

Physician-Focused Payment Model Technical Advisory Committee

Session 1: Improving Data Infrastructure to Empower Patients and Providers

Presenters:

Subject Matter Experts

- [Mark Scrimshire](#) – Chief Interoperability Officer, Onyx Health
- [Kristen Valdes](#) – Founder and Chief Executive Officer, b.well Connected Health
- [Hayes Abrams](#) – Executive Director, Enterprise Health Care Management, Health Care Service Corporation
- [Ami Parekh, MD, JD](#) – Chief Health Officer, Included Health

Physician-Focused Payment Model Technical Advisory Committee

Session 1: Improving Data Infrastructure to Empower Patients and Providers

Mark Scrimshire

Chief Interoperability Officer,
Onyx Health



Beyond the Clipboard

Empowering Patients Through FHIR-Driven
Interoperability

PTAC Public Meeting Sept 2025



Mark Scrimshire

Chief Interoperability & Security Officer

- Co-Chair Da Vinci Payer Data Exchange Workgroup
- Co-Chair HL7 Financial Management Workgroup
- Board Member, FHIR Business Alliance (FHIRball)



mark.scrimshire@onyxhealth.io

A bit about Onyx

The market leader for FHIR-Enabled Interoperability



40M+ Lives
on our Platform

History of Innovation



Built Centers for Medicare & Medicaid Services (CMS) Blue Button 2.0 API, the largest FHIR implementation in the world, supporting **60 million** Americans.



OnyxOS jointly built
with Microsoft

Guided by Deep Experience



Susheel Ladwa
Chief Executive Officer
AHIP IT Workgroup
Chair; former health
leadership at IBM, HP,
EDS



Mark Scrimshire
Chief Interoperability
Officer
CMS Blue Button
Innovator;
H17 Da Vinci Payer Data
Exchange Author



Balaji Narayanan
Chief Product
Officer
Trizetto and
Medecision



Tom DeGemmis
Chief Growth
Officer
Oracle, Cigna &
Aetna



Naveen Chaudhary
Chief Administration
Officer
CareFirst, Infosys, &
Versant Health

Advisory Board



Tony Trenkle
Former CIO,
CMS



Aneesh Chopra
First CTO of
USA



Judy Murphy
Former Chief Nursing
Officer, ONC & IBM



Grahame Grieve
Father of FHIR

Influencing Industry Standards

HL7



Creating Access to Real-time Information Now
through Consumer-Directed Exchange

FHIRBall
The FHIR Business Alliance

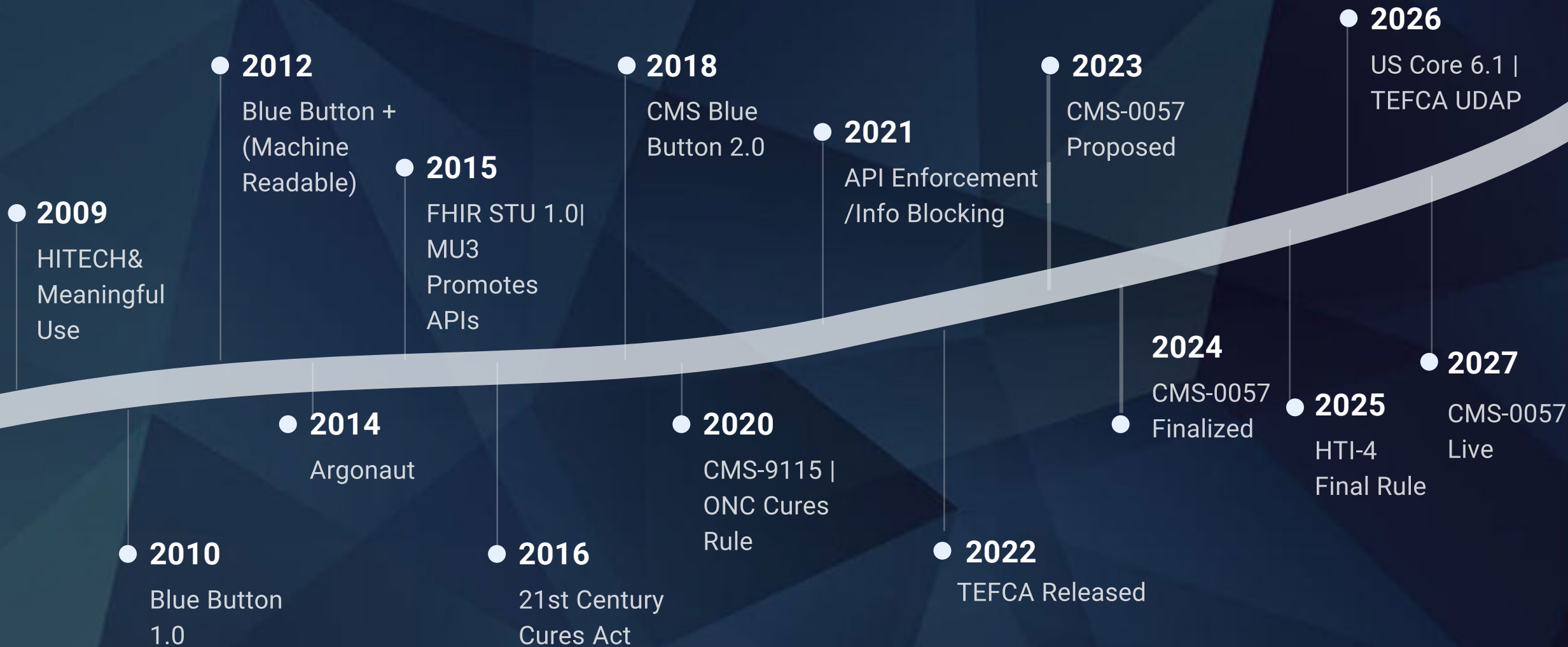
Billions Invested...

And we still have the waiting
room memory test.

Would you pass?



Breaking Down Barriers Since 2009



Breaking Down Barriers Since 2009



Image courtesy b.well

HL7 V2

CCD

US Core FHIR



Insights

Information

Data



- Patient Access
- Provider Access
- Payer-to-Payer

onyx

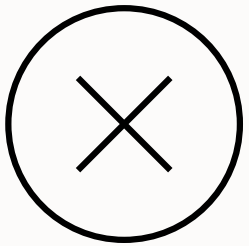
The Patient Experience Gap



...Can I access my data?

...Why do you make it so hard?

...Why won't my doctor trust my data?



We have the data,
we're just not putting it to use



27 portals is not the answer!

The data inversion is here. Who has the most data?



Our Phone is our Insurance Card & the Gateway to Interoperability



CMS.gov

CMS can incentivize the use of Digital over Physical cards.

The industry can do the rest.



