



## Data Usability Workgroup

October 3, 2024

# Agenda

- Welcome, Introductions, Membership, Agenda - Adam Davis, MD – 5 minutes
- Public Comment Phase Summary – Bill Gregg, MD – 15 min
- Data Usability Taking Root Community of Practice Update – Didi Davis – 5 minutes
- Reminders – 5 minutes
  - AHIMA Annual Meeting – October 28, 2024
  - Timeline for Phase 4 – Final Publication and Save the Date: The Sequoia Project Annual 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

# Workgroup Members

392 Organizations

490 Participants



Healthcare Providers



Public Health



Consumer/Patient



Standards Developer



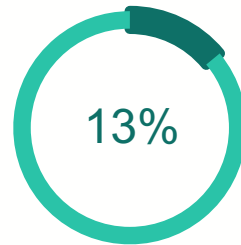
Health Plan/Payer



Federal, State, Local Government



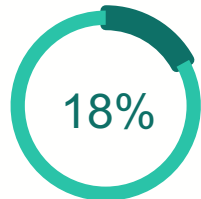
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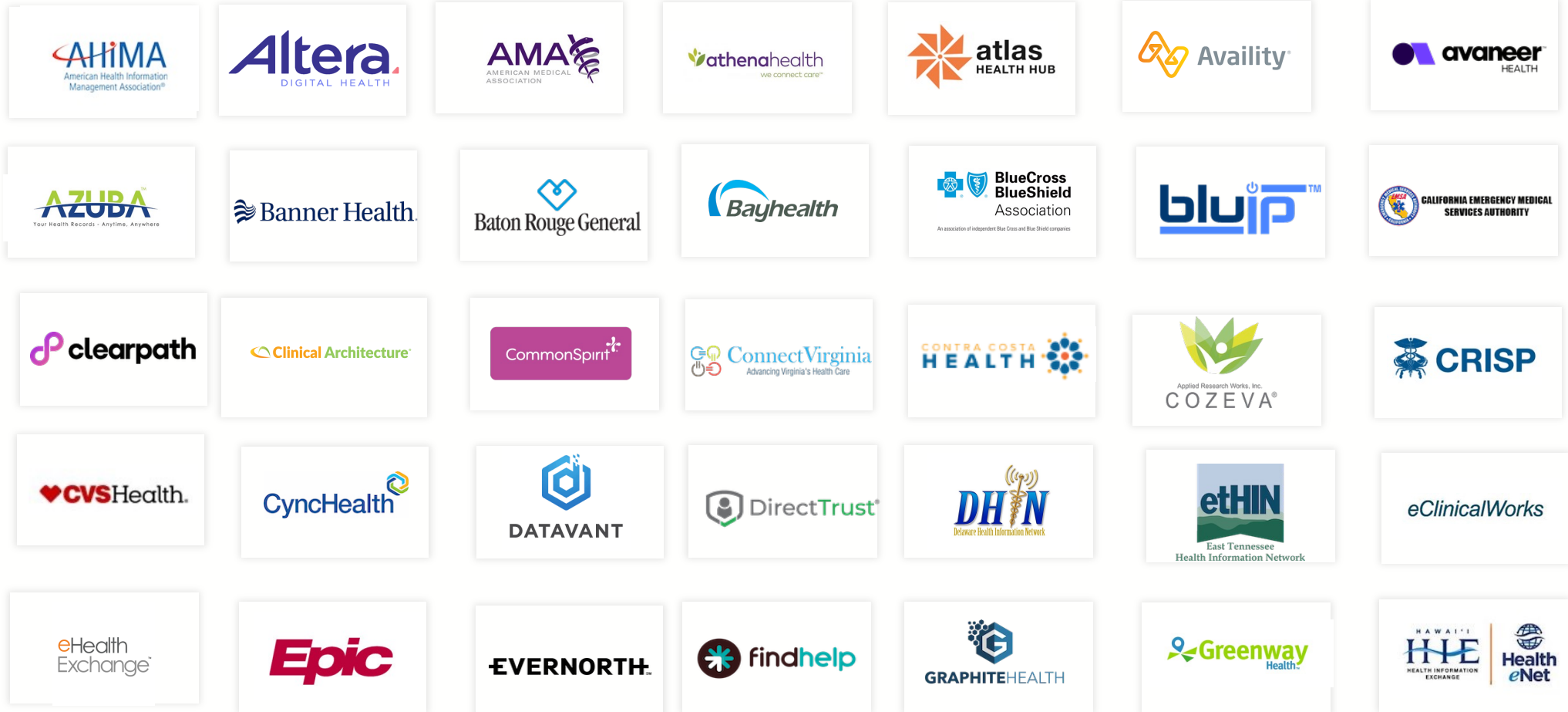
Other



