

CSTE

Data Science Team Training

Coach's Office Hours/
Workshop

August 26, 2021

3:00pm EST

Agenda

- Welcome and General Announcements
- Dashboard Dos & Don'ts
- Dashboard Reviews
- Breakout Rooms
- Adjourn

General Announcements

DSTT Final Presentations

- Presentations will take place over 2 days:
 - December 2nd (6:00-7:30 PM eastern)
 - December 9th (3:00-4:30 PM eastern)
- Each team will need to sign up for their preferred date on a Doodle poll.
 - Please fill out the Doodle poll by Friday, September 3rd.
- Questions?
 - Please read the detailed documentation on Basecamp - Docs & Files- Final Presentations
 - Contact Bernadette Aylward (baylward@cste.org)

Next Office Hours

- Thursday, September 23, 2021, 3:00pm EST

Dashboard Dos & Don'ts

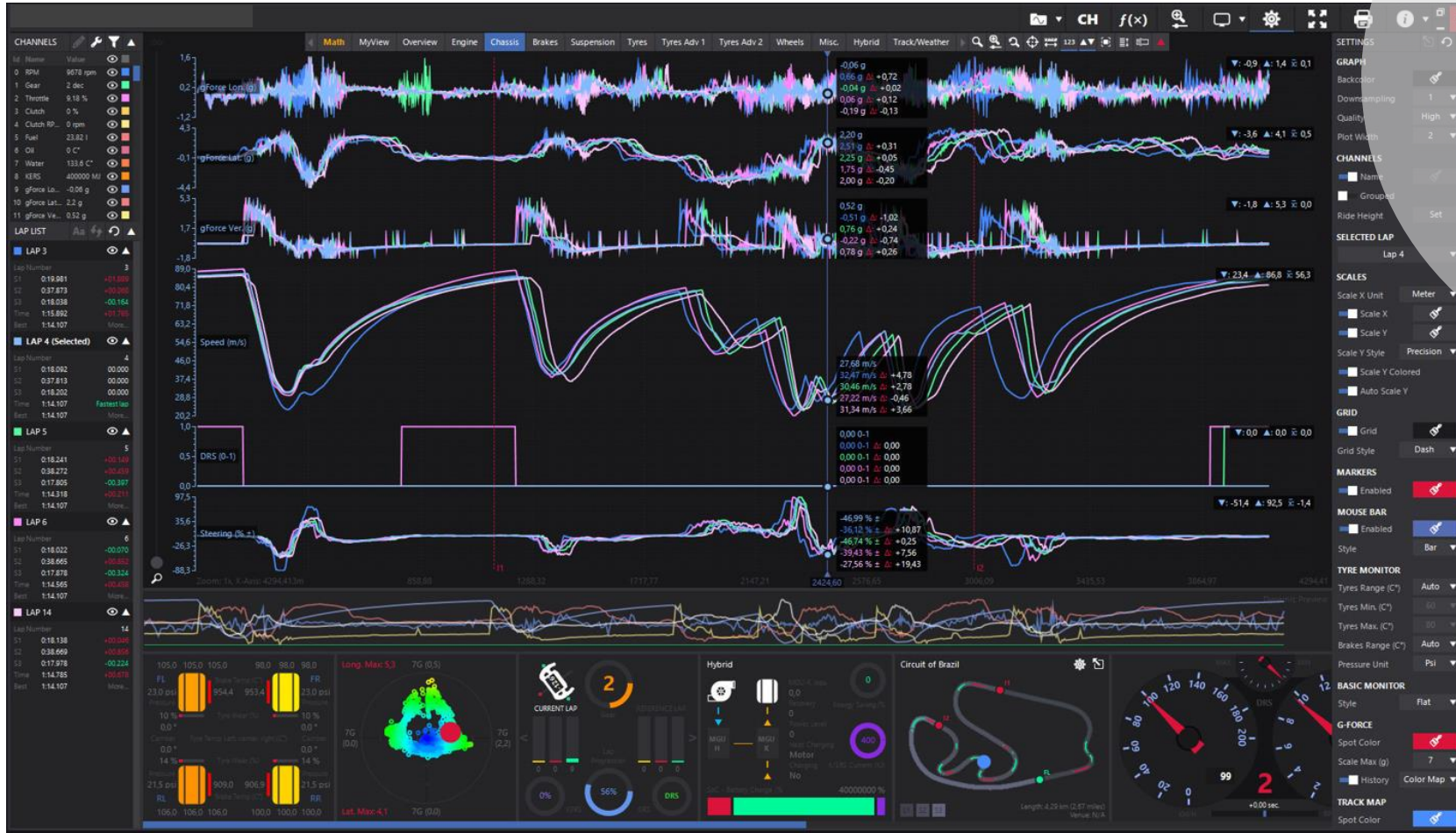
Know your audience