Thank you

Mark Scrimshire, Onyx

Mark.Scrimshire@onyxhealth.io

Session 1: Improving Data Infrastructure to Empower Patients and Providers

Kristen Valdes

Founder and Chief Executive Officer,
b.well Connected Health



Secure, Seamless, and Modern: Patient Access in the Era of Digital Health





Kristen Valdes

CEO of b.well Connected Health

Healthcare Data & Interoperability
Industry Expert, and Board Member
of the CARIN Alliance

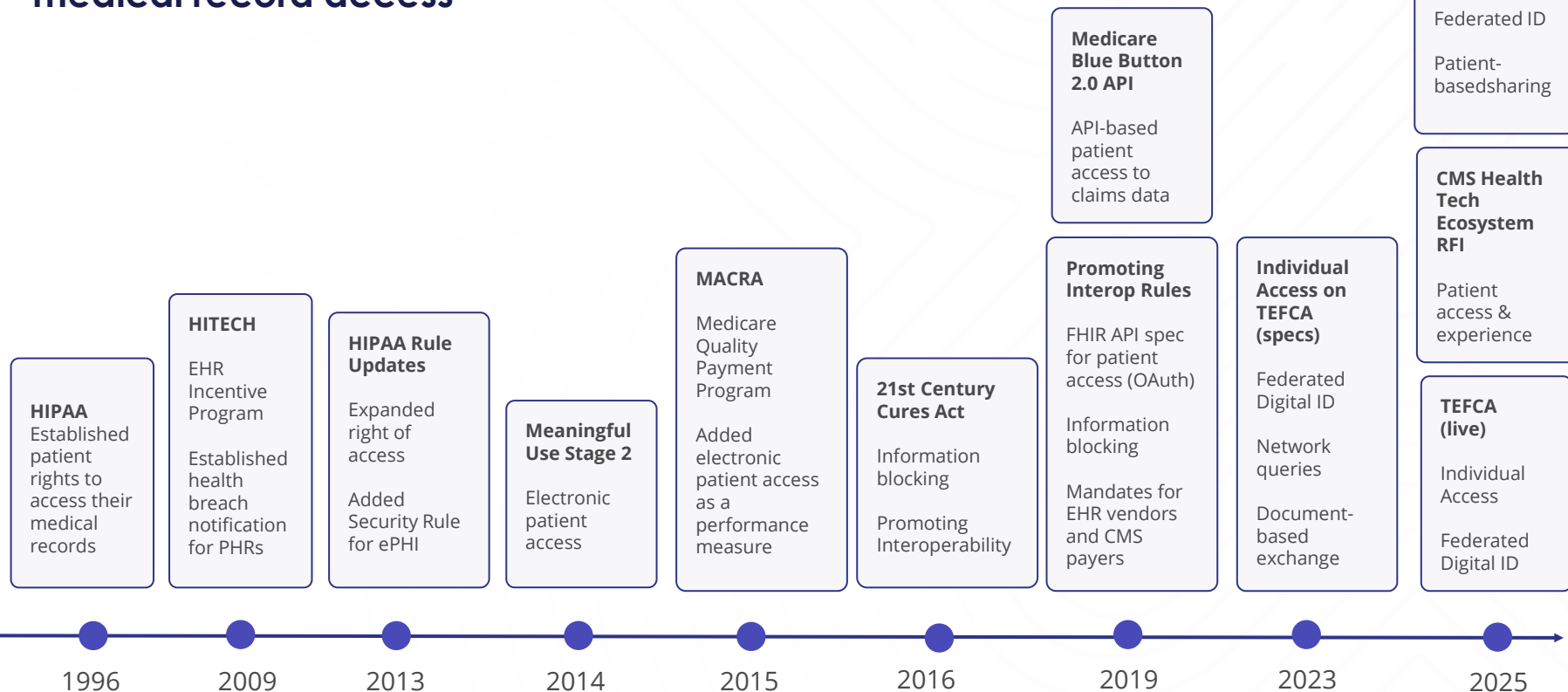
The healthcare **fragmentation crisis** that is blocking consumer access, trust, and outcomes.



VS



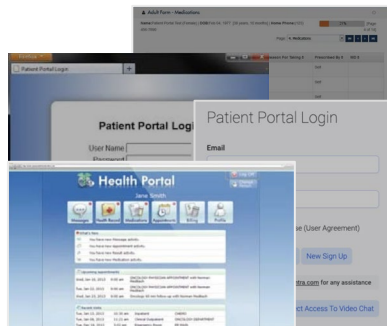
Regulatory history of patient medical record access



The evolution of patient access



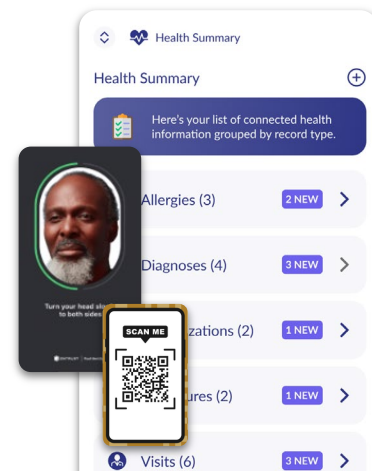
Fill out paper forms for
paper records



Electronic data access,
through many different
portals



Electronic data access
from different portals,
through patient's chosen
app

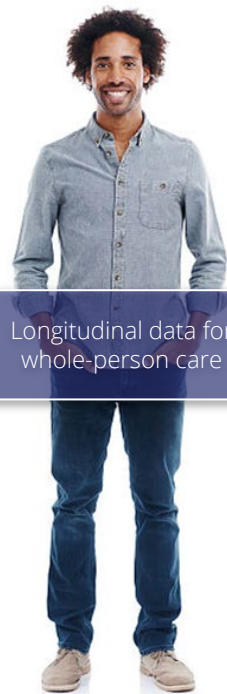
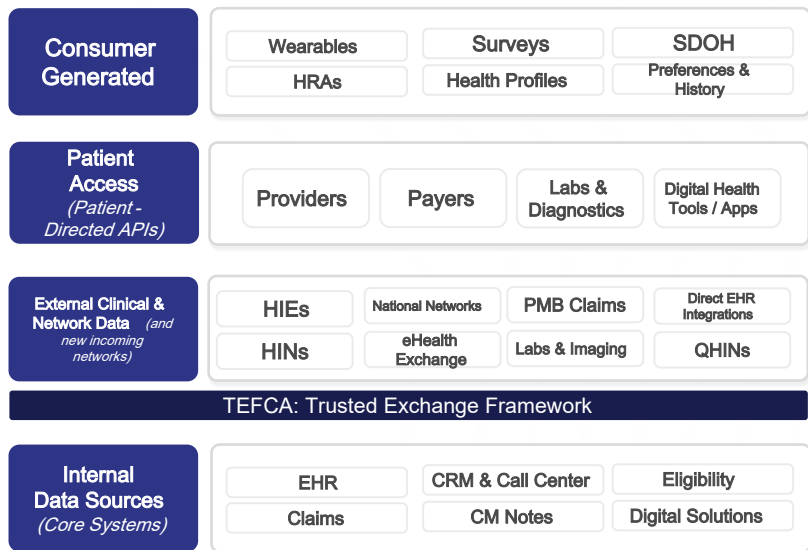


Locate and access records
from different portals,
through a single app, with
a federated identity,
open up consumer-
controlled portability

Then

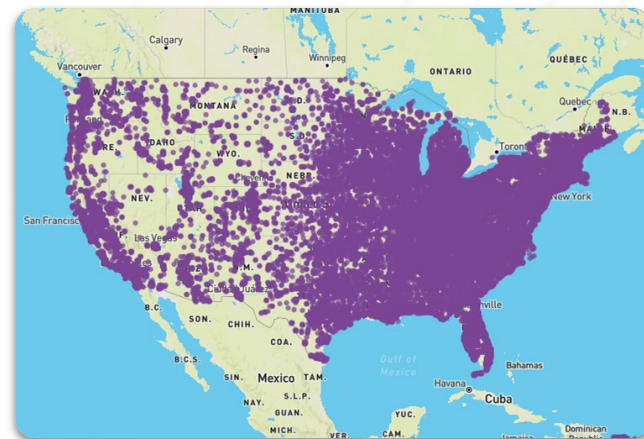
Now

Current state of healthcare data exchange



Longitudinal data for whole-person care

b.well Patient Access API Coverage
(2.1M providers & over 330 health plans)





Did you know?

