



**Flex
Monitoring
Team**

University of Minnesota

University of North Carolina at Chapel Hill

University of Southern Maine

CAHMPAS Updates to Help Inform Your Workplan

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University of North Carolina – Chapel Hill

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Learning Objectives

At the end of this session, participants will be able to:

- Describe and interpret new financial data features available in CAHMPAS.
- Understand how to use CAHMPAS to identify hospitals or areas that may benefit from financial or operational performance improvement interventions.
- Contribute feedback and ideas for strengthening and enhancing CAHMPAS to better meet user needs.



Why CAHMPAS ?

Critical Access Hospital Measurement & Performance Assessment System

INFORMATION for

- Benchmarking
- Identifying trends
- Identifying hospitals at risk of financial distress
- Identifying potential opportunities for intervention

A FRAMEWORK for

- Discussions with hospitals
- Real-time data collection



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Learning Objective #1

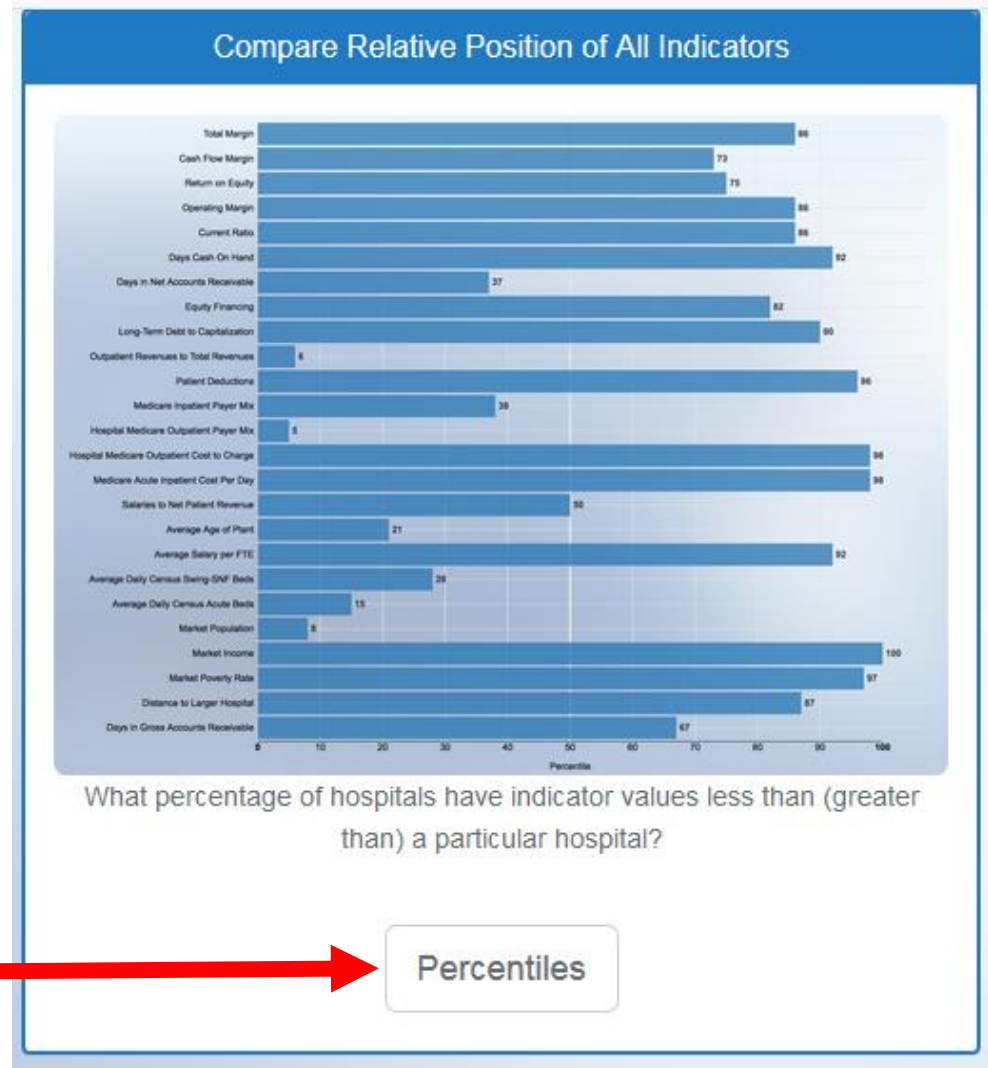
Describe and interpret new financial data features available in CAHMPAS.