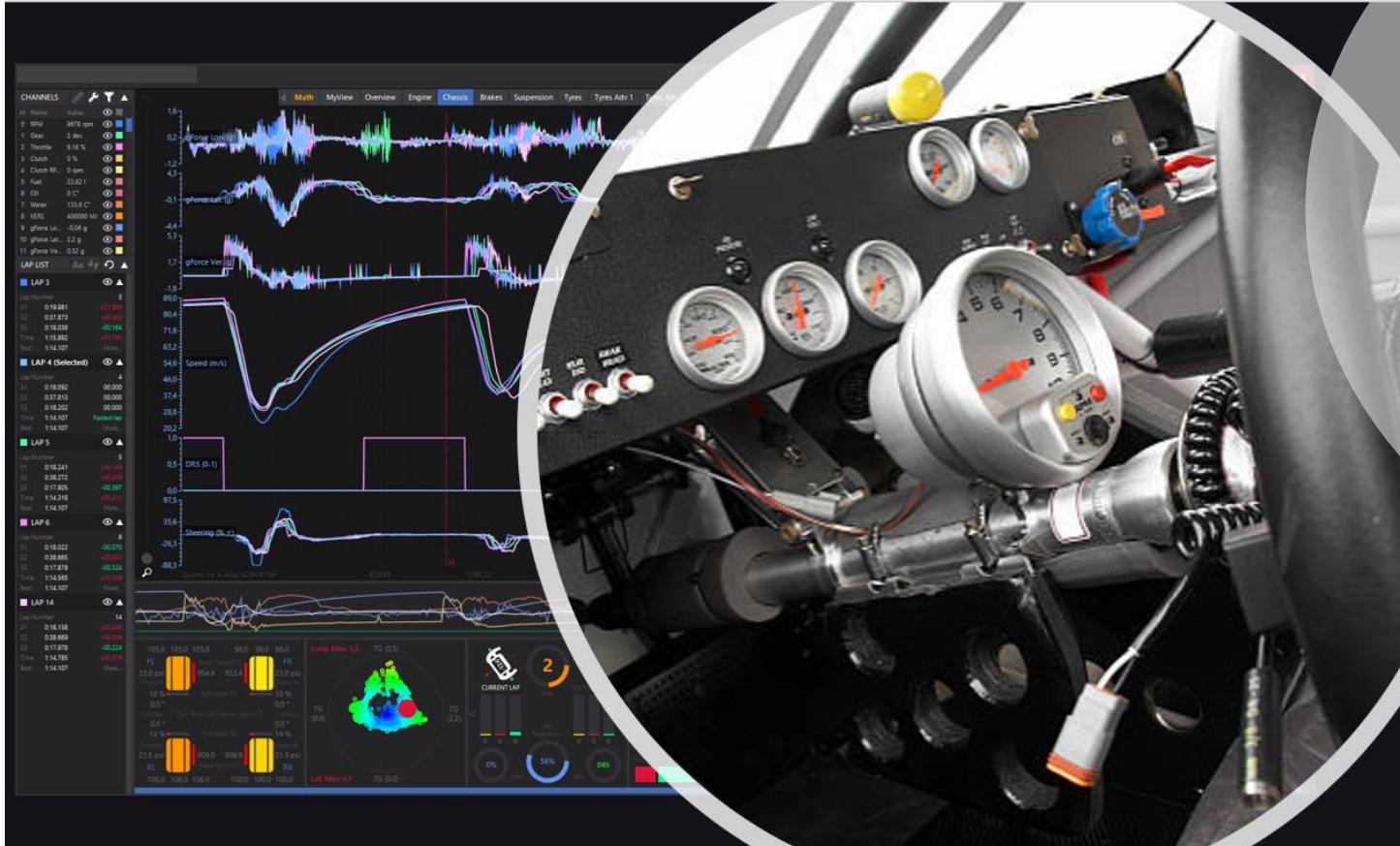
Racecar
Driver's
Perspective

Know your audience

Racing Analyst's Telemetry Perspective



Know your purpose



Win the Race!

Driver and the Analyst

- Both need to be informed by the data
- Both need to act on the data

Dashboard Dos

- Engage your users early & often
 - Learn how they source data without/prior to a dashboard
 - Learn what they do with data
 - Learn why they do what they do with the data
- Listen to your users all the time
 - They will have new ideas along the way
- Review other visuals
 - Imagine how they could apply to your users
- Iterate. Iterate. Iterate.
 - Try different views of the same data
 - You may need to adapt raw data structure
- Static vs Dynamic
- Consider how frequently data needs to be updated:
 - Every minute?
 - Once a day?
 - Once a week?

