



Interoperability MATTERS

an initiative of The Sequoia Project

Data Usability Workgroup

May 2, 2024

Agenda

- Welcome, Introductions, Membership, Agenda - Bill Gregg, MD – 5 minutes
- Overview of Future Efforts for Version 2.0 of the Implementation Guide - Adam Davis, MD – 5 min
- Data Usability Taking Root Community of Practice Update – Didi Davis – 5 minutes
- Data Tagging/Searchability & Effective Use of Narrative for Usability – Didi Davis – 40 minutes
- Save the Dates: The Sequoia Project Annual Meeting 2024 – 5 minutes
- Workgroup Discussion & Q&A – Didi Davis, Co-chairs and Workgroup



Adam Davis, MD, Co-chair
Sutter Health



Bill Gregg, MD, Co-chair
HCA Healthcare



Didi Davis, VP
The Sequoia Project

Workgroup Members

391 Organizations

488 Participants



Healthcare Providers



Public Health



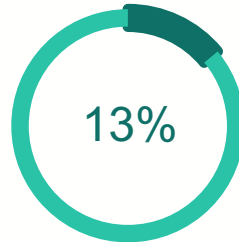
Consumer/Patient



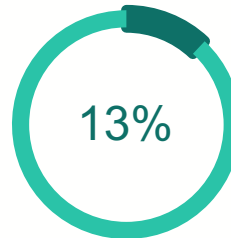
Standards Developer



HIN/HIEs



Federal, State, Local Government



Health Plan/Payer



Health IT Developers



Other



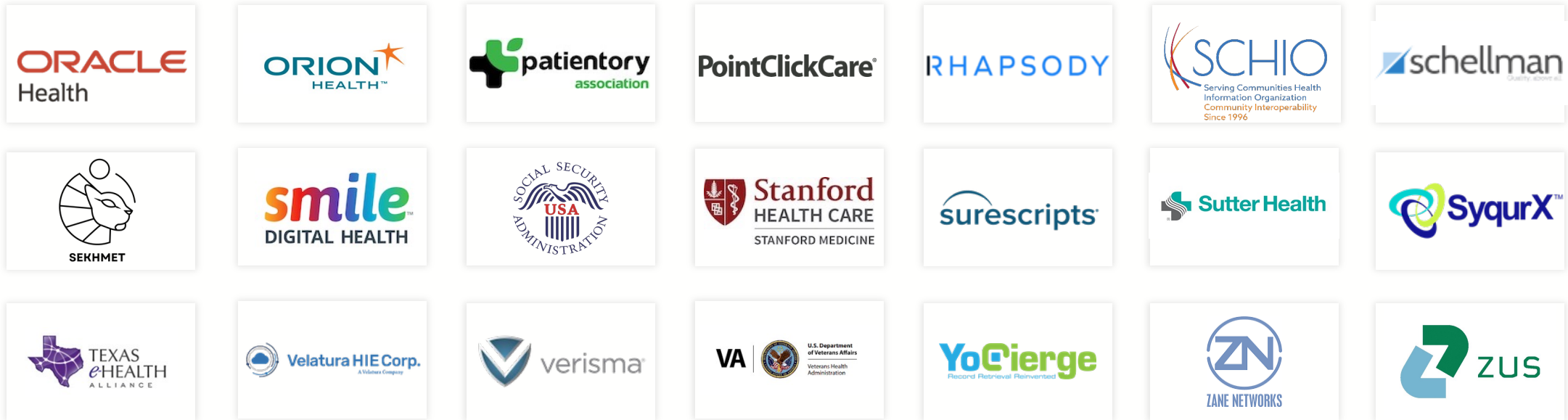
Sequoia Members Shape Interoperability for the Public Good