Health IT Developers



# Sequoia Members Shape Interoperability for the Public Good



# Sequoia Members Shape Interoperability for the Public Good

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**Intermountain**  
Healthcare

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# Sequoia Members Shape Interoperability for the Public Good

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A Verisma Company

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of Veterans Affairs  
Veterans Health  
Administration

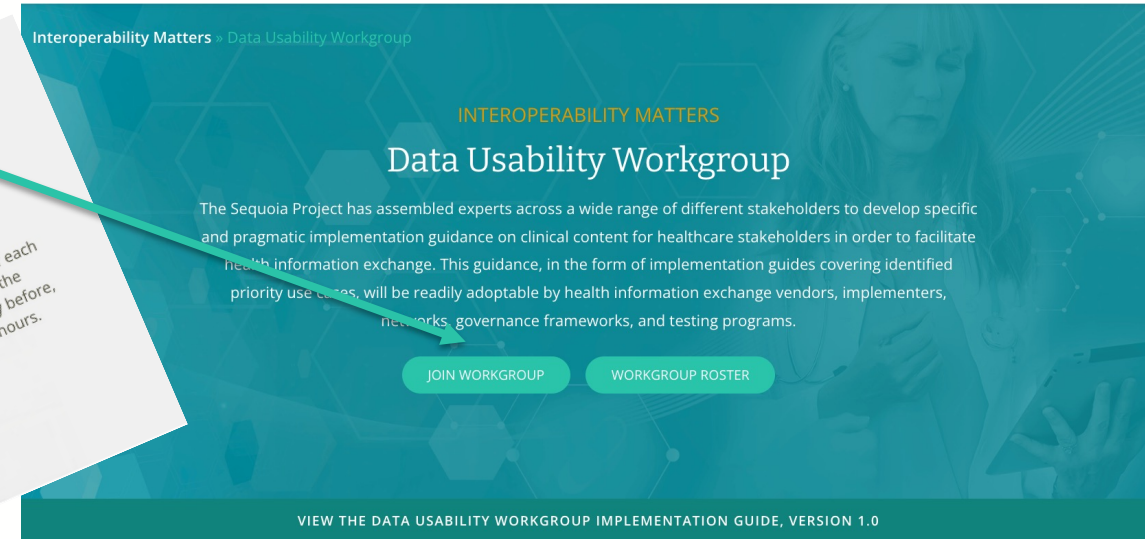
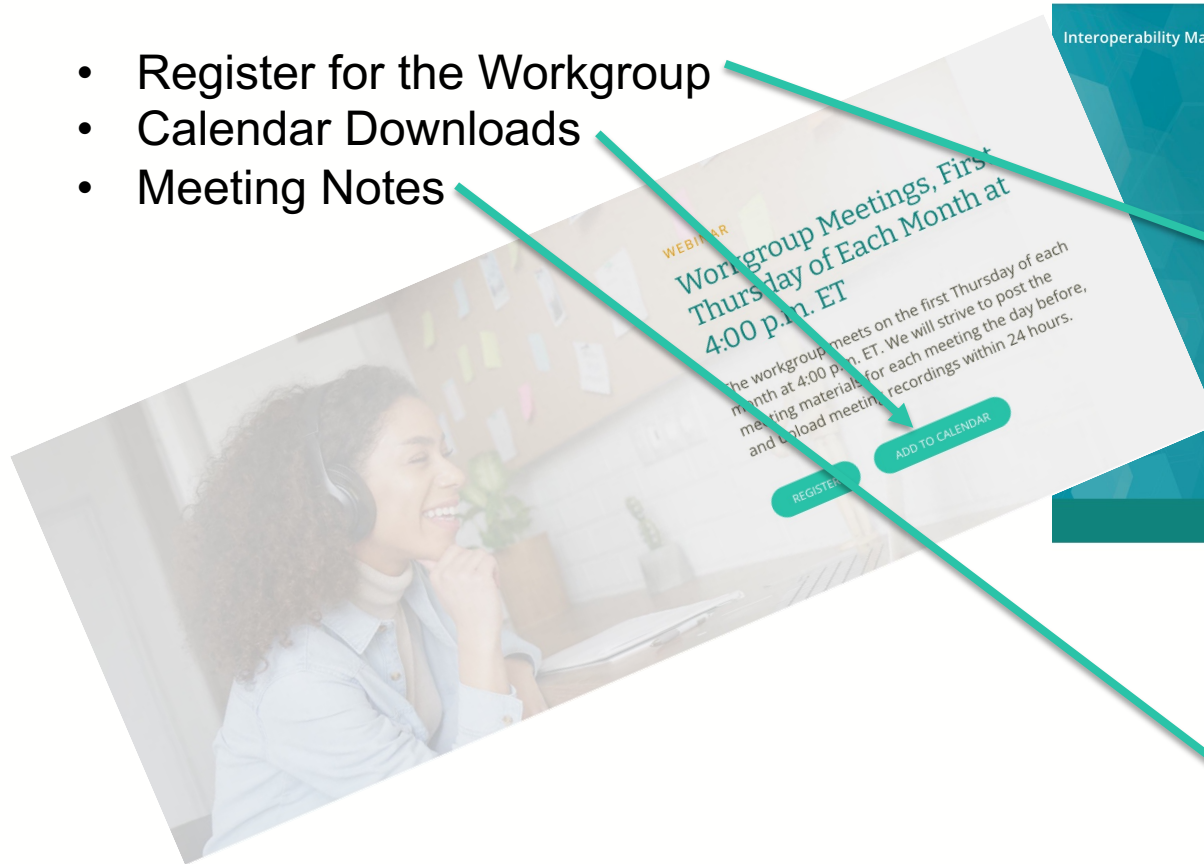
**YoCierge**  
Record Retrieval Reinvented

