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

Session 1: Improving Data Infrastructure to Empower Patients and Providers

Mark Scrimshire

Chief Interoperability Officer,
Onyx Health

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Beyond the Clipboard

Empowering Patients Through FHIR-Driven
Interoperability

PTAC Public Meeting Sept 2025

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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

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A bit about Onyx
The market leader for FHIR-Enabled Interoperability

40M+ Lives on our Platform

History of Innovation

Blue Button 2.0

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

Microsoft

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; Hl7 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

DA VINCI HL7 FHIR

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

FHIRBall
The FHIR Business Alliance

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Billions Invested...
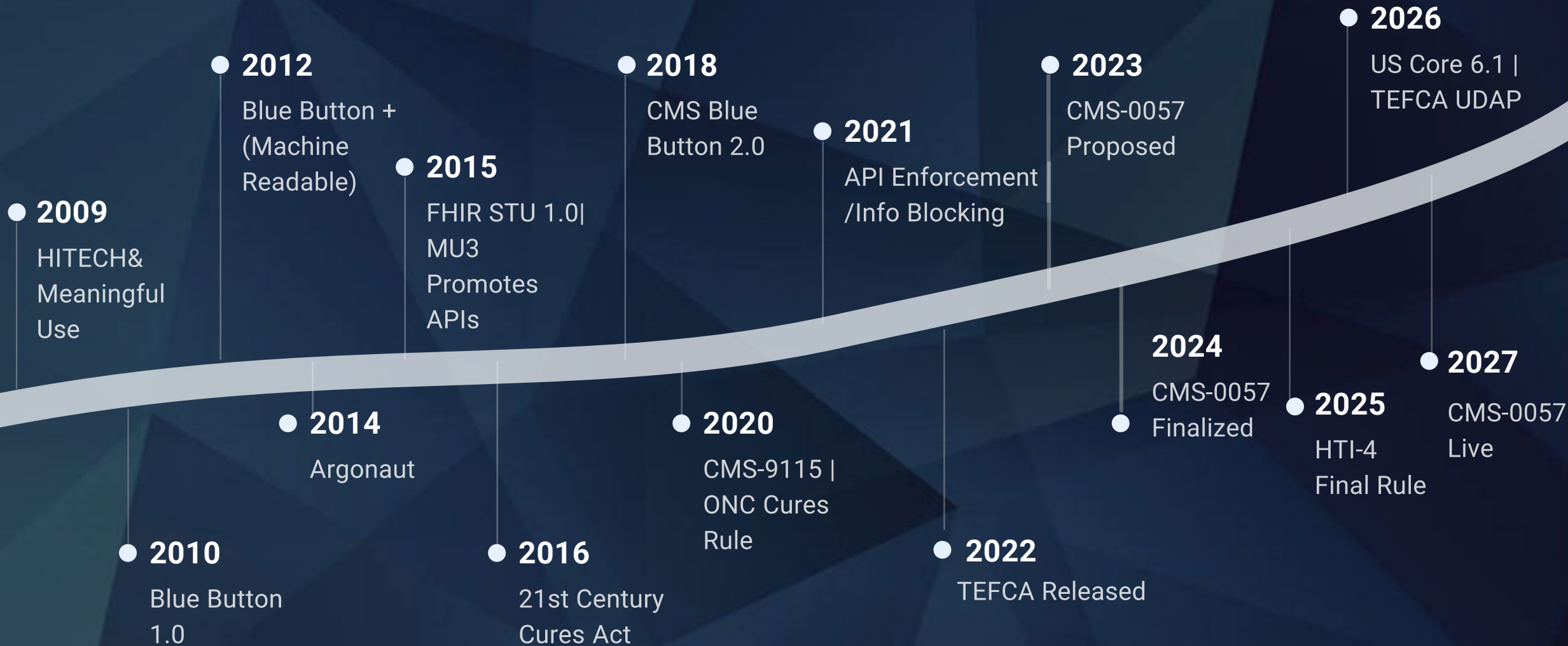
And we still have the wating room memory test.

Would you pass?

