# Data Exchange Framework

## Technical Advisory Subcommittee (TASC) Meeting #2A

Members are strongly encouraged to **enable their video** to foster increased interaction and discussion.

**Tuesday, March 23, 2024**

1:30 PM – 3:00 PM PT

CalHHS

CENTER FOR DATA INSIGHTS AND INNOVATION

# The Vision for Data Exchange in California

The Data Exchange Framework (DxF) creates new connections and efficiencies between health and social services providers, improving whole-person care.

The DxF is California's first-ever statewide Data Sharing Agreement (DSA) that requires the secure and appropriate exchange of health and human services information to enable providers to work together and improve an individual's health and wellbeing.

**DATA EXCHANGE FRAMEWORK**

# Agenda

**1:30 PM**
**Welcome**

**1:35 PM**
**Methods and Lessons Learned for Implementation of ADT Event Services**

Invited presenters will cover:

- Event Notification Services in Massachusetts (presented by Mass General Brigham);

- Patient Centered Data Home (PCDH), an initiative of Civitas Networks for Health members for alerting providers of care events;

- Bamboo Health event notification services;

- An implementation guide for event notifications developed by DirectTrust; and

- Learnings from the ADT notifications use case from the DxF Sandbox.

**2:50 PM**
**Public Comment**

**2:55 PM**
**Next Steps and Closing Remarks**

DATA EXCHANGE FRAMEWORK

# Public Comment Opportunities

Public comment will be taken during the meeting at the approximate time listed on the agenda and limited to the total amount of time allocated for public comment.

Members of the public may also use the Zoom's Q&A feature to ask questions or make comments during the meeting, or can email their questions or comments to DxF@chhs.ca.gov.

**DATA EXCHANGE FRAMEWORK**

# TASC Members

| Name | Organization |
| --- | --- |
| Rim Cothren (Chair) | Center for Data Insights and Innovation |
| Cindy Bero | Manatt Health Strategies |
| Hans Buitendijk | Oracle (EHRA) |
| Cassie-Ann Bush | Adventist Health |
| Sarah DeSilvey | Gravity Project |
| Mohit Ghose | Anthem Blue Cross |
| Prashant Gupta | LabCorp |
| John Helvey | SacValley Medshare |

| Name | Organization |
| --- | --- |
| Kimberly Krause | Providence Administrative Consulting Services |
| Michael Marchant | UC Davis |
| Chris Muir | Office of the National Coordinator for Health IT |
| Ken Riomales | CalMHSA |
| Jess Sanford | California Department of Public Health |
| Hanan Scrapper | People Assisting the Homeless (PATH) |
| Gregg Smith-McCurdy | Hill Physicians Medical Group |
| Joe Sullivan | California EMS Authority |
| Brian Thomas | Alameda County |

**DATA EXCHANGE FRAMEWORK**

# Methods and Lessons Learned for Implementation of ADT Event Services

**Mass General Brigham**

# Event Notification Overview

Presented to:  CalHHS DxF TASC Meeting

April 23, 2024

# Introductions

**Deborah Adair**

Executive Director, Enterprise Health Information Management

Massachusetts Health Information Technology Council, member

**Matt Butler**

Program Director, Population Health

**Daniel Joyce**

Manager, Digital/Information Systems

# Agenda

1. Introductions/Background

2. Overview of ADT Services / Description of Technical Standards and Methods

3. Compliance with State and Federal Requirements

4. ACO and Roster Management

5. Lessons Learned and Challenges

6. Q&A

# Medicaid ACO Event Notification Interface

1.  ENS Vendor matches an event at external hospital to a patient on our MGB Medicaid ACO roster

2.  ENS Vendor sends a Direct message to MGB using HIE/HISP connection

      - Payload is an HL7v2 ADT message with information about the outside encounter

3.  MGB interface engine receives Direct message, uses APIs to construct and send a human-readable notification to Epic Care Team's In Basket

      - Care Team Roles that receive Event: Primary Care Physician, Nursing Staff, Case Managers

# CMS CoP Event Notifications at Mass General Brigham

- Mass General Brigham satisfies CMS Conditions of Participation (CoP) requirement by using Epic
  - Direct message sent outbound to external providers using our HIE/HISP connection
  - C-CDA with embedded Text document that contains Event Notification

- Mass General Brigham receives CoPs from variety of ENS vendors and HIEs
  - Format varies (Text, C-CDA, PDF, HL7v2, HTML, RTF); not all formats are compatible with Epic
  - Most documents cannot be identified as ENS-related: missing LOINC identifiers
  - Limited or missing discrete patient demographic information prevents many documents from matching
  - Documents that we can match appear in Epic In Basket in the same folder as other external HIE documents, such as Transition of Care C-CDAs and Referral/Discharge Summaries
    - Providers view internal ENS and ENS from other Epic organizations in a different folder. User experience not streamlined
  - Providers sometimes receive events for patients with whom they do not have a current treatment relationship
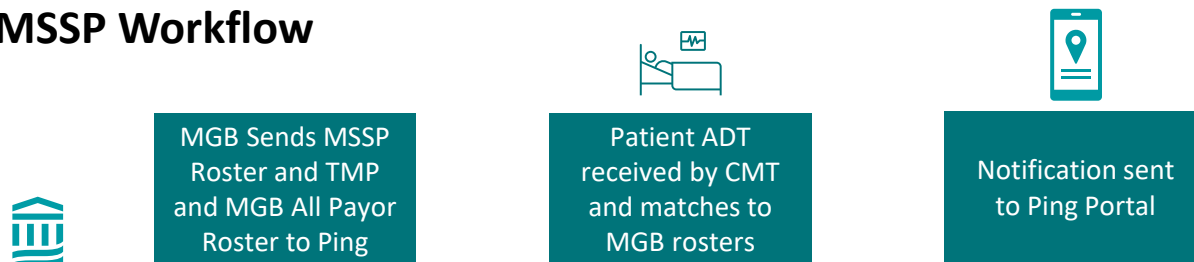
# MGB ENS Vendor Digital Workflow

- **CMT** and **Bamboo** are the only complete source for real-time ADT notifications & critical for the following priorities:
  - Readmissions Outreach (MSSP and MassHealth)
  - SNF Utilization Management
  - Quality

- **CMT**: Used by RSOs for MassHealth, and by MGBHP for all LOBs. CMT is integrated to send direct messages to our Epic InBasket for MassHealth patients, but the associated workflows vary greatly across sites and programs.

- **Bamboo**: Used by TCMs, Case Managers, and iCMP for MSSP, requires teams to go to the Bamboo Portal
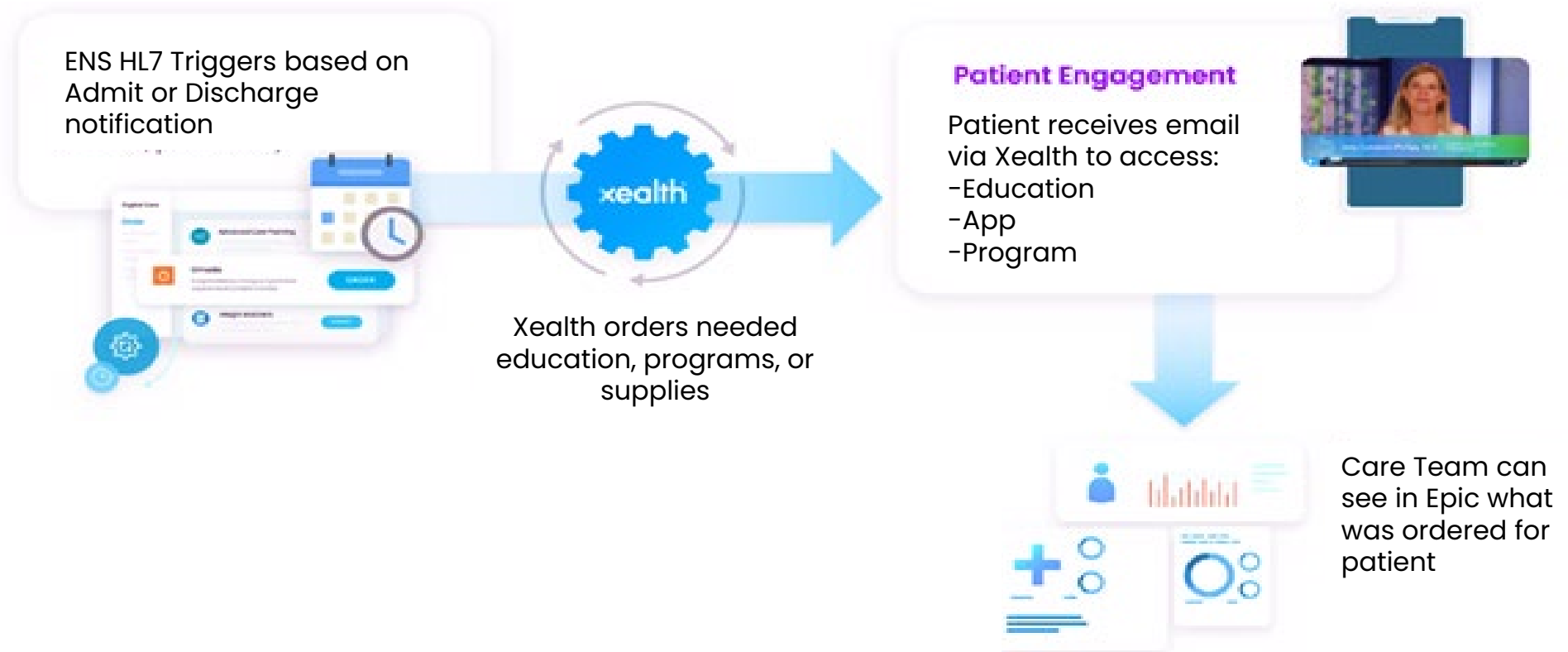
## MassHealth Workflow

