



37th Annual Plenary & Working Group Meeting

Phoenix, Arizona

Monday, September 11, 2023



Monday



Welcome

Charles Jaffe, MD, PhD

Chief Executive Officer
HL7 International

KEYNOTE PRESENTATIONS

AI IN HEALTHCARE: OPPORTUNITIES & CHALLENGES

Monday



Keynote Session 1

Peter Lee, PhD

Corporate Vice President, Research
& Incubations, Microsoft

Monday

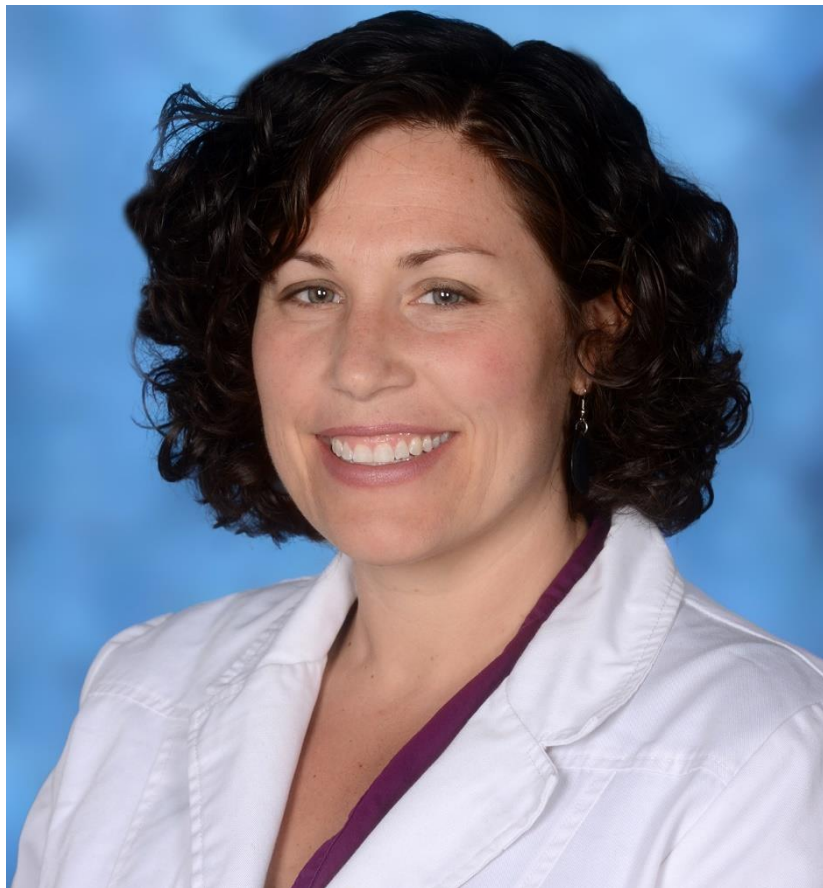


Keynote Session 2

John Halamka, MD, MS

President,
Mayo Clinic Platform

Monday



Panel: Government Perspective

North America

Moderator: Julia Skapik, MD

Chair-Elect, HL7 International
Medical Director for Informatics, National
Association of Community Health Centers
(NACHC)

Monday



Panel: Government Perspective

Panelist: Colonel Thomas Cantilina, MD

Chief Health Informatics Officer,
Department of Defense

Monday



Panel: Government Perspective

Panelist: Jose Galvez, MD

Deputy Director of the Office of Strategic Programs, FDA

Monday



Panel: Government Perspective

Panelist: Steve Posnack, MS, MHS

Deputy National Coordinator for Health Information Technology, ONC

Monday



Keynote Session 4

Michael Pencina, PhD

Vice Dean for Data Science; Chief Data
Scientist, Duke University School of
Medicine

Monday



Keynote Session 5

**Kenneth Goodman, PhD,
FACMI, FACE**

Director, Ethics Programs
Director for Ethics & Health Policy,
University of Miami

Ethics, AI Standards, and Responsibility

HL7 37th Annual Plenary
Phoenix, Arizona
September 11, 2023

Kenneth W. Goodman, PhD, FACMI, FACE

Professor of Medicine and Philosophy

Director, University of Miami Miller School of Medicine Institute for Bioethics and Health Policy and
UM Institute for Data Science and Computing Program in Data Ethics + Society,
kgoodman@med.miami.edu



“More and more the tendency is towards the use of mechanical aids to diagnosis; nevertheless, the five senses of the doctor do still, and must always, play the preponderating part in the examination of the sick patient. Careful observation can never be replaced by the tests of the laboratory. The good physician now or in the future will never be a diagnostic robot.”

— Scottish surgeon Sir William Arbuthnot-Lane (Lane, 1936)

The AI story so far

- Bias
- Safety
- Transparency
- Explainability
- Accountability
- Responsibility
- Governance

Standards as ethics

- convenience, economy
- reliability, efficiency
- safety
- profit maximization
- values protection, promotion
- quality
- interoperability

Standards for ethics

- Values protection, promotion
- Cf. privacy and security (HL7: Privacy, Access and Security Services)
- Appropriate uses
- Appropriate users

The Hard Problem

- The Parfait System: no bias, no confabulation, explainable to the satisfaction of all, designed by committed and responsible coders, manufactured by corporations dedicated to the common good ...
- Affordable, reliable, easy to use
- Consistently more accurate than human experts

It gets worse...

- Diagnostic systems get it right more frequently than humans
- Prognostic systems get it right more frequently than humans (cf. “computational futility metric”)
- Patients and family members use them all the time (cf. online cancer nomograms)

Hurray ... or uh-oh?

- The data and information scraped from electronic health records, registries, etc. and used to train the Parfait System thus guides practice – and eventually replaces the data and information used to train future systems
- Future systems are thus trained on data and information derived from practice shaped or guided by computers
- Which data and information is used to train new systems
- Progress, or the systematic replacement of a store of human-acquired knowledge by machine intelligence?

In the meantime...

- “Better than humans” is usually a good thing. Humans + tools are better than humans without tools,
- ...which tend to be imperfect (sometimes because of humans).
- The more we look the more we find uncertainty if not error.

Parfait? Not yet

The problem with humans...

- “Scraping the internet” metaphor is more accurate than supposed: when scraping, you only get the surface.
- Uncertainty in biostatistics; missingness
- Meta-correlation – extremely well-documented correlation – still does not establish causation.
- Cf. early prognostic scoring systems.

(We're used to error, inaccuracy)

- His prognosis is poo.
- Mr X was seen by himself in the hospital room today.
- I saw but didn't see the order placed. Thank you.
- I asked that her house Mr. H doing prior to come to the hospital.
- His current PPS 505% is more related to ...
- Seen by Neurology, unable to do MRI due to penile metal prosthesis. Still minimally arousable.
- He initially presented by EMS, who report they found him on the side of the road stating he wished to diet.
- ... is an 82 y.o. male admitted on 1/2/3 with a primary diagnosis of No primary diagnosis.

Other human problems

- Greed
- Selfishness
- Inattention
- Laziness
- Cruelty



Internet cafes in the Philippines are now frequented by workers who sort and label data for artificial intelligence models.

(Martin San Diego for The Washington Post).

<https://s2.washingtonpost.com/camp-rw/?trackId=61284be9ae7e8a0d5066f8af&s=64ed6ea1fc110e7018436c03&linknum=5&linktot=61&linknum=5&linktot=61>

Miller's "Standard Model"

- Humans are educated and licensed to practice medicine and nursing.
- Humans are better at using tools than allowing themselves to be used by tools (except when well incentivized).
- The computer (should) no more replace human cognitive practice and capacity than, say, the stethoscope.

“Progressive Caution”

- We are dependent on computers
- ...which are imperfect.
- It can be blameworthy *not* to use a tool that improves patient care
- ... which tension is difficult to resolve.
- “Progressive Caution” (1998) is the idea that wise and compassionate progress can ethically optimize adoption of computational aids in healthcare.

The Hard Problem, redux

- Skill degradation
- What if the loss of human cognitive engagement leads to better outcomes?
- Forever
- What if our EHRs and data sets are wholly supplanted by data and information generated by ever-diminished human decisions?
- Does it matter? Why?

And if they are so good...

- For whom – which populations – will they be available?
- Cf. human-subjects research in low-income countries.
- We have a poor track record sharing useful technologies including, most recently, vaccines.
- Which business plans take this into account?

What if large-language models, for instance, are superior to human agents and more reliably hew to standards than humans?

Standards for ethics, redux

- Appropriate uses, users
- Appropriate role of humans
- Education (not “training”)
- Consider health-ethics-and-informatics SWAT teams (HEISTs).
- Ongoing, independent review, analysis

Ethics and standards: A hypothesis

- Value-driven standards support ethically optimized products, processes, and actions
- They should be public, transparent, and driven by transparent processes
- This is in many respects an empirical challenge... the opportunity is that we might be able to demonstrate the practical utility of ethics standards and so foster trust and confidence – as HL7 has done for decades.

Thank you.

Monday



HL7 AI Standards - Laying the Foundation

Gary Dickinson, FHL7

EHR WG Co-Chair, Co-Facilitator of
AI Focus Team

Monday



HL7 AI Standards - Laying the Foundation

**Mark Janczewski, MD, MPH,
FAAFP, FAMIA**

EHR WG Co-Chair, Co-Lead of AI
Data Lifecycle Project

HL7 AI Standards – Laying the Foundation

EHR WG Project – AI Data Lifecycle

Gary Dickinson FHL7

Mark Janczewski MD MPH

HL7 37th Annual Plenary and Work Group Meeting

11 September 2023

Phoenix, Arizona USA



HL7 EHR Work Group – Reducing Clinician Burden Project

Background

- The HL7 EHR WG has a well-established learning project focused on [Reducing Clinician Burden](#)
- Key Objectives are to:
 - Understand the substance, extent and impact of clinician burden
 - Recognize root causes
 - Identify success stories
 - Support novel and disruptively innovative advances that will allow healthcare IT to reduce burden and improve care quality by better supporting clinical workflow

Considering AI...

Where We Started

- Starting in January 2022, we began to receive presentations/reports on AI – with emphasis not so much on artificial, but rather on assistive or augmented, intelligence
 - US NIH, US VA, Mayo Platform, Harvard/MIT, Beth Israel Deaconess, Philips, Akélex, Availity, Cognotekt, Book Zurman
- We began to seriously consider the *potential of AI to reduce burden* – recognizing that AI has applications/benefits beyond this objective
- We then established an [AI Focus Team](#) to evaluate the optimum role for HL7 in AI standards development
- With expert input from many sources, we identified *21 AI Topics/Areas of Focus*
- With further review, we prioritized the list and identified [AI Data Lifecycle](#) as our initial priority and project

Candidates 1-11

AI Topics/Areas of Focus

Item	Topic/Area of Focus
1	Contribute SDO expertise at standards development or providing a framework for such. Use SDO consensus process to review and approve AI artifacts/standards.
2	Establish “Contexts” within which AI Algorithms are developed and ultimately applied in health and healthcare. a) ISO 13119 – Clinical knowledge resources - Metadata b) Patient/Provider/Action Contexts c) Problem Context
3	Create a label for every algorithm — analogous to a nutrition label, or a drug label — describing the data used to develop an algorithm, its usefulness and limitations, its measured performance, and its suitability for a given population.
4	Test and monitor the performance of algorithm-guided care within the settings in which it is deployed in an ongoing way.
5	Create best practices for establishing the usefulness, reliability, and fairness of AI algorithms that bring together different organizations to develop and test AI on data sets drawn from diverse and representative groups of patients.
6	Create a standard way for government, academia, and industry to monitor the behavior of AI algorithms over time.
7	Understand clinical context and goals of each algorithm and know what attributes — quality, safety, outcomes, cost, speed, and the like — are being optimized.
8	Learn how local variations in lifestyle, physiology, socioeconomic factors, and access to health care affect both the construction and fielding of AI systems and the risk of bias.
9	Assess the risk that AI might be used, intentionally or not, to maintain the status quo and reinforce, rather than eliminate, discriminatory policies.
10	Develop approaches for appropriate clinical use of AI in combination with human expertise, experience, and judgment, and discourage overreliance on, or unreflective trust of, algorithmic recommendations.
11	AI Data Lifecycle: AI algorithms depend on data quality and context. Consider how to bolster accountability, data quality, context and provenance at each step in the data lifecycle (capture, share, use). Develop Provenance Resource Profile (FHIR for AI)

Candidates 12-21

AI Topics/Areas of Focus

12	Develop standards for auditing AI
13	Develop standards for CDS software to identify AI tools potentially applicable to a patient problem, combine data about the applicable tools (including but not limited to metadata in ISO 13119) with data about the patient/problem, and generate options (i.e. alternative tools) with details about the pros and cons of each option specific to the patient (see paragraph I.A.4 of the “Problem Context” memo in Item 2c above).
14A	Publication guidance for medical literature including precise markup optimized for extraction of knowledge constructs to support machine learning
14B	Translation of knowledge fragments into structured patterns, assuring validation and fidelity, and enabling input mapping to support the AI user interface and Natural Language Processing
15	Everyday patient care record, rigorously formatted – extracted for diagnosis, treatment, decisions, use for clinical trials
16	Data standards for data brokers
17	Create / enhance standards for capturing results from AI, which are linked back to the AI source
18	Create / enhance standards to translate AI results into existing medical domains while ensuring that they are correctly flagged as coming from AI and linked back to the source AI
19	Use HL7 FHIR resources/data structures for AI data strata
20	Develop a minimum viable standard for AI ethics specific to healthcare. This might incorporate the idea of making data FAIR and establishing a standard for developing AI ready datasets. (#10 seems to touch on Ethics and therefore it may be possible to address both)
21	Develop standardized approach towards the development of AI ready data sets, including research design, data generation, data processing
	Project Underway
	Deferred to Other Organizations
	Potential Concurrent Track or Subsequent Phase of Current Project
	For Future Consideration

AI Project 11 - AI Data Lifecycle

What Do We Aim to Achieve?

- Explainable AI
- Black Box gives way to Clarity
 - Trustworthy, Accountable, Fit for Purpose
 - Transparent and Fully Traceable – from Machine Learning to Algorithm Derivation to Live Operation
- AI Conclusions/Recommendations are Substantiable
 - Evidence-based
 - Measurable as to Data Accuracy and Quality
- Ethically Sound
- Initially Focused on Training and Developing Machine Learning (AI/ML) Models
 - NOT Generative AI leveraging Large Language Models

AI Project 11 - AI Data Lifecycle Framework

- Incorporates AI Use Case Examples
- Utilizes Trigger Events and Audit Trails (capturing key Provenance and Metadata elements)
- Patterned after FHIR R5 [Record Lifecycle Event Implementation Guide](#)
- Uses US General Accounting Office (GAO) Framework for an AI Project Lifecycle, with Distinct Phases:
 - Design Phase
 - Development Phase – including Machine Learning/Training and Algorithm Creation
 - Deployment Phase – including Testing
 - Production Phase – Live Operation with Continuous Monitoring

Project 11 – AI Data Lifecycle

GAO AI Accountability Framework – Phases 1-4



US General Accountability Office (GAO) – [“Artificial Intelligence An Accountability Framework for Federal Agencies and Other Entities”](#) (2021) – Guidance for the AI Project Life Cycle, including AI for healthcare, which involves several critical phases, each requiring specific standards to ensure consistent high-quality implementation.

Project 11 – AI Data Lifecycle

Timeline

- Project Underway early 2023
- Project Proposal (Title and Description)
 - 22 Mar 2023: Approved
- Project Scope Statement (PSS)
 - 23 May 2023: Approved by HL7 EHR WG
 - 30 June 2023: Passed Consensus Review
 - 17 July 2023: Approved by Technical Steering Committee (TSC)
- 1st Deliverable: Laying the Foundation – White Paper
 - Draft in development
 - **Ballot Cycle: 2024JAN**
- Over 50 Individuals have Volunteered

Project 11 – AI Data Lifecycle – Initial Deliverable

White Paper

- So far, about 50 pages long
- Table of Contents (High-Level)
 - Introduction (Forward, Caveats, Scope)
 - Use Cases and Case Studies
 - Background (Definitions, Challenges Associated with the Use of AI in Healthcare, Benefits of AI Standardization)
 - Discussion
 - Recommendations / Guidance
- Currently in Review and Draft Development

AI Focus Team and P11 Project – AI Data Lifecycle

Participants and Contributors

Many Thanks to:

- AkéLex
- Availity/Diameter Health
- Beth Israel Deaconess/Lahey Health
- Book Zurman
- Booz Allen Hamilton
- Centers for Medicare and Medicaid Services
- Cognotekt (Germany)
- Computer Network Architects
- EHR Standards Consulting
- Harvard University/Massachusetts Institute of Technology
- ISO TC215/Task Force 5 on AI
- JP Systems
- Mitre
- Mayo Platform
- Oak Ridge National Laboratories
- Philips
- Prosumer Health
- Stanford University
- University of Nebraska
- US Department of Defense
- US Food and Drug Administration
- US National Institutes of Health
- US General Accountability Office
- US National Institute of Standards and Technology
- US Office of National Coordinator
- US Veterans Administration
- Wolters-Kluwer
- Yale University
- and Many Other Individuals

→ Key Instigators

AI Focus Team and P11 Project – AI Data Lifecycle

Upcoming Sessions

- **This WGM: Tuesday Q4** – hosted by the EHR WG
- **Recurring Meetings**
 - AI Focus Team: 4th Tuesday each month, 1600-1700 US ET
 - AI Project 11: Every second Monday, 1100-1200 US ET
 - Reducing Clinician Burden: 2nd and 4th Mondays each month, 1200-1300 US ET
- **Your Participation is Welcome!**
 - See POCs on next slide if you wish to be included on email distribution lists
 - To receive meeting announcements, links and materials

Points of Contact

- AI Focus Team

- Gary Dickinson FHL7, EHR Standards Consulting
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- Steve Datena MD, AkéLex
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- Project 11 – AI Data Lifecycle

- Rhonna Clark, US Department of Veterans Affairs – Project Lead
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- Ioana Singureanu, US Department of Veterans Affairs – Project Advisor
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Thanks to Our Sponsors



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Have a great day!

Monday, September 11, 2023





37th Annual Plenary & Working Group Meeting

Phoenix, Arizona

Tuesday, September 12, 2023



Tuesday



Welcome

Mark McDougall

Executive Director
HL7 International

Tuesday

- **Chair's Report & John Quinn HL7 Fellows Class of 2023**
- CSDO & TSC Report
- Implementation Division Report
- International Council Report
- FHIR Accelerator: CARIN
- FHIR Accelerator: Helios
- Final Announcements

Tuesday



Chair's Report

Andy Truscott

Chair

HL7 International Board of Directors

HL7 Product Family Logos



Annual Business Meeting

Recognition of the Class of 2023 HL7 John Quinn Fellows Award

Andy Truscott

Chair, HL7 International Board of Directors

John Quinn (1949-2020)

Born on July 16, 1949, in Los Angeles, CA, John Francis Quinn was the oldest of eight children. He attended the Archdiocesan Seminary Program from 8th grade through college. Realizing he did not have a calling to the priesthood, John transferred to Loyola Marymount University where he received a BS and MS in Electrical Engineering/Computer Science.

After graduation, John worked at Hughes Aircraft Co and then the Hilton Casino in Las Vegas, NV, installing their first computer system. He became a Computer Systems Analyst for Data General Corp. in El Segundo, CA. During the next 10 years, John worked for three companies all using computers with a medical application.

Becoming a Senior Manager in the Medical Consulting Practice of Ernst and Young in Cleveland, OH, John furthered the industrialization of healthcare information technology and concluded his career as a Senior Executive in Accenture's Health & Life Science's Provider Practice, focusing on healthcare information system's technologies, architectures and data and messaging standards.

A recognized global leader, John dedicated his career to information technology and computing excellence.

The John Quinn Fellowship

John was a proud and founding member of Health Level Seven and served as the second chair of the organization from 1988 – 1989. He became Chair of the Technical Steering Committee in 1990, a role he held until 2007. From 2007 – 2016, John served as HL7's Chief Technology Officer, and as CTO Emeritus thereafter. He was a member of the HL7 board for nearly 30 years and served on countless committees and taskforces during his tenure at HL7. His piano playing often rang out from the corners of various convention centers and hotels.

John was a sought-after leader and mentor both inside and outside of HL7. John's spirit and passion live on at HL7.

The John Quinn Fellowship is a prestigious honor that recognizes your role in furthering John's legacy. Your Mentorship of our Family, your Leadership of our Mission, and your Commitment to the Rigor and Discipline required of HL7 is recognized globally, and especially by your co-Fellows who have elected you.



The HL7 John Quinn Fellows Program

- The purpose of the program is to recognize outstanding commitment and sustained contribution to Health Level Seven International.
- Contributions to HL7 may be reflected through serving as a working group or committee co-chair, serving on the board, receiving the W. Ed Hammond [Volunteer of the Year award](#), serving as an Ambassador, making a presentation or publishing a paper about HL7, or other visible activity.
- At a minimum, all Fellows have been HL7 members for at least 15 years. More details are available at: <http://www.hl7.org/about/hl7fellows.cfm>

... and the members of our Class of 2023 HL7 Fellows are



Congrats! HL7 John Quinn Fellows Class of 2023

- Adam Chee
- Carmela Couderc
- Suzanne Gonzales-Webb, CPhT
- Chuck Jaffe, MD, PhD
- Joginder Madra
- Mitra Rocca
- Dan Vreeman, DPT

Congrats! HL7 John Quinn Fellows Class of 2023



Adam Chee



Joginder Madra



Mitra Rocca

Tuesday

- Chair's Report & John Quinn HL7 Fellows Class of 2023
- **CSDO & TSC Report**
- Implementation Division Report
- International Council Report
- FHIR Accelerator: CARIN
- FHIR Accelerator: Helios
- Final Announcements

Tuesday



CSDO Report

Daniel Vreeman, DPT

Chief Standards Development Officer
HL7 International

CSDO Update

HL7 Working Group Meeting

2023 09 12

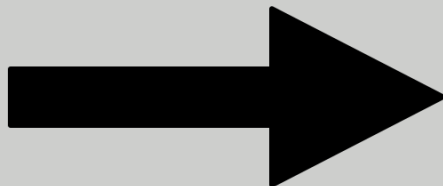
Daniel J. Vreeman, PT, DPT, MS, FACMI
Chief Standards Development Officer





Full (and future) updates here

hl7.me/updates



The screenshot shows a web browser displaying the Confluence page "Updates on HL7 Infrastructure and Standards Development" at the URL hl7.me/updates. The page is part of the "Pages / Welcome to the Confluence Pages of Health Level 7 (HL7) International" space. It features a sidebar with navigation icons, a main content area with a "The Latest" section, and a "Standards development" section at the bottom. The "The Latest" section includes a video icon and a brief description of updates. The "Standards development" section lists 39 new specification versions published in 2023 and provides a link to follow announcements.

hl7.me/updates

Confluence Spaces People Blueprints Glossaries More Create Search

Pages / Welcome to the Confluence Pages of Health Level 7 (HL7) International 2,454 views

Updates on HL7 Infrastructure and Standards Development

Created by Wayne Kubick, last modified by Daniel Vreeman on Apr 30, 2023

The Latest

Updates about standards development, tooling, infrastructure, and process improvement at HL7.

Updates on Standards Development

Daniel Vreeman posted on Sep 10, 2023

Here at the 37th Annual Plenary, Working Group Meeting, and HL7 FHIR Connectathon we are celebrating the vibrance and innovation of HL7's global community. It's wonderful to see the progress we're making on becoming the Re-envisioned HL7 we set our sights on in HL7's 3 Year Plan.

Your participation in our shared work brings a unique perspective, and we are grateful for how you choose to contribute these gifts to the global good. Collectively we are advancing interoperability around the world and enabling a whole host of other newfound freedoms across the health ecosystem.

Standards development

S05 S06 S08 S10

As we head into Fall, HL7 International has now published (or reaffirmed) 39 new specification versions 2023 year-to-date. If you're interested in getting notified as soon as new specifications are published, be sure to follow the [#Announcements](#) > [New](#)

A black and white photograph of a rustic wooden wall made of vertical planks. Two horizontal wooden boards are attached to the wall, displaying the words 'THANK YOU.' in a white, hand-painted, sans-serif font. The sign is positioned in the lower-middle part of the frame. Below the wall, a concrete surface and some grass are visible.

THANK YOU.

hl7.me/updates



hl7.me/updates



What am I grateful for being able to leave behind?

What am I grateful for that is waiting for me when I return?

What am I grateful for about where I'm going?



Full update here



hl7.me/updates

Standards Development

A global FHIR publishing ecosystem

Making HL7 standards more approachable

Community Engagement

Welcoming New Participants to HL7

Perspectives from Co-chairs

Collaboration with World Health Organization

Infrastructure Improvements

Sharing best practices

Single Sign-on

Automation in Unified Terminology Governance (UTG)

Specification Lifecycle: Proposals → Scope Statements

Update to Ballot Desktop

Affiliate balloting

Tuesday



TSC Report

Jean Duteau

TSC Chair

TSC Co-Chair Feedback

- Gold Star WGs
- TSC Election Results
- Project Deadline Updates
- PSS Update/New
- Terminology Expectations
- JIRA Dashboards
- Co-Sponsor/Interested Party

Gold Star WGs

- Arden Syntax
- BR&R
- CDS
- Clinical Genomics
- CIMI
- CIC
- CQI
- CBCP
- Conformance
- CGP
- EHR
- FHIR-I
- FM
- HSS
- II
- ITS
- InM
- O&O
- PA
- PC
- PE
- PPIE
- Pharmacy
- PH
- Security
- SD
- Υο

TSC Election Results

- Chair Elect – Rick Geimer
 - Affiliate Rep – Alexander Zautke
 - Implementation Rep – Jeff Brown
 - WG Rep – Riki Merrick, Lloyd McKenzie
-
- Gora Datta has agreed to stay on as WG Rep to fill Abdul-Malik Shakir's role
 - David Pyke has agreed to stay on as an Adhoc Member and will be our GOC liaison
 - Austin Kriesler has agreed to stay on as an Adhoc Member

Project Deadline Updates

- **Project Proposal Submitted** - minimum 2 weeks before PSS submission
- **PSS Approved by WG in JIRA and enters Consensus Review** - minimum 2 months before the WGM (to allow the community to review the PSS and potentially add themselves as co-sponsors; also dependent on required approvals)
- **PSS Submitted to TSC** - 1 month before WGM that occurs before the ballot (to allow for TSC approval)

When to Update PSS vs New PSS

- TSC reviewed the guidelines on updating an existing PSS vs creating a new one
- <https://confluence.hl7.org/display/TSC/Revise+PSS+Change+In+Scope+Approval>

Terminology Expectations

- <https://build.fhir.org/ig/FHIR/ig-guidance/terminology.html>
- <https://confluence.hl7.org/display/TSMG/Terminology+Play+Book>
- <https://confluence.hl7.org/display/TSMG/Terminology+Expectations+for+IG+Developers>

JIRA Dashboards

- HL7 is developing some common consistent JIRA dashboards that provide insight into various aspects of HL7 processes:
 - User Dashboard
 - WG Dashboard
 - Specification Dashboard
 - Accelerator Dashboard

Co-Sponsor / Interested Party

- If you are identifying yourself as a Co-Sponsor of a project, that means that your WG has enough interest in a project that, although you are not the main sponsor, that you need to be informed and need to provide approvals to a project
 - Please be careful when indicating you want to co-sponsor a project. It does provide an administrative burden to the project team.
- Interested Party means that your WG is just interested. It is up to your WG and NOT the project team to find out updates to the project. It provides a note to the project team that they should anticipate your WG reaching out to them.