Breaking Down Barriers Since 2009

2009
HITECH&
Meaningful
Use

2010
Blue Button
1.0

2012
Blue Button +
(Machine
Readable)

2014
Argonaut

2015
FHIR STU 1.0|
MU3
Promotes
APIs

2016
21st Century
Cures Act

2018
CMS Blue
Button 2.0

2020
CMS-9115 |
ONC Cures
Rule

2021
API Enforcement
/Info Blocking

2022
TEFCA Released

2023
CMS-0057
Proposed

2024
CMS-0057
Finalized

2025
HTI-4
Final Rule

2026
US Core 6.1 |
TEFCA UDAP

2027
CMS-0057
Live

Breaking Down Barriers Since 2009

HL7 V2		CCD		US Core FHIR		
						Specific Interventions
					Structured Notes: Progress	Activity Tracking
			Support Multiple Note Types w/ Granular Metadata	Precise Metadata About Note Creation	Interdisciplinary Care Coordination
		Limited Note Type Granularity	Structured Notes: Consultation	Author Details with Professional Role	Machine-Readable Goal Progress
	More Static, Document Based	Primary Text-Based Representations	Structure Notes: Discharge Summary	Explicit Versioning of Clinical Documents	Explicit Intent Categorization
Less Support for Complex Note Structures	Limited Note Type Granularity	Static Document-Based Representations	Structured Notes: History and Physical	Ability to Link Notes to Specific Encounters	Detailed Activity Definitions
Basic Note Representation	Basic Care Plan Messaging	Summary Documents	Less Dynamic Goal Tracking	Structured Notes: Imaging Narrative	Support for Multimedia & Embedded Obsv	Support for Patient Specific Care Pref
Limited Structural Metadata	Limited Goal and Activity Tracking	Transition of Care Documents	Limited Interdisciplinary Coordination Data	Structured Notes: Lab Report Narrative	Dynamic Goal-Oriented Resources	Ability to Track Goal Achievement
Messaging Data, vs Comprehensive Documentation	Minimal Support for Complex Care Coordination	Less Flexible Metadata	Primarily Textual Descriptions	Structured Notes: Procedures	Detailed Patient Goals	Linkage to Specific Health Conditions

Image courtesy b.well

HL7 V2   CCD   US Core FHIR

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Insights

Information

Data

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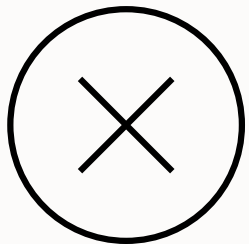- Provider Access
- Payer-to-Payer

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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 <u>not</u> the answer!

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

Health Plans

Providers

Patients

INTERNET

IOT | IOMT

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Our Phone is our Insurance Card & the Gateway to Interoperability

Biometric Security

Gateway to my Info

My AI Advisor

CMS.gov

CMS can incentivize the use of Digital over Physical cards.

The industry can do the rest.

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Thank you

Mark Scrimshire, Onyx

Mark.Scrimshire@onyxhealth.io

b.well

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

b.well

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

VS

Consumers expect experiences tailored to them as individuals

3

Regulatory history of patient medical record access

Federal policies

HIPAA
Established patient rights to access their medical records

1996

HITECH

EHR Incentive Program

Established health breach notification for PHRs

2009

HIPAA Rule Updates

Expanded right of access

Added Security Rule for ePHI

2013

Meaningful Use Stage 2

Electronic patient access

2014

MACRA

Medicare Quality Payment Program

Added electronic patient access as a performance measure

2015

21st Century Cures Act

Information blocking

Promoting Interoperability

2016

Medicare Blue Button 2.0 API

API-based patient access to claims data

Promoting Interop Rules

FHIR API spec for patient access (OAuth)

Information blocking

Mandates for EHR vendors and CMS payers

2019

Individual Access on TEFCA (specs)

Federated Digital ID
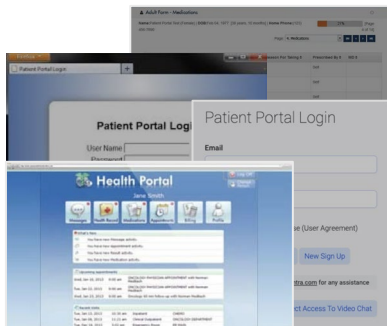
Network queries

Document-based exchange

2023

CMS Digital Health Ecosystem

CMS aligned networks

Federated ID

Patient-basedsharing

CMS Health Tech Ecosystem RFI

Patient access & experience

TEFCA (live)

Individual Access

Federated Digital ID

2025
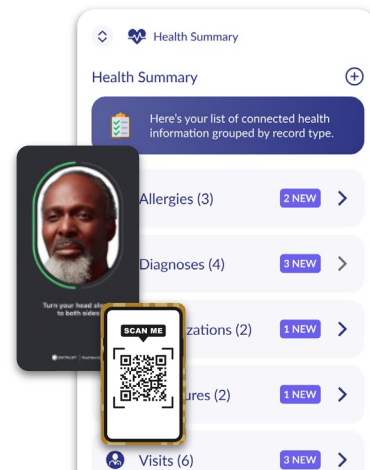
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The evolution of patient access

Fill out paper forms for paper records

Electronic data access, through many different portals

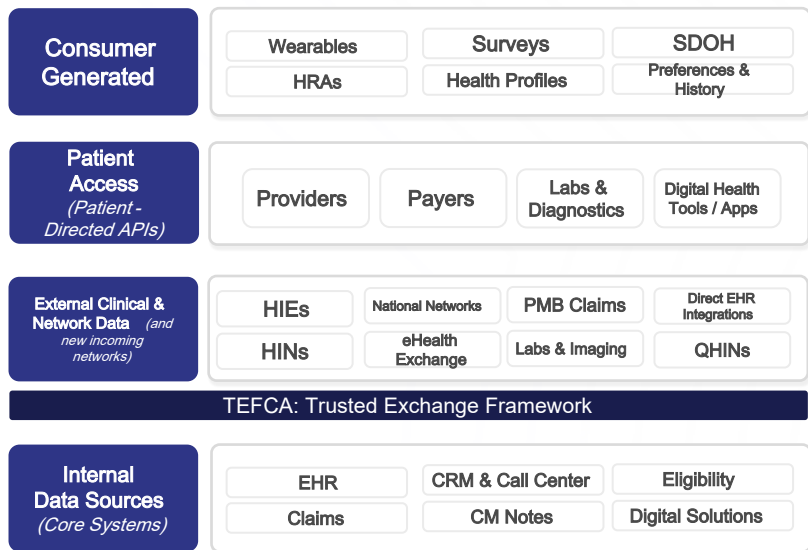Electronic data access from different portals, through patient's chosen app

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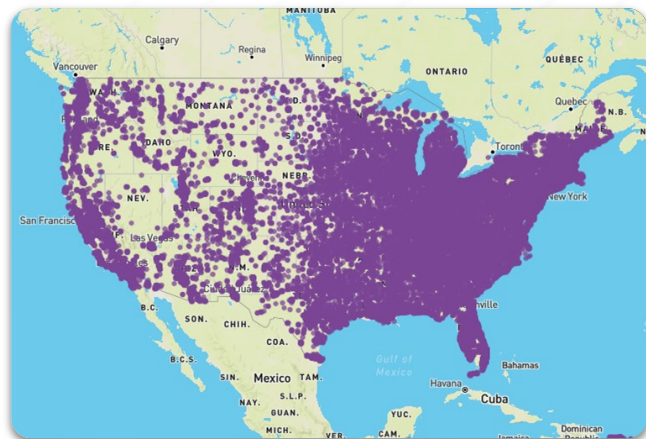
Then

Now

Current state of healthcare data exchange

Consumer Generated

Wearables	Surveys	SDOH
HRAs	Health Profiles	Preferences & History

Patient Access *(Patient - Directed APIs)*

Providers	Payers	Labs & Diagnostics	Digital Health Tools / Apps

External Clinical & Network Data *(and new incoming networks)*

HIEs	National Networks	PMB Claims	Direct EHR Integrations
HINs	eHealth Exchange	Labs & Imaging	QHINs

TEFCA: Trusted Exchange Framework

Internal Data Sources *(Core Systems)*

EHR	CRM & Call Center	Eligibility
Claims	CM Notes	Digital Solutions

Longitudinal data for whole-person care

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

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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.

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Portalitis

noun | pronounced por -tə -ˈī-tis

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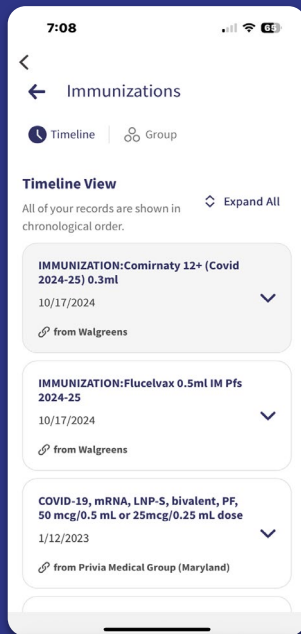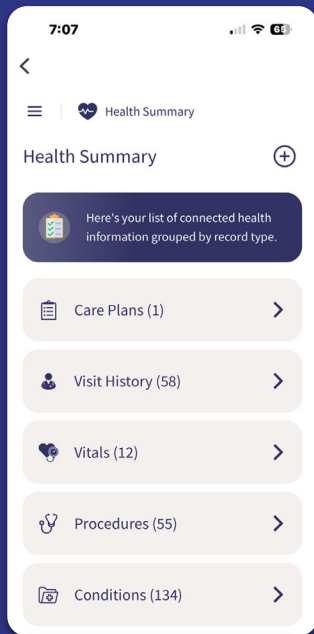
Balance of security & usability: IAL2 delivers *"high confidence someone is who they say they are"* without requiring in-person checks

How it works:

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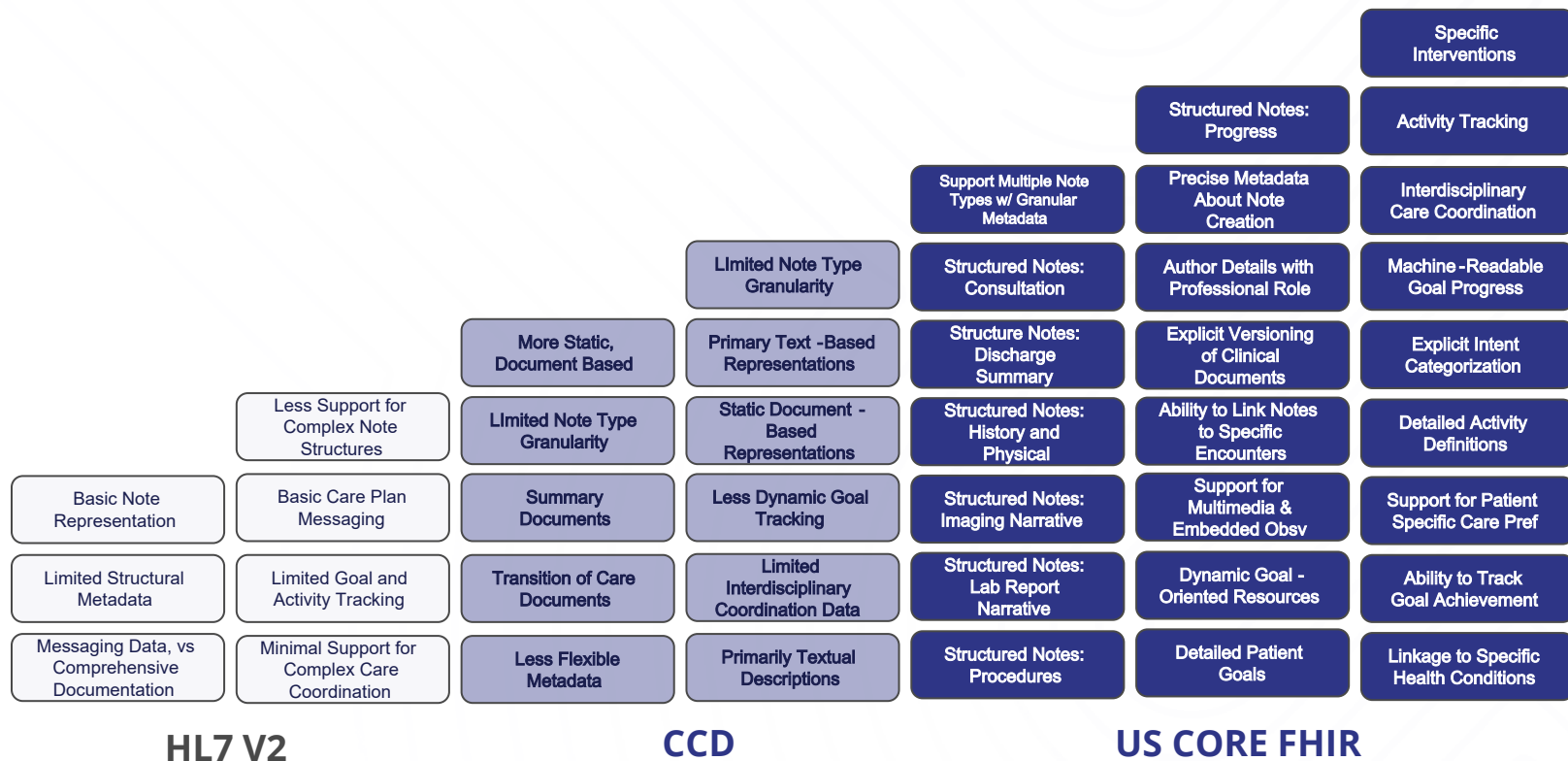- Optionally validate ID with issuing authority

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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

HL7 V2		CCD		US CORE FHIR		
						Specific Interventions
					Structured Notes: Progress	Activity Tracking
				Support Multiple Note Types w/ Granular Metadata	Precise Metadata About Note Creation	Interdisciplinary Care Coordination
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HL7 V2   **CCD**   **US CORE FHIR**

60 companies take the pledge to be LIVE in 2025

Data Networks	carequality	commonwell HEALTH ALLIANCE	b.well	innovaccer	CyncHealth	DATAVANT
	eHealth Exchange	Kno2	CRISP · CRISP DC	particle	HEALTH GORILLA	KONZA NATIONAL NETWORK
Health Systems and Providers	Epic	zus health	surescripts	MyHealth ACCESS NETWORK	LOUISIANA DEPARTMENT OF HEALTH	MedAllies
	Elation	TruBridge	amazon care	eClinicalWorks	athenahealth	ORACLE
Apps - Conversational AI	ThedaCare Froedtert	BON SECOURS MERCY HEALTH	CVS Health	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	Apple	Zocdoc	SAMSUNG	SANFORD HEALTH	habitnu
	NantHealth	sharecare	Flexpa	fasten	welldoc	citizen health
Payers	Elevance Health	oscar	Medicare	UNITEDHEALTH GROUP	aetna	Humana

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Consumer directed-portability of their health data is here now

icanbwell.com • LinkedIn

**Physician-Focused Payment Model
Technical Advisory Committee**

Session 1: Improving Data Infrastructure to Empower Patients and Providers

Hayes Abrams

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

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

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

Google · Walmart · COMCAST · AT&T · salesforce

JPMorgan Chase & Co. · Southwest · DOLLAR TREE · BlackRock · United Healthcare · CalPERS

AMTRAK · hp · HCA Healthcare · HEARST · Humana · Micron

McDonald's · ORACLE · TRAVELERS · BlueCross BlueShield Minnesota · accenture · BEST BUY

BlueCross BlueShield Texas · CDPHP · Genentech · lululemon · Lilly · MATTRESS FIRM

reddit · MGM RESORTS · State Farm · TORO · cencora · Wellmark

Supporting tens of millions across employer, health plan, public sector & consumer channels
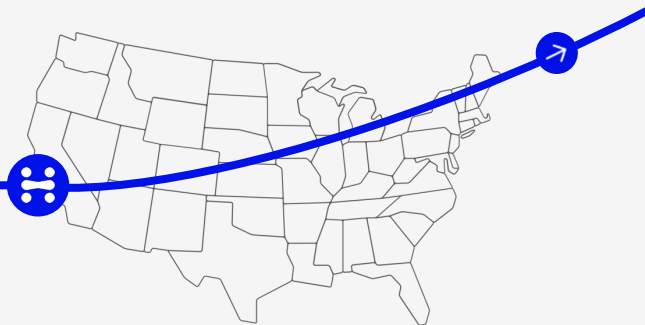
Included HEALTH · dr+ on demand by Included Health
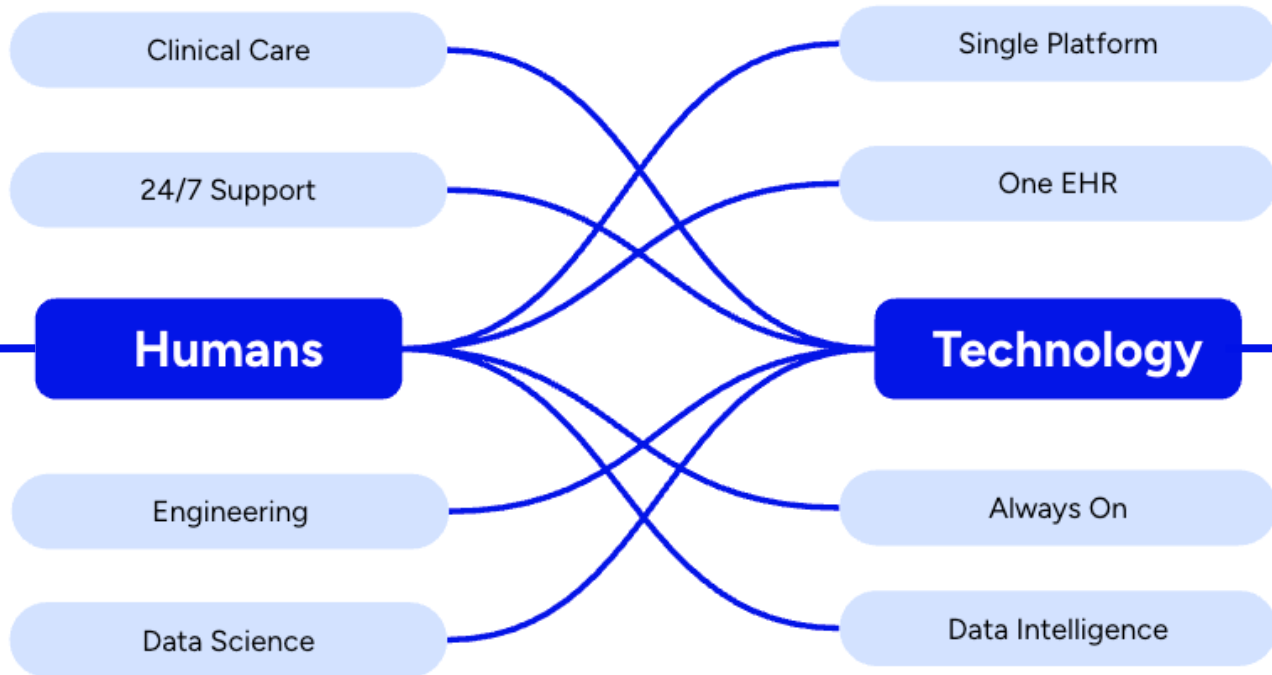
Integrating wide range of data sources to improve care