| MGB Sends Medicaid ACO Roster to CMT | Patient ADT received by CMT and matches to MGB ACO roster | Notification sent to MGB via Mass Hiway and to CMT Portal | Mass Hiway message received by MGB and sent to care team | Member is assigned to a RSO/practice that is on Epic |
|---|---|---|---|---|

- Hospital is on Care Everywhere → ADT notifications will go to everyone on the care team, except the provider → Providers will not receive an ADT notification. Instead they will receive a Care Everywhere notification
- Hospital is not on Care Everywhere → ADT notifications will go to everyone on the care team

## MSSP Workflow

| MGB Sends MSSP Roster and TMP and MGB All Payor Roster to Ping | Patient ADT received by CMT and matches to MGB rosters | Notification sent to Ping Portal |
|---|---|---|

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# What's Next with MGB's ENS Strategy

- **We are exploring new ways to integrate data into workflows** to support real-time monitoring, analytics, alignment w/ HP:
  - Separate HL7 feeds to different endpoints to enable clinical and contractual rule driven workflows
  - Data ingestion to a MGB database
    - Will allow us to more easily share with key Data in our Azure Tenant, can connect to **MGB provisioned ChatGPT to triage and automate workflows**

ENS HL7 Triggers based on Admit or Discharge notification

Xealth orders needed education, programs, or supplies

**Patient Engagement**

Patient receives email via Xealth to access:
-Education
-App
-Program

Care Team can see in Epic what was ordered for patient

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# Patient Centered Data Home™

