

2023
Revenue Cycle
Conference

hfma



Measuring Training Effectiveness

The Trinity Health Journey

Sergio Alfaro and Ed Thomas

Presented by: Sergio Alfaro

Objectives

Form an Understanding of

- The Trinity Health Journey
- What is Possible Using our Dashboard
- Business Case for Training and Organizational Performance
- Journey Map to Achieve Best Practice

The Trinity Health Journey



The Trinity Health Journey

March 2020



Transparency

①

Accountability

Line of Sight

Stakeholder Reporting

Visual Management

②



Performance Evaluation

Coaching

③



Utilize existing
technology

What is Possible using our Dashboard


Training Dashboard 2.0

Training Dashboard 2.0


Landing Page

Click on icon to view individual sub-dashboards:


Data through last evaluation: 1/27/2023




Onboarding Evaluations




TogetherCare Evaluations




Legacy Evaluations




Assessments




Onboarding Evaluations Archived




Training Metrics



Metrics Explorer



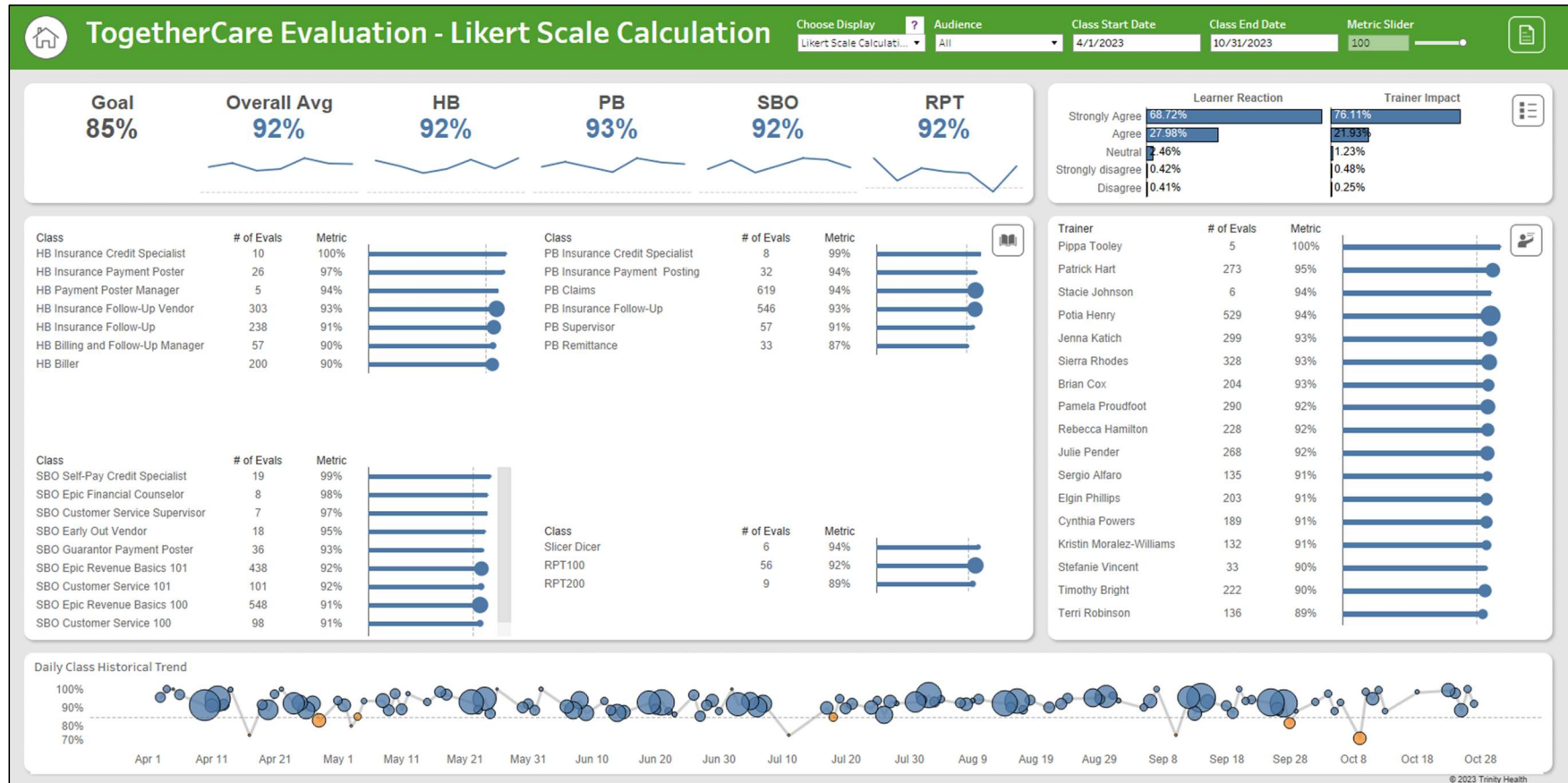
Metrics by Fiscal Year



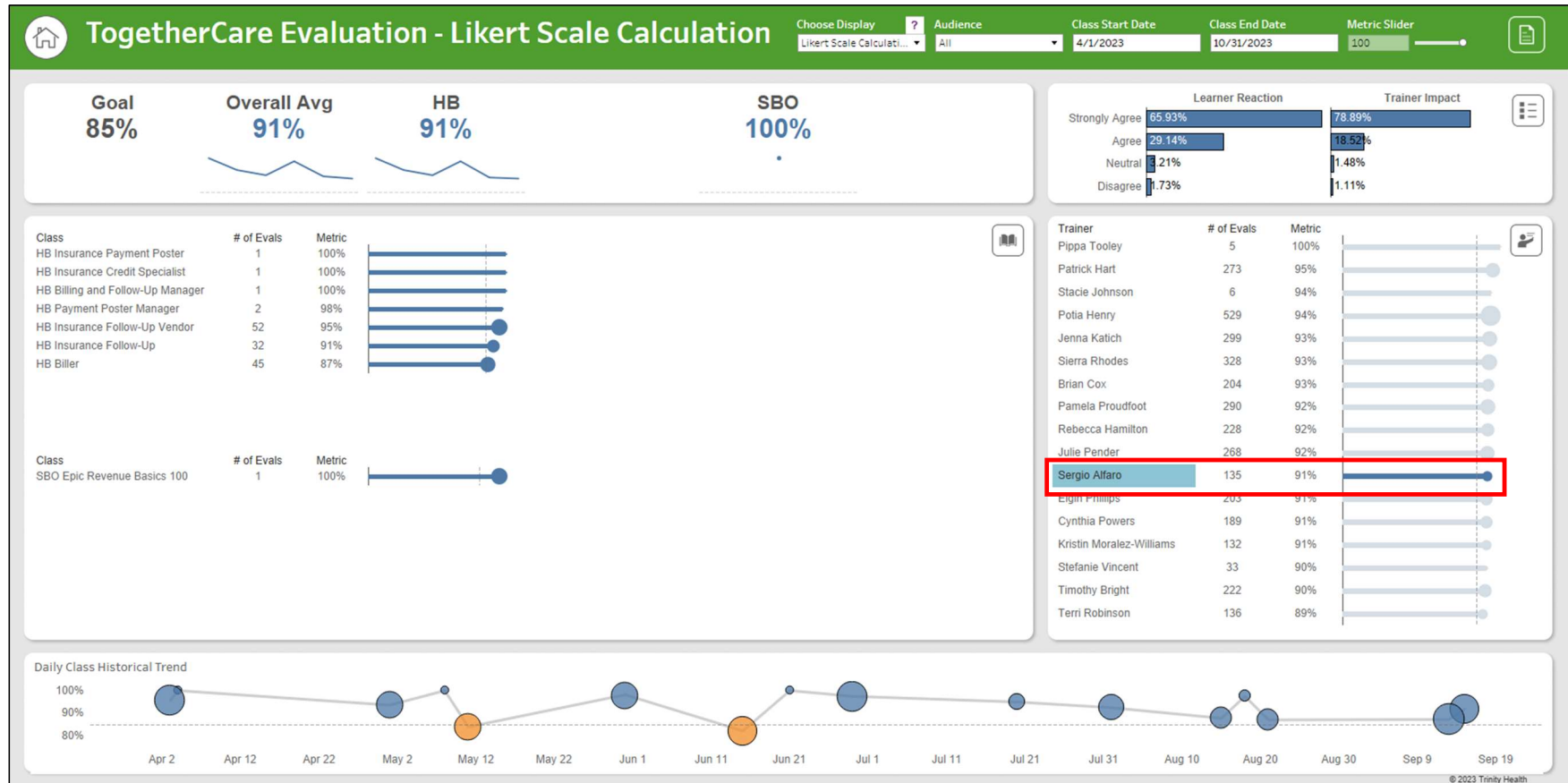
Quick Start Guide

RevEx Analytics

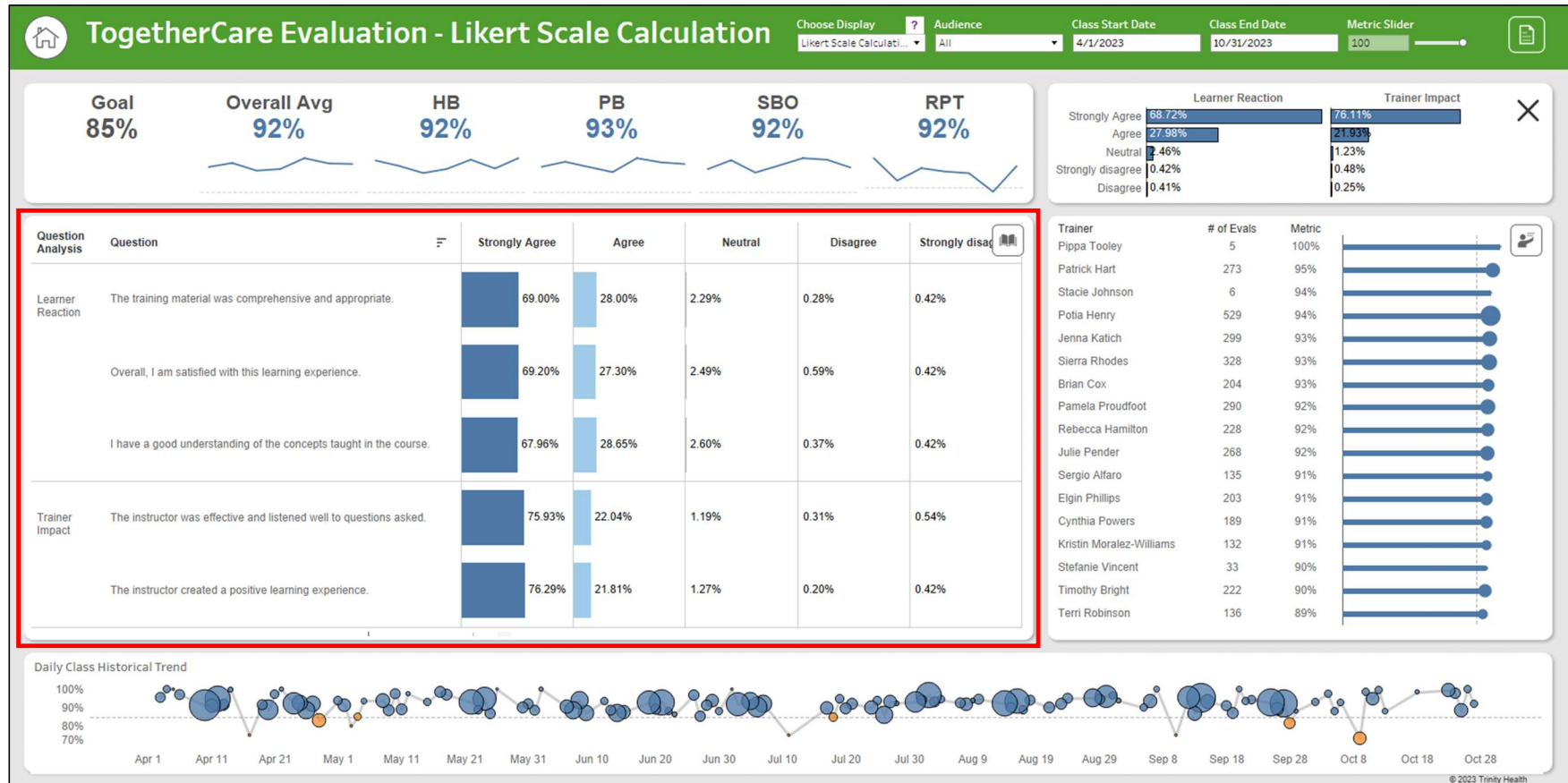
TogetherCare Evaluation Page



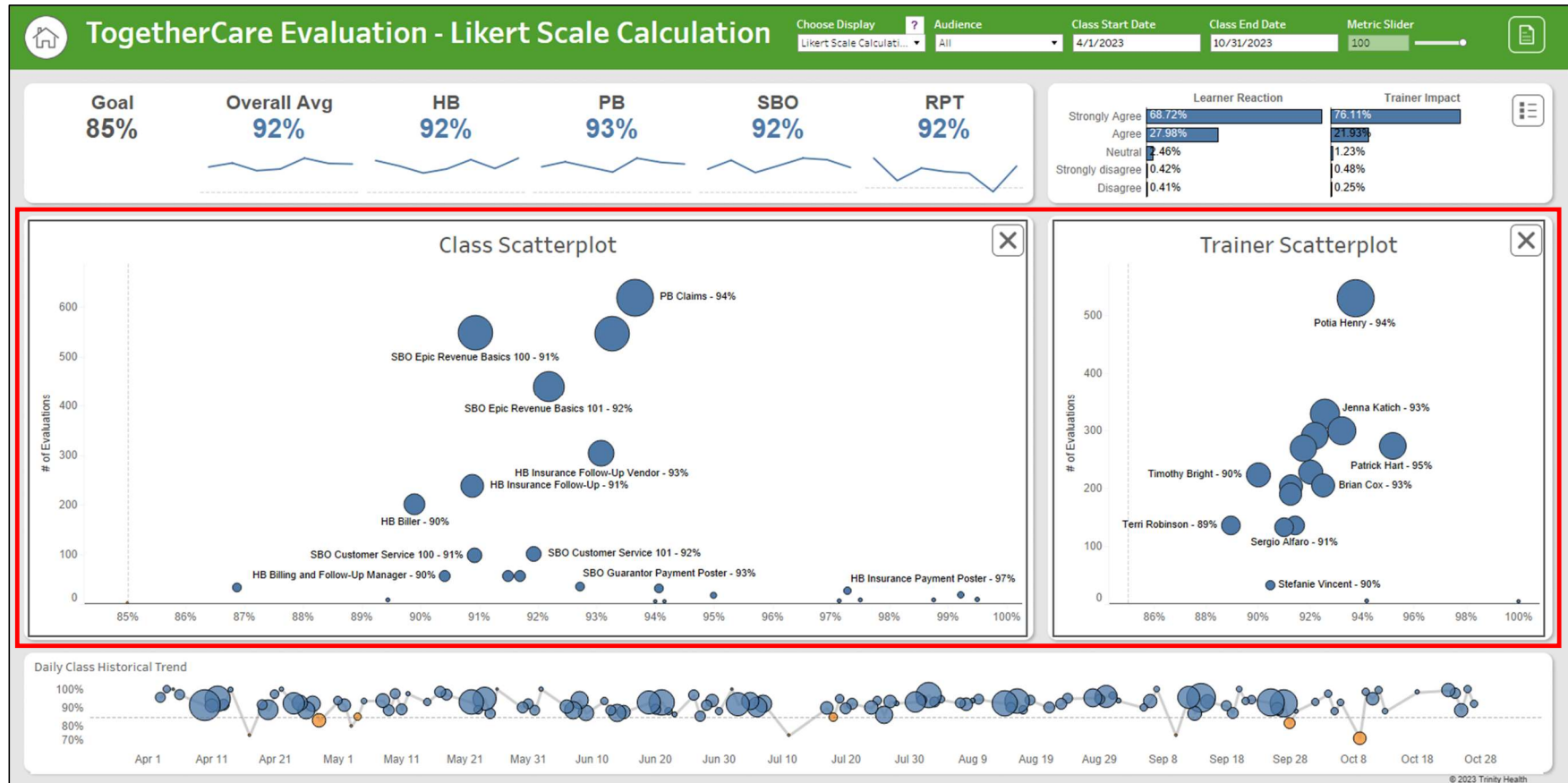
TogetherCare Evaluation Page – Trainer Selected



