DRVS Data Voyage

How does this thing work anyways?

PRESENTED BY:

Philip Parker
SVP, Client Analytics

ALONG WITH

Everyone who has ever worked at Azara

Agenda – What's in the Black Box

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EHR DATA

Practice staff enter data into the EHR

AZARA DOES SOMETHING WITH IT

We will be talking about this part today!

DRVS

DRVS

DRVS Reports, Measures, and other Features are Available

Actual Agenda

CONNECTORS

What ships EHR data to Azara

DADMIN

Azara's beloved internal control tool

AZARA'S DATA WAREHOUSE

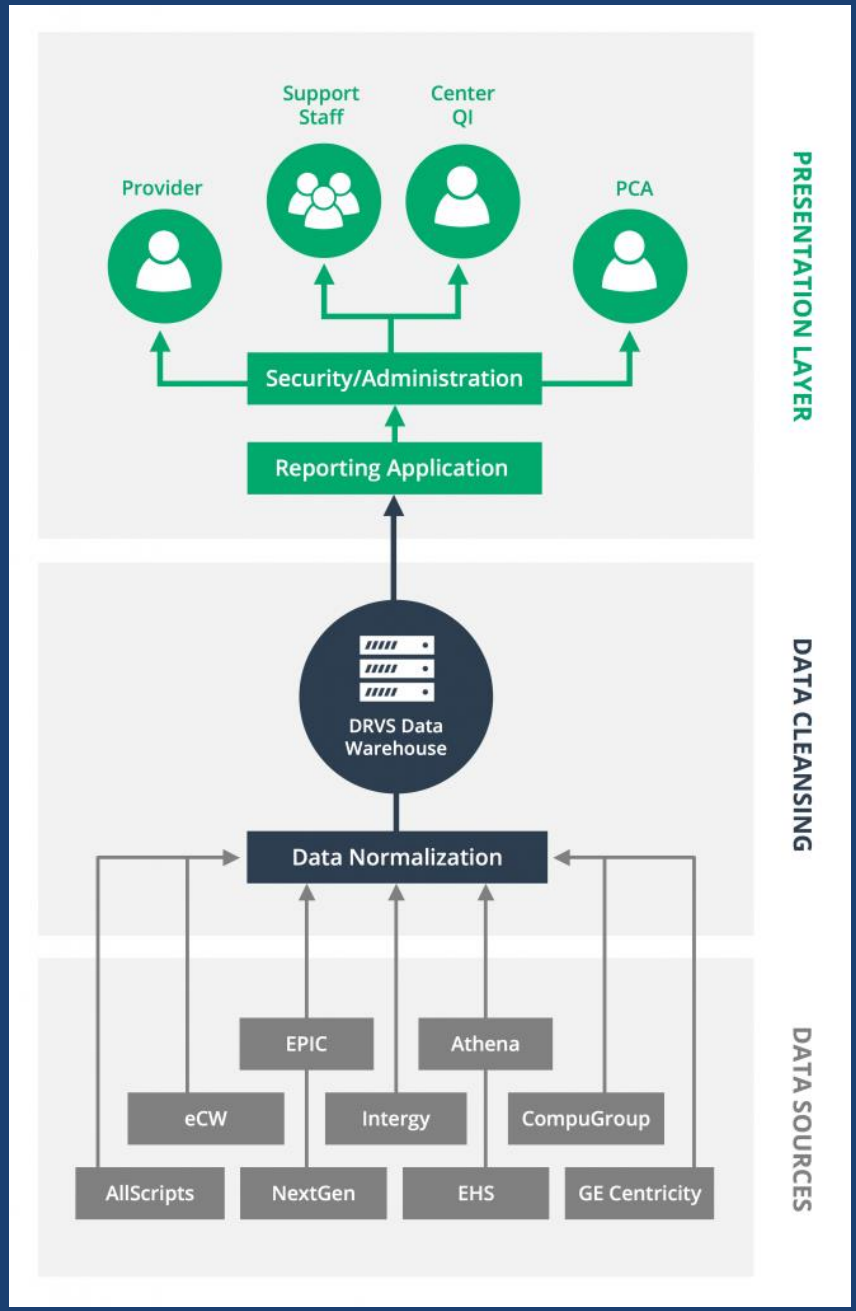
Where we keep all the data

MEASURES, REPORTS, ETC.

The logic that's applied to the data

THE API & FRONT END

How you see the data



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Connectors &
How We Get Data

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Azara's EHR Connections, Visualized

