



Data Usability
Lab Tiger Team
April 18, 2024

Agenda

- Welcome, Introductions, Membership, Agenda – Didi 5 minutes
 - Overview of Future Efforts
- Clinical Architecture: ONC Lab Data Quality Analysis – Steve Emrick and Charlie Harp – 5-7 minutes
- Discussions - Adam Davis, MD, Bill Gregg, MD, Andrea Pitkus, Didi Davis Facilitate discussion – 45 minutes
 - Standards being Considered
 - Use Case Discussion
- Discussion – [Priority Labs Spreadsheet](#) – 5 minutes



Adam Davis, MD, Co-chair
Sutter Health



Bill Gregg, MD, Co-chair
HCA Healthcare



Didi Davis, VP
The Sequoia Project

Tiger Team Roster

61 members

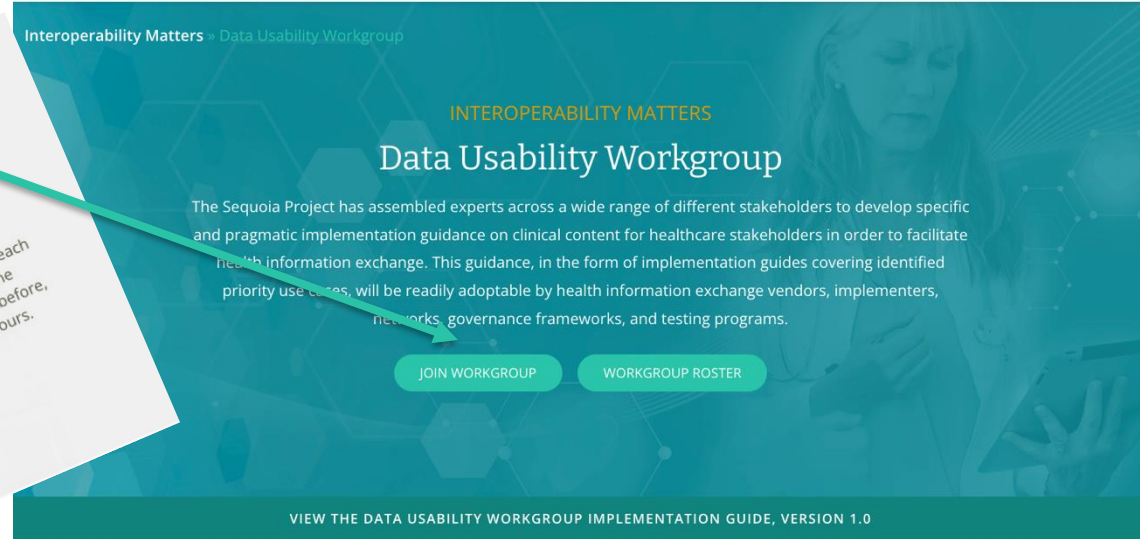
47 organizations

| 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 | jpsys |

| 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 |

Website, Meeting and Workgroup Logistics

- Register for the Workgroup
- Calendar Downloads
- Meeting Notes



Meeting Materials and Recordings

2023 - 2024 2020 - 2022

▶ January 4: Meeting Notes

▶ December 7: Meeting Notes

▶ November 9: Lab Tiger Team Meeting

▶ November 2: Meeting Notes

▶ October 12: Lab Tiger Team Meeting

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

Laboratory Tiger Team Meeting Logistics and Timeline

- 2023 – 2024 Planned Schedule
 - Kickoff Call: October 12, 2023
 - Ongoing calls: 2nd Thursday each month – 4pm – 5pm ET
- Align with Next Phase of Activities of DUWG - 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

Clinical Architecture: ONC Lab Data Quality Analysis

Steve Emrick and Charlie Harp

ONC Lab Data Quality Analysis | Executive Summary

The Office of the National Coordinator of Health IT (ONC) is authoring a Congressional report to assess the state of interoperability and quality of lab data in US health systems. As part of the report, ONC is requesting CA support to procure and assess lab data quality from health systems.

Background

- Congress requested that the Office of the National Coordinator of Health IT produce a report describing the current state of lab data quality and interoperability.
 - [H.R.2617 - Consolidated Appropriations Act, 2023](#) (“Study on Laboratory Information Standards”)
- ONC is looking at “the basics” around data quality and interoperability, such as % of lab test mapped to LOINC codes, validity of code mapping, references ranges and units of measure (for quantitative tests), etc.
- ONC has asked Clinical Architecture to provide support in
 - ...reaching out to customers like you who have access to lab data
 - ...performing a data quality assessment based on de-identified data we can obtain from our customers and partners
- ONC will be submitting the Report by end of Calendar Year 2024

Opportunity

ONC is asking us to reach out to customers and partners like you that may be able to provide us with a 90-day sample (from 2023 as possible) of de-identified lab data (e.g., HL7v2 OBR/OBX message segments) that can be used as part of the Report.