Keith Kelley, MBA

David Kendrick, MD, MPH

For the PCDH Governance Council

**| CIVITAS**

Networks for Health
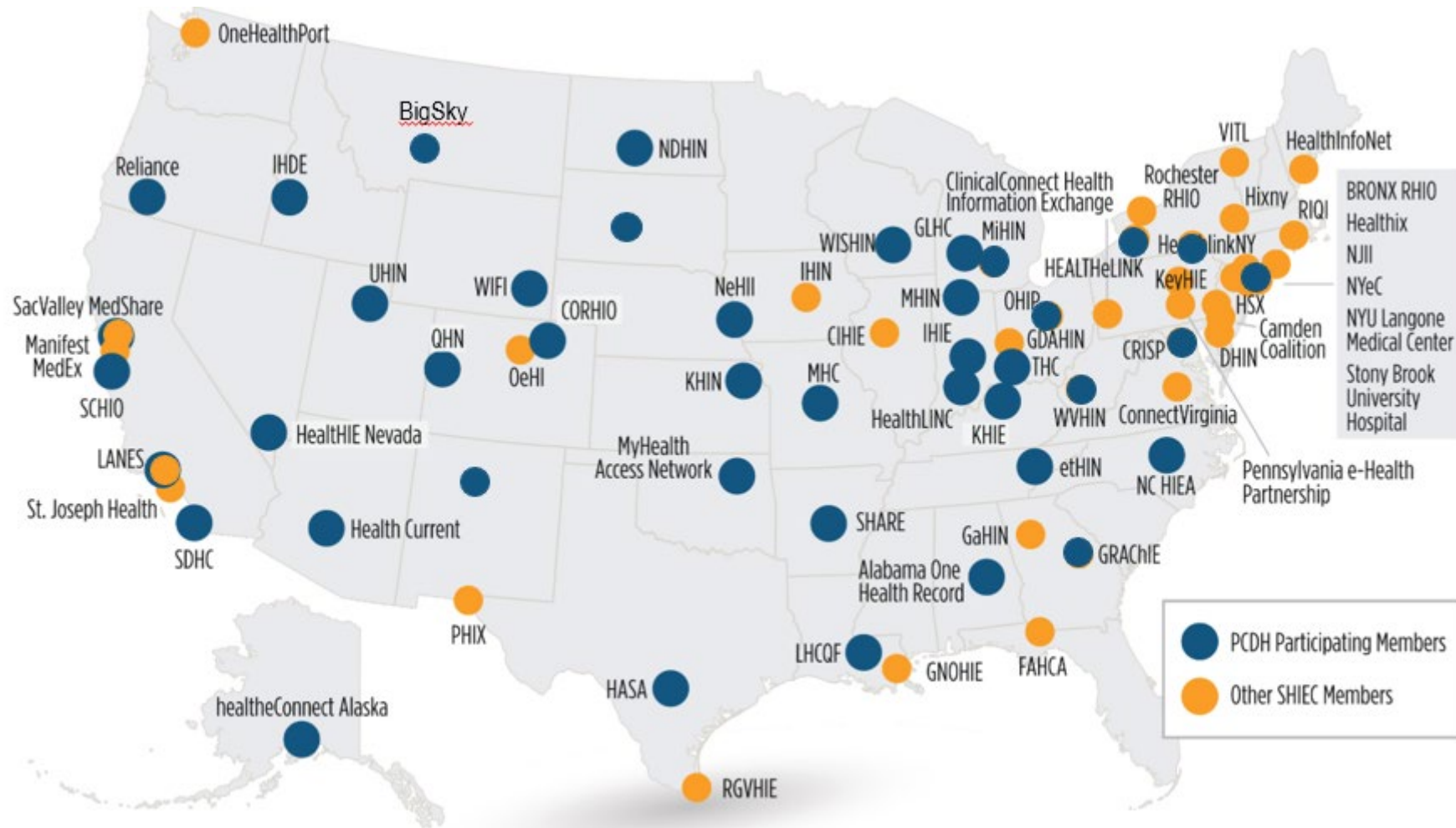
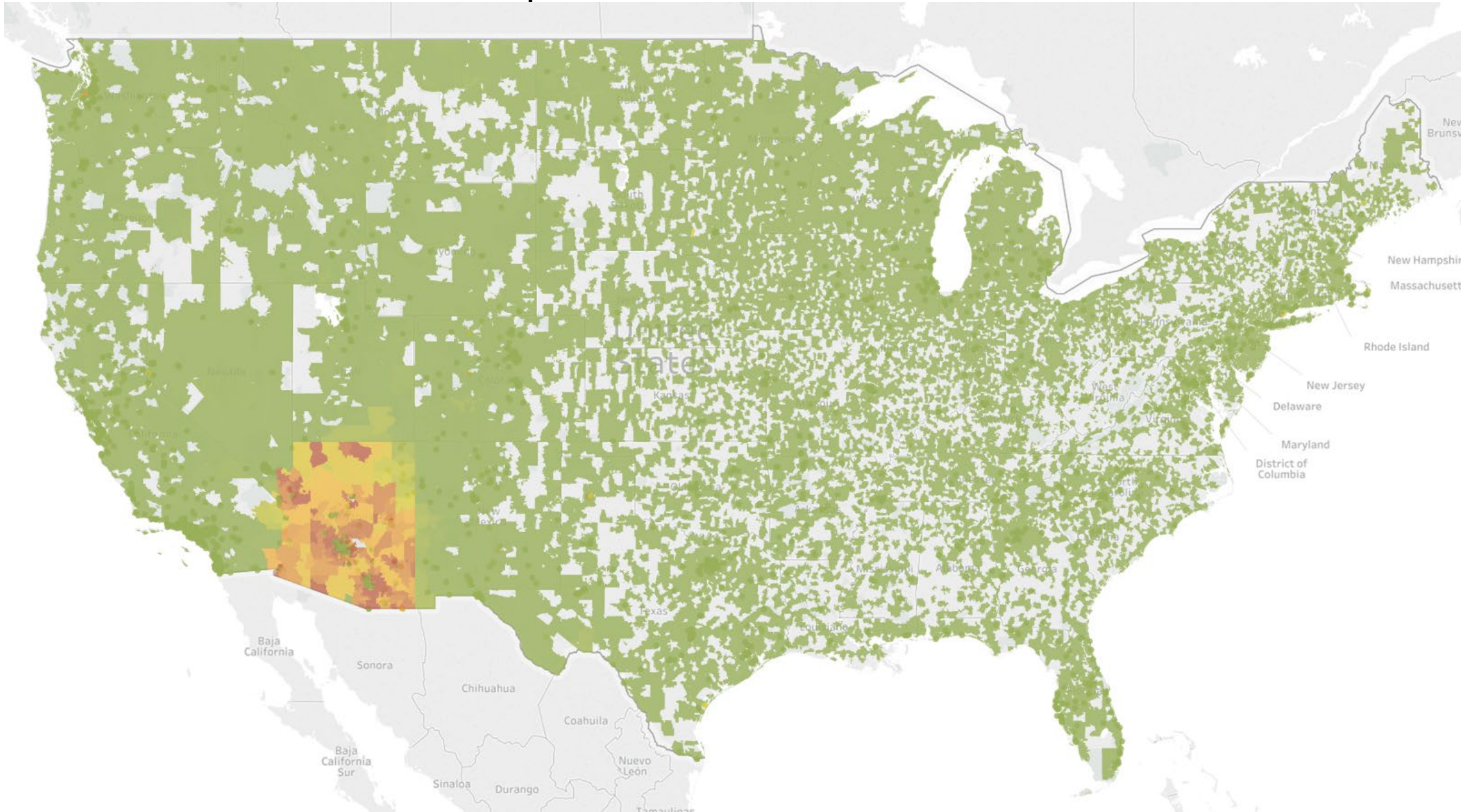# How does this model scale nationwide?
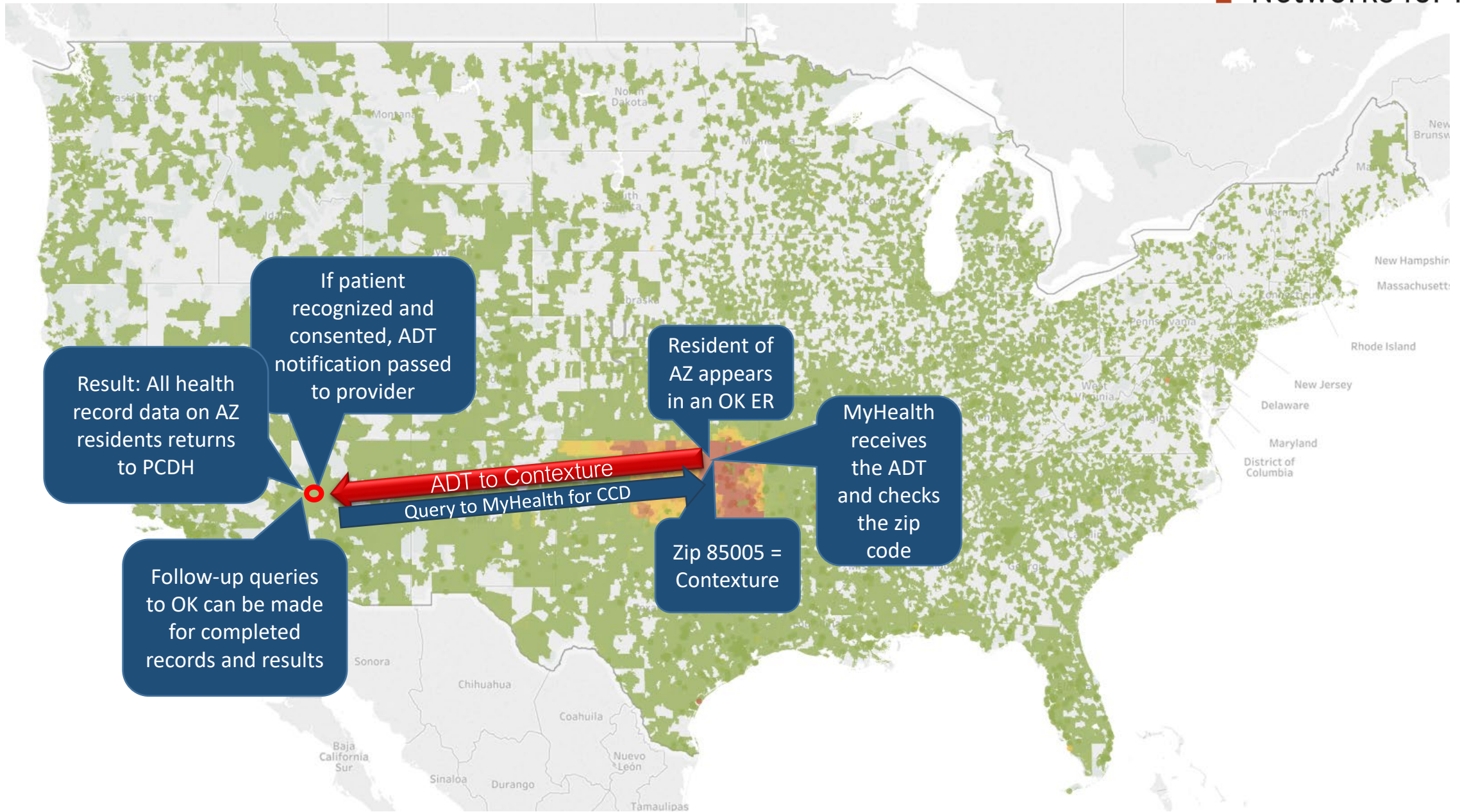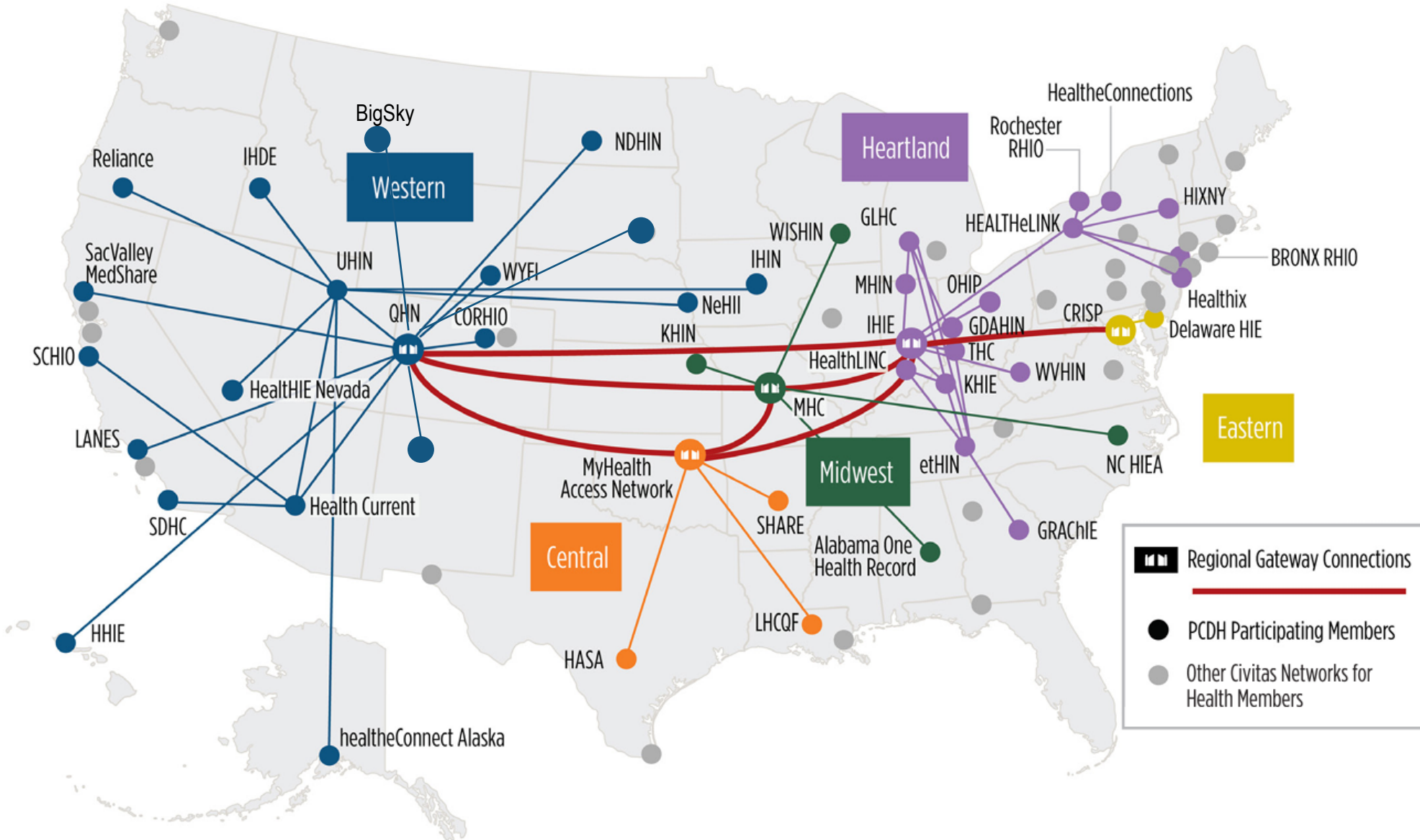
# Member Population: Contexture