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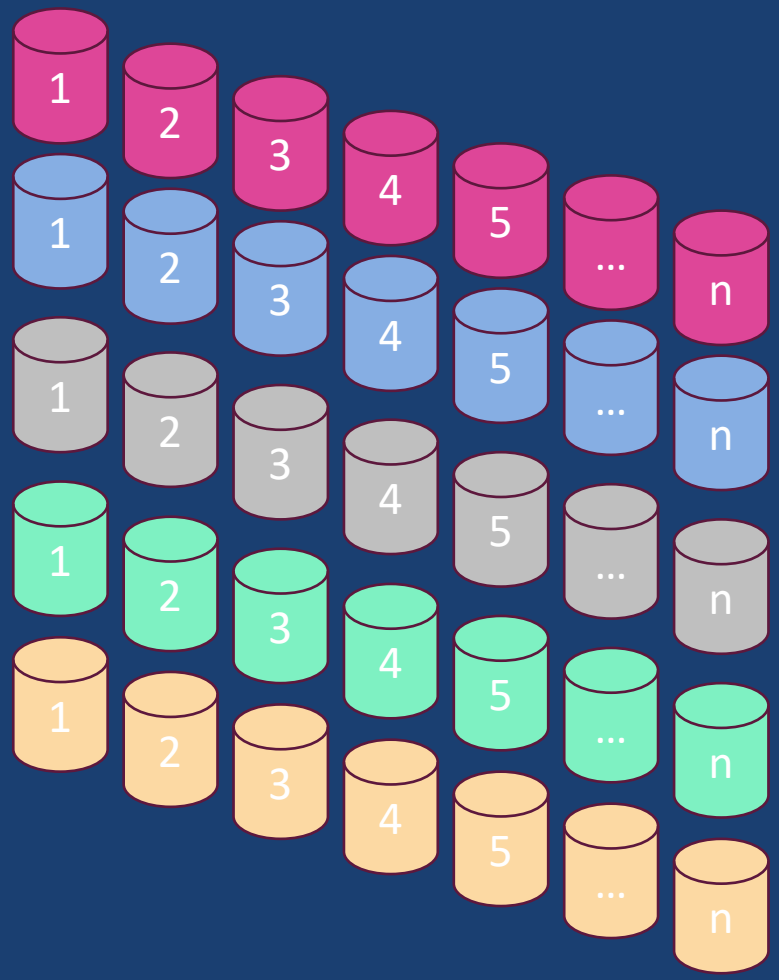