Claims Data

Claims Data Clearinghouses

Commercial Health Plans & Employers

Medicare Data
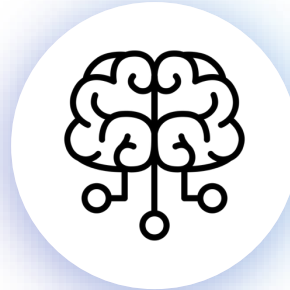
POWER

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

Identify local, in-network MDs

Optimize for clinical quality of care

Optimize for cost of care

Match to condition need

Sort by quality and relevance
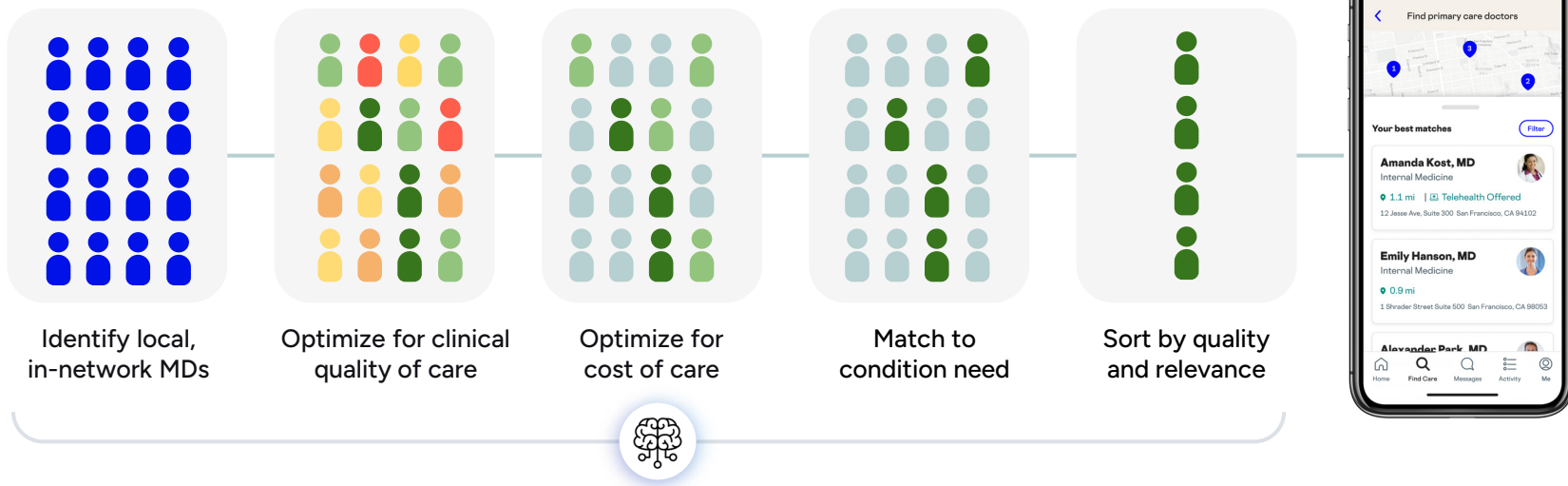
Externally-Validated Approach

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

Included HEALTH

Other platforms

42 year old female just suffered her second stroke → **Dr. Kendall Griffin** **Vascular Neurologist** | 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

During the past 30 days, for about how many days did poor physical health or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

Reply with a number '0' through '30'
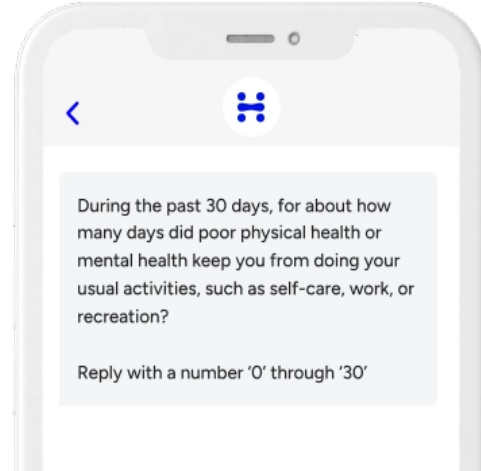
40%
Of pilot population accepted offer to connect with a clinician for support

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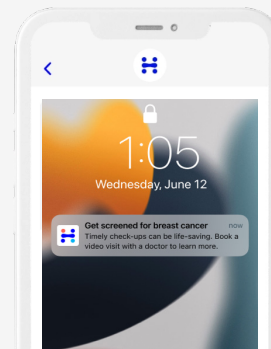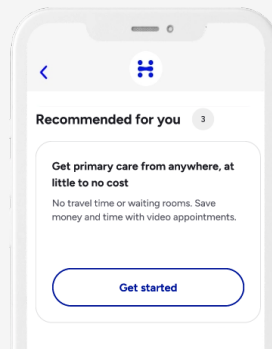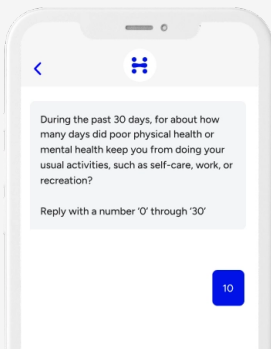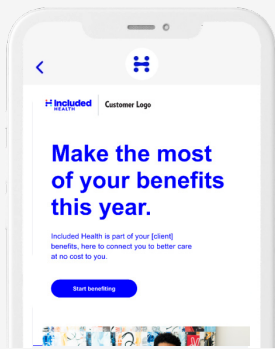
A **people-centered, AI-powered approach** can engage new users, build trust, fuel high-quality interactions, and drive meaningful engagement

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