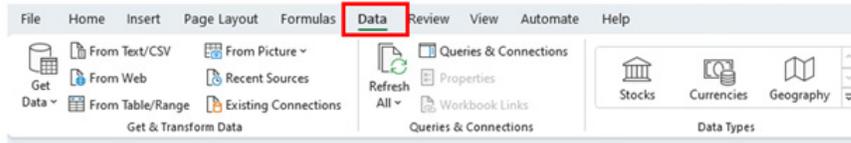


- d. Once the box has been checked, click "OK." The "Data" tab should now appear in the header.

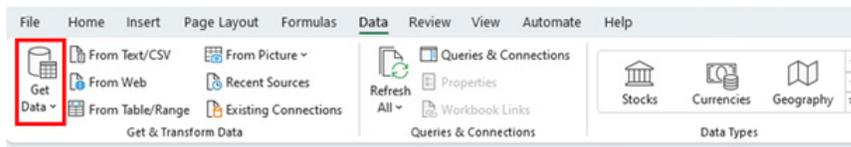


3. Download a table from Audited Financial Statements:

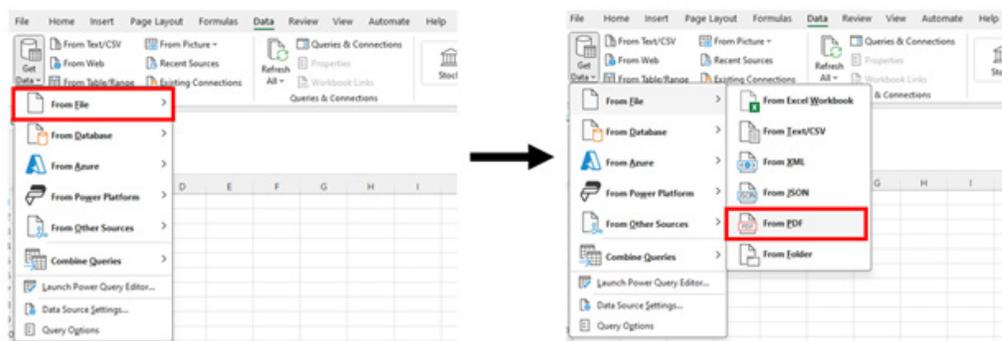
- a. Click on the "Data" tab in the header section.



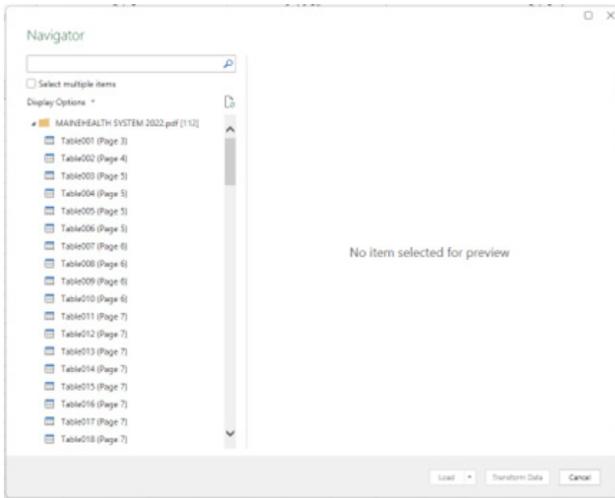
- b. Click on "Get Data":



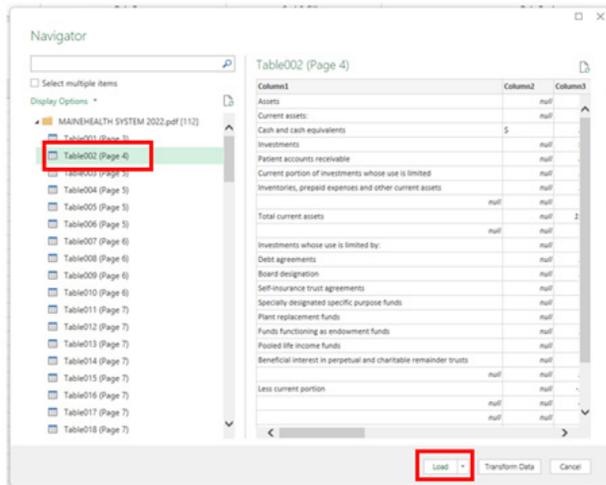
- c. On the drop-down menu that appears below, choose the applicable file type. The example below shows extraction from a PDF file, a common file type for Audited Financial Statements.