  
**ZANE NETWORKS**

 **ZUS**

# 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](mailto:Interopmatters@sequoiaproject.org)



# Meeting Logistics and Timeline

- 2023 – 2024 Planned Schedule
  - Kickoff Call: February 2, 2023
    - Ongoing calls: 1<sup>ST</sup> 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 – This meeting ends Phase 2
  - Phase 3: Public Comment Period/Recommended Next Steps
    - July 23, 2024 – August 23, 2024
  - Phase 4: Finalizing Implementation Guide and Call to Action
    - August 26, 2024 – December 11, 2024



# Public Comment Summary and Phase 4 Next Steps

## DUWG Implementation Guide Version 2.0

The implementation guide covers the identified priority use cases that can be readily adopted within health information exchange vendors, implementers, networks, governance frameworks, and testing programs with **18 months**. Some key changes in this public comment version included:

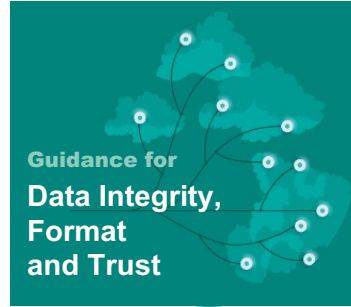
- Added guidance for receiving systems in addition to sending systems
- Advancing the baseline requirements from USCDI V1 (Problem, Allergy, Medications, Immunizations ONLY) to all data classes within USCDI V3
- Expanded guidance to be technology agnostic with added requirements for HL7® FHIR®, HL7 v2.x and HL7 C-CDA across the topic categories
- Added an additional topic category for laboratory

