

Flex Monitoring Team

STATE USERS:

A STEP-BY-STEP GUIDE TO USING CAHPAS

CAHPAS

Critical Access Hospital Measurement & Performance Assessment System

ABOUT CAHPAS

CAHPAS is a free tool developed by the Flex Monitoring Team to help you better understand the CAHs in your state. CAHPAS allows you to explore financial, quality and community benefit data for these hospitals—and compare that data across relevant peer groups. With this tool, you can create graphs that compare relevant hospitals' values to state and national medians and even show trends over time.

This step-by-step Guide will walk you through the basics of the CAHPAS system. We encourage you to explore the nuances of the data and develop strategies to address CAH performance. We hope that this tool will help you make the most relevant performance comparisons, collaborate with peers, and effectively allocate funding.

We are continually updating and improving CAHPAS to best meet the needs of our users. We intend to ensure that this Guide reflects any large changes made to CAHPAS, however not all minor updates will be reflected immediately in this Guide. Please email the CAHPAS team (monitoring@flexmonitoring.org) if you have any questions or feedback.

To begin using CAHPAS, follow the steps below.

GETTING STARTED

1) LOG IN

To access CAHPAS, click [here](#) or visit <http://cahmpas.sirs.unc.edu>. Enter your username and password on this screen. If you need login credentials, please contact us at monitoring@flexmonitoring.org.



2) GET STARTED

Once you log in, you will be directed to the CAHPAS home page. Notice that the email to contact us is available on this home page as well. You may navigate back to this page at any time by clicking the home button on the grey navigation bar [under the blue arrow].

Click the yellow, highlighted 'Get Started' button to begin.

For state flex users, there are six available graph types and tools:

- Compare individual hospitals using a bar graph
- Compare group trends using a line graph
- Compare relative position of all indicators using a percentile bar graph

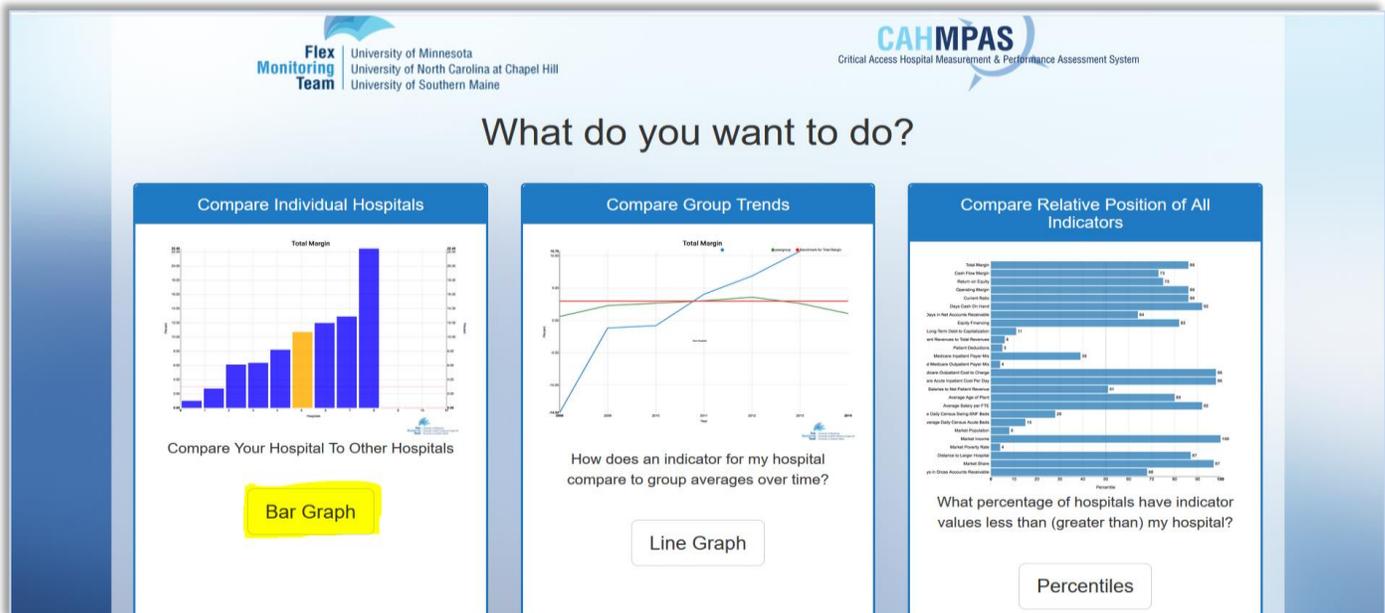


BAR GRAPH

1) SELECT A GRAPH TYPE

The first graph, the bar graph titled “Compare Individual Hospitals,” allows you to compare a financial indicator of your choice for an individual or group of hospitals in your state. We will begin with this graph type.

Click the yellow, highlighted 'Bar Graph' button to select this graph.



2) SELECT AN INDICATOR

CAHMPAS offers a number of financial measures and ratios for your use. These indicators include profitability, liquidity, capital structure, outpatient, inpatient, growth, labor, other, and financial distress metrics. For more information on these indicators and how best to use them, see the *CAH Financial Indicators Primer and Calculator Resources* by visiting [here](#).

Notice that the grey navigation bar at the top of the screen has “followed” your progress through the system. If you want to return to the graph options screen, for example, you need only to click ‘Set Graph Type’ (below the blue arrow) to return to that screen.

Let’s take a look at a common profitability indicator, operating margin. Click the button in the red box.



CAH Measurement and Performance Assessment System (CAHMPAS) Home > Set Graph Type > Set Indicator >

The screenshot shows the CAHMPAS interface with the following elements:

- Navigation bar: CAH Measurement and Performance Assessment System (CAHMPAS) Home > Set Graph Type > Set Indicator >
- Logos: Flex Monitoring Team (University of Minnesota, University of North Carolina at Chapel Hill, University of Southern Maine) and CAHMPAS (Critical Access Hospital Measurement & Performance Assessment System).
- Section Header: Select an indicator to graph:
- Financial Performance section:
 - Profitability Indicators (highlighted with a yellow box): Total Margin, Cash Flow Margin, Return on Equity, and Operating Margin (highlighted with a red box).
 - Liquidity Indicators: Current Ratio, Days Cash On Hand, Days in Net Accounts Receivable, and Days in Gross Accounts Receivable.
 - Capital Structure Indicators: Equity Financing, Debt Service Coverage, and Long-Term Debt to Capitalization.
- Service Line section.
- Operations section.

3) SELECT A CUSTOM GROUP

This screen allows you to create groups of hospitals or select individual hospitals in your state to plot on your bar graph. You can filter which hospitals are shown in these custom groups by selecting the drop-down menus. The following filters are available to you:

- Net Patient Revenue
 - <\$10 million
 - \$10-20 million
 - >\$20 million
- Rural Health Clinic
 - Yes/No
- Long-Term Care
 - Yes/No
- Government Ownership
 - Yes/No
- System Affiliation
 - Yes/No

Custom Group Name: Custom Group 1

43 Hospitals

State: [v]
 Net Patient Revenue: All [v]
 Rural Health Clinic: All [v]
 Long-Term Care: All [v]
 Government Owned: All [v]
 Data from Year: 2016 [v]

Add Group Add Hospital Draw Graph

4) SELECT AN INDIVIDUAL HOSPITAL

To add a single hospital to your graph, select the “Add Hospital” button, which will bring up a list of CAHs in your state (example pictured). You can filter your results by using the search bar in the top right corner of the dialogue box. Select a hospital by clicking the “Add” button.

Add additional hospitals by selecting the “Add Hospital” button again and selecting another hospital from the dialogue list. When finished adding your groups and hospitals, click “Draw Graph.”