Tuesday

- Chair's Report & John Quinn HL7 Fellows Class of 2023
- CSDO & TSC Report
- **Implementation Division Report**
- International Council Report
- FHIR Accelerator: CARIN
- FHIR Accelerator: Helios
- Final Announcements

Tuesday - Implementation Division Report



Viet Nguyen, MD

Chief Standards Implementation Officer
HL7 International



Diego Kaminker

Deputy Chief Standards Implementation Officer
HL7 International

Standards Implementation Division

Brief Report
September 12, 2023

Viet Nguyen, MD
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Diego Kaminker
HL7 DCSIO
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*Disclaimer: In all our activities we involve our CSDO, Dr.
Dan Vreeman. We work together.
We do not mention it in every slide.*



Program Management

- . **Quality Measure Accelerator**
 - Interest from orgs in organizing a Quality/Metrics focused accelerator - four meetings / defining use cases and priorities
- . **Program Manager**
 - Recruiting Program Manager for Q4/2023
 - Standardizing Accelerator Operations
- . **External Relationships**
 - Supporting coordination of FAST and others involved with infrastructure
 - Relationships with other SDOs and other organizations

Q3 2023/ Working on:

- HL7 AI Roadmap (requested by the HL7 BOD)

Community Outreach

- FHIR Security Event / August 2023
 - <https://tinyurl.com/hl7sec>
- Synthetic Data Event / August 2023
 - <https://tinyurl.com/hl7synth>
- FHIR Community Process (FCP)
 - <https://tinyurl.com/hl7fhircp>



Best Practices / Patient Empowerment

- Terminology Best Practices Playbook Published
<https://tinyurl.com/hl7termpb>
- First IG with Plain Language Section
<https://hl7.org/fhir/us/mcc/2023Sep/>

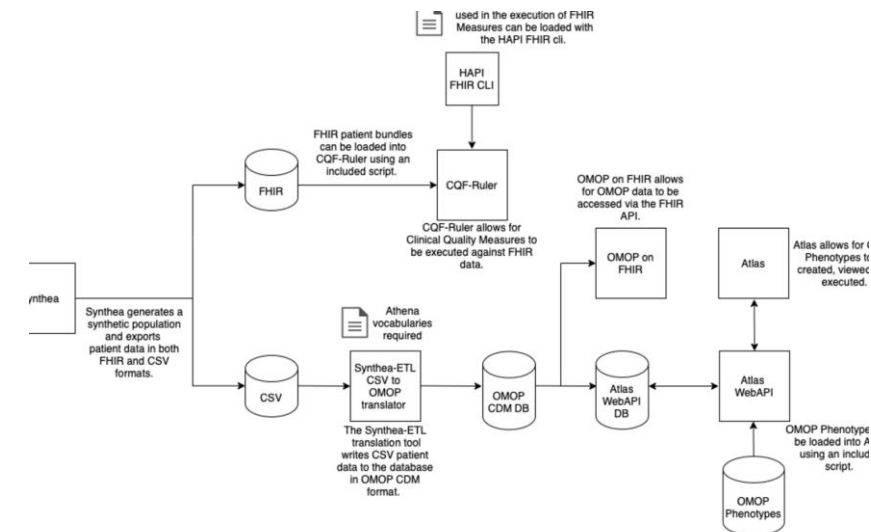
Q3 2023/ Working on:

- FHIR Reference Implementation Playbook
- Observation / Questionnaire Gallery
- Patient Empowerment Event



Ecosystem (Foundry)

- **Logica Sandbox / End of transition period**
 - Studying how to maintain basic services
 - Recommending use of the Community Edition
- **FHIR Foundry EOI Published**
 - Two complementary proposals received
 - Defining MVP and Budget requirements for FY 24
- **FHIR Reference Implementations Installed and Working**
 - IPS
 - <https://hl7-ips-server.hl7.org/fhir/metadata>
 - OMOP ATLAS+OMOP ON FHIR+CQF RULER
 - <https://hl7-reasoning-omop.hl7.org/oof/fhir/metadata>
 - <https://hl7-reasoning-omop.hl7.org/cqf/fhir/metadata>
 - <https://hl7-reasoning-omop.hl7.org/atlas/#>



Education

- **Credentialing Program**

- Created TDD for our first test
- Recruiting Question Writers
- Working on JTA (Job Task Analysis)
- First test will be released Q1 2023

- **Partnering Program**

- Contract templates created for all categories
- First two private organizations signed (Firely and AEGIS)
- Finishing Partners Event and Landing Web Pages

Q3 2023: Working on

- Education for CMS to promote FHIR and interoperability to broader community
- Continuing proposal development for NIH to support their extramural FHIR education

Global Outreach

- First FHIR On-Site Course / **Kenya / Africa**
- Participation in **DevDays 2023 / Amsterdam**
- Participation in **Medinfo 2023 / Australia**
- Participation in **HL7 Perú Affiliate 1st Event (Virtual)**
- Agreement with **WHO / Signed**
- Draft Agreement / Meeting with **AeHIN Leadership**
- Meeting with **RACSEL leadership**

Q3 2023/ Working on:

- Regional Partnership with RACSEL (IDB/LAC) – Pending their signature
- Affiliate RECAINSA in Central America - Pending their proposal
- Finalize Agreement with AeHIN / Annual Meeting (Nov. 6-9, Jakarta, Indonesia)
- Participation in HL7 Brazil Event / RACSEL / PAHO Event (Nov. 14, Sao Paulo)

Thank You

Tuesday

- Chair's Report & John Quinn HL7 Fellows Class of 2023
- CSDO & TSC Report
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- FHIR Accelerator: CARIN
- FHIR Accelerator: Helios
- Final Announcements

Tuesday



International Council Report

Fernando Campos

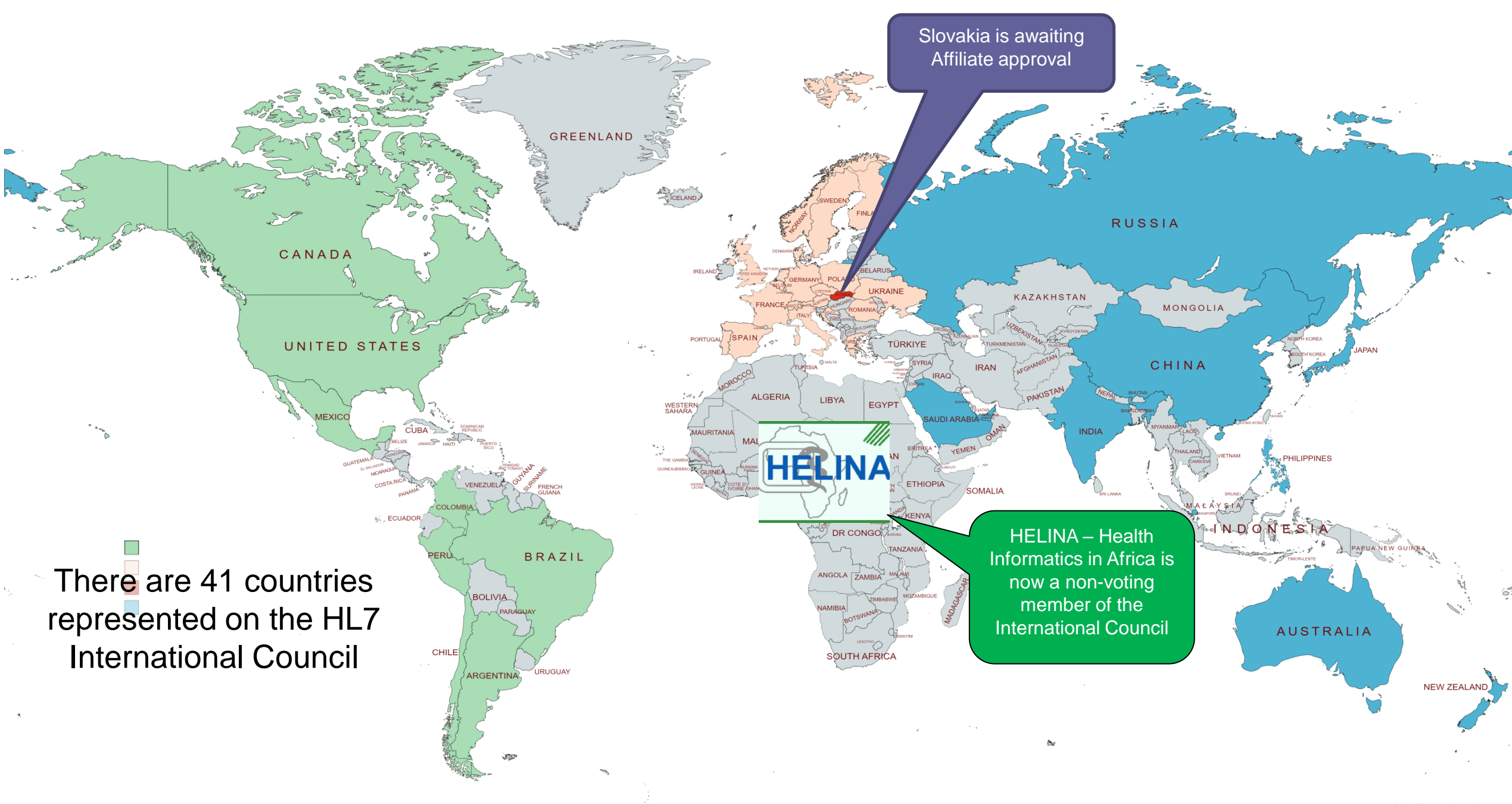
Co-Chair

International Council Update

HL7 International WGM
Sept 12th, 2023

Fernando Campos
HL7 International Council Co-Chair
Chair HL7 Argentina





There are 41 countries represented on the HL7 International Council

International Council Virtual Meetings

- Since last WGM, one virtual IC meeting on August 16th, 2023
 - Conclude e-Vote funding assistance for HL7 Philippines (1st HL7 Philippines Summit).
 - IC Decision Making Practices
 - Review of last changes of the Affiliate Agreement for 2024-25
 - Preparation for Plenary 2023 WGM

Proposed Affiliate Agreement Updates – Main topics

- Two new subsections “Obligations of the Affiliate” and “Participation”.
- Organizational Member Use of licensed Standards
 - Related to no open standards (like V2x)
- Use an online Form for Section B of the Annual Report
- Requiring Affiliate Chairs to have active (free) HL7 Confluence accounts.
- More items will be discussed next Thursday

IC Decision Making Practices Update

- the way the necessary quorum is established based on whether an affiliate participates in the meetings or not.
 - If the Affiliate do not participated in 3 International Council meetings and/or IC e-Votes in the previous 12 months, their status will be changed to “Inactive” and, until they meet these criteria, they are no longer counted in the quorum thresholds for International Council decision making process

Affiliate updates - milestones

- First FHIR On-Site Course in Kenya - Africa



- First HL7 Philippines Summit (Aug 25-26)



Affiliate updates

■ FHIR IG Core JAPAN (36 months)

- FHIR Infrastructure
- Diagnostics and Observations
- Patient Administration
- Clinical Module
- Pharmacy and Medication
- Terminology



HL7 FHIR JP Core ImplementationGuide
1.1.0 - release

Table of Contents > HL7 FHIR JP Core 実装ガイド < Draft Ver1.1 >

HL7 FHIR JP Core ImplementationGuide - Local Development build (v1.1.0). See the [Directory of published versions](#)

1 HL7 FHIR JP Core 実装ガイド < Draft Ver1.1 >

項目	内容
定義URL	http://jpfhir.jp/fhir/core/ImplementationGuide/hl7.fhir.jp.core
Version	1.1.0
Name	FHIRJPCoreImplementationGuide
Title	HL7 FHIR JP Core ImplementationGuide
Status	Active (2022-10-24)
Copyright	Copyright FHIR Japanese implementation research working group in Japan Association of Medical Informatics (JAMI) 一般社団法人日本医療情報学会 NeXEHRs課題研究会FHIR日本実装検討WG

このドキュメントは日本医療情報学会NeXEHRs課題研究会「HL7®FHIR® 日本実装検討WG」で作成した実装ガイドのドラフトVer.1.1である。このバージョンは日本HL7協会による承認を受けていない。今後、予告なく内容に変更がある。また実装や利用は全て自己責任で行なうこと。

1.1 概要

ガイダンス: JP Coreでの全体に関する規則や注意事項を記載している。

Affiliate updates – Next events

- HL7 Argentina – JIS summit (Nov 2-4 Bs As)
- HL7 Brazil Event / RACSEL / PAHO Event (Nov. 12-14, Sao Paulo)
- HL7 Hellas - Athens Digital Health Week 2024 (Jan 2024)
 - Organize the 1st HL7 Europe working group meetings and Connectathon in Europe
- HL7 Chile FHIR connectathon (Jan 2024)

Looking Forward

- Slovakia has made an application to be an affiliate
 - International Council will vote on approving the application with recommendation to the Board (deadline Sept 14th)
- IPS localization demo & IG in different languages
- WGM May 2025
 - Two candidates – Madrid & Rotterdam



THANK YOU!

Tuesday

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Tuesday



FHIR Accelerator: CARIN

Mark Roberts
Associate

CARIN Alliance Updates

Mark Roberts and Amol Vyas

9/14/2023



CARIN Digital Insurance Card IG Overview

- The IG develops artifacts (FHIR implementation guides, code mappings, reference implementations, etc.) to enable the digital exchange and digital rendering of the elements found on a person's physical insurance card. The primary use case is to support insurance members who wish to retrieve their proof of insurance coverage digitally via a consumer-facing application.
- The implementation guide was published as an STU1 in July 2022.



CARIN Digital Insurance Card 2023 Updates

- On 2/28 we held a developer seminar on to discuss an approach for integrating the CARIN IG for Digital Insurance Card with SMART Health Cards
- Following that seminar, we discussed proposed changes that could be added to the IG to include the SHC use case.



SMART Health Links for CARIN Digital Insurance Card

- ⑩ Payors create digital insurance card, make it available to members
 - Generate the FHIR bundle defined by the CARIN IG
 - Generate SMART Health Link for a signed copy of the insurance FHIR data
 - Provide to members to import as a QR code, download button, or link
- ⑩ Providers accept the insurance cards in online or in person check-in processes
 - Accept links or scan QR codes via tablets or webcams, check in kiosks, and in online check-in processes
 - Retrieve and validate the FHIR bundle
 - Integrate (or lean on vendors to integrate) data into existing workflows
- ⑩ App and wallet makers provide people tools to manage their cards
 - Import cards, add to digital wallets, display QRs for sharing, links for pasting



CARIN Digital Insurance Card 2023 Updates

- In June 2023, during the [PIE WG](#) meeting we reviewed proposed updates to add the SHC use case to the IG, which are posted on confluence here: <https://confluence.hl7.org/display/CAR/CARIN+IG+For+Digital+Insurance+Cards+SMART+Health+Links+Use>
- We also discussed how to move forward with new use case (update PSS or FHIR IG). After the discussion, the PIE WG voted (20-0-1) to approve update the FHIR IG.
- FMG approved the FHIR IG update on 2023-06-28: [2023-06-28 FMG Agenda/Minutes](#)
- CARIN included the updates, which were approved by PIE in a CI build here: <https://build.fhir.org/ig/HL7/carin-digital-insurance-card/>



CARIN Digital Insurance Card 2023 Updates

- At the CMS Connectathon several apps were able to capture and ingest the SMART Health. Several were then able to validate and display the card or QR code that could be used at a kiosk scanner at a providers office. A report on this can be found here:

<https://confluence.hl7.org/display/FHIR/2023+-+07+CARIN+IG+For+Digital+Insurance+Card>



CARIN Digital Insurance Card 2023 Updates

- At the September Connectathon, we held a working session to review proposed updates, answer implementer questions, and invite implementers to join in testing the SHC, which can be on the track Confluence page here:
<https://confluence.hl7.org/display/FHIR/2023+-+09+CARIN+IG+For+Digital+Insurance+Card>
- We will be meeting with PIE on 9/12 @ Q2 to discuss publication next steps.
- We also invite you to join us at the January 2024 Connectathon where we plan to hold a robust testing session with numerous implementers.



CARIN Blue Button IG Overview

- This IG describes the CARIN for Blue Button® Framework and Common Payer Consumer Data Set (CPCDS), providing a set of resources that payers can display to consumers via a FHIR API to meet part of the CMS requirements related to the Patient Access API.
- STU1 was published in November 2020, and minor technical corrections were published in early July 2021 as STU1.1.0.
- STU2 was published November 2022 and includes oral and vision types for the first time.



CARIN Blue Button 2023 Updates

- Launched a pilot with the ONC and CMS to include a test kit on the ONC's Inferno test suite for the CARIN IG for Blue Button®.
- Reviewing Jira tickets and discussing updates to the IG to include non-financial EOBs to meet the CMS Advancing Interoperability and Improving Prior Authorization Processes Proposed Rule proposal, which will make patient claims and encounter data (excluding cost information) available to in-network providers beginning January 1, 2026.



Provider Access to Non-Financial Claims Data

- Objectives
 - Avoid Data Duplication
 - Avoid heavy post processing in an Orchestration Layer
- What We Have Learned So Far
 - _summary view won't work due to base resource settings



Draft Intro for CARIN BB Non-Financial Profiles



3.3 Use Case - Provider Access to Non-Financial Claims Data

3.3.1 Background

- The CMS Advancing Interoperability and Improving Prior Authorization Processes Proposed Rule (CMS-0057-P) requires Health Plans to make a Bulk FHIR API available to Providers. The data available via that API would be the information a Health Plan makes available to the member, with one exception: Providers would have access to a member's claims data with the financial elements redacted. Making Non-Financial versions of Claims and Encounters available to a Provider audience requires three distinct areas to be addressed:
 1. The profile or data view.
 2. An Attribution control capability- how members are attributed to a specific provider.
 3. An Access control capability - how providers gain access to an API to retrieve data for their attributed members.

3.3.1.1 Data View

- The CARIN Consumer Directed Payer Data Exchange (CARIN IG for Blue Button) has defined the claims profiles available for the Patient Access API. it is therefore appropriate for this IG to define the Non-Financial versions of these profiles.

3.3.1.2 Attribution Control

- Access to the Non-Financial Claims and Encounter profiles will be managed using a Group resource. The Da Vinci Member Attribution IG provides capabilities to manage attribution to providers and support bulk data api access

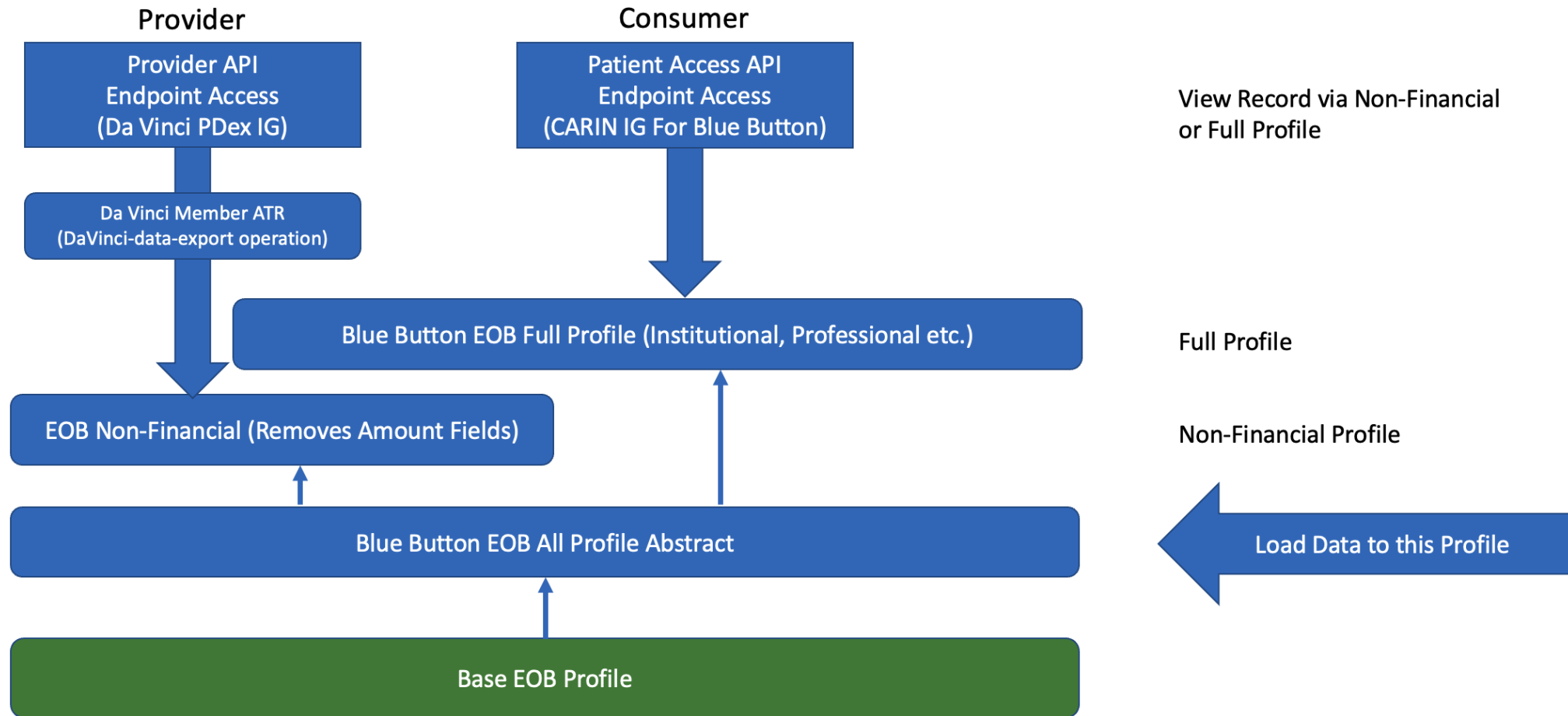
3.3.1.3 Access Control

- The Payer Data Exchange IG, in a planned STU2 update, is working on defining the access method for leveraging Member Attribution for bulk access by providers to Patient Access API data for attributed members. This will define the Provider API required by the Prior Authorization Proposed Rule. It will utilize the Da Vinci Data Export operation defined in the Da Vinci Member Attribution IG.

In summary, Enabling Provider Access to non-financial versions of claims and encounter data will require the combined focus of IGs from both the CARIN Alliance and Da Vinci Accelerators.



CARIN IG for Blue Button Non-Financial Flow



USCDI and USCDI+ Quality

- The CARIN Alliance previously submitted new Data Class and Element recommendations for USCDI versions 2, 3, and 4.
- CARIN suggested the inclusion of core administrative data found in the CPCDS and CARIN IG for Blue Button that did not exist in USCDI, but are necessary to further the ONC's mission of “a standardized set of health data classes and constituent data elements for nationwide, interoperable health information exchange.”



USCDI and USCDI+ Quality

- Many of the submitted Data Element recommendations have been included within the Health Insurance Information and Patient Demographics/Information Data Classes in USCDI v3 or v4.
- However several have not including the Explanation of Benefits (EOB) Data Class and Data Elements associated with the CARIN IG for Blue Button.
- CARIN recently submitted comments to USCDI v5 to again ask for ONC to consider including EOBs (or at least the non-financial EOBs) in the next published version of USCDI.



Weekly Meetings

- We invite you to join the weekly discussion to review Jira tickets, which will likely lead to updates to the STU2 of the CARIN Blue Button IG. The meetings occur weekly **Thursday at 1-2 pm ET**.

- The invite can be found on the HL7 Conference Call Center, Confluence, and Zulip or you can join using this Zoom information:

<https://leavittpartners.zoom.us/j/99456976904?pwd=MIhmODhSUFRldDlDVU9rYW9NZGxMZz09&from=addon>

Password: 807486




CARIN ALLIANCE ACCOMPLISHMENTS & PLANS



AREA OF FOCUS	ACCOMPLISHMENTS	PLANS
CARIN IG for Consumer-facing Real-time Pharmacy Benefit Check	❖ Developed, in conjunction with HL7 and NCPDP, a consumer-facing real-time pharmacy benefit check <u>implementation guide</u>. This implementation guide meets the CMS requirement to provide a 'Beneficiary real-time benefit tool (RTBT)' to Medicare beneficiaries.	❖ Advance the adoption of our RTPBC standard, including encouraging PBMs to consider this standard in conjunction with the NCPDP standard for MAPD and Part D plans. ❖ Working with HL7 sponsoring WG on an STU extension to continue our work.

CARIN ALLIANCE ACCOMPLISHMENTS & PLANS



AREA OF FOCUS	ACCOMPLISHMENTS	PLANS
Digital Identity & Authentication  <small>Digital Identity Federation Report</small>	<ul style="list-style-type: none">❖ Worked with ONC, CMS, and the HHS team to conduct a year-long OpenID Connect-based Digital Identity Federation Proof of Concept. The PoC was necessary to implement FHIR-based data exchange at scale. For the PoC, we tested four workstreams (CSP only, CSP with HIEs, CSP with the HHS XMS Identity Broker service, and CSP with UDAP Tiered OAuth which followed the FAST HL7 IG on Interoperable Digital ID and Patient Matching) with the objective of scaling an open framework for federating trusted Identity Assurance Level 2 (IAL2) certified credentials using a person-centric approach. The output of this endeavor was published on our website in March 2023.❖ Developed the CARIN Digital Identity Federation Credential Policy, which maps to NIST 800-63-3A, NIST 800-63-3B, NIST 800-53, and RFC 3467 guidance. This allows for digital identities to be interoperable. The credential policy is non-proprietary and can be used by anyone. It was published on our website in March 2023.	<ul style="list-style-type: none">❖ Incorporate the lessons learned from the Digital Identity Federation Proof of Concept into a production pilot.❖ There is the potential to lead a health care digital identity federation pilot in the state of Utah through the One Utah Health Collaborative digital health pilot.❖ A new workstream within CARIN will be addressing an open framework for how to identity proof minors with their consent and their legal guardian's/parent(s) consent.