# Patient Centered Data Home™

# Patient Centered Data Home™ rapid growth

# Unique Benefits of PCDH

- Real time pushed data exchange for no cost
- Built on existing Trust Relationships among HIE/HDU's
  - PCDH Governing Counsel
- Defers to local/state privacy laws and rules
  - Behavioral health data
  - Minors
- Addresses Identity Resolution prospectively
  - Identity resolved initially using robust eMPI
  - Resolved identity exchanged, enabling highest quality match between sender and receiver
  - Supports all future query-based transactions
- Enables most efficient, targeted federated queries by providing identity, location, and timing:
  - Who?
  - Where?
  - When?

*Ensures that All Records are re-patriated to the reported patient's home-*

*"Patient Centered Data Home"*

# Bamboo Health

## Bamboo Health:
## ENS & Care Collaboration

April 23, 2024

# Agenda & Presenters

**Today's Agenda**

- Introduction to Bamboo Health (fka PatientPing)
- ADT Services & Experience: Building the Network
- Technical Standards & Methods: How Does It Work?
- Lessons Learned
- Q&A

**Vatsala Kapur**

VP of External Affairs

**David Berkowicz**

Head of Product R&D

*(Co-Founder & CTO, PatientPing)*

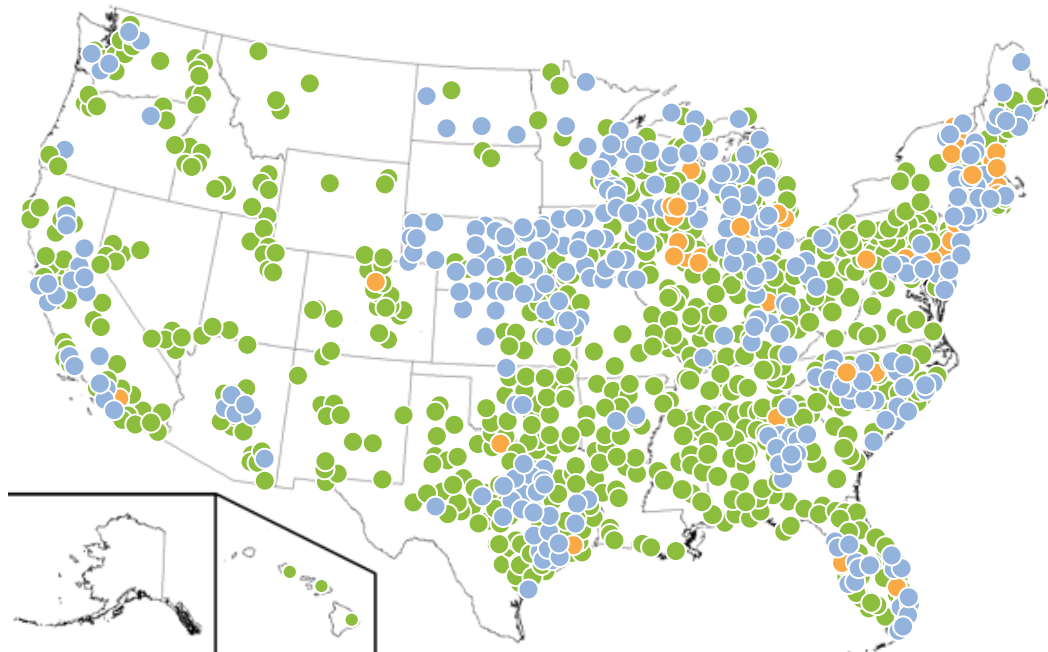**Cindy Lin**

VP of Customer Success

# The nation's leading care collaboration platform

Giving healthcare providers the right information – at the moments that matter – to improve outcomes and reduce costs, and with better experiences for patients, providers, and administrators.

## The Bamboo Health Network Today



**1,800+** HOSPITALS

**8,000+** POST-ACUTE FACILITIES

**300+** PROVIDER ORGS & PAYERS

## Bamboo Health's Pings Product Suite

### Pings
Real-time notifications when patients receive care, smart flags and longitudinal care history

### Rising Risk
Proactively identify your rising risk cohort & streamline follow-ups

### Discharge Summaries
Access patient's discharge summary from hospital & post-acute events in Pings workflow

### Stories
Patient clinical context delivered to the point of care

### Spotlights
Performance-based analytics to drive meaningful improvements in care coordination

# Building the Network

## Multiple Models to Support Multiple Use Cases

### ADT Connections

**Direct Connections**
Bamboo integrates directly with acute and post-acute EHRs to receive full unfiltered ADT feeds.

**HIE Partnerships & Other Convenors**
Bamboo receives ADT feeds from an HIE or convenor. HIE or convenor is responsible for building and maintaining direct connections with participating facilities.

### Roster Management

**Static Roster**
Bamboo receives roster (attribution) files from customers on a specified cadence. Roster files contain all patients that customers plan to manage within the Pings platform, e.g., ACO patients

**Smart Roster**
Bamboo dynamically attributes customers' patients to a roster based on defined patient or event criteria available within the ADT feed, e.g., BPCI-A

# How Does It Work?

## Platform Powered By HL7 ADT Data & Member Rosters

Admission  Discharge  Transfer

**Real-time HL7 ADT Data**

(Acute & PAC EHR Integration)

**Patient Rosters**

(Patient & Provider Attribution via Attribution List or PAC EHR integration)

Bamboo Health Processing Engine:

- Validation
- Mapping
- Standardization
- Matching (people/patients)
- Encounter management

**Pings**
(Real-time Notifications)

**Stories**
(Patient context at the POC)

**Rising Risk**
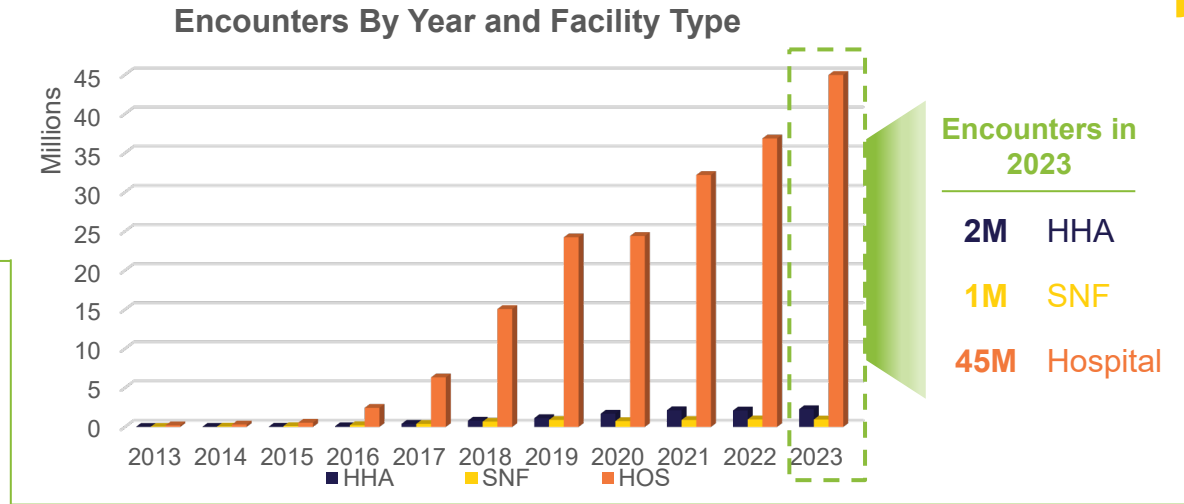(Identification & Workflow solution)

**Spotlights**
(Reporting & Actionable Insights)

*Patient Matching Algorithm Challenge, Office of the National Coordinator for Health Information Technology, November 2017