Single Hospital Selection

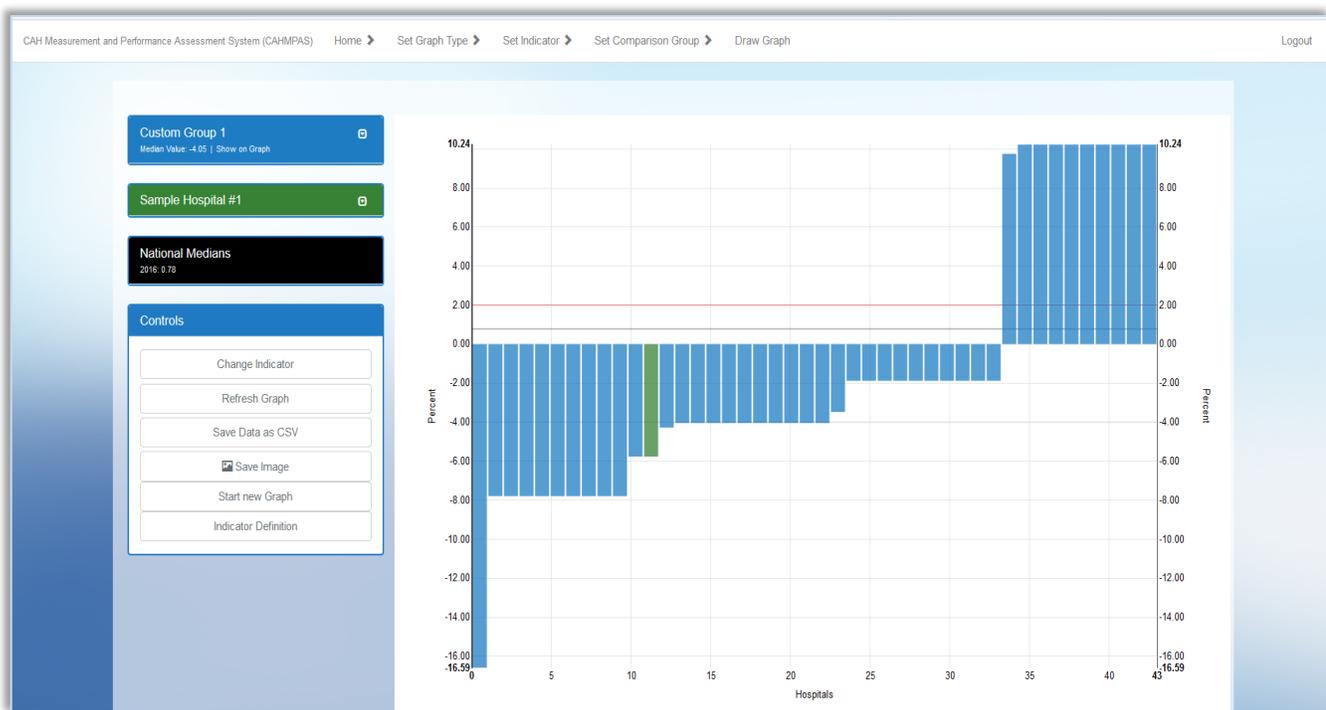
Show 10 entries Search: sample

CAHID	Hospital Name	City	Action
YS001	Sample Hospital #1	City 1	Add
YS0010	Sample Hospital #10	City 10	Add
YS0011	Sample Hospital #11	City 11	Add
YS0012	Sample Hospital #12	City 12	Add
YS0013	Sample Hospital #13	City 13	Add
YS0014	Sample Hospital #14	City 14	Add
YS0015	Sample Hospital #15	City 15	Add
YS0016	Sample Hospital #16	City 16	Add
YS0017	Sample Hospital #17	City 17	Add
YS0018	Sample Hospital #18	City 18	Add

5) BAR GRAPH: OVERVIEW

In the graph below, the columns are color-coordinated according to their group. For example, the blue columns represent “Custom Group 1,” which is shown in the blue group box on the left side of your screen. The green column represents an individual hospital selected, in this case called “Sample Hospital #1,” which is shown in the green group box on the left side of your screen.

- To see the specific value of the indicator for these hospitals, hover over the columns.
- The red horizontal line on the graph represents the financial benchmark: in the case of our operating margin, your hospital’s value would ideally be at or above this line. The black horizontal line represents the US median for the financial ratio.



6) BAR GRAPH: SIDE BARS

On the left side of the screen, you will see boxes which display your custom group or hospital’s characteristics. This box reminds you of the filters you chose for your groups and/or hospitals from the previous screen, including their:

- Net revenue
- Rural health clinic
- Long-term care
- Government ownership
- System affiliation
- Data year

Click the drop-down menu under the blue arrow to see/unsee these characteristics for each group.

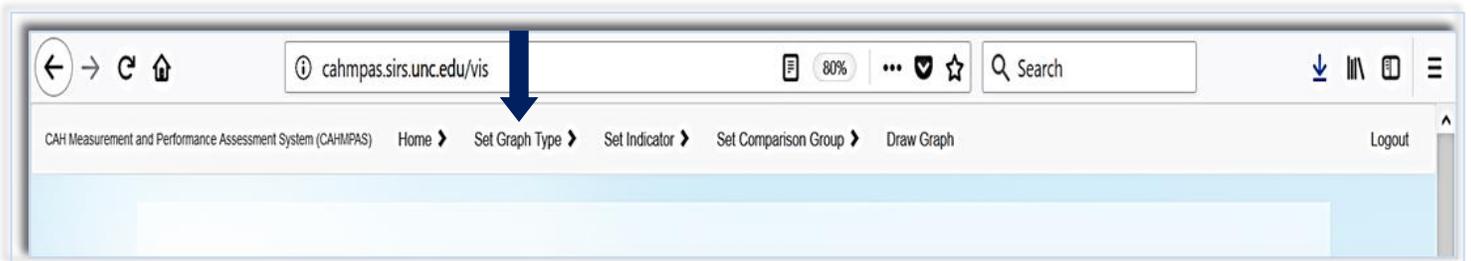
Custom Group 1
Median Value: -2.44 | Show on Graph

State Geography:	YS
Net Patient Revenue	All
Rural Health Clinic:	All
Long Term Care:	All
Government Owned:	All
Data Year:	2016

7) RETURNING TO PREVIOUS SCREENS

The grey navigation bar at the top of your screen (and shown below) allows you to move throughout the CAHMPAS system seamlessly. Once you have a graph drawn, you may want to change the indicator—perhaps you want to show the cash flow margin rather than the operating margin—or you may even want to change from a bar to a line graph. This navigation bar allows you to return to those screens by clicking “Set Indicator” or “Set Graph Type.”

To return to the graph type selection page, simply click the “Set Graph Type” button (underneath the blue arrow) on your grey navigation bar.



LINE GRAPH

1) SELECT A GRAPH TYPE

The “Set Graph Type” buttons returns us to a familiar screen, where we previously chose from one of three types of graphs:

- Compare individual hospitals using a bar graph
- Compare groups trends using a line graph
- Compare relative position of all indicators using a percentile bar graph

Let’s take a look at the line graph. Click the yellow, highlighted ‘Line Graph’ button to select this graph.

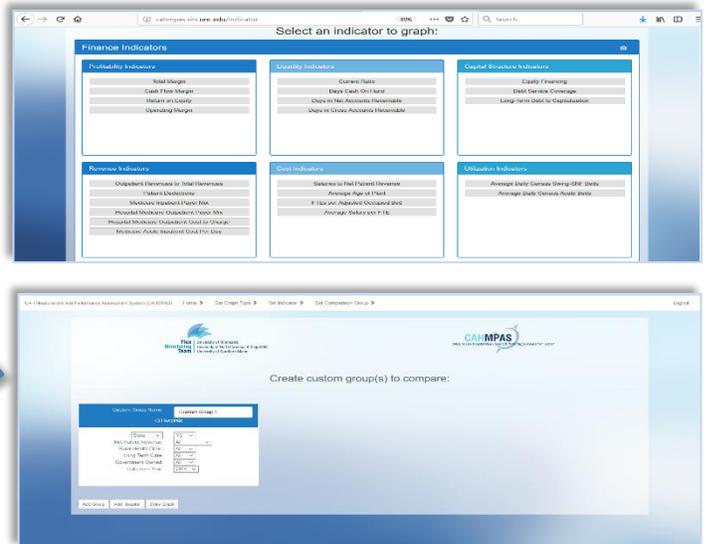


2) SET YOUR CRITERIA

Just like with the bar graph, you will now need to select your specific financial indicator and your chosen hospitals/custom groups before drawing the line graph. Recall the following step sequence that we used with the bar graph:

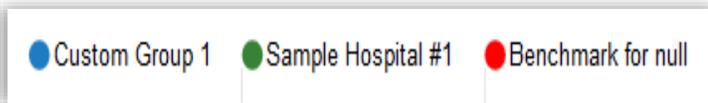
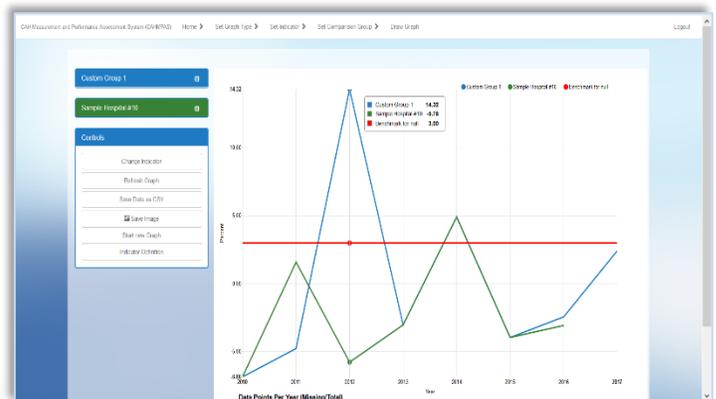
- Select a specific indicator (i.e., Current Ratio)
- Select Your Custom Groups or Individual Hospitals

TIP: CAHMPAS will automatically populate this screen with your previously chosen hospitals and/or custom groups. Feel free to utilize these groups; otherwise, you may delete them and begin again with different hospitals/groups.



3) LINE GRAPH: OVERVIEW

The graph to your right depicts how a line chart in CAHMPAS may look, with one custom group and one individual hospital selected. Utilizing the key at the top right corner of your graph (and enlarged below), you will notice that the blue line represents your custom group, the green line represents a single selected hospital from the previous screen, and the red line represents the benchmark for your financial ratio. Note: colors may vary.

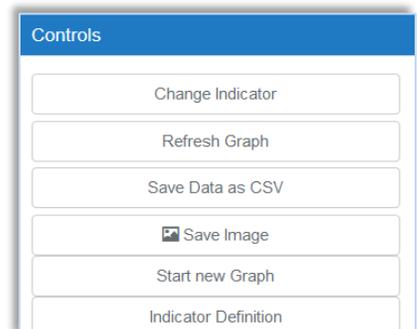


Notice also that the options panel to the left of your graph is the same for both the bar graph and the line graph. As mentioned previously, you can use the drop-down menu to recall the characteristics of your selected groups.