Sequoia Members Shape Interoperability for the Public Good

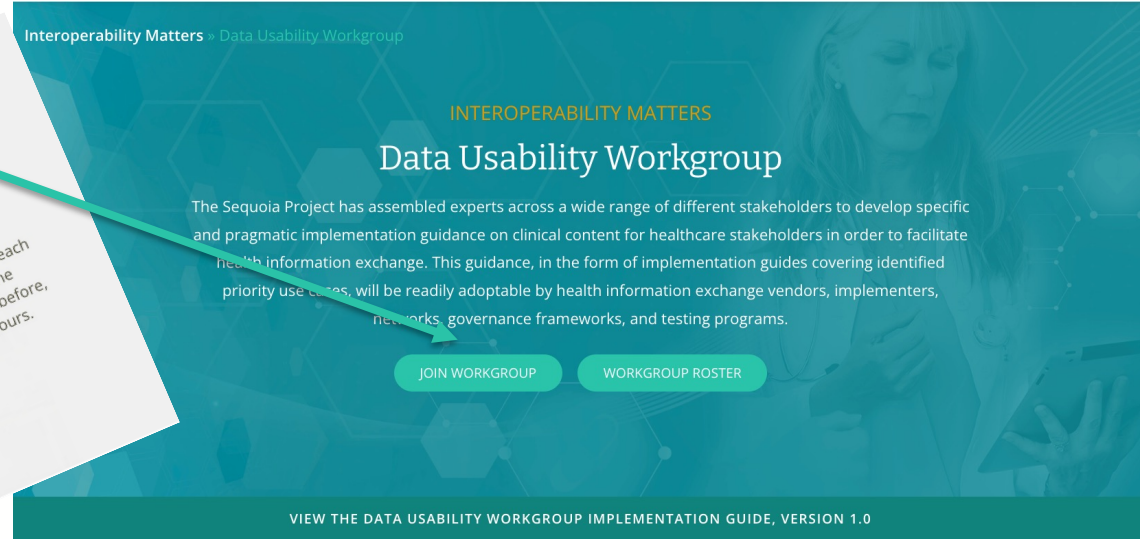


Sequoia Members Shape Interoperability for the Public Good



Website, Meeting and Workgroup Logistics


- Register for the Workgroup
- Calendar Downloads
- Meeting Notes



Meeting Materials and Recordings

2023 - 2024 2020 - 2022

- ▶ February 8: Lab Tiger Team Meeting
- ▶ February 1: Meeting Notes
- ▶ January 11: Lab Tiger Team Meeting
- ▶ January 4: Meeting Notes

 <https://sequoiaproject.org/interoperability-matters/data-usability-workgroup/>
Interopmatters@sequoiaproject.org

Version 2.0 of the Implementation Guide

2023-2024 Sequoia Data Usability WG – Proposed Work V2.0

Google Spreadsheet used for tracking

- Contains Phase 2 IG Development – Parking lot of existing pain points

17										
18		Data linked to Action	X	X	X	X	X			From this brainstorming page
19		Data Tense - Past, Present, Future	X	X	X	X	X			From this brainstorming page
20		Data in Context	X	X	X	X	X			From this brainstorming page
21										
	Data Tagging/Searchability	Improving readability of documents through tagging	X	X			X			From this brainstorming page
30		Guidance for populating meaningful narratives	X			X	X			From this brainstorming page
31	Effective Use of Narrative for Usability	Promoting the use of narrative in exchanged documents	X			X	X	X		From this brainstorming page

@Hans Buitendijk/Oracle 7/6/23: From Hans/Oracle 7/6/23: I noticed in the list shared today (slides and spreadsheet) that on the topic of tagging and searchability the focus was mainly on how to enhance the usability of documents once received, but not on improving the ability to find the relevant documents of interest to begin with. I'd like to suggest that a topic for consideration is added that focuses on alignment on document type encoding/classification and search parameter/method guidance to increase the probability of receiving the right, expected documents. Today it is entirely possible to query for documents, get zero results, even though it is known there are records of interest. Either the document type classification used by requester and responder are not in sync, and/or the method of searching is not aligned. It seems that clarity and alignment can help reduce frustration of not finding documents to being with. Subsequently are then opportunities to improve other tagging to reduce duplicates, etc., etc.

@Lisa Nelson comment to scorecard for v1.0: There is new guidance coming out that Katherine Lusk spearheaded through the C-CDA IAT and originating from this group and a group in TX to encourage the use of sub-sections for the Procedures and Results Sections. Any chance of getting that guidance to be adopted here sooner rather than later? - @Lisa, this should be discussed by implementers to determine if new guidance can be considered. As yo mention, it has not yet been published. However, new guidance can also be added to v2.0, but will be discussed for awareness now.