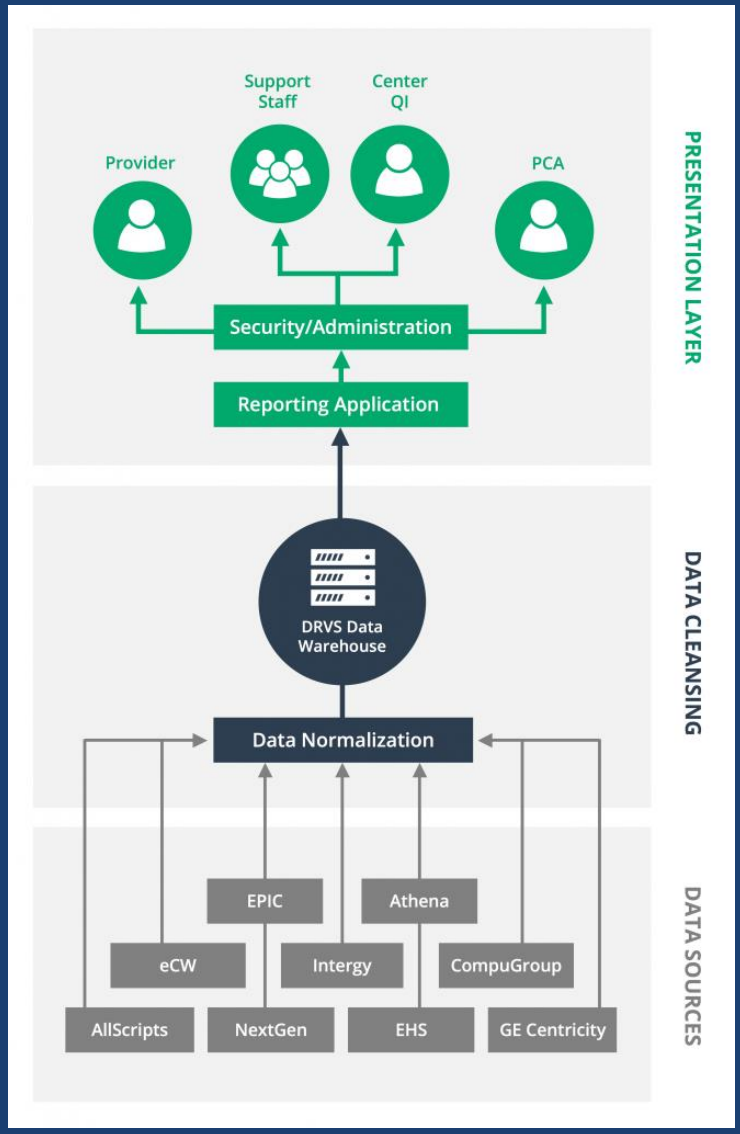
Epic

Nextgen

Athena

eCW

Intergy



…and onwards, we connect to 30+ EHR types

The Connector

Lives in the source environment

“Phones home” regularly for instructions

Designed to pull data incrementally

Ships data via SFTP back to Azara

Azara's EHR Connections, Visualized

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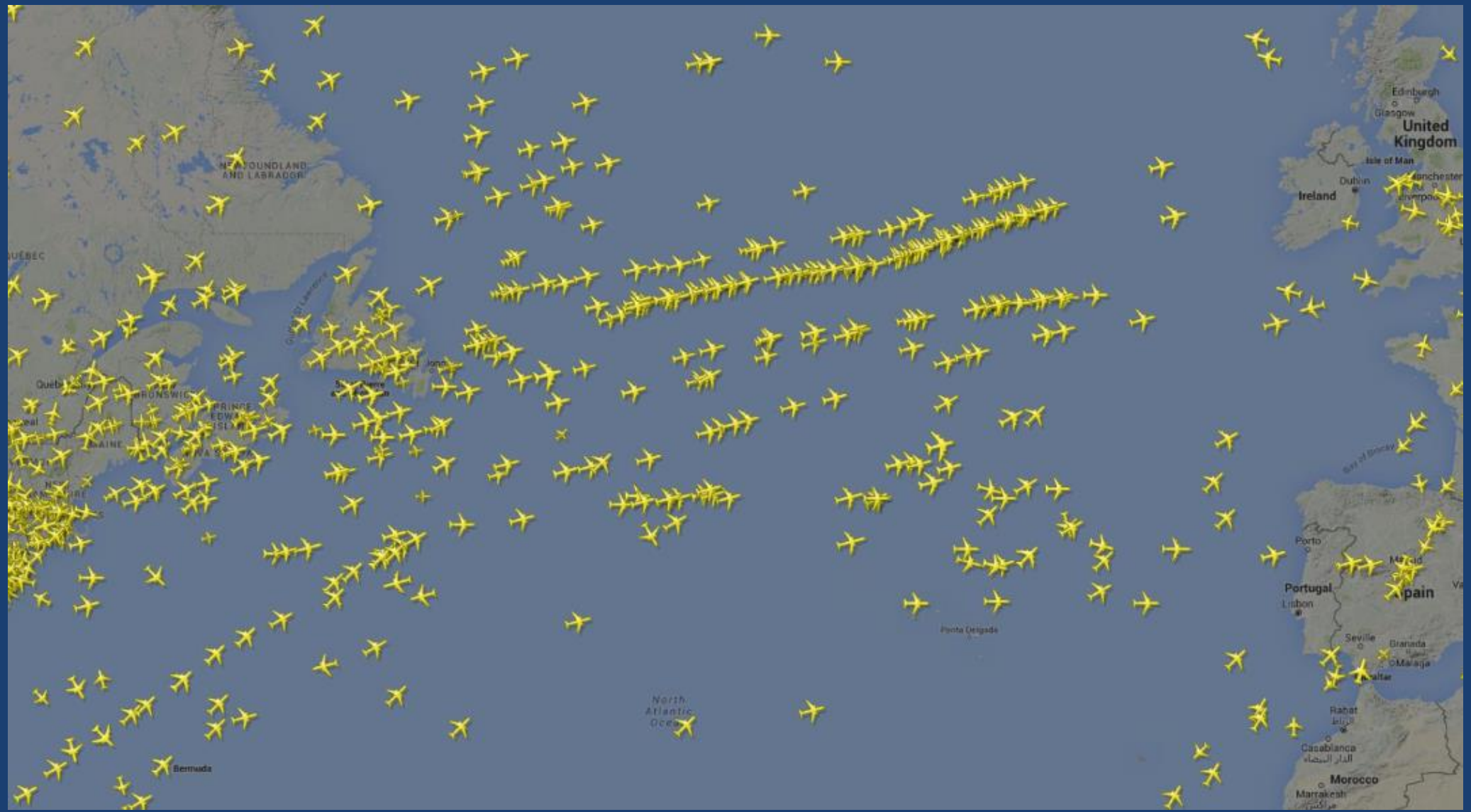