More than **75% of patients who want to access their data**, abandon portals at the credential-checkpoint, losing access to critical insights, care coordination, and continuity.



Portalitis

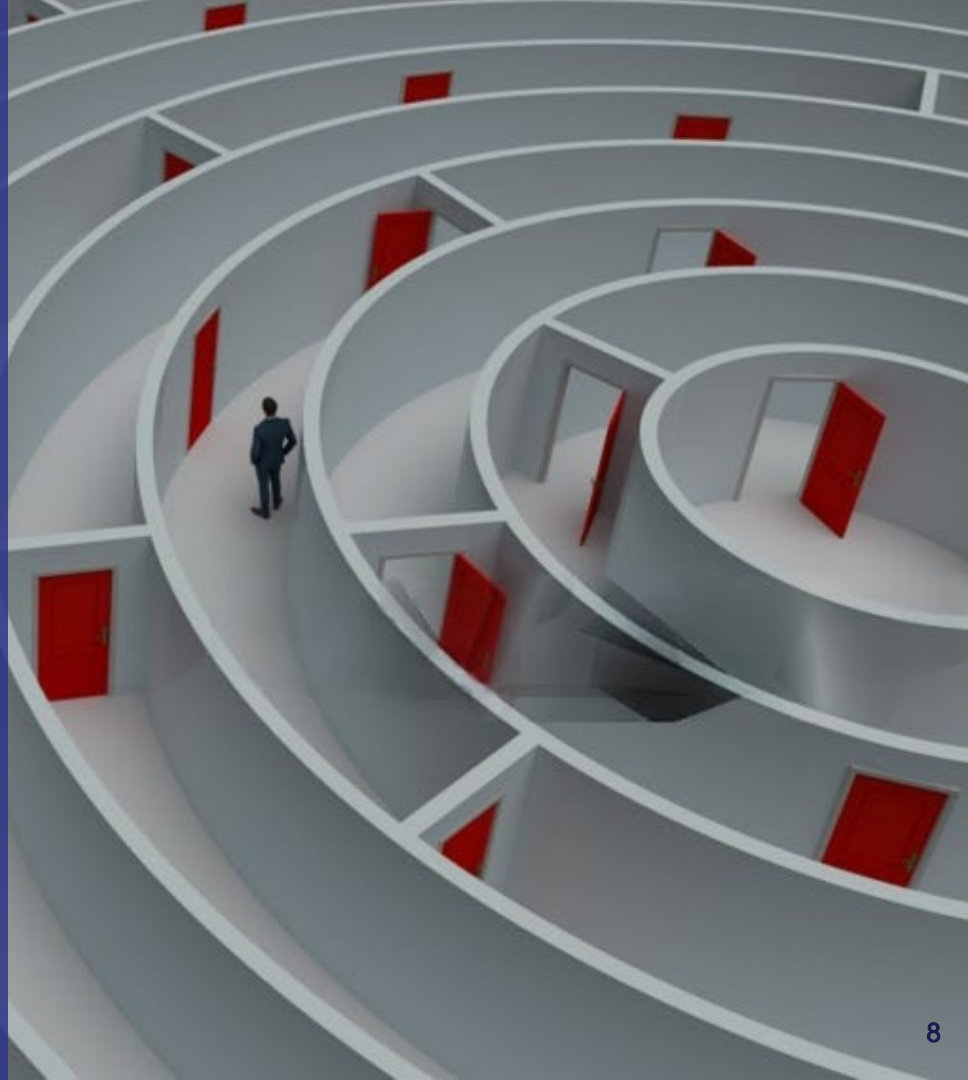
noun | pronounced por -tē -tīs

Definition

A digital health experience condition marked by excessive fragmentation and access friction, caused when patients must navigate multiple standalone portals to access their health information.

Symptoms

- Repeated logins and forgotten passwords
- Complex multi-factor authentication flows
- Session timeouts and expired tokens
- Loss of access when care relationships change (e.g., aging out of pediatric care)
- Caregiver or proxy access complications



Identity Management in Healthcare



Then



Now

What does **modern** digital identity management mean?

Identity Assurance Level 2 (IAL2): A NIST-defined standard requiring document verification + evidence of ownership

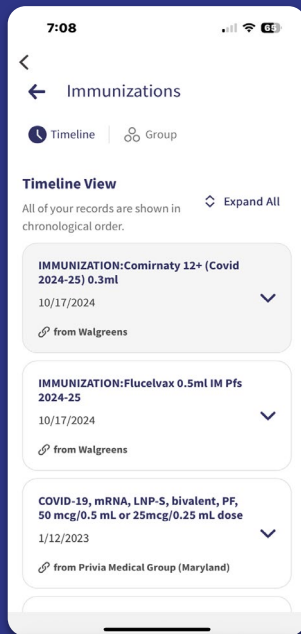
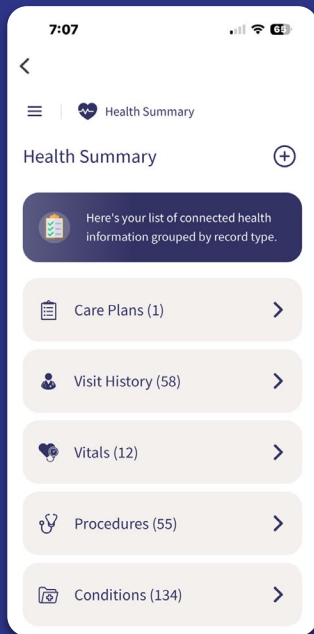
Balance of security & usability: IAL2 delivers “*high confidence someone is who they say they are*” without requiring in-person checks

How it works:

- Scan government ID (e.g., driver's license)
- Capture live selfie for biometric match
- Confirm phone/ device belongs to user
- Optionally validate ID with issuing authority