@Lisa Nelso comment to scorecard for v1.0: Can you call out the guidance from the Companion Guide on how to do proper narrative text linking? Doing this sets a very important foundation that will enable faster, smoother evolution toward FHIR documents and FHIR entries. It makes it very clear what the text element is for each clinical statement that is present as a machine processed entry.
 - Reply: @Lisa, guidance is called out as follows: 6.4.1.1. Following guidance in the HL7 CDA® R2 Implementation Guide: C-CDA Templates for Clinical Notes STU Companion Guide Release 3, section 5.2.18.1, Implementers SHOULD use a Note Activity Entry for narrative notes to improve machine processing on the receiving system side

ALL Comments Incorporated into Working Draft IG V2.0

5. Data Tagging / Searchability

Problem Statement

For years, organizations have developed individual definitions of which CDA documents are sent as part of a patient's record, with most sending a minimum of a current patient summary and a summary of relevant encounters. Recently, the Joint Document Content Workgroup introduced a more comprehensive and standardized view of the patient, labeled the Longitudinal Record, which includes at minimum a current patient summary along with an **encounter summary for each encounter**. While an excellent wealth of information, this exchange can contain more than is applicable to the clinical goals of the requestor. The quantity of content can make it difficult to understand the context around particular pieces of data that are of interest and the connection between pieces of information in different sections of the document.

Use Cases

5.2.1. Provider to Provider and Provider to Public Health - Example Scenario

5.2.1.1. A provider searches by C-CDA document titles to only request documents which pertain to certain criteria, such as diagnostic code.

6. Effective Use of Narrative for Usability

Problem Statement

Current document formats and general practice in the industry often prioritizes 'discrete' data elements that are easy to store and understand individually over longer format narrative information that better captures the 'story' of the patient. Auto-generated documents made of discrete elements are useful, but are an incomplete 'patient story' for the busy clinician. **There is a need to provide informative principles for development, and guidance on what information should and should not be present and appropriate in both coded clinical statements (entries) and narrative content in an automatically generated clinical summary (e.g., CCD, Discharge Summary, Referral Note, Consultation Note, etc.).** Consistently providing and linking these valuable clinical narratives to the discrete data can help clinicians validate and understand the context of shared data. Robust sharing of clinical narrative information in ways that are easily digestible by receiving organizations and clinicians can significantly improve patient care.

Use Cases

6.2.1. Provider to Provider

The screenshot shows a comment thread. The first comment is from Laura Bright, dated 4:54 PM Yesterday. It discusses the importance of knowing if data pertains to an activity (action) that is in the past, present, or future, and mentions the likely state/status of the data: complete/final, partial/incomplete/subject to change, or pending. Below this, there are two lines of text: "Planned vs. occurred" and "Problem: data is atoms - linking to context". The second comment is from Didi Davis, dated 10:30 AM Today. It is an "Add" comment that says: "There is a need to provide informative principles for development, and guidance on what information ..."

- Prior “parking lot” documents updated to view only access
- Comments incorporated into this working draft
- Comments will be discussed on monthly calls
- Homework assignments for input from Workgroup monthly
- Internal comments resolved leading to public comment version posted July 2024

Laboratory Tiger Team

2023-2024 Sequoia Data Usability WG - Proposed Work Items

File Edit View Insert Format Data Tools Extensions Help

Search Menus 100% 123 Default... 10 B I A

A9 Standardizing Laboratory Result Display in C-CDA

	A	B
1	Work Item Proposal Template Link: https://docs.google.com/document/d/1NKfml0EM-nbVXnRMQ-XXZ4Pp0w-OVgCcYot_puvD5h8/edit#heading=1	
2		
3	<initial working name for it> <Describe the integration and/or workflow problem: What doesn't work, or what needs to work.>	Proposed Work Item Title
4	<Describe the Value Statement: what is the underlying cost incurred by the problem, what is to be gained by solving it. If possible, provide quantifiable costs, or data to demonstrate the scale of the problem.> <Describe how this will improve usability and for what stakeholders>	The Problem Description
5	<List existing systems that are or could be involved in the problem/solution.> <Describe one or more short use case scenario(s) from the user perspective. The use case should demonstrate the current integration/workflow problem. Consider a chronological bullet list of "A does X with Y".>	Actors/Systems
6	<Feel free to add a second use case scenario demonstrating how it "should" work. Try to show the people/systems involved, the tasks they are doing, the information they need, and hopefully where the information should come from.> <Focus on the end user requirements, and not just the solution mechanism. Give concrete examples to help people trying to understand the problem and the nature of the solution required. Remember that other committee members reviewing the proposal may or may not have a detailed familiarity with this problem. Where appropriate, define terms.>	Use Case/Clinical Scenario
7	<List relevant standards, where possible giving current version numbers, level of support by system vendors, and references for obtaining detailed information.>	Standards
8		
9	Standardizing Laboratory Result Display in C-CDA	
10	Appendix A Updates	
11		

