Interoperability MATTERS

an initiative of The Sequoia Project

Data Usability Workgroup

February 1, 2024

the sequoia project

Agenda

- Welcome, Introductions, Membership, Agenda - Adam Davis, MD – 5 minutes
- Overview of Future Efforts for Version 2.0 of the Implementation Guide – Bill Gregg, MD – 5 min
- Data Usability Taking Root Community of Practice Update – Didi Davis – 5 minutes
- Data Provenance & Traceability of Changes work items – 30 minutes
- Save the Dates: HIMSS 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

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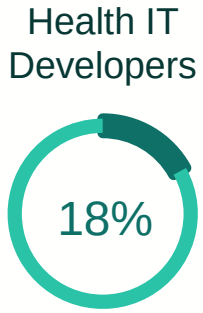
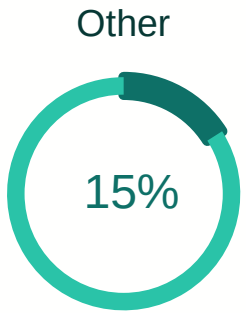
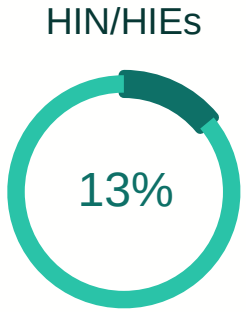
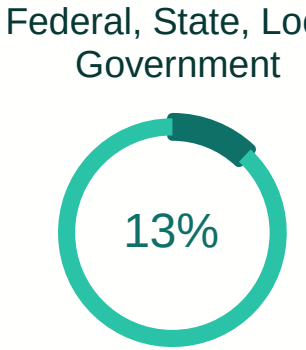
Workgroup Members

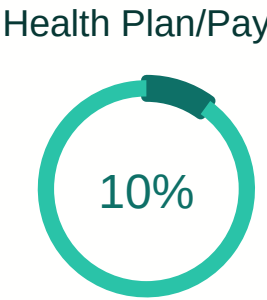
391 Organizations | **488 Participants**











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Sequoia Member's Shape Interoperability for the Public Good

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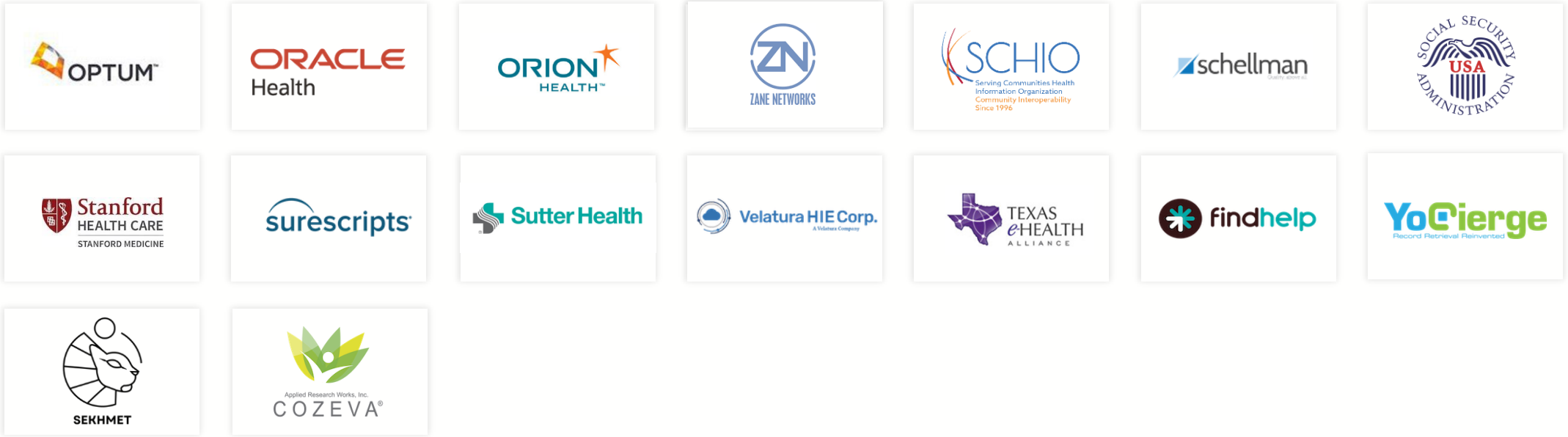