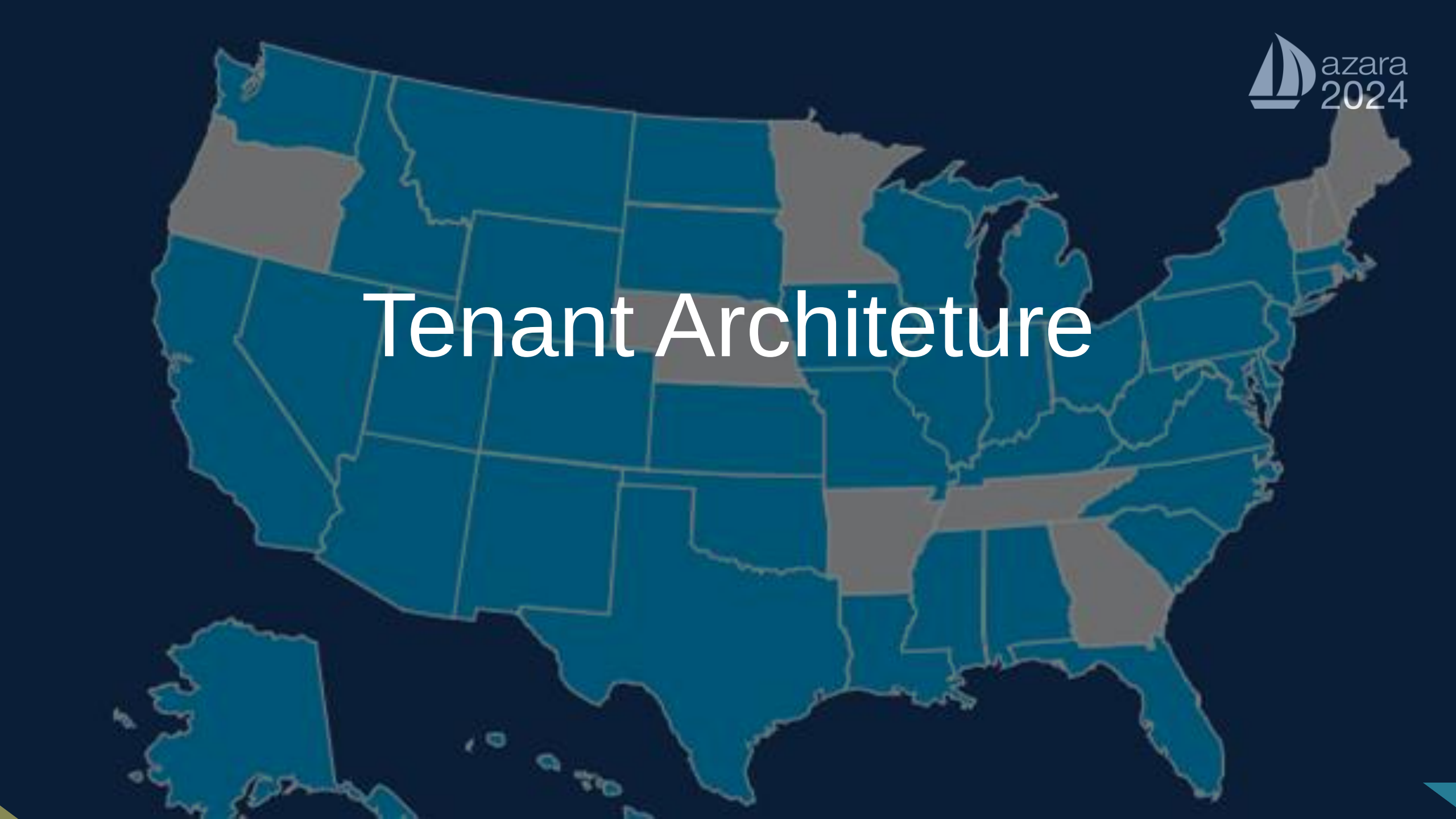

Tenant Architeture

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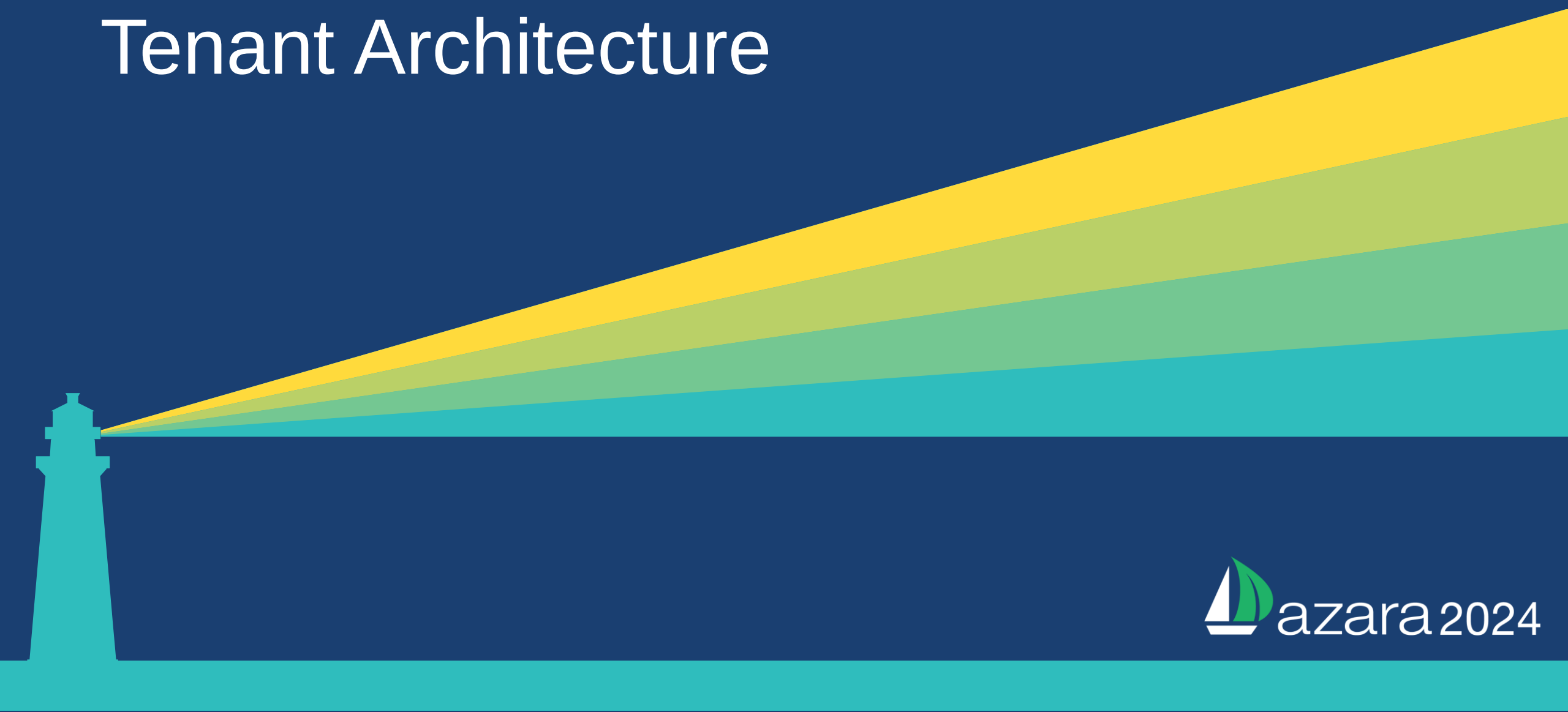
Tenant Architecture