# Table of Contents

- Executive Summary & Phases Timeline
  - Phase 1 - Administration & Prioritization
  - Phase 2 - IG Development
  - Phase 3 - IG Public Comment
  - Phase 4 - IG Publication
- Statement of Intent
- Sections/Chapters
  - Seven Topic Categories
  - Guidance with SHALL, SHOULD, MAY
- References
- Appendix A – High Priority Lab Results
- Appendix B – A Priority list of documents for information sharing



Guidance for  
Data Provenance  
& Traceability  
of Change




Guidance for  
Data Integrity,  
Format  
and Trust



Guidance for  
Effective  
Use of Codes




Guidance for  
Data Tagging /  
Searchability



Guidance for  
Laboratory  
Interoperability



Guidance for  
Reducing  
the Impact of  
Duplicates



Guidance for  
Effective Use  
of Narrative  
for Usability

## Public Comment Summary and Phase 4 Next Steps

- Public Comment was open to the public July 23 – August 23, 2024. The webforms were closed on August 26, 2024
- Data Usability Workgroup Members will have the opportunity to provide comments via email to [interopmatters@sequoiaproject.org](mailto:interopmatters@sequoiaproject.org) email until September 30, 2024
  - Please include the page number, line number, suggested wording changes or additions, etc per section/chapter.
- Monthly meetings will enlist input for workgroup members on how to remediate the 179 comments received to final publication

## Phase 4: Finalizing Implementation Guide for Publication

- Comments will be disposed as they are received by the Leadership team and socialized on the monthly workgroup meetings (first Thursday of each month) through December 5, 2024
- **The Final Version 2** of the Implementation Guide will be published **December 11, 2024**
- The Implementation Guide will be highlighted at the in-person Sequoia Annual Member Meeting in Downtown, Nashville, TN
  - Embassy Suites by Hilton
  - [Register and Subscribe for Updates](#)
  - <https://sequoiaproject.org/2024-annual-meeting/>





