



**Flex  
Monitoring  
Team**

University of Minnesota

University of North Carolina at Chapel Hill

University of Southern Maine

# **Using Flex Monitoring Tools to Improve Critical Access Hospital Performance**

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# CAHMPAS

Critical Access Hospital Measurement & Performance Assessment System

- Online data query tool created by FMT
- Provides graphs and data to compare CAH performance for various measures across user-defined groups

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# Logging In

CAH Measurement and Performance Assessment System (CAHMPAS) Login

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**CAHMPAS**  
Critical Access Hospital Measurement & Performance Assessment System

Login

Username:

Password:

Remember Me

Login

1. Visit <http://cahmpas.sirs.unc.edu>
2. Enter your username and password (if you need login credentials, contact us at [monitoring@flexmonitoring.org](mailto:monitoring@flexmonitoring.org))



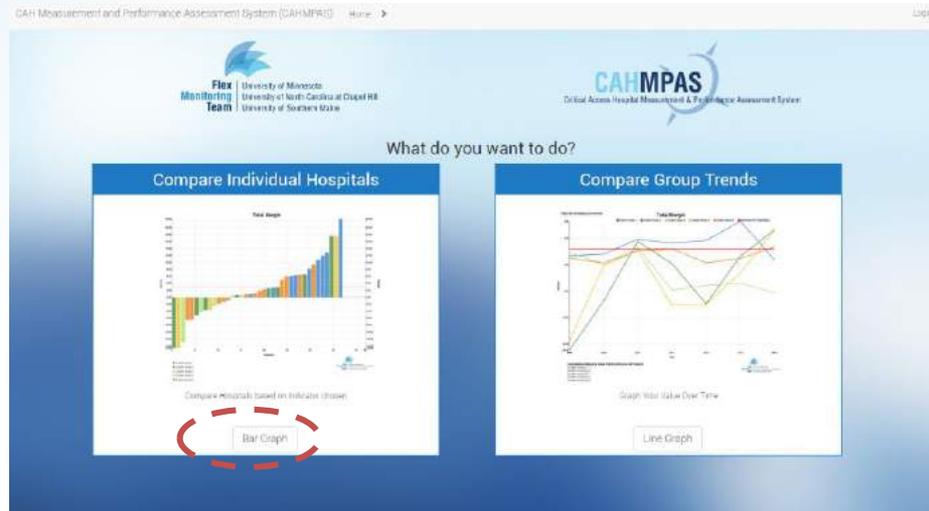
# CAHMPAS Home Screen



1. Note the navigation bar at the top of the window – use this, rather than your browser’s back & forward buttons, to get around.
2. Click “Get Started.”



# Set Graph Type



1. Bar graphs compare hospitals' performances on an indicator for a specific year; line graphs display performance over time.
2. Choose one. You can always use the nav bar to switch types later. We'll start with a bar graph.



# Set Indicator



1. You can graph one indicator at a time. The 22 finance indicators are listed first; scroll down to access quality & community indicators.
2. We'll choose the "Total Margin" indicator here.



# Set Comparison Groups

1. This screen allows you to create and define groups for comparing CAHs. CAHMPAS allows you to compare up to five custom groups at a time by using the “add group” button.
2. Let’s start with just one group... (see next step)



# Set Comparison Groups

Custom Group Name: Custom Group 1  
1318 Hospitals

State: All  
Net Patient Revenue: All  
Rural Health Clinic: All  
Long-Term Care: All  
Government Owned: All  
Data from Year: 2014

Add Group Draw Graph

1. This screen allows you to create and define groups for comparing CAHs. CAHMPAS allows you to compare up to five custom groups at a time by using the “add group” button.
2. Let’s start with just one group... (see next step)



# Set Comparison Groups

Custom Group Name:

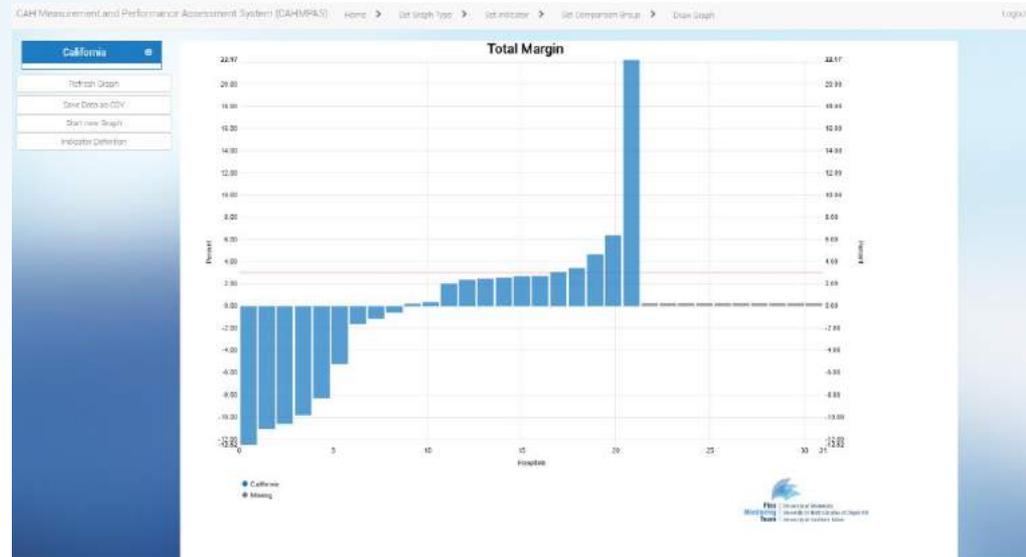
32 Hospitals

State	CA
Net Patient Revenue	All
Rural Health Clinic	All
Long-Term Care	All
Government Owned	All
Data from Year	2014

1. As you define the group, the # of hospitals will change.
2. For example, to graph all CAHs in California, select "CA" from the drop-down menu. Type a group name if desired.
3. Select "Draw Graph."



# Understanding the Bar Graph



- Each bar corresponds to a CAH in CA for 2014. Hover your cursor to identify your hospital.
- Blue bars are part of the CA group; gray bars are CAHs with missing data for this year.
- The red line represents the benchmark for this indicator.



# Add Comparison Groups



Let's compare 2014 Total Margin among CAHs in California by government ownership:

1. Click "Set Comparison Group" in the top nav bar.
2. Click on the "Add Group" button below.



# Add Comparison Groups

Custom Group Name: **California: Gov-Owned**  
17 Hospitals

State: CA  
Net Patient Revenue: All  
Rural Health Clinic: All  
Long-Term Care: All  
Government Owned: Yes  
Data from Year: 2014

Custom Group Name: **California: Not Gov-Owned**  
15 Hospitals

State: CA  
Net Patient Revenue: All  
Rural Health Clinic: All  
Long-Term Care: All  
Government Owned: No  
Data from Year: 2014