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DAdmin

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azara healthcare **DAdmin** Data Sources Connectors Report Admin Core ETL Job Security Logs Products PRD Help Log off

Search:

Tenant	DbServerAlias	Last Start	Last End	Next Run	Core ETL Job Status	Connectors	Data Extracts	Actions
AACHC	az-prd-sql15	04/25 09:30 AM	04/25 09:34 AM	04/25 12:00 PM	✔	! 2	✔	Actions
AKPCA	az-prd-sql15	04/25 09:00 AM	04/25 09:43 AM	04/25 10:15 AM	!	✔	✔	Actions
AL	az-prd-sql19	04/25 10:00 AM		04/25 01:00 PM	00:00:36 115%	✔	✔	Actions
BCBSLA	az-prd-sql17	04/25 02:00 AM	04/25 02:58 AM	04/26 02:00 AM	✔	! 5	✔	Actions
CBHA	az-prd-sql15	04/25 10:00 AM		04/25 10:25 AM	00:00:30	✔	! 1	Actions

The Azara Data Warehouse

Azara's production warehouses contain over **150 billion records**

31 TB of data

88.6 Million EHR Patient Records*

* "patient records" likely does not represent life count. Many duplicates & other nuances here

Interfaces & Outbound Data

LOINC Mapping

Lab data is critical to population health

Measures require codes, **LOINCs for labs** specifically

A large segment of lab data comes over with **missing or bad codes**

Azara uses **AI/ML technology** to assist us in mapping labs to LOINC codes

E Pluribus Unum - MPI

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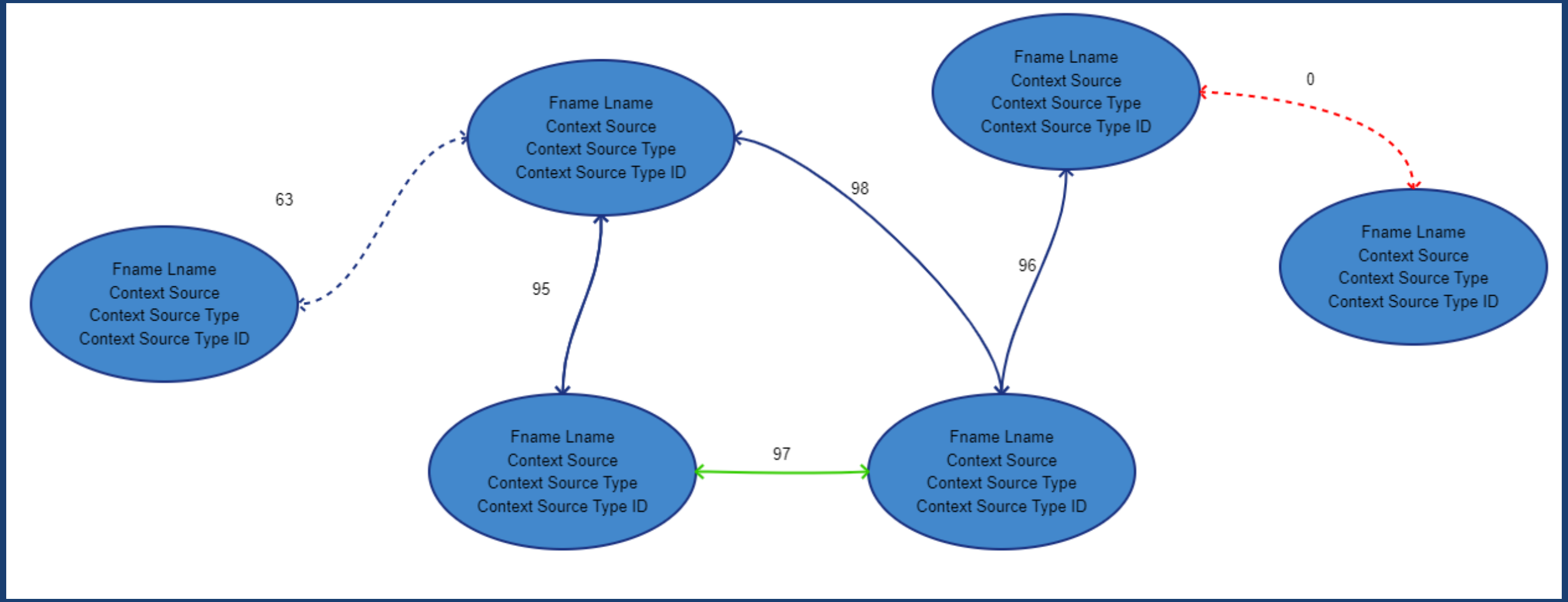

