36th Annual Plenary & Working Group Meeting

Baltimore, Maryland

Tuesday, September 20, 2022
Welcome

Mark McDougall
HL7 Executive Director
Tuesday

- CEO Report
- CSDO & TSC Report
- Implementation Division Report
- International Council Report
- FHIR Accelerator: CodeX
- FHIR Accelerator: Vulcan
- Housekeeping Announcements
CEO Report

Charles Jaffe, MD, PhD
HL7 Chief Executive Officer
Report to the HL7 Membership

FHIR Foundation Update

Chuck Jaffe
20 September 2022
Rationale for Proposed Changes to the HL7 FHIR Foundation

• The **business model** is inconsistent with the current landscape.
• The **governance** has remained static since the inception of the Foundation.
• New opportunities have arisen which are predicated by **emerging funding opportunities** for HL7 and for the FHIR Accelerators.
• The **current 501(C)3 status** does not effectively permit charitable organizations with sufficient opportunity to allow maximal funding.
• The FHIR Foundation has been seen by some organizations as a unique funding opportunity, and they have proactively approached our partners.
Background of HL7 FHIR Foundation Changes

- A large International charitable organization approached the Codex FHIR Accelerator with an opportunity for significant (transformative) funding.

- On behalf of Codex, Mitre approached *Growing Good* to assist in the process
  - “*Growing Good* partners with non-profit organizations and companies who aim to do good in the world. We help them optimize their fundraising and organizational strategies and enable them to maximize their impact.”

- [https://www.growinggoodinc.com/](https://www.growinggoodinc.com/)

- *Growing Good* leadership met with the FHIR Foundation to explain their role and to propose changes to our organization.
Proposed FHIR Foundation Changes

• Changes to the IRS filing
  • Charitable organizations providing large contributions do not receive optimal tax benefits from 501 (C)3 non-profits.
  • *Growing Good* provided evidence that the FHIR Foundation would be better suited as a 501(C)3A organization.
• Such entities can provide funding directly to another organization.

• Governance
  • A 501(C)3A must have a Board of Directors, which includes a majority of members from the organization that it will benefit.
  • The current Foundation Board members voted unanimously to amend the Bylaws in keeping the 501 (C)3A requirements.

• Additional requirements
  • Codex has tentatively received a funding opportunity, which must be completed before the end of the current calendar year.
Progress toward FHIR Foundation Revitalization

- Changes to the IRS filing
  - Revisions to the **IRS filing** are under way.
- Governance
  - The FHIR Foundation Board of Directors has **finalized the changes**.
  - The resulting Board will decrease in size and will have the needed component of HL7 International Board members.
- **FHIR Foundation Funding**
  - *Growing Good* will assist the Foundation in submitting necessary filings to the 7 states home to charitable organizations must likely to be significant contributors.
  - When enabled, HL7 International will receive a **management fee** for these grants.
- Current Grant demands
  - In order to receive the proposed grant by years end, Codex will require **another fiduciary** to accomplish to funds management.
Tuesday

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CSDO Report

Daniel Vreeman, DPT
Chief Standards Development Officer
CSDO Update

HL7 36th Annual Plenary and Work Group Meeting
September 2022

Daniel J. Vreeman, PT, DPT, MS, FACMI
Chief Standards Development Officer
DANKE!
THANK YOU!
MERCI!
GRAZIE!
GRACIAS!
DANK JE WEL!

............
Updates on HL7 Infrastructure and Standards Development

Created by Wayne Kubick, last modified by Daniel Vreeman on May 10, 2022

New and noteworthy updates about standards development, tooling, infrastructure, and process improvement activities at HL7. General updates are curated in the HL7 Newsroom and on our blog The Standard.

Updates on Standards Development and Infrastructure
Daniel Vreeman posted on May 08, 2022

The essence of HL7 is a vibrant and well-orchestrated global community. Your participation is the fuel for our collective progress, and during the Working Group Meeting, it’s a delight to reflect on our advancements so far in 2022. We continue learning and iteratively improving how we can best work together to create world class standards.

Year to Date Progress: Standards Development

Already this year we have published 19 new specification versions.
Cooperative Agreement

Office of the National Coordinator for Health Information Technology

Closing the Gap between Standards Development and Implementation -

Maturing the C-CDA and FHIR standards

Period of performance: Sep 08, 2022 to Sep 07, 2027

Builds on our longstanding collaboration

Enhancements to the infrastructure and processes for standards development and implementation
TSC Report

Jean Duteau
TSC Chair Elect
24 Work Groups qualify for Gold Stars this cycle!