CARIN ALLIANCE ACCOMPLISHMENTS & PLANS



AREA OF FOCUS	ACCOMPLISHMENTS	PLANS
Trust Framework, Code of Conduct, and App Registration Guide	<ul style="list-style-type: none">❖ Continued to advance the <u>CARIN Code of Conduct</u> with various industry and public sector organizations. Current adopters include dozens of payers, the VHA, provider organizations, and others. We also have reviewed in detail with the FTC.❖ Launched the <u>CARIN Code of Conduct Certification</u> program with EHNAC. Applications can now get CARIN code of conduct certified with EHNAC.❖ Continued discussions with the VHA, CCIIO, & CMS about developing a common public sector application registration process, in relation to the <u>CARIN App Registration Guide</u>.	<ul style="list-style-type: none">❖ CARIN Code of Conduct for Consumer-facing Applications is currently going through its annual update process based on feedback.❖ CARIN is creating a new Code of Conduct for “Connectors.”❖ WG is collaborating with Policy on FTC Health Breach Notification Rule.❖ Continue to ramp up the CARIN code of conduct certification program with more applications getting certified.

CARIN ALLIANCE ACCOMPLISHMENTS & PLANS

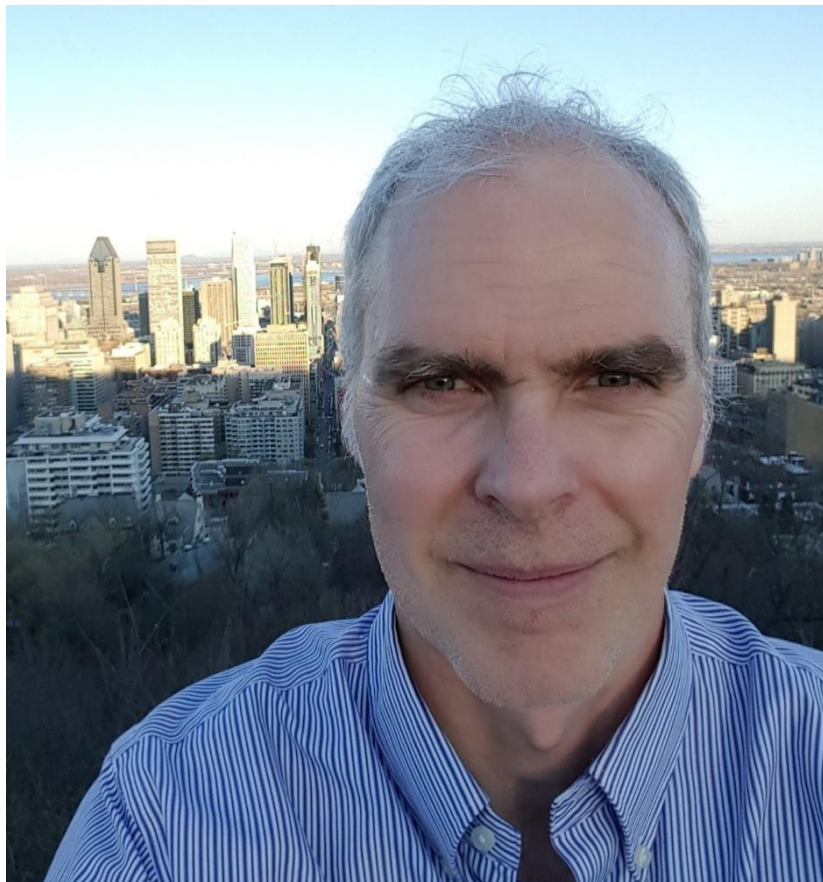


CARIN WORKGROUP	ACCOMPLISHMENTS	PLANS FOR 2023
Trust Framework, Code of Conduct, and App Registration Guide	<ul style="list-style-type: none">❖ Continued to advance the CARIN <u>Code of Conduct</u> with various industry and public sector organizations. Current adopters include dozens of payers, the VHA, provider organizations, and others. We also have reviewed in detail with the FTC.❖ Launched the CARIN Code of Conduct Certification program with EHNAC. Applications can now get CARIN code of conduct certified with EHNAC.❖ Continued discussions with the VHA, CCIIO, & CMS about developing a common public sector application registration process, in relation to the CARIN <u>App Registration Guide</u>.	<ul style="list-style-type: none">❖ CARIN Code of Conduct for Consumer-facing Applications is currently going through its annual update process based on feedback.❖ CARIN is creating a new Code of Conduct for “Connectors.”❖ WG is collaborating with Policy on FTC Health Breach Notification Rule.❖ Continue to ramp up the CARIN code of conduct certification program with more applications getting certified.

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- **FHIR Accelerator: Helios**
- Final Announcements

Tuesday




FHIR Accelerator: Helios

Craig Newman
Program Manager

The Helios FHIR Accelerator for Public Health

HL7 WGM Meeting
September 12, 2023





**What can be done
to accelerate
public health
readiness to act
on the data and
use the data
meaningfully?**

**What can we do
to ensure that our
efforts to
influence
healthcare
partners are
strategic and
aligned?**

**How can we
leverage policies
and approaches to
interoperability
that have
momentum and
buy-in beyond
public health?**

HELIOS FHIR Accelerator

Helping public health to align with and benefit from the widespread standardization and transformation that is happening around digital health data

**Focusing
on Impact**

**Bringing
People
Together**

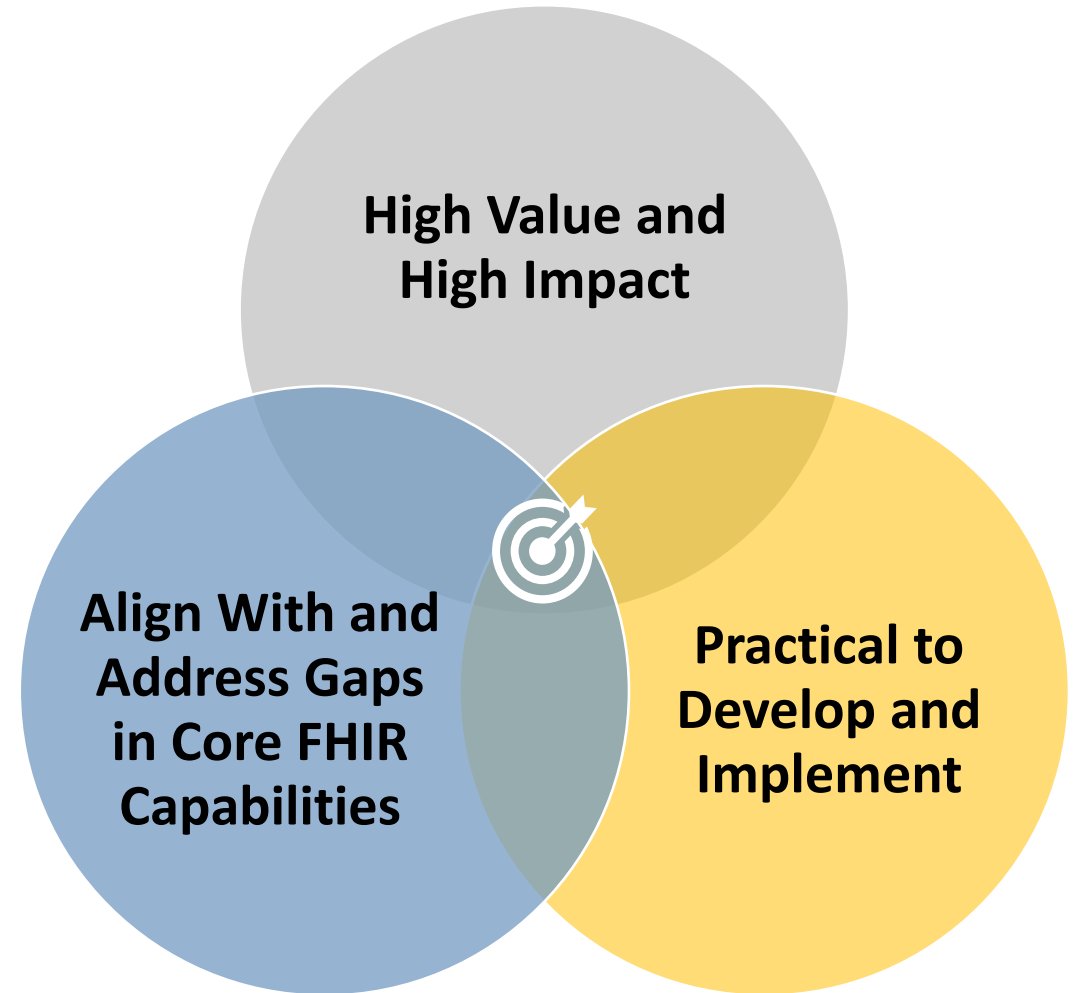
**Aligning
Efforts**

Core Principles

Desirability: Serves a pressing public health need

Feasibility: Fits with public health goals and resources

Compatibility: Builds off existing foundations



HELIOS FHIR Accelerator

Community-led
priority areas

**Deliver
Aggregate
Information to**



**Make Data in Public
Health Systems
Accessible in Bulk**



**Align and
Optimize Public
Health**



HELIOS FHIR Accelerator

Community-led
priority areas

**Deliver
Aggregate
Information to**



**Make Data in Public
Health Systems
Accessible in Bulk**



**Align and
Optimize Public
Health**



**Public Health
Query &
Response**



Deliver Aggregate Information to Public Health



Goals

Provide **mission-critical situational awareness information** to public health to support both **emergency response and ongoing monitoring needs**.

Community Leaders

- Ravi Kafle (WA DOH), Hans Buitendijk (Oracle Cerner)

Engaged Partners

- HIT/EHR Vendors
- STLTs
- Tech Partners
- Federal Partners

Key Achievements

- 1 Identified and defined initial subset of standardized building block priority measures for testing
- 2 Testing proof-of-concept systems for existing FHIR interoperability standards –
September 2023 Connectathon

Make Data in Public Health Systems Accessible



Goals

Enable authorized users of IIS data to access complete, accurate, and timely immunization history information on their patient populations in a consistent way

Community Leaders

- Mary Beth Kurilo (AIRA), Les Lenert (MUSC), John Stamm (Epic)

Engaged Partners

- IIS/HIT/EHR Vendors
- State Immunization Programs
- Payers
- Federal Partners

Key Achievements

- 1 Applied bulk Bulk Data FHIR standard to the use case
- 2 Achieved proof-of-concept exchange of data for 100,000 test patients

Align and Optimize Public Health Data Sharing



Goals

Describe a process for **assessing the interoperability needs** of a public health use case and **identifying optimal FHIR-based approaches** for achieving data sharing

Community Leaders

- Michelle Barber (Oregon), Gillian Haney (CSTE), Steve Hill (Oracle Cerner)

Engaged Partners

- HIT/EHR Vendors
- CSTE
- STLTs
- Federal Partners

Key Achievements

- 1 Developed an evaluation framework to map use cases to FHIR-based solutions
- 2 Established high priority use cases to assess

Public Health Query & Response



Goals

Leverage existing FHIR API support to enhance public health access to data necessary to perform critical functions such as case generation and providing services and support to impacted individuals

Engaged Partners

- HIT/EHR Vendors
- STLTs
- Federal Partners

Key Achievements

- 1 Defined 3 initial use cases to test
- 2 Sept 2023 Connectathon track

Get Involved

Work alongside partners from across healthcare, government, and the private sector to access & exchange detailed information not easily available now

Attend our sessions:

Public Health WG: Today Q1

Birds of a Feather: Today Q5

Join a Helios project team, email:

helios@hl7.org

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Tuesday



Final Announcements

Mark McDougall

Executive Director

HL7 International

Meeting Schedule

- General sessions begin in this room at 8 am through Thursday
- Day is organized in quarters
 - Q1: 9 -10:30 am Q2: 11 am -12:30 pm
 - Q3: 1:45 – 3 pm Q4: 3:30 – 5 pm
- 30-minute breaks
 - 10:30 am
 - 3 pm
- Use Whova to find your meeting locations

Lunches

- Lunch is at 12:30 pm each day
- Those with an allergy and a Special Meals Ticket in their packet should speak to a server (they may have an alternative meal)
- Those registered for Friday and planning to attend the luncheon should pick up their ticket by 12 noon *today* at the registration desk.

Wireless Access

- Connect to: HL7SEP2023
- Password: HealthLevel7
 - Password is case sensitive

Mobile & Web App – Whova

- Stay up to date with event announcements, changes, view the site map, meeting agendas, and best of all, create your own schedule!
- If you experience any issues in your meeting rooms, send a message to **Ask Organizers Anything** under Community.
- If you have questions or need help with your app, please see the HL7 Staff.

Mobile & Web App – Whova

- Download the mobile app on the App Store or Google Play
- Access the web app from your laptop:
https://whova.com/portal/webapp/hleve_202312/
- Scan the QR code at the registration desk



Reminder to co-chairs

Schedule Changes

Please notify Mary Ann of any schedule changes:

WGMHelpDesk@HL7.org

Evaluations

- Tutorial evaluation links will be sent to participants.
- Meeting evaluation links were in the welcome letter and will also be sent after the meeting concludes.
- There will be a drawing for \$500 towards HL7 Education!

<https://www.surveymonkey.com/r/Sept2023WGM>

Birds of a Feather Meetings

- Tuesday 12:30 PM
 - Gravity – Phoenix D
- Tuesday 5:30 PM
 - Helios – Phoenix E
 - Da Vinci – Phoenix B
 - Dental – Paradise Valley
 - CARIN – Deer Valley
 - FAST – Encanto A
- Wednesday 9 AM
 - Government – Phoenix A
- Wednesday 12:30 PM
 - CodeX – Phoenix D

Join us for the
Women of HL7
Networking Reception
tonight at 5:15 PM
in Phoenix 3rd Street
Foyer

Sponsored by HL7 Australia & Lantana



Thanks to Our Sponsors



Women of HL7 Reception Sponsor



Women of HL7 Reception Sponsor



Connectathon Sponsor



WGM Lanyard Sponsor

Bow Tie SIG





Have a fabulous day!

Tuesday, September 12, 2023

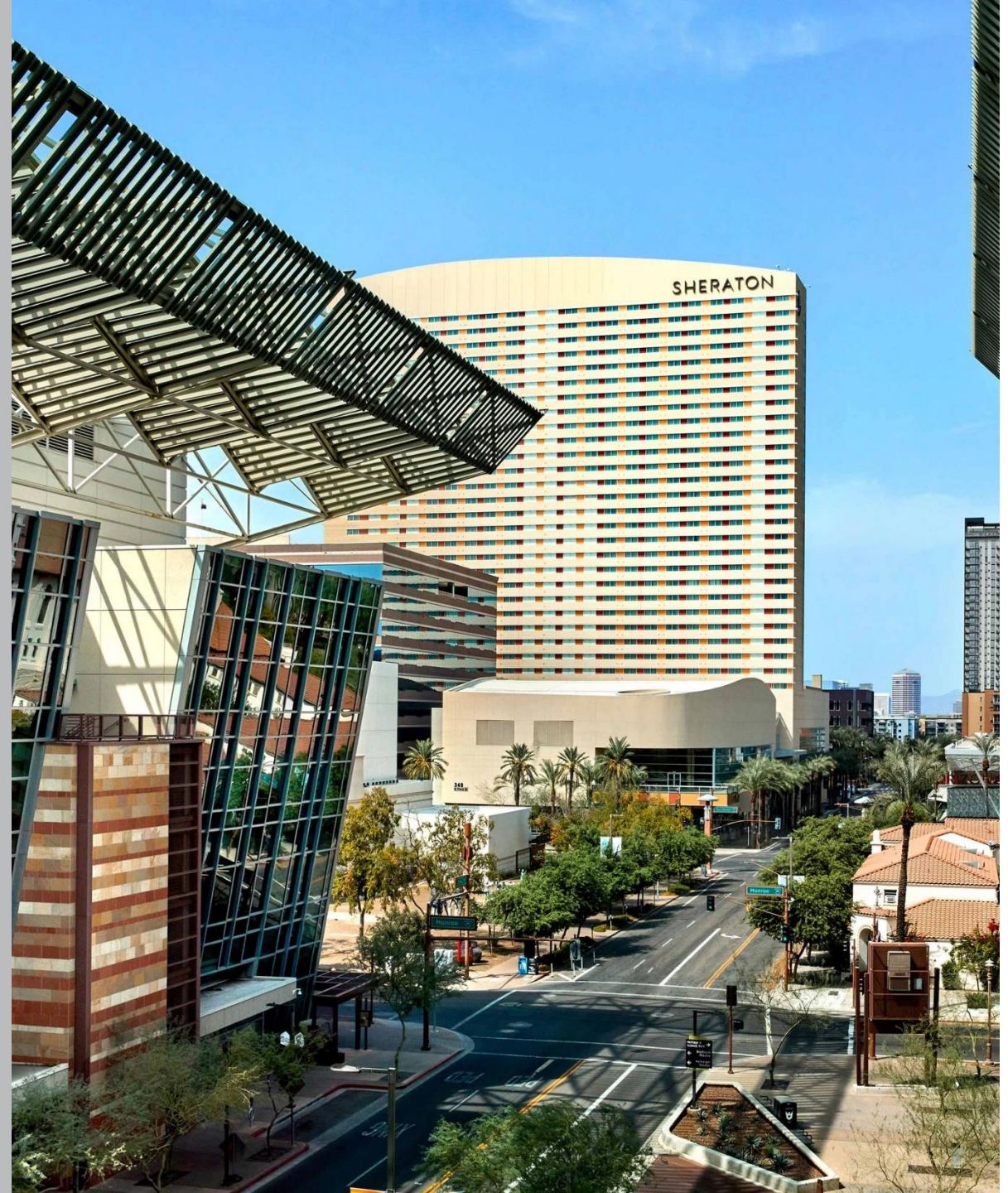




37th Annual Plenary & Working Group Meeting

Phoenix, Arizona

Wednesday, September 13, 2023



Wednesday



Welcome

Mark McDougall

Executive Director
HL7 International

Wednesday

- **Annual Business Meeting**
 - **CEO's Report**
 - Secretary's Report
 - Treasurer's Report
 - 3-Year Plan Update
- **Recognition & Awards**
 - Individuals & Companies
 - Volunteers of the Year
- **Final Announcements**

Wednesday



CEO's Report

Charles Jaffe, MD, PhD

Chief Executive Officer
HL7 International

HL7's Approach to Generative AI

Chuck Jaffe
HL7 CEO

Brief Report for the HL7 Membership

Developed in collaboration with
Dan Vreeman, CSDO
Diego Kaminker, DCSIO



HL7®
International

Building a Roadmap for 2023, 2024 & beyond

1. What is Generative AI?
2. How can Generative AI be leveraged in Healthcare and Interoperability?
3. Can Generative AI support our own HL7's processes?
4. Are there any existential threats to HL7 from Generative AI?
5. Can we protect our stakeholders from unethical use of Generative AI?
6. Current related projects inside HL7
7. Roadmap and next steps

What is Generative AI?

“An artificial intelligence (AI) system capable of generating text, images, or other media in response to prompts”

Everyday mentions:
ChatGPT, DALL-E,
Midjourney, GitHub Copilot, etc...



BOSTON GLOBE TODAY | METRO | SPORTS | BUSINESS | POLITICS | OPINION | HEALTH

Massachusetts hospitals, doctors, medical groups pilot ChatGPT technology

By Jessica Bartlett Globe Staff, Updated May 30, 2023, 9:09 p.m.



Boston Children's Hospital already makes broad use of older types of artificial intelligence, such as to read radiology and pathology scans. LANE TURNER/GLOBE STAFF

Artificial intelligence is already in wide use in health care: medical workers use it to record patient interactions and add notes to medical records; some hospitals use it to read radiology images, or to predict how long a patient may need to be in intensive care.

The New York Times

A.I. and Chatbots > Test A.I.'s Literary Skills Spot the A.I. Image What Are the Dangers of A.I.? How 35 Real Pe

SUBSCRIBER-ONLY NEWSLETTER
On Tech: A.I.

Get the Best From ChatGPT With These Golden Prompts

Our personal tech columnist shares how to improve many parts of your life.

Give this article



Applying Generative AI in Healthcare

© Randy Glasbergen
glasbergen.com

- **Traditional AI:** Limited to specific tasks - identify objects in images or translate languages.
- **Generative AI:** Potential to improve workflow in patient care, reduce costs, and accelerate medical research.

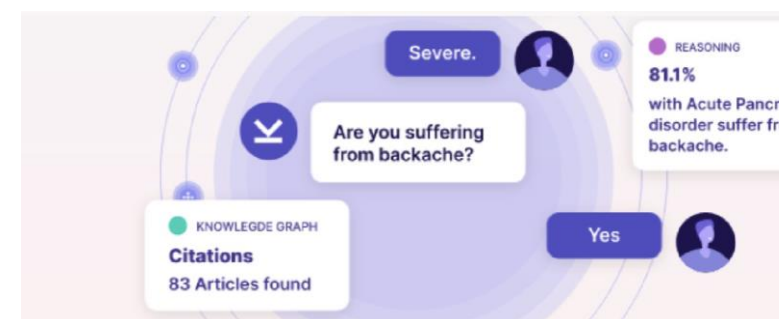
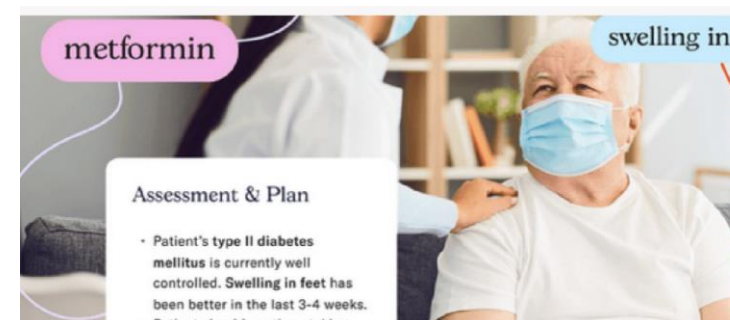
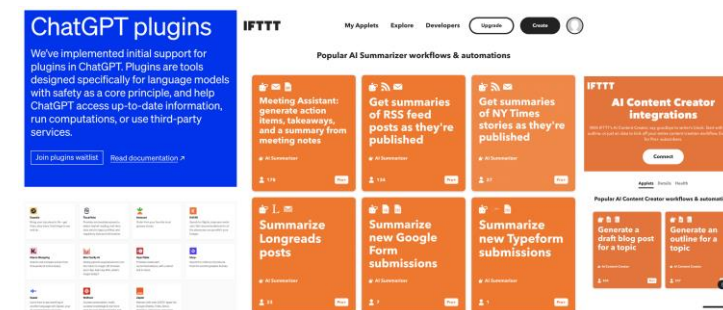


“We have a surplus of solutions, so I need you to create a bunch of new problems.”

The Future of Generative AI in Healthcare

Generative AI will revolutionize the way healthcare is delivered, and is likely to play an increasingly important role in the years to come.

Most implementations will utilize '**GenAI plug-ins**' into current systems.



Generative AI for HL7 processes

Our purpose: Convene and create consensus to develop interoperability standards and speed their implementation.

Our approach: Identify challenges and opportunities in the standards development and implementation lifecycle that...

- may utilize Generative AI for creating interoperability standards (HL7 as a convener: community consensus).
- may leverage Generative AI for our internal processes.

Generative AI for HL7 processes

- **Short Term**

- Note-taking and meeting minutes (in person or Zoom)
- Make a checklist for speakers at our virtual event that uses Zoom
- Summarize the survey results from a questionnaire

- **Long Term**

- ChatHL7: train a model on **chat.fhir.org** responses and **confluence.fhir.org** content
- Auto-generate FHIR profiles, queries, and text-based narrative descriptions

- **Medium Term**

- Create a lay person summary of the "MCC eCare Plan Implementation Guide"
- Create multiple examples of FHIR Coverage resources that conform to the Resource Profile: US Core Coverage Profile
- Create "album art" for our specs to convey the spirit of standards development for a non-technical audience
- Summarize this!

Existential Threats of Generative AI

- Member job contraction
- Membership erosion
- Industry consolidation
- Enabling interoperability solutions that do not require standards
- Accelerating obsolescence
- Auto-creation of false clinical records
- Development of non-standardized interoperability solutions

Challenges in the use of Generative in Regulation

- **Hype vs Actual Use:** Formulating processes to aid our community in navigating hype versus actual (realistic) use cases
- **Computing Resources:** Recognizing the requirement of Generative AI for an extremely large amount of computer resources
- **Inaccuracy and Bias:** Elaborating concerns about the accuracy and bias (gender, race, SDOH) of Generative AI models and the data to train them.
- **Security and Privacy:** Protecting access to large amounts of sensitive data to train models.