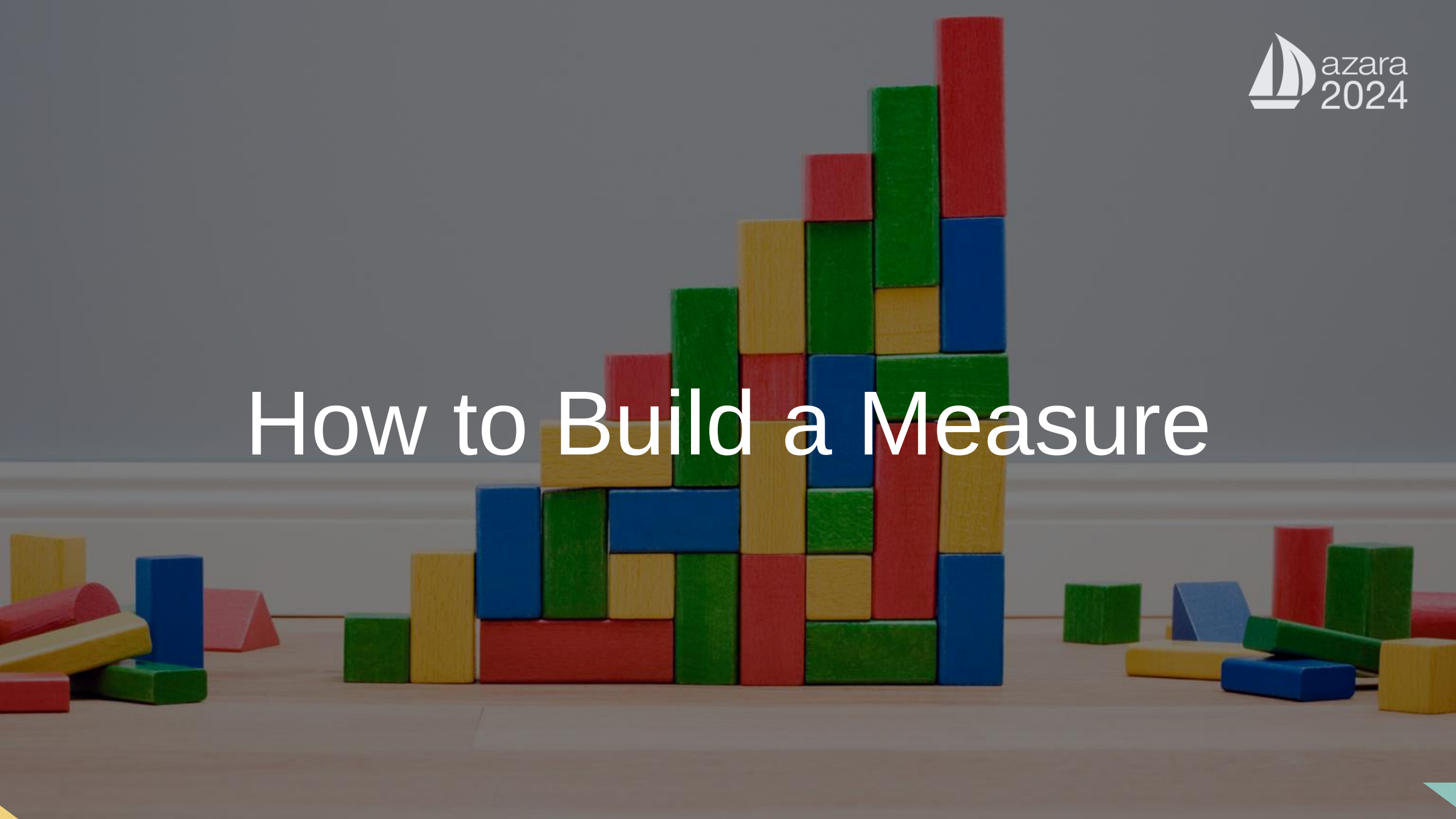
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How to Build a Measure