# Community of Practice Update

August 28, 2024



# Data Usability

Taking Root Movement

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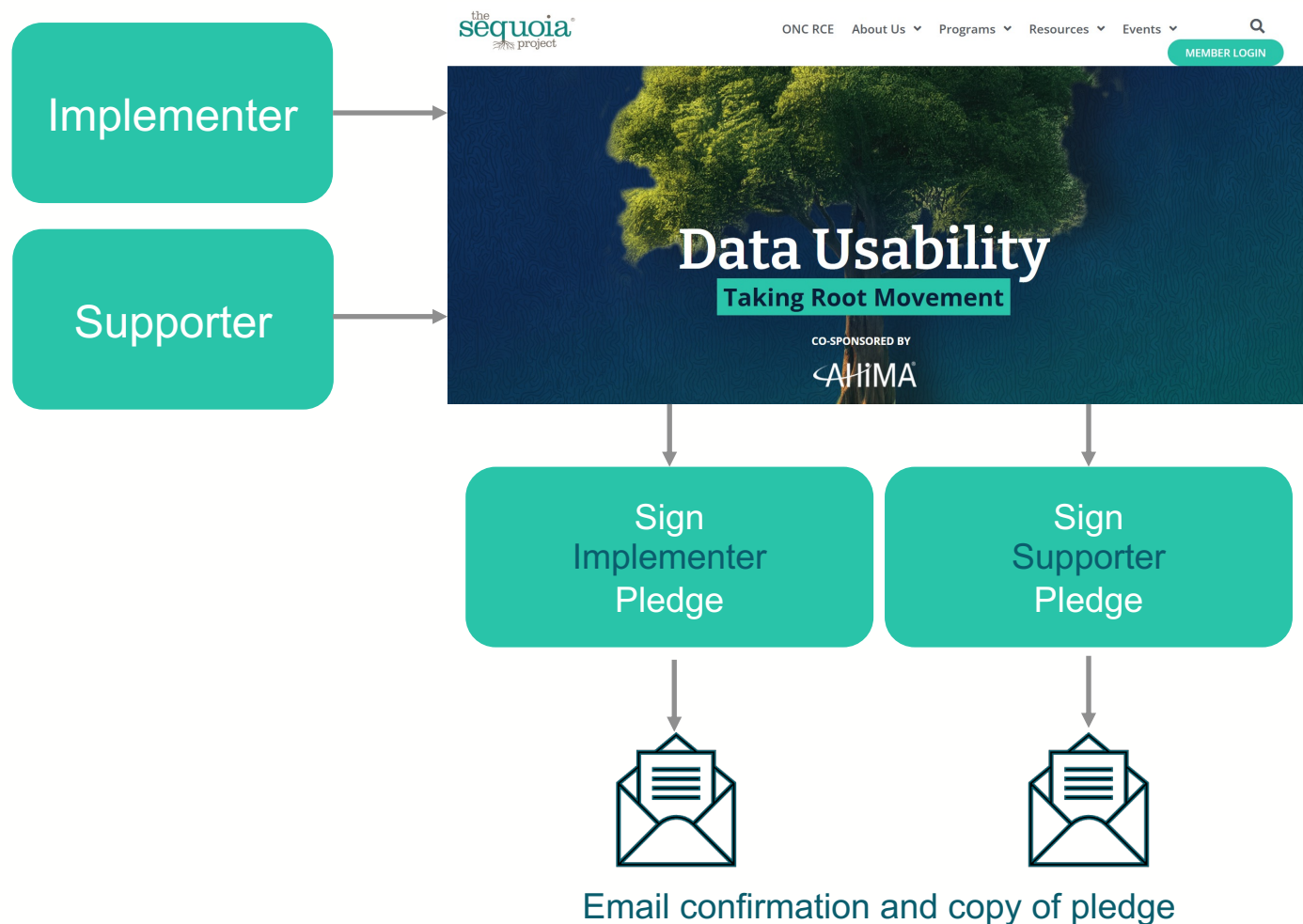


# What is the difference between the Data Usability Taking Root Movement and the Data Usability Workgroup?





# Pledge Process – Open NOW!



Those who  
have pledged  
will have  
password-  
protected  
access to  
**Data Usability  
Taking Root  
Resources on  
the Sequoia  
website**

# Organizations that have pledged to participate!

AHIMA®

C<sup>3</sup>HIE

CIVITAS  
Networks for Health

Clinical  
Architecture®

commonwell®  
HEALTH ALLIANCE

DirectTrust®

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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/>

# Highlights for Workgroup Input and Public Comment

# Topics for Workgroup Input/Discussion

- 179 Comments received during Public Comment – July 23 – August 23, 2024
  - Comment Spreadsheet can be found [here](#)
  - Comments are in process of being triaged and remediated by the leadership team
- Working Data Usability Implementation Guide V2.0 can be found [here](#)
- Homework assigned to commenters to help resolve comments marked with **red** and **green** to indicate status
- HL7 Orders and Observations Workgroup created [Confluence Page](#) to consider for replacement of *Table 1: Laboratory Data Element Code System and Exchange Standards*

# Appendix A – High Priority Lab Results

## Appendix A – High Priority Lab Results

The Data Usability Workgroup membership identified Laboratory Interoperability as an area that needed significant improvement during the first cycle (2020 - 2022) that concluded with the publication of the Data Usability Implementation Guide Version 1.0. In Version 1.0, this Appendix A was included to allow HIT Developers, EHR platforms and lab systems to focus on mapping and maintaining codes for this list of preliminary high clinical impact list (for reference only):

### Blood Chemistry: Chemistry Results

- Albumin
- Alkaline Phosphatase
- ALT
- AST
- Bilirubin, Total
- Calcium
- Chloride
- Creatinine
- eGFR
- Glucose
- Hemoglobin A1c
- Lead Screening
- Potassium
- Protein, Total
- Sodium
- T4
- Urea Nitrogen (BUN)
- BNP
- Troponin
- Vitamin B1
- Vitamin B12
- Vitamin D 25,OH

### Urine Chemistry:

- Microalbumin Urine
- Microalbumin/Creat Ratio

### Coagulation:

- INR

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The Data Usability Workgroup would like comments and input on whether providing additional detail for the high priority labs above would be useful to the industry? The Workgroup began drafting a spreadsheet for these Lab that can be found [here](#).