Current Generative AI related projects in HL7

- The EHR Workgroup is creating:
 - A white paper on the use of AI in Healthcare (not focused on GenAI)
 - A specification on the AI Data
- Other discussions: (GenAI+existing FHIR specs)
 - How to call an AI service: CDS Hooks
 - How to get Get recommendations from an AI service: CDS Hooks+SMART-on-FHIR
 - How to Identify the device and the algorithm: IG on Provenance for AI+Extensions and (if needed) algorithm bias
 - How to identify the resource as preliminary and/or created by an AI algorithm: Utilizing **verificationStatus** or similar resource or tagging the resources as 'preliminary' or 'created by AI': tag/element in the resource metadata

Roadmap and next steps

- The HL7 Board charged the Executive Leadership Team with the advancement of 3 areas, within the scope of the Three-year plan:
- **Outreach:**
 - Create a virtual event "What is GenAI to HL7", before the end of this calendar year.
 - Create an "innovation award" for creative uses of HL7 standards with GenAI.
- **Relevance:** Identify use cases, stakeholders, and themes for GenAI use in HL7's domain (based upon current WG projects & other sources).
- **Agility:** Find concrete ways to leverage GenAI Bots or tools to improve our processes

Additional References & Resources

- The Lancet Regional Health – Embracing generative AI in Health Care
[https://www.thelancet.com/journals/lanepi/article/PIIS2666-7762\(23\)00096-0/fulltext](https://www.thelancet.com/journals/lanepi/article/PIIS2666-7762(23)00096-0/fulltext)
- Epic, Microsoft partner to use generative AI for better EHRs
<https://www.healthcareitnews.com/news/epic-microsoft-partner-use-generative-ai-better-ehrs>
- Draft HL7 White Paper on AI (EHR WG)
<https://tinyurl.com/wpaihl7>
- AI LifeCycle
<https://jira.hl7.org/browse/PSS-2149>

Wednesday

- **Annual Business Meeting**
 - CEO's Report
 - **Secretary's Report**
 - Treasurer's Report
 - 3-Year Plan Update
- **Recognition & Awards**
 - Individuals & Companies
 - Volunteers of the Year
- **Final Announcements**

Annual Business Meeting



Secretary's Report

Julia Skapik

For

Virginia Lorenzi
Secretary

HL7 International Board of Directors

Board Election Results

- Treasurer: John Hatem
- Directors: Josh Mandel, MD, Marjorie Rallins
- Affiliate Directors: Giorgio Cangioli, Fernando Campos

International Council Co-Chair Election Results

- International Council Co-Chair: Ron Parker

TSC Election Results

- Chair Elect: Rick Geimer
- Implementer Rep: Jeff Brown
- Work Group Reps: Riki Merrick, Lloyd McKenzie
- Affiliate Rep: Alexander Zautke

WG Co-Chair Election Results

- Arden Syntax – Peter Adlassnig
- Biomedical Research and Regulation – Maryam Garza
- Clinical Decision Support – Robert Jenders, Kensaku Kawamoto, Bryn Rhodes
- Clinical Genomics – Robert Freimuth, Michael Watkins, Patrick Werner
- Clinical Information Modeling Initiative – Nathan Davis, Stan Huff
- Clinical Interoperability Council – Bruce Bray, Russ Leftwich
- Clinical Quality Information – Paul Denning, Yan Heras, Stan Rankins
- Community Based Care and Privacy – David Pyke

Co-Chair Election Results

- Conformance – Robert Snelick
- Cross-Group Projects – Floyd Eisenberg
- Devices – Todd Cooper, John Garguilo, Elliot Silver
- Electronic Health Records – Mark Janczewski, John Ritter, Lincoln Weed
- Emergency Care – James McClay
- FHIR Infrastructure – Gino Canessa, Grahame Grieve, Yunwei Wang
- Financial Management – Celine Lefebvre, Mark Scrimshire
- Human Services – Brian Handspicker, Michelle Zancan

WG Co-Chair Election Results

- Imaging Integration – Jonathan Whitby
- Implementable Technology Specifications – Paul Knapp
- Infrastructure and Messaging – Tony Julian
- Learning Health Systems – Bruce Bray, Maria Michaels
- Mobile Health – Matthew Graham
- Modeling and Methodology – Ron Shapiro
- Orders and Observations – Lorraine Constable, Robert Hausam, Ralf Herzog, JD Nolen
- Patient Administration – Reinhard Egelkraut, Cooper Thompson

WG Co-Chair Election Results

- Patient Care – Laura Heerman Langford, Emma Jones, Michael Tan
- Patient Empowerment – Kim Herman, Abigail Watson
- Payer/Provider Information Exchange – Chris Johnson, Karuna Relwani
- Pharmacy – Jean Duteau, Frank McKinney
- Public Health – Erin Holt, Forest White, Danny Wise
- Security – Kathleen Connor, Alexander Mense
- Services Oriented Architecture – Jerry Goodnough, Stefano Lotti, Ken Rubin
- Structured Documents – Joanne Dehnbostel, Gay Dolin, Benjamin Flessner
- Vocabulary – Jessica Bota, Marc Duteau, Robert Hausam

Recipients of Woody Beeler Memorial Scholarship

- Haotian Huang, Victoria, Australia
- Michael Tan, North Holland, Netherlands

Wednesday

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Annual Business Meeting



Treasurer's Report

Floyd Eisenberg, MD

Treasurer

HL7 International Board of Directors

Treasurer's Report

- Highlights of 2022 yearend financials
- Highlights of 2023 yearend financial forecast
- Preliminary insight to the 2024 budget that is under development

Highlights of 2022 Operating Financials*

	<u>2022 Budget</u>	<u>2022 Actual</u>	<u>Variance</u>	<u>Variance %</u>
Revenues	7,099,850	7,751,023	651,173	9%
Expenses	8,842,917	7,605,623	-1,237,294	-14%
Net Income	-1,743,067	145,400	1,888,467	108%
2022 Yearend Reserves	9,178,097	11,066,564	1,888,467	21%
Reserves in months of operating expenses	12.45	17.46	5.0	40%

*Excludes pass-through funds for ONC funded projects and FHIR accelerators.

Highlights of 2023 Yearend Forecast Financials*

	<u>2023 Budget</u>	<u>Yearend Forecast</u>	<u>Variance</u>	<u>Variance %</u>
Revenues	10,313,729	10,073,126	-240,603	-2.3%
Expenses	11,734,477	10,612,992	-1,121,485	-9.6%
Net Income	-1,420,748	-539,866	880,882	62%
2023 Yearend Reserves	9,645,816	11,376,215	1,730,399	18%
Reserves in months of operating expenses	9.86	12.86	3.0	30%

*Excludes pass-through funds for ONC funded projects and FHIR accelerators.

Looking ahead to HL7's 2024 budget

2024 Budget advance highlights:

- Budget reconfigured from previous years to incorporate the 3-year business plan highlighted during yesterday's general session presentation
 - Project-line expense and revenue accounting including staff time
 - Business-centered accountability enabling expansion of services with focus on the bottom line
- Includes significant investments for additional resources and events as well as new sources of income
 - New events
 - Additional support infrastructure
 - Additional staff support
- Finance Committee will review the proposed budget to the HL7 Board of Directors over the next 2 ½ months with final approval no later than December 4th

Treasurer's Report

- Should you have any questions, please contact me at feisenberg@iparsimony.com or our HL7 Controller, Nagham Sabah at Nagham@HL7.org
- Thank you!

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3-Year Plan Update



Dan Vreeman, DPT
HL7 International CSDO



Viet Nguyen, MD
HL7 International CSIO

HL7 International 3-Year Plan

HL7 WGM September 2023

Charles Jaffe
HL7 CEO

cjaffe@hl7.org

Dan Vreeman
HL7 CSDO

dan@hl7.org

Viet Nguyen
HL7 CSIO

viet@hl7.org

Diego Kaminker
HL7 DCSIO

diego@hl7.org



Our Foundation:

Core Principles and 2022-2024 Strategic Goals

Focus

Advance the global adoption of HL7 FHIR, while maintaining other HL7 standards currently in use

Agility

Optimize HL7 processes and make HL7 more approachable and simpler to be engaged in

Global Relevance

Ensure all our products and services have global relevance and reach a global market

Community

Expand HL7 reach beyond our traditional communities to include implementers and consumers

Sustainability

Pursue diversification and expansion of our funding sources to increase long-term sustainability of the organization

From Principles to 3-Year Plan

From the **Principles** and the detailed Re-envisioning Task Force(s) **Recommendations**, we developed **10 overarching Strategies**

- S01 - Leverage and expand the success of the HL7 FHIR Accelerator program
- S02 - Increase quality, value, and reach of HL7 education offerings
- S03 - Create a platform to enable discovery and testing of HL7 specifications
- S04 - Pursue new communities
- S05 - Empower patient participation and patient-awareness/friendliness of our standards
- S06 - Work proactively in global outreach
- S07 - Develop and execute a contributor engagement program
- S08 - Extend our portfolio of standards advancement projects through external funding
- S09 - Migrate legacy web platform to a modern content management system
- S10 - Continue HL7's "flywheel" activities that perpetuate our momentum

HL7 International 3-Year Plan: Outline

The Plan is organized by this framework

Each **Strategy**:

links to the **Recommendations** on which it is based
has a responsible person from one of HL7's 3 divisions
has a corresponding **Business Plan**

HL7 3-Year Plan

Principles



Recommendations



Strategies



Business Plan



The future is becoming the now

3 years from now...we'll be able to say:



We are a vibrant, diverse, global and continuously-welcoming community



We have a complete portfolio of role-based courses and certification tracks



We have an active portfolio of grant/contract funding complementing other revenues



We have a place to understand and test every HL7 Implementation Guide



We have a network of training partners



The robust HL7 FHIR Accelerator program catalyzes standards development and use

10 Strategies for Becoming the Re-envisioned HL7

Based on our learned best practices, we will develop a standardized and sustainable **Accelerator Blueprint** as the model to grow our community and support the adoption of FHIR around the world.

SID (Viet Nguyen)

- Improved cross-Accelerator coordination
- Established and applied the **Accelerator Blueprint**
- Supported Gravity in transition to new PMO
- Initiated discussions with key, representative stakeholders to discuss value of a Quality-Metrics Accelerator
- Supporting CodeX PMO RFP and transition
- Advised development of Accelerator workflow

- Launch 2 new Accelerators
- Further maturation of Accelerator workflows with input from PMOs
- Implement workflows as applicable
- Coordinate with Accelerators to maximize effectiveness of HL7 and Accelerators at HIMSS
- Continued coordination with SDD on events

S02

Increase quality, value and reach of HL7 education offerings

Create new education programs to increase the value (through **credentialing**), volume (through **partnering**) and quality (through **certifying education providers**) of HL7 Education.

SID (Diego Kaminker)

Partnering Program Launch: Contract templates and web page prepared. Three partners signed up. First course created by a Partner released in August (TW)

Credentialing Program: Contract signed August 2023. Working on Blueprint and Job/Task Analysis for the first test / certification.

Partnering: September 2023: Launch / Announce the Program / Sign up at least 2/4 partners next year

Credentialing: Finalize and launch the new test and credentials by Q1 2024.

S03

Create a platform for discovery and testing of our specifications

Create an open platform (the ***FHIR Foundry***) where anyone in the world can **discover**, **test/try**, and **install** reference implementations of HL7 specifications.

SID (Diego Kaminker)

Maintained the Logica Sandbox running (lights-on)

Created Foundry EOI and met with the selected vendors

Created the roadmap for MVP+one product cycle

Installed Reference Implementations for IPS and OMOP-Reasoning Modules running in HL7 Assets

Secure budget for FYI 2024

First MVP for Q1 2024

Create the Foundry Advisory Council for future roadmap

Enable Community Edition and minimal set of services for current users of the Logica Sandbox

S04 Pursue new communities

Proactively reach new communities by leveraging industry opportunities and paving new paths.

SID (Diego Kaminker + Chuck Jaffe)

FHIR in the
Clouds

FHIR - The Future of
Interoperability. Now!

FHIR Data Science
Institute @ HL7

AMIA/HL7 FHIR App
Competition

Open Data on FHIR

Cybersecurity for FHIR

Progress

FHIR in the Clouds Virtual Edition (HL7 / Jul 2023)

FHIR Synthetic Data Event (HL7/ Aug 2023)

FHIR Security Event (HL7 / Aug 2023)

Oncology Summit (Sep 2023)

BIDMC-AMIA AI Summit (Sep 2023)

ACP Medical Informatics Symposium (Oct 2023)

AMIA Annual Symposium (Nov 2023)

NODE Health Summit (Dec 2023)

Plans

2024 Events:

FHIR Data Science Institute

Open Data on FHIR

AMIA HL7 FHIR App Competition

FHIR Open Source

S05

Empower patient participation and patient-friendliness of our standards

Reinforce HL7's commitment to proactively involve patients and caregivers in the full life cycle of standards development and implementation.

SID (Diego Kaminker + Chuck Jaffe)

Progress

First Implementation Guide with friendly narrative published

Notre Dame Health Equity Data Lab Participation

Plans

Patient empowerment Event (2024)

S06

Work proactively in global outreach

Improve the vitality of our affiliate network and expand our partnerships through deliberate outreach, targeted communication, and developing shared services available for use in their local programs.

SID (Diego Kaminker + Chuck Jaffe)

Progress

- Terminology Best Practice Playbook
- Reference Implementation Best Practice Playbook
- Signed Agreements with: Helina (Africa) and WHO
- Events: First African on-site FHIR Workshop (Kenya)
- Participation in Medinfo and Devdays
- APEC Annual Interoperability Summit
- EMA IDMP Workshop

Plans

- Agreement with RACSEL (Network of countries in SouthAm)
- Agreement with AeHIN (Regional Partner in SouthEast Asia)
- Participation in AeHIN Annual Meeting
- New affiliate in Central America (RECAINSA)

S07

Develop and execute a contributor engagement program

We must inspire, expand, and engage with an ever-broader set of global stakeholders to fuel our collective progress in developing and implementing HL7's standards.

SDD (Dan Vreeman)

Community metrics

Recruiting: HL7 Community Manager

Co-chair perspectives survey (findings + follow-up)

Addressing common frustrations through sharing **best practices** and **infrastructure improvements**

Onboard HL7 Community Manager

Develop community health roadmap

Address additional frustration points

Implement respectful communication education into HL7 leadership training

S08

Extend our externally-funded standards advancement portfolio

We will continue delivering on our existing funded portfolio, while cultivating and expanding externally funded activities through grants, contracts, and cooperative agreements.

SDD (Dan Vreeman + Chuck Jaffe)

Operating 40+ projects: **standards advancement, core infrastructure development, process improvement, pilot testing, and dissemination.**

Projects are advancing all ten 3 Year Plan strategies

Submitted 3 additional proposals to new agencies

Supported **Friends of HL7** for more legislative funding

Continue aligning sponsored project objectives with HL7 mission and 3 Year Plan strategies

Build internal capabilities for sustaining project innovations

Strategically pursue additional funding opportunities

S09

Modernize our web platform

Revamp and re-imagine our web platform on a modern, open-source content management system with a vision towards integration with our standards development and publication infrastructure.

SDD (Dan Vreeman)

Prototype Project Life Dashboard on new platform

Stabilized Ballot Desktop and Con Call Center

Single Sign-On (planned roll-out Oct 2023)

Specification Lifecycle

Modern branding / UI for registry.fhir.org

Kickoff hl7.org design cycle

Phase 2 Project Life Dashboard (data automations)

Add additional apps to SSO

Consolidate / rewrite stand-alone apps

S10

Continue HL7's "flywheel" activities that perpetuate our momentum

HL7's core activities serve as the organizational circulatory system that sustains our vital momentum. To keep things running smoothly, we monitor and look for opportunities for continuous improvement.

Operations (Mark McDougall) + SDD (Dan Vreeman)

Convening WGMs, WGM+, FHIR Connectathons, FHIR Connectathons, CMS Connectathon, FHIR DevDays, etc

Maintaining core admin and technical infrastructure

Conducting routine ballot cycles

Operating core business services

Keep the flywheel turning!

Here today. *Towards* tomorrow.

hl7.me/plan

HL7 International 3-Year Plan

Becoming the re-envisioned HL7

Our Foundation

Core Principles and 2022-2024 Strategic Goals

Focus

Advance the global adoption of HL7 FHIR, while maintaining other HL7 standards currently in use

Agility

Optimize HL7 processes and make HL7 more approachable and simpler to be engaged in

Global Relevance

Ensure all our products and services have global relevance and reach a global market

Community

Expand HL7 reach beyond our traditional communities to include implementers and consumers

Sustainability

Diversify and expand our funding sources to increase long-term sustainability of the organization



Wednesday

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Wednesday



Recognition of Individuals & Companies

Mark McDougall

Executive Director
HL7 International

Congrats! HL7 John Quinn Fellows Class of 2023

- Adam Chee
- Carmela Couderc
- Suzanne Gonzales-Webb, CPhT
- Chuck Jaffe, MD, PhD
- Joginder Madra
- Mitra Rocca
- Dan Vreeman, DPT

Recognition of Long Time Members 1/6

HL7 members for **20-24** years:

Noam Arzt

Ann Badame

Mary Lynn Bushman

Christopher Chute

Gora Datta

Tom de Jong

Helen Drijfhout-Wisse

Gerard Freriks

Sheldon Gilmer

Hugh Glover

Recognition of Long Time Members 2/6

HL7 members for **20-24** years

Matthew Greene

Norman Gregory

Grahame Grieve

Smita Hastak

John Hatem

Robert Hausam

Beat Heggli

Kai Heitmann

William Hess

Masaaki Hirai

Recognition of Long Time Members 3/6

HL7 members for **20-24** years:

Martin Hurrell

Jeff Jacobs

Lenel James

Robert Jenders

Phillip Kiefer

Michio Kimura

Elizabeth King

Gunnar Klein

Peter Kranich

Austin Kreisler

Recognition of Long Time Members 4/6

HL7 members for **20-24** years:

David Marotz

Eliot Muir

James McClay

Nancy Orvis

Robert McClure

David Parker

Lloyd McKenzie

Ron Parker

Tim McNeil

Nick Radov

Recognition of Long Time Members 5/6

HL7 members for **20-24** years:

John Ritter

Spencer SooHoo

Ken Rubin

Corey Spears

Peter Scholz

Robert Stegwee

Masakazu Shimomura

Sandra Stuart

Judith Snow

Sadamu Takasaka

Recognition of Long Time Members 6/6

HL7 members for **20-24** years:

Sylvia Thun

Denise Warzel

Recognition of Very Long Time Members 1/2

HL7 members for **25-29** years:

Liora Alschuler

Bernd Blobel

Philip Caillouet

Ray Duncan

Carl Dvorak

Peter Haug

Tony Julian

Christopher Melo

Karen Nocera

Frank Oemig

Recognition of Very Long Time Members 2/2

HL7 members for **25-29** years:

Durwin Day

Rene Spronk

Vassil Peytchev

Timo Tarhonen

AbdulMalik Shakir

Franklin Wilcox

Recognition of Very Long Time Members

HL7 members for **30-34** years:

Hans Buitendijk

Gary Dickinson

Ted Klein

Virginia Lorenzi

Clem McDonald

Doug Pratt

Recognition of Very Long Time Members

HL7 members for **35+** years:

Ed Hammond



Recognition of Long Time Affiliates

Affiliates for more than 20 years:

HL7 Argentina

HL7 Australia

HL7 Brazil

HL7 Canada

HL7 China

HL7 Croatia

HL7 Finland

HL7 Germany

HL7 India

HL7 Japan

HL7 Korea

HL7 Netherlands

HL7 New Zealand

HL7 Switzerland

HL7 Taiwan

HL7 UK

Recognition of Long Time Org Members 1/4

Organizations for **more than 20 years:**

Accenture

South Carolina

American College of Radiology Cedars-Sinai Medical Center

ARUP Laboratories

Computrition, Inc.

Blessing Hospital

Epic

Blue Cross Blue Shield of

Food and Drug Administration

Recognition of Long Time Org Members 2/4

Organizations for **more than 20 years:**

GE Healthcare

Health Care Service Corporation

HLN Consulting

IBM

Merck & Co. Inc.

National Cancer Institute

National Institute of Standards

National Library of Medicine

New York State Department of
Health

Recognition of Long Time Org Members 3/4

Organizations for **more than 20 years:**

New York-Presbyterian
Hospital

NICTIZ

North Carolina Baptist
Hospitals

Quest Diagnostics

Rady Children's Hospital

Regenstrief Institute

Sharp HealthCare Information
Systems

Stanford Children's Health
Surescripts

The CBORD Group Inc.

Recognition of Long Time Org Members 4/4

Organizations for **more than 20 years:**

The CBORD Group Inc.

U.S. Department of Defense

U.S. Department of Veteran
Affairs

University of Nebraska Medical
Center

Washington State Department
of Health

XIFIN, Inc

2023 Benefactor Members

1/2

Accenture

Allscripts

Amazon Web Services, Inc.

American Medical Association

Centers for Disease Control and
Prevention (CDC)

CGI Federal

Duke Clinical & Translational Science
Institute

Edifecs, Inc

Epic

European Medicines Agency

Federal Electronic Health Record
Modernization

Food & Drug Administration (FDA)

Google

InterSystems

Kaiser Permanente

2023 Benefactor Members

2/2

MAK-SYSTEM Group Limited

NCQA

Office of the National Coordinator for
Health IT (ONC)

Onyx Technology LLC

Optum

Oracle

Partners HealthCare System, Inc.

Pfizer

Philips Healthcare

PointClickCare

Quest Diagnostics, Incorporated

Ready Computing Inc.

U.S. Department of Defense, Military
Health System

U.S. Department of Veterans Affairs

UnitedHealthcare

WAYSTAR

Gold Members

1/6

Academy of Nutrition & Dietetics

ADVault, Inc.

Alphora

Altarum

American College of Physicians

American Heart Association

ASSYST, Inc.

Availity, LLC

Azuba Corporation

BGO Software Ltd.

Blue Cross Blue Shield Association

BlueCross BlueShield of Alabama

Brooklyn Data Co.

CAL2CAL Corporation

Carradora Health, Inc.

CCS Health

CITRIOM LLC

Computable Publishing LLC

Gold Members

2/6

Computrition, Inc.

Connecticut Department of Public Health

Council of State and Territorial Epidemiologists

CU Anschutz Medical Campus

Dogwood Health Consulting Inc.

Double Lantern Informatics

Drummond Group

Duteau Design Inc.

Evernorth

EyeMD EMR Healthcare Systems, Inc.

Godfrey Systems LLC

Graphite Health Inc.

Health Care Service Corporation

Health Intersections Pty Ltd

Hi3 Solutions

IBM

Gold Members

3/6

ICF

ICHOM

Intelligent Medical Objects (IMO)

INTERFACEWARE, Inc.

Labware, Inc.

Logibec

MacroHealth

Massachusetts Health Data Consortium

MaxMD

Medallies, Inc.

MedCom

Michigan Health Information Network

Microsoft Corporation

Milliman IntelliScript

MY Synergy Ltd.

National Association of Community
Health Centers

National Association of Dental Plans

Gold Members

4/6

National Marrow Donor Program

NICTIZ

NIH/Department of Clinical Research
Informatics

North Star Health Solutions

Northwestern Medicine

Optimoz, Inc.

P.G.M.D. Consulting S.r.l.

Public Health Informatics Institute

Redox

Regenstrief Institute, Inc.

Registry Clearinghouse

Rhoads Systems, Inc.

Rochester RHIO

RTI International

Samvit Solutions

Security Identification Systems
Corporation

Gold Members

5/6

Security Risk Solutions, Inc. (SRS)

Skyward IT Solutions

SMART Health IT

Starwest Tech

State Hygienic Laboratory at the
University of Iowa

State of Delaware Division of Public
Health

Systex, Inc.

Tata America International Corp (TAIC)

The Sequoia Project

Therap Services LLC

UC Davis School of Medicine

United Physicians

Univ of Texas Health Science Center
San Antonio

University of Arkansas Medical
Sciences

Gold Members

6/6

USAging

UW Medicine Information Technology
Services

VICO Open Modeling

VNB Health Solutions

Vynyl

Special thanks to two critically important groups

Recognition of the Backbone of HL7

Sincere thanks to our dedicated mentors,
facilitators, TSC members, instructors
and all co-chairs...
the ***backbone*** of HL7

Please stand to be recognized

Recognition of Long Time HL7 Staff at HQ

Staff who have been on our team for **15+ years:**

Lynn Laakso (15)

Dave Hamill (16)

Mary Ann Boyle (17)

Andrea Ribick (17)

Linda Jenkins (19)

Anne Wizauer (24)

Karen Van Hentenryck (27)

Mark McDougall (32)

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Annual Business Meeting

27th Annual Volunteers of the Year Award

W. Ed Hammond, PhD



27th Annual Volunteers of the Year Award

Rob Hausam, MD



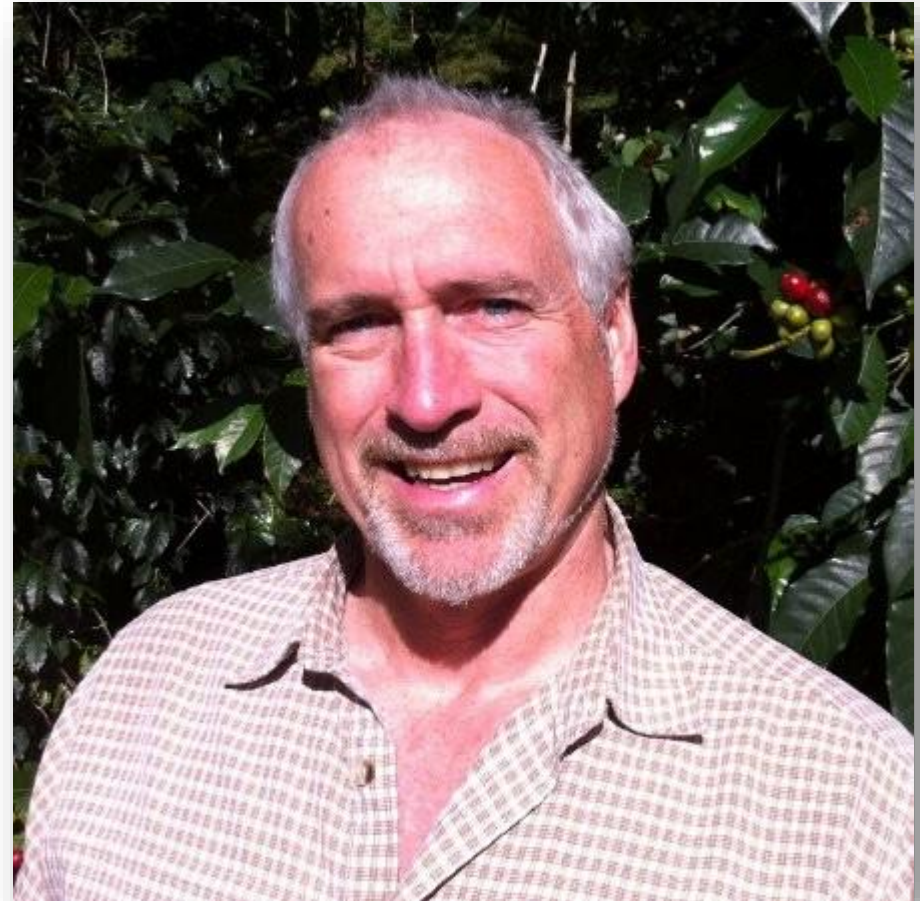
27th Annual Volunteers of the Year Award

Mark Janczewski,
MD, MPH,
FAAFP, FAMIA



27th Annual Volunteers of the Year Award

Rob McClure, MD



27th Annual Volunteers of the Year Award

Lisa Nelson, MBA,
MMI



27th Annual Volunteers of the Year

Rob Hausam, MD

Mark Janczewski, MD, MPH, FAAFP,
FAMIA

Rob McClure, MD

Lisa Nelson, MBA, MMI

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Final Announcements

Mark McDougall

Executive Director

HL7 International

Evaluations

- Tutorial evaluation links will be sent to participants.
- Meeting evaluation links were in your welcome letter and will also be sent after the meeting concludes.
- There will be a drawing for \$500 towards HL7 Education!