Arden Syntax, Biomedical Research and Regulation, Clinical Decision Support, Clinical Genomics, Clinical Quality Information, Community-Based Care and Privacy, Cross-Group Projects, Electronic Health Records, Emergency Care, FHIR Infrastructure, Financial Management, Human and Social Services, Imaging Integration, Implementable Technology Specifications, Infrastructure and Messaging, Modeling and Methodology, Orders and Observations, Patient Administration, Patient Care, Payer/Provider Information Exchange, Pharmacy, Services Oriented Architecture, Structured Documents, Vocabulary
Work Group Health

- 3 Work Groups have PBS metrics issues to address
- 6 Work Groups have Stale Jira Ticket issues to address

All Work Groups are in the Green this cycle!!!
New Work Group Health and PBS Metrics

- New Metrics for the next cycle
  - Missing Re-affirmation / withdrawal timeline for 5 Year Anniversary
  - Expired STUs
- Dropping from PBS Metrics
  - Projects greater than Two (2) Years Old
Forming a TSC Task Force – Co-chair and Project Team Training

- The task force will explore education options for cochairs and project teams possibly including:
  - Formal training classes
  - Training videos
  - Updates to HL7 Essentials page
  - Updates to the Co-chair Handbook

- If you are interested in joining the task force, contact the TF Chair
  - Gora Datta (gora@cal2cal.com)
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Implementation Division Report

Viet Nguyen, MD
Chief Standards Implementation Officer
Implementation Division Report

Diego Kaminker
Deputy Chief Standards Implementation Officer
Standards Implementation Division Update

September 20, 2022

Viet Nguyen, MD
HL7 CSIO
viet@hl7.org

Diego Kaminker
HL7 DCSIO
diego@hl7.org
How to Achieve HL7’s Mission and Vision

Our view is **HOLISTIC**

- To achieve success every implementation project will surely need some combination of these services, but we do not want to choke the market.
- **Organizations should have a path for progressive adoption of these programs.**

We understand that **HL7 cannot launch everything at the same time**
Program Management

- Developed and received approval for the HL7 FHIR Accelerator Blueprint
- FAST Accelerator formalized transition to HL7
- HELIOS Accelerator continuing to organize and prioritize activities
- Hiring additional staff to support Accelerators
Community Outreach

- AMIA - Engaging HL7 community to judge the AMIA FHIR App Competition. Proposed a model for future competitions at other AMIA events
- HELINA - Regional Partner Agreement for Africa executed last week
- Regional Partner Agreement for Central America with RECAINSA or RACSEL in Discussion
- Meeting with open source communities to engage with HL7 FHIR Communities
- Early planning stages for 2023 events
Best Practices

- Supporting SDD with Terminology Internship and Best Practices Playbook
- Implementing HL7 FHIR Accelerator Blueprint
- Working with Accelerators to develop handbook
Ecosystem (Foundry)

- Finance Committee reviewing budget and assessing additional information for planning
- Plan to move the Logica Sandbox to HL7 domain and AWS hosting after the September Connectathon
- Plan to re-engage community in Q4 to solicit feedback, participation and funding support
- Working with HL7 Infrastructure to in planning and coordination of migration
Education

- Converting the UCSD/UT FHIR education series (10 sessions) to on-line course with video series and questionnaires so that it can be offered to other organizations
- Discussing details on the Credentialing program with the EAC (weekly meeting with a 4 person subcommittee)
- Return to in-person education at Sept WGM
Thank You
Tuesday

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International Council Report

Peter Jordan
HL7 New Zealand

Ron Parker
HL7 Canada

Line Saele
HL7 Norway
International Council Update

HL7 International WGM
September 20th, 2022

Line Saele
HL7 International Council Co-Chair
Chair HL7 Norway

Team:
Peter Jordan, HL7 New Zealand
Ron Parker, HL7 Canada
There are 40 countries represented on the HL7 International Council
Every Affiliate signs a binding Affiliate Agreement
- 20% of annual affiliate revenue goes to HL7 International
- International Council has 1 voting member per Affiliate
- Each affiliates get 1 vote on HL7 International Ballots per 10 affiliate members

2 International Affiliate Directors on the HL7 Board
- Board will vote on adding 2 more

Affiliate Due Diligence Committee
- On-boarding & engaging with lapsing Affiliate members

Approximately 40 Affiliate members hold WG Co-Chair or Facilitator positions within HL7
International Council Updates