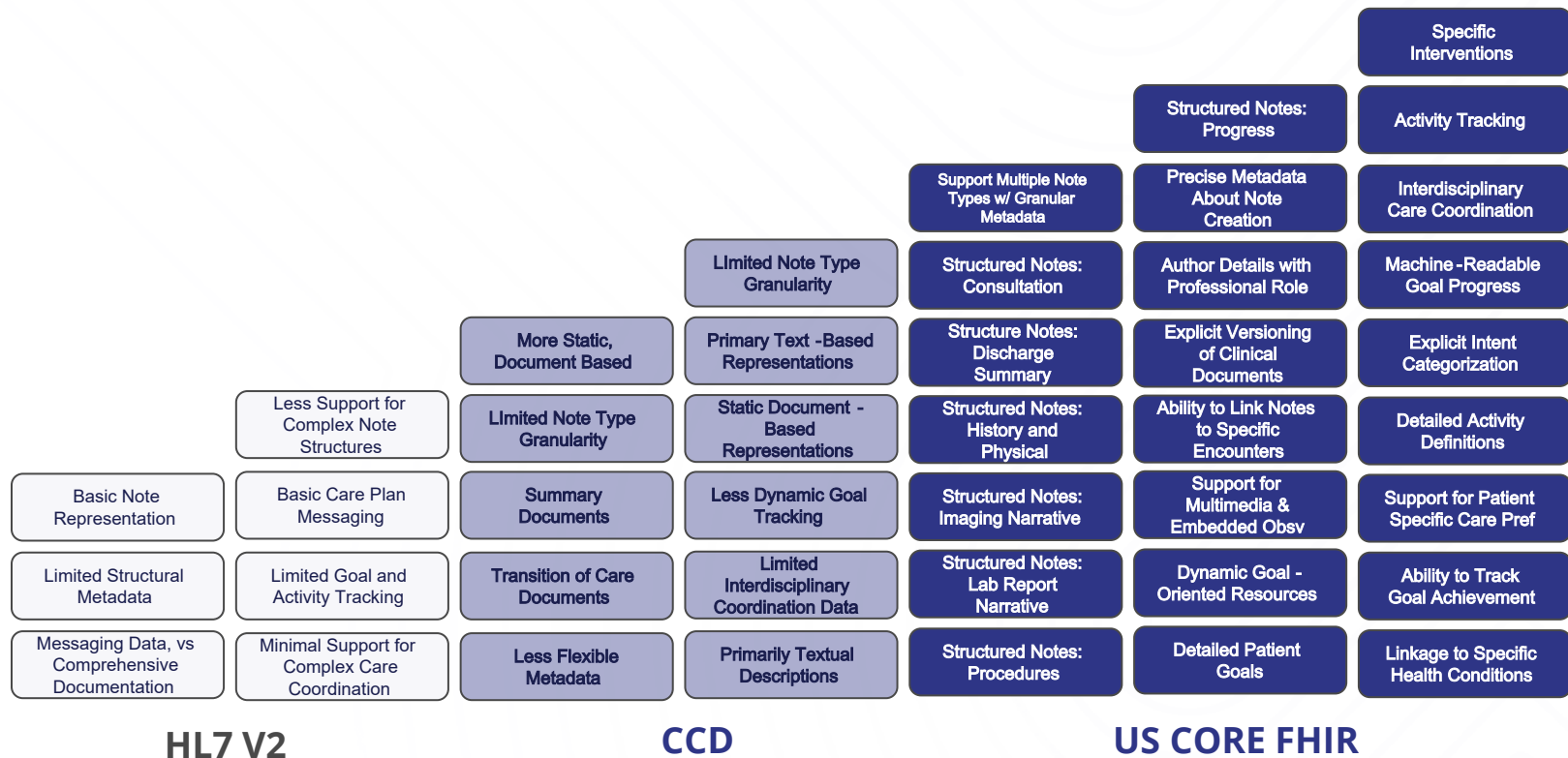
The Longitudinal Health Record



BREAKING NEWS: CMS-Aligned Network

- Patient not required to use portal credentials
- Record location services
- FHIR meeting USCoreV3
- Patient consent preferences
- Surface patient appointments & other encounters

Substantially greater & richer data with the move to FHIR



60 companies take the pledge to be LIVE in 2025

Data Networks

carequality

commonwell
HEALTH ALLIANCE

b.well

innovaccer

CyncHealth

DATAVANT

Health
Systems and
Providers

eHealth Exchange

Kno2

CRISP  **CRISP DC**

particle

HEALTH
GORILLA

KONZA
NATIONAL NETWORK

Epic

zus health

surescripts

MyHealth
ACCESS NETWORK

LOUISIANA
DEPARTMENT OF
HEALTH

MedAllies

Elation

TruBridge

amazoncare

eClinicalWorks

athenahealth

ORACLE

Apps -
Conversational
AI

ThedaCare
Froedtert

BON SECOURS
MERCY HEALTH

CVSHealth.

Providence

Intermountain
Health

Cleveland Clinic

ANTHROPIC

 OpenAI |  Microsoft

ELLIPSIS
HEALTH

Hippocratic AI
— Do No Harm —

k health

Curai Health

Apps -
Diabetes and
Obesity

OURA

NOOM

NUNA

polygon
HEALTH

Bioinsights

virta

Apps - Kill the
Clipboard

Google



Z **Zocdoc**

SAMSUNG

SANFORD
HEALTH

habitnu

NantHealth

sharecare

Flexpa

fasten

welldoc

citizen
health

Payers

Elevance
Health

OSCAR

Medicare

UNITEDHEALTH GROUP

aetna

Humana

Consumer directed-portability of their health data is here now





icanbwell.com • [LinkedIn](#)

Session 1: Improving Data Infrastructure to Empower Patients and Providers

Hayes Abrams

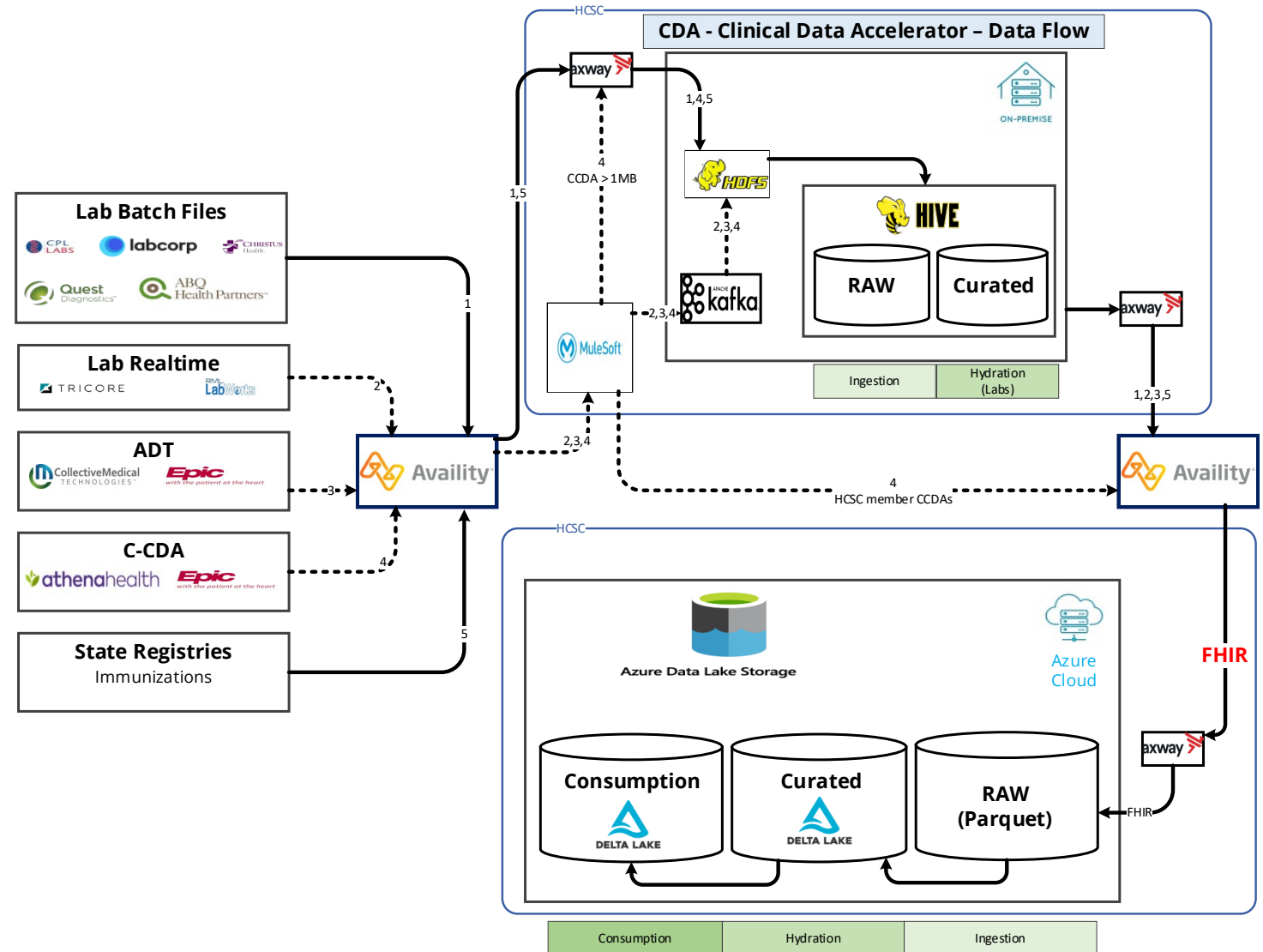
Executive Director, Enterprise Health Care Management,
Health Care Service Corporation