Summary of DUWG Proposed Work Items Laboratory Work Items

- **Google Spreadsheet used for tracking will be place for gathering Laboratory Data Exchange pain points**
 - Use cases and standards
 - Anyone with the link can comment within the documents
- Two Tiger Team meeting held in April
 - April 11, 2024
 - April 18, 2024

Tiger Team Roster

61 members
47 organizations

First Name	Last Name	Company
Maria	Moen	ADVault, Inc.
Kristine	Geis	Altera Health
Mary-Sara	Jones	Amazon
Jenna	Rychert	ARUP Laboratories
Riki	Merrick	Association of Public Health Laboratories
Maruthu Vijay	Kumar	AthenaHealth, Inc.
Reddy C	Haraneesh	AthenaHealth, Inc.
Manish	Naik	Austin Regional Clinic
Samantha	Spencer	CAP
Will	Humphrey	CDC
Abigail	Viall	CDC
Muktha	Natrajan	CDC
Hung	Luu	Children's Health System of Texas
April	Bohbrink	Clinical Architecture
Kristin	Benware	Clinical Architecture
Stephanie	Broderick	Clinical Architecture
Carol	Ross	Clinisys, Inc.
Robert	Rae	College of American Pathologists
Scott	Stuewe	DirectTrust
Jay	Nakashima	eHealth exchange
Benjamin	Ollila	Epic
Supantha	Samanta	Epic systems corporation
Mike	Kolzet	EQTY Life Sciences
Robert	Oakley	Evernorth - Office of Interoperability
Victoria	Derbyshire	FDA
Stanley	Huff	Graphite Health
Nathan	Davis	Graphite Health
Neelam	Sharma	HCA
Hilary	Greer	HCA
Steven	Lane	Health Gorilla Inc.
Satish	Kholay	IdLink
Hazel	Chappell	Ishca health
Teresa	Saxon	JP Systems
CJ	Amurao	JP Systems
Sulayman	Aziz	ipsys

First Name	Last Name	Company
Aaron	Green	Labgnostic, Inc.
Deb	Loniewski	MDHHS
Desiree	Mustaquim	National Center for Injury Prevention and Control
Amy	Weinland	Nationwide Children's Hospital
Kendra	Wyatt	New Birth Company
Sara	Haddon	New York eHealth Collaborative
Andrea	Pitkus	none
Sara	Armson	ONC
Natalee	Agassi	Oracle
Hans	Buitendijk	Oracle
Mark	Dorner	PreciseMDX
Christopher	Kellogg	Quest Diagnostics
Christopher	Harrison	Quest Diagnostics
Mick	Talley	Southeast Michigan Health Information Exchange
Daniel	Wyman	Synensys
Stephen	Powell	Synensys
Alana	Keller	Synensys, LLC
M E	de Baca	Sysmex America Inc
Katherine	Lusk	Texas Health Services Authority
Baraah	Elsaadi	Texas State University
Tracy	Asibu	The University of Texas Health Science Center
Thomas	Bronken	Trinity Health
David	Rocha	UT Health Houston
Elizabeth	McElhiney	Verisma
Sandra	Mitchell	VHIE, contractor JP Systems
Aaron	Berdofe	Zus Health

Laboratory Use Cases

Emphasis on improving data quality – for direct clinical use, feeding AI/ML, Clinical Trials, RWD/RWE, Research, etc.

1. Reference lab (or internal hospital lab) currently sharing data electronically to EHRs (sending system)reference lab already sends via HL7, but maybe not fully compliant
2. Establish best practices for receiving EHR or portal systems to display data from lab information systems AND minimum for sharing data via CCDA/FHIR
 - Note: these are not used by LIS/lab systems, but EHR to EHR sharing and HIEs, etc
3. Proposed target for discrete labs, e.g. chemistries, CBC, etc.
 - Start with a minimum set of labs (e.g. CBC and BMP) for compliance but ultimate goal is compliance for full discrete labs
 - Development of recommended value sets for grouping labs (target VSAC and lab standards bodies) – this is something that providers should be able to access and NOT reinvent themselves

Meeting Logistics and Timeline

- 2023 – 2024 Planned Schedule
 - Kickoff Call: February 2, 2023
 - Ongoing calls: 1ST Thursday each month
- Next Phase of Activities - Process & Timeframe
 - Phase 1 - Administration and Prioritization
 - February 2023 – June 2023
 - **Phase 2: Developing Initial Draft Guidance**
 - **July 2023 – July 2024**
 - Phase 3: Public Comment Period/Recommended Next Steps
 - July 2024 – August 2024
 - Phase 4: Finalizing Implementation Guide and Call to Action
 - August 2024 – December 2024

Community of Practice Update

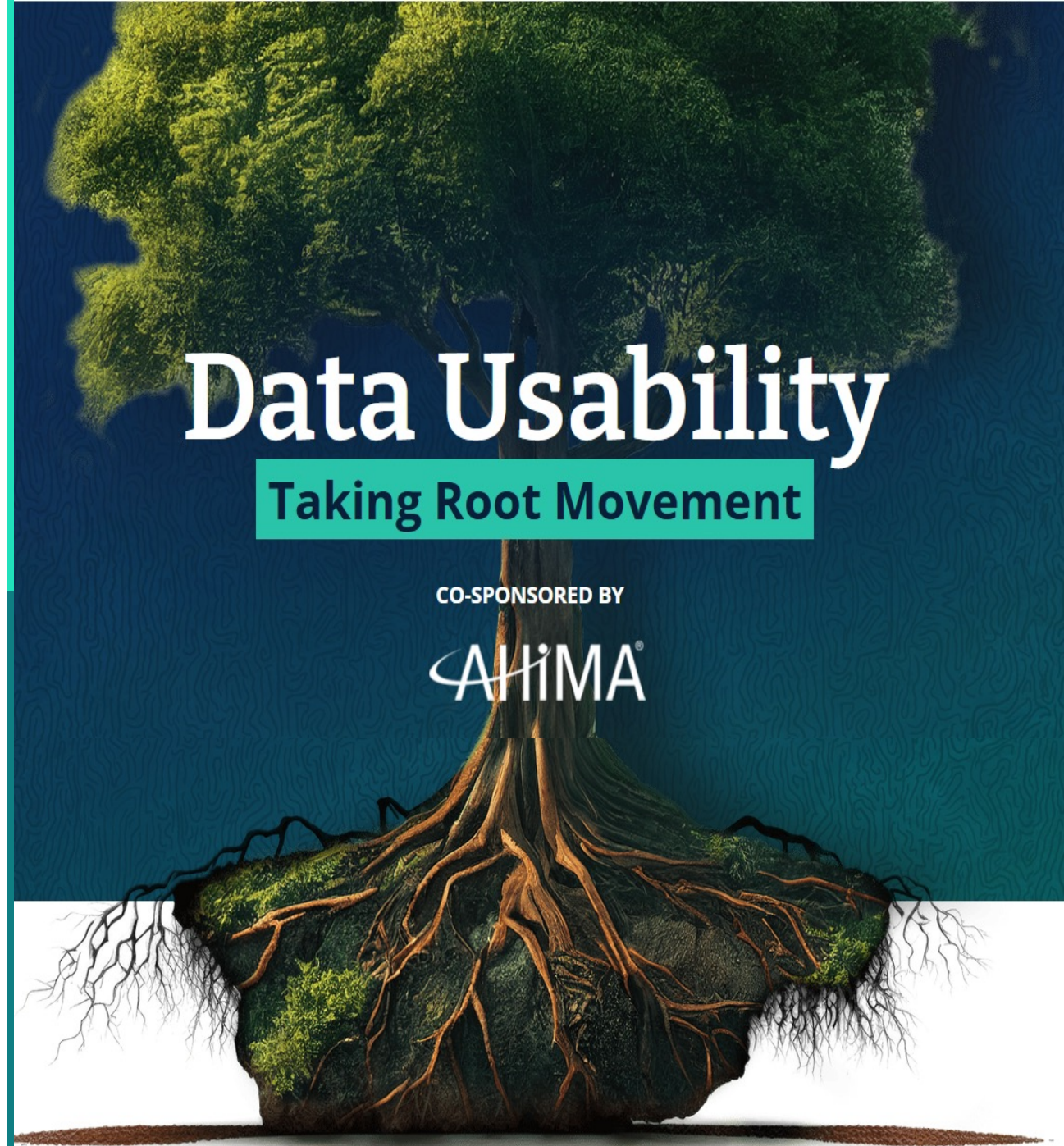
April 24, 2024



Data Usability

Taking Root Movement

CO-SPONSORED BY



What is the difference between the **Data Usability Taking Root Movement** and the **Data Usability Workgroup**?



Data Usability Workgroup
Develops Guidance



Taking Root Movement
Implements Guidance

An initiative co-sponsored by **AHIMA**

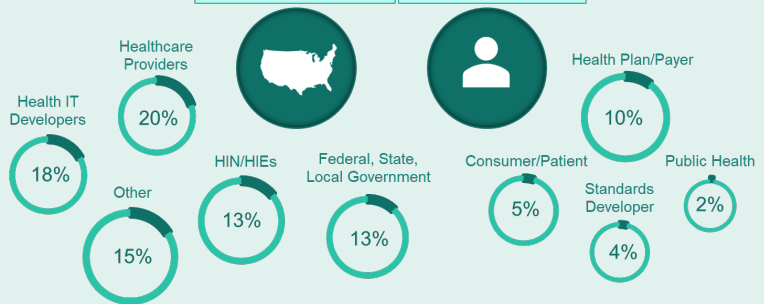
Community of Practice

Roundtables	Technical Assistance
Testing Platform	In-person Convenings

Participation Levels

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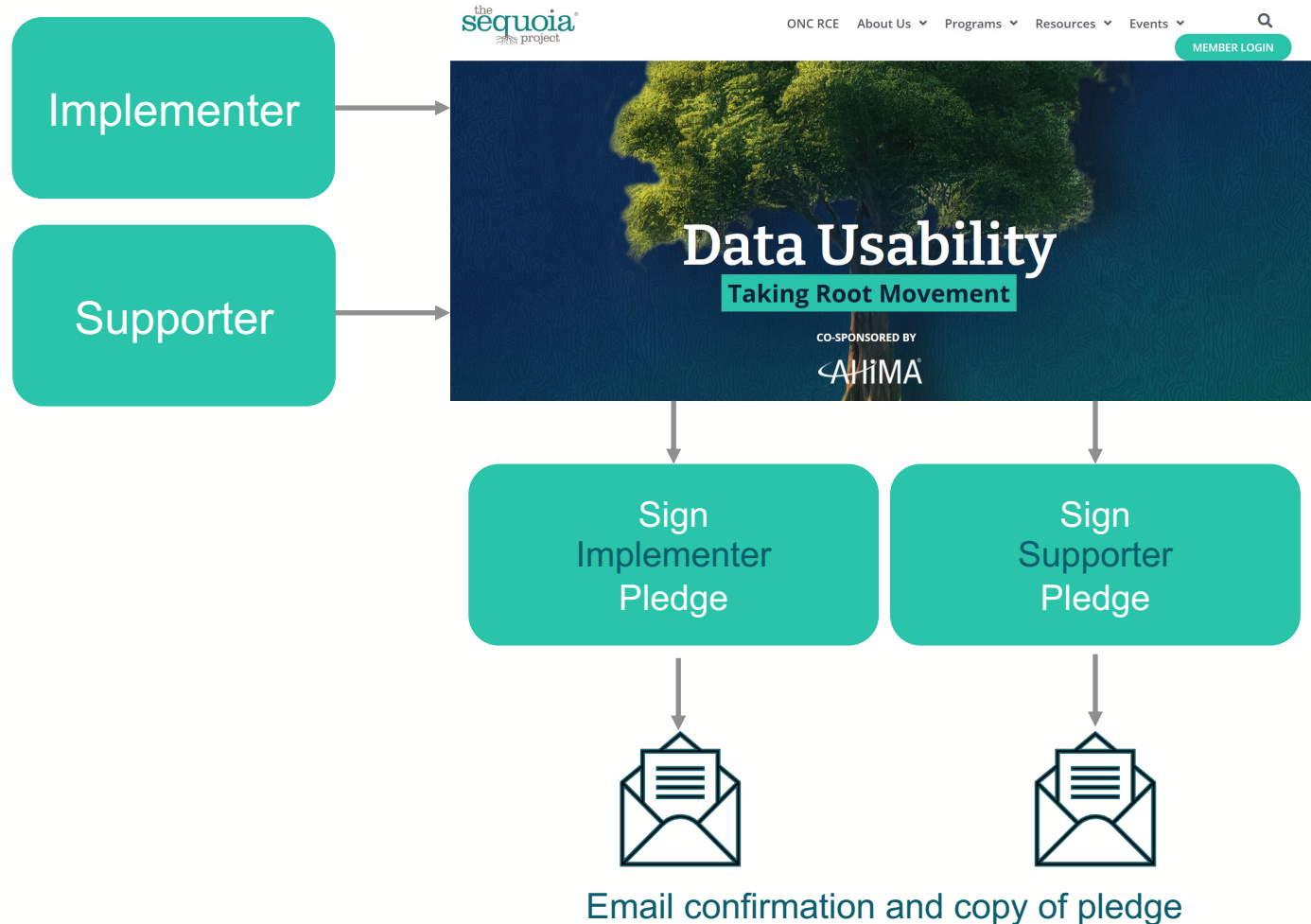
268 Organizations | 443 Participants