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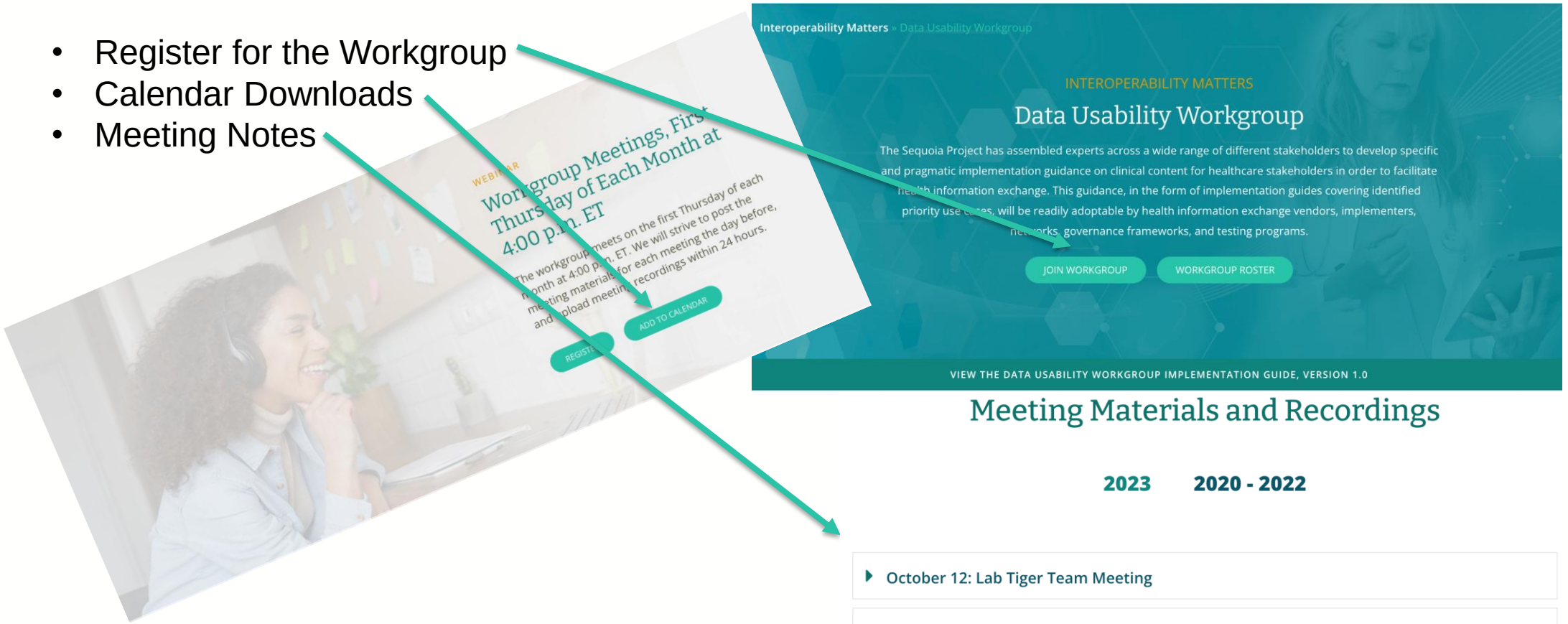
Website, Meeting and Workgroup Logistics

- Register for the Workgroup
- Calendar Downloads
- Meeting Notes



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

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Interoperability MATTERS
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Version 2.0 of the Implementation Guide

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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

2023-2024 Sequoia Data Usability WG - Proposed Work Items

File Edit View Insert Format Data Tools Extensions Help

Share

Menus 100% $ % 123 Defaul... 10

A3:A5 | Data Provenance & Traceability of Changes

	A	B	C	D	E	F	G	H	I	J	K	L
1	Topic Category	Description or link to page	Assigned	Use case: Provider to provider	Use case: Provider to Public Health Agency	Use case: Healthcare entity to consumer	General: End user usability	General: Data quality	Laboratory Related	Notes	Status	Action Items
2												
3		Guidance for Data Provenance		X	X	X	X	X		From this brainstorming page		@Steven Lane comment to scorecard for v1.0: Suggest that we consider in V2 a second tier of medium priority data classes for which to collect provenance, specifically Laboratory, Clinical Tests, Clinical Notes, and Vital Signs. Also, suggest that, in V2, we specify that the Author Person SHOULD be included when it is the individual/patient. @Katherine Lusk comment to scorecard for v1.0: Corrections to provenance should be available in audit trail for 5 years at a minimum. Disaster preparedness with back-up plan in 2 formats with provenance. Also under Public Health comments: Exploration of the future of involvement of public health with TEFCA evolution and moving organizations from direct HL7 connections, connecting thru QHINS (eCR becoming part of a QHIN) Corrections to provenance should be available in audit trail for 5 years at a minimum. Disaster preparedness with back-up plan in 2 formats with provenance included. @Lisa Nelson submitted comment to scorecard for v1.0: Suggest adding Healthcare Entity to Consumer Use case. DUWG can consider this if a more detailed sub-use case is developed for inclusion. Also, for the Consumer to Provider use case to support sharing of a patient's care experience preferences, treatment intervention preferences, and patient goals, author's need to support an author person (the patient his or her self). There will not be an author organization in this use case. It also may be important to clarify the importance of the "performer" role for data provenance, not just author. author person and performer are both essential in the Consumer to Provider use case.
4		Consequential Data Update		X	X	X	X	X				
5	Data Provenance & Traceability of Changes	US Realm Header - Legal Authenticator										

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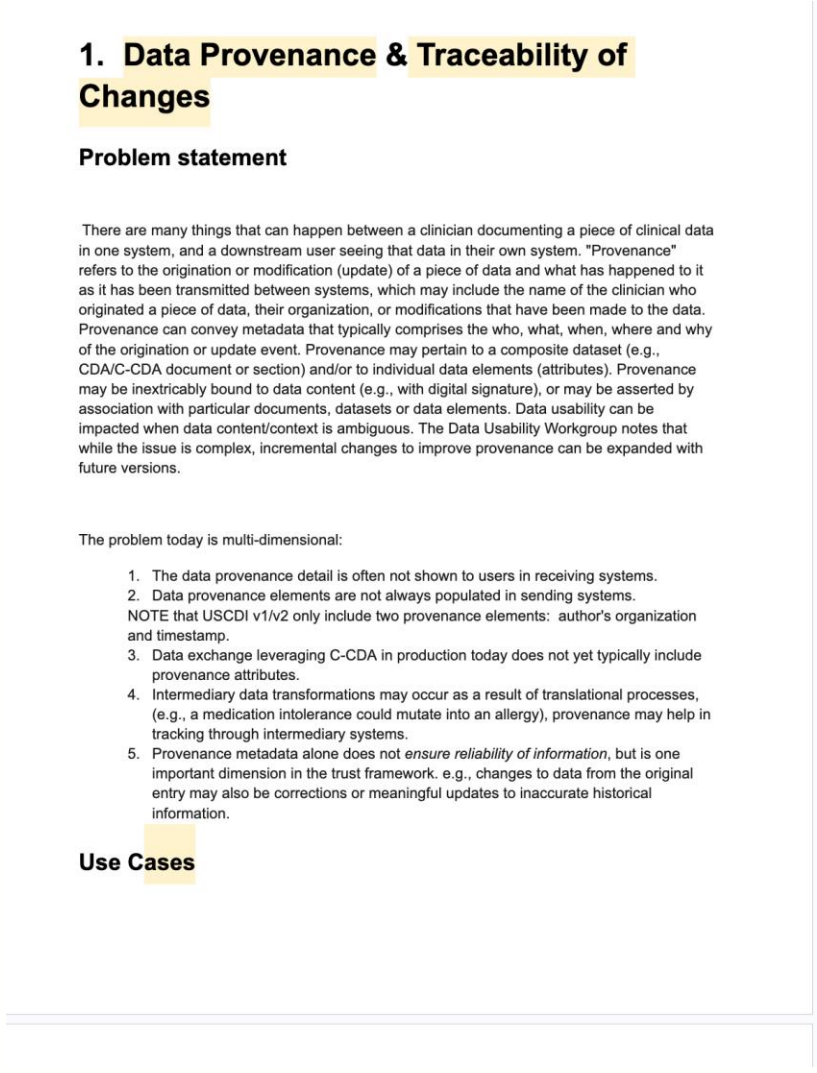
ALL Comments Incorporated into Working Draft IG V2.0



1. Data Provenance & Traceability of Changes

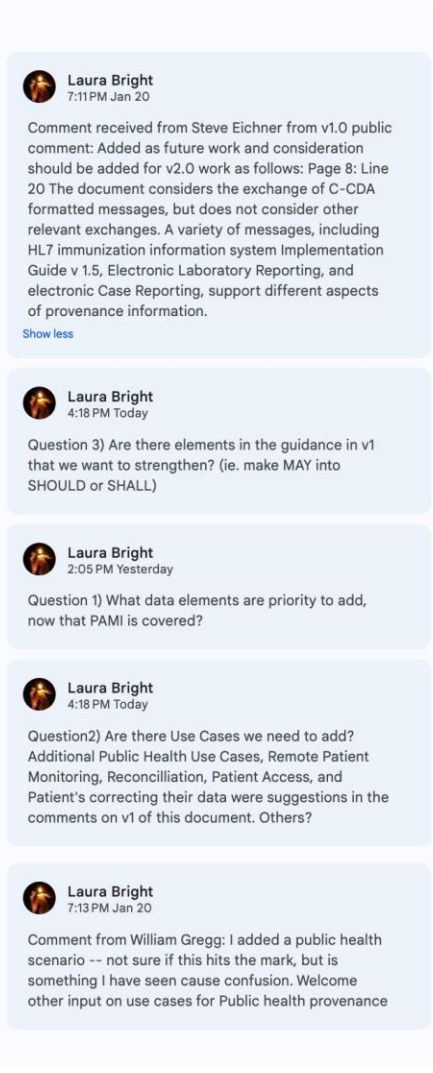
Problem statement

There are many things that can happen between a clinician documenting a piece of clinical data in one system, and a downstream user seeing that data in their own system. "Provenance" refers to the origination or modification (update) of a piece of data and what has happened to it as it has been transmitted between systems, which may include the name of the clinician who originated a piece of data, their organization, or modifications that have been made to the data. Provenance can convey metadata that typically comprises the who, what, when, where and why of the origination or update event. Provenance may pertain to a composite dataset (e.g., CDA/C-CDA document or section) and/or to individual data elements (attributes). Provenance may be inextricably bound to data content (e.g., with digital signature), or may be asserted by association with particular documents, datasets or data elements. Data usability can be impacted when data content/context is ambiguous. The Data Usability Workgroup notes that while the issue is complex, incremental changes to improve provenance can be expanded with future versions.

The problem today is multi-dimensional:

1. The data provenance detail is often not shown to users in receiving systems.
2. Data provenance elements are not always populated in sending systems.
NOTE that USCDI v1/v2 only include two provenance elements: author's organization and timestamp.
3. Data exchange leveraging C-CDA in production today does not yet typically include provenance attributes.
4. Intermediary data transformations may occur as a result of translational processes, (e.g., a medication intolerance could mutate into an allergy), provenance may help in tracking through intermediary systems.
5. Provenance metadata alone does not *ensure reliability of information*, but is one important dimension in the trust framework. e.g., changes to data from the original entry may also be corrections or meaningful updates to inaccurate historical information.

Use Cases



Laura Bright
7:11 PM Jan 20

Comment received from Steve Eichner from v1.0 public comment: Added as future work and consideration should be added for v2.0 work as follows: Page 8: Line 20 The document considers the exchange of C-CDA formatted messages, but does not consider other relevant exchanges. A variety of messages, including HL7 immunization information system Implementation Guide v 1.5, Electronic Laboratory Reporting, and electronic Case Reporting, support different aspects of provenance information.

Show less

Laura Bright
4:18 PM Today

Question 3) Are there elements in the guidance in v1 that we want to strengthen? (ie. make MAY into SHOULD or SHALL)

Laura Bright
2:05 PM Yesterday

Question 1) What data elements are priority to add, now that PAMI is covered?

Laura Bright
4:18 PM Today

Question2) Are there Use Cases we need to add? Additional Public Health Use Cases, Remote Patient Monitoring, Reconcilliation, Patient Access, and Patient's correcting their data were suggestions in the comments on v1 of this document. Others?

Laura Bright
7:13 PM Jan 20

Comment from William Gregg: I added a public health scenario -- not sure if this hits the mark, but is something I have seen cause confusion. Welcome other input on use cases for Public health provenance

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

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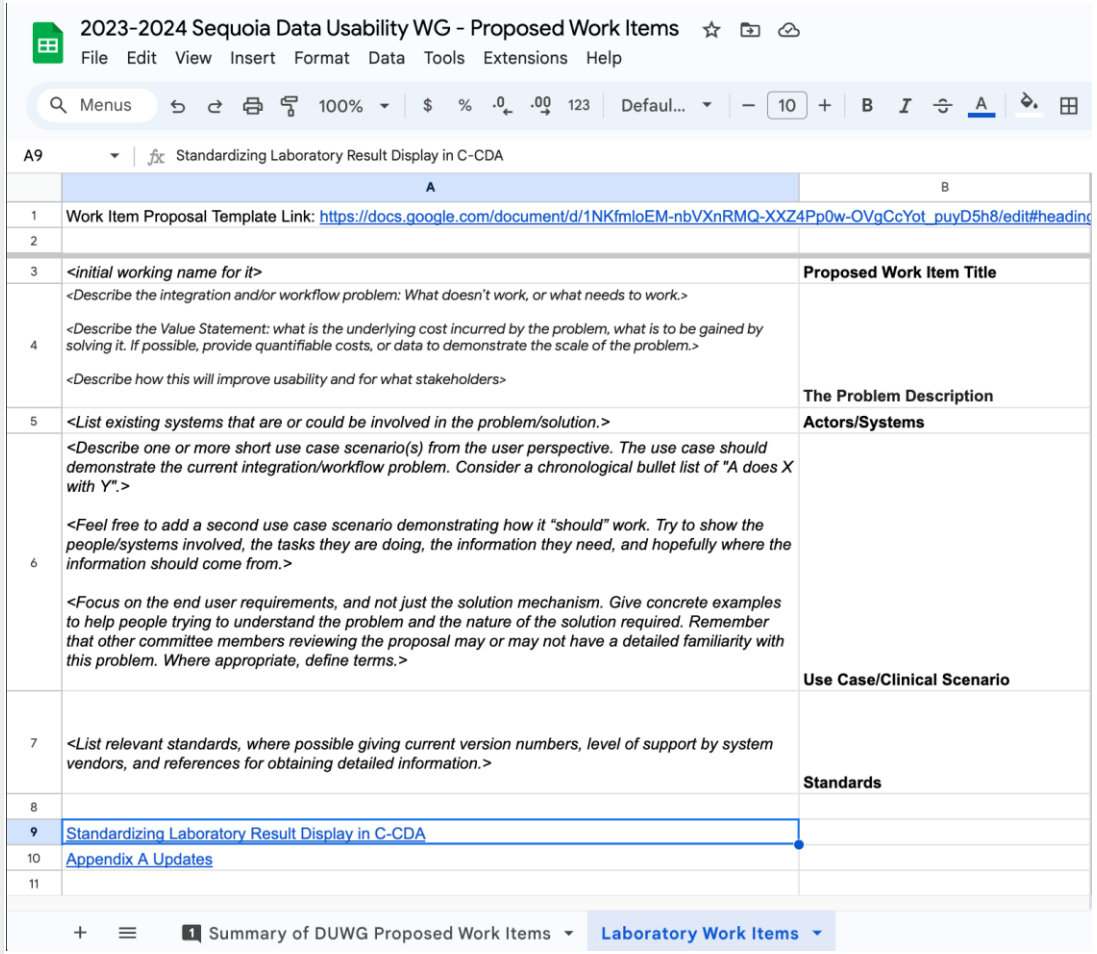
Laboratory Tiger Team – January 11, 2024



2023-2024 Sequoia Data Usability WG - Proposed Work Items

File Edit View Insert Format Data Tools Extensions Help

A9 | Standardizing Laboratory Result Display in C-CDA

	A	B
1	Work Item Proposal Template Link: https://docs.google.com/document/d/1NKfmloEM-nbVXnRMQ-XXZ4Pp0w-OVgCcYot_puyD5h8/edit#heading	
2		
3	*<initial working name for it>*	**Proposed Work Item Title**
4	*<Describe the integration and/or workflow problem: What doesn't work, or what needs to work.>* *<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.>*	**Actors/Systems**
6	*<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".>* *<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
- **Priority Labs Spreadsheet**
- Tiger Team will meet monthly
  - Next meeting February 8, 2024

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Tiger Team Roster
48 members
39 organizations

First Name	Last Name	Company
Maria	Moen	ADVault, Inc.
Mary-Sara	Jones	Amazon
Jenna	Rychert	ARUP Laboratories
Riki	Merrick	Association of Public Health Laboratories
Reddy C	Haraneesh	AthenaHealth, Inc.
Manish	Naik	Austin Regional Clinic
Muktha	Natrajan	CDC
Hung	Luu	Children's Health System of Texas
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
Robert	Oakley	Evernorth - Office of Interoperability
Nathan	Davis	Graphite Health
Stanley	Huff	Graphite Health
Hilary	Greer	HCA
Steven	Lane	Health Gorilla Inc.
Hazel	Chappell	Ishca health
Teresa	Saxon	JP Systems
CJ	Amurao	JP Systems
Sulayman	Aziz	jpsys

First Name	Last Name	Company
Aaron	Green	Labgnostic, Inc.
Deb	Loniewski	MDHHS
Holly	Miller	MedAllies, Inc.
Desiree	Mustaquim	National Center for Injury Prevention and Control
Amy	Weinland	Nationwide Children's Hospital
Sara	Haddon	New York eHealth Collaborative
Andrea	Pitkus, PhD, MLS(ASCP)CM	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
Thomas	Bronken	Trinity Health
Elizabeth	McElhiney	Verisma
Sandra	Mitchell	VHIE, contractor JP Systems
Aaron	Berdofe	Zus Health

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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

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Community of Practice **Update**

January 24, 2024

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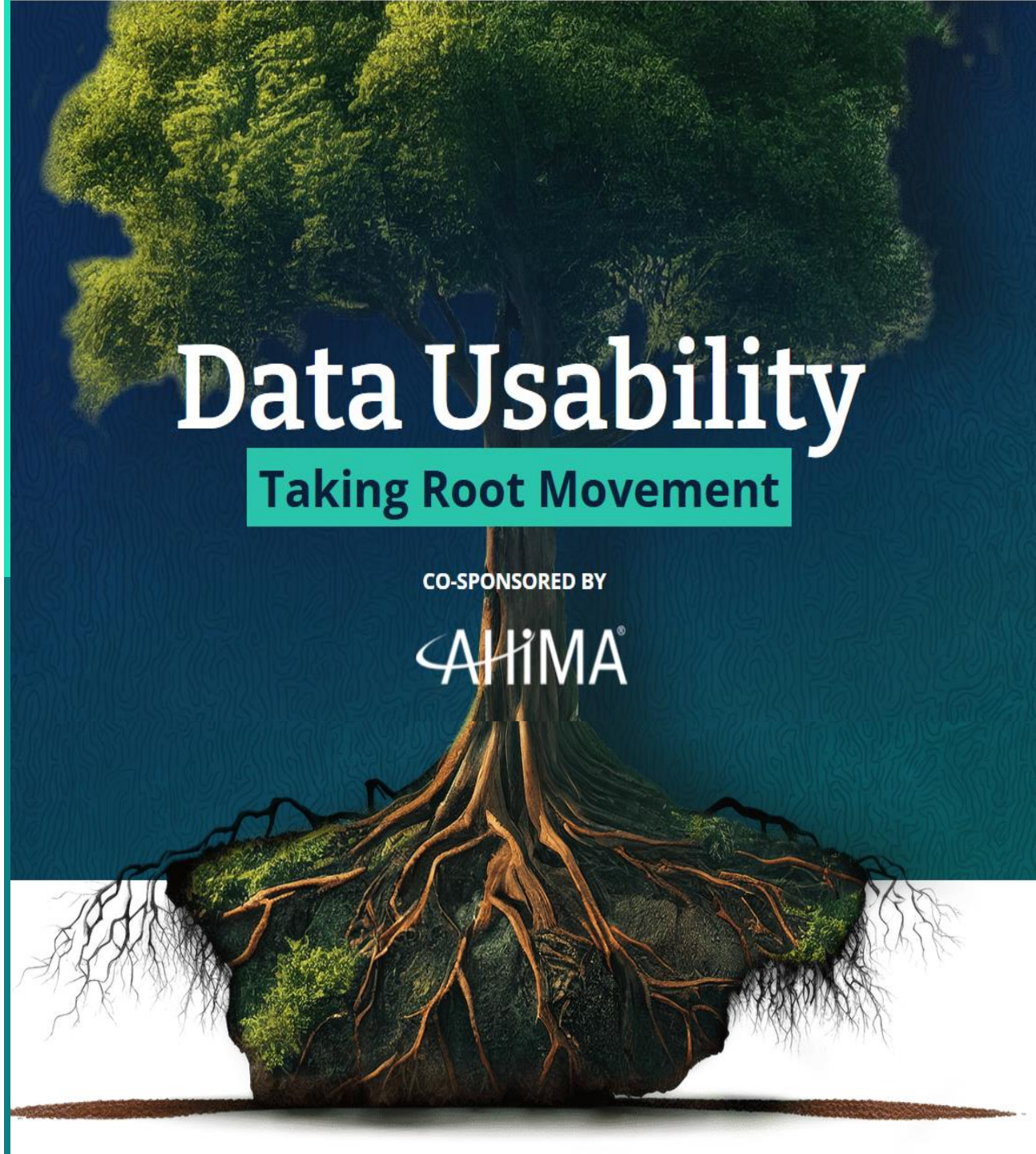


What is the difference between the **Data Usability Taking Root Movement** and the **Data Usability Workgroup**?

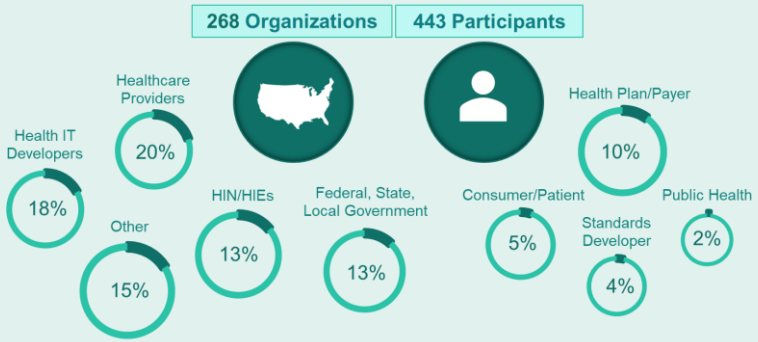
Data Usability
Workgroup
Develops Guidance

Deployment **Guidance**

Development **Feedback**

Taking Root
Movement
Implements Guidance

An initiative co-sponsored by AHIMA



Community of Practice

- Roundtables
- Technical Assistance
- Testing Platform
- In-person Convenings

Participation Levels

IMPLEMENTER

SUPPORTER

SPONSOR

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The Data Usability Taking Root **Movement** – January 2024

11

Azuba
Bwell
Celeste
Clinical Architecture
Delaware Health Information Network
Epic
Health Gorilla
National Institutes of Health, National Institute of Diabetes & Digestive & Kidney Diseases
New York eHealth Collaborative
Opala
Santa Cruz Health Information Exchange

40

ADVaultinc
American Medical Association
Austin Regional Clinic
Banner
Brevard Health Alliance
Civitas
Claim Clarity
DirectTrust
eHealth Exchange
Elevance Health
First Genesis, Inc.
Foothold Technology
Hawaii Pacific Health
HCA Healthcare
Health Services of North Texas (HSNT)
HealthElence
Johnson and Johnson
Kaiser Permanente
Kno 2
Meditech
MTC Group LLC

Netsmart
NextGen Healthcare
Optum
Particle Health Inc.
Patientory
PeaceHealth
Premiere Pointe Podiatry
Social Security Administration
Surescripts
Texas A&M
Texas Department of State Health Servic
Texas Health Services Authority
Texas State University
The Picture of Health
The University of Texas Health Science C
University of Washington
Verinovum
Veterns Health Information Exchange
Wolters Kluwer Health, Health Language
Zus Health

3

AHIMA

MedAllies

smile DIGITAL HEALTH

OTHER ROUNDTABLE PARTICIPANTS

8

Carequality
HIMSS EHRA Association
IHIE
OCHIN
Oracle
Stanford Health
Sutter Health
Veterans Administration

An initiative co-sponsored by AHIMA

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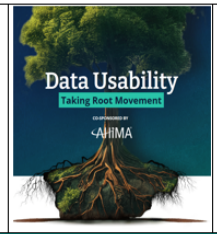
Status

- Ready for use
- Will be distributed to implementers upon signing pledge in March
- Quarterly reporting process
- Anonymized and aggregated reporting

Congratulations on committing to improve the usability of health data!



Your willingness to implement the DUIGV1.0 will set an example for others to follow. We appreciate and support your leadership and innovation.

Data Usability Implementation Guide Version 1.0 : Taking Root Implementation Scorecard

FAQs

How do I complete the Scorecard?	This worksheet contains tabs representing the 6 areas of the IGV1.0 available for implementation. Open up the tabs for the areas you've pledged to implement in your organization and fill in the required information. Save the worksheet using the following file naming convention: TAKING-ROOT-SCORECARD_yourorgname_date
Who do I contact with questions?	ddavis@sequoiaproject.org
How do I submit the completed scorecard?	via email to ddavis@sequoiaproject.org
When do I submit the completed scorecard?	Scorecards are due on a quarterly basis: July 31st, Oct 31st, Jan 31st, and April 30th
How will the information be used?	Scorecard data will be anonymized and aggregated. Only aggregated data will be shared with the Taking Root Community of Practice Roundtable.
Where can I find the IG V1.0?	https://sequoiaproject.org/wp-content/uploads/2023/08/2022-12-14-Sequoia-DUWG-IG-Version-1-1.pdf

Instructions | Data Provenance & Traceability | Effective Use of Codes | Reducing imp

An initiative co-sponsored by AHIMA

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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/

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Data Provenance & Traceability of Changes

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Reminders

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HIMSS 2024

- **Interoperability & HIE Forum**
  - Monday, March 11 • 8:00 AM - 4:30 PM Eastern Time
  - USCDI Data Usability & Certification: A Dual Perspective
  - Monday, March 11, 2024 - 11:15 AM - Location: W304A

- **Building a Framework for Better Data Quality**
  - Tuesday, March 12 • 2:45 PM - 3:05 PM EST –
  - Location: Interoperability Showcase - Spotlight Theater | Hall B | Booth 3760

- **An Office of the National Coordinator for Health IT—Common Agreement Update from the Recognized Coordinating Entity**
  - Tuesday, March 12 • 4:15 PM - 5:15 PM EST- Location: Hall F (WF4)

- **TEFCA/FHIR Roadmap & CA Version 2.0**
  - Thursday, March 14 • 10:00 AM - 11:00 AM EST- Location: Hall F (WF4)

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Data Usability Work Group

For more information:
www.sequoiaproject.org/interoperability-matters/data-usability-workgroup/

(571) 327-3640

Interopmatters@sequoiaproject.org

Convene

Collaborate

Interoperate

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