4) LINE GRAPH: CONTROLS BOX

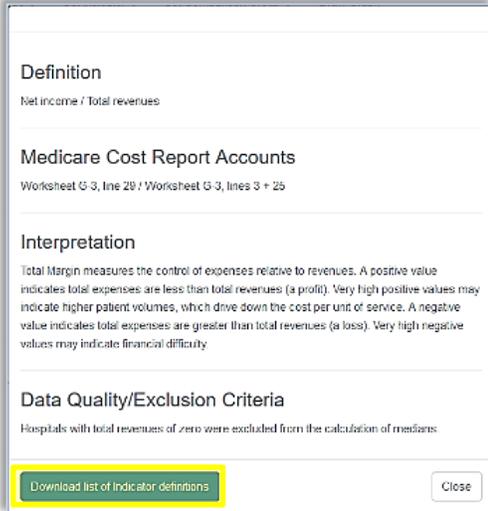
The control box to the left side of your screen allows you to refresh your graph, save the graphed data with Microsoft Excel, save the graph as an image, understand the financial indicator you chose, change your indicator, and return to the home screen to begin a new graph. These capabilities are available both for the line and bar graphs.

Note: When opening a saved image, convert it to a PDF or JPEG file.



Images are automatically saved as PNG files, but the PNG files may not display clearly.

5) UNDERSTANDING YOUR INDICATOR



Definition
Net income / Total revenues

Medicare Cost Report Accounts
Worksheet G-3, Line 29 / Worksheet G-3, Lines 3 + 25

Interpretation
Total Margin measures the control of expenses relative to revenues. A positive value indicates total expenses are less than total revenues (a profit). Very high positive values may indicate higher patient volumes, which drive down the cost per unit of service. A negative value indicates total expenses are greater than total revenues (a loss). Very high negative values may indicate financial difficulty.

Data Quality/Exclusion Criteria
Hospitals with total revenues of zero were excluded from the calculation of medians.

Download list of Indicator definitions Close

Click on the “Indicator Definition” button from the “Controls” box in order to see a definition, equation, interpretation and quality explanation for your indicator. The image to the left explains how Total Margin is calculated for a graph.

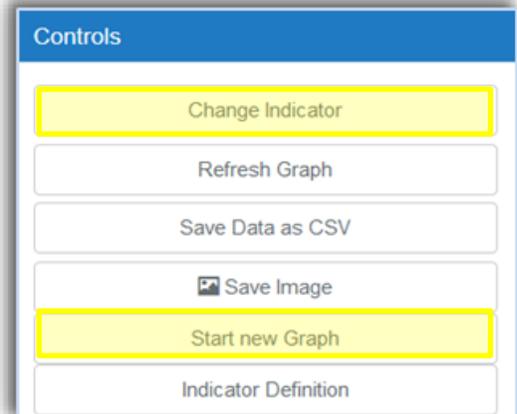
Click the “Download List of Financial Indicators” button, if you would like a list of the indicators used in CAHMPAS. This may be helpful if you plan on downloading and utilizing the data provided in CAHMPAS.

6) ALTER YOUR INDICATOR FROM THE GRAPH

Click the “Change Indicator” button in order to switch your chosen financial indicator to another, without returning to any previous screens. A dialogue box will appear, asking you to select your indicator type and then your specific indicator.

7) RETURN TO THE CHART SELECTION SCREEN

Click the “Start New Graph” button from the “Controls” box in order to return to the home page where we selected our graph types (bar, line, and percentile).



Controls

Change Indicator

Refresh Graph

Save Data as CSV

Save Image

Start new Graph

Indicator Definition

PERCENTILES GRAPH

1) SELECT A GRAPH TYPE

The “Start New Graph” buttons returns us to a familiar screen, where we previously chose from one of three types of graphs:

- Compare individual hospitals using a bar graph
- Compare groups trends using a line graph
- Compare relative position of all indicators using a percentile bar graph

The screenshot shows the CAHMPAS interface with the question "What do you want to do?". There are three main panels:

- Compare Individual Hospitals:** Shows a bar chart titled "Total Margin" comparing a hospital to others. Below it is a "Bar Graph" button.
- Compare Group Trends:** Shows a line chart titled "Total Margin" over time. Below it is a "Line Graph" button.
- Compare Relative Position of All Indicators:** Shows a horizontal bar chart comparing various indicators. Below it is a "Percentiles" button, which is highlighted in yellow.

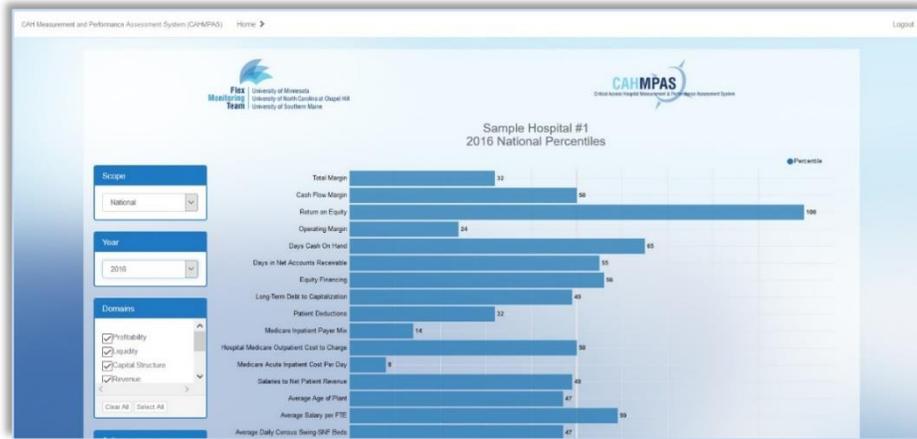
Let's take a look at the percentile bar graph. Click the yellow, highlighted 'Percentiles' button to select this graph.

2) SELECT A HOSPITAL

This page allows you to select a hospital in order to view its financial performance as a percentiles dashboard. You can search for a specific hospital by using the search bar at the top right side of your screen. To view a specific hospital, select the “View Dashboard” button in yellow.

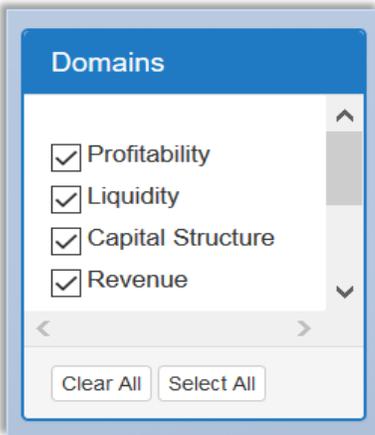
Choose a hospital				
CAHID	Name	City	CMS ID	Action
YS001	Sample Hospital #1	City 1	999991	View Dashboard
YS0010	Sample Hospital #10	City 10	9999910	View Dashboard
YS0011	Sample Hospital #11	City 11	9999911	View Dashboard
YS0012	Sample Hospital #12	City 12	9999912	View Dashboard
YS0013	Sample Hospital #13	City 13	9999913	View Dashboard
YS0014	Sample Hospital #14	City 14	9999914	View Dashboard
YS0015	Sample Hospital #15	City 15	9999915	View Dashboard

3) PERCENTILES GRAPH: OVERVIEW



In the image above, the bars indicate the percentile under which your chosen hospital falls compared to its peers for each financial indicator. To see the hospital's indicator value, specific percentile, and a state/national median associated with the indicator, hover your cursor over bars. You may also change 1) the scope of the graph (state or national) and 2) the year for the data from the controls on the left side of your screen.

4) PERCENTILES GRAPH: DOMAINS



From the left side of your screen, you may check or uncheck boxes based on what types of indicators you want to view on the graph. These include:

- Profitability
- Liquidity
- Capital Structure
- Outpatient
- Inpatient
- Growth
- Labor
- Other

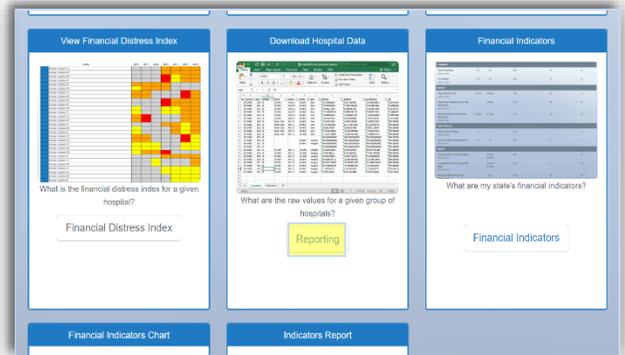
Use the “clear all” and “select all” buttons to select and deselect all indicators at once.

REPORTING TOOL

1) SELECT THE REPORTING TOOL

Click the “Set Graph Type” button from your grey navigation bar in order to return to a familiar screen, where we previously chose from one of three types of graphs:

- Compare individual hospitals using a bar graph
- Compare groups trends using a line graph
- Compare relative position of all indicators using a percentile bar graph

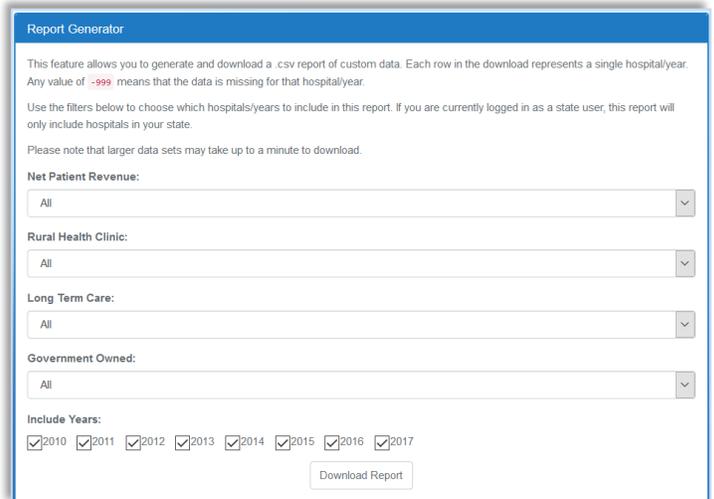


From this screen, scroll down and click the “Reporting” button. This tool allows you to download data from CAHMPAS and the next step will allow you to filter down that data to suit your needs.