<https://www.surveymonkey.com/r/Sept2023WGM>

Reminder to co-chairs

Schedule Changes

Please notify Mary Ann of schedule changes:
WGMHelpDesk@HL7.org

Join us for the
Networking Reception
tonight at 5:15 PM
in Phoenix C



Thanks to Our Sponsors



Women of HL7 Reception Sponsor



Women of HL7 Reception Sponsor



Connectathon Sponsor

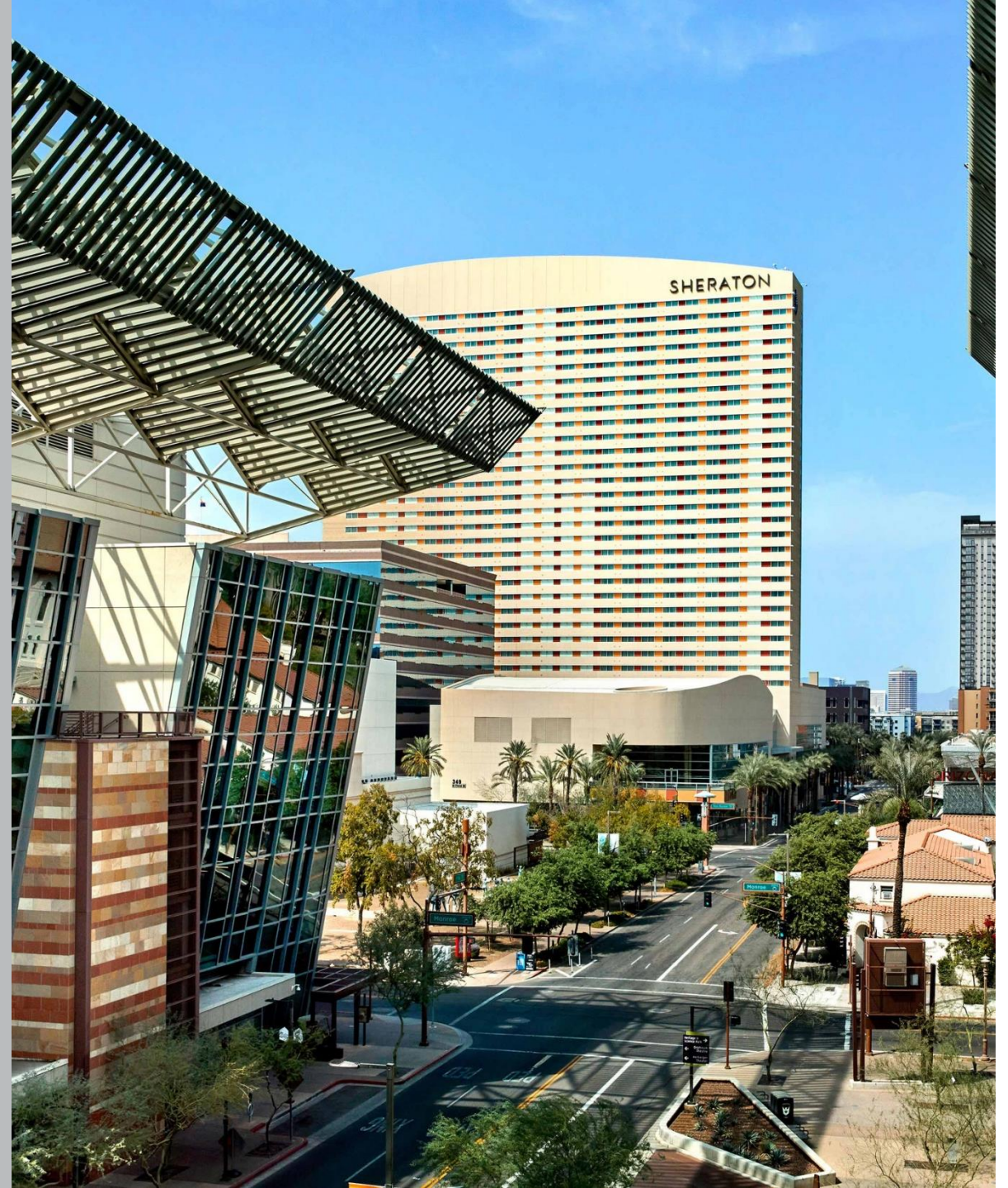


WGM Lanyard Sponsor



Have an awesome day!

Wednesday, September 13, 2023

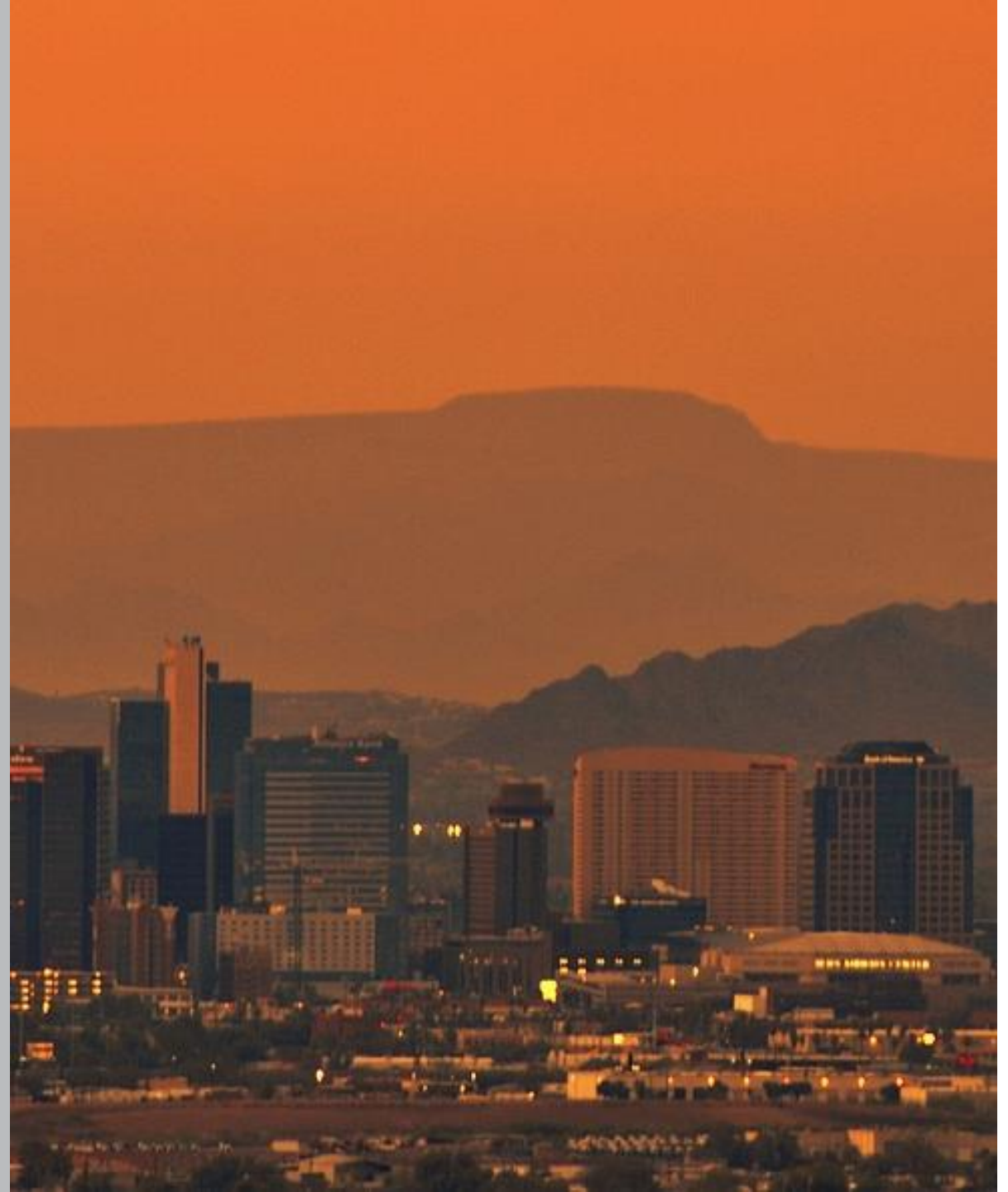




37th Annual Plenary & Working Group Meeting

Phoenix, Arizona

Thursday, September 14, 2023



Thursday



Welcome

Mark McDougall

Executive Director
HL7 International

Thursday

- **FHIR Accelerator: FAST**
- FHIR Accelerator: Argonaut
- FHIR Accelerator: Gravity
- FHIR Accelerator: Da Vinci
- FHIR Accelerator: CodeX
- Upcoming Education & Meetings
- The State of FHIR
- Final Announcements

Thursday



FHIR Accelerator: FAST

David Pyke
Member



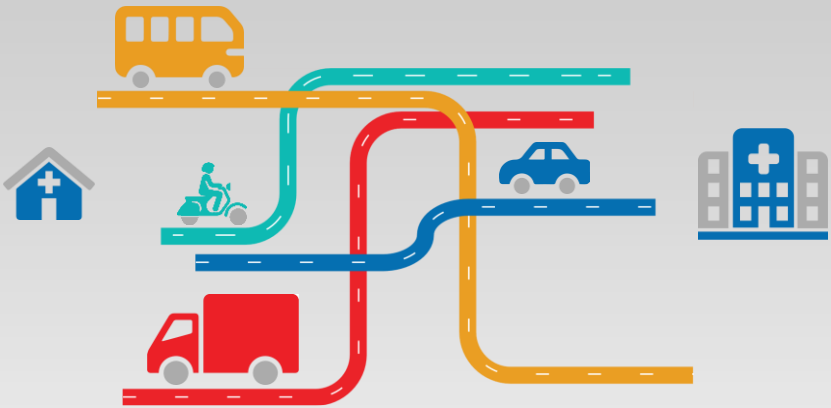
FAST Update

September 2023 HL7 Annual Plenary &
WGM





What is the Problem?



TODAY - Exchange

Exchange characterized by point-to-point interfaces
Adoption trajectory is slow, expensive, and fragmented



FUTURE - Interoperability

A common & consistent infrastructure approach to API implementation
Consensus on implementation guides for key enablers, such as directory, security, patient matching, exchange and testing

DESIRED RESULT:

A national interoperability approach that enables consistent data exchange via API. We have this for administrative transactions (X12, clearinghouses, WEDI) and pharmacy transactions (NCPDP, Surescripts). We do not have this for HL7 FHIR.



FAST 2023 Members





FAST Implementation Guide Dashboard

Implementation Guide	Project Page	Scenarios Included	IG Status	Reference Implementation	Number of Connectathons	Sponsoring Workgroup	Project Number	PSS	Zulip Stream
Security for Scalable Registration, Authentication, and Authorization	FAST: Scalable Registration, Authentication, and Authorization for FHIR Ecosystem Participants	B2B B2C User Authentication	STU 1 Published	GitHub - HL7-FAST/udap-security: FAST UDAP Security Reference Implementation	14	Security	1689	FHIR at Scale (FAST): Scalable Registration, Authentication, and Authorization for FHIR Ecosystem Participants PSS	FHIR at Scale Taskforce (FAST): Security
Hybrid/ Intermediary Exchange	FHIR at Scale (FAST): Exchange with or without Intermediaries	Passive intermediaries	STU 1 Published	TBD	8	FHIR-I WorkGroup Home	1653	PSS for FAST Exchange Metadata Using RESTful Headers	FHIR at Scale (FAST): Exchange with/without intermediaries
Interoperable Digital Identity and Patient Matching	Interoperable Digital Identity and Patient Matching Capabilities		STU 1 Published	https://github.com/HL7-FAST/identity-matching	9	Patient Administration	1717	Patient Matching PSS	FHIR at Scale Taskforce (FAST): Identity
National Directory of Healthcare Providers & Services (NDH)	National Healthcare Directory	The National Directory Exchange IG; Query IG, & Attestation & Verification IG combined into a single IG	September 2023 STU 1 Ballot Reconciliation	https://github.com/HL7-FAST/national-directory Hosted: https://national-directory.fast.hl7.org/	11	Patient Administration	1690	National Healthcare Directory PSS	National Directory

<https://confluence.hl7.org/display/FAST/FAST+Implementation+Guide+Dashboard>



Identity

- Prioritized updates for STU2 with the team members
- Gathering additional SME feedback to refine the Identity Proofing
- Participated in HL7 Connectathon
- Requests:
 - Join workgroup discussions to provide input into STU 2 - 1st and 3rd Thursdays at 2pm ET (HL7 Conference Call Center)

Security

- Participated in recent HL7 Security Event
- Participated in HL7 Connectathon
 - Demonstrated adoption of Security IG outside of *FAST* (Da Vinci, CARIN and TEFCA)
- Collaboration with National Healthcare Directory , Da Vinci and CARIN on Provider Access API
- Weighing whether a new STU or an un-balloted update is needed



Testing and Versioning Discovery

- Completed discovery process which included gathering community feedback on needs
- Assuming Steering Committee approval, will move forward as a *FAST* project
- Requests:
 - Join workgroup discussions to provide input – next call on Thursday, Sept 21st at 10am ET (HL7 Conference Call Center)

National Healthcare Directory

- IG in HL7 ballot process to refine the single IG format and structural changes
- Driving the Provider Access API discussion at the WGM
- Requests:
 - Join workgroup discussions to provide input on the IG - Mondays at 3pm and Thursdays at 11am ET (HL7 Conference Call Center)



FAST Consent Discovery Project

- Completed initial consent discovery project identifying gaps, potential use cases and recommendations to inform *FAST*'s discussions of whether to take on consent-related project
 - Explored scalability factors for consent management and enforcement to define what consent at scale means and entails
 - Identified a high-level list of abstract use cases in consent management and enforcement and the requirements for scalability for each of these use cases
 - Analyzed existing initiatives around consent cover and exposing the gaps within the existing work
- Consent discovery team concluded there are sufficient consent scalability challenges to warrant *FAST*'s consideration of a Consent IG project
- Request: Review the *FAST* Birds of a Feather presentation for full update and contact *FAST* at fast@hl7.org with feedback or questions.



FAST Threading the Needle: From IG Development to Adoption



- *FAST* develops Implementation Guides to address common implementation challenges but that's just step one!
- *FAST* is dedicated to supporting & encouraging the implementation community to ensure *FAST* IGs are being widely adopted and provide clarification or address confusion where any exists
- *FAST* also encourages testing early and often
- *FAST* is working collaboratively with governing bodies to build alignment with their mandates

Thursday

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FHIR Accelerator: Argonaut

Brett Marquard

Project Manager and SME

What is the Argonaut Project?



The Argonaut Project is an implementation community comprising leading technology vendors and provider organizations to accelerate the use of FHIR and OAuth in health care information exchange.

Argonaut Project Members



Technology Vendors

- Accenture
- Allscripts
- Apple
- Athenahealth
- Cerner
- eClinicalWorks

Technology Vendors (cont)

- Epic
- Google
- Humana
- MEDITECH
- Microsoft
- Optum

Provider Organizations

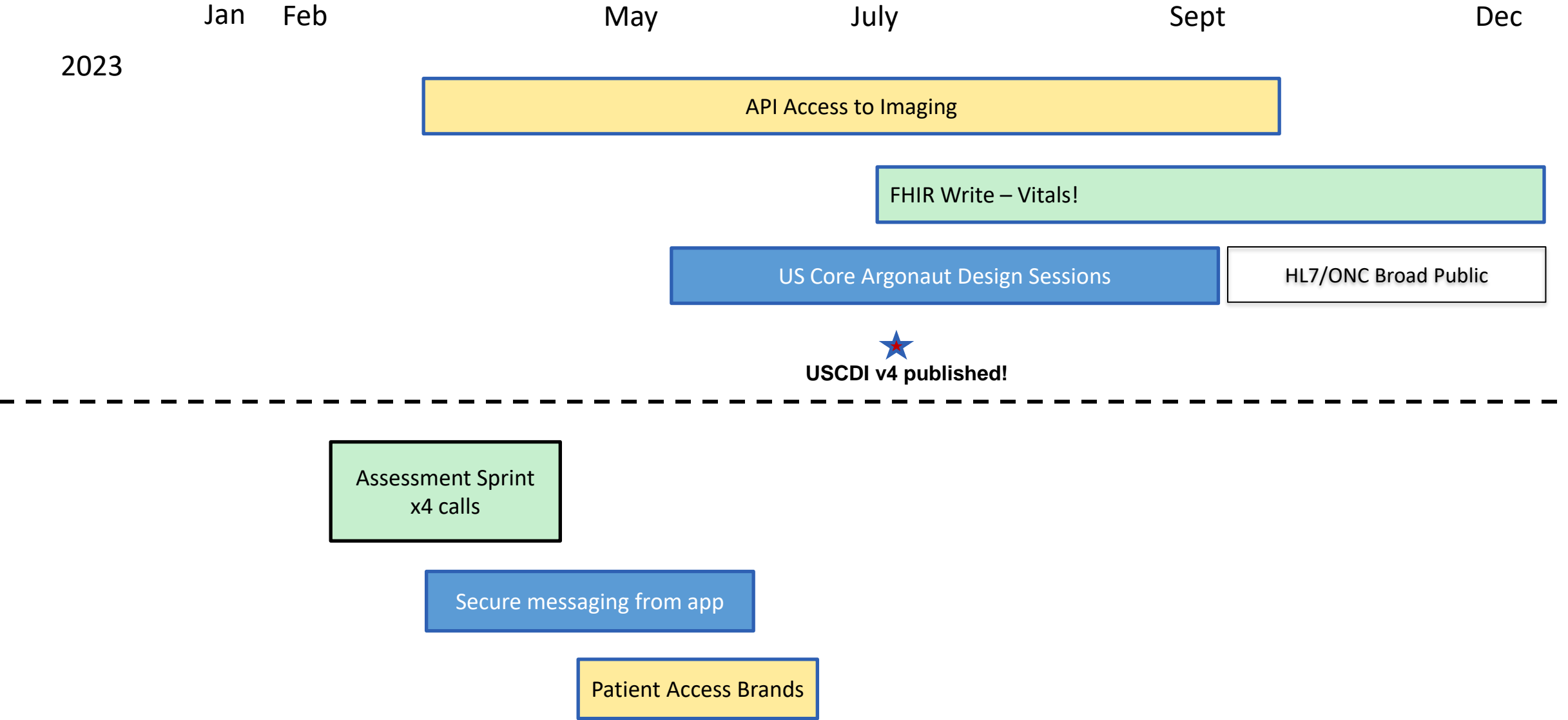
- Intermountain Health
- Mayo Clinic
- Partners Healthcare
- SMART at Boston Children's Hospital



Prior Initiatives

- SMART on FHIR support
- Data Query and Document Query
- Provider Directory
- Scheduling
- CDS Hooks support
- Bulk Data
- Questionnaire and Questionnaire Response
- Clinical Provenance
- SMART Health Links
- Clinical Notes
- SMART Web Messaging
- Clinical Data Subscriptions
- US Core Argonaut - USCDI
- SMART on FHIR Granular Controls
- Patient List
- FHIR Write
- Patient Access Brands
- EHI Export API
- International Patient Access

Project Schedule – All



Argonaut 2023 – Full Projects



API Access to Images

- Make imaging data accessible through the same SMART on FHIR API as clinical data.
- One authorization flow + one access token enables access to clinical + imaging.
Bridge to DICOM web services under the hood.

FHIR Write – Vitals

- Provider facing-app or Patient facing-app: sprint focused on writing back Vitals.
- This information is structured in systems today, and Health Systems report they want to bring this discrete data into the EHR.

US Core design to support USCDI v4

- Consistent deployment of USCDI requires, review, testing, and the development of clear FHIR profiles.
- Test new designs for USCDI

Argonaut 2023 – Minis



Enable patient-provider secure messaging from app (4-5 calls!)

- Patients using an app who want to share information with their providers need to screenshot or copy that information and then log in to a separate health system app to send a message

Testing of Patient Access Brands

- FHIR endpoints and associated branding information to create a seamless user experience connecting patients to their health records through various applications.
- Apps display recognizable cards or tiles representing different healthcare providers, payers, or organizations

Assessment Sprint

- Mini sprint to test new US Core design of Observation vs QuestionnaireResponse
- Updated design included in US Core 6.0.0 (expected publication May 2023!)

Argonaut



“We don’t make the FHIR APIs you deploy, we make them better”



Participation



How to Participate

- Review existing designs and comment using HL7 JIRA
- Zulip Chat Channel - [Argonaut](#)
- [Argonaut Confluence Page](#)

Contacts

- Gino Canessa
- Dan Gottlieb
- Eric Haas
- Josh Mandel
- Brett Marquard

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FHIR Accelerator: Gravity

Dan Vreeman, DPT
Member

Consensus-driven Standards on Social Determinants of Health

Gravity Project General Update
HL7 WGM Q1 Thursday September 14, 2023

Dan Vreeman (Gravity Steering Committee HL7
Liason, *Former Gravity Technical Director*)



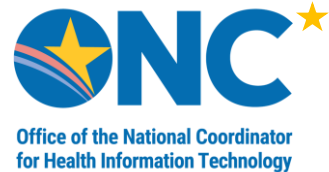
Gravity Overview



A collaborative initiative with the goal to develop consensus-driven data standards to support the collection, use, and exchange of data to address the social determinants of health (SDOH).



2023 **Project** Sponsors, Members and Partners



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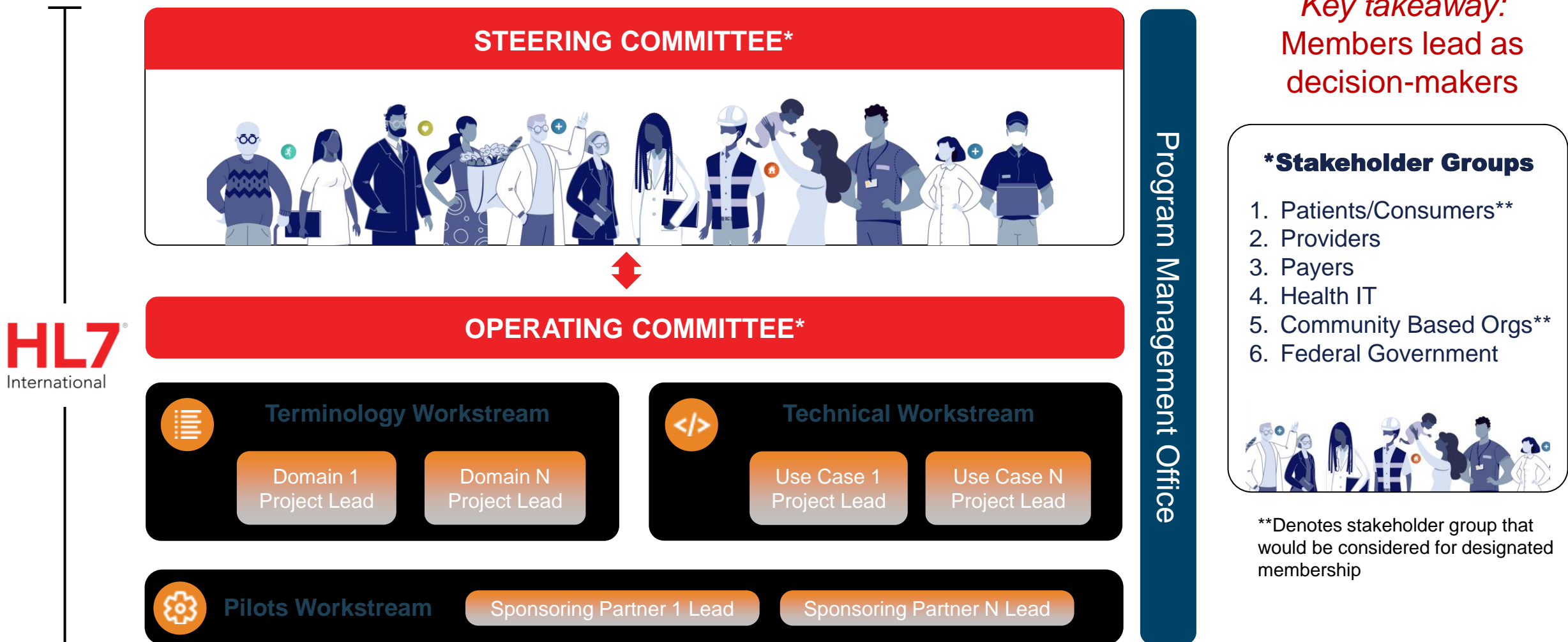


★ Founding Sponsors

Gravity Strategic Goals 2023 Refresh

- Grow and maintain a vibrant community with sustainable governance, funding, and an operational model that strengthens Gravity Project partnerships and community-led consensus-based goals.
- Convene and support a diverse community with expertise and lived experience of addressing and meeting social needs, through care, administrative support and informatics.
- Accelerate data standard solutions to address the payment and reporting needs of community-based organizations and other stakeholders that limit equitable health and social care, leveraging HL7® FHIR®, in conjunction with other standards as needed.
- Enable Health and Social Care organizations to effectively implement and test Gravity Project SDOH data exchange and terminology standards to ensure they better meet community needs.
- Increase awareness of Gravity work among broader stakeholder groups.

