

azara2025

USER CONFERENCE APR 29-MAY 1 | BOSTON, MA

# How Data Become DRVS

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



Practice staff enter data into the EHR



Azara does something with it.  
We will be talking about this part today!



DRVS Reports, Measures, and other Features are Available

# Actual Agenda

## CONNECTORS

What ships EHR data to Azara

## DADMIN

Azara's beloved internal control tool

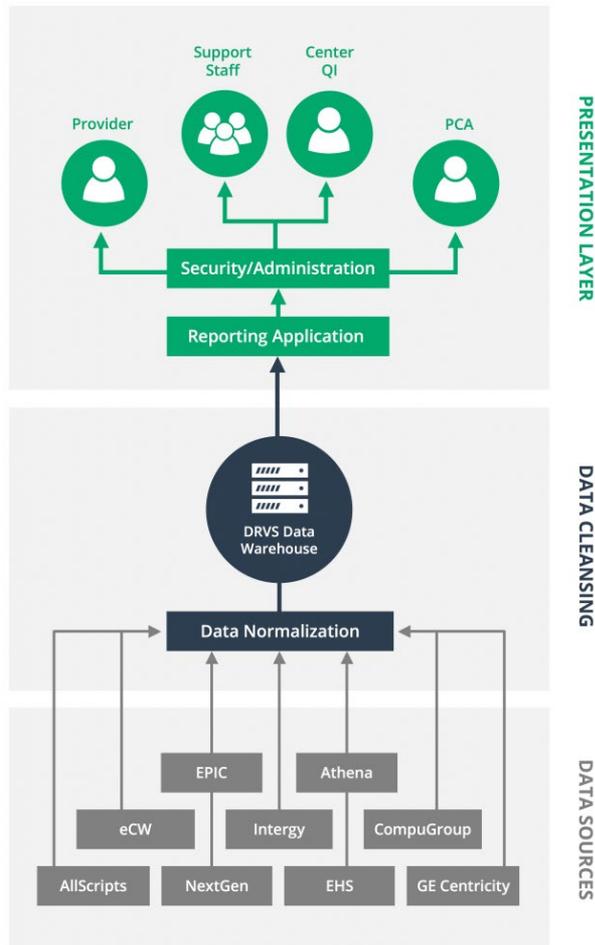
## AZARA'S DATA WAREHOUSE

Where we keep all the data

## MEASURES, REPORTS, ETC.

The logic that's applied to the data

## THE API & FRONT END



# Connectors & How We Get Data

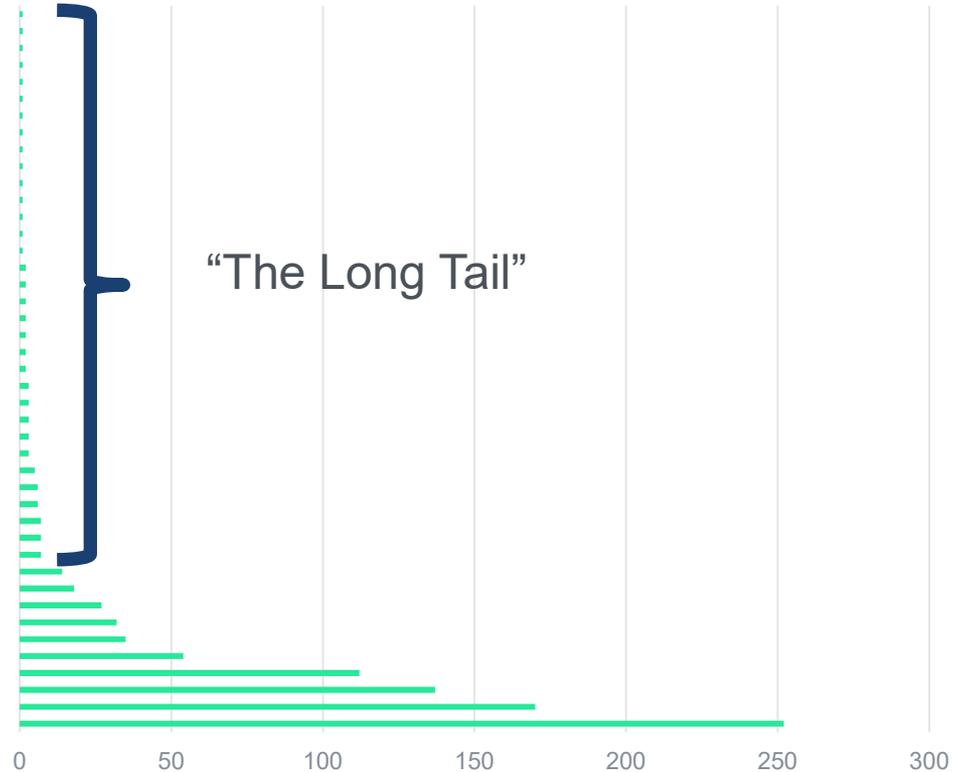


# Azara's EHR Connections, Visualized



...and onwards, we connect to 30+ EHR Vendors, however the top 5-7 EHR Vendors account for 80% of the connections