Using Albumin as an example (see rows 3 - 8) in the spreadsheet linked above, many (incorrectly) use the high level LOINC Result code to group Albumins by other methods. There are more suitable LOINC codes for Methods as shown in Column I and J. Clinical values can differ significantly with different methods.

BCG	Albumin [Mass/volume] in Serum or Plasma by Bromocresol green (BCG) dye binding method
BCP	Albumin [Mass/volume] in Serum or Plasma by Bromocresol purple (BCP) dye binding method
Nephelometry	Albumin [Mass/volume] in Serum or Plasma by Nephelometry
Electrophoresis	Albumin [Mass/volume] in Serum or Plasma by Electrophoresis
BCP	Albumin [Mass/volume] in Blood by Bromocresol purple (BCP) dye binding method

The Data Usability Workgroup would like industry comments on whether there is value in including this level of detail in the final publication planned for December 2024?

As referenced by Recommendation 13 in the [Synensys report](#): "Develop formal processes for inclusion of laboratorians in the multidisciplinary teams responsible for decisions about laboratory data needs, representations, and interfaces at care facilities.

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For example, medical practitioners are responsible for ordering tests to monitor and diagnose patients, but at the same time have a huge range of responsibilities and could benefit from better communication with laboratories. Laboratorians have up-to-date information on changes to the diagnostic testing environment, including new test options or how test results should be interpreted. However, due to the way many interfaces are set up, laboratorians may not receive sufficient data to fully support practitioners.

What other guidance may be helpful in addressing the flawed communication and coordination within the lab ecosystem to reduce the potential for patient harm?

The Data Usability Workgroup would like comments and input for the yellow highlighted areas of Appendix A and whether providing additional detail for the high priority labs above would be useful to the industry?

Table 1: Laboratory Data Element Code System and Exchange Standards

The table below attempts to highlight the USCDI Data Elements across various specifications, fields, value sets and coding requirements for

HL7 V2.5.1, HL7 FHIR, HL7 C-CDA and CLIA. This table is non-normative and provided as reference only.

The workgroup would welcome feedback on whether this table helpful and how it could be improved.

Data Element	Additional Info	Code System	V2.5.1 (LRI, ELR, Genomics)	FHIR Resource	Value Set	CCDA	CLIA
Laboratory Order	May be called Test Procedure or Test Request. Include local test code and information.	LOINC (Order or Both code)	OBR-4	<a href="#">Service Request</a> (preferred)  <a href="#">Procedure</a>  <a href="#">Observation</a>	<a href="#">HL7_FHIR_Value_Set (Observation)</a>	<a href="#">ProceduresSection</a>	<a href="https://www.ecfr.gov/current/title-42/section-493.1241">https://www.ecfr.gov/current/title-42/section-493.1241</a>  \$493.1291(c)(4) \$493.1291(a) \$493.1241(c)(3) \$493.1241(c)(6) \$493.1241(c)(7)
Laboratory Result	Also known as test result observation	LOINC (Both or Observation code)	OBX-3	<a href="#">Observation</a> (preferred)  <a href="#">Observation.component</a>	<a href="#">HL7_FHIR_Value_Set (Observation)</a>	<a href="#">Result Organizer</a>  <a href="#">Organizer code</a> "Laboratory results <b>"SHOULD"</b> be from LOINC (CodeSystem: 2.16.840.1.113883.6.1)	<a href="https://www.ecfr.gov/current/title-42/section-493.1291">https://www.ecfr.gov/current/title-42/section-493.1291</a>  \$493.1291(c)(4) \$493.1278 (4)

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# Laboratory Priority Labs Spreadsheet – Appendix A