Question Analysis



Scatterplots for Class and Trainer



Free-Text Responses

TogetherCare Evaluation - Likert Scale Calculation

Choose Display ?
Likert Scale Calculati...

Audience
All

Class Start Date
4/1/2023

Class End Date
10/31/2023

Metric Slider
100

Class Category
(All)

Class
(All)

Trainer
(All)

Question
(All)

TogetherCare Free-Text Responses

Class	Trainer	Date	Question <small>THE INSTRUCTOR WAS ASKING ONE QUESTION WITH 10 QUESTIONS asked.</small>	Answer <small>Agree</small>
				Strongly Agree
			The training material was comprehensive and appropriate.	Agree
				Strongly Agree
			What did you enjoy most about the class?	Null
				All of it!! JOB Well DONE!!!
				n/a
				Sergio took the time to address concerns even though there was a time crunch.
				Sergio was amazing!
				Sergio was great. Very upbeat and kept things moving along.
				The information and the interaction.
				The instructor and the way the material was presented was very engaging. It was easy to follow along and to stay focused.
				The interactive learning, when we're able to actually use EPIC for training
				The trainer - he kept us motivated and on track
				The trainer!
				trainer was great!!!!
				was very specific and professional
9/15/2023			I have a good understanding of the concepts taught in the course.	Agree
			If you selected Disagree or Strongly Disagree for any of the items above, please let us know how we can improve the traini...	N/A
			Overall, I am satisfied with this learning experience.	Agree
			The instructor created a positive learning experience.	Agree

© 2023 Trinity Health


Assessments Page

Training Dashboard 2.0


Landing Page

Click on icon to view individual sub-dashboards:


Data through last evaluation: 1/27/2023




Onboarding Evaluations




TogetherCare Evaluations




Legacy Evaluations




Assessments




Onboarding Evaluations Archived




Training Metrics




Metrics Explorer



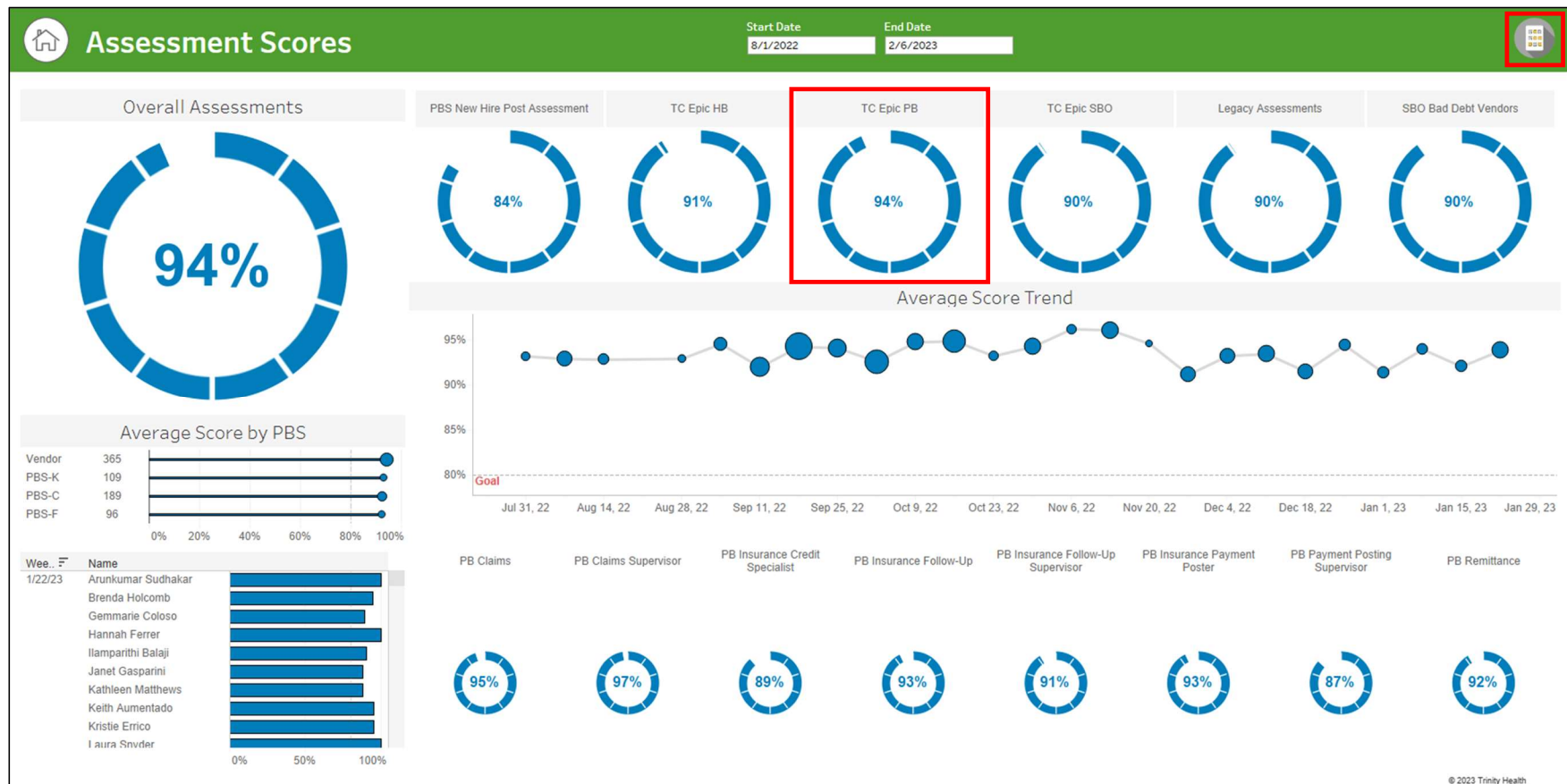
Metrics by Fiscal Year



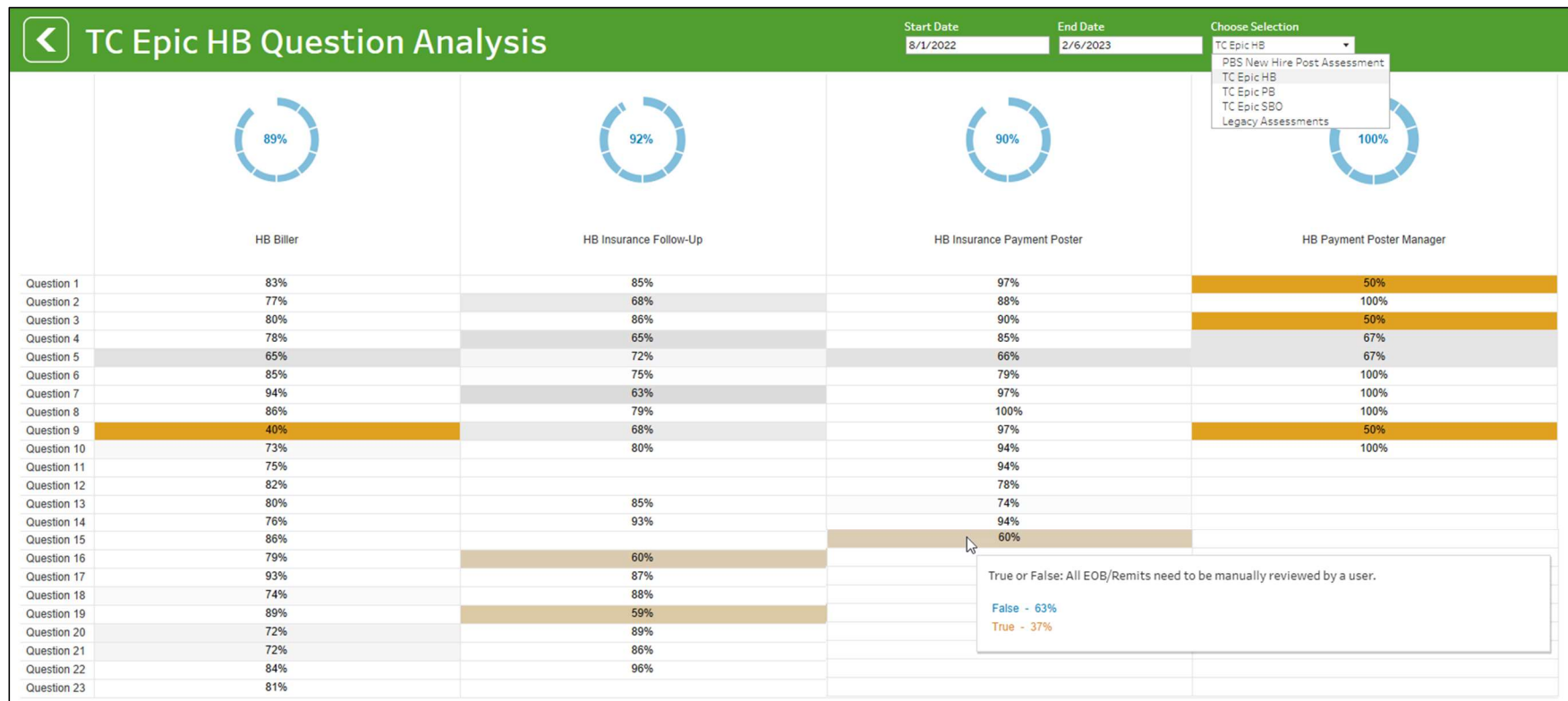
Quick Start Guide



Assessment Scores Page



Assessment Scores Question Analysis Page



Business Case for Training and Organizational Performance

hfma | 2023
Revenue Cycle
Conference

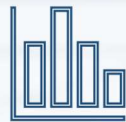
Building A Business Case

The Data Trifecta



① Reliability

Consistency of Results
Over time,
participants, trainers
and conditions
However, reliable
does not mean valid



② Validity

Accuracy of
Measurement
Crosschecking
Information
Quantitative against
Qualitative



③ Time

Recency of Measurement
impacts results reported
Recency of Measurement
impacts data integrity



④ Generalizability

Statistical Inference
Applicability of
measurement to
achieving a desired
outcome

Building A Business Case

The Kirkpatrick Model is an internationally recognized tool for evaluating and analyzing the results of educational, training and learning programs.