Connections By EHR Type



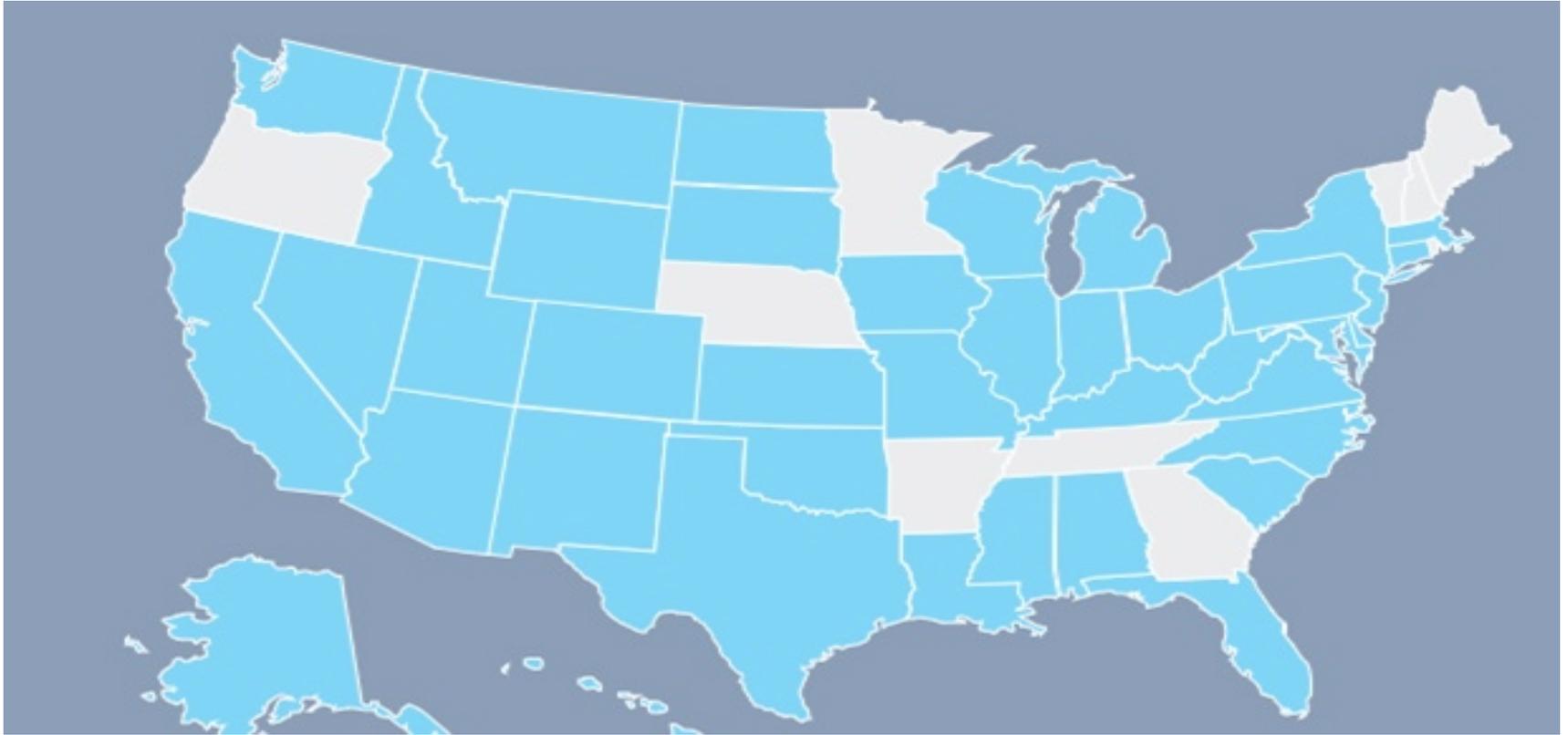
# The Connector

- Lives in the source environment
- “Phones home” regularly for instructions
- Designed to pull data incrementally
- Ships data via SFTP back to Azara





# Tenant Architecture



# DAdmin

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 ▾

# Dadmin – Core ETL Config

- Move Files
- Load Warehouse\*
- Trigger Hopkins ACG Risk Model run\*
- Move File Pattern
- Load Report DB
- Load ACC Data\*
- Load Staging
- Purge Reporting Periods\*
- Load ACM Data\*
- Scrub\*
- Reprocess Mappings\*

## PERIODS

## CENTERS

All

## PLANS

AZCH, Banner (VBCare), Care1st, UHC

## MEASURES

Encounters\_NonQualifying (Encounters - Non-Qualifying),  
Azara\_Telehealth\_Encounter\_Charges (Telehealth Encounter Charges),  
EncounterVolume (Patient Interactions)

## MPI Contexts

MPI Center Context AACHC ADELANTE, MPI Center Context AACHC  
Canyonlands Healthcare, MPI Center Context AACHC CCHCI, MPI Center  
Context AACHC CircleTheCity, MPI Center Context AACHC Desert Senita,  
MPI Center Context AACHC HCHC, MPI Center Context AACHC MHC,  
MPI Center Context AACHC Native Health, MPI Center Context AACHC  
North Country, MPI Center Context AACHC Sunlife, and 7 more

- Incremental Load\*
- Pregnancy Details
- Ryan Health BHI
- MICH Collab Care
- Observations for Measures\*
- Encounter Observations For Measures\*
- Encounter Observations For Reports\*
- Member Observations\*
- Measures\*