New! Gravity Governance Model



Terminology Workstream

Recent Accomplishments

New Consensus Social Risk Domains

- 10 Consensus development of priority terms for **Digital Access** and **Digital Literacy** with the support of Kaiser Permanente

Value Set Enhancements to Support Implementation

- 10 **SDOH CC IG:** Developed domain-level Question and Answer value sets to support implementation and better integrate Gravity validated instruments into the SDOH CC IG
- 10 **C-CDA:** Inclusion of Gravity SDOH value sets into 2023 C-CDA release

Priority: Widespread Adoption and Use of Gravity Project Terminologies

- 10 **Implementation Materials:** Developed “For Implementers” area on confluence with easy access to value sets, validated instruments, and general implementation guidance
- 10 **Pilots Technical Support:** Providing technical support to the Gravity Pilots

SDOH Domains



Technical Workstream Recent Accomplishments

Gravity SDOH Clinical Care FHIR Implementation Guide (IG)

- Standard for Trial Use v2.1 (STU2.1) publication in August 2023.
 - Updates focused on making implementation easier and more accessible to all stakeholders.
 - Replaced Supplemental Guide with integration of all value sets into Value Service Authority (VSAC) and reference in Gravity IG, including Screening Assessments Panels, Questions and Answers.
- Updates to the Reference Implementation (RI) for stability improvements
- July 2023 CMS HL7 Connectathon:
 - Testing of the IG and Reference Implementation
 - Successful Proof of Concept Test to determine social care supplemental benefits with FHIR, leveraging Da Vinci IGs.
 - for FHIR-based API Join us in January 2024!
- Reviewed and participated in the September 2023 BSeR IG Ballot.



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Priority: Widespread Adoption and Use of SDOH Clinical Care IG

Pilot Workstream: Gravity Pilots Across the Nation

This is a sample (not all-inclusive list) of organization locations that have participated in the Gravity Pilots Affinity Group. We are grateful to all organizations adopting the work of Gravity to advance SDOH standards.

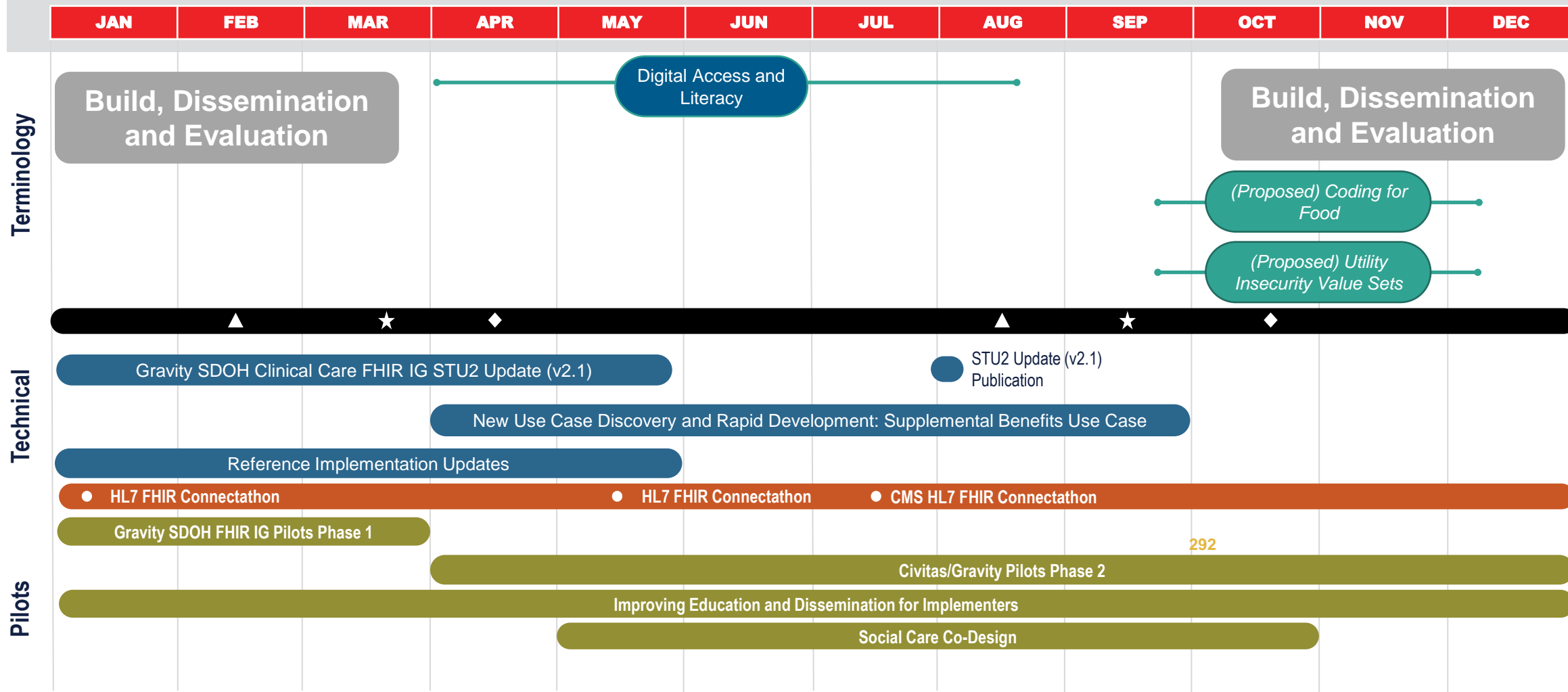


Pilots Workstream 2023 - Phase 2

- Focus on public health and health equity
- Partnering with Civitas Networks for Health, with support from the Robert Wood Johnson Foundation*.
- Tier 2 Pilot Sites kicked off in April 2023 include:
 - Bronx (RHIO)/New York State
 - MyHealth Access Network/Oklahoma State;
 - University of Colorado Hospital/Denver Metro Area;
 - Pima County Department of Public Health & Southwest Tribe/Pima County Arizona
- Gravity Pilots Affinity Group monthly open forums are the last Thursday of the month

**Support for this initiative was provided by the Robert Wood Johnson Foundation. The views expressed here do not necessarily reflect the views of the Foundation.*

Gravity 2023 Roadmap



How to Engage

Gravity convenes participants from across the health and human services ecosystem via the following virtual meetings:

1. Terminology Workstream: **Bi-weekly** Public Collaborative meetings Thursdays 4:00 to 5:30 pm ET (Next Meeting: September 28th)
2. Technical Workstream: **Bi-weekly** Implementation Guide/Connectathon Work Group meetings Wednesdays from 1:00 to 2:00 pm ET (Next Meeting: September 27th)
3. Pilots Workstream: **Monthly** [Pilots Affinity Group meetings](#) - Last Thursday each month 2:30 to 4:00 pm ET (Next Meeting: September 28th)

View the [Upcoming Meeting Information](#) confluence page and HL7 conference call calendar for meeting details: <https://www.hl7.org/concalls/>

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Become a Gravity Project sponsor!

<https://thegravityproject.net/sponsors/>

Contact: vanessa.candelora@pocp.com



Thank you!

Visit us at:

Gravity Website:
<https://thegravityproject.net/>

Gravity Confluence Page:
[https://confluence.hl7.org/display/GRAV/
The+Gravity+Project](https://confluence.hl7.org/display/GRAV/The+Gravity+Project)

Help us with Gravity Education & Outreach

Use Social Media handles to share or
tag us to relevant information:

 [@thegravityproj](https://twitter.com/thegravityproj)

 [https://www.linkedin.com/
company/gravity-project](https://www.linkedin.com/company/gravity-project)

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Contact Us: gravityproject@hl7.org

Program Manager: Vanessa.Candelora@pocp.com

Thursday

- FHIR Accelerator: FAST
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Thursday



FHIR Accelerator: Da Vinci

Viet Nguyen, MD

Technical Director

HL7® Da Vinci Project Update

Sept 2023

Da Vinci Project: **Why**

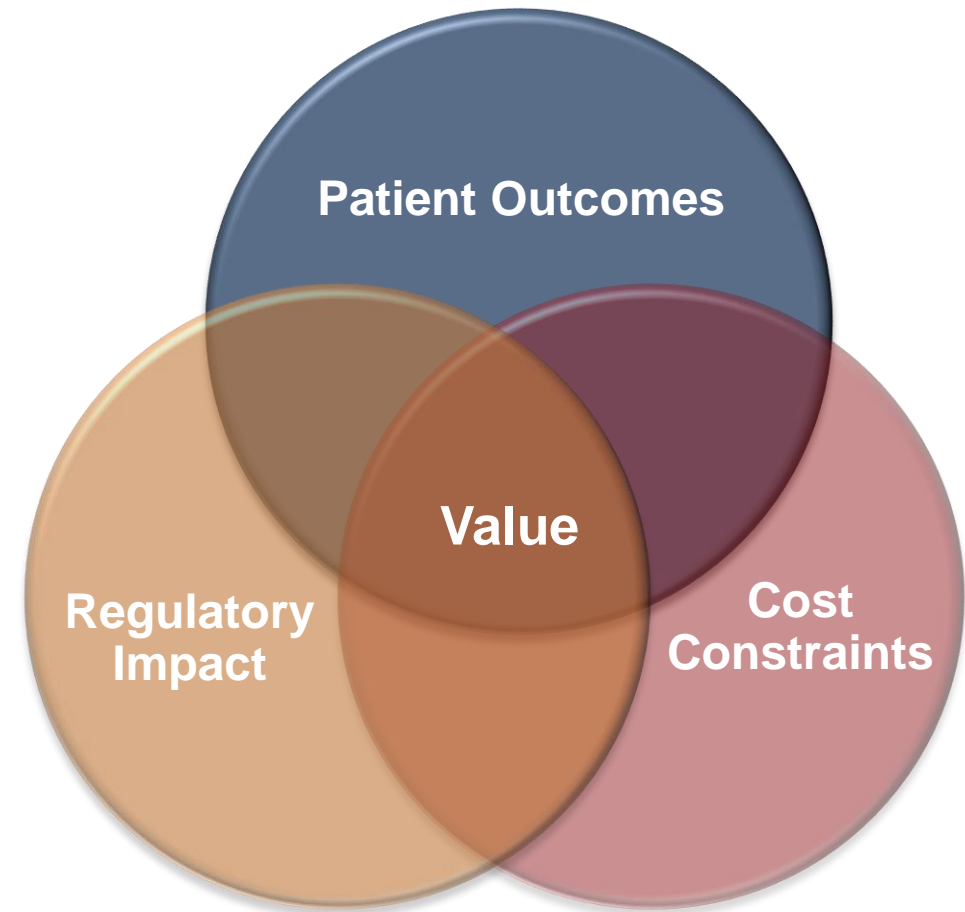
VBC Programs Drive Focus to Patient Outcomes

Da Vinci members are industry leaders and health IT technical experts who are working together to accelerate the adoption of HL7 Fast Healthcare Interoperability Resources (HL7® FHIR®) as the standard to support and integrate value-based care (VBC) data exchange across communities.

VBC programs enable providers to see right data at right time for specific patient coverage, benefits and care coordination.

Focus:

Use cases linked to high volume, manual activities that would benefit from automation of portions of the workflow that collect and exchange critical data to improve outcomes.



DA VINCI 2023 MULTI-STAKEHOLDER MEMBERSHIP

PROVIDERS



EHRs



PAYERS



VENDORS



For current membership:

<https://confluence.hl7.org/display/DVP/Da+Vinci+Project+Members>

The above listed Blue Cross and Blue Shield companies are independent licensees of the Blue Cross and Blue Shield Association.

Rev 7/17/23.

INDUSTRY PARTNERS

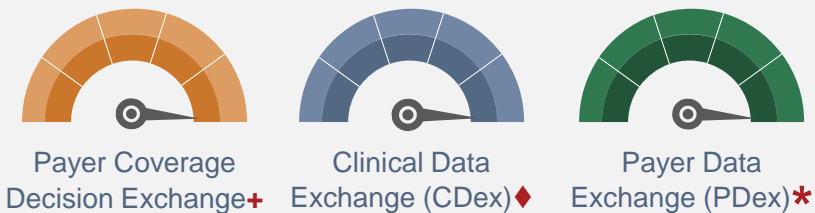


*Indicates a founding member of the Da Vinci Project. Organization shown in primary Da Vinci role, Many members participate across categories.

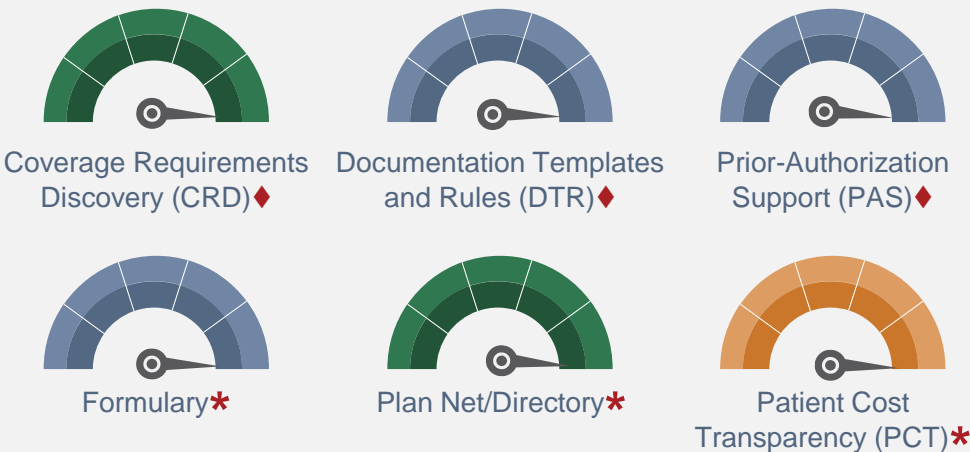


USE CASE & IG READINESS

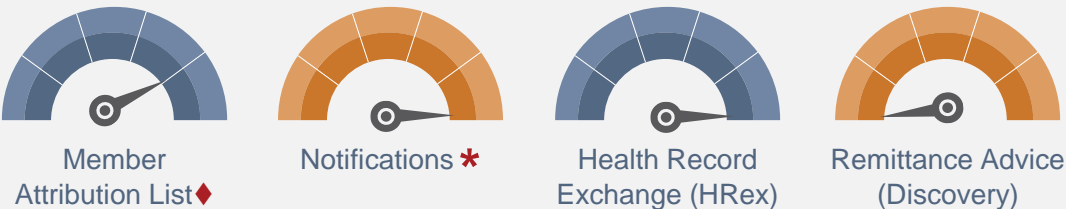
Clinical Data Exchange



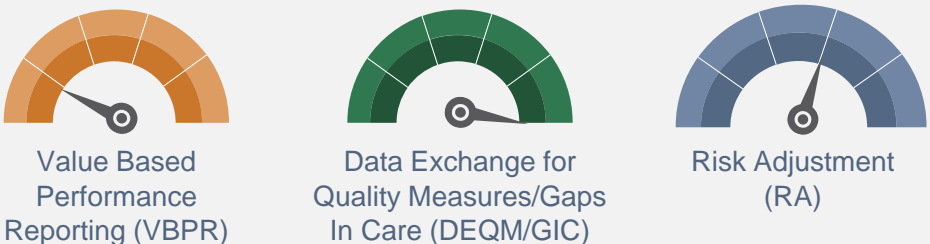
Coverage, Transparency & Burden Reduction



Foundational Assets



Quality & Risk



- * Referenced in or supports Federal Regulation
- ♦ Aligned with expected Federal Regulation
- + Guide Paused and Core Functionality moved to PDex
- ➡ Dial denotes progress in current STU Phase



Overall
Maturity:

Most Mature

Active Growth

Least Mature



DA VINCI PROGRAM 2023 PRIORITIES

Foundation is in place. It is the Year of Implementation.

FHIR & Da Vinci Core and Build Progress

1. **Continue investment in progress and maturity of Da Vinci guides**
 - FHIR based clinical data exchange. Expand examples and specific scenarios for Clinical Data Exchange (CDex) use
 - Invest in a **FHIR-based API for Remittance Advice**
 - Develop requirements for **next phase of Patient Cost Transparency (PCT)** to support No Surprises Act
 - Advance and broaden **Burden Reduction** and supporting guides to **support proposed regulation**
2. **Expand membership** of Da Vinci to solidify healthy foundation for work to move to normative

Industry & Policy Impact

- **Build awareness and transparency of FHIR** adoption progress and success metrics from early adopters
- Provide clear guidance on the role of Da Vinci guides to support Interop 3 and Attachments NPRMs
- Continue to **evangelize and provide thought leadership** across Da Vinci community and key industry organizations e.g., AAFP, CMS, HIMSS, HL7, ViVE, WEDI
 - Prioritize member journey, results from implementation as focus
 - Introduce newest guides and opportunities to engage
 - Provide visible home for providers, payers and vendors to share their progress across guides and find each other
 - Grow and advance content and breadth of Community Roundtable, Case Studies

Resources:

Da Vinci In Action: <https://confluence.hl7.org/display/DVP/Da+Vinci+In+Action+Interactive+-+Implementations+To+Date>

Industry statements: <https://confluence.hl7.org/display/DVP/Da+Vinci>

2023 DA VINCI IMPLEMENTATION GUIDE ROADMAP

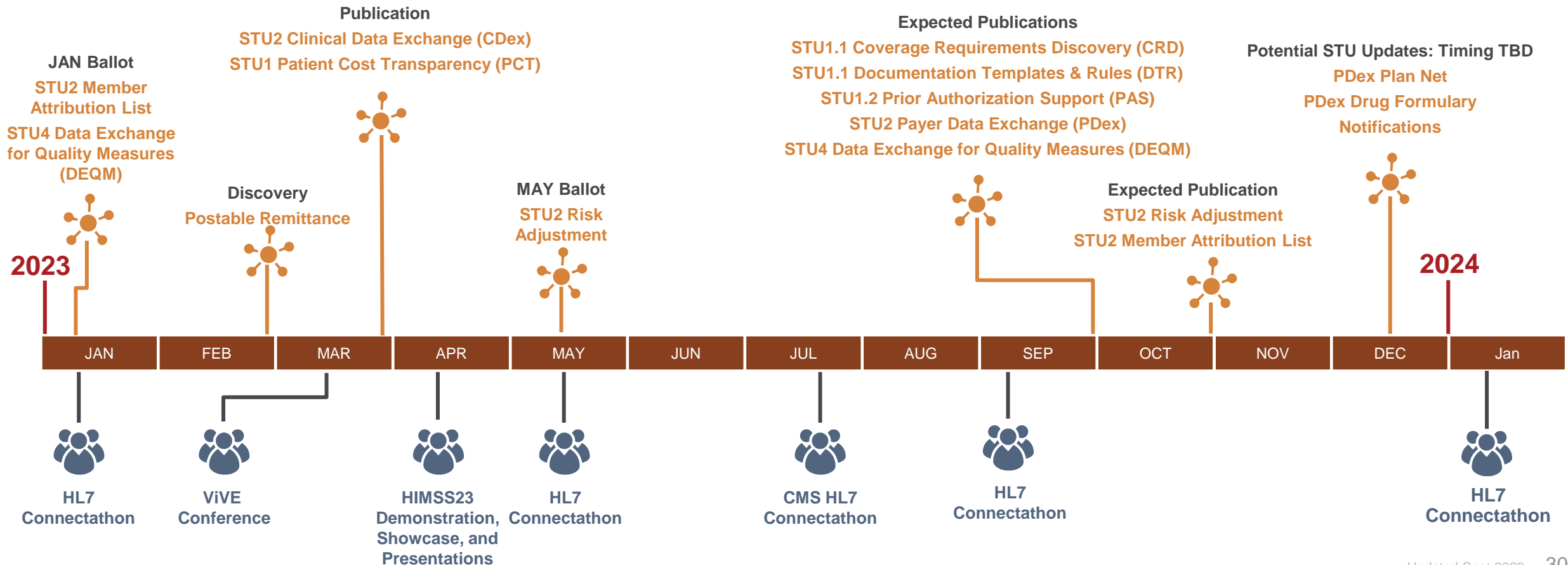


Deliverables



Event - see calendar on Confluence:

<https://confluence.hl7.org/display/DVP/Da+Vinci+2023+-+Calendar>





DA VINCI USE CASE WORKING SESSIONS – JOIN US!

Use Case	Schedule
Value Based Performance Reporting (VBPR)	Mondays at 2pm Eastern
Burden Reduction (CRD)	Wednesdays at 11am Eastern
Notifications	First Wednesday of each Quarter 1pm Eastern (12/6)
Clinical Data Exchange (CDex) Health Record Exchange Framework (HREx) included	Wednesdays at 2pm Eastern
Member Attribution List (ATR)	Wednesdays biweekly at 3pm Eastern
Risk Adjustment (RA)	Thursdays at 3pm Eastern
Burden Reduction (PAS)	Thursdays at 4pm Eastern
Patient Cost Transparency (PCT)	Wednesdays at 129m Eastern (new time!)
Payer Data Exchange (PDex, Formulary, PlanNet)	Fridays at 12pm Eastern
Burden Reduction (DTR)	Fridays at 12pm Eastern

Conference Call Sign Up

- [HL7 Conference Call Center](#) - check the HL7 calendar for cancellations/changes!
- [Da Vinci Conference Call Sign Up Instructions](#)
- Note: There is no invitation, add to your own calendar
- HL7 Da Vinci General Inquiries: DaVinciPMO@pocp.com

Sign Up for Da Vinci Community Roundtable and News:

<https://confluence.hl7.org/display/DVP/Da+Vinci+Welcome>

Community Roundtable Schedule

- 2023 schedule anticipates monthly: 4th Wednesday at 4 pm ET
 - Next Session: Sept 27, 2023
 - Stay informed through Da Vinci's [listserv](#)
- Registration details will be posted to the [Da Vinci Calendar](#)
 - Recordings and slides available [here](#)



Industry Events

- **NCQA Health Innovation Summit**
 - Oct 23 – 25, 2023, Orlando, FL
 - <https://www.ncqasummit.com/>
- **ONC Annual Meeting**
 - Dec 14 – 15, 2023, Washington, DC
 - <https://www.healthit.gov/news/events/2023-onc-annual-meeting>
- **ViVE 2024**
 - Feb 25 – 28, 2023, Los Angeles, CA
 - <https://www.viveevent.com/>
- **HIMSS Global Health Conference**
 - March 11 – 15, 2024, Orlando, FL
 - <https://www.himss.org/global-conference>

HL7 Events

HL7 Sept FHIR Connectathon

- Sept 9 - 10, 2023, Sheraton Phoenix Downtown
- <http://www.hl7.org/events/fhir-connectathon/>

HL7 Sept Working Group Meeting

- Sept 11 - 15, 2023, Sheraton Phoenix Downtown
- https://www.hl7.org/events/working_group_meeting/2022/09/

HL7 Jan FHIR Connectathon

- Jan 16 - 18, 2023, Virtual Event

HL7 Jan Working Group Meeting

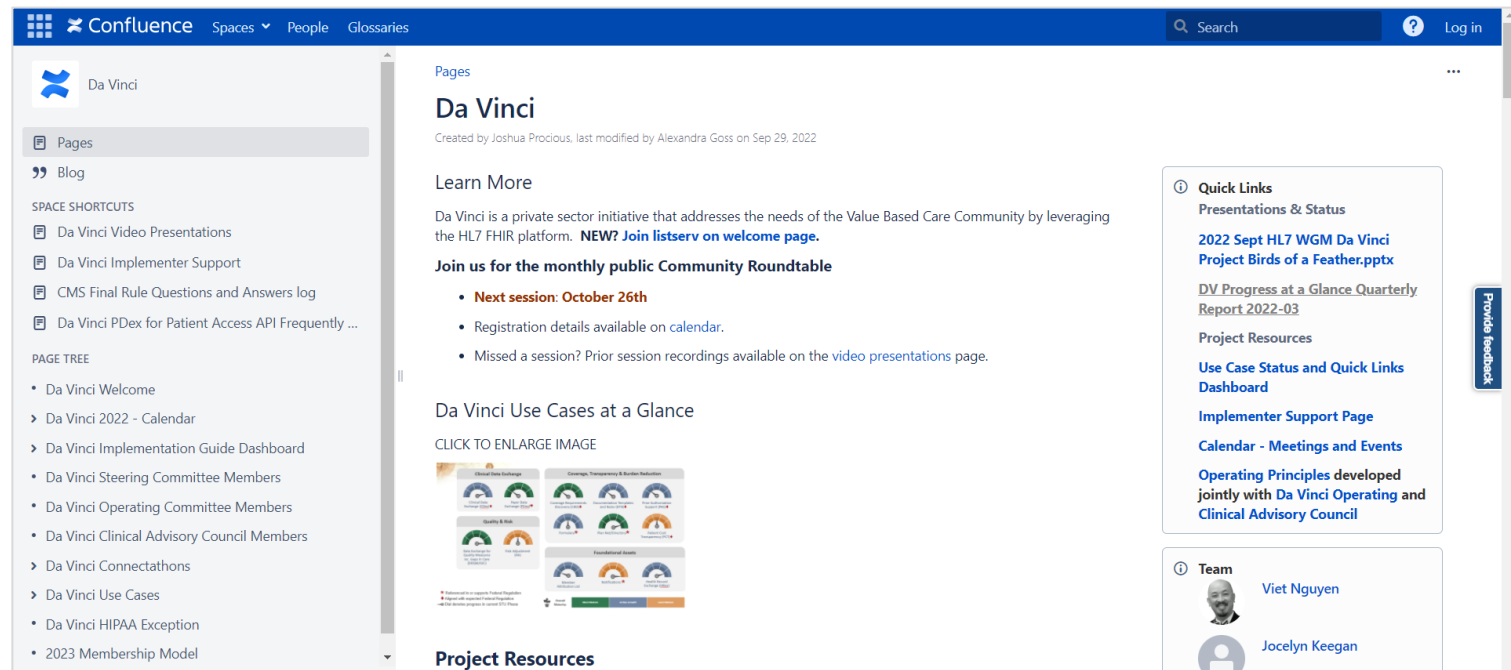
- Jan 29 – Feb 2, 2023, Virtual Event

PUBLIC CONFLUENCE RESOURCES

- [Da Vinci](#) has publicly available Confluence resources!
- [Da Vinci Welcome](#) – Confluence page to learn about Da Vinci project and signup for Listserv
- [Da Vinci Implementation Guide Dashboard](#) – Confluence summary view of information and links per use case
- New to Da Vinci? Check out the [Implementer Resource Page](#)
- [Da Vinci Use Cases](#) – Confluence parent page to each use case containing meeting meetings and use case materials
- [Da Vinci Video Presentations](#) – Confluence page to view past slides, recordings from Community Roundtable and more!