Leveraging Health Data for Member-Level Insights

Hayes Abrams

Health Data

- Data resource combining several clinical data streams
 - Includes electronic medical record data (Clinical Document Architecture; C-CDA)
 - All data standardized to Fast Healthcare Interoperability Resources (FHIR) specification
- Includes:
 - Conditions/Diagnoses
 - Procedures
 - Observations (Labs/Vitals)
 - Clinical notes, prescriptions, etc.
- Available in Azure cloud environment



Potential Sources of Value

REDUCE DATA LATENCY

- Model evaluation triggers
- Key input information (recent hospitalization, new diagnosis)

Example: Member's first prenatal care visit may appear in EHR sources before it appears in claims data

EXPAND ON EXISTING DATA DOMAINS

- Medications
- Labs
- Diagnosis/Utilization (new members)

Example: EHR data will cover some members without Prime pharmacy benefits

INTRODUCE NOVEL DATA DOMAINS

- Vital signs
- Physical exam, other non-laboratory findings
- Clinical notes

Example: Notes capture staging information (e.g., of pregnancy or heart failure) not in ICD-10 codes

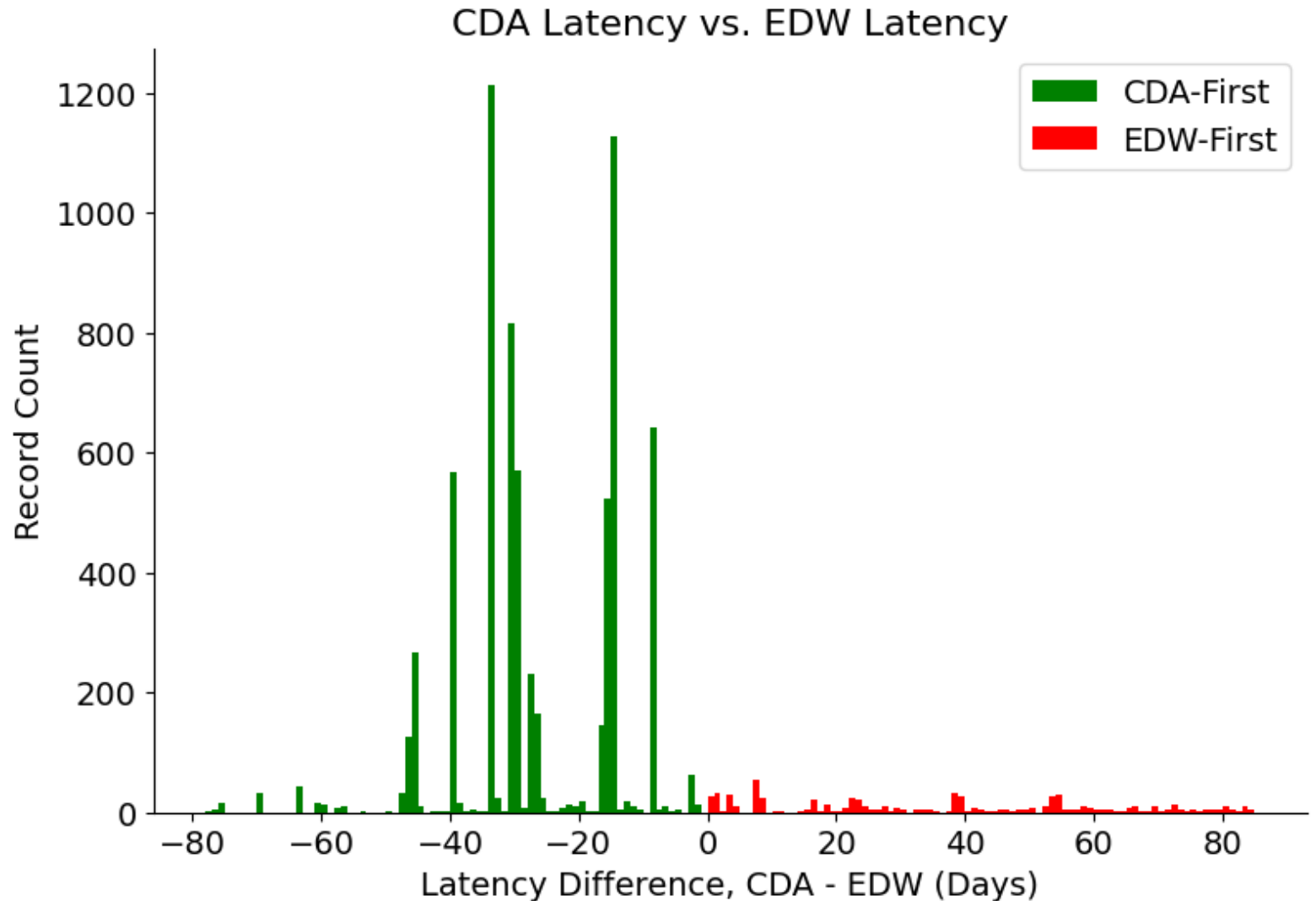
Reducing Latency

>90% of procedure code records that match a claim record arrive ahead of monthly EDW claims views

Typical time between procedure date and Health data availability:

- 12-24 hours (C-CDA source)

Historical data fills for newly added members/vendors will have longer apparent latency



Expanding Existing Data

Some, but not all records found in Health Data also appear in claims, etc:

- In an analysis of pregnancy-related codes:

Domain	Percent Health data records w/ no match in EDW
Conditions (ICD-10)	22%
Procedures (HCPCS/CPT)	6%
Laboratory (LOINC)	9%

Some of this due to earlier arrival of Health data, but also:

- **Unique info documented in EMR but not claims (ex: problem list)**
- **Historical info not represented by our claims** (ex: new members)

Other potential for expanded data sourcing:

- Ex: Pharmacy/medication data



Novel Domains

Vitals (BMI, blood pressure, etc.)