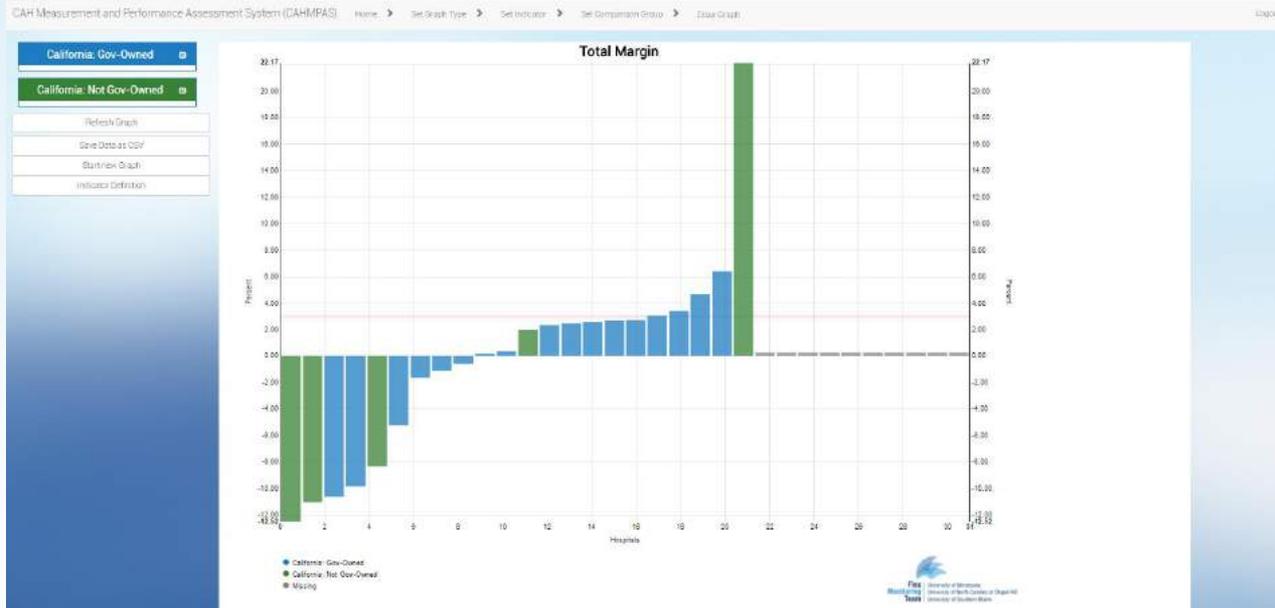
Delete Group

Add Group Draw Graph

1. Change the name of group #1, and then select “yes” next to “Government Owned.” The number of CAHs in this group changes from 32 to 17.
2. Do the same for group 2, but specify “No.” This group has 15 CAHs.
3. Click “Draw Graph.”



# Multiple Comparison Groups



- The new graph displays the same 2014 data for total margin but now distinguishes between government-owned CAHs (blue) and non-government-owned CAHs (green) in California.



# Change Indicator

CAH Measurement and Performance Assessment System (CAHMPAS)

Home >

Set Graph Type >

Set Indicator >

Set Comparison Group >

Draw Graph

California: Gov-  
Owned

California: Not Gov-  
Owned

Refresh Graph

Save Data as CSV

Start new Graph

Indicator Definition

22.17  
20.00  
18.00  
16.00  
14.00  
12.00  
10.00

Total Margin

- To see this same comparison for an entirely different indicator, first select "Set Indicator" from the top navigation bar to access the indicator selection page...



# Change Indicator

CAH Measurement and Performance Assessment System (CAHMPAS) Home > Set Graph Type > Set Indicator > Set Comparison Group > Draw Graph Logout

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Select an indicator to graph:

**Finance 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 Revenue in Accounts Receivable	Long-Term Debt to Capitalization
Operating Margin		

**Revenue Indicators**

Outpatient Revenues to Total Revenues
Patient Deductions
Medicare Inpatient Payer Mix
Medicare Outpatient Payer Mix
Medicare Outpatient Cost to Charge
Medicare Acute Inpatient Cost per Day

**Cost Indicators**

Salaries to Net Patient Revenue
Average Age of Plant
FTEs per Adjusted Occupied Bed
Average Salary per FTE

**Utilization Indicators**

Average Daily Census Swing-ORF Beds
Average Daily Census Acute Beds

- ... then choose a new indicator. Let's look at "Medicare Inpatient Payer Mix," a revenue indicator on the left side of the screen.
- Click the indicator button.