[Request an Account](#) – HL7 Jira/Confluence accounts are free and available to anyone (including non-members)

Quick Links have presentation slides for community to leverage

A screenshot of the Da Vinci Confluence page. The page has a blue header with the Confluence logo and navigation links: Spaces, People, Glossaries, Search, and Log in. The main content area is titled "Da Vinci" and includes a "Learn More" section with a description of the initiative and a "Join us for the monthly public Community Roundtable" section with a list of links. There is also a "Da Vinci Use Cases at a Glance" section with a "CLICK TO ENLARGE IMAGE" link. The right sidebar contains "Quick Links" and "Team" sections. The left sidebar shows a "PAGE TREE" with various links like "Da Vinci Welcome", "Da Vinci 2022 - Calendar", and "Da Vinci Implementation Guide Dashboard".

Confluence Spaces People Glossaries Search Log in

Da Vinci

Pages

Blog

SPACE SHORTCUTS

- Da Vinci Video Presentations
- Da Vinci Implementer Support
- CMS Final Rule Questions and Answers log
- Da Vinci PDex for Patient Access API Frequently ...

PAGE TREE

- Da Vinci Welcome
- Da Vinci 2022 - Calendar
- Da Vinci Implementation Guide Dashboard
- Da Vinci Steering Committee Members
- Da Vinci Operating Committee Members
- Da Vinci Clinical Advisory Council Members
- Da Vinci Connectathons
- Da Vinci Use Cases
- Da Vinci HIPAA Exception
- 2023 Membership Model

Pages

Da Vinci

Created by Joshua Prociouk, last modified by Alexandra Goss on Sep 29, 2022

Learn More

Da Vinci is a private sector initiative that addresses the needs of the Value Based Care Community by leveraging the HL7 FHIR platform. **NEW? Join listserv on welcome page.**

Join us for the monthly public Community Roundtable

- Next session: **October 26th**
- Registration details available on [calendar](#).
- Missed a session? Prior session recordings available on the [video presentations](#) page.

Da Vinci Use Cases at a Glance

CLICK TO ENLARGE IMAGE

Project Resources

Quick Links

Presentations & Status

[2022 Sept HL7 WGM Da Vinci Project Birds of a Feather.pptx](#)

[DV Progress at a Glance Quarterly Report 2022-03](#)

Project Resources

[Use Case Status and Quick Links Dashboard](#)

[Implementer Support Page](#)

[Calendar - Meetings and Events](#)

[Operating Principles developed jointly with Da Vinci Operating and Clinical Advisory Council](#)

Team

[Viet Nguyen](#)

[Jocelyn Keegan](#)

Provide feedback

The background of the slide features a collage of Leonardo da Vinci's sketches, including anatomical drawings of the human body, mechanical designs of a crane and a helicopter, and various scientific diagrams. Overlaid on these sketches are several hexagonal icons: a blue hexagon with a white stethoscope, an orange hexagon with a white test tube, a brown hexagon with a white mortar and pestle, a brown hexagon with a white stethoscope, a brown hexagon with a white plus sign, and a brown hexagon with a white heart and pulse line.

HL7 Da Vinci Program Support:

Jocelyn Keegan,
Program Manager, Point of Care Partners

Jocelyn.Keegan@pocp.com

781-264-1630

Crystal Kallem,
Project Manager, Point of Care Partners

Crystal.Kallem@pocp.com

515-689-7819

HL7 Da Vinci General Inquiries:

DaVinciPMO@pocp.com

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FHIR Accelerator: CodeX

Su Chen, MD
Program Manager

CodeXTM HL7[®] FHIR[®] Accelerator Update

September 2023



HL7[®] FHIR[®] is a registered trademark owned by Health Level Seven International[®]

<https://www.hl7.org/codex/>
<https://confluence.hl7.org/display/COD/CodeX+Home>
<https://www.linkedin.com/company/codex-common-oncology-data-elements-extensions/>

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HL7® FHIR® Accelerator

<https://codex.hl7.org/>

Better Data Better Health

The CodeX community is singularly focused on bringing standards to healthcare data so patients have the care and research journey they deserve and should expect.

Oncology - Radiation Oncology - Genomics - Cardiovascular Health

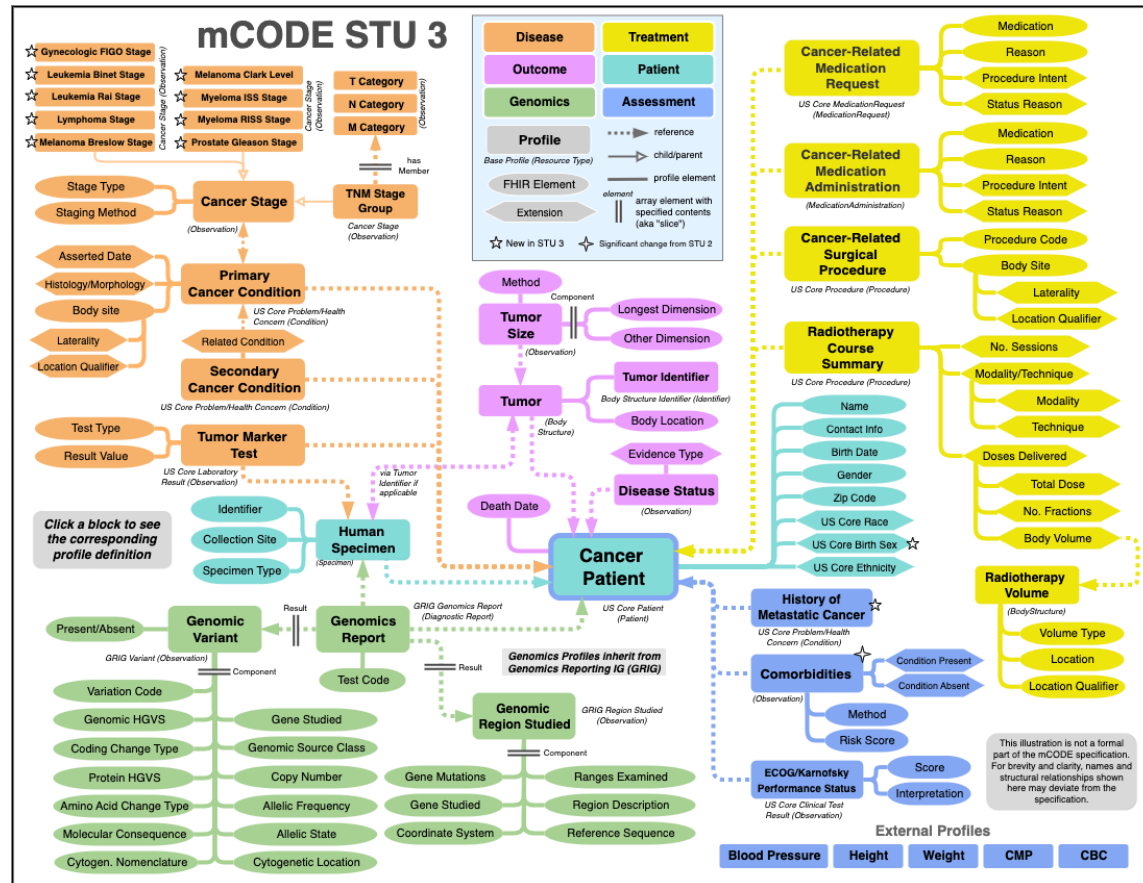
mCODE STU 3:

anticipated to publish September 2023

<https://build.fhir.org/ig/HL7/fhir-mCODE-ig/index.html>

Release Notes:

https://build.fhir.org/ig/HL7/fhir-mCODE-ig/change_log.html



CodeX Radiation Therapy STU 1 - PUBLISHED!

<http://hl7.org/fhir/us/codex-radiation-therapy/ImplementationGuide/hl7.fhir.us.codex-radiation-therapy>

HL7 International **CodeX Radiation Therapy** 1.0.0 - STU 1

Home Table of Contents Background FHIR Artifacts Conformance More

Table of Contents > Home

CodeX Radiation Therapy, published by HL7 Cross Group Projects Work Group. This is not an authorized publication; it is the continuous build for version 1.0.0. This version is based on the current content of <https://github.com/HL7/codex-radiation-therapy/> and changes regularly. See the [Directory of published versions](#)!

1 Home

Official URL: <http://hl7.org/fhir/us/codex-radiation-therapy/ImplementationGuide/hl7.fhir.us.codex-radiation-therapy> Version: 1.0.0

Draft as of 2023-07-27 Computable Name: CodeXRadiationTherapy

1.1 Background

Radiation therapy treatment details – critical for care coordination – are not readily available in information systems beyond radiation oncology information technology (IT) modules. Furthermore, creation of radiation therapy (RT) treatment summary documents is often a manual process, creating clinician burden and potential patient safety issues. Historical RT summary documents tend to be comprised of unstructured data; therefore, providers have been unable to leverage this information to meet reporting requirements (e.g., quality reporting, registry reporting) or support comparative effectiveness research without additional manual data entry.

- Background
- Actors and Use Cases
- Example Scenarios
- Treatment Summary Transactions
- Sources

PREMIER		
		
		
		
		
PRINCIPAL	BENEFACTOR	GOVERNMENT AGENCY
		
		
		
		
		
		
		
		
		
		
SPONSORED MEMBER	DEVELOPER/IMPLEMENTER	
		
		
		
		
		
		
		
		
		
		
		
		

Use Cases

The CodeX framework spurs community-driven use case development and demonstration, piloted in-the-field by stakeholders expected to benefit in the future.

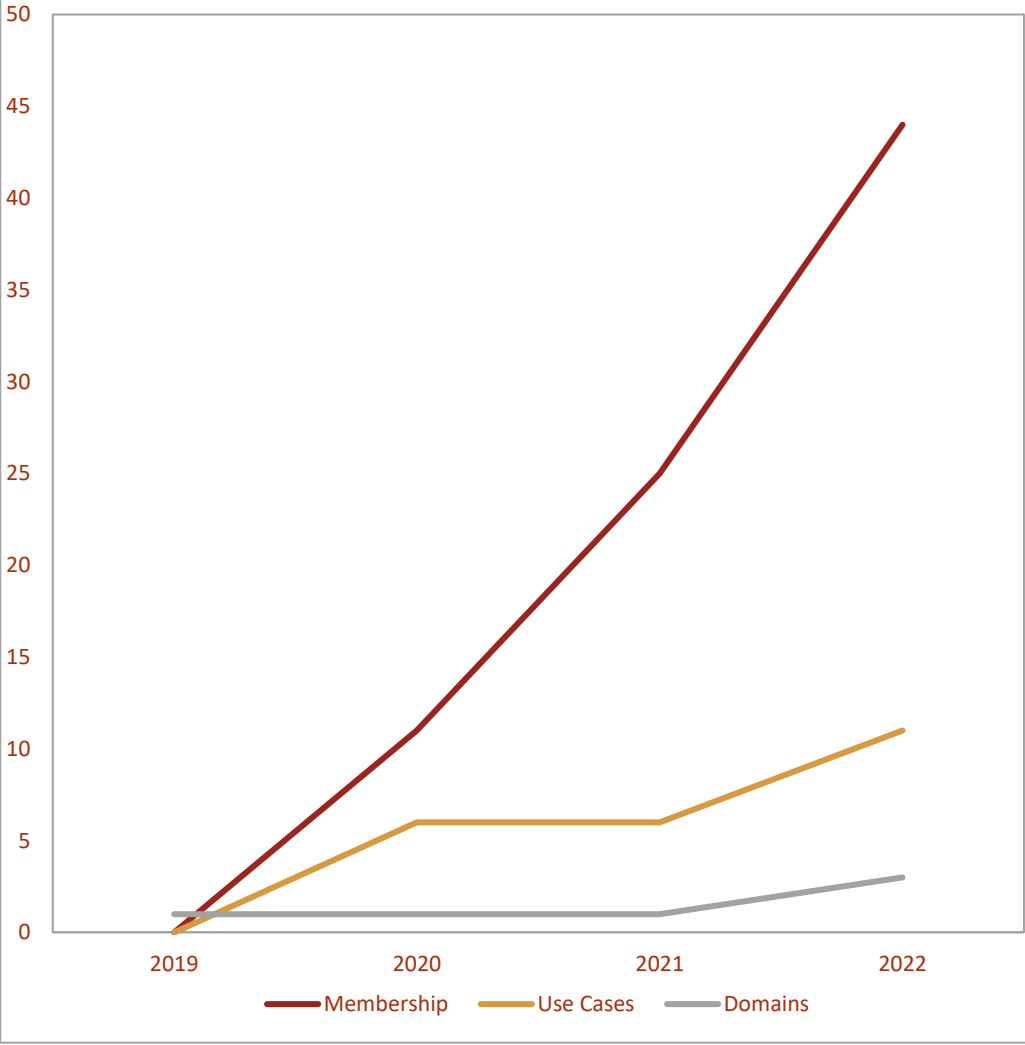
6
In Execution

- EHR Endpoints for Cancer Clinical Trials (ICAREdata)
- Integrated Trial Matching for Cancer Patients and Providers
- Cancer Registry Reporting
- Radiation Treatment Therapy Data for Cancer
- Prior Authorization in Oncology
- Genomics Data Exchange

4
In Planning

- CardX Hypertension Management
- Genomics Operations
- Risk Evaluation and Mitigation Strategies
- Quality Measures for Cancer

CodeX Growth



Use Cases

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6

In Execution

- **EHR Endpoints for Cancer Clinical Trials (ICAREdata)**
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In Planning

- **CardX Hypertension Management**
- **Genomics Operations**
- **Risk Evaluation and Mitigation Strategies**
- **Quality Measures for Cancer**

Each CodeX Use Case progresses through three stages of development.



Discovery



Planning



Execution

CodeX Use Case Spotlight: Quality Measures for Cancer

Can oncology quality measures be effectively authored and executed using mCODE and FHIR?

Challenge

Digital oncology measure development and authoring is constrained by disparate and unstructured data and a lack of interoperability. Most oncology quality measures require manual abstraction leading to less developed measures compared to other domains.

Need

- To author and evaluate quality measures using a FHIR data model with mCODE profile extensions and data elements for value-based programs and quality improvement in oncology.

Impact

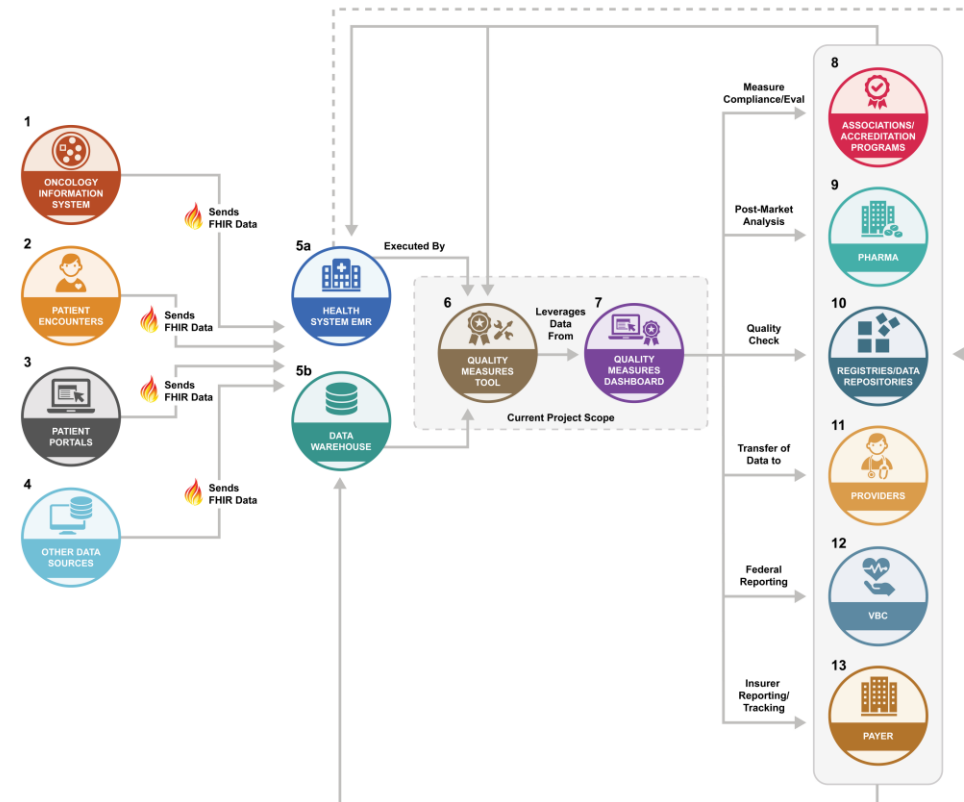
- Provide a less burdensome path to data collection and quality measure authoring
- Ability to share standardized quality measures for oncology data across systems or organizations

Key Partners



Proposed Solution

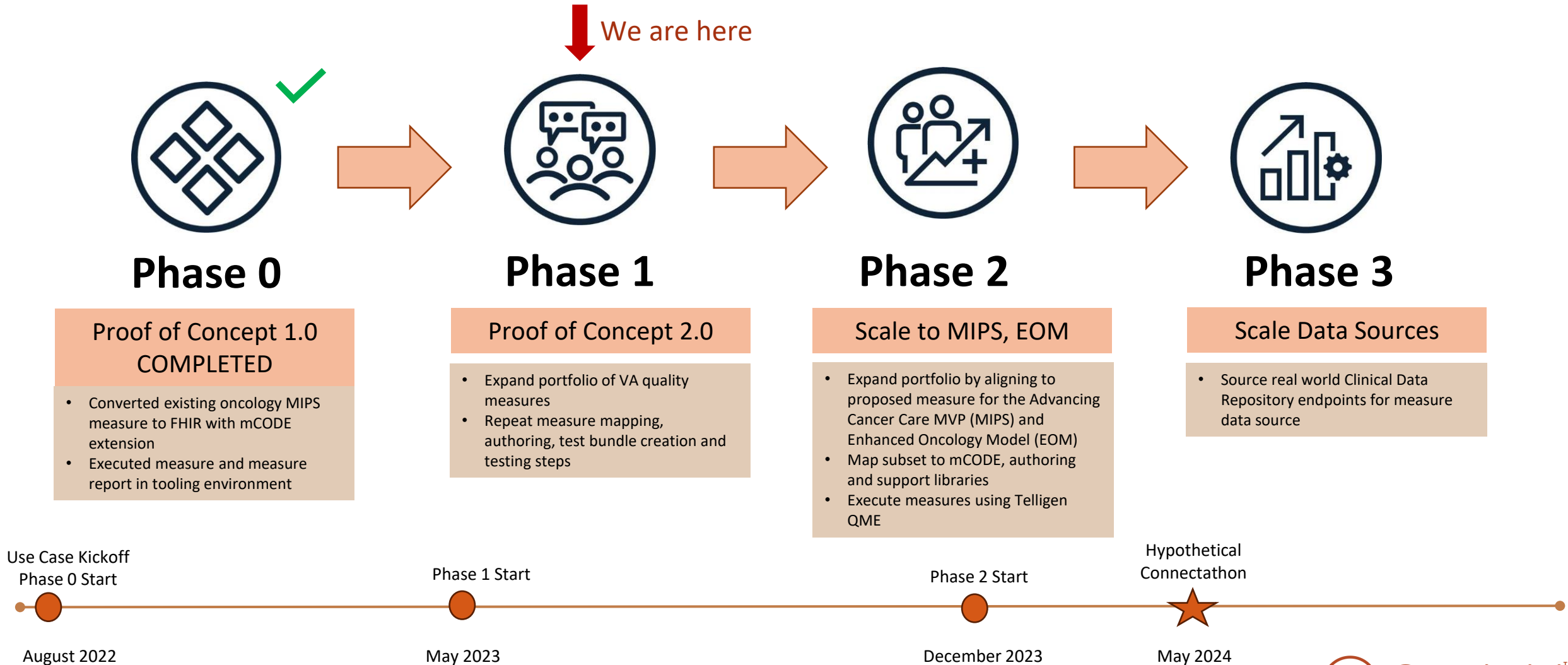
Demonstrate that mCODE and FHIR can be used to author and execute measures in a standardized manner that will yield correct measure results. The effort will begin by authoring and developing electronic oncology quality measures, and associated test case bundles, in the medical and radiation oncology domains.



Status

Currently, developing and testing the conversion of oncology-based quality measures to FHIR as a proof-of-concept, with a focus on the beginning of a measure's life cycle via quality measure authoring.

CodeX Spotlight: Quality Measures for Cancer



CodeX Policy & Regulatory Support

Federal Agency Support

- **CDC:**
 - Central Cancer Registry Reporting IG: cancer data elements point to mCODE
- **ONC:**
 - USCDI submissions
 - USCDI+: 8 mCODE and extensions elements in proposed **USCDI+ Quality Data Element list**
 - Upcoming: **USCDI+ for Cancer**
- **CMS**
 - **CMS Enhancing Oncology [Payment] Model (EOM):** leverages mCODE for data submission
 - Tracking CodeX PA and QM Use Cases. On PA: CMS, ONC Listening Sessions

CodeX Real World Traction



**Preliminary results to be updated based on 2023 mCODE implementation survey.*

- **Industry Implementing mCODE and Extensions**
 - 13 Vendors implementing
 - 45% U.S. patients covered by mCODE consistent vendor systems
 - 80% of North American treatment sites supported by vendors adopting mCODE
- **International Traction**
 - 10 countries exploring (6) or actively adopting (4) CodeX standards
- **Adoption for Routine Care**
 - Oncolincas, large cancer network in Latin America, adopted mCODE
 - Able to aggregate patient outcomes at previously unprecedented scale that correlate to scientific literature outcomes https://ascopubs.org/doi/abs/10.1200/JCO.2022.40.16_suppl.e13022
 - Mayo with pilots in routine use mCODE
 - <https://confluence.hl7.org/display/COD/2023-06-30+CoP+Meeting+Notes>
 - Germany: routine exchange of genomics FHIR-based data
 - <https://confluence.hl7.org/display/COD/2023-08-25+CoP+Meeting+Notes>

Build and Innovate on Our Work

We enable high-quality computable data using HL7[®] and FHIR[®] standards to create a common language for clinical specialty domains in cancer, genomics, and cardiovascular health.

Get Engaged

CodeX hosts a monthly Community of Practice event to keep our community informed and engaged, and to make sure the public's opinions are heard. We also hold Public Calls to give updates on ongoing CodeX use cases.

Attend Upcoming Events: <https://confluence.hl7.org/display/COD/CodeX+Calendar>

Expand Our Reach

There are currently over 250+ stakeholders involved in CodeX. We are looking to expand our membership and to partner with new health systems in our pilots. Spread the word and get involved as a CodeX Member!

Share our site: <https://codex.hl7.org/> **Become a Member:** email CodeX@hl7.org

Support Our Mission

Funding from foundations, philanthropies, and government organizations will allow us to further scale and drive maximum adoption across systems. Please reach out about interesting opportunities that may apply to CodeX.

Email suchen@mitre.org or CodeX@hl7.org



A Member-driven **community** accelerating **interoperable** data modeling and **implementation** around CodeX HL7® **FHIR**® standards, such as **mCODE**, leading to **substantial improvements** in **health care** and **research** in cancer, cardiovascular health, genomics and beyond.

<https://www.hl7.org/codex/>

<https://confluence.hl7.org/display/COD/CodeX+Home>

<https://www.linkedin.com/company/codex-common-oncology-data-elements-extensions/>

Additional Detail



CodeX Oncology Use Cases

Focus of 2023 is on expanding patient impact

EHR Endpoints for Cancer Clinical Trials (ICAREdata)

Building foundation to transform clinical trials by capturing trial results in a standard way. When oncology patient data is consistently captured during trials, clinical researchers can learn more and help more patients with standard trial results. Three clinical sites participating.

Integrated Trial Matching for Cancer Patients and Providers

Automates existing clinical trial matching process, allowing eligibility screening to be completed in one step. Demonstrated feasibility of program with a 300% to 800% increase in matched trials with plans for a prospective approach including 2-3 implementation sites.

Cancer Registry Reporting

Enables automated reporting of cancer data to registries, expediting researchers' ability to identify better treatments. Completed the pilot and currently preparing to extend testing before transitioning to production in the future.

Radiation Therapy (RT) Treatment Data for Cancer

Enables exchange of radiation therapy data for enhanced patient care coordination and data reuse, such as quality management, research, and payer-required reporting. Currently, proof of concept testing the exchange of treatment summary information between oncology information systems.

Prior Authorization (PA) in Oncology

Automates PA for cancer treatment utilizing FHIR CRD, DTR, PAS IGs to **expedite patient care, reduce manual processes for providers and payers** with the target of 80% of determinations that do not require manual review. Currently preparing proof of concept for radiation oncology for prostate cancer.

Quality Measures for Cancer

Demonstrates ability to **author and evaluate oncology quality measures using FHIR data model and mCODE for value-based programs and quality improvement.** Currently, developing and testing conversion of oncology-based quality measures to FHIR as a proof-of-concept.

Each CodeX Use Case progresses through three stages of development.



Use Cases in Clinical Domains Beyond Oncology

Focus of 2023 is on expanding impact in broader set of clinical domains

GenomeX Data Exchange

Aims to create scenario-based profiles/import specifications with the FHIR Genomics IG **so structured genomic data can be shared from a lab to receiving organizations (EHR/genomic data repository) so that providers can use the data in patient care.** Currently building community and identifying specific problems and solutions.

CardX Hypertension Management

Enables **access to hypertension management data both at home and in the clinic so that patients and providers have increased awareness about how patients are managing their disease.** Developing a minimal Cardiovascular FHIR IG that is consistent and interoperable with mCODE.

GenomeX Operations

Aims to **create a uniformed approach** for FHIR Genomics operations **so patients and providers can easily get actionable genetic variation information that can impact treatment options.** Currently building community and identifying specific problems and solutions.

Risk Evaluation and Mitigation Strategies (REMS)

Streamlines FDA REMS process to speed equitable availability of essential medications for patients. Initiating a pilot to incrementally develop a new REMS data infrastructure in partnership with the FDA and industry participants.

Each CodeX Use Case progresses through three stages of development.