- Member Measures\*
- Patient-Period Snapshots\*
- Patient-Period Snapshots - Plan Filter\*
- Patient-Period Snapshots for Current Calendar Month  
Period(Only Financial Class, Plan, and Payer)\*
- Observations for Period Based Reports (eg. UDS)
- Load Registry/PVP Visit/Patient\*
- Observations for Filters\*
- Daily Observations\*
- 1st of the Month Processing\*
- Alerts\*
- Observations For Risk
- Process Observations for Data Validation
- Load Patient Risk For Selected Periods
- Load Patient Risk For Current Calendar Month Period
- Load RAFs for Current Calendar Year\*
- Load RAFs for Selected Periods\*
- Load Member Deliveries
- Medication Approximate Term Matching
- Prescription Rx Fill Fact Table
- Custom Facts\*
- RVU Fact\*
- Days in AR\*
- HIE Encounter Fact Tables\*
- Load OSHPD\*
- Load App Tables\*
- Load Member-Patient\*
- Refresh Map Counts\*
- Load MPI\*
- Load Drug Era\*
- Load Device Exposure
- Load Immunization Management
- Process APO Campaigns
- Load UDS Fact Tables (eg. 6a, 3, 4, Zipcode)

# The Azara Data Warehouse

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

# Interfaces & Outbound Data

- Billions of records a year sent downstream
- Millions of CCDs
- Would have been millions of FHIR Documents... (UDS+)
- NCQA Data Aggregator Validation Certified



This is not a real logo I made this up to make flat files seem cool

# Mapping

Terminology is fragmented, non-standard

- Language
- Race
- Ethnicity
- Appointment status
- Etc.