Development Feedback

Deployment Guidance

Pledge Process – Open NOW!



Data Usability Taking Root participants have been alerted that the pledge feature is operational on Sequoia's website

Organizations that have pledged to participate!



Clinical Architecture
Epic
Health Gorilla
MedAllies
Oracle



ADVault, Inc.
AHIMA
Hawai'i Pacific Health
LaPortaCare
NextGen Healthcare
Surescripts
Texas Health Services Authority

Pledge Deadline – May 29, 2024!

ROUNDTABLE PARTICIPANTS WHO HAVE NOT YET PLEDGED

53

American Medical Association	MTC Group LLC
Austin Regional Clinic	National Institutes of Health, National Institute of Diabetes & Digestive & Kidney Diseases
Azuba	Netsmart
Banner	New York eHealth Collaborative
Brevard Health Alliance	OCHIN
Bwell	Opala
Carequality	Optum
Celeste	Particle Health Inc.
Cincinnati Children's Hospital Medical Center	Patientory
Civitas	PeaceHealth
Claim Clarity	Premiere Pointe Podiatry
Complete Health	Santa Cruz Health Information Exchange
Delaware Health Information Network	Smile Digital Health
DirectTrust	Social Security Administration
eHealth Exchange	Stanford Health
Elevance Health	Sutter Health
First Genesis, Inc.	Texas A&M
Foothold Technology	Texas Department of State Health Services
HCA Healthcare	Texas State University
Health Services of North Texas (HSNT)	The Picture of Health
HealthElence	The University of Texas Health Science Center
HIMSS EHRA Association	University of Washington
IHIE	Verinovum
Johnson and Johnson	Veterans Health Information Exchange
Kaiser Permanente	Wolters Kluwer Health, Health Language
Kno 2	Zus Health
Meditech	

Access the pledge [here](#)

Sequoia Data Usability IG v1.0 Readiness Checklist

- The draft Readiness Checklist is grouped by Categories and then further grouped by Data Sent and Received as appropriate:
 - General
 - Data Provenance and Traceability of Changes
 - Effective Use of Codes
 - Reduce Impact of Duplicates
 - Data Integrity, Format and Trust
 - Data Tagging/Searchability
 - Effective Use of Narrative for Usability
- Please review and provide comments by March 15, 2024



Contact Us

Thank you for your interest in The Sequoia Project's new **Data Usability Taking Root** Initiative.

If you would like to get in touch you can reach us at:



takingroot@sequoiaproject.org

To join the Community of Practice Roundtables, please sign up as a **Supporter, Implementer or Sponsor here:**

<https://sequoiaproject.org/data-usability-taking-root-movement/>

Data Tagging / Searchability

Effective Use of Narrative for Usability

Reminders

Annual Meeting 2024

Embassy Suites Nashville | December 10-12, 2024

- An all-new construction that is the flagship for the brand
- Easy walk to Broadway



Data Usability Work Group

For more information:

www.sequoiaproject.org/interoperability-matters/data-usability-workgroup/



(571) 327-3640



Interopmatters@sequoiaproject.org

Convene



Collaborate



Interoperate



**Thank You for your support of
Interoperability Matters!**