2) REPORT GENERATOR

This screen allows you to filter the hospitals in your download by their net patient revenue and by other characteristics, such as their provisions of long-term care, government ownership, system affiliation, and rural health clinic ownership. Additionally, you can select or deselect years of data.

Click the drop-down menus to narrow your results.



3) DATA REPORT

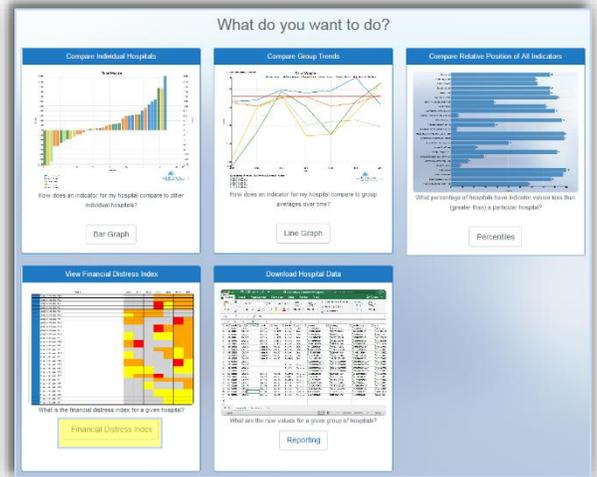
The screen to the right depicts the downloaded data on the first tab, titled “Hospitals.” The second tab, titled “Indicators,” provides a list of the financial indicators used in CAHMPAS—which you can use to match with the headers shown below. Keep in mind, values of -999 represent data that is missing for that hospital or year.

	A	B	C	D	E	F	G	H	I	J	K	L	M	
1	id	cahid	year	cahstate	revcat	hasnfn	hasrhc	govt	opmarg	totmarg	cashflomarg	roe	curratio	salperctc
2	43455	YS001	2016	YS	Over 20m	No LTC	No RHC	Nongovt	5.7620422140	-1.2285619120	6.8378066520	62.8341787200	.999.0000000000	45.4764
3	43463	YS0010	2016	YS	Under 10m	No LTC	Has RHC	Nongovt	-1.8810135510	-3.0774386130	-0.8417620180	0.3330172100	.999.0000000000	56.2816
4	43471	YS0011	2016	YS	Under 10m	Has LTC	No RHC	Nongovt	10.2419684400	0.5737862550	10.7886880500	16.4981491600	.999.0000000000	999.00
5	43479	YS0012	2016	YS	10-20m	Has LTC	Has RHC	Nongovt	-7.7922936170	-2.4441898710	4.5524815240	49.7146873500	.999.0000000000	999.00
6	43487	YS0013	2016	YS	Under 10m	No LTC	Has RHC	Nongovt	4.0467822620	-3.0774386130	5.6687439670	23.4284127200	0.6595680420	58.7642
7	43495	YS0014	2016	YS	Under 10m	No LTC	Has RHC	Nongovt	-1.8810135510	0.5737862550	9.8310332660	.999.0000000000	6.1278120420	57.1857
8	43503	YS0015	2016	YS	10-20m	Has LTC	Has RHC	Nongovt	10.2419684400	-2.4441898710	10.5824005200	.999.0000000000	3.9216472170	56.8220
9	43511	YS0016	2016	YS	10-20m	No LTC	Has RHC	Govt	-7.7922936170	-3.0774386130	13.1006867300	.999.0000000000	0.4096475820	54.7938
10	43519	YS0017	2016	YS	Under 10m	No LTC	No RHC	Nongovt	-4.0467822620	0.5737862550	10.7873360200	.999.0000000000	1.3133604620	55.9090
11	43527	YS0018	2016	YS	Under 10m	Has LTC	Has RHC	Nongovt	-1.8810135510	-2.4441898710	.999.0000000000	.999.0000000000	0.5897534080	50.5775
12	43535	YS0019	2016	YS	Under 10m	No LTC	No RHC	Nongovt	10.2419684400	-3.0774386130	.999.0000000000	-0.2563278930	6.7228686840	56.2816
13	43543	YS0020	2016	YS	Under 10m	No LTC	Has RHC	Nongovt	4.2753846760	9.9830905120	15.2889366500	.999.0000000000	1.7314472380	49.5532
14	43551	YS0020	2016	YS	Under 10m	Has LTC	Has RHC	Govt	-7.7922936170	0.5737862550	6.0950834490	60.6647622900	3.1040159840	999.00
15	43559	YS0021	2016	YS	Under 10m	No LTC	No RHC	Nongovt	4.0467822620	-2.4441898710	-11.2090099000	.999.0000000000	0.4819255870	999.00
16	43567	YS0022	2016	YS	10-20m	Has LTC	Has RHC	Nongovt	-1.8810135510	-3.0774386130	1.0765203000	20.1907732100	1.5847918410	58.7642
17	43575	YS0023	2016	YS	Under 10m	No LTC	No RHC	Nongovt	10.2419684400	0.5737862550	4.3380323700	3.9250382010	2.8578377860	57.1857
18	43583	YS0024	2016	YS	Under 10m	No LTC	No RHC	Nongovt	-7.7922936170	-2.4441898710	8.0825801080	-0.2469689670	6.5248636810	56.8220
19	43591	YS0025	2016	YS	10-20m	No LTC	Has RHC	Nongovt	-4.0467822620	-3.0774386130	11.7613271700	3.4683963400	1.1905391140	54.7938
20	43599	YS0026	2016	YS	Under 10m	No LTC	No RHC	Nongovt	-1.8810135510	0.5737862550	11.3861891700	.999.0000000000	0.5836543000	55.9090
21	43607	YS0027	2016	YS	Over 20m	No LTC	Has RHC	Nongovt	10.2419684400	-2.4441898710	15.7308218700	-22.7555194200	8.1923762610	50.5775
22	43615	YS0028	2016	YS	Over 20m	Has LTC	Has RHC	Nongovt	-7.7922936170	-3.0774386130	6.2604779850	10.0334108600	3.6654448730	56.2816

FINANCIAL DISTRESS INDEX

1) SELECT THE FINANCIAL DISTRESS INDEX TOOL

Click the “Financial Distress Index” button on the main navigation page to select the financial distress index tool. The Financial Distress Index Model (FDI) predicts the probability of rural hospital financial distress and subsequent closure in your state within two years.

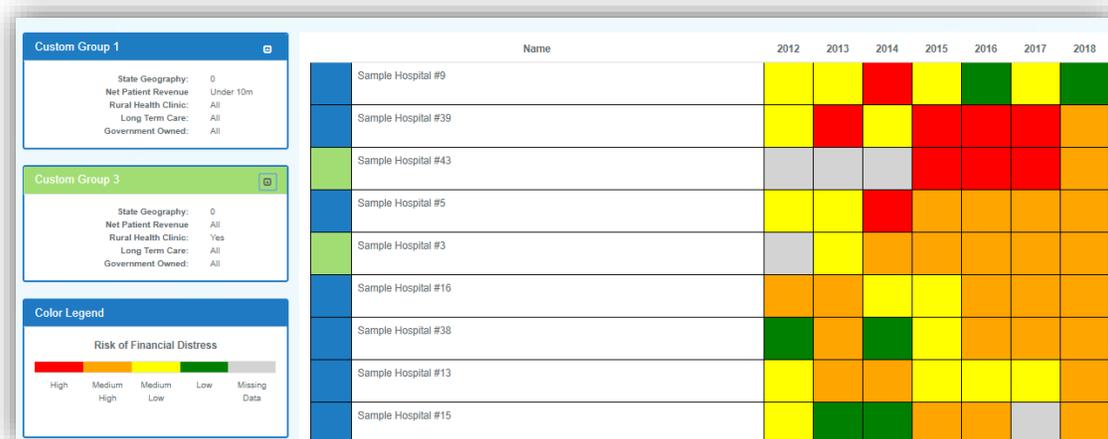


2) FDI: OVERVIEW

The FDI Model results categorize hospitals into one of four risk categories:

- low (green)
- medium-low (yellow)
- medium-high (orange)
- high (red)

Risk categories are presented by year, with the current year blank (grey). For more info on how the model works, read: GM Holmes, BG Kaufman and GH Pink. [Predicting Financial Distress in Rural Hospitals](#), Journal of Rural Health, Summer 2017;33(3):239-249.



DOWNLOAD HOSPITAL DATA TOOL

1) SELECT DOWNLOAD YOUR HOSPITAL'S DATA TOOL

Another feature of CAHMPAS is the Download Your Hospital's Data Tool. The Download Your Hospital's Data Tool shows the metrics of an individual hospital's financial indicators over time.

Select reporting.

The screenshot shows a spreadsheet titled 'Download Your Hospital's Data' with columns for hospital ID, year, net patient revenue, rural health clinic, long-term care, government owned, and include years. A yellow 'Reporting' button is highlighted at the bottom of the spreadsheet.

2) SELECTING YOUR FILTERED DATA

This screen allows you to filter the hospitals in your download by their state, net patient revenue, provisions of long-term care, government ownership, system affiliation, and rural health clinic ownership. Additionally, you can select or deselect whole years of data.

Click the drop-down menus to narrow your results.

The screenshot shows the 'Report Generator' interface with the following filter options:

- State: AL, AK, AR (dropdown menu)
- Net Patient Revenue: All (dropdown menu)
- Rural Health Clinic: All (dropdown menu)
- Long Term Care: All (dropdown menu)
- Government Owned: All (dropdown menu)
- Include Years: 2010 2011 2012 2013 2014 2015 2016 2017

A 'Download Report' button is located at the bottom right of the form.