Azara maps 29 different “concepts”

- Captured at “source” level, different sources can map values differently

31.2M term mappings exist in our warehouses

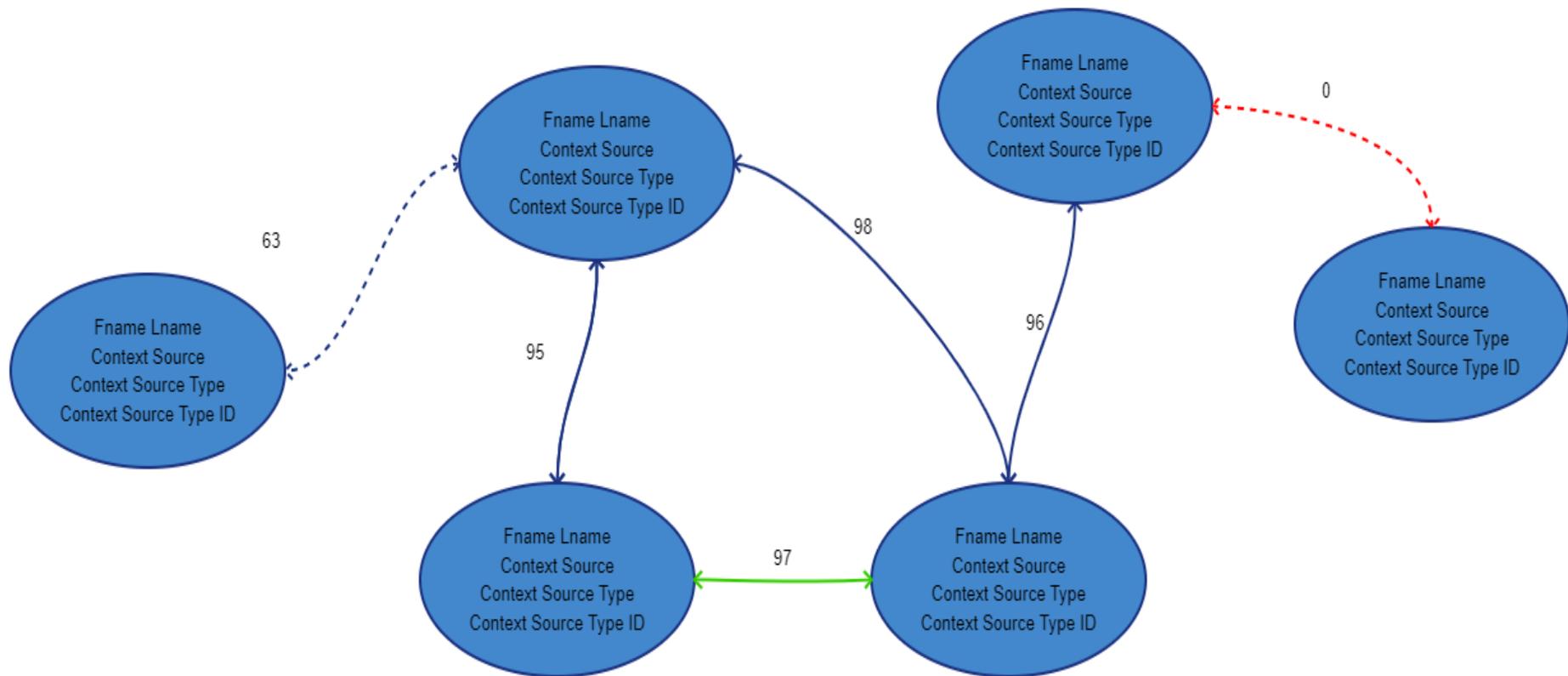


# LOINC Mapping

- **Lab data** is critical to population health
- Measures require codes, **LOINC**s 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



# How to Build a Measure



# Azara Measure Suite

LIBRARY
UDS 2023 CQMs
UDS 2024 CQMs
UDS Legacy 2022 CQMs
Alert Closure
Behavioral Health
Billing
Cancer Screening
CDC 1422 Grant
Childhood Immunizations
Controlled Substance
CVD Prevention and Control 1815
Data Health
Dental
Diabetes
Diabetes Prevention and Control (1815)
Encounters
Family Planning
Financial
GPRA - Cancer Group
GPRA - Diabetes Group
GPRA - Other
Healthy Hearts
HEDIS MY2023
Hepatitis C
HIV
Hypertension BP Control
Hypertension Monitoring
Hypertension Prescribing
Infectious Disease