Additional Detail

- Any data you provide to us will be used only for the ONC Report to Congress and deleted after the Report is completed.
- ONC can provide attribution in the Report to recognize your organization's contribution if you desire, but this is not required.
- Any specific measures of quality / interoperability in the Report will not be tied to your organization's data.
- Clinical Architecture can provide you the results of your organization's lab data quality assessment

Call To Action

If you are interested in participating, or would like to learn more information, please let us know.

We are happy to schedule a call with you and others from your team who would like to learn more.

steve.emrick@clinicalarchitecture.com

Standards & Use Case Discussion

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

Laboratory Pain Point - Use Case - Standards Tracking

| | 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> | Proposed Work Item Title |
| 4 | <Describe the integration and/or workflow problem: What doesn't work, or what needs to work.> | |
| 5 | <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.> | The Problem Description |
| 6 | <Describe how this will improve usability and for what stakeholders> | |
| 7 | <List existing systems that are or could be involved in the problem/solution.> | Actors/Systems |
| 8 | <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".> | |
| 9 | <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.> | Use Case/Clinical Scenario |
| 10 | <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.> | |
| 11 | <List relevant standards, where possible giving current version numbers, level of support by system vendors, and references for obtaining detailed information.> | Standards |
| 12 | | |
| 13 | | |
| 14 | | |
| 15 | | |
| 16 | | |
| 17 | | |
| 18 | | |
| 19 | | |
| 20 | | |
| 21 | | |
| 22 | | |
| 23 | | |
| 24 | | |
| 25 | | |
| 26 | | |
| 27 | | |
| 28 | | |
| 29 | | |
| 30 | | |
| 31 | | |
| 32 | | |
| 33 | | |
| 34 | | |
| 35 | | |
| 36 | | |
| 37 | | |
| 38 | | |
| 39 | | |
| 40 | | |
| 41 | | |
| 42 | | |
| 43 | | |
| 44 | | |
| 45 | | |
| 46 | | |
| 47 | | |
| 48 | | |
| 49 | | |
| 50 | | |
| 51 | | |
| 52 | | |
| 53 | | |
| 54 | | |
| 55 | | |
| 56 | | |
| 57 | | |
| 58 | | |
| 59 | | |
| 60 | | |
| 61 | | |
| 62 | | |
| 63 | | |
| 64 | | |
| 65 | | |
| 66 | | |
| 67 | | |
| 68 | | |
| 69 | | |
| 70 | | |
| 71 | | |
| 72 | | |
| 73 | | |
| 74 | | |
| 75 | | |
| 76 | | |
| 77 | | |
| 78 | | |
| 79 | | |
| 80 | | |
| 81 | | |
| 82 | | |
| 83 | | |
| 84 | | |
| 85 | | |
| 86 | | |
| 87 | | |
| 88 | | |
| 89 | | |
| 90 | | |
| 91 | | |
| 92 | | |
| 93 | | |
| 94 | | |
| 95 | | |
| 96 | | |
| 97 | | |
| 98 | | |
| 99 | | |
| 100 | | |

- **Google Spreadsheet used for tracking**
 - Anyone with the link can comment within the documents
 - Contains Phase 2 IG Development
 - Parking lot of existing pain points
- Will be place for gathering Laboratory Data Exchange pain points
- Use Case will be included for Receiving System Guidance

Standards being Considered

- Require HL7 2.5.1 as the floor going forward – update from 2.x
- USCDI V3 (Tests, Values/Results, Specimen Type, Result Status)
- USCDI+ (Public Health Laboratory Data Exchange)
- HL7 Version 2 Laboratory Value Set Companion Guide, Release 2 – US Realm
- HL7 Version 2.5.1 Laboratory Orders Interface (LOI)
- HL7 Version 2.5.1 Laboratory Test Compendium Framework (eDOS) aka Electronic Directory of Service
- HL7 Version 2.5.1 Laboratory Orders Interface (LRI)
- HL7 Version 2.5.1 Electronic Lab Reporting (ELR) to Public Health
 - CDC How to Implement ELR

Discussion: Priority Labs Spreadsheet

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!**