3) VISUALIZING DATA

The screen to the right depicts the downloaded data on the first tab, titled “Hospitals.” The second tab, titled “Indicators,” provides a list of the financial indicators used in CAHMPAS—which you can use to match with the headers shown below. Keep in mind, values of -999 represent data that is missing for that hospital or year.

cahid	year	cahstate	revcat	hassnf	hasrhc	govt	cahcity	name	cmsid	regname	totmarg	cashflomaroe	opmarg	curratio	daysc	
20004	2011	20	Under 10r	Has LTC	Has RHC	Nongovt	City 20004	Hospital 2	20004	West	-9.46084	-18.1187	-19.9486	-22.4644	1.396679	8.21
20004	2012	20	Under 10r	Has LTC	Has RHC	Nongovt	City 20004	Hospital 2	20004	West	-0.35287	-15.2341	-0.66331	-20.2309	2.269121	17.0
20004	2013	20	Under 10r	Has LTC	Has RHC	Nongovt	City 20004	Hospital 2	20004	West	-4.01607	-19.2358	-7.56513	-23.4031	2.86831	46.6
20004	2014	20	Under 10r	Has LTC	Has RHC	Nongovt	City 20004	Hospital 2	20004	West	6.361356	-5.4885	11.82577	-9.59573	1.986802	53.5
20004	2015	20	Under 10r	Has LTC	Has RHC	Nongovt	City 20004	Hospital 2	20004	West	-0.56892	-8.25289	-1.03413	-12.4805	3.495507	48.4
20004	2016	20	Under 10r	Has LTC	Has RHC	Nongovt	City 20004	Hospital 2	20004	West	-3.70746	-21.2333	-8.00828	-27.0201	2.119885	23.1
20004	2017	20	Under 10r	Has LTC	Has RHC	Nongovt	City 20004	Hospital 2	20004	West	4.841036	-5.68538	9.790185	-9.22824	2.854555	33.3
20004	2018	20	Under 10r	Has LTC	Has RHC	Nongovt	City 20004	Hospital 2	20004	West	-6.29007	-13.3088	-20.1636	-15.698	1.5087	16.1
20004	2019	20	Under 10r	Has LTC	Has RHC	Nongovt	City 20004	Hospital 2	20004	West	-3.07805	-8.46204	-11.7406	-12.0147	0.935855	21.0
20001	2011	20	Under 10r	Has LTC	No RHC	Govt	City 20001	Hospital 2	20001	West	10.56529	6.239362	7.969163	1.394215	5.488864	276.0
20001	2012	20	Under 10r	Has LTC	No RHC	Govt	City 20001	Hospital 2	20001	West	7.061864	9.289101	5.347102	4.713329	2.374435	39.1
20001	2013	20	10-20m	Has LTC	No RHC	Govt	City 20001	Hospital 2	20001	West	9.86933	11.50956	7.499288	7.842557	2.346537	81.2
20001	2014	20	10-20m	Has LTC	No RHC	Govt	City 20001	Hospital 2	20001	West	1.116141	2.603795	0.871595	-3.21239	2.563375	66.0
20001	2015	20	10-20m	Has LTC	No RHC	Govt	City 20001	Hospital 2	20001	West	5.660739	4.288237	4.738548	-1.28222	2.525411	65.0
20001	2016	20	10-20m	Has LTC	No RHC	Govt	City 20001	Hospital 2	20001	West	6.272726	-4.28637	5.953048	-10.8184	0.898946	10.0
20001	2017	20	10-20m	Has LTC	No RHC	Govt	City 20001	Hospital 2	20001	West	2.422636	-3.4792	2.320236	-8.37149	1.52918	132.0
20001	2018	20	10-20m	Has LTC	No RHC	Govt	City 20001	Hospital 2	20001	West	5.115327	7.942516	5.048161	1.063106	2.58656	80.4
20001	2019	20	10-20m	Has LTC	No RHC	Govt	City 20001	Hospital 2	20001	West	1.836054	7.754996	1.975136	0.080985	2.135252	76.0
20005	2011	20	10-20m	Has LTC	Has RHC	Nongovt	City 20005	Hospital 2	20005	West	-0.85501	-2.02971	-1.30926	-9.26414	2.643437	86.0
20005	2012	20	10-20m	Has LTC	Has RHC	Nongovt	City 20005	Hospital 2	20005	West	5.481919	-4.27538	8.287326	-10.7001	4.159799	104.0

FINANCIAL INDICATORS

1) SELECT THE FINANCIAL INDICATORS TOOL

Another feature of CAHMPAS is the Financial Indicators Tool. The Financial Indicators Tool shows the medians of a state's financial indicators in comparison to national medians or benchmarks.

Select Financial Indicators Tool.



What are my state's financial indicators?

Financial Indicators

2) FINANCIAL INDICATORS TOOL: OVERVIEW

The Financial Indicator Tool shows results for a state's hospitals compared national medians using the following financial indicators:

PROFITABILITY INDICATORS

Profitability Indicators	Liquidity Indicators	Capital Structure Indicators
Total Margin	Current Ratio	Equity Financing
Cash Flow Margin	Days Cash on Hand	Debt Service Coverage
Return on Equity	Days Net Revenue in Accounts Receivable	Long-Term Debt to Capitalization
Operating Margin	Days Gross Revenue in Accounts Receivable	

SERVICE LINE INDICATORS

Inpatient Indicators	Outpatient Indicators
Medicare Inpatient Payer Mix	Outpatient Revenues to Total Revenues
Medicare Acute Inpatient Cost Per Day	Hospital Medicare Outpatient Payer Mix
Average Daily Census Swing-SNF Beds	Hospital Medicare Outpatient Cost to Charge
Average Daily Census Acute Beds	

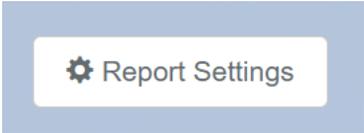
OPERATIONS INDICATORS

Labor Indicators	Other Indicators
Salaries to Net Patient Revenue	Patient Deductions
FTEs per Adjusted Occupied Bed	Average Age of Plant
Average Salary per FTE	Uncompensated Care
	Medicaid Payer Mix

The results for the selected state and selected year are shown in comparison to national medians.

3) SELECT YOUR INDICATORS AND YEAR

When you open the table, all indicators for your state will automatically populate. To change selected indicators or the year, go to the **Report Settings** button at the bottom left of the table.



Select Report Settings
×

Displayed Indicators

- Operating Margin
- Total Margin
- Salaries to Net Patient Revenue
- Days Cash On Hand
- Days in Net Accounts Receivable
- Debt Service Coverage
- Average Age of Plant
- Medicare Inpatient Payer Mix
- Hospital Medicare Outpatient Payer Mix
- Long-Term Debt to Capitalization
- Days in Gross Accounts Receivable
- Average Daily Census Swing-SNF Beds
- Average Daily Census Acute Beds
- Market Population
- Market Income
- 1-Year change in operating expenses
- 1-Year change in operating revenue

- Cash flow margin
- Return on equity
- Current ratio
- Medicare acute inpatient cost per day
- Outpatient revenue to total revenue
- Hospital Medicare outpatient cost to charge
- FTEs per adjusted occupied bed
- Patient deductions
- Uncompensated care
- Medicaid payer mix
- Equity Financing
- Plant Age
- Average Salary per FTE
- Market Poverty Rate
- Distance to Larger Hospital
- Market Share
- 3-Year change in operating expenses
- 3-Year change in operating revenue

Year

2019 ▼

Create Report

4) SET YOUR CRITERIA

You now can set the criteria you would like to view from the pop-up menu. All financial indicators will automatically be selected with a blue check mark.

- 1) Select the year of data
- 2) Select the indicators you would like on your report. (If the box is checked, the financial indicator will be displayed in the report. If you would like certain indicators not to show, uncheck the box next to the indicator.)
- 3) Lastly, click **create report** at the bottom of the pop-up.

5) OVERVIEW

Once you select create report, you will see the table with financial indicators for the state you selected. The state name will be located where the “20” is in this screenshot.

Financial indicators are grouped by domains (Profitability, Liquidity, Capital Structure, Inpatient, Outpatient, Growth, Labor, and Other.)

For each indicator, the table shows, benchmark, U.S. median, percent of hospitals in state worse than benchmark, number of hospitals worse than benchmark, and number of hospitals with complete data.



20: Performance on Select Financial Indicators Compared to National Benchmarks/Medians 2019

Total number of hospitals: 13

Indicator	Benchmark	US Median	Percent of hospitals in state worse than benchmark *	Number of hospitals worse than benchmark	Number of hospitals with complete data
Profitability					
Cash Flow Margin <i>(higher is better)</i>	5%	6%	54%	7	13
Operating Margin <i>(higher is better)</i>	2%	0%	85%	11	13
Return on Equity <i>(higher is better)</i>	4.5%	5%	67%	8	12
Total Margin	3%	2%	69%	9	13

6) UNDERSTANDING YOUR INDICATOR

Indicator	Benchmark	US Median	Percent of hospitals in state worse than benchmark *	Number of hospitals worse than benchmark	Number of hospitals with complete data
Profitability					
Cash Flow Margin <i>(higher is better)</i>	5%	6%	54%	7	13

Below each indicator, a statement (e.g., “higher is better” or “lower is better”) lets you know how to interpret the indicator. The image below shows this for cash flow margin.