# Change Indicator

Custom Group Name: **California: Gov-Owned**  
17 Hospitals

State: CA  
Net Patient Revenue: All  
Rural Health Clinic: All  
Long-Term Care: All  
Government Owned: Yes  
Data from Year: 2014

Custom Group Name: **California: Not Gov-Owned**  
15 Hospitals

State: CA  
Net Patient Revenue: All  
Rural Health Clinic: All  
Long-Term Care: All  
Government Owned: No  
Data from Year: 2014

Delete Group

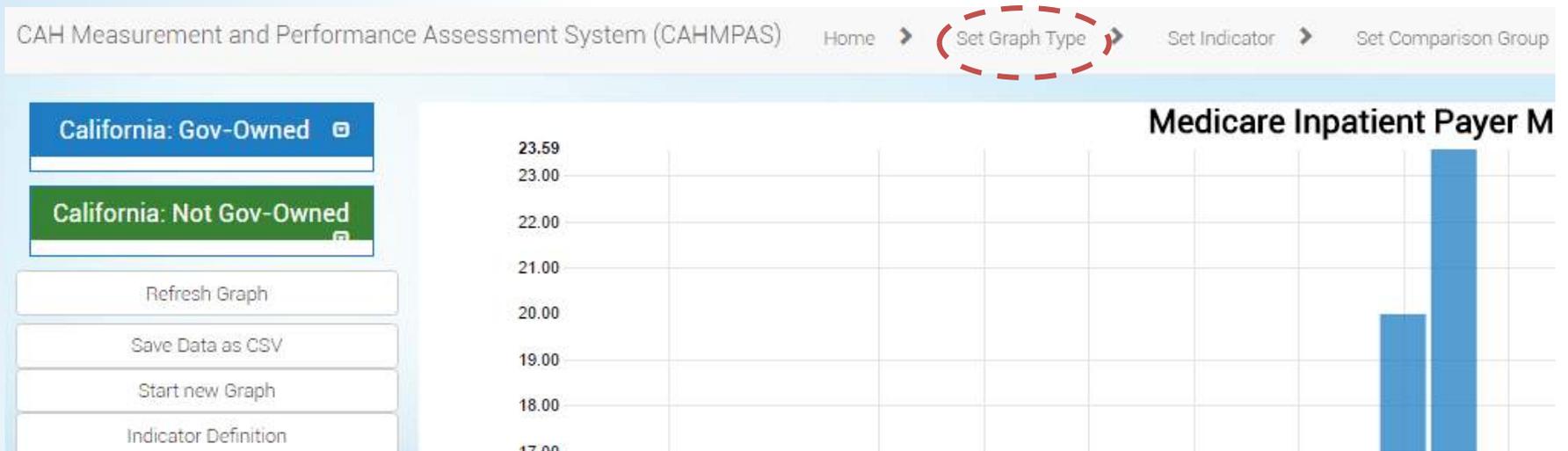
Add Group Draw Graph

...This brings you back to the “Set Comparison Group” page. You’ll notice that your previous group settings are still there.

1. Click “Draw Graph” again to see results. This process can be used to generate comparisons for every indicator in CAHMPAS.



# Change Graph Type



To switch from a bar graph to a line graph or vice versa, use the same basic process as changing an indicator.

1. Select "Set Graph Type" from the top navigation bar. This will take you to the graph type selection page.



# Change Graph Type

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

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What do you want to do?

### Compare Individual Hospitals

Compare Hospitals based on Indicator chosen

Bar Graph

### Compare Group Trends

Graph Your Value Over Time

Line Graph

2. Choose “line graph” on the bottom right.



# Change Graph Type

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

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Select an indicator to graph:

**Finance Indicators**

- Profitability Indicators**
  - Total Margin
  - Cash Flow Margin
  - Return on Equity
  - Operating Margin
- Liquidity Indicators**
  - Current Ratio
  - Days Cash on Hand
  - Days Revenue in Accounts Receivable
- Capital Structure Indicators**
  - Equity Financing
  - Debt Service Coverage
  - Long-Term Debt to Capitalization
- Revenue Indicators**
  - Outpatient Revenues to Total Revenues
  - Patient Deductions
  - Medicare Inpatient Payer Mix
  - Medicare Outpatient Payer Mix
  - Medicare Outpatient Cost to Charge
- Cost Indicators**
  - Salaries to Net Patient Revenue
  - Average Age of Plant
  - FTEs per Adjusted Occupied Bed
  - Average Salary per FTE
- Utilization Indicators**
  - Average Daily Census Swing-SNF Beds
  - Average Daily Census Acute Beds