- Typically use LOINC codes, but not often found in EDW

Physical exam findings

- Observations themselves
- Indirect insight into clinical concerns

Surveys (e.g., PHQ-9)

Social/Family History (e.g., SDOH, smoking history, family history of cancer/heart disease/...)

Problem List/Medical History

- Often coded using systems other than ICD-10

Clinical notes (care plans, discharge instructions, etc.)

HCSC

Practical Impact – Maternity Risk

Problem: Pregnant members must be identified before they can be assessed for risk. Need to identify members as early as possible for screening/intervention.

Value Add: Pregnancy indicators from medical records could be obtained sooner. Could also identify members who would otherwise be missed by claims data.

In future, health data could support the risk-scoring process as well.

Subset	% w/ Health Records (Members to Screen)	% w/ Health Records (Members ID'd as Pregnant)
GROUP	25%	29%
RETAIL	26%	29%
GOVT	29%	35%
IL	23%	28%
TX	27%	30%
OK	27%	32%
NM	41%	46%
MT	16%	21%
OVERALL	25%	30%

Practical Impact – Maternity Risk

Resource Type*	# of Unique MIDs (EDW Only)	# of Unique MIDs Added w/ CDA data
ICD-10 code line items	292,692	4,603 (+2%)
CPT code line items	258,815	1,629 (+1%)
LOINC code records (labs)	41,461	1,387 (+3%)
Overall	303,384	6,389 (+2%)

*Records filtered to pregnancy-related codes tied to our model population

Practical impact to pregnancy identification:

- **2% increase** in members identified as potentially pregnant/recently post-partum
- Refined pregnancy stage identification for additional members (~1-2%)
- In future, will also use Health data to support historical features related to adverse outcome risk

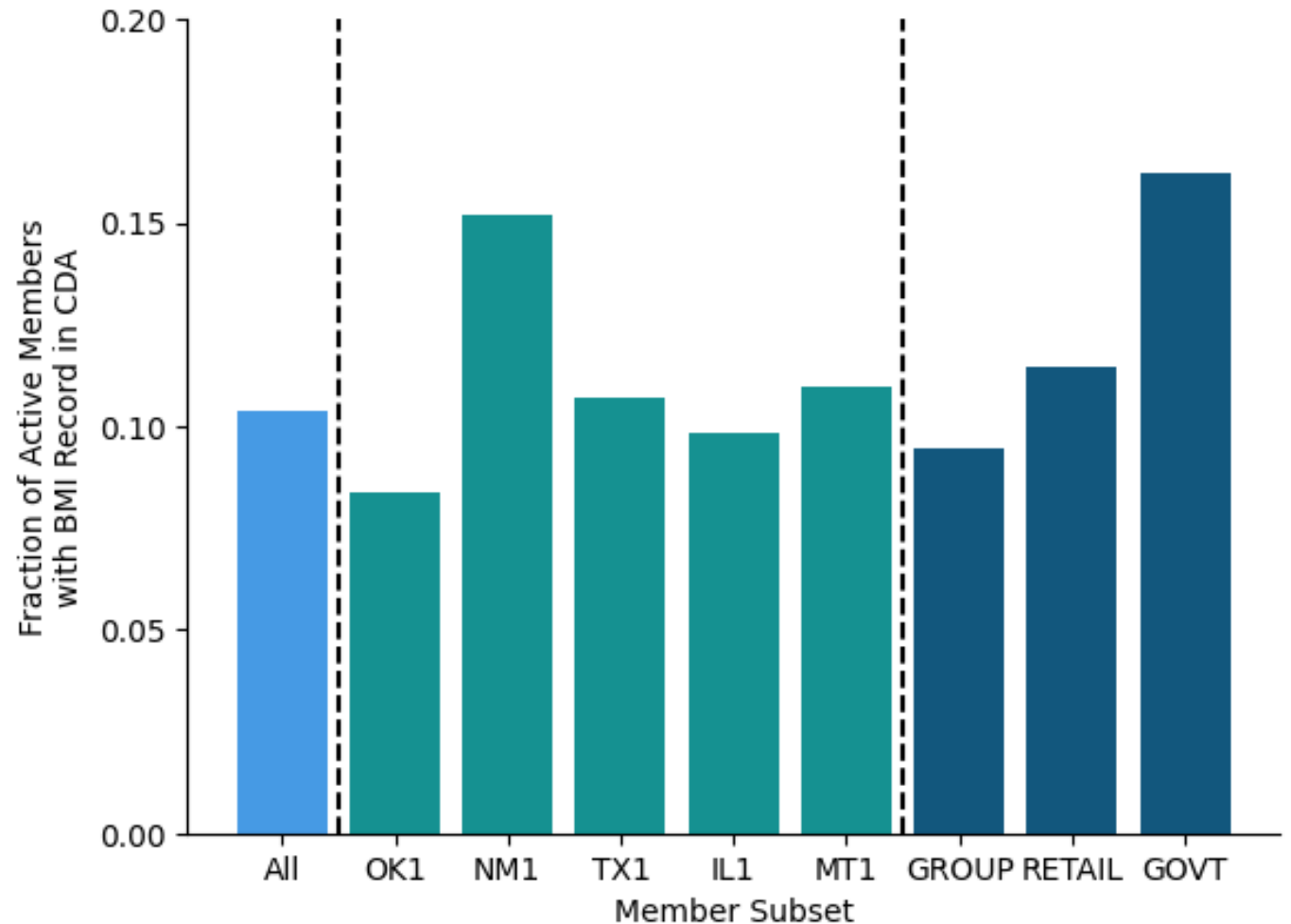
Practical Impact – Obesity Reporting

Problem: Obesity is under-coded in claims data:

- Obesity prevalence in the US: ~40%
- Obesity prevalence in claims data: ~12%

Value Add: ~10% of current membership has a BMI record present in Health data from past 12 months. Could use this to improve identifications of members with obesity, where available.

Note: >30% of membership has at least some records available in the Clinical data (just not always BMI)



Practical Impact – Obesity Reporting

Does BMI better match expected prevalence of Obesity?

BMI Categorization	Rate in Members w/ CDA BMI	Rate among US Adults*
Obese	43%	43%
Overweight	28%	30%
< Overweight	29%	27%

Where available, closely matches expected rates of obesity/overweight diagnosis

- Can this data generalize to members w/o BMI history? Potential for modeling solution

Does health data BMI help find members w/ obesity missed by claims?