Thursday

- FHIR Accelerator: FAST
- FHIR Accelerator: Argonaut
- FHIR Accelerator: Gravity
- FHIR Accelerator: Da Vinci
- FHIR Accelerator: CodeX
- **Upcoming Education & Meetings**
- The State of FHIR
- Final Announcements

Thursday



Upcoming Education & Meetings

Sadhana Alangar, PhD


Director of Education
HL7 International

HL7 TRAINING & EDUCATION

AGENDA


- Upcoming Courses (2023)
- Future Webinars
- Partnerships
- Regional Affiliates
- Credentialing Program

HL7 Online Classes & Webinars

 **Clinical Quality & Decision Support on FHIR**
Oct 3, 2023 to Oct 5, 2023 - Online Class
[Add to Calendar](#)




 **HL7 FHIR Implementation Guide Design and Maintenance - Chinese Version**
Oct 5, 2023 to Nov 8, 2023 - Asynchronous Course
[Add to Calendar](#)


 **Applied HL7 FHIR Questionnaire & Data Capture**
Oct 24, 2023 to Oct 26, 2023 - Online Class
[Add to Calendar](#)


[Learn out more about our Individual Training.](#)


Fundamentals Courses


 **HL7 V2 to FHIR Mapping**
Sep 7, 2023 to Oct 12, 2023 - Asynchronous Course
[Add to Calendar](#)



 **HL7 Fundamentals**
Sep 7, 2023 to Nov 30, 2023 - Asynchronous Course
[Add to Calendar](#)

 **HL7 FHIR Intermediate**
Sep 14, 2023 to Oct 26, 2023 - Asynchronous Course
[Add to Calendar](#)

 **HL7 FHIR Exam Prep**
Sep 28, 2023 to Oct 26, 2023 - Asynchronous Course
[Add to Calendar](#)

 **HL7 FHIR Fundamentals**
Oct 26, 2023 to Nov 23, 2023 - Asynchronous Course
[Add to Calendar](#)

2023: Asynchronous Courses

- September 14: HL7 FHIR Intermediate
- September 28: Comprehensive HL7 FHIR Proficiency Exam Prep Course
- October 5: FHIR Implementation and Guide Design Maintenance – Chinese Version 
- October 26: HL7 FHIR Fundamentals

2023 Synchronous Online Classes


- October 3: Clinical Quality and Decision Support on FHIR
- October 24: Applied FHIR Questionnaire and Data Capture

TBD

- IPS Introduction and It's Implementation
- Referrals and Orders – How to Ask for Stuff in FHIR
- FHIR Security and Privacy (Flipped Classroom Format)
- Interoperability for Clinicians and Policy Makers


2023 Education Catalog

1. Go to HL7.org
2. Click on Training tab or Education Calendar
3. Fill out form to download



Education Catalog

Straight From The Source

**HL7® FHIR®**

Online Events & Classes

HL7 FHIR Connectathon

3 Days | Virtual Event

An HL7 Fast Healthcare Interoperability Resources (FHIR®) Connectathon features hands-on FHIR development and testing. This is a chance to get your hands dirty and learn by helping evolve the FHIR specification!

Whether the format is virtual or in-person, implementers and developers can gain experience developing FHIR-based solutions and exchange data with other FHIR interfaces.

Participants select one of several tracks based on level of readiness and area of interest, and can engage in hands-on, heads down development and testing. There is an opportunity to work directly with other FHIR developers and senior members of the FHIR standards development team, and participants are expected to write some software intended to demonstrate FHIR connectivity.

EVENT DATES

January 13-15, 2021

HL7 FHIR Intermediate

6 Weeks | Self-paced

This intermediate level, 6-week course for developers provides an overview on how to program FHIR clients and servers. It also features an introduction to the most relevant implementation guides in the healthcare IT market: Argonaut, IPS, SMART on FHIR and CDS Hooks. Hands-on exercises are included on how to implement HL7 FHIR, using widespread open source libraries for C#, Java and JavaScript.

Participants will learn:

- How to navigate the Argonaut and IPS implementation guides
- What is involved in programming a FHIR Client using Java, C# and JavaScript
- How to create a FHIR façade to integrate a legacy application
- How to use SMART on FHIR to integrate apps with EHRs
- How to use CDS Hooks to integrate clinical decision support to an app
- Fercam

Prior experience with FHIR is required. Background in software development using Java, C# or JavaScript is required to complete the course assignments. Completing the HL7 FHIR Fundamentals course is highly recommended.

COURSE DATES

February 18–April 1, 2021
June 3–July 15, 2021
September 16–October 28, 2021

INSTRUCTOR


Diego Kaminker: Affiliate Director, HL7; Creator & Educator, HL7 Fundamentals, FHIR Fundamentals and FHIR Intermediate; Member, HL7 Argentina

Fernando Campos, FHL7: Chair, HL7 Argentina; Creator & Educator, HL7 Fundamentals, FHIR Fundamentals and FHIR Intermediate; Software Engineering Department Chief, Hospital Italiano de Buenos Aires; Author

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Request Download Link

*Classes that are recorded will be available at HL7 On Demand
www.pathlms.com/HL7

Webinars

- October 12: Global Spotlight: Marching Forward on Interoperability and Standards for Better Health (90 minutes)
 - Developments from HL7 and its international community, global digital health leaders and innovators in Africa, Asia and the Middle East. Creating increased connectiveness, community and better outcomes through interoperable electronic health will be highlighted
- A webinar (panel presentation) for health care workers, administrators and policymakers is being planned. Speakers from Epic, Oracle (Cerner) will participate. Payer and patient perspective will also be included.

Virtual Student Academy

- Check out our Student Academy and the Fall 2023 Module
 - <https://info.hl7.org/virtual-student-academy>
 - Free and reduced-cost, on-demand modules.
- The Future of Interoperability Now 
 - A series of 10 one-hour webinars designed for academic students and staff interested in learning about the FHIR standard and its role in enabling interoperability across the healthcare enterprise.

Education Partners



- Partnership Programs
 - National Teipei University of Nursing and Health Sciences
 - AEGIS.net, Inc., Rockville, MD
 - Firely, Amsterdam

Regional Affiliates

- AFRICA – HELINA
- AeHIN
 - 2024 EAC Key Initiative – Offer affordable education all over the world. Regional Affiliates to help with these initiatives.



Credentialing Program (2023 -2024)



- First Phase – Update the current FHIR Proficiency Review Exam
 - Test Design Development – Completed
 - Job Task Analysis – October
 - Item Writing Workshop
 - Item and Form Level Setting
 - Modified Angoff Standard Setting



Future HL7 Working Group Meetings

January Working Group Meeting

Virtual Event

January 29 – February 2, 2024

May Working Group Meeting

Renaissance Dallas Hotel

Dallas, Texas

May 18-24, 2024

38th Annual Plenary & Working Group Meeting

The Omni

Atlanta, Georgia

September 21-27, 2024



Future Connectathons

HL7 FHIR Connectathon

Virtual Event

January 16-18, 2024

HL7 FHIR Connectathon

Renaissance Dallas Hotel

Dallas, TX

May 18-24, 2024

HL7 FHIR Connectathon

The Omni

Atlanta, Georgia

September 21-27, 2024



Future DevDays

HL7® FHIR® DevDays 2024 Minneapolis, Minnesota

June 10-13, 2024

<https://www.devdays.com/>

Thursday

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- FHIR Accelerator: Gravity
- FHIR Accelerator: Da Vinci
- FHIR Accelerator: CodeX
- Upcoming Education & Meetings
- **The State of FHIR**
- Final Announcements

Thursday - The state of FHIR



Diego Kaminker

Deputy Chief Standards Implementation
Officer

HL7 International



Ward Weistra

Product Manager and FHIR DevDays
content lead

Firely

2023 STATE OF FHIR®

Survey Results

Diego Kaminker & Ward Weistra

9/14/2023



2023 STATE OF FHIR® SURVEY

- Sent out to **HL7 Affiliates** and known **national IG authors**
- One or more knowledgeable responses per country

RESPONSE

32 RESPONSES

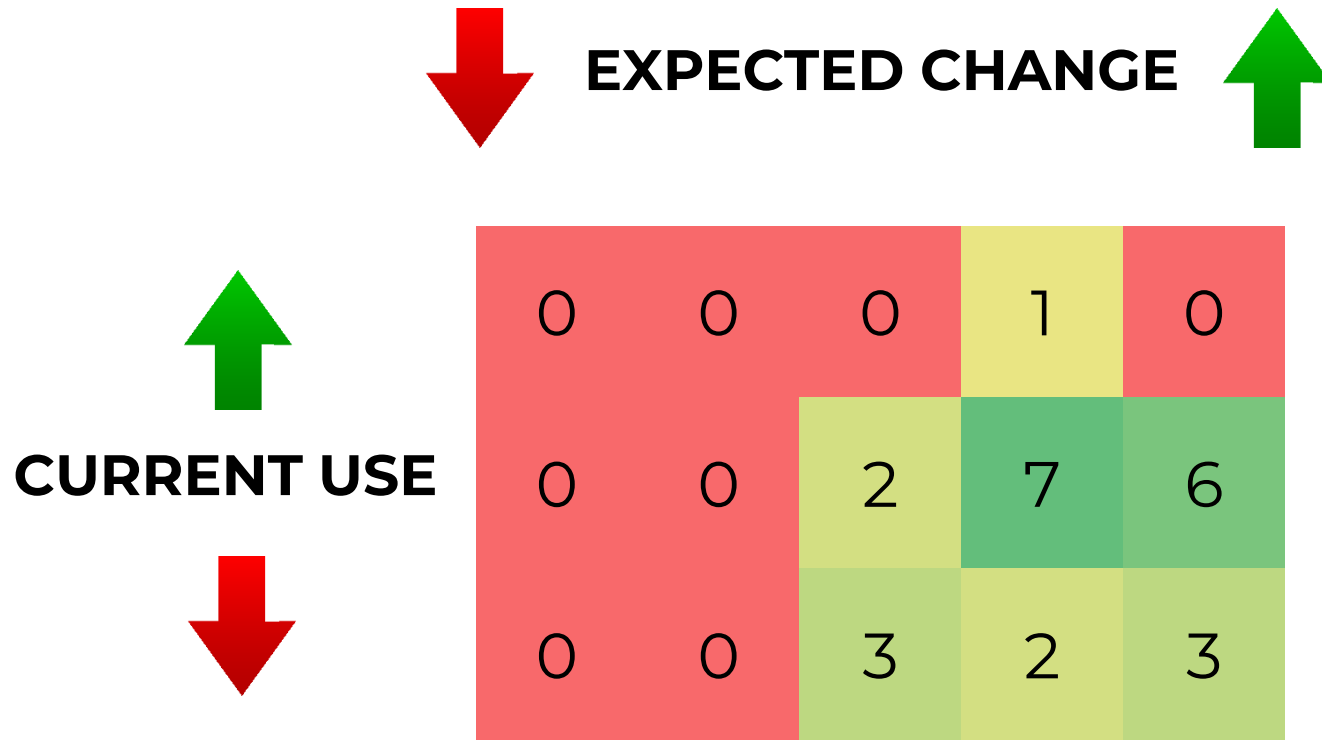
24 COUNTRIES

Argentina
Australia
Brazil (2)
Canada (2)
Chile
Colombia

Cyprus
Denmark
Estonia
Finland
France
Germany (4)

Israel
Luxembourg
Mexico
Netherlands
New Zealand (3)
Norway

Peru (2)
Slovakia
Taiwan
Thailand
United Kingdom
United States



MEDIUM/HIGH AND RISING

- Finland, Norway, Denmark
- United Kingdom, Germany, France, Netherlands
- Canada
- New Zealand, Australia
- Israel
- Chili, Argentina, Colombia

MEDIUM AND STABLE

- United States, Thailand

LOW AND RISING

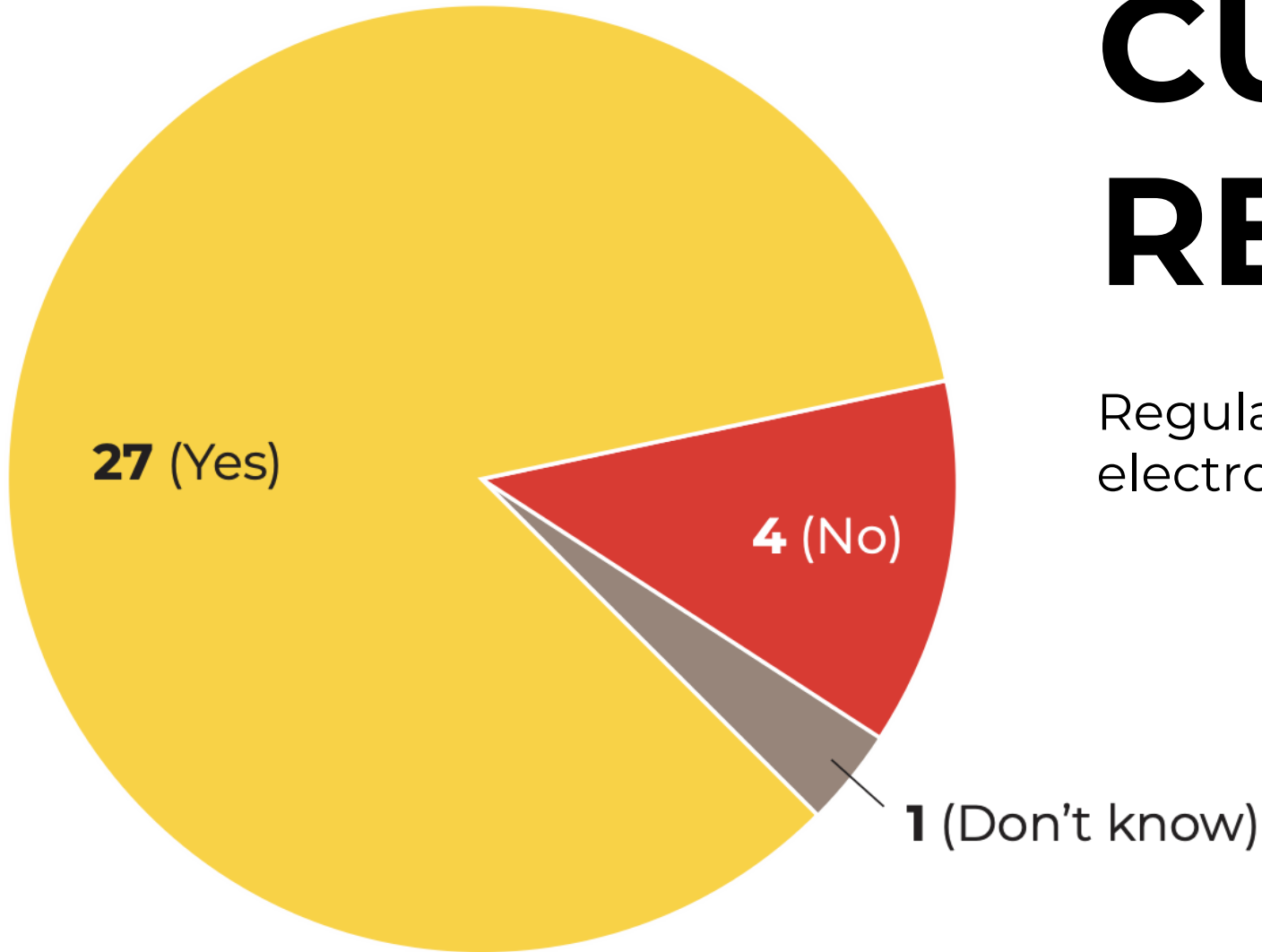
- Brazil, Estonia, Luxembourg, Slovakia, Cyprus

LOW AND STABLE

- Peru, Mexico, Taiwan

CURRENT REGULATION

Regulation for the use of **standards** in
electronic health data exchange?



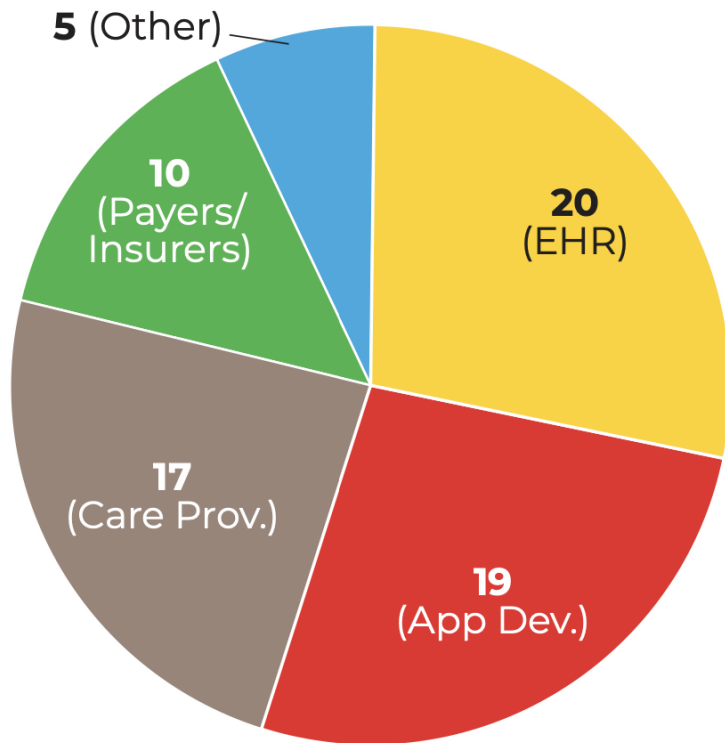
OF THOSE WITH NATIONAL REGULATION

- More than half **mandate or advise FHIR**
- More than half have **no deadline** attached
- Majority have **no fines** for non-compliance

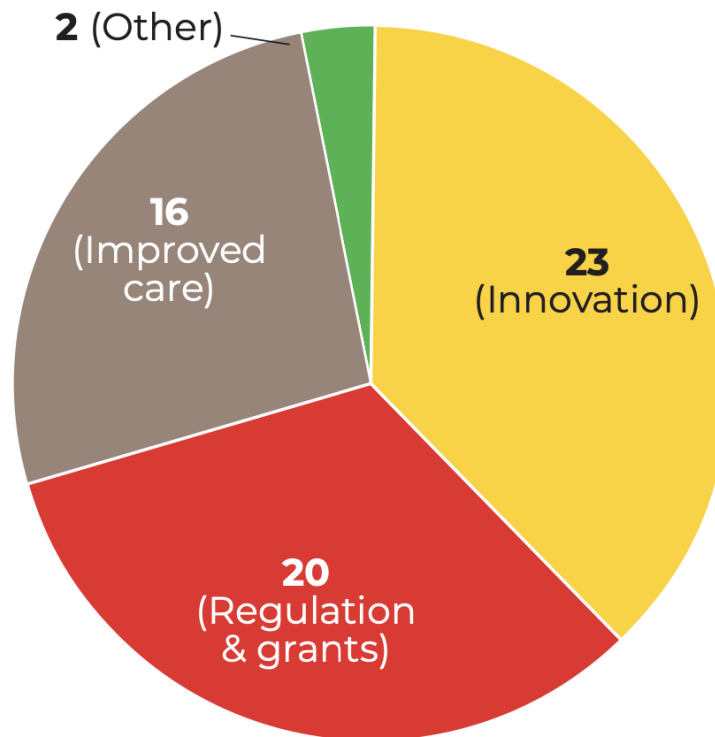
Nearly half have **funds available** stimulating FHIR adoption

NATIONAL STANDARDS

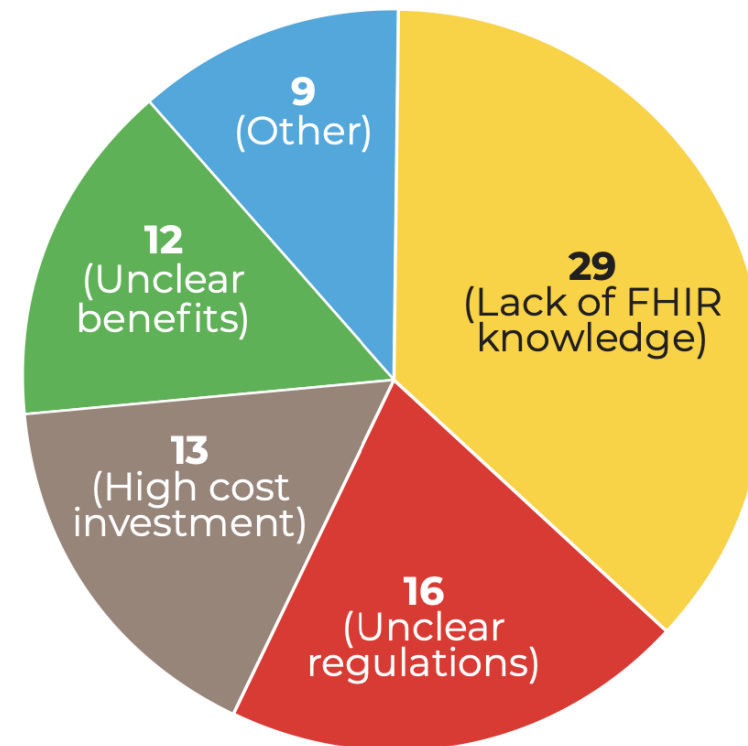
- Nearly all have a **national standards organization** on electronic health data exchange.
- Vast majority has a **national FHIR data model**
- Vast majority has one to many **use-case FHIR standards**
 - Almost all derive from their national FHIR data model.



Who?



Why?



Why not?

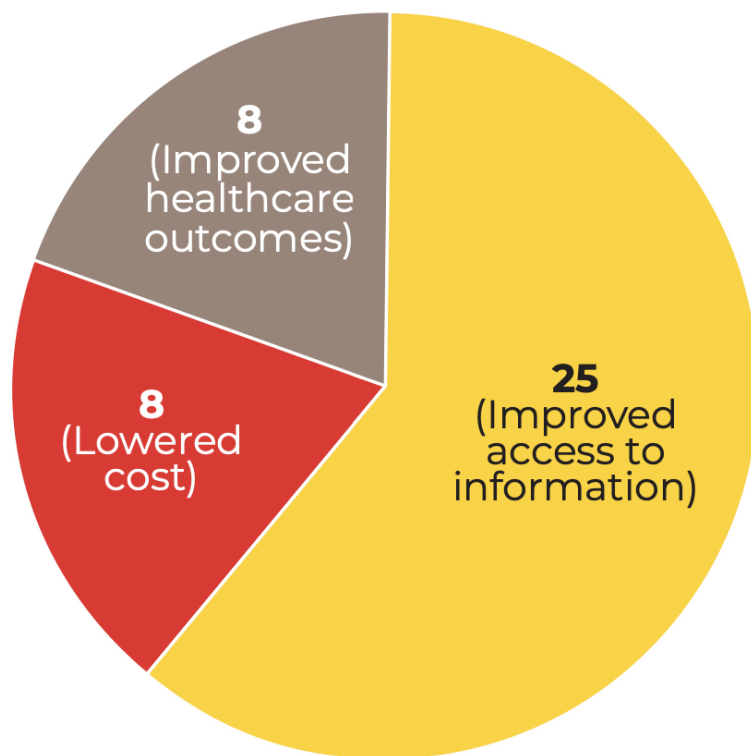
FHIR ADOPTION

PATIENT ADVOCACY

- Half of respondents were aware of patient advocacy for the **availability of healthcare data**
- Two thirds of those patient advocacy groups pay specific attention to **health data standards**

FHIR USE CASES

- Eighty percent were aware of **successful FHIR use cases**



which led to ...

2023 STATE OF FHIR® SURVEY

- **Full report** will be released on HL7 & Firely blogs
- Not represented? Reach out!

Co-authors

- Martine Berden – Firely
- Patricia Guerra and Andrea Ribick – HL7 International

SAVE THE DATE

HL7 FHIR DevDays 2024

The largest FHIR-only
event in the world

June 10-13, 2024

Minneapolis, MN

McNamara Alumni Center



Thursday

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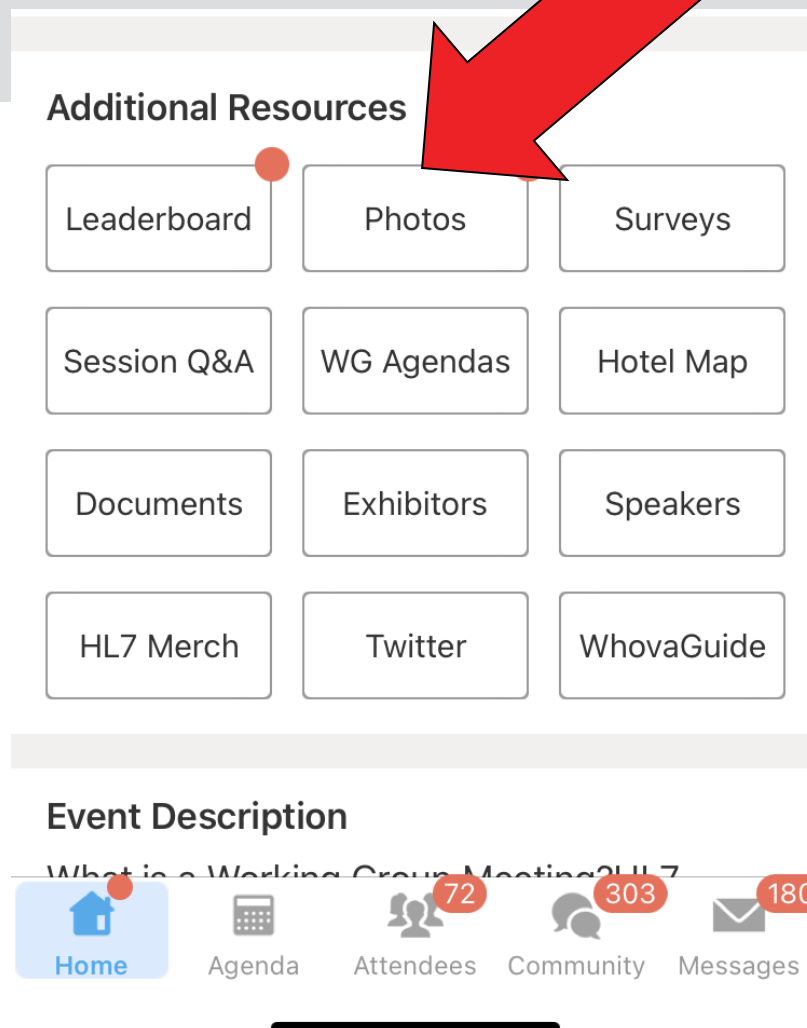
Thursday

- Don't forget to fill out the WGM survey on Whova under **Resources > Survey** on the left-side navigation
- There will be a drawing of **\$500** towards HL7 Education!

<https://www.surveymonkey.com/r/Sept2023WGM>

Thursday

Share your photos
with the HL7
Community through
Whova!



Thanks to Our Sponsors



Women of HL7 Reception Sponsor



Women of HL7 Reception Sponsor



Connectathon Sponsor



WGM Lanyard Sponsor



**Hope you're
Phoenix fine!**

Thursday, September 14, 2023