7) DOWNLOADING LIST OF BELOW BENCHMARK HOSPITALS

Another feature of the financial indicators tool is the ability to download a list of “below benchmark hospitals” – hospitals for your state that have indicators that are below benchmark. Most benchmarks have been established by the Flex Monitoring Team to provide reference point as a basis of comparison among the financial indicators. When there is no established benchmark, the national median is used as a basis of comparison.

A **median** is the middle number in a sorted, ascending or descending, list of numbers. For example, if the median total margin is 3 percent, then half of all hospitals have a total margin > 3 percent and half have a total margin < 3 percent. The median is used because there may be outliers in the sequence that could skew the mean of the values. Medians usually change every year.

A **benchmark** is an absolute measure of performance that does not change over time and is independent of how other hospitals performed.

Note: Benchmarks are a key component of many performance measurement systems because they help to identify good financial performance and provide specific targets for improvement. CAH Chief Executive Officers (CEOs) and Chief Financial Officers (CFOs) are most knowledgeable about the financial management of CAHs, so in 2006, we began surveying CEOs and CFOs. In April 2007, we used their feedback to help create benchmarks for five of the indicators. This method was repeated in 2011 to create benchmarks for seven additional indicators. The intent of the benchmarks is to provide a relevant and useful basis to assess the financial performance and condition of CAHs. Medians change over time, but benchmarks provide a constant basis on which to judge financial performance and condition.

To download the list of below benchmark hospitals, **you must do so before changing the year and selected indicators.**

 Below Benchmark Hospitals

Click the below benchmark hospitals button found at the far bottom right of the report.

The file will contain hospitals within the previously selected criteria, their city, your state, indicators, benchmarks, each hospital’s value, and the ordinality which shows if the hospital’s value is higher or lower than the benchmark.

AutoSave Off     Hospitals below benchmark 2021-11-29 02_35_35

File Home Insert Draw Page Layout Formulas Data Review View

Clipboard Font Alignment Number

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A1    name

	A	B	C	D	E	F	G	H	I
1	name	city	state	indicator	benchmar	hospital_v	ordinality		
2	Hospital 0	City 01013	01	totmarg	3	-0.35269	higher		
3	Hospital 0	City 01009	01	totmarg	3	0.9218	higher		
4	Hospital 0	City 01012	01	totmarg	3	-0.89453	higher		
5	Hospital 0	City 01015	01	totmarg	3	1.753168	higher		
6	Hospital 0	City 01019	01	totmarg	3	-14.5871	higher		
7	Hospital 0	City 01021	01	totmarg	3	2.991739	higher		
8	Hospital 0	City 01020	01	totmarg	3	0.612228	higher		
9	Hospital 0	City 01011	01	cashfloma	5	2.977375	higher		
10	Hospital 0	City 01013	01	cashfloma	5	2.63815	higher		

8) PRINTING THE FINANCIAL INDICATORS TOOL

To print the page, **you must do so before changing the year and selected indicators.**

- To print, click the save image button found at the bottom middle of the report.
- Once you click save image, a downloadable file will appear, which you can then click to print.

 Save Image

9) TO CHANGE THE YEAR OR DISPLAYED INDICATORS, RETURN TO THE HOSPITAL SELECTION SCREEN

To change your selected financial indicator, click report settings found at the bottom of screen. Follow steps three and four again.

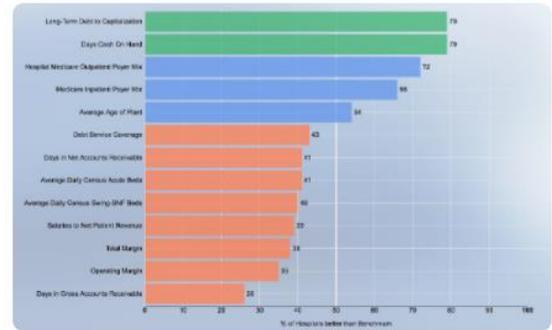
FINANCIAL INDICATORS CHART

1) SELECT THE FINANCIAL INDICATORS CHART TOOL

Another feature of CAHMPAS is the Financial Indicators Chart Tool. The Financial Indicators Chart Tool shows a state's financial indicators in comparison to national benchmarks.

Select Financial Indicators Chart Tool.

Financial Indicators Chart



What are my state's financial indicators?

[Financial Indicators Chart](#)

2) FINANCIAL INDICATORS CHART: OVERVIEW

The Financial Indicators Chart Tool shows results for your state's hospitals compared national medians using the following financial indicators:

- 1-Year change in operating expenses
- 1-Year change in operating revenue
- 3-Year change in operating expenses
- 3-Year change in operating revenue
- Average Age of Plant
- Average Daily Census Acute Beds
- Average Daily Census Swing-SNF Beds
- Average Salary per FTE
- Cash Flow Margin
- Current Ratio
- Days Cash on Hand
- Days Gross Revenue in Accounts Receivable
- Days Net Revenue in Accounts Receivable
- Debt Service Coverage
- Equity Financing
- FTEs per Adjusted Occupied Bed
- Hospital Medicare Outpatient Cost to Charge
- Hospital Medicare Outpatient Payer Mix
- Long-Term Debt to Capitalization
- Medicaid payer mix
- Medicare Acute Inpatient Cost Per Day
- Medicare Inpatient Payer Mix
- Operating Margin
- Outpatient Revenues to Total Revenues
- Patient Deductions
- Return on Equity
- Salaries to Net Patient Revenue
- Total Margin
- Uncompensated care

The results for the selected state and selected year are shown in comparison to national medians.



3) SELECT YOUR INDICATORS AND YEAR

When you open the table, all indicators for your state will automatically populate. To change states, you will need to select a state. To change the state, go to the **Report Settings** button at the bottom of the table.

Select Report Settings

Displayed Indicators

- Operating Margin
- Total Margin
- Salaries to Net Patient Revenue
- Days Cash On Hand
- Days in Net Accounts Receivable
- Debt Service Coverage
- Average Age of Plant
- Medicare Inpatient Payer Mix
- Hospital Medicare Outpatient Payer Mix
- Long-Term Debt to Capitalization
- Days in Gross Accounts Receivable
- Average Daily Census Swing-SNF Beds
- Average Daily Census Acute Beds
- Market Population
- Market Income
- 1-Year change in operating expenses
- 1-Year change in operating revenue
- Cash flow margin
- Return on equity
- Current ratio
- Medicare acute inpatient cost per day
- Outpatient revenue to total revenue
- Hospital Medicare outpatient cost to charge
- FTEs per adjusted occupied bed
- Patient deductions
- Uncompensated care
- Medicaid payer mix
- Equity Financing
- Plant Age
- Average Salary per FTE
- Market Poverty Rate
- Distance to Larger Hospital
- Market Share
- 3-Year change in operating expenses
- 3-Year change in operating revenue

Year

2019

Create Report



4) SET YOUR CRITERIA

You can now set the criteria you would like to view from the pop-up menu. All financial indicators will automatically be selected with a blue check mark.

- 1) Select your state
- 2) Select the year of data
- 3) Select the indicators you would like on your report. (If the box is checked, the financial indicator will be displayed in the report). If you would like certain indicators not to show, uncheck the box next to the indicator.)
- 4) Lastly, click **create report** at the bottom of the pop-up.



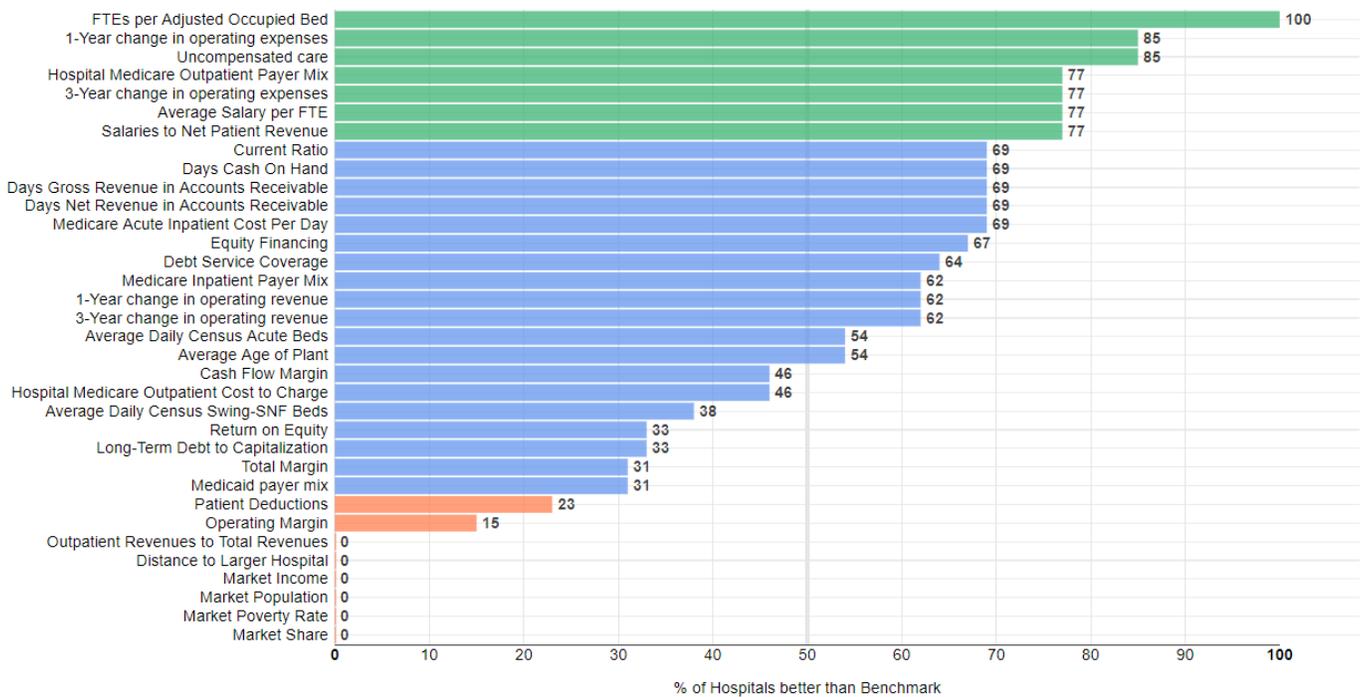
5) OVERVIEW

Once you select create report, you will see the chart with the financial indicators and year you selected.

