UTHealth
The University of Texas
Health Science Center at Tyler

Completing the DY9-10 DSRIP Cost & Savings Report

A Discussion With Region 1 Provider Organizations

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Guidance from HHSC what we know so far

Required of all providers generating a DSRIP program valuation of > $1 million

Official Cost and Savings Analysis template has not been released

Must analyze a different intervention or aspect of intervention than in the DY8 analysis

The outcome of the intervention must be reported in dollars

HHSC has no expectations on the results of your Cost and Savings Analysis

What is a Return On Investment (ROI) Analysis?

Return on Investment (ROI) is a performance measure used to evaluate the efficiency or profitability of an investment or compare the efficiency of a number of different investments. ROI tries to directly measure the amount of return on a particular investment, relative to the investment's cost.

Different Types of ROI Analyses

Retrospective – Uses organizations data and data from other sources to reflect on the impact of an investment

- Requires data on the cost of the investment
- Requires cost data on care from before and after the investment
- Requires assumptions be made in the model
- Requires sensitivity analyses

Forecasted – Uses organizations data and data from other sources to anticipate the impact of an investment

- Requires cost data on the investment
- Requires cost data on care from before the investment
- Requires lots of assumptions be made in the model
- Requires more elaborate sensitivity analyses

Characteristics of a good intervention for ROI

Set reasonable boundaries on the intervention (scoping)

The intervention's start up and operating costs can be clearly defined

The impact of the intervention can be clearly defined in dollar terms

Data on all inputs to the model are available or can be obtained/extrapolated

Data Sources & Data

Secondary Data – Data collected for purposes other than your ROI analysis

- Financial administrative data systems
- Clinical data systems

Primary Data – Data collected specifically for your ROI analysis

- Surveys, key stakeholder interviews, ect.

Outside Data – Data from industry or academic literature

- Type of secondary data
- Used to develop assumptions when data is not obtainable
- Internet searches
- “Google Scholar”

Outside Data Sources - Examples

STAY UP-TO-DATE
HEALTHCARE NEWS AND ANALYSIS
BECKER'S HOSPITAL REVIEW E-WEEKLY
BECKER'S HOSPITAL REVIEW
Click Here

https://www.beckershospitalreview.com/

Google

https://www.google.com/

https://www.hfma.org/

Advisory Board

https://www.advisory.com/

Google Scholar

https://scholar.google.com/

Suggestions for Obtaining & Using Data

Establish connections with the people who manage the data (early and often)

Communicate regularly with your data people during analysis

- Their definition for data items probably does not match yours

"Clean" your data

- "Smell Test" your data – Does it make sense

Be sure to include in your limitations section any data issues that you encounter

Filling In the Gaps – Making Assumptions

****All financial models require making assumptions****

Methods for basing assumptions

- Historical data from your organization
- Assessments from your staff
- External expert assessments
- Industry and academic literature

Be sure to document assumptions and explain your thought process

Making Assumptions – Example 1

Situation Example 1 – You are utilizing a forecasted ROI analysis tool and you need to make an assumption about the growth rate of patient costs of care.

Methods for Assumption – There are different ways to approach any assumption. One way to approach the situation presented in example 1 would be to calculate the average growth rate in patient care costs over the last 3 to 5 years.

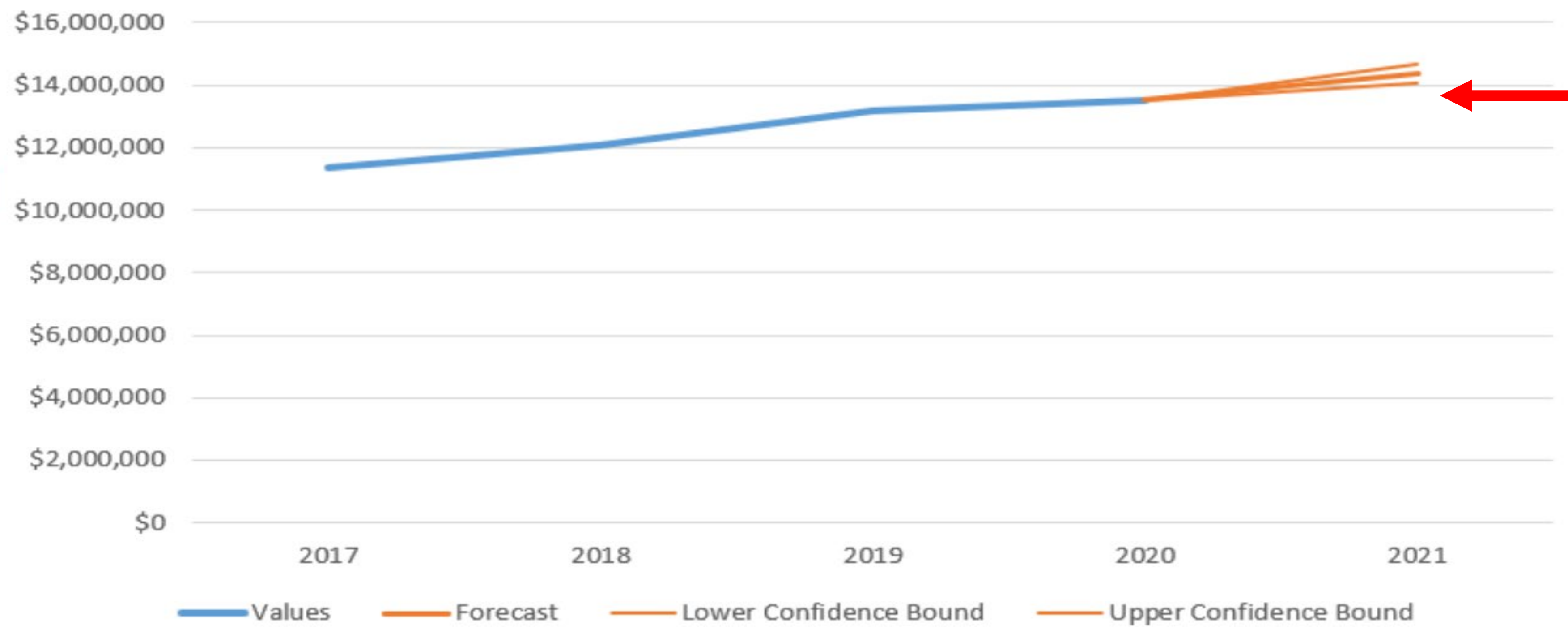
Making Assumptions – Example 1

Glory Springs Hospital					
Pro Forma Income Statement 2021					
Revenue	**2017**	**2018**	**2019**	**2020**	**2021**
Inpatient Revenue	$11,330,864	$12,048,840	$13,159,082	$13,524,530	
Outpatient Revenue	$59,901,620	$54,634,885	$61,844,264	$65,228,283	
	Growth Rate				
	2017-18	2018-19	2019-20	Average	
	6.34%	9.21%	2.78%	6.11%	

Average growth rate in patient care costs can be used as assumption for growth rate in costs

Sensitivity Analysis of Assumptions – Example 1

Timeline	Values	Forecast	Lower Confidence Bound	Upper Confidence Bound
2017	$11,330,864			
2018	$12,048,840			
2019	$13,159,082			
2020	$13,524,530	$13,524,530	$13,524,530	$13,524,530
2021		$14,366,725	$14,048,842	$14,684,608



3 Forecasts for 2021 patient care cost based on the "best guess" estimate and a high and low estimate for growth rates

Making Assumptions – Example 2

Situation Example 2 – You are utilizing a forecasted ROI analysis tool and you need to make an assumption about how much of your staffs time to include in the start up and operating costs of the intervention.

Methods for Assumption – There are different ways to approach any assumption. One way to approach the situation presented in example 2 would be to ask each of the staff members involved with the intervention to keep track for two weeks of how much time they spend each day on work related to the intervention. Then you take an average for each type of employee (nurse, CHW, administrative staff) and use the averages in your ROI model. Do not forget sensitivity analysis.

Wrapping Things Up

Time to pick your intervention

Get started with analysis early and communicate often with data people

Assumptions are required … explain and defend them in your analysis

All analyses have weakness, report your limitations and do not worry

HHSC does not expect any specific results