Sequoia Lab Tiger Team v2

File Edit View Insert Format Data Tools Extensions Help

100% 123 Calibri 11 B I A

C1:J1 LOINC

	A	B	C	D	E	F	G	H	I	J
1			LOINC							
2	Lab Category	Test Name	Result LOINC Code	LOINC Component	LOINC Property	LOINC Timing	LOINC System	LOINC Scale	LOINC Method	LOINC Result Long Name
3	Chemistry (CHEM)	Albumin	1751-7	Albumin	MCnc	Pt	Ser/Plas	Qn		Albumin [Mass/volume] in Serum or Plasma
4	Chemistry (CHEM)	Albumin	61151-7	Albumin	MCnc	Pt	Ser/Plas	Qn	BCG	Albumin [Mass/volume] in Serum or Plasma by Bromocresol green (BCG) dye binding method
5	Chemistry (CHEM)	Albumin	61152-5	Albumin	MCnc	Pt	Ser/Plas	Qn	BCP	Albumin [Mass/volume] in Serum or Plasma by Bromocresol purple (BCP) dye binding method
6	Chemistry (CHEM)	Albumin	101198-0	Albumin	MCnc	Pt	Ser/Plas	Qn	Nephelometry	Albumin [Mass/volume] in Serum or Plasma by Nephelometry
7	Chemistry (CHEM)	Albumin	2862-1	Albumin	MCnc	Pt	Ser/Plas	Qn	Electrophoresis	Albumin [Mass/volume] in Serum or Plasma by Electrophoresis
8	Chemistry (CHEM)	Albumin	76631-1	Albumin	MCnc	Pt	Bld	Qn	BCP	Albumin [Mass/volume] in Blood by Bromocresol purple (BCP) dye binding method
9										
10	Chemistry (CHEM)	Alkaline Phosphatase								
11	Chemistry									



# Reminders

# AHIMA24 Conference

## Salt Lake City, UT- October 27 – 29, 2024

- Registration is still open [here](#)
- Monday, October 28, 2024
  - 8:30am - 9:15am MT  
First Things First: Get the Data Right Presentation
  - 9:30am – 10am MT  
The ABCs of TEFCA Meetup



### Event Overview

The Virtual HL7 Consolidated Clinical Document Architecture (C-CDA) Implementation-A-Thon (IAT) plays an important role of helping implementers reduce inconsistencies in C-CDA implementations across the healthcare industry. The aim of the C-CDA Implementation is to expand outreach to engage new communities and increase the impact of this content improvement effort. We invite you and the implementers in your community to be a part of shaping the future of C-CDA.



View the Virtual IAT Track Agenda here: [2024.08 Virtual IAT Track Agenda - Implementation-A-Thons - Confluence \(hl7.org\)](#)

### Event Fees

\$99 Members / \$199 Non-Members

# CommonWell Health Alliance 2024 Fall Summit

- Registration is open [here](#)
- Monday, November 4 – Tuesday, November 5, 2024  
Renaissance Nashville  
611 Commerce St.  
Nashville, TN 37203
- **Tuesday, November 5th**
  - **Data Quality Session**
  - 2:00 PM – 3:00 PM
  - **Speakers:**
    - **Didi Davis**, The Sequoia Project, VP, Informatics, Conformance & Interoperability
    - **Phil Beckett**, CEO C3HIE
    - **William Gregg**, HCA Healthcare, VP, Clinical Data and Interoperability





# Sequoia Annual Meeting 2024

## Embassy Suites Nashville | December 11, 2024

- Save the Date Calendar Invite
- Submit a Topic for Discussion
- Book your hotel
- Consider sponsorship opportunities
  - See prospectus
- Easy walk to Broadway



## Data Usability Work Group

**For more information:**

[www.sequoiaproject.org/interoperability-matters/data-usability-workgroup/](http://www.sequoiaproject.org/interoperability-matters/data-usability-workgroup/)



(571) 327-3640



Interopmatters@sequoiaproject.org

Convene



Collaborate



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