To the left of the chart, you will see all selected indicators listed on the y axis. On the bottom x-axis you will see the percentage of hospitals for the selected state that are better than the benchmark.

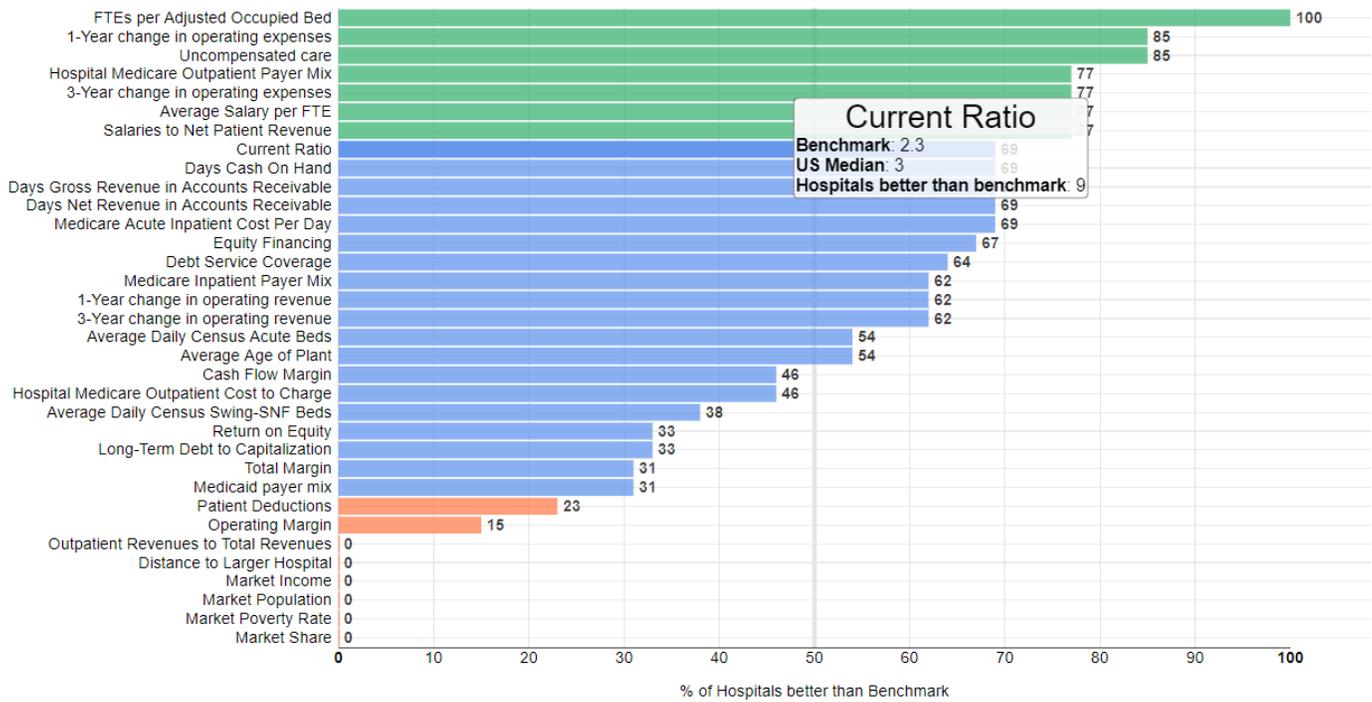
20: Performance on Select Financial Indicators Compared to National Benchmarks/Medians 2019

Total number of hospitals: 13



6) UNDERSTANDING YOUR INDICATOR

To see how each benchmark compares other hospitals and national medians, you can hover over the selected indicator. Below, you can see that the current ratio benchmark is 2.3, the US median is 3, and the hospitals that are better than the benchmark are 9.



7) DOWNLOADING LIST OF BELOW BENCHMARK HOSPITALS

Another feature of the financial indicators chart tool is the ability to download a list of “below benchmark hospitals” – hospitals for your state that have indicators that are below benchmark. Most benchmarks have been established by the Flex Monitoring Team to provide reference point as a basis of comparison among the financial indicators. When there is no established benchmark, the national median is used as a basis of comparison.

A **median** is the middle number in a sorted, ascending or descending, list of numbers. For example, if the median total margin is 3 percent, then half of all hospitals have a total margin > 3 percent and half have a total margin < 3 percent. The median is used because there may be outliers in the sequence that could skew the mean of the values. Medians usually change every year.

A **benchmark** is an absolute measure of performance that does not change over time and is independent of how other hospitals performed.

Note: Benchmarks are a key component of many performance measurement systems because they help to identify good financial performance and provide specific targets for improvement. CAH Chief Executive Officers (CEOs) and Chief Financial Officers (CFOs) are most knowledgeable about the financial management of CAHs, so in 2006, we began surveying CEOs and CFOs. In April 2007, we used their feedback to help create benchmarks for five of the indicators. This method was repeated in 2011 to create benchmarks for seven additional indicators. The intent of the benchmarks is to provide a relevant and useful basis to assess the financial performance and condition of CAHs. Medians change over time, but benchmarks provide a constant basis on which to judge financial performance and condition.



To download the list of below benchmark hospitals, **you must do so before changing the year and selected indicators.**



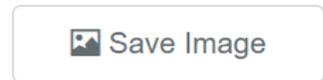
Click the below benchmark hospitals button found at the far bottom right of the report.

The file will contain hospitals within the previously selected criteria, their city, your state, indicators, benchmarks, each hospital's value, and the ordinality which shows if the hospital's value is higher or lower than the benchmark.

8) PRINTING THE FINANCIAL INDICATORS TOOL

To print the page, **you must do so before changing the year and selected indicators.**

1. To print, click the save image button found at the bottom middle of the report.
2. Once you click save image, a downloadable file will appear, which you can then click to print.



9) TO CHANGE THE YEAR OR DISPLAYED INDICATORS, RETURN TO THE HOSPITAL SELECTION SCREEN

To change your selected financial indicator, click report settings found at the bottom of screen. Follow steps three and four again.



INDICATORS REPORT

1) SELECT THE VIEW INDICATORS REPORT TOOL

Another feature of CAHMPAS is the Indicators Report Tool. The Indicators Report Tool shows the metrics of an individual hospital's financial indicators in comparison to other hospitals. There is also a download indicators report option which will be discussed after view indicators report.

Select View Indicators Report.



2) VIEW INDICATORS REPORT: OVERVIEW

The indicators report shows results for an individual hospital compared to other hospitals at both the state and national level over time with the following financial indicators:

1. Total margin
2. Cash flow margin
3. Return on equity
4. Operating margin
5. Current ratio
6. Days cash on hand
7. Days net revenue in accounts receivable
8. Equity financing
9. Debt service coverage
10. Long-term debt to capitalization
11. Outpatient revenues to total revenues
12. Patient deductions
13. Medicare inpatient payer mix
14. Hospital Medicare outpatient payer mix
15. Hospital Medicare outpatient cost to charge
16. Medicare acute inpatient cost per day
17. Salaries to net patient revenue
18. Average age of plant
19. FTEs per adjusted occupied bed
20. Average salary per FTE
21. Average daily census swing-SNF beds
22. Average daily census acute beds
23. Days gross revenue in accounts receivable
24. Uncompensated care
25. Medicaid payer mix
26. 1-year change in operating expenses
27. 1-year change in operating revenue
28. 3-year change in operating expenses
29. 3-year change in operating revenue

The results over time for the selected indicator are shown in comparison to national and state medians.



3) SELECT YOUR HOSPITAL

First, you will need to select the hospital you would like to view from the potential options by clicking view dashboard.



Choose a hospital

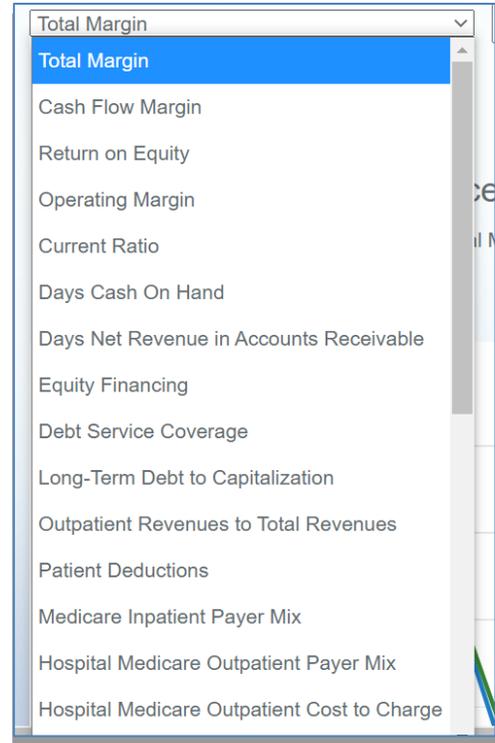
Show entries Search:

CAHID	Name	City	CMS ID	Action
20001	Hospital 20001	City 20001	20001	View Dashboard
20002	Hospital 20002	City 20002	20002	View Dashboard
20003	Hospital 20003	City 20003	20003	View Dashboard
20004	Hospital 20004	City 20004	20004	View Dashboard



4) SET YOUR CRITERIA

You will now need to select your specific financial indicator to look at the results and the associated line graph.