- d. Choose the appropriate file from the browsing menu.
- e. After selecting the desired file, a new menu should appear, as shown below. Browse through Tables recognized on the left-hand side.



- f. Select and extract the desired table. In the example below, the balance sheet is being extracted through this tool.



- g. Select a location for the data; the spreadsheet will populate. Note that manual formatting will likely be required.

	2022	2021	Liabilities and Net Assets	2022	2021
Assets					
Current assets:			Current liabilities:		
Cash and cash equivalents	\$303,765	\$415,441	Current portion of long-term debt	\$43,012	\$41,994
Investments	\$995,099	\$1,195,752	Current portion of lease obligation	\$16,560	\$17,406
Patient accounts receivable	\$156,256	\$367,554	Accounts payable and other current liabilities	\$229,220	\$378,361
Current portion of investments whose use is limited	\$128,484	\$200,695	Accrued payroll, payroll taxes and amounts withheld	\$111,034	\$101,392
Inventories, prepaid expenses and other current assets	\$139,806	\$147,717	Accrued earned time	\$101,665	\$106,852
Total current assets	\$1,923,410	\$2,347,159	Accrued interest payable	\$0,312	\$0,374
Investments whose use is limited by:			Estimated amounts payable under reimbursement regulations	\$69,254	\$57,925
Debt agreements	\$123,139	\$198,255	Self-insurance reserves	\$46,645	\$34,888
Board designation	\$137,546	\$259,405	Deferred revenue	\$21,397	\$17,080
Self-insurance trust agreements	\$38,624	\$47,006	Total current liabilities	\$644,699	\$762,272
Specialty designated specific purpose funds	\$82,668	\$77,827	Accrued retirement benefits	\$235,242	\$296,716
Plant replacement funds	\$4,856	\$1,648	Self-insurance reserves – less current portion	\$60,100	\$53,136
Funds functioning as endowment funds	\$113,584	\$156,219	Long-term debt, less current portion	\$715,631	\$755,545
Pooled life income funds	\$2,139	\$2,546	Long-term lease obligation – less current portion	\$143,808	\$146,366
Beneficial interest in perpetual and charitable remainder trusts	\$47,179	\$56,782	Other liabilities	\$13,425	\$74,847
Sum rows 12-20	\$557,715	\$695,688	Total liabilities	\$1,832,905	\$2,090,922
Less current portion	-\$128,484	-\$200,695	Net assets:		
Sum rows 20 and 21	\$429,231	\$494,993	Without donor restrictions	\$2,077,843	\$2,332,434
Property, plant and equipment - net	\$1,498,755	\$1,445,794	With donor restrictions	\$263,381	\$308,755
Right of use assets	\$155,322	\$160,176	Total net assets	\$2,341,224	\$2,541,379
Other assets	\$167,391	\$184,173	Total liabilities and net assets	\$4,174,129	\$4,632,301
Total assets	\$4,174,129	\$4,632,301			

Troubleshooting: In some cases, Excel will not be able to readily extract the table from a PDF. If so, manual extraction may be necessary. Analysts may also attempt to extract the file into a Word document and then extract the table from the Word document.

If the file appears “corrupted,” analysts may open the PDF in a web browser and download the PDF from the web browser. This may reset a PDF file’s functionality to its default settings.

Appendix E: Interviewees, Reviewers, and Contributors

The following individuals provided invaluable input through the development of this guide, from sharing tips for working with hospital financial data to reviewing and testing the analytic approach outlined above. We thank them for sharing their time and expertise.

- Elizabeth Almanzor, Director of Provider Finance, Massachusetts Center for Health Information and Analysis
- David Auerbach, Senior Director for Research and Cost Trends, Massachusetts Health Policy Commission (HPC)
- Sarah Bartelmann, Cost Growth Target Program Manager, Oregon Health Authority
- Ge Bai, Professor of Accounting at Johns Hopkins Carey Business School and Professor of Health Policy & Management (joint) at Johns Hopkins Bloomberg School of Public Health
- Maureen Hensley-Quinn, Senior Program Director, National Academy for State Health Policy (NASHP)
- Dr. Nancy Kane, Professor of Health Policy and Management, Emerita, Harvard T.H. Chan School of Public Health
- KeriAnn LaSpina, Health Researcher, Mathematica
- Steven Ranzoni, Hospital Policy Adviser, Oregon Health Authority
- Zoe Torrey, Research Analyst, National Academy for State Health Policy (NASHP)
- Vicki Veltri, Senior Policy Fellow, National Academy for State Health Policy (NASHP)



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