# Numbers & Processes

| Total Messages/day | Total Patients | Total People |
|---|---|---|
| 13 M | 113 M | 76 M |

**A. Roster ingestion:**
- Periodic at customer determined frequency
- Standard format across all providers
- Must contain customer specific identifiers

**Encounters By Year and Facility Type**



**Encounters in 2023**

| 2M | HHA |
|---|---|
| 1M | SNF |
| 45M | Hospital |

Roster of patients → Validation → Matching → Persistence → TxDB

ADT → Ingestion steps → Matching
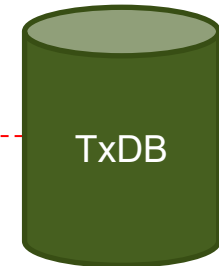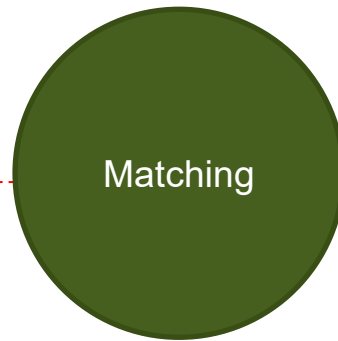
**B. ADT ingestion:**
- Real-time
- HL7 v2.xx
- Enough information to ensure accurate match

**Match Notes:**
1. Independent processes (A/B)
2. Quality of match depends on data quality from both sides
3. Accuracy proportional to number of demographic values
4. Match reassessed every message

# Lessons Learned

## Align on the "Why"

- Have a clear focus & purpose. Bamboo Health identified, validated, and then committing to solve one specific problem (PAC visibility) for providers. This level of focus allowed us to grow our network quickly because providers understood the real-world use case and therefore the need to share their data.
- Our data use agreements and data sharing requirements evolved as our customer and product use cases grew. Our first "Ping" included very limited data elements. We expanded what we included based on feedback from our customers, e.g., adding diagnosis data to support condition-specific workflows like diabetes care management.

## Technical & Operational

- Understand the constraints organizations are working under, resources might be scarce.
- Adhere to well established standards, the latest greatest might not be widespread.
- Establish a consistent onboarding schedule and stick to it, saying what you do and doing what you say builds confidence.

## Data Sharing

- While there is a strong policy framework that supports interoperability at the state and federal level, healthcare organizations tend to be reticent to share their data. Financial incentives tend to drive behavior more than mandates.
- Data quality remains a significant barrier to data sharing. The data must be usable.
- Bamboo's growth has been enabled by the reality that ADT data on its own is necessary but not sufficient. Organizations want actionable data.
- There are ongoing privacy concerns among some providers but can be allayed through adherence to HIPAA and strong security infrastructure.

# Notifications via the Direct Standard®

April 2024

# DirectTrust's Four Focus Areas

At DirectTrust, we're a non-profit, vender-neutral community dedicated to **establishing trust in a connected world** through four focus areas.

## Membership

Gathering health and cybersecurity constituents in community to develop policy and best practices, share knowledge, and advance industry efforts

## Standards

Developing conformity practices for disparate organizations to trust, communicate, and exchange with each other

## Accreditation

Verifying and certifying conformance with established policies and criteria governed by EHNAC (Electronic Healthcare Network Accreditation Commission)

## Trust Services

Supporting industry through HITRUST assessment, trust frameworks, promoting identity proofing/credentials, network facilitation, Directory services, certificate issuance

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# Stakeholder-Driven Efforts

## EHR Roundtable Participation

### A COLLABORATIVE OF THE TOP EHR VENDORS IN THE MARKET

Coming together with the **goals** to ensure that Direct technology is not only **widely deployed**, but also **implemented to its full capacity** to **optimize utilization** in order to **facilitate the best possible patient care**

- athenahealth
- brightree *by ResMed*
- Allscripts
- Cerner
- eClinicalWorks
- Epic
- Evident
- Greenway Health
- MatrixCare *by ResMed*
- MEDHOST
- MEDITECH
- nextgen healthcare
- WellSky

## Outcomes

### ADT NOTIFICATIONS VIA DIRECT

Vendors were asked if they were currently sending notifications via Direct and what the strengths, challenges, and opportunities are to use Direct to both meet the Conditions of Participation (CoPs) and improve care coordination

**STRENGTH**
Simple setup
Vendors connected to HISPs
Adoption is substantial
Exists in workflow

**THREAT**
Hospitals **must have process and solution(s) in place** by May 2021 to meet CoP

**WEAKNESS**
One vendor is sending, others may be receiving but **no consensus on payload** requirements
No requirements on receiver side but senders required to know how to locate receivers

**OPPORTUNITY**
**Directory** can be used to locate receivers, fields can be added to indicate subscription preferences

### FORMATION OF THE DIRECTTRUST NOTIFICATIONS CONSENSUS BODY

Deemed urgent by the vendors due to the timeline to meet the CoPs, a DirectTrust Standards Consensus Body was formed to **create an Implementation Guide** for **Notifications via Direct Secure Messaging**, with specific attention to **payload and context**

EHR Roundtable Outcomes Infographic: bit.ly/441KgCn

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# Event Notifications via Direct Consensus Body Members

40+ organizations and individuals contributed

# Development Timeline

**7/8/20**
- EHR Roundtable focusing on Notifications

**7/31/20**
- Consensus Body announced in ANSI Standards Action

**2/23/21**
- Draft Standard for Trial Use Publicly Released

**4/8/21**
- First Connectathon

**5/1/21**
- CMS Compliance Date

**5/13/22**
- Event Notifications via the Direct Standard ® v1 ANSI Approved

**1/4/24**
- Event Notifications via the Direct Standard ® v1.1 ANSI Approved

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**DirectTrust®**

ANSI/DS2020-03-101-2024 - Event Notifications via the Direct Standard®
Release Version 1.1 – US Realm
December 20, 2023