		Obesity Indicator in Claims Hx	
		No	Yes
Obesity Indicator in BMI Hx	No	85%	10%
	Yes	2.1%	2.9%

BMI from health data expands membership identified w/ obesity by 16%

- Immediate benefit to analytics related to obesity and metabolic health
- Production reporting started in April '25



*[https://www.niddk.nih.gov/health-information/health-statistics/overweight-obesity#:~:text=As%20shown%20in%20the%20above,\(PDF%2C%2097.2%20KB\)%20](https://www.niddk.nih.gov/health-information/health-statistics/overweight-obesity#:~:text=As%20shown%20in%20the%20above,(PDF%2C%2097.2%20KB)%20)

Future Health Data Domains of Care Uses

Maternity risk model:

- Collect additional diagnoses and procedure codes from CDA to support current features
- Expand pharmacy/diagnosis information

Obesity risk model:

- Use BMI history as input feature
- Explore prescription/medication history

Other use-cases:

- Summarize holistic member histories to support internal care managers
- Identify care gaps (ex: missing vaccinations, medication adherence)
- Explore patient history components of EMR as risk factors across our models

Questions

Physician-Focused Payment Model Technical Advisory Committee

Session 1: Improving Data Infrastructure to Empower Patients and Providers

Ami Parekh, MD, JD

Chief Health Officer,
Included Health



PTAC Public Meeting:

*Improving Data Infrastructure
to Empower Patients and
Providers*

September 8, 2025



Ami Parekh, MD, JD *she/her*

Chief Health Officer at Included Health

Dr. Parekh leads the clinical vision and strategy for Included Health, focusing on client value and improved member health outcomes. She oversees the Health Strategy and Insights Team, encompassing Analytics and Actuarial, Provider Strategy and Relations, Clinical Strategy & Outcomes Research, Clinical Market Initiatives, and Public Policy.

Background: Formerly Chief Medical Officer for Population Health and Clinical Integration at UCSF Health, with experience at McKinsey.

Board Member: A current board member for Blue Cross Blue Shield of Massachusetts and The Doctors Company.

Education & Residency: Holds degrees from Yale Medical School and Yale Law School, and completed her Internal Medicine Residency at Harvard's Brigham and Women's Hospital.

Recognized Industry Leader: Honored with multiple accolades, including Becker's Hospital Review 32 Chief Population Health Officers to Know, SF Business Times Most Influential Women in Business, and Fierce Healthcare's Women of Influence.



Included Health is personalized all-in-one healthcare



"Why is this bill so high?"



"My eczema makes me uncomfortable"



"My child came home from school sick"



"It's so hard to find a PCP with availability"



"I want to see a therapist who understands *me*"



"My wife has cancer and I'm overwhelmed"

All-Included Care™

Navigation and Advocacy

Navigation

Core

Enhanced

Premium

Pharmacy

Communities

Care Clinic

Primary Care

Urgent Care and Behavioral Health

Specialty Care

EMO

Cancer



The Included Care Clinic employs **1,300+ clinicians** and taps into a **network of 4,000+ specialists** for expert medical opinions

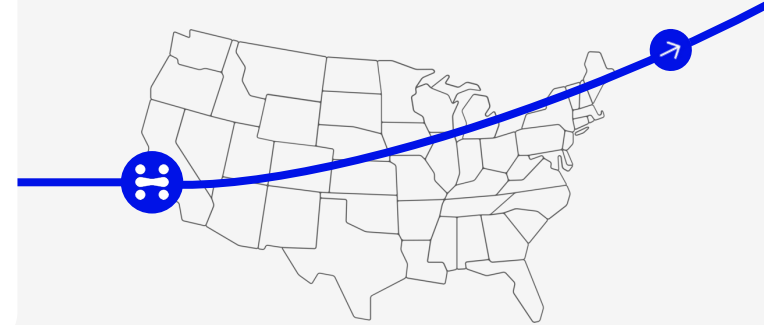


Who does Included Health serve?

Trusted by ~300 group purchasers and health plans
Including one-third of the Fortune 100



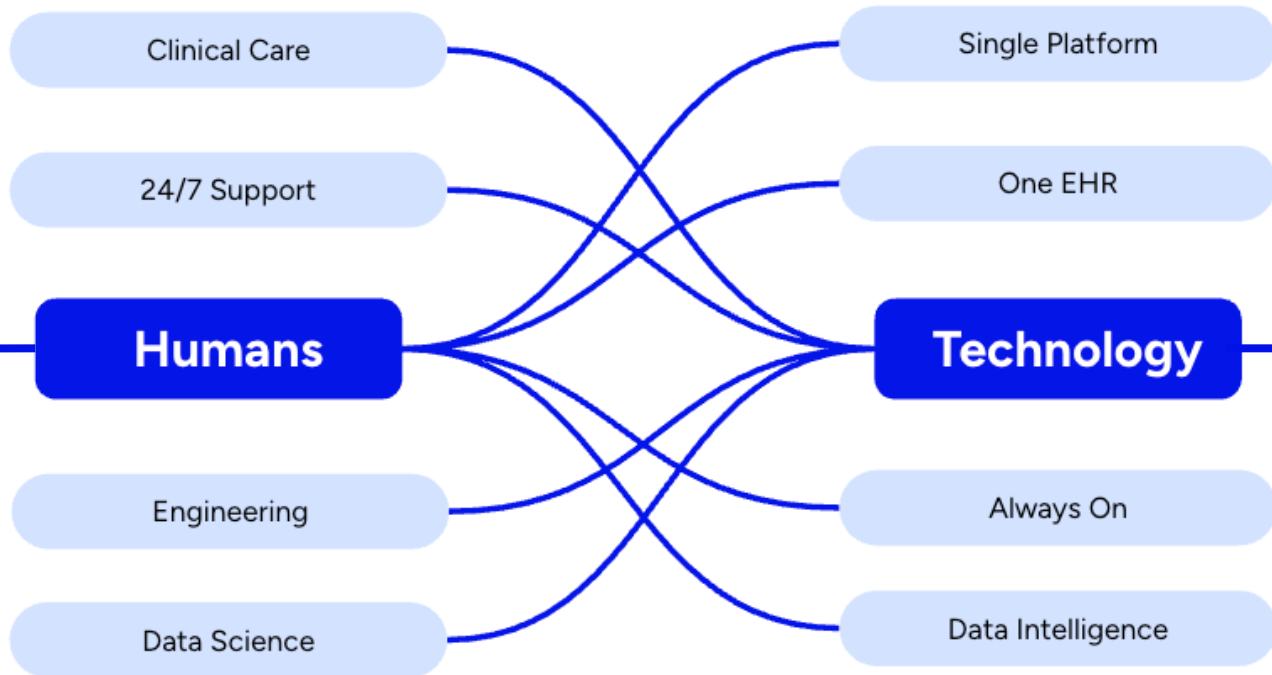
Supporting tens of millions across employer, health plan, public sector & consumer channels





*A focused
approach to
data to drive
outcomes:*

**Integration
is the
innovation**





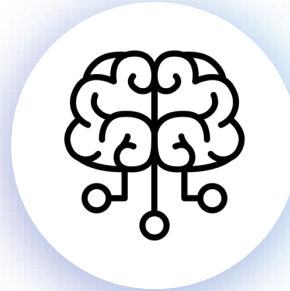
Integrating wide range of data sources to improve care

Claims Data

Claims Data
Clearinghouses

Commercial Health
Plans & Employers

Medicare Data



POWER

Our data hub combines
over 10 billion data points
to provide intelligence for use
in both our member-facing and clinical-
facing applications.