Dashboard Don'ts

- Do not feel pressured to pack-in everything
 - It is OK to have more than one dashboard view
- Fancy does not translate to effective
- Do not assume everyone will know how to interact with dashboards
 - Consider quick videos showing users how to interact
- Do not cover your visualizations with footnotes and text explanations
 - It's a visual
- Do not underestimate the prep work
 - Charts and graphs are the easy part
 - Getting the right data is hard work

Levels of Dashboards

Executive

- Most Essential Information
- Efficient Presentation
- Less Options or Functions
- Get to the point



Operational

- Key Performance Indicators
- Relative Trends
- More Options and Features
- Drilling-down



Analytical

- Lots of Options, Filters, and Details
- Drilling-down, Rolling-up, & Data Extracts
- Exploration and Discovery
 - May generate more questions than answers and that's OK



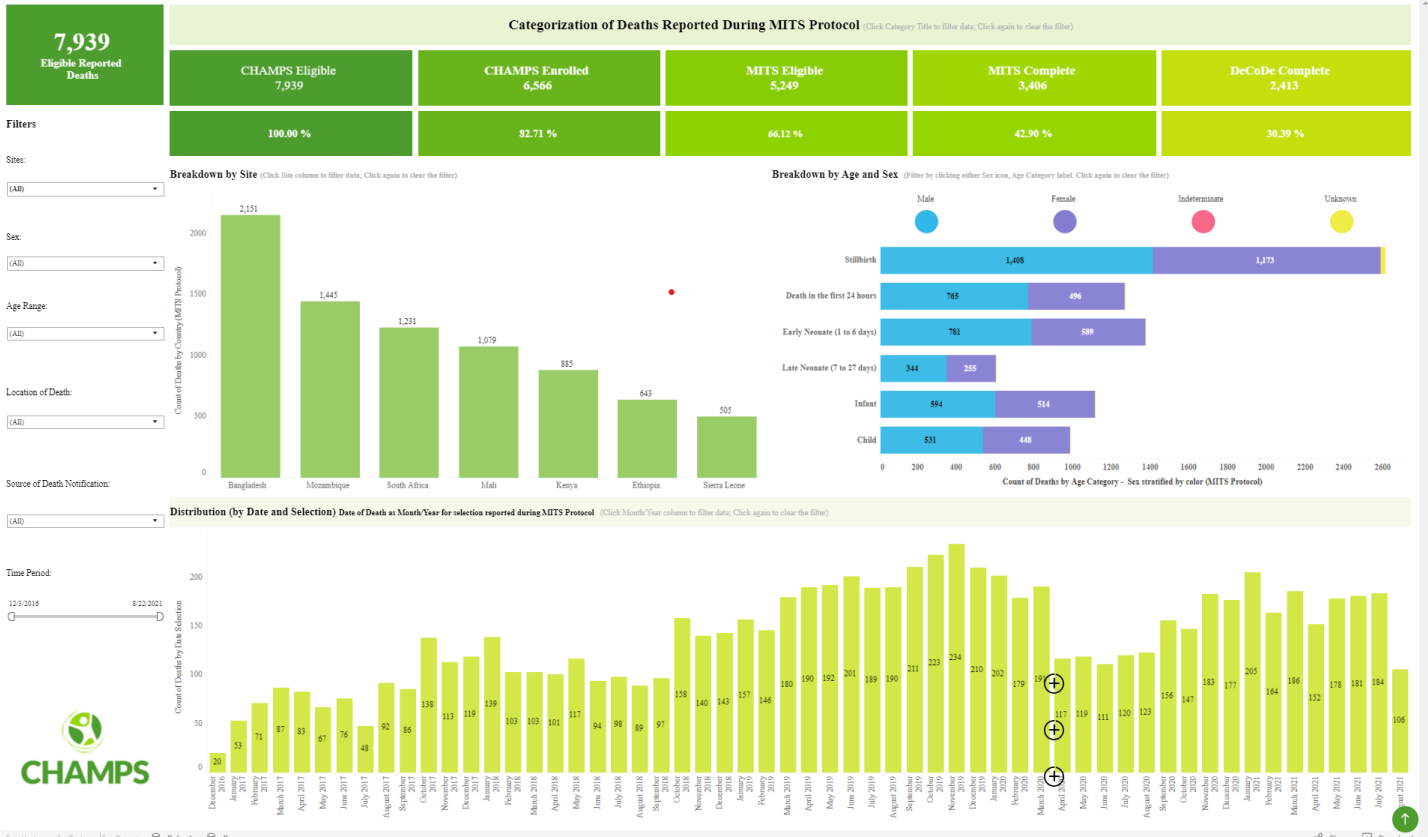
Dashboard Review 1

Executive Level (Tableau)