Sponsored by:
DS2020_03 Event Notifications via Direct Consensus Body

Approved by ANSI: January 04, 2024

**ANSI** — Approved American National Standard

**DirectTrust®**
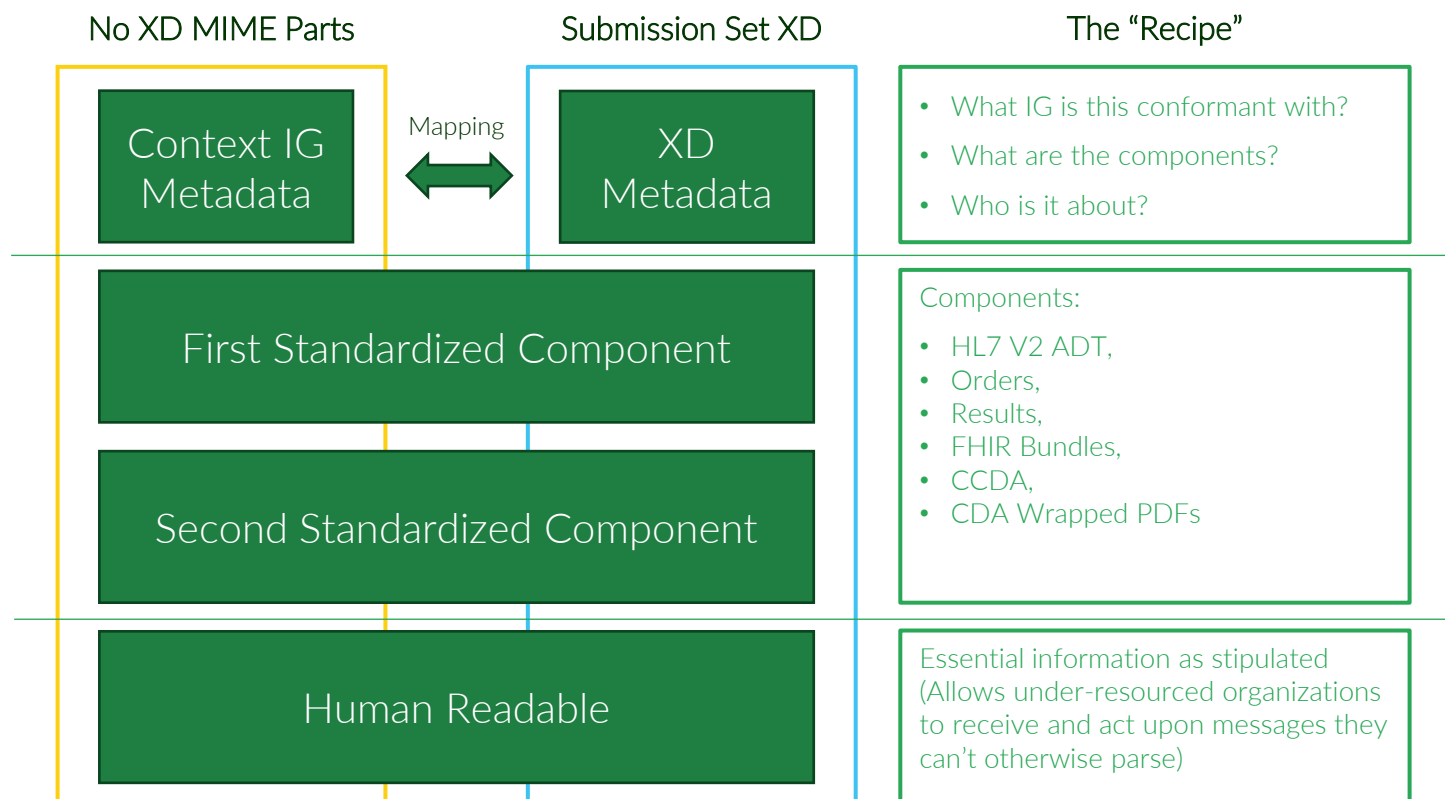
# The "Recipe"

Inspired by the Event Notifications work, a template for any new use case or payload which contains explicit specification of the following components

**No XD MIME Parts**

**Submission Set XD**

**The "Recipe"**

Context IG Metadata

Mapping ⬌

XD Metadata

- What IG is this conformant with?
- What are the components?
- Who is it about?

First Standardized Component

Second Standardized Component

Components:
- HL7 V2 ADT,
- Orders,
- Results,
- FHIR Bundles,
- CCDA,
- CDA Wrapped PDFs

Human Readable

Essential information as stipulated (Allows under-resourced organizations to receive and act upon messages they can't otherwise parse)
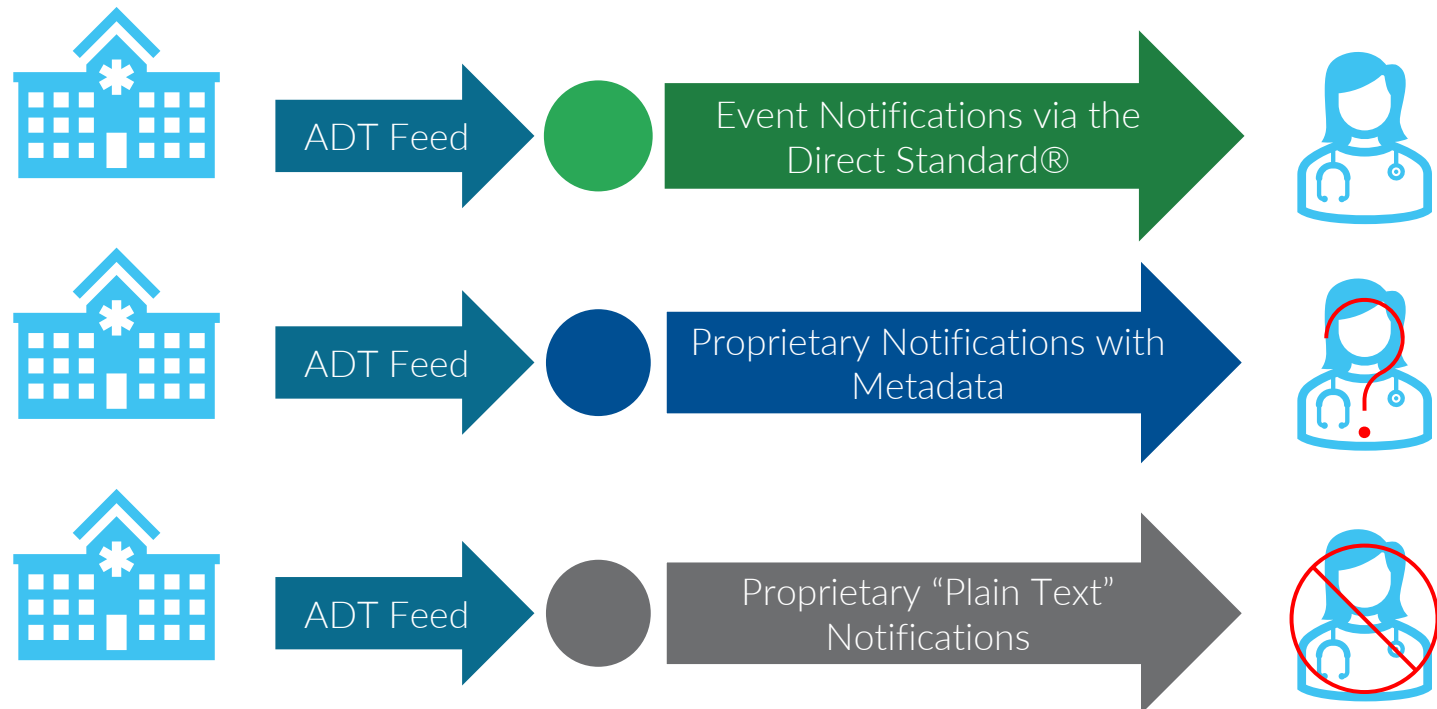
# Notifications – Great, Good, Bad and Ugly

Hospitals have the obligation to send notifications

- **Great:** Compliant messages sent by the hospital
- **Good:** Intermediary formats compliant messages
- **Bad:** messages make it through, but no ability to route
- **Ugly:** Most messages don't reach their destination

Hospital sends compliant messages

Event Notifications via the Direct Standard®
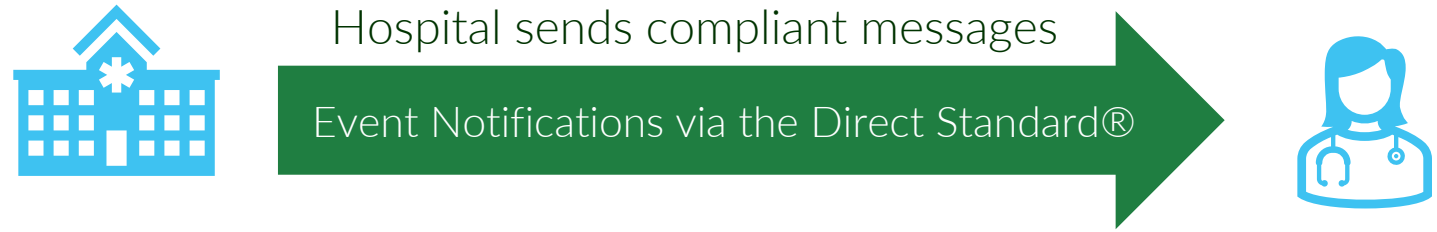
Hospital sends to an intermediary,
Receivers can route to appropriate individual and workflow

ADT Feed → Event Notifications via the Direct Standard®

ADT Feed → Proprietary Notifications with Metadata

ADT Feed → Proprietary "Plain Text" Notifications

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## Texas Health Services Authority

### Ensuring Success Requires Perseverance!

Clinicians are burdened receiving messages that should be routed to other team members. Care is delayed from needless hand-offs.