3. Select an indicator. Let's use "Total Margin" again.



# Change Graph Type

Custom Group Name: **California: Gov-Owned**  
20 Hospitals

State: CA  
Net Patient Revenue: All  
Rural Health Clinic: All  
Long-Term Care: All  
Government Owned: Yes

Custom Group Name: **California: Not Gov-Owned**  
16 Hospitals

State: CA  
Net Patient Revenue: All  
Rural Health Clinic: All  
Long-Term Care: All  
Government Owned: No

Delete Group

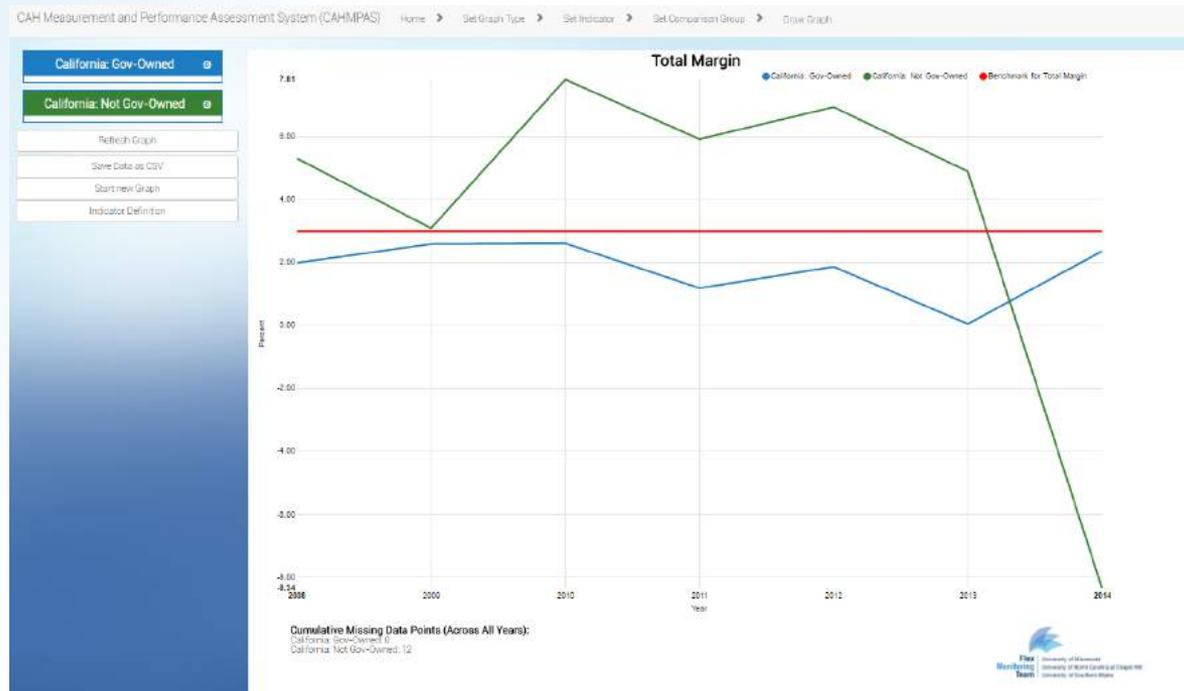
Add Group Draw Graph

The “Set Comparison Group” page still defaults to our previous selections, but this is a line graph, so the “select year” option is no longer present.

4. Click “Draw Graph.”



# Understanding the Line Graph



Results for these two groups from 2008 through 2014 are displayed. Just like the bar graph, gov-owned CA CAHs are blue, non-gov-owned CA CAHs are green.



# Questions / Comments:



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