It consists of four levels of measurement.

① Reaction

Enjoyment, Relevance
and Engagement

② Impact

Knowledge Transfer
Degree of knowledge,
skill, and ability
acquired by
attendance

③ Behavioral Change

Degree to which
learning is applied to
specific Job Tasks

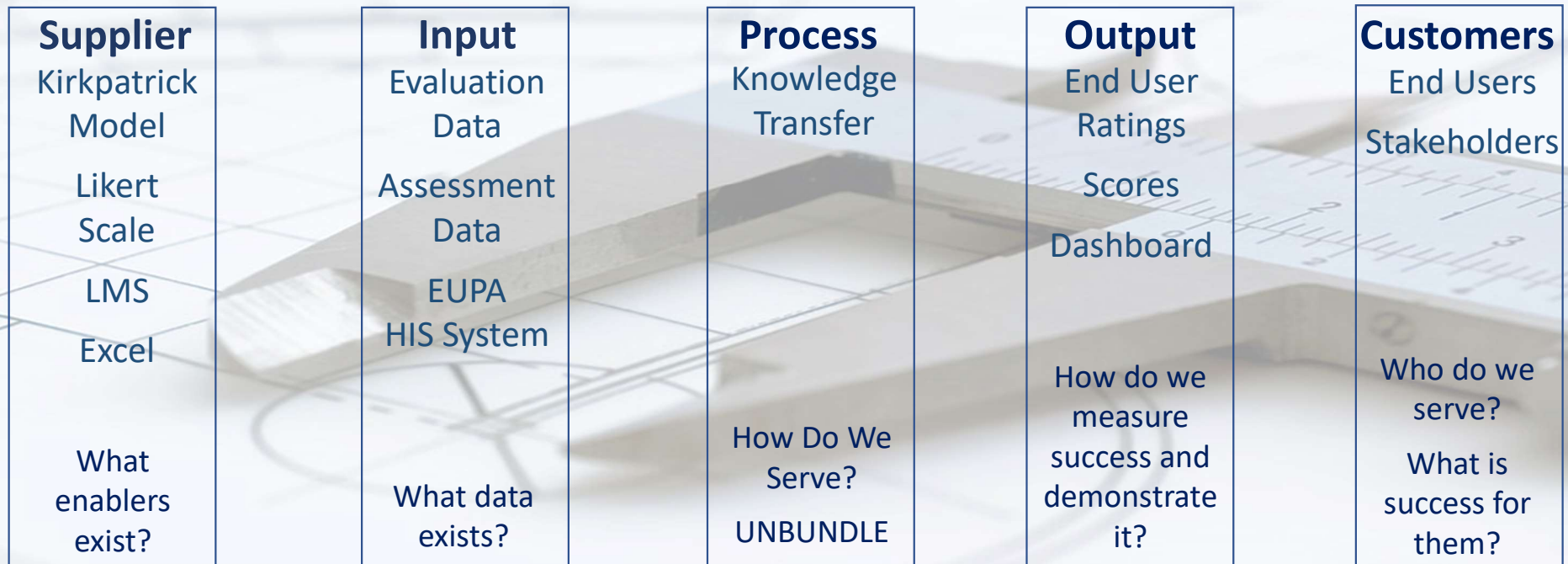
④ Return on Investment

Impact against
desired business
objectives

Statistical inference becomes harder to achieve with each level

Building A Business Case

SIPOC but we used COPIS



Building A Business Case

Data Organization

- ① Effectiveness
- ② Journey Map
- ③ Efficiency

(Future Discussions)

Training Dashboard 2.0

Landing Page

Click on icon to view individual sub-dashboards:

Data through last evaluation: 1/27/2023



Onboarding Evaluations



TogetherCare Evaluations



Legacy Evaluations



Assessments



Onboarding Evaluations Archived



Training Metrics



Metrics Explorer



Metrics by Fiscal Year



Quick Start Guide

Journey Map to Achieve Best Practice

hfma | 2023
Revenue Cycle
Conference

A Shared Journey: Level One Measurement

1 Construct Measured Learner Reaction

2 Instrument: Evaluation

Use quantitative questions which focus on a single idea, and a Likert Scale requiring selection of a level of agreement.

And, use qualitative questions which are open ended and require a narrative response.