- HL7 Colombia latest addition to the family of Affiliates
- Lapsed status
  - Bosnia/Herzegovina
  - Czech Republic
  - Pakistan
- Virtual meeting 24th August
  - Main topics:
    - Presentation on proposed execution strategies arising from the Board-reviewed Business Plan
    - Preparation for Affiliates’ completion of the new Affiliate Reporting tool
International Council Updates

- Number of Attendees Registered for the Intl Council Meeting: 31
- US vs. Non-US Attendees
  - 576 Total registrants
  - 485 US registrants
  - 91 Non-US registrants
- Countries Attending (23 total)
International Council Sunday update

- Update from Grahame on HL7 FHIR International efforts
  - Revisiting the HL7 Community Process
  - This will effect the new HL7 Affiliate Agreement – discussion on IC on Thursday

- Presentations from Saudi Arabia

- Hospitals on FHIR
Looking Forward

- Getting our lapsed status countries back as Affiliates
- Updating the International Affiliate's Agreement
- Complete the structured International Affiliate Annual Report

- Next in-person meeting at HL7 2023 January WGM
- Planning one virtual meetings before next in-person meeting
THANK YOU!
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FHIR Accelerator: CodeX

Steve Bratt
Program Manager
The CodeX HL7 FHIR Accelerator

"People’s lives are depending on what we do and what this data tells us."

A Member-driven community accelerating interoperable data modeling and implementation around the FHIR and mCODE HL7 standards, leading to substantial improvements in clinical care and research.

DR. MONICA BERTAGNOLLI
Chief of Surgical Oncology, Dana-Farber Cancer Institute/Brigham and Women’s Hospital
Professor of Surgery, Harvard Medical School
President, Alliance for Clinical Trials in Oncology

http://hl7.org/CodeX
1 Accelerator = Multiple Clinical Specialties

HL7 FHIR Accelerator

Oncology Domain

Cardiovascular Domain

Genomics Domain

mCODE™

CardX

GenomeX™

New!
Use and reuse directly for ...

- **Care of the patient today.**
- **Health of the patient for a lifetime.**
- **Ensuring that one patient’s journey improves care for all future patients.**
1. Welcome!
   ...Community of stakeholders

2. Prioritize
   ...Use Cases to improve patient care and research

3. Build
   ...core, standard FHIR IGs (ex: mCODE)

4. Implement
   ...standards into real products, systems, workflows

5. Execute
   ...Pilots in the real-world with real users to demonstrate impact and enable rapid adoption, scaling
CodeX™ Community of Practice

https://confluence.hl7.org/display/COD/mCODE+Community+of+Practice

Latest developments on mCODE, CodeX, and cancer data exchange

Ask questions and learn from the experience of other community participants

Develop and share best practices for clinical workflows, data modeling, and exchange

- Health Systems: 55
- Payers: 7
- Pharma: 10
- EHRs and other tech companies: 85
- Medical Societies and Consortia: 12
- Government Agencies: 14
- Research Organizations: 12
- Nonprofits/Foundations: 7
- Patient Advocacy Organizations: 2
# CodeX Members

(September 2022) **CodeX Founders** ★

## PREMIER

- AMERICAN ASSOCIATION of PHYSICISTS IN MEDICINE
- ASTRO ★
- HL7 International ★
- Pfizer ★
- ALLIANCE ★
- MITRE ★
- EVERNORTH ™
- Syntropy
- onta da
- UnitedHealthcare

## PRINCIPAL

- Cancer Action Network

## BENEFAC T O R

- CIBMTR ★
- ASCO ★
- CDC ★
- FDA ★
- University of Nebraska Medical Center ★
- Michigan Cancer Surveillance Program ★

## GOVERNMENT AGENCY

- U.S. FOOD & DRUG ADMINISTRATION ★
- Tempus ★
- Telligen★

## SPONSORED MEMBER

- AMGEN ★
- ONS ★
- HC Learning Health Community
- NRG Oncology ★
- OCPM ★

## DEVELOPER/IMPLEMENTER

- Cancer Insights Informatics
- elimu informatics
- MASSIVEBio
- mcg Solutions
- Mettle Solutions
- Navigate Oncology
- NeuralFrame

- Oncora Medical
- patientlink
- PHENOTIPS
- PRINCIPIA HEALTH SCIENCES
- QL HC
- Quantum Leap Healthcare Collaborative
- Wemedoo Clinical Information Specialists
CodeX Use-Cases

[Image of CodeX Use-Cases]

https://confluence.hl7.org/display/COD/CodeX+Use+Cases

**Oncology** mCODE

- mCODE++ Extraction
- Clinical Trials
- Trials Matching
- Registry Reporting
- Radiation Therapy Treatment
- Prior Authorization
- Risk Evaluation and Mitigