Interoperability MATTERS

an initiative of The Sequoia Project

Data Usability Workgroup

July 6, 2023

the sequoia project

Agenda

- Welcome, Introductions, Membership, Agenda - Adam Davis, MD – 5 minutes
- Workgroup Priorities & 2023 – 2024 Timeline – Bill Gregg, MD – 5 minutes
- Data Usability Taking Root – Didi Davis – 10 minutes
- VHIE Clinical Data Quality Team Proposed FHIR Use Cases – 30 minutes
- Overview of Prioritized Future Efforts – 10 minutes
- Save the Date: Sequoia Annual Member Meeting
- 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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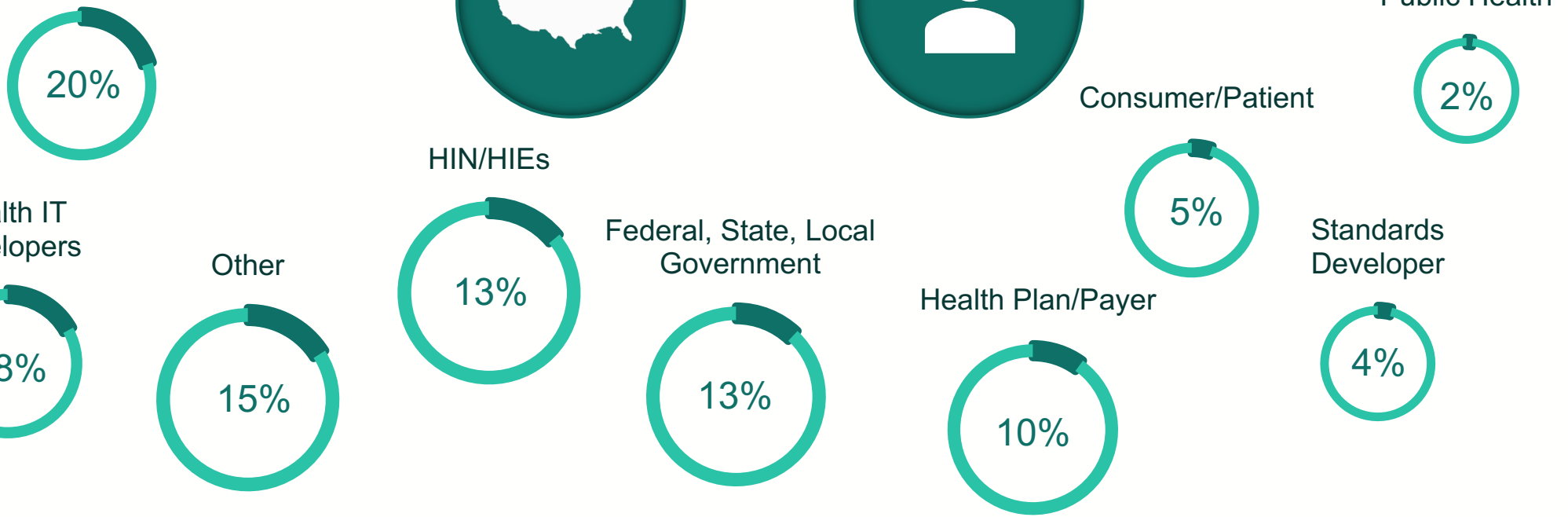
Workgroup Members

268 Organizations | **443 Participants**



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Sequoia Member's Shape Interoperability for the Public Good

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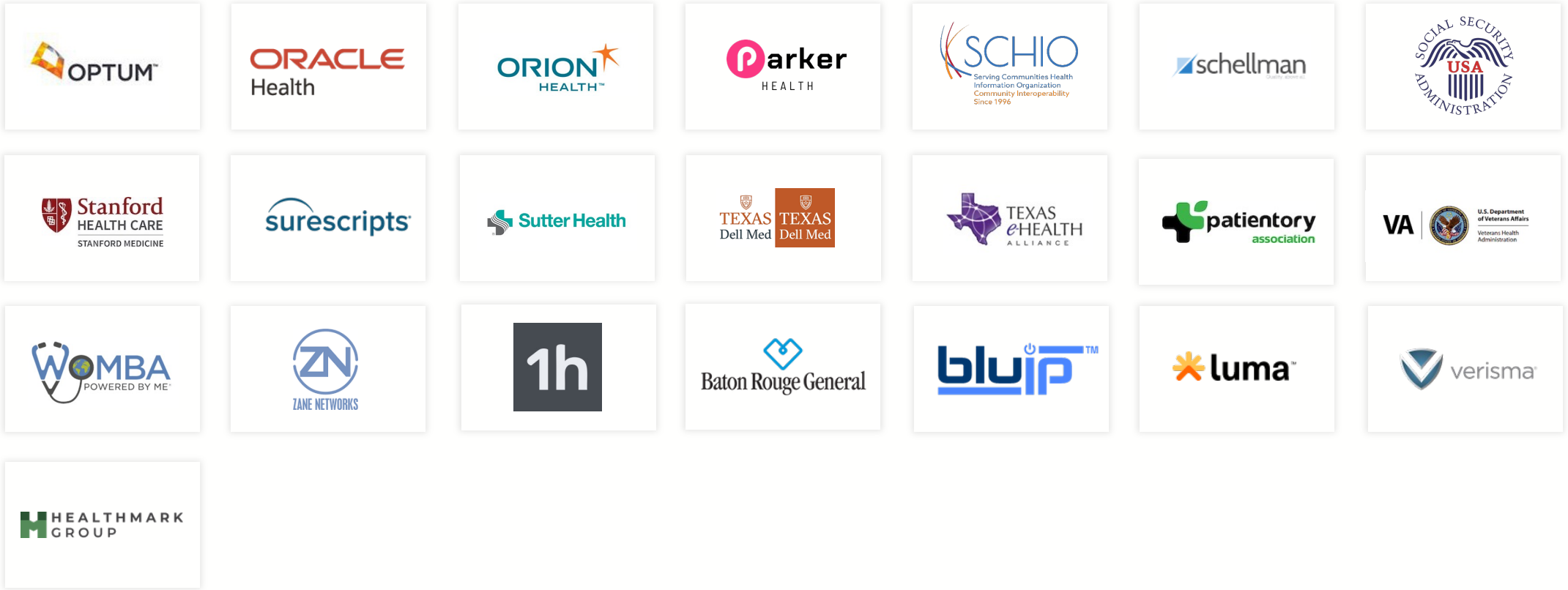

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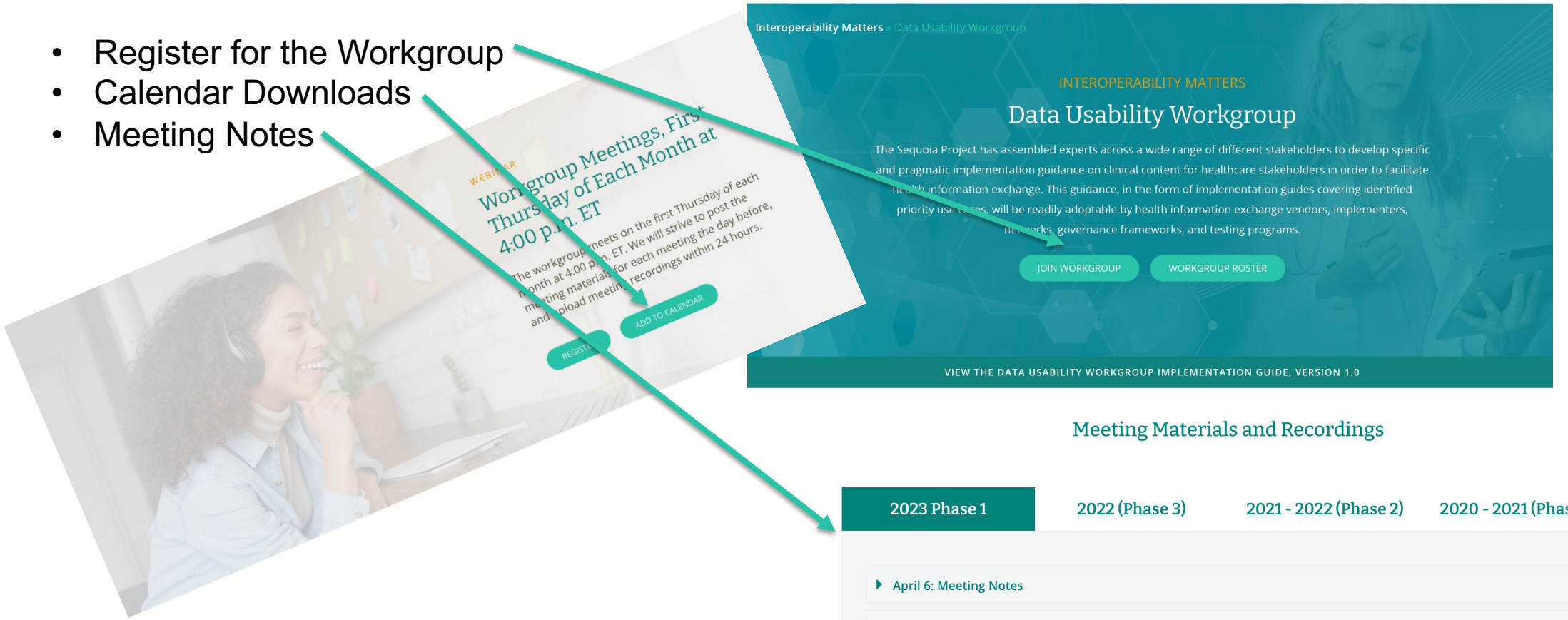
Website, Meeting and Workgroup Logistics

- 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 Data Usability Workgroup 2023 – 2024 Timeline

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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 Drafts
    - July 2023 – June 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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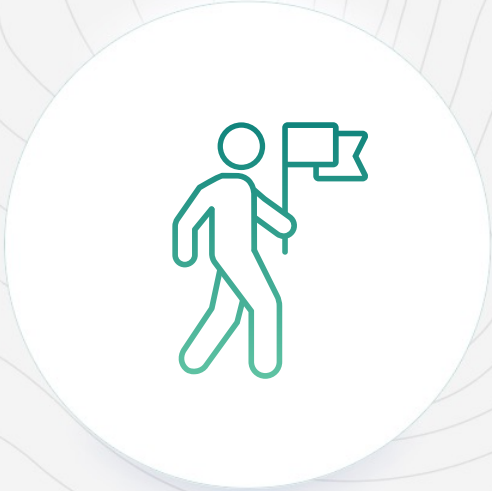
Your priorities drive our process

We set our course based on our members' challenges, barriers, gaps, and opportunities.



Identify

Prioritize

Solve

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Data Usability Taking Root Initiative Update

It’s time for this guidance to **take root**.

An initiative co-sponsored by AHIMA

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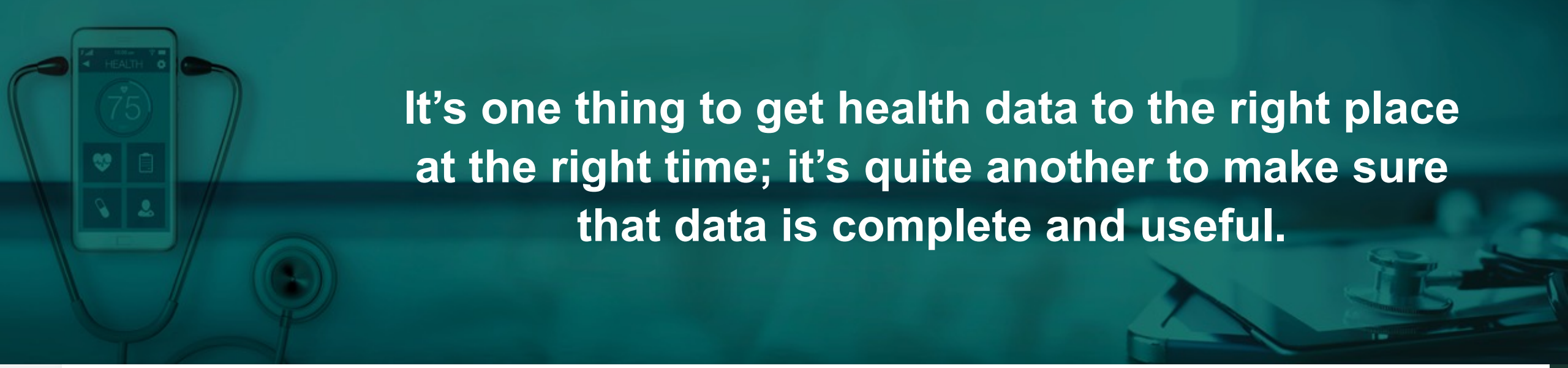

It's one thing to get health data to the right place at the right time; it's quite another to make sure that data is complete and useful.

cross-industry Guidance for Data Usability

3 years in the making

2 years of public input

266 engaged organizations

378 subject matter experts

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Why Join Our Data Usability Initiative?

Because…

- More complete data improves outcomes.
- Better data leads to better and timely decisions.
- Usable data are more actionable
- Reduces clinician burden.
- Guidance promotes consistency across technologies.
- Practical, incremental improvements simplify implementation.
- Addresses a common challenge across all actors.
- It's the right thing to do.

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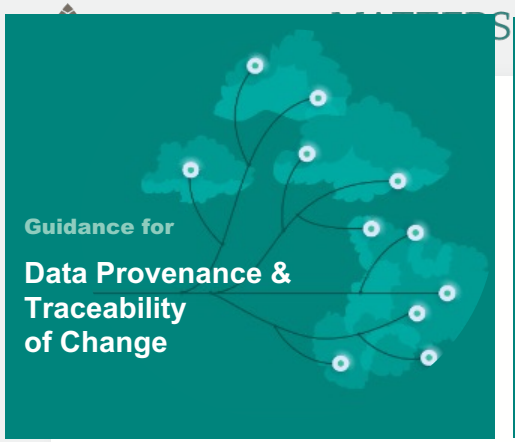

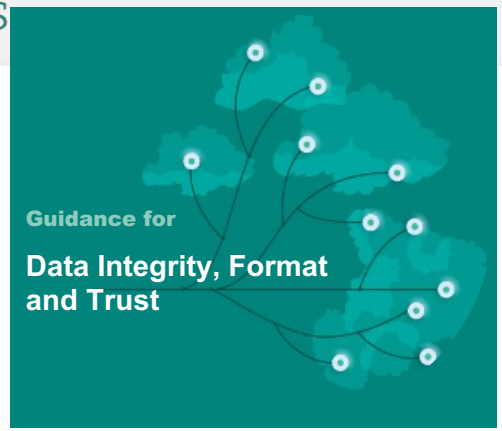

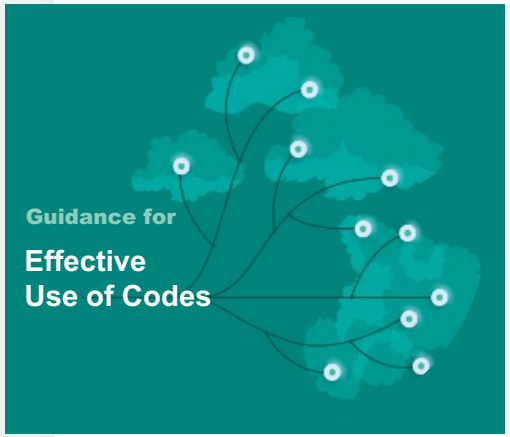

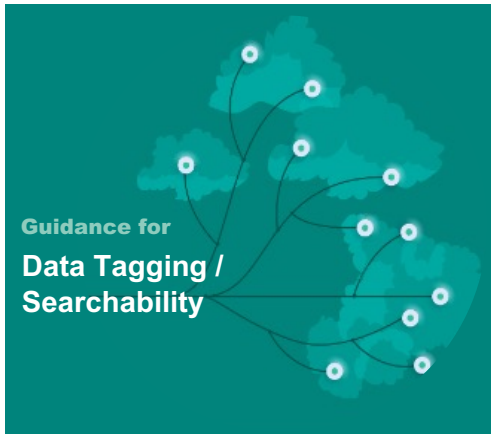

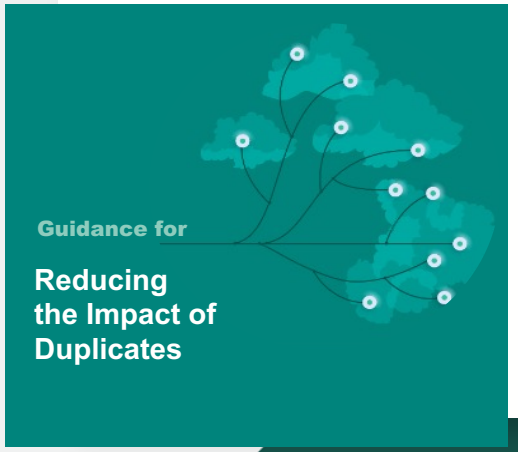

Pragmatic Guidance

V1.0 Implementation guidance on clinical content for information exchange

- provider-to-provider
- provider-to-public health
- healthcare entity-to-consumer

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Putting Guidance Into Practice

- **Identify where to start**
  - Which V1.0 sections are priorities?
  - Which can be done quickly?
  - What is the timeframe?
- **Track progress**
  - Potential self-reported score card promotes transparency and healthy competition
  - # elements supported
  - % of customers supporting
- **Incremental approach**
  - Enables rollout in conjunction with other IT projects
  - Elevates data usability for all IT projects - UAP
- **Other Considerations**
  - Leverage for governmental programs (e.g., EHR certification, USCDI, TEFCA, etc)
  - Address as part of Data Usability Round Table

Participants choose their own implementation pathway and pace…

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Implementation Enablers

Technical Assistance

+

Community of Practice

+

Testing Platform Services

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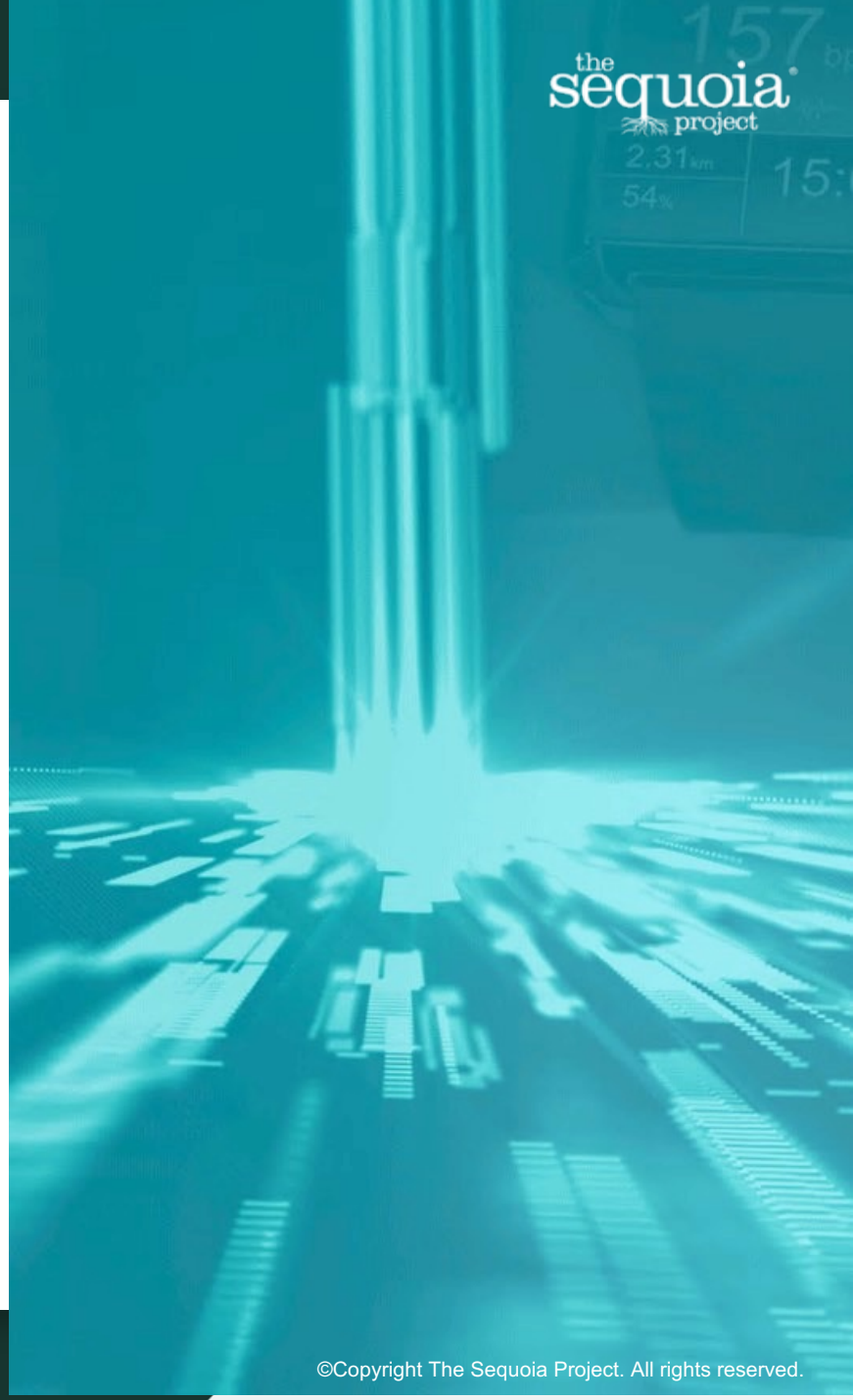
What makes this distinctive

Data Usability Guidance leverages existing standards to address pain points from end users on the frontline.

- The universal benefit of this work cannot be achieved in isolation.
- This work empowers diverse actors to affect change.
- The industry is entwined in interdependencies.
- When there is strength in numbers, momentum will accelerate.
- Collective action will solve a shared pain point.
- Those that adopt early will have first mover advantage.
- Practical focus can inform future versions of USCDI.
- Model of continuous improvement of data quality.



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Data Usability Taking Root

Supporter

Pledges to support the data usability movement as a member of the Sequoia interoperability community and the data usability community of practice. Opportunity to participate in the Data Usability Workgroup to aid in the development V2.0 of the Data Usability Guide. Grants right to Sequoia to include logo in its Taking Root member directory. Participates in Data Usability Round Table to plan the Summit.

Implementer

Pledges to adopt & implement V1.0 data usability guidance across one or more topics within a defined timeline. Commits their IT organization to consider implementation of guidance in a usability-in-all-projects (UAP) approach. Participates in the data usability community of practice, the Data Usability Workgroup to aid in the development V2.0 of the Data Usability Guide with representation on the Data Usability Taking Root Steering Committee of Implementers. Encourages others to join the movement. Grants right to Sequoia to include logo in its Taking Root member directory.

Sponsor

Pledges to co-sponsor the Data Usability Taking Root movement. Invests in the development of materials, toolkits, convenings, and outreach to launch and grow the movement on a national scale. Socializes and evangelizes the purpose and power of this work. Co-hosts Data Usability Summit and participates in Steering Committee.

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Roadmap

2023

- Early Supporters for V1
- Round Table
- Taking Root Summit

2024

- Expand participation; develop V2 to include FHIR
- Community of Practice
- Technical Assistance
- Implementation begins
- Movement grows

2025

- Community of Practice expands
- Technical Assistance expands
- Conformance Testing
- Movement grows

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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

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Veterans Health Information Exchange (VHIE)

Clinical Data Quality Team

FHIR Use Cases

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Traceability of Message Versions

- **Scenario 1** – Both the author and the Care Team contact information are critical for the receiving clinician to reach back with any questions.

- **Scenario 2** – FHIR data exchanges shall have the ability to identify an update to the original message (e.g., HL7 v2.5 Update Patient Information). The value becomes more important as automatic ingestion of external messages is implemented (i.e., source identifies data entered on wrong patient, and is aware the data was exchanged, then an update can be triggered).

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Effective Use of Codes

Scenario

- Code and the specificity/granularity must be standardized within the exchange process. The source and the receiver may maintain data at different specificity levels and need to eliminate the confusion. An example is laterality within the code yet across health care organizations, there are diverse configuration strategies.

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Data Integrity, Format and Trust

Scenario

- FHIR specifications can be more specific and require more data elements in each domain. Usability by each organizations downstream systems is critical to success. An example is that de-duplification of a specific domain is dependent on the vendor architecture, FHIR message configuration, health care organization definition of what makes a single record unique.

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Data Tagging/Searchability

Scenario

- In order to close the loop on referral orders sent to external organizations, the inclusion of the original order unique ID can Close the Loop if included in the both the original order and the response message / encounter that includes the result/report.

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Effective Use of Narrative for Usability

Scenario

- All text messages exchanged in different FHIR resources need to be organized in a way that supports connecting specific data elements within specific structured parts of the message and the unstructured parts of the message (e.g., Clinical Note). The Care Team EHR display of the exchanged data will be enhanced and more complete because often the structured and unstructured are populated differently.

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Reducing the Impact of Duplicates

Scenario

- FHIR documents and the resources can be provided multiple times based on the configuration and workflow at different health care organizations. A national discussion on what makes a message/ resource/record unique needs to be opened. This is an issue at the message and the resource / record level.