3 Validation

Response comparison

Evaluation: Quantitative

Evaluation T.	Question Text	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Learner Reaction	I have a better understanding of the concepts taught in this course.	76.7%	21.8%	0.7%	0.1%	0.8%
	Overall, I am satisfied with this learning experience.	76.3%	22.0%	0.8%	0.0%	0.9%
	The instructor-led review games were presented in a manner that kept my attention.	72.1%	25.3%	0.9%	0.2%	1.4%
	The training material was comprehensive and appropriate.	76.5%	21.8%	0.9%	0.1%	0.7%

Evaluation: Qualitative

Question Text	Answer
If you did not select Strongly Agree or Agree for any of the above questions, please tell us how we can improve the training.	I selected strongly agreed no
What did you enjoy most about the class?	how clear everything is I enjoyed the class and believe this is going to be a job I really enjoy. Im looking forward to getting my equipment set up so I can fully participate in the onbo I loved training, I learnt a lot today and enjoyed my time in Cynthia powers training today. The energy of the trainer. It was very welcoming. Very good training happy to join with your team

A Shared Journey: Level Two Measurement

① Construct Measured Trainer Impact

② Instrument: Evaluation

Same method and design as Level One only the quantitative questions change.

With time we learned our qualitative responses fully informed us,

and, avoid rater fatigue.

③ Validation

Response comparison

Evaluation: Quantitative

Trainer Impact Question	Strongly Agree	Agree	Disagree	Strongly Disagree	No Answer
The instructor created a positive learning experience.	78.3%	20.3%	0.6%	0.0%	0.8%
The instructor encouraged questions and participation during instructor-led review games.	72.8%	24.9%	0.9%		1.4%
The instructor explained concepts clearly.	78.2%	20.4%	0.6%	0.1%	0.7%
The instructor responded effectively to questions asked.	78.2%	20.4%	0.6%	0.1%	0.7%

Evaluation: Qualitative

Question Text	Answer
If you did not select Strongly Agree or Agree for any of the above questions, please tell us how we can improve the training.	I selected strongly agreed no
What did you enjoy most about the class?	how clear everything is I enjoyed the class and believe this is going to be a job I really enjoy. Im looking forward to getting my equipment set up so I can fully participate in the onboarding training. I learnt a lot today and enjoyed my time in Cynthia powers training today. The energy of the trainer. It was very welcoming. Very good training happy to join with your team

A Shared Journey: Level Three Measurement

① **Construct Measured**
Knowledge Applied

② **Instrument: Assessment**
Outcome based

Ordinal rating scale

Measures proficiency

Realistic Job Preview: **Simulations**

③ **Validation**

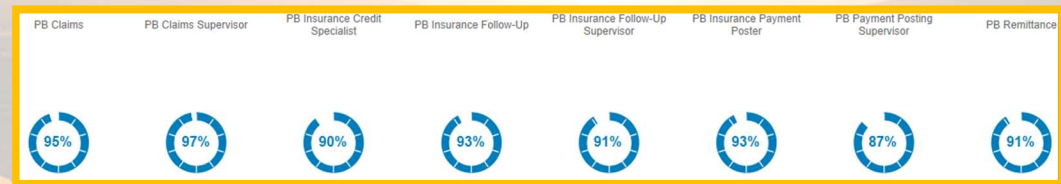
Holistic review of assessment outcomes

Face: assessment appears like it will measure adequately

Content: extent to which a measure represents all facets

Construct: effectiveness in measuring concepts

Criterion : current and future operationalization of a construct



A Shared Journey: Level Four Measurement

① **Construct Measured**
Outcomes Achieved

② **Instrument: Evaluation of Value**
Outcome based

Change in current state from historical trended performance

Performance calculations in comparison to post intervention performance

③ **Validation**

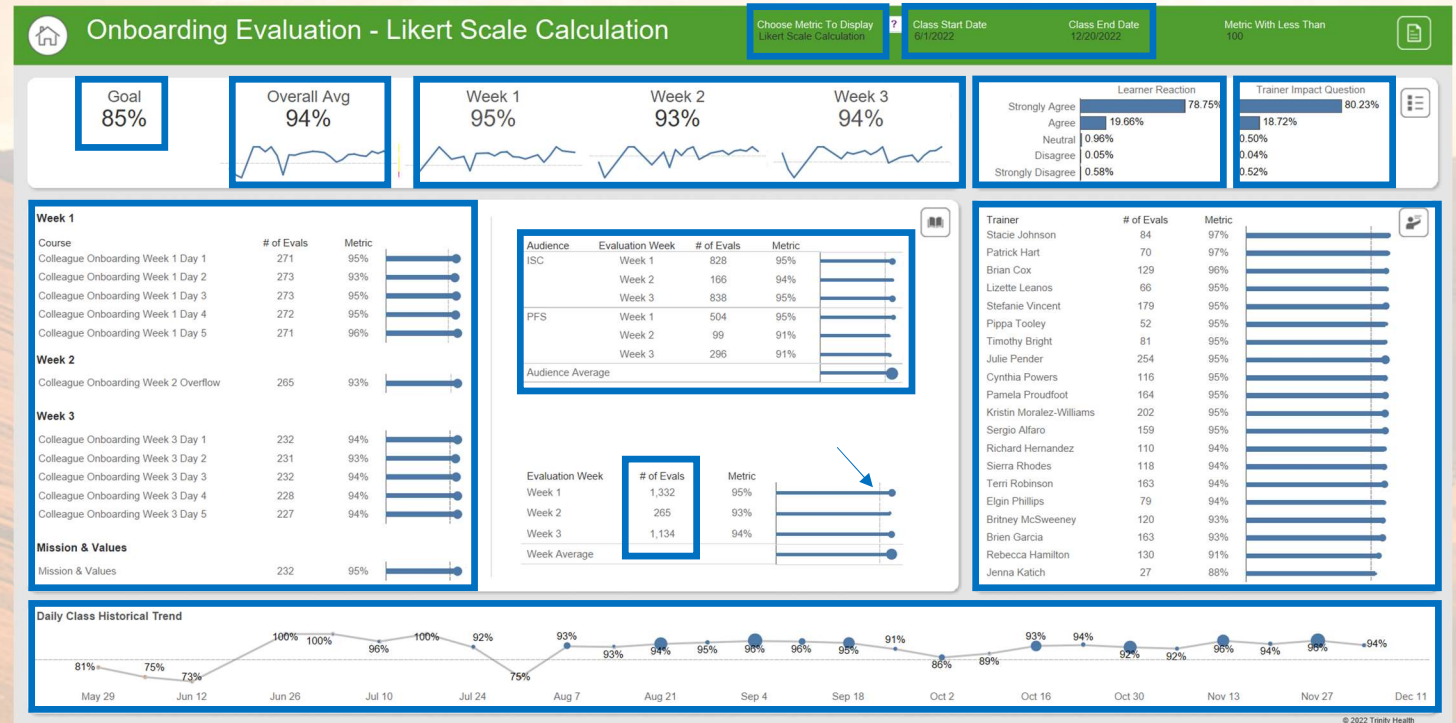
Multivariate analysis isolating a single causal factor in causing a statistically significant change

FY 23

Row Labels	July	August	September	October	November	December	Grand Total
California	0.44%	0.54%	0.68%	0.60%	0.66%	0.64%	0.59%
Florida	1.34%	2.29%	1.68%	1.21%	0.71%	1.04%	1.35%
Georgia	1.86%	1.89%	2.14%	2.38%	1.16%	1.40%	1.78%
Illinois	0.58%	0.55%	0.59%	0.50%	0.61%	0.51%	0.55%
Indiana	1.03%	1.51%	1.03%	1.00%	1.04%	0.92%	1.09%
Iowa - Nebraska	0.54%	0.62%	0.76%	0.88%	0.49%	0.52%	0.63%
Maryland	1.21%	1.14%	1.19%	1.05%	1.01%	0.94%	1.09%
Michigan	0.53%	0.66%	0.65%	0.66%	0.69%	0.69%	0.65%
Mid-Atlantic	1.03%	0.96%	0.95%	0.77%	0.31%	0.38%	0.72%
New York - Albany	0.80%	0.74%	0.79%	0.76%	0.83%	0.75%	0.78%
New York - Syracuse	0.81%	1.00%	0.90%	0.80%	0.68%	0.84%	0.83%
Ohio	1.13%	1.19%	1.09%	1.18%	1.10%	1.06%	1.13%
Oregon - Idaho	0.95%	1.08%	0.94%	1.21%	1.04%	0.90%	1.02%
THONE	0.49%	0.47%	0.57%	0.56%	0.59%	0.36%	0.50%
Trenton	0.37%	0.53%	0.20%	0.23%	0.24%	0.49%	0.34%
Grand Total	0.76%	0.84%	0.83%	0.80%	0.73%	0.69%	0.77%

Basic Visual Management

- ① Target Performance
- ② Current Performance
- ③ Outcome Calculation
Likert Averages
Net Promoter
Time Period
Level One: Reaction
Level Two: Impact
- ④ Line of Sight
- ⑤ N (larger is better)
- ⑥ Historical Trend



In Summary: Application of Today

- ① **Evaluation: Level One** ★★★★★
The training material was comprehensive and appropriate.

- ② **Evaluation: Level Two** ★★★★★
The instructor explained concepts clearly.

- ③ **Assessment: Level Three**
What does SIPOC stand for?

Supplier	Input	Process	Output	Customer

- ④ **Application: Level Four**

Training Effectiveness Report	July 1 st through July 31 st , 2023
Reaction Average Score	
Impact Average Score	
Assessment Average Score	
Colleagues Ready to work	

In Summary: Our Journey

**Once you
know what
you have, use
that**

We started with
paper evaluations
paper assessments
manual scoring
scanned and uploaded
daily
from 3 different locations

Then...

I put those into Excel
and created a Visual
Management dashboard
Kind of...

We had no standard content

We had no Epic

Data Analytics was 18 months away



**We took one step at a
time...
and hope that you do to.**

Your Toolkit

Trinity Health: [Website](#)

SIPOC: Video: [SIPOC Diagram Simplified](#) Adriana Girdler Introductory/ Tutorial

Survey Data Measurement, Validity, and Reliability: [Reliability in Survey Design](#) Dr. Jessica Uriarte Wright

Kirkpatrick Model: Video [Kirkpatrick's 4 Levels of Evaluation in One Minute](#) Zeroe Gravity

Visual Management: Resources: [Agency for Healthcare Research and Quality \(AHRQ\) Visual Management](#)

Formal Education/ Certification: [Lean Manufacturing - Nexus at Michigan Engineering \(umich.edu\)](#)

Contact: Email: Sergio.Alfaro@trinity-health.org and Edward.Thomas@trinity-health.org