Kidney Disease
Million Hearts
MIPS
MU Asthma CQMs
MU Core CQMs
MU Dental CQMs
MU General Practice CQMs
MU Heart CQMs
MU HIV CQMs
MU Immunization CQMs
MU Legacy (2011-2013) Core CQMs
MU Objectives
Operational
Order Management
Panel Management
Patient Outreach
Payer Integration
PCHH
PHASE Measures
Plan Calculated HEDIS Measures
Prenatal/Postpartum
Preventative
Preventive / Well-Care
Referrals
Risk Adjustment Factors (RAF)
Risk Stratification
Ryan White Measures
SDOH
Substance Use
Transition of Care
Universal Scorecard
Usage

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”

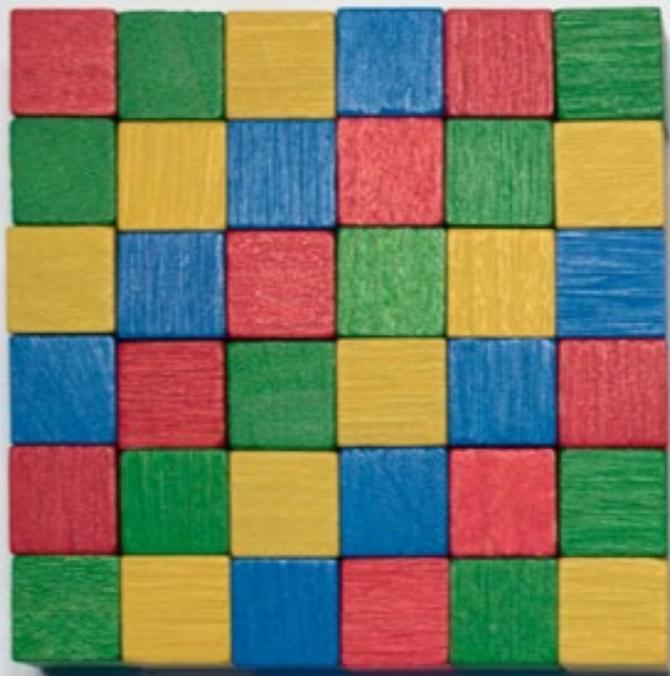
Calculating all measures individually would be impossible (we tried)

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



# Let's Build a Measure!

## A1c Control



### Diabetes A1c > 9 or Untested (CMS 122v12)

Endorser: None

Steward: NCQA

Percentage of patients 18-75 years of age with diabetes who had hemoglobin A1c > 9.0% during the measurement period

#### Numerator:

Patients whose most recent HbA1c level (performed during the measurement period) is >9.0% or is missing, or was not performed during the measurement period

- Most recent HbA1c laboratory result in the last 12 months is either
  - Numeric result > 9
  - OR
  - Result is missing or a non-numeric value
- OR
- No record exists of HbA1c laboratory result in the last 12 months

#### Denominator:

Patients 18-75 years of age by the end of the measurement period, with diabetes with a visit during the measurement period.

- Age  $\geq 18$  and  $< 76$  at the end of the measurement period
- Active diagnosis of Diabetes during the measurement period
- Measure qualifying visit in the last 12 months (see value set tab and technical specifications for qualifying visit codes)