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Overview of Future Efforts for Version 2.0 of the Implementation Guide

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Prior Work Efforts Topic Categories Used for Prioritization

2020 – 2022 Sequoia Data Usability Workgroup – Proposed Work Items

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Data Provenance & Traceability of Changes Future Efforts

- JDCWG C-CDA Whitepaper
  - 1.5.1.1. As Appendix A highlights, this workgroup whitepaper deliverables **will build upon the reference to USCDI** (most current version) in this original guide to document testable guidance for future implementers.
- Guidance for Data Provenance
  - **Additional data elements and staged requirements over time**
  - Guidance beyond **HL7 C-CDA to include HL7 FHIR to align with HL7 mapping**
- Consequential Data Update
  - **Likely build and add data provenance elements** to better communicate the appropriate provenance attributes to support the Who, What, When, Where, How and Why.
  - US Realm Header - Legal Authenticator Guidance
- Create guidance on **provenance for various use cases**
  - **Healthcare Entity to Consumer / Patient Access and/or remote patient monitoring sensors/devices**

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Effective Use of Codes
Future Efforts

- Prioritized list of laboratory results to be shared
  - **Expand guidance for Laboratory Test Lifecycle**: JDCWG C-CDA Whitepaper section 2.5.1
  - **Interoperable Laboratory Results:** JDCWG C-CDA Whitepaper section 2.5.2
  - Consider transmission of **results from a Laboratory to a Public Health Agency**
  - **Investigate the differences among vendors for consumption and display of translational fields**
  - Guidance for the translation of lab result codes and nomenclature
- Guidance for codes in discrete data elements
- Guidance will **go beyond content exchanged for HL7 C-CDA to include HL7 v2.x and HL7 FHIR**
- Create guidance for various use cases: **Descriptions/codes for document/data types to filter** (i.e., Radiology Reports from Lab Data to allow indexing or filtering by date)
- **Investigate consumption and display of translation fields across vendors**
- Consider guidance on **chart correction workflows** and how to propagate data edited during chart corrections downstream

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Reducing the Impact of Duplicates Future Efforts

- Expand **guidance beyond Allergies, Immunizations & Problem Lists**
- List Reconciliation
  - Consider **best practice guidance for receiving systems to optimize speed reconciliation of lists**, including deduplications strategies and auto-reconciliation thresholds
  - **Expand Healthcare Entity to Consumer use case** from Documents/data imported into a system or Portal.
- Problem Oriented Health Record functional requirements are in the process of being balloted by HL7. Future versions of this implementation guide will **consider referencing guidance** once published

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Data Integrity, Format and Trust Future Efforts

- Data Accountability/Binding Content and Authorship
  - **Consider how to ensure content and authorship binding is intact and verifiable** when data is exchanged
- Data Integration or Data Insulation
  - **Consider best practices for how receivers import and incorporate external data into a clinical workflow** to avoid having a provider navigate among multiple user interfaces
  - **Consider guidance for remote patient monitory sensors/devices as sources of data**
  - **Consider guidance** from AHIMA's Recommended Data Elements for Capture in the Master Patient Index (MPI)
- Data Transformation from Source
- **Temporal Parameters** - Consider additional temporal parameters to improve C-CDA
- **Consider referencing 360X Project – Closed Loop Referral IG temporal Parameters**
  - Consider additional temporal parameters to improve C-CDA
- **Consider derived work from HL7 EHR Reducing Clinician Burden Project** referenced in Proposed Data Usability Characteristics and Data Definition Consistency
- Consider how to improve **data granularity in a groupable hierarchy**

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Data Tagging / Searchability

- Data in Context – e.g., BP – Physical location, patient positioning, method, performer, author, etc. geared to FHIR exchange
- Guidance for longitudinal view – For a resilient receiver, providing robust search and filtering capabilities helps the end user to quickly find relevant
- **Receiving system filtering and search** within Received Documents
- Industry and government has an interest in an interchange system that will allow advanced algorithms to parse, search and distribute data sets and digital documents
- **Consideration for Orders and results for diagnostic Imaging**

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Effective Use of Narrative for Usability

- **Continue to help define and encourage the use of standard narrative inclusions in various exchange use cases**. Currently, there is little standardization in what is actually shared and further developing rational guidance may help consistency in the industry

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SAVE THE DATE:
Sequoia Annual Member Meeting

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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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