Azara Measure Suite

Technically, Azara has 1,000+ measures

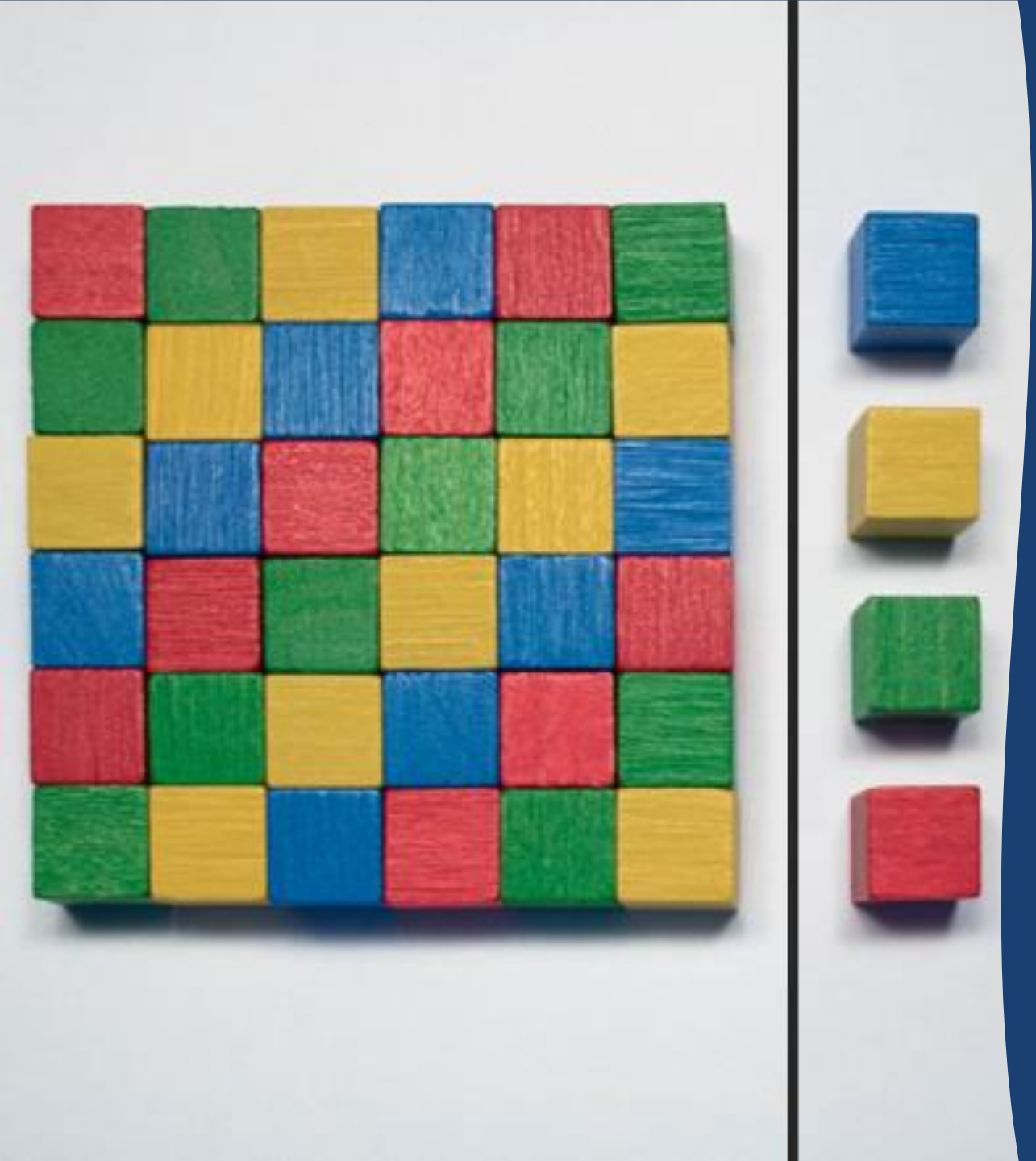
- Many versions of the same measure
- Many retired measures

Azara pre-aggregates (processes) measures

- Weekly, generally on weekends
- Some exceptions to this rule

We also process measures for dozens of period types and periods

- Years
- Quarters
- Months
- Etc.



Building Blocks – “Observations”