- Validate with the organization that is sending Event Notifications for you that they are following the DirectTrust Standard

- Work with EHR vendor to route incoming messages to appropriate personnel, many EHR vendors are capable of routing incoming messages when they contain Context

- Help your clinicians by adhering to DirectTrust Event Notification standard

Success = *80,000* Notifications a month to *7212* PCPs And continuous growth over the last 12 months!



**THSA's Nine Recommendations for a Better Direct Secure Messaging Experience**

**01 Include NPI in Directory Entries**
Confirm your Health Information Service Provider (HISP) has National Provider IDs (NPIs) for your organization and providers.

**02 List Direct Address on Fax Cover Sheet**
Update the language on your Fax Cover sheet to indicate you'd prefer communication via Direct and your Direct address(es).

**03 Use Message Routing**
Avoid unintended consequences by routing the messages to the appropriate team member to manage through workflow Direct addresses, or other use of technology.

**04 Encourage Referral Partners to Adopt Direct**
Reach out to your common referral partners and encourage them to use Direct Secure Messaging for your communication.

**05 Include your Direct Address on All External Communication**
Anywhere that you list your office phone or fax number, include your Direct address.

**06 Verify NPI Compliance in Your Database**
Check if your organization's physician database has a NPI for all Primary Care Providers you refer to for ease of lookup for clinician matching.

**07 Use the ONC's Project US@ address format**
Ensure addresses are entered in a standardized format by using the Project US@ guidance.

**08 Routinely Synchronize your Provider Directory**
Develop a schedule for reconciling and updating your organization's Directory.

**09 Adopt Policy and be a Good Partner**
Establish Policy Guidelines for reviewing and updating your Directory data quality and routinely publish your provider directory; inform EHR/HISP technology partners of any changes.

DirectTrust®    THSA Texas Health Services Authority

To learn more, visit DirectTrust.org.

## Outcomes and Next Steps

- More information at bit.ly/ENviaDirect

*DirectTrust Annual Conference –*

*"The Future of Trust in Health"*

Short link:

http://bit.ly/DirectTrust2024



The Future of **TRUST** in Health

St. Louis MO | September 2024

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## Contact Information
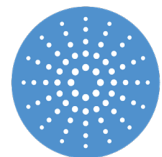
**Scott Stuewe**

*President and CEO*

Scott.Stuewe@DirectTrust.org

Phone: 913.222.0630

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# DxF Sandbox Update
## TASC Committee April 23, 2024

Connecting for Better Health

Advancing data sharing to improve the health of all Californians

# Agenda

| No. | Items | Time |
|-----|-------|------|
| **1** | Introduction / Background on the DxF Sandbox | 1 |
| **2** | Approach to Notifications | 3 |
| **3** | Technical Standards and methods explored | 5 |
| **4** | Lessons learned and challenges | 2 |
| **5** | Q&A | 4 |

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# Why Project Sandbox?

Create implementation guidelines for DxF rollout that correspond to high-priority use case

Prove out high priority use cases and show how the DxF accommodates social care integration and whole-person care

Demonstrate how partners and competitors are able to collaborate to keep the person at the center and share only the data needed

Illustrate how DxF meets state's vision for data exchange and allows for new entrants (eg. EMS, justice, and education)

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# Approach

The approach to preparing and implementing the DxF Sandbox focuses on **rapid cycle implementation of priority use cases associated with data exchange**. This allows for organizations to have access early in 2024 to test their needs and connectivity questions as they meet the DxF requirements and other data sharing efforts. With **comprehensive engagement of organizations that oversee data sharing related initiatives**, we will **incorporate real world needs and requirements to aid implementers in taking their learnings** from the Sandbox environment and quickly **address them in their production environments.**

## Co-Design Team
(see next slide for full list)

**BluePath** HEALTH

**emi** ADVISORS

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Advancing data sharing to improve the health of all Californians

Facilitate **weekly technical requirements gathering sessions** with early adopters and other identified stakeholders to:

**Identify priority use case and** went live with Minimum Viable Product (MVP) in **February, 2024**

**Co-design person story, personas, and use case(s)** to **support testing of priority data exchange use cases** among early adopters

**Identify and align on business, functional, and technical requirements** for sandbox environment.

## Stand-Up Community Design Studio
Ongoing human-centered design-thinking initiative to bring in CBOs and other providers to develop shared use cases

powered by **aws**

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# Approach to notifications

**Use Case Story:**

Estella lives alone and calls her neighbor when she falls and can't get up. Her neighbor takes her to the Emergency Department where she is admitted and receives appropriate assessments/ screening in the hospital (i.e., cognitive/functional status, social risk). The hospital discharges her home the same day and sends a referral to a home health agency (HHA) for home rehabilitation services.
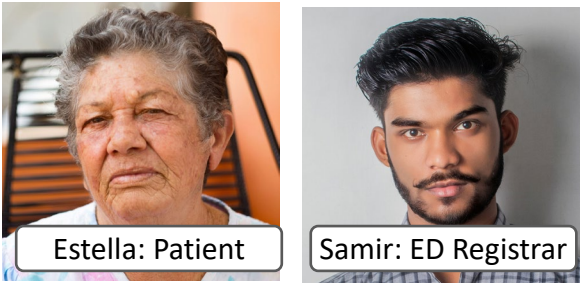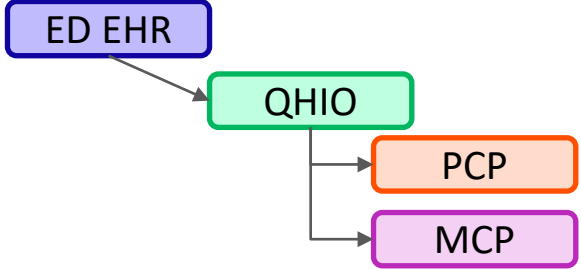
**Scenes:**

1. Emergency Department Notification sent to PCP and MCP via QHIO. ED Physician and ED Discharge Planner query QHIO for Estella's clinical documents
2. ED Discharge Planner refers Estella for Home Health and when Home Health completes their assessment, the information is returned to the ED EHR.
3. Primary Care Provider and Managed Care Provider receive notification of Estella's visit to the ED and query the QHIO for information about that visit.

**Pre-Conditions / Assumptions:**

- ED, QHIO, PCP, and MCP have agreement on what data elements to include in ADT notifications.
- ED has rosters or has CoP solution that defines which of Estella's providers should receive a notification.
- Communication Requesters can access and integrate patient data received from other systems.
- Order/Referral Placer system automatically assigns a unique ID to the service request.
- Order/Referral Filler can receive and process the order/request from the Order Placer.
- Information Recipients can process and use aggregated encounter data.
- Data Aggregator can receive and process patient data and share aggregated data with other systems

## Scene 1A: ED Event Notification

### Personas



Estella: Patient | Samir: ED Registrar

### Key Steps

1. ED sends event notification to QHIO
2. QHIO ingests ADT
3. QHIO notifies PCP
4. QHIO notifies MCP Administrator

### Systems

ED EHR → QHIO → PCP
                QHIO → MCP

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# AT A GLANCE: Data Set Considerations

| UC # | Transactions | DxF Data Exchange Pattern (OPP-9) | USCDI v2 Data Class (OPP-8) | Content/Structure Standard (OPP-8, OPP-9) | Transport Standard (OPP-8, OPP-9) |
|---|---|---|---|---|---|
| 1A | Unsolicited Communication (Sent ADT Data) | Notification of ADT Event | • Patient Demographics<br>• Care Team Member<br>• Encounter Location | HL7 Messaging Standard V.2.5.1 | HL7 Messaging Standard V.2.5.1 |
| 1B | Query for Data | Request for Information | • USCDI v2 data classes as selected by Requestor | IHE XCPD for Person Matching<br>IHE XCA to retrieve HSSI | IHE XCPD for Person Matching<br>IHE XCA to retrieve HSSI |
| 1C | Communication Request | Request for Information: Requesting Participants | • USCDI v2 data classes as selected by Requestor | IHE/XCPD, IHE/XCA | IHE/XCPD, IHE/XCA |
| 1D | Communication Response | Request for Information: Responding Participants | • USCDI v2 data classes as selected by Requestor | IHE/XCPD, IHE/XCA<br>HL7 C-CDA 2.1 IG OR<br>HL7 FHIR US Core IG 4 OR<br>HL7 FHIR Multiple Chronic Conditions eCare Plan | IHE/XCPD, IHE/XCA<br>HL7 C-CDA 2.1 IG OR<br>HL7 FHIR US Core IG 4 OR<br>HL7 FHIR Multiple Chronic Conditions eCare Plan |

Not specified in Policy OPP-8 or OPP-9

Working Draft here.