Total Margin

Total Margin

Recent Results for Hospital 20001

In 2019, Hospital 20001's Total Margin was 1.84 percent, the national median was 2.22 percent, and the median was 0.61 percent.

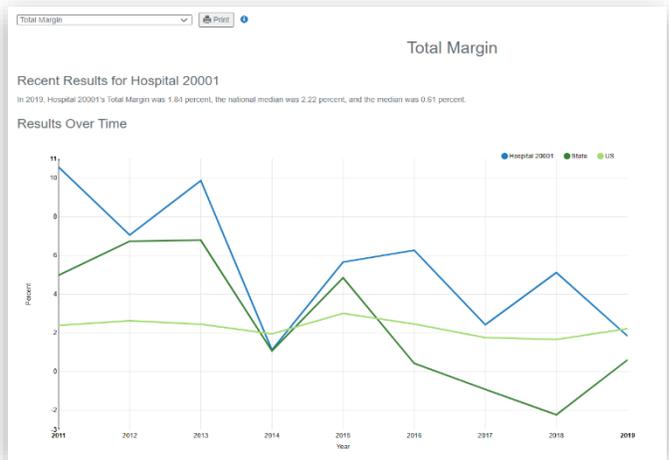
Results Over Time





5) INDICATOR GRAPH: OVERVIEW

The graph to your right depicts how indicator charts in CAHMPAS may look, with your hospital selected. Utilizing the key at the top right corner of your graph (and enlarged below), you will notice that the blue line represents a single selected hospital, the dark green line represents the state median, and the light green line represents the US median. Note: Colors may vary.



6) DATA TABLE

Below the graph, you will find a table that contains the indicator data by year, also represented in the line graph.

Total Margin (percent)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019
Hospital 20001	10.57	7.06	9.87	1.12	5.66	6.27	2.42	5.12	1.84
	4.98	6.74	6.79	1.07	4.85	0.43	-0.92	-2.23	0.61
US	2.39	2.63	2.45	1.95	3.01	2.46	1.76	1.66	2.22

7) UNDERSTANDING YOUR INDICATOR

Underneath the graph and table, you will see the indicator definition, the location of the financial indicator components on the Medicare cost report accounts worksheet, an interpretation explaining how to use the indicator, and information about the quality of the data that may affect whether or not values are missing in the chart and table. The image below shows each of these for the Total Margin indicator.

Definition

Net income / Total revenues

Medicare Cost Report Accounts

Worksheet G-3, line 29 / Worksheet G-3, lines 3 + 25

Interpretation

Total Margin measures the control of expenses relative to revenues. A positive value indicates total expenses are less than total revenues (a profit). Very high positive values may indicate higher patient volumes, which drive down the cost per unit of service. A negative value indicates total expenses are greater than total revenues (a loss). Very high negative values may indicate financial difficulty.

Data Quality/Exclusion Criteria

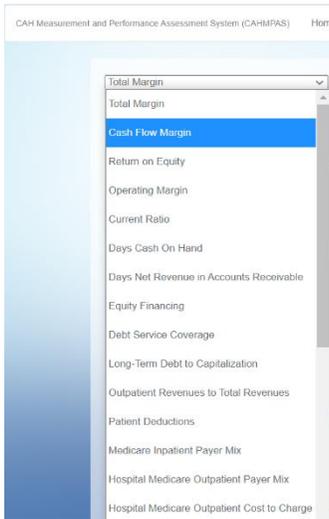
For hospitals with total revenues of zero or with total margin values greater than or less than 100%/-100%, indicator values were set to missing.

8) PRINT & ALTER YOUR INDICATOR FROM THE GRAPH



To print the page, **you must do so before changing the indicator**. To print, you can click the “print” button to the right of the drop-down menu.

To change your selected financial indicator, click the drop-down arrow on the left side of the screen and select the new financial indicator you would like to view, without returning to any previous screens.



9) SELECT THE DOWNLOAD INDICATORS REPORT

The download indicators report tool allows you to download individual pdf reports for each hospital and financial indicator. You can select as little or as many hospitals and financial indicators as you would like.

Select download Indicators Report.

Indicators Report

Total Margin

Recent Results for Test Hospital
In 2016, Test Hospital's Total Margin was 8.25 percent, the national median was 1.81 percent, and the Test median was 5.5 percent.

Results Over Time

Year	Test Hospital (%)	State (%)	US (%)
2011	5.0	4.0	2.0
2012	6.0	4.0	2.0
2013	10.0	4.0	2.0
2014	1.0	1.0	2.0
2015	10.0	5.0	2.0
2016	8.25	4.0	2.0
2017	10.0	8.0	2.0
2018	8.0	6.0	2.0

How does an individual hospital's indicators compare?

[View Indicators Report](#)

[Download Indicators Report](#)



10) DOWNLOAD INDICATORS REPORT: OVERVIEW

A white “Select Report Settings” box will pop up.

You may check or uncheck boxes based on what hospitals and indicators you want to download. Selected indicators will be downloaded as individual pdfs corresponding to each indicator.

Use the “check all” and “unselect all” button to select and deselect all indicators at once.

Select Report Settings



Displayed Hospitals

Choose hospitals

Check/Uncheck All

	CAHID	Name	City	CMS ID
<input checked="" type="checkbox"/>	20004	Hospital 20004	City 20004	20004
<input checked="" type="checkbox"/>	20001	Hospital 20001	City 20001	20001
<input checked="" type="checkbox"/>	20005	Hospital 20005	City 20005	20005
<input checked="" type="checkbox"/>	20012	Hospital 20012	City 20012	20012
<input checked="" type="checkbox"/>	20015	Hospital 20015	City 20015	20015
<input checked="" type="checkbox"/>	20008	Hospital 20008	City 20008	20008
<input checked="" type="checkbox"/>	20006	Hospital 20006	City 20006	20006
<input checked="" type="checkbox"/>	20009	Hospital 20009	City 20009	20009
<input checked="" type="checkbox"/>	20002	Hospital 20002	City 20002	20002
<input checked="" type="checkbox"/>	20016	Hospital 20016	City 20016	20016
<input checked="" type="checkbox"/>	20003	Hospital 20003	City 20003	20003
<input checked="" type="checkbox"/>	20007	Hospital 20007	City 20007	20007
<input checked="" type="checkbox"/>	20011	Hospital 20011	City 20011	20011

Displayed Indicators

Check/Uncheck All



Select Report Settings

Displayed Indicators

- Check/Uncheck All
- Operating Margin
- Total Margin
- Salaries to Net Patient Revenue
- Days Cash On Hand
- Days in Net Accounts Receivable
- Debt Service Coverage
- Average Age of Plant
- Medicare Inpatient Payer Mix
- Hospital Medicare Outpatient Payer Mix
- Long-Term Debt to Capitalization
- Days in Gross Accounts Receivable
- Average Daily Census Swing-SNF Beds
- Average Daily Census Acute Beds
- 1-Year change in operating expenses
- 1-Year change in operating revenue
- Cash flow margin
- Return on equity
- Current ratio
- Medicare acute inpatient cost per day
- Outpatient revenue to total revenue
- Hospital Medicare outpatient cost to charge
- FTEs per adjusted occupied bed
- Patient deductions
- Uncompensated care
- Medicaid payer mix
- Equity Financing
- Average Salary per FTE
- 3-Year change in operating expenses
- 3-Year change in operating revenue

Please note: Selecting more than 10 indicators may take several minutes to generate.

[Download Reports](#)

Select Download Reports. You will see a reports processing loading screen. Once the report(s) have fully processed, you will see a report ready screen.

CAH Measurement and Performance Assessment System (CAHMPAS) Home > Users

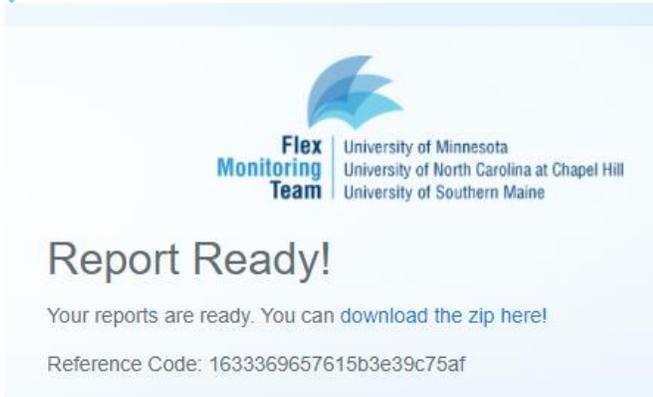



Reports Processing...

Please wait while we generate your reports. This page should eventually refresh to provide you with a zip file to download.



Reference Code: 1633369657615b3e39c75af



Click “download the zip here” to gain access to a zip file with all of your report(s).

11) VIEWING YOUR REPORT(S)

In the zip file you will see your hospital identifier. Click on your identifier to view the indicator reports for each indicator you selected.

› This PC › Downloads › hospital-indicator-reports (1)

^	Name	Type
	📁 20001	File folder

Each indicator will show up as a separate pdf. The downloadable file will contain the indicator graph, a data table, and information that will help you understand your indicator. Refer to the Indicators Report tool instructions for more guidance.

Other questions?

If you have other questions about CAHPAS refer to the navigation bar where we have links to other resources and frequently asked questions (FAQ)



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