Additional Data Sources

Biometric & Labs Data

Member Usage Data*

Licensure & Sanctions

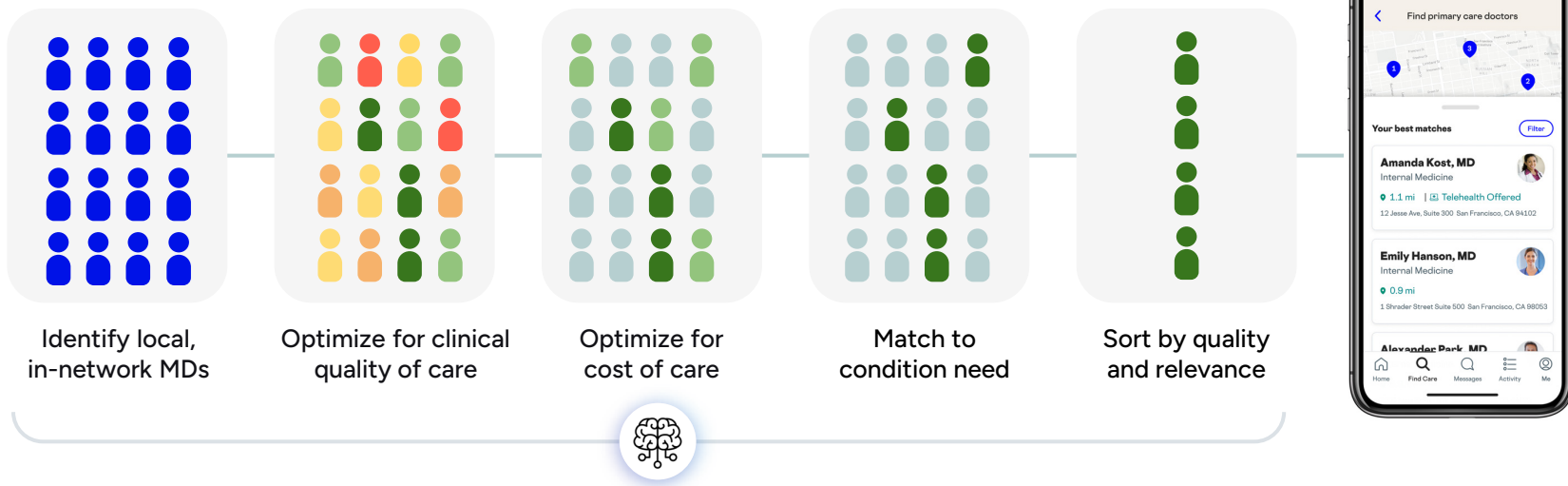
Board Certifications

Provider Directory

Additional Outcomes &
Included Health Data

* Proprietary

Driving members to high-quality clinicians



Externally-Validated Approach

96%
of physicians in U.S. mapped to quality measures

92%
increase in visits to top quartile providers

2.7M+
people who have gained access to high-quality providers since 2014



Our approach differs fundamentally vs. other platforms

Personalized results guide members to the right sub-specialists for their unique needs

Members with neurology needs



42 year old female just suffered her second stroke



Dr. Kendall Griffin
Vascular Neurologist

Other platforms

Dr. Frank Odenburg
General Neurologist



61-year-old male newly diagnosed with Parkinson's



Dr. Lucas Garcia
Movement Disorder Specialist

Dr. Timothy Snell
General Neurologist



34 year old male discovered he has multiple sclerosis (MS)



Dr. Mary Colvin
MS Specialist

Dr. Donata Henderson
General Neurologist



Leveraging Healthy Days to measure value at scale



A simple, validated survey used by the CDC and CMS



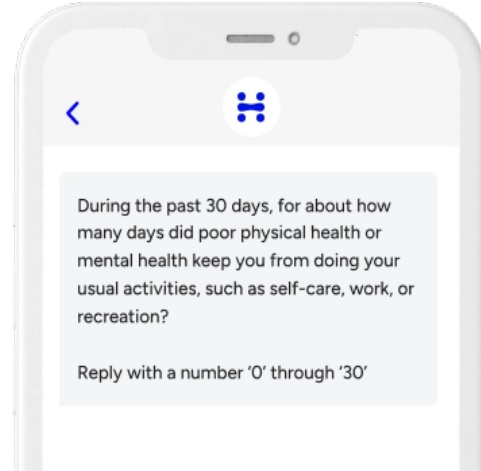
Part of our standard Navigation engagement strategy



Identifies opportunities for clinical intervention



Allows members to self-reflect on their own wellness needs and goals



40%

Of pilot population accepted offer to connect with a clinician for support

2 days

Average increase in Healthy Days per month for clinically engaged members

Predictive

Responses strongly predictive of future spend & capture risk that is not reflected in claims data

Patient-centered

Reflects how people feel about their health and how their health impacts their day-to-day life



Fueling engagement with centralized health history

Broad awareness

ID card placement, leader endorsement, marketing, and webinars **drive new utilization**

Proactive outreach

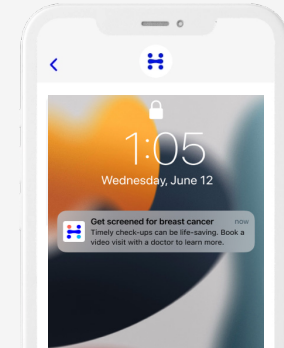
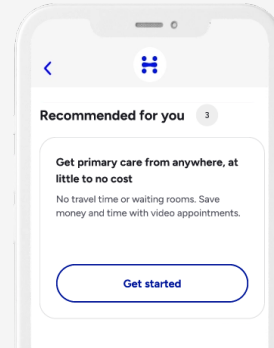
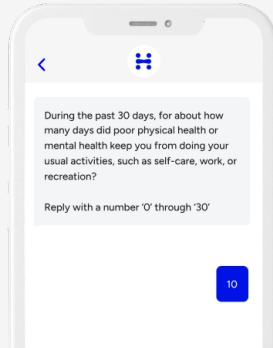
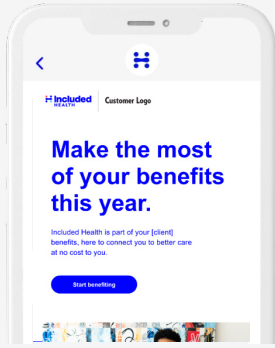
Targeted emails and predictive SMS outreach to collect Healthy Days data **enable clinical connections**

Care team plus tech

Insights empower our teams to seamlessly guide members to care, while **home screen nudges increase clinical starts**

Re-engagement

Consistently high-quality experiences and timely, personalized **push notifications** help **drive repeat engagement**



A **people-centered, AI-powered approach** can engage new users, build trust, fuel high-quality interactions, and drive meaningful engagement



Data barriers and key takeaways



Data Access & Infrastructure

Data barriers and blockers across some incumbent players (PBMs, Health Insurers)



PRO Standardization

Lacking industry-wide definitions and data standardization to collect and action on PROs



Entity Resolution

Need a modern framework to enable high-quality integrated care while protecting patient privacy