# DxF Sandbox:  Functional Architecture
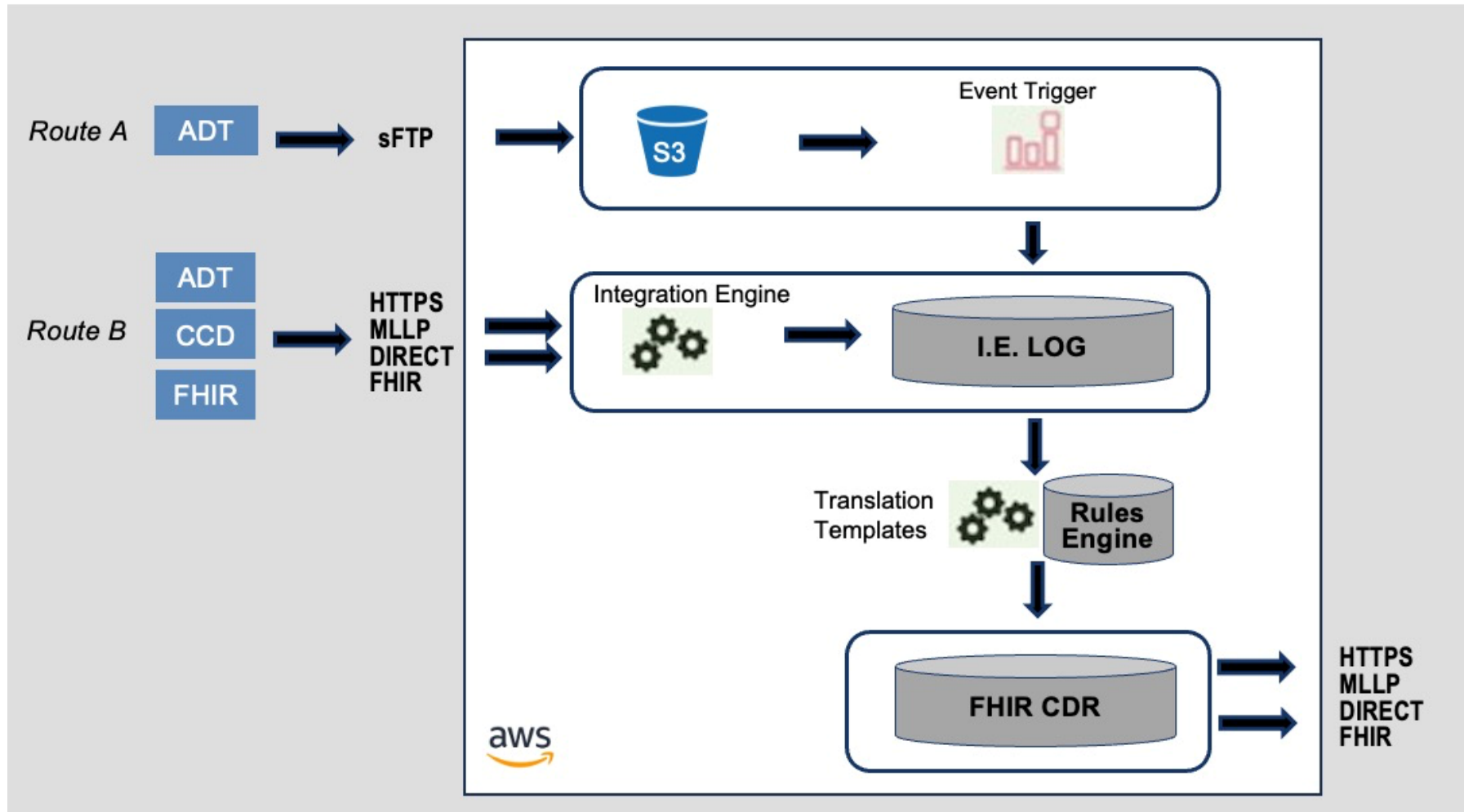
# ADT HL7-V2 Minimum Data Set (proposed)

The Patient Identification segment is used by all applications as the primary means of communicating patient identification information. This segment contains permanent patient identifying and demographic information that, for the most part, is not likely to change frequently.

The DxF provides three references that can be used to determine which fields within this segment should be included: Technical Requirements P&P (person matching), the Cal HHS Digitial identities paper and USCDI. The attempt here is to require sufficient data for person matching and not necessarily to satisfy the full set of the USCDI

| Segment | Person Matching per DxF Technical Requirements | CalHHS DxF Strategy for Digital identities | USCDI Demographics V2 | Proposed | Future | Comments: |
|---|---|---|---|---|---|---|
| PID.2 - Patient ID | | | | Y | | |
| PID.5 - Patient Name | Y | Y | Y | Y | | |
| PID.6 - Mother's Maiden Name | Y | Y | Y | Y | | |
| PID.7 - Date/Time of Birth | Y | Y | Y | Y | | |
| PID.8 - Administrative Sex (optional) | Y | Y | Y | Y | | |
| PID.9 - Patient Alias | Y | Y | Y | Y | | |
| PID.10 - Race (optional) | | | | Y | Y | CalAIM use case |
| PID.11 - Patient Address | Y | Y | Y | Y | | |
| PID.12 - County Code (optional) | Y | Y | Y | Y | | |
| PID.13 - Phone Number - Home | Y | Y | Y | Y | | |
| PID.14 - Phone Number - Business | Y | Y | Y | Y | | |
| PID.16 - Marital Status (optional) | | | | | Y | |
| PID.17 - Religion (optional) | | | | | Y | |
| PID.21 - Mother's Identifier (optional) | | | | | Y | |
| PID.22 - Ethnic Group (optional) | | | Y | | Y | |
| PID.26 - Citizenship (optional) | | | | | Y | CalAim use case |
| PID.27 - Veterans Military Status (optional) | | | | | Y | |
| PID.28 - Nationality (optional) | | | | | Y | |
| PID.29 - Patient Death Date and Time (if applicable) | | | | | | |
| PID.30 - Patient Death Indicator (if applicable) | | | | | Y | |
| PID.39 - Tribal Citizenship (optional) | | | | | Y | |
| Patient email | | Y | | | | |
| Language | | | Y | | | CalAIM use case |

As part of the co-design process, participants highlighted the need for additional data elements in V2 messages for various use cases.

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# Lessons Learned about Notifications

| Feedback / Learnings | | Adjustments / Actions |
|---|---|---|
| There is a need to identify a minimum set of ADT message types to exchange and align the segments to be included in DxF exchange. | → | Proposed a minimum set of ADT message types and required segments based on DxF. Requested feedback from co-design team to reach a common agreement on this interpretation of DxF requirements. |
| Patient's primary language and patient's email are not commonly shared in ADT PID but are often required by downstream recipients. | → | Crosswalk PID to USCDI v2 requirements and work with participants to identify ADT PID minimum data set. |
| Not all senders / recipients of notifications are able to send/receive HL7 V2 messages. | → | Sandbox can now handle notifications via sFTP and Direct Secure Email. |
| A DxF participant directory where entities can post patient rosters and endpoints may be useful. | → | This feedback is catalogued and will be explored with CDII and other co-design participants. |
| Customization is required to ingest each ADT format. | → | • Writing additional scripts in Mirth to transform ADT_A01 into a format that can be ingested in Smile.<br>• Validating a minimum requirements ADT exchange crosswalk for DxF Sandbox exchange. |

# Contact Information

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# Public Comment

# Next Steps and Closing Remarks

# Next Steps

Members to:

- Reflect on today's discussion
- Be prepared to discuss an ADT Notification Strategy at the next meeting.

# Upcoming Meetings

| TASC Meeting Series | Date |
|---|---|
| **Meeting #2B:** ADT Notification Strategy Framing the Issues | May 7, 2024, 2:00 PM – 3:00 PM |
| **Meeting #2C:** ADT Notification Strategy Developing a Straw Model | May 21, 2024, 2:00 PM – 3:00 PM |
| **Meeting #2D:** ADT Notification Strategy Final Recommendation | June 4, 2024, 2:00 PM – 3:00 PM |

**DATA EXCHANGE FRAMEWORK**

Note: Additional TASC meetings are being scheduled.
Meeting information will be posted to the CDII DxF webpage once confirmed.