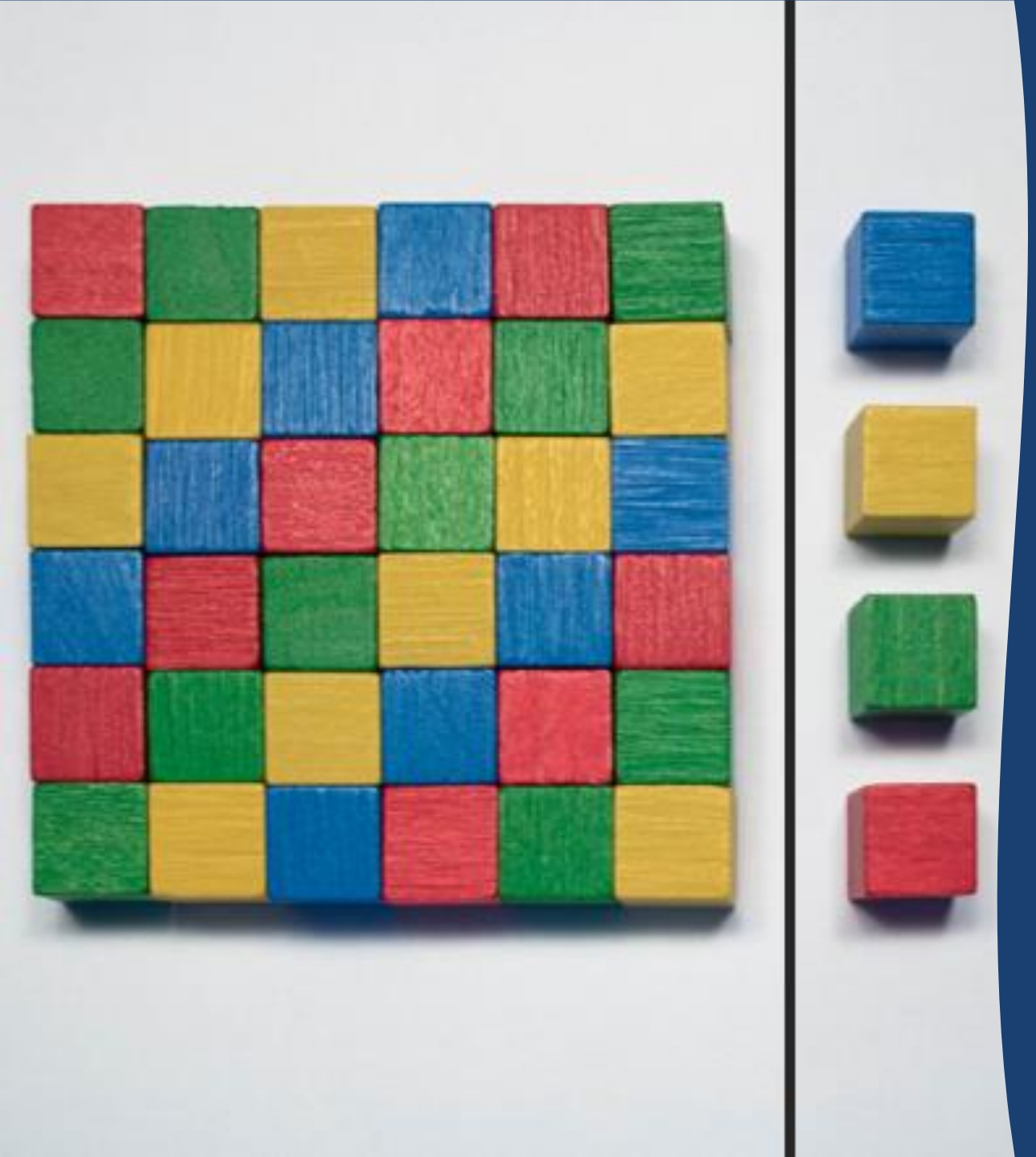
Calculating all measures individually would be impossible (we tried)

Many measures share logic

- Patient must have Diabetes
- Most Recent Encounter

We can first build these “observation” building blocks, then use them in measures

Observation = curated data point



Not Just Building Blocks

Observations are useful in their own right, and power many of Azara's other features:

- Registries
- Alerts
- Filters
- Azara Patient Outreach (Texting)

ALERT	MESSAGE	DATE	RESULT
A1c	Overdue	3/25/2023	9.3
LDL	Overdue	3/25/2023	187
Depression Screen	Overdue	3/25/2023	Negative
Tobacco Scr	Overdue	3/25/2023	Y
BMI & FU	Overdue		
BP	Overdue	3/25/2023	135/88
Asth Severity	Overdue	1/12/2023	
Foot	Overdue	1/12/2023	Y
E/D Encounter	Occurred	4/27/2024	St. Josephs Hospital

API

Before you ask, it is not public (maybe someday!)

What is an API?

- Structured method of interacting with a database

Finally, DRVS!

Custom built front end

10,000+ Monthly Active Users

Questions?

Azara healthcare

@AzaraDRVS

We Want to Hear From You!

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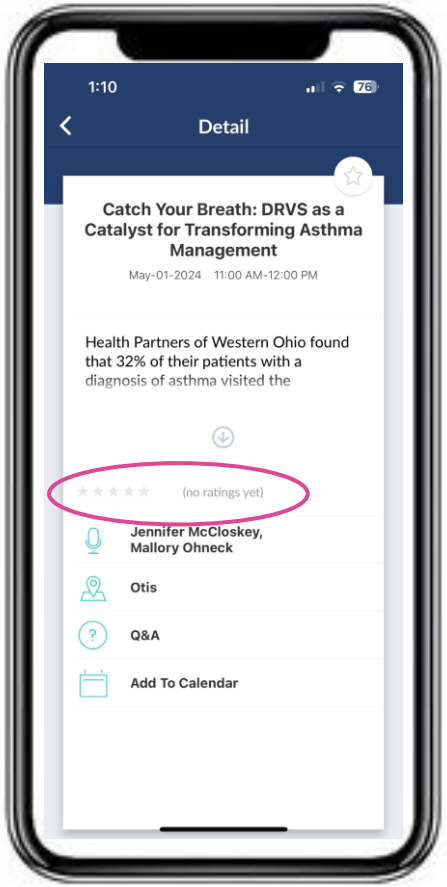
Click the stars in the center of your screen to rate and provide feedback.



Quick and Easy

Provide brief feedback or ideas

Rate the session and the speaker(s)

Help us continue to improve