I. The Hospital Dashboard

All of the indicators for a given hospital displayed on a single screen.

For most indicators, the percentile value tells you what percentage of hospitals in the sample have values for a given indicator that are “worse” than the given hospital.





Using the Dashboard

Choose a hospital

Show entries

Search:

CAHID	Name	City	CMS ID	Action
01001	Hospital 01001	City 01001	1001	View Dashboard
01002	Hospital 01002	City 01002	1002	View Dashboard
01003	Hospital 01003	City 01003	1003	View Dashboard
01004	Hospital 01004	City 01004	1004	View Dashboard
01005	Hospital 01005	City 01005	1005	View Dashboard
01006	Hospital 01006	City 01006	1006	View Dashboard
01007	Hospital 01007	City 01007	1007	View Dashboard
01008	Hospital 01008	City 01008	1008	View Dashboard
01009	Hospital 01009	City 01009	1009	View Dashboard
01010	Hospital 01010	City 01010	1010	View Dashboard

Showing 1 to 10 of 1,376 entries

[Previous](#) [1](#) [2](#) [3](#) [4](#) [5](#) [...](#) [138](#) [Next](#)

Using the Dashboard, cont.



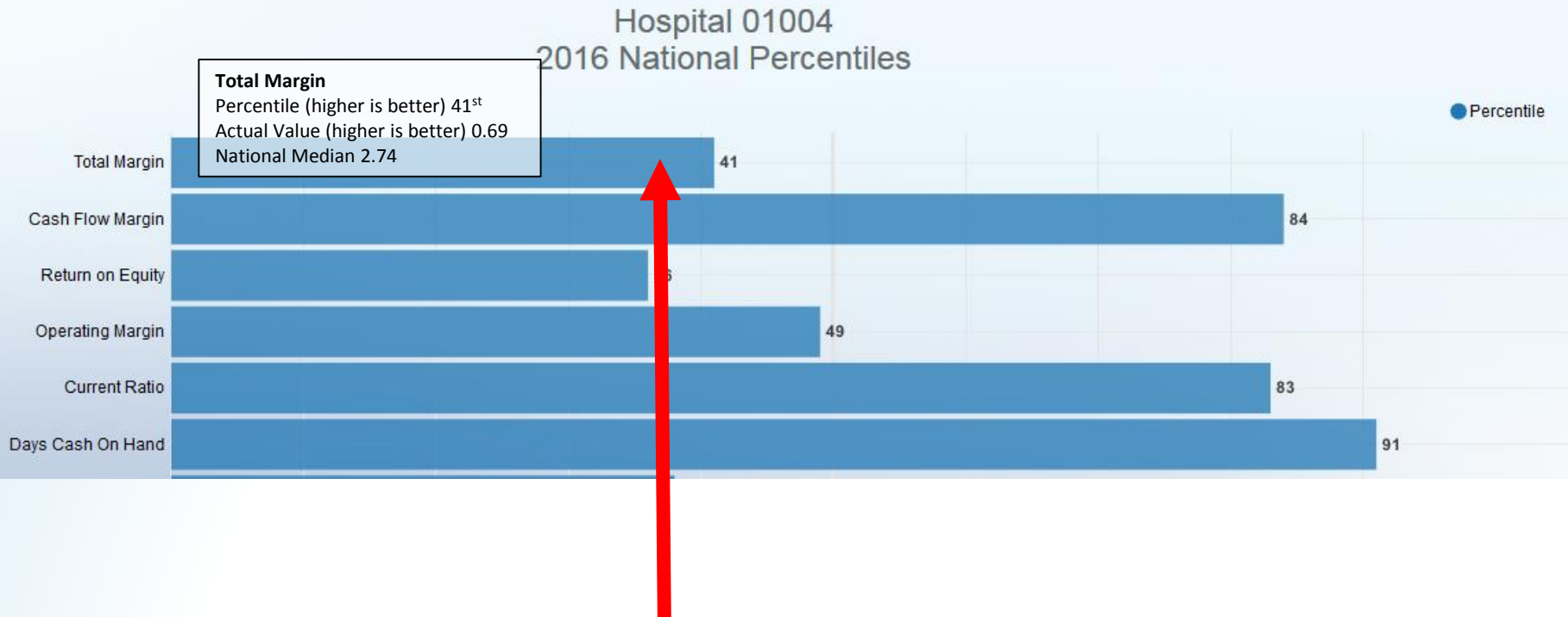
This partial dashboard provides a visual display of Hospital 01004's performance on two selected indicators in 2016 relative to CAHs nationally.

The hospital's total margin is below the median (the 50th percentile), meaning they are in the lower half of profitability compared to hospitals nationally. However, their cash flow margin is at the 84th percentile, meaning their performance on that indicator is in the top quarter of hospitals nationally.

It is important to note that a percentile only tells you where a hospital fits in a distribution when values are ordered. Being below the median does not necessarily indicate "poor" performance, and for indicators with tight distributions, actual values could be very close to each other. It is important to look not only at the percentile, but also at the indicator value.



Using the Dashboard, again



Scrolling over each bar will give you a pop-up box with the percentile, information about whether a higher or lower value signals stronger performance, the actual indicator value and the comparator indicator value.



Using the Dashboard Controls

The dashboard controls are organized into four main sections:

- Scope:** A dropdown menu currently set to "National".
- Year:** A dropdown menu currently set to "2016".
- Domains:** A list of four domains with checkboxes: Profitability, Liquidity, Capital Structure, and Revenue. All are checked. Below the list are "Clear All" and "Select All" buttons.
- Actions:** A vertical stack of three buttons: "Refresh", "Change Hospital", and "Save Image".

A series of dashboard controls allow you to select:

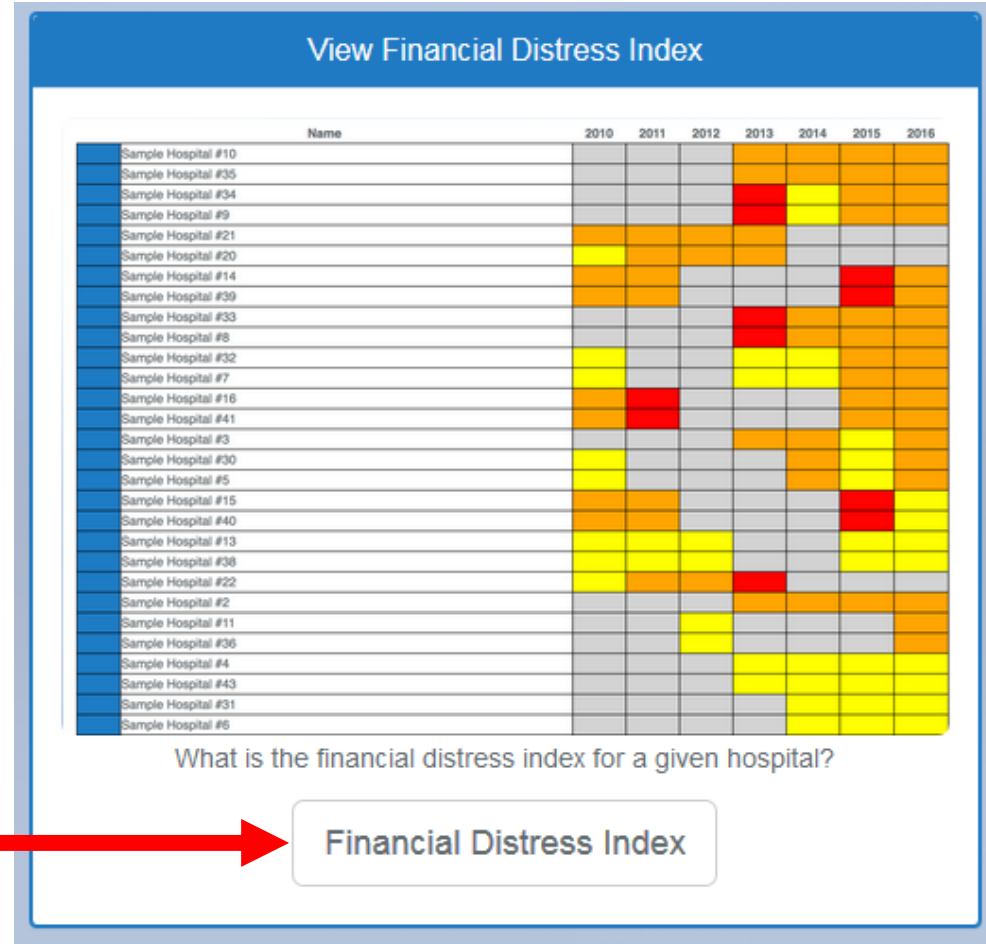
1. The scope for comparison – national or state
2. The data year you wish to view
3. The indicator domains you wish to view
4. A different hospital to view



II. The Financial Distress Index

The financial distress risk category for each hospital in your state over time.

The financial distress model predicts the risk of financial distress two years in the future. Unlike the financial indicators, it is more current. It is an estimate of where a hospital may be now.





Using the Financial Distress Index

Name		2012	2013	2014	2015	2016	2017	2018
	Hospital 10001	Red	Red	Red	Red	Red	Red	Gray
	Hospital 10012	Yellow	Orange	Yellow	Orange	Orange	Orange	Gray
	Hospital 10011	Yellow	Yellow	Yellow	Yellow	Yellow	Orange	Gray
	Hospital 10013	Yellow	Yellow	Yellow	Orange	Orange	Yellow	Gray
	Hospital 10004	Orange	Orange	Yellow	Yellow	Yellow	Yellow	Gray
	Hospital 10006	Orange	Yellow	Yellow	Yellow	Yellow	Yellow	Gray
	Hospital 10003	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Gray
	Hospital 10008	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Gray
	Hospital 10005	Green	Green	Yellow	Yellow	Yellow	Yellow	Gray
	Hospital 10014	Gray	Yellow	Yellow	Yellow	Green	Yellow	Gray
	Hospital 10009	Green	Yellow	Green	Green	Green	Green	Gray
	Hospital 10010	Orange	Orange	Yellow	Orange	Orange	Gray	Gray
	Hospital 10002	Yellow	Yellow	Yellow	Yellow	Yellow	Gray	Gray
	Hospital 10007	Yellow	Yellow	Yellow	Yellow	Yellow	Gray	Gray

Low risk = Green; Medium-low risk = Yellow
Medium-high risk = Orange; High risk = Red
Missing = Gray



III. The Reporting Feature

Download all financial data into an EXCEL spreadsheet.

The reporting feature allows you to download data so that you can add more current data, share data with others, and/or produce your own graphs, charts or reports.

Download Hospital Data

ID	CAHID	Year	CAH State	RevCat	Has LTC	Has RHC	Govt	Opmarg	Totmarg	Cashflowmarg	Roe
85	SS001	2010	SS	10-20m	Has LTC	No RHC	Govt	5.3705588162	0.3171664075	2.6439450354	1.054374659
86	SS001	2011	SS	10-20m	Has LTC	No RHC	Govt	9.0795158549	2.2441762814	6.1131825464	6.625694442
87	SS001	2012	SS	10-20m	Has LTC	No RHC	Govt	6.4946221435	0.0389962732	3.5339591386	0.115567471
88	SS001	2013	SS	10-20m	Has LTC	No RHC	Govt	13.2180987129	5.6602263120	9.8507572432	18.9496125
89	SS001	2014	SS	10-20m	Has LTC	No RHC	Govt	9.5489884244	2.6126803733	7.0266958028	9.98892608
90	SS001	2015	SS	10-20m	Has LTC	No RHC	Govt	0.6921997424	34.50249944	1.7605392238	17.55204001
91	SS003	2010	SS	Under 10m	No LTC	No RHC	Govt	9.4228533087	4.4965542842	5.9802975292	999.00000000
92	SS003	2011	SS	Under 10m	No LTC	No RHC	Govt	12.7473027090	12.7473027090	16.3123958717	999.00000000
93	SS003	2012	SS	Under 10m	No LTC	No RHC	Govt	2.0626557699	0.0626557699	6.9961119364	999.00000000
94	SS003	2013	SS	Under 10m	No LTC	No RHC	Govt	12.4276180931	12.4276180931	7.5461124514	999.00000000
95	SS003	2014	SS	Under 10m	No LTC	No RHC	Govt	11.4119721807	11.2187624492	7.3286616772	999.00000000
96	SS003	2015	SS	Under 10m	No LTC	No RHC	Govt	999.0000000000	999.0000000000	999.0000000000	999.00000000
97	SS005	2010	SS			No RHC	Nongovt	999.0000000000	999.0000000000	999.0000000000	999.00000000
98	SS005	2011	SS			No RHC	Nongovt	999.0000000000	999.0000000000	999.0000000000	999.00000000
99	SS005	2012	SS				Nongovt	999.0000000000	999.0000000000	999.0000000000	999.00000000
100	SS005	2013	SS	10-20m	No LTC	Has RHC	Nongovt	15.2681591817	0.1449529909	10.9259795248	999.00000000
101	SS005	2014	SS	10-20m	No LTC	Has RHC	Nongovt	3.7025938112	7.7025938112	27.5547540909	999.00000000
102	SS005	2015	SS	10-20m	No LTC	Has RHC	Nongovt	6.2191720422	6.2191720422	22.1440342915	999.00000000
103	SS006	2010	SS	10-20m	No LTC	No RHC	Nongovt	16.8349979712	16.8346409317	9.2274812648	999.00000000
104	SS006	2011	SS	10-20m	No LTC	No RHC	Nongovt	20.2251776047	20.1958074507	12.8383356445	999.00000000
105	SS006	2012	SS	10-20m	No LTC	No RHC	Nongovt	16.9746837438	15.3669865703	7.2742044542	999.00000000
106	SS006	2014	SS	10-20m	No LTC	No RHC	Nongovt	1.1193050275	1.1193050275	1.1193050275	1.87186110
107	SS006	2015	SS	10-20m	No LTC	No RHC	Nongovt	5.9972816648	5.9972816648	5.9972816648	15.66136638

What are the raw values for a given group of hospitals?

Reporting



Using the Reporting Feature

Report Generator

This feature allows you to generate and download a .csv report of custom data. Each row in the download represents a single hospital/year. Any value of **-999** means that the data is missing for that hospital/year.

Use the filters below to choose which hospitals/years to include in this report. If you are currently logged in as a state user, this report will only include hospitals in your state.

Please note that larger data sets may take up to a minute to download.

State:

AL
AK
AZ
AR
CA

Net Patient Revenue:

All

Rural Health Clinic:

All

Long Term Care:

All

Government Owned:

All

Include Years:

☒ 2010 ☒ 2011 ☒ 2012 ☒ 2013 ☒ 2014 ☒ 2015 ☒ 2016 ☒ 2017

Download Report

You will only see your state. You can choose to filter by peer group factors and by year, or you can simply download all data.

The workbook includes two tabs. The first provides the indicator values. The second provides the longer indicator names and the indicator definitions to help you interpret the data.



Learning Objective #2

Understand how to use CAHMPAS to identify hospitals or areas that may benefit from financial or operational performance improvement interventions.



Identifying Hospitals in Need

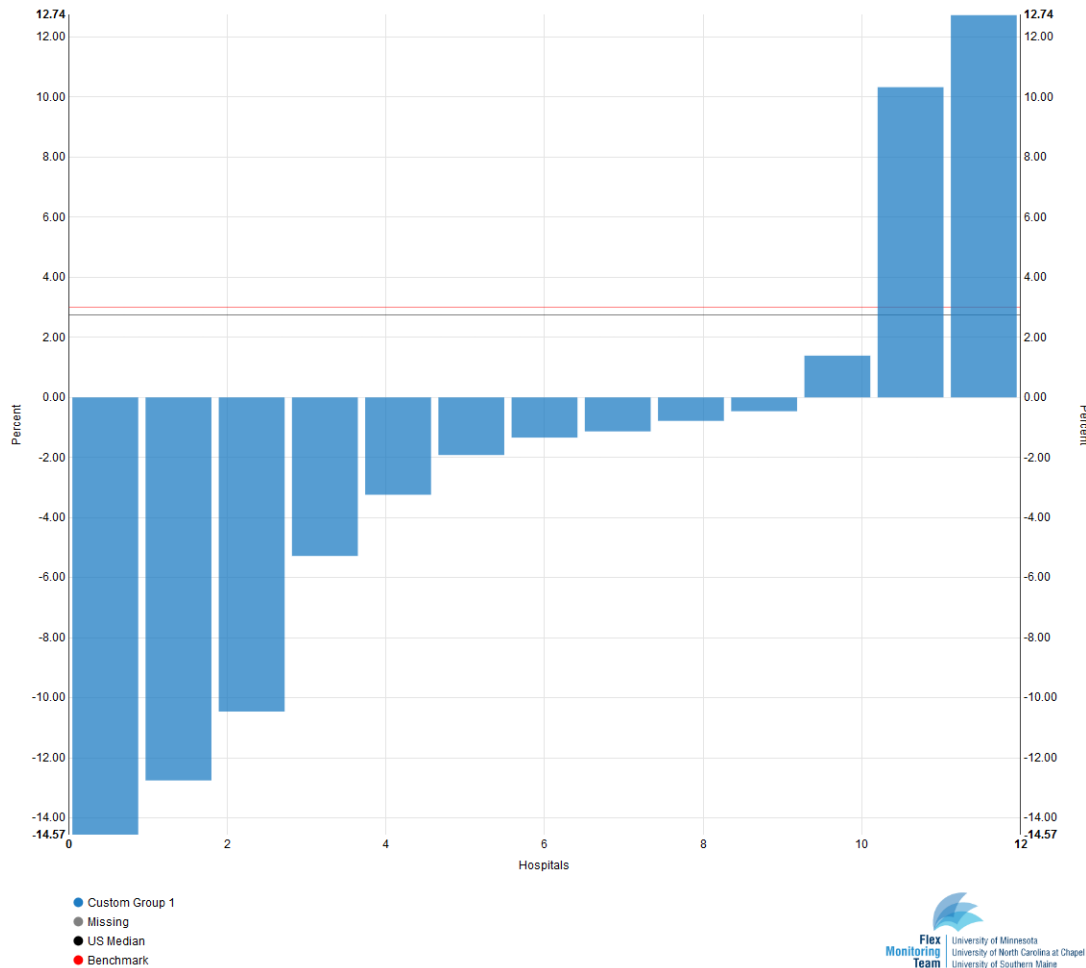
The financial distress index is a good place to start.

Look for:

1. Hospitals at high risk
2. Hospitals with persistently higher risk levels (medium-high or high)
3. Hospitals whose risk level seems to be trending higher over time

Use the dashboard feature to get a snapshot of each hospital's performance across the indicators. Use the line graph feature to examine each hospital's performance on a given indicator over time.

Identifying Indicators Where Performance Suggests Common Needs



The bar graph feature can be helpful. Look for indicators where many hospitals are performing below the national median and/or below benchmark.


The “Change Indicator” control button allows you to quickly move through different indicators.

Controls

Change Indicator

Refresh Graph

Save Data as CSV

 Save Image

Start new Graph

Indicator Definition



The “Top 10” Indicators¹

- Days in Net Accounts Receivable
- Days in Gross Accounts Receivable
- Days Cash on Hand
- Total Margin
- Operating Margin
- Debt Service Coverage
- Salaries to Net Patient Revenue
- Medicare Inpatient Payer Mix
- Average Age of Plant
- Long-term Debt to Capitalization

¹ National Rural Health Resource Center. Critical Access Hospital Finance 101. Updated June 2017. Available at:
<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0ahUKEwjh9Pi4geDbAhUPvlkKHR1GBf0QFggvMAE&url=https%3A%2F%2Fwww.ruralcenter.org%2Fsites%2Fdefault%2Ffiles%2FCAH%2520Finance%2520101%2520Manual%2520June%25202017.pdf&usg=AOvVaw2zbOVGtHRQ2MpArJR9HnFK>.

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Additional Considerations for Interpreting and Using CAHMPAS Data

It is important to understand:

- System membership – may affect financial indicator values for certain hospitals
- Participation in alternative payment models – incentives under different payment models warrant different interventions
- County subsidies – these are not discernable from the financial indicator data



Limits of CAHMPAS Financial Indicators

Help to identify:

- Questions to ask
- Issues to address
- Problems to solve

Do not necessarily provide:

- Answers
- Explanations
- Solutions



Developing the Workplan

Analyses may be more informed if financial data are supplemented with hospital operating metrics such as:

- Revenue cycle metrics (e.g., denials rates)
- Staffing productivity data (e.g., paid hours per unit of service)
- Volume data (e.g., Emergency Department (ED) visits, outpatient visits, inpatient days, swing bed days)
- Charges
- Service line data (e.g., surgery volumes & types)
- Physician relationships and availability
- Bypass rates



Potential State Flex Coordinators (SFC) Actions

- Consultation
- Education
- Learning collaboratives*
- Facilitation
- Policy advocacy

*Sharing transparent data and best practices may be helpful if hospitals agree



Monitoring Outcomes

Different interventions will affect different metrics at varying time intervals. Important to link interventions to desired outcomes, to assess feasibility of seeing effects in the short-term, and to understand other factors that may affect metrics.

Example Intervention Target	Example Outcome Metric(s)
Revenue cycle	Days in Accounts Receivable (A/R)
Staffing productivity	Salaries to net patient revenue
Chargemaster review	Revenue; operating margin



Learning Objective #3

Contribute feedback and ideas for strengthening and enhancing CAHMPAS to better meet user needs.



Planned Enhancements

- We are working hard to develop a process for providing quarterly financial data updates.
- We are developing a series of technical assistance videos, FAQs, instructional pdfs and other materials to help users understand CAHMPAS and its features.



Discussion

How have you used CAHMPAS?

Where should CAHMPAS go next?



Questions / Comments:



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Thank you!

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Resources

- GM Holmes, BG Kaufman and GH Pink. Predicting Financial Distress in Rural Hospitals. *Journal of Rural Health*, Summer 2017; 33(3): 239-249.
<https://www.ncbi.nlm.nih.gov/pubmed/?term=Predicting+Financial+Distress+in+Rural+Hospitals>
- Prediction of Financial Distress among Rural Hospitals (January 2016) Kaufman B, Pink G, Holmes, M. FB126.
<http://www.shepscenter.unc.edu/download/12524/>