Purpose:
Descriptive account of ongoing research population

- Audience:**
- General Public
 - Research Leadership & Sponsor
 - Global Partners

- Tech**
- SQL Server Database
 - Custom views updated nightly
 - Tableau Server



CHAMPS

<https://champshealth.org/data/enrolled-population-summary/>

Dashboard Review 2

Operational (Grafana)

Purpose:

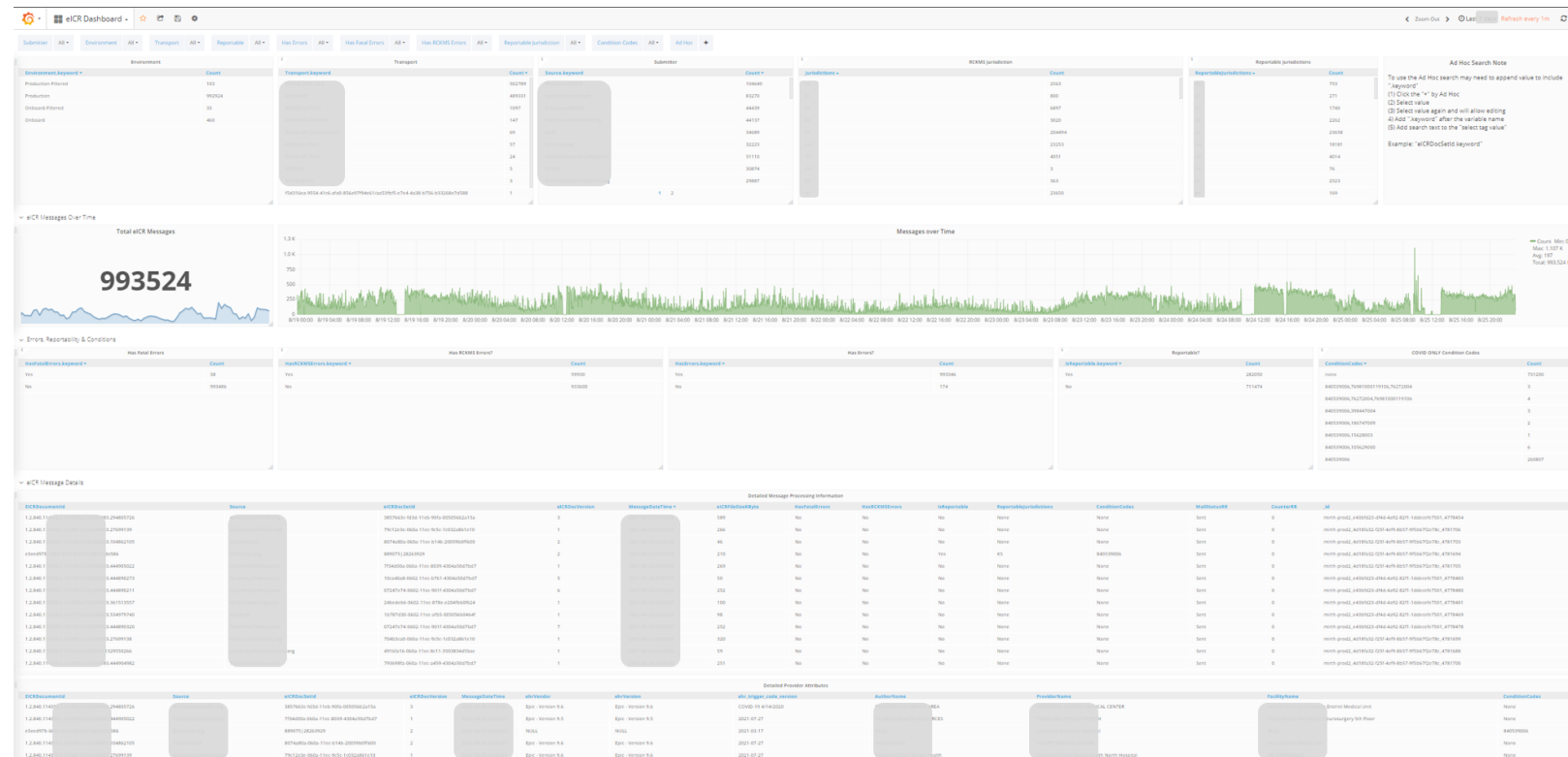
Live monitoring of high-volume message processing and transmission

Audience:

- Internal Operations Team
- Tech Support

Tech

- Elasticsearch
 - Updated in near-real time
- Grafana



Dashboard Review 3

(Power BI)

Purpose:

Hearts M&E Reporting

Audience:

- Eventually – health facilities
- Now - Stakeholders

Tech

- DHIS2 for aggregate reporting
- R for ETL
- Power BI for reporting

Report 101 HEARTS Health Facility Report



130341
Hypertensive

66990
Registry

51.4%
Coverage

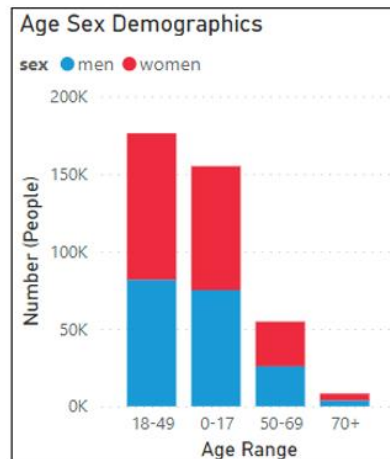
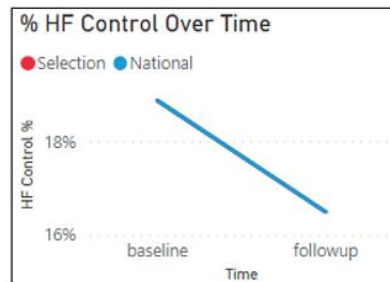
11043
Controlled

16.5%
Control (HF %)

8.5%
Control (Pop %)

77.4%
Retention

This dashboard presents comparative country & health facility differences in performance and progress for HEARTS monitoring and evaluation.



Indicator Score by Health Facility

Health Facility	I.1	I.2	I.3	I.4	I.5	I.6	I.7	I.8
CENTRO DE SALUD LAS ROSAS	0	0	1	1	1	0	1	1
CENTRO DE SALUD SAN CRISTOBAL DE LAS CASAS	1	1	1	1	1	1		
CENTRO SALUD CHANAL	1	1	0	0	1	1		
CENTRO SALUD TEOPISCA	0	0	0	0	0	1	1	1
HEARTS CENTRO DE SALUD SANTA CLARA	1	1	1	1	0	0		

On Track

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Process Scores

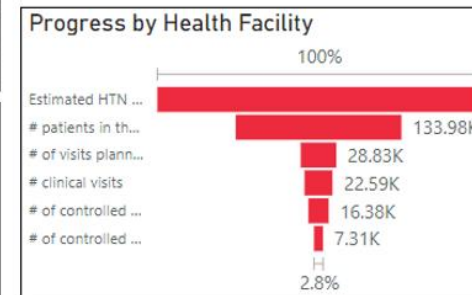
Health facility name	Score
CENTRO DE SALUD SAN CRISTOBAL DE LAS CASAS	21
CENTRO SALUD CHANAL	15
HEARTS CENTRO DE SALUD SANTA CLARA	11
CENTRO DE SALUD LAS ROSAS	8
CENTRO SALUD TEOPISCA	5

62.32

Medical / 10000 HPN

26.0%

Auto-validated HBP



Country

All

State

All

Health Facility

All

Sex

All

Age

All

Risk

All

Complexity

All

Urban Rural

All



| Data Collected by PAHO | Dashboard Created by Patric Prado

Breakout Groups



Adjourn

Next Office Hours Meeting

Thursday September 23, 2021

3:00pm EST

Links to Dashboards Reviewed

CHAMPS

<https://champshealth.org/data/enrolled-population-summary/>

<https://champshealth.org/data/infant-and-child/>

Tableau Gallery

<https://public.tableau.com/en-us/gallery/?tab=viz-of-the-day&type=viz-of-the-day>

<https://public.tableau.com/en-us/gallery/?tab=featured&type=featured>

Other examples from Breakout Room 1

<https://www.who.int/teams/control-of-neglected-tropical-diseases/overview/progress-dashboard-2011-2020>

<https://montbelvieu.maps.arcgis.com/apps/dashboards/80511e2f638347228263cb563142adcc>

<https://experience.arcgis.com/experience/ae30cf23f70b40fda5a4804e7601eee9>

https://public.tableau.com/app/profile/asitha.mudiyanselage/viz/COVID-19casesasof08252021220PM_/Story2

<https://www.epstrong.org/results.php>