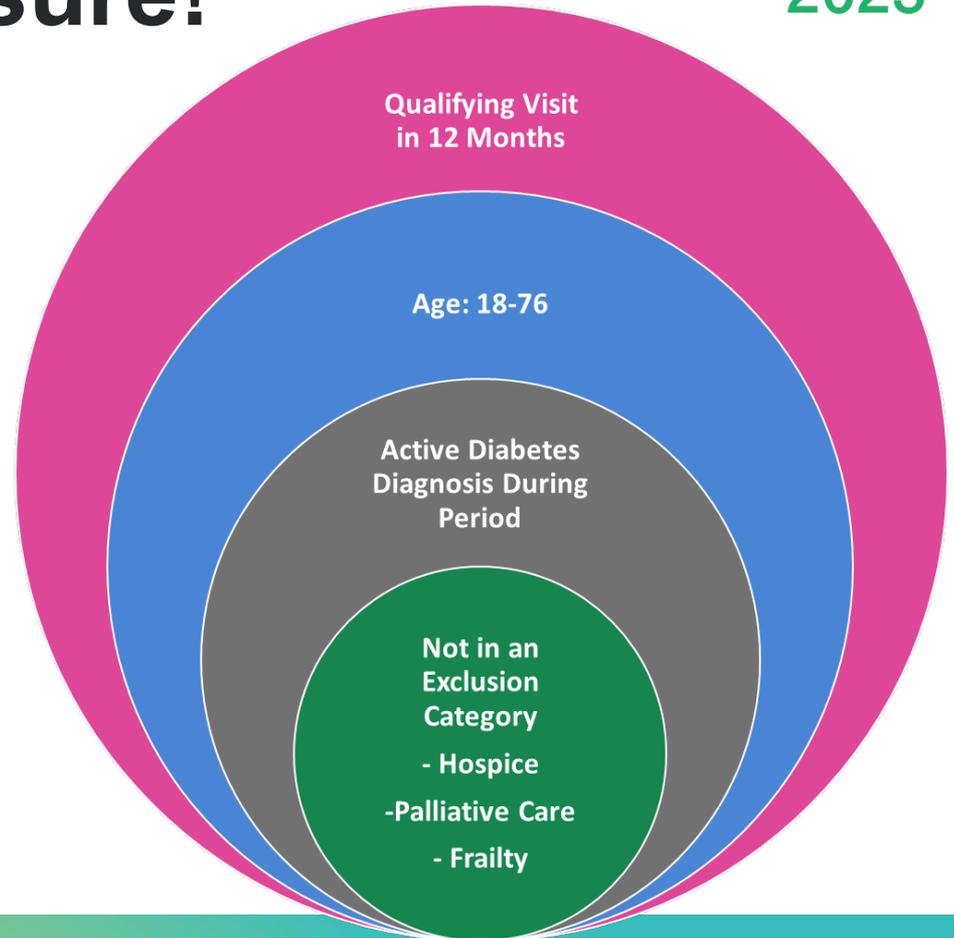
#### Exclusions:

- Hospice Care at any point in the measurement period
- Palliative Care at any point in the measurement period
- Age  $\geq 66$  by the end of the measurement period AND
  - Are living long term in a nursing home any time on or before the end of the measurement period.
  - OR
  - Evidence of frailty overlapping the measurement period, AND the following in the two years before the end of the measurement period:
    - $>1$  outpatient visit with different dates of service with a diagnosis of Advanced Illness
    - OR
    - $\geq 1$  inpatient visit with a diagnosis of Advanced Illness
    - OR
    - Active medication for dementia

# Let's Build a Measure!

A1c Control

Denominator



# Let's Build a Measure!

A1c Control

Numerator

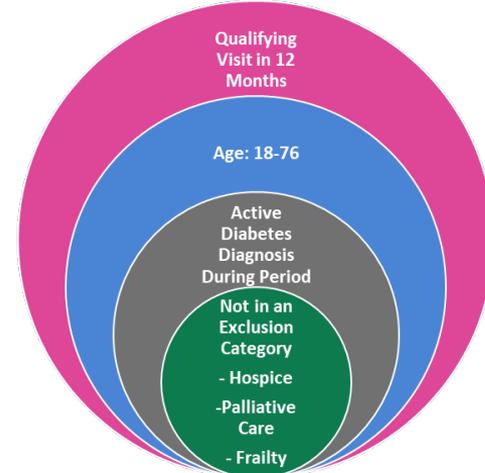
Most Recent A1c in the Past 12  
Months Does Not Exist

Most Recent A1c in the Past 12  
Months Result > 9%

# Let's Build a Measure!

A1c Control

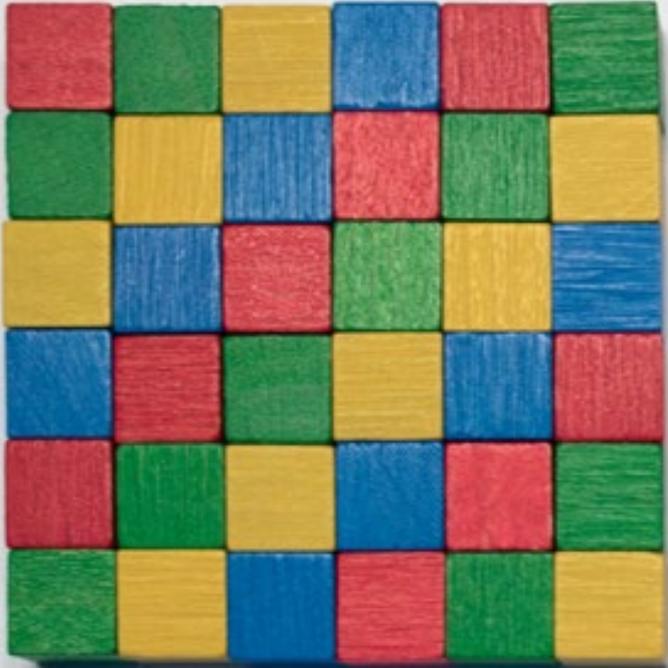
Result



# Not Just Building Blocks

Observations are useful, 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



Search

All Centers

UDS 2024 CQMs [FULL REPORT >](#)

TY March 2024

MEASURE	RESULT
BMI Screening and Follow-Up 18+ Years (CMS 69v12)	90.7%
Breast Cancer Screening Ages 50-74 (CMS 125v12)	74.1%
Cervical Cancer Screening (CMS 124v12)	24.5%
Childhood Immunization Status (CMS 117v12)	0.0%
Colorectal Cancer Screening (CMS 130v12)	68.6%
Depression Remission at Twelve Months (CMS 159v12)	2.2%
Diabetes A1c > 9 or Untested (CMS 122v12)	62.4%
HIV Screening (CMS 349v6)	0.0%
Hypertension Controlling High Blood Pressure (CMS165v12)	82.5%
Screening for Depression and Follow-Up Plan (CMS 2v13)	86.0%

Network Overview

TY March 2024

3,123 PATIENTS

7,188 VISITS

DM A1c > 9 or Untested (CMS122v11)

TY March 2024

62%

Events & Announcements

**ANNOUNCEMENT** NEW

**2024 CQM Version Migration**  
2024 CQM Version Migration Automatic migration of measures from 2023 ...

APR 23

**ANNOUNCEMENT**

**UDS 2024 CQM Release**  
UDS 2024 CQM Measure Release Now available in DRVS! Azara is proud to ...

APR 17

**EVENT**

**May Webinars**  
Please join us for our May webinars: Preparing for UDS 2024: CQMs, Table ...

APR 15

**ANNOUNCEMENT**

**Testing Email Hyperlink**  
Contact support.

# Finally, DRVS!

- Custom built front end
- ~14,000 Monthly Active Users

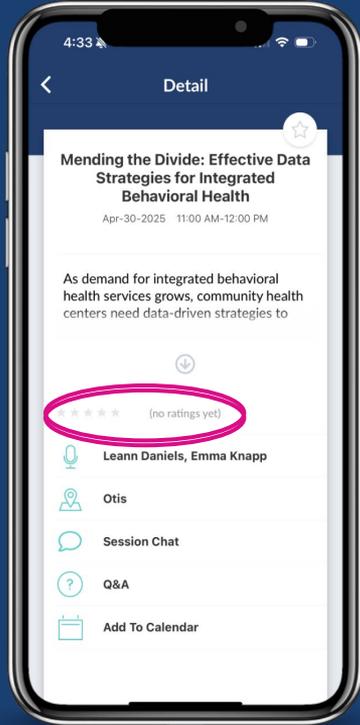
# Questions?



# We want to hear from you!

Click on the session from your agenda in the conference app.

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

# Achieve, Celebrate, Engage!



## ACE'd it? Share your DRVS success story and become an Azara ACE!

Show your organization has used DRVS to **A**chieve measurable results, **C**elebrate improvement in patient health outcomes, and effectively **E**ngage care teams and/or patients. Stories should showcase how DRVS helped your organization overcome a challenge, the tools and solutions used to drive improvement and details of the successes that resulted from your initiatives. ACEs should be able to provide examples that quantify quality improvement, cost savings, operational efficiency or patient health improvement.

### Benefits:

- Azara will help tell your story and provide a client-branded version for your use
- Potential to create a 2-4 minute video or hour-long Azara-hosted webinar
- Potential to be featured at next year's Azara User Conference
- Win Azara swag!

Submit your success story by completing the form [at this link](#).

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**ACE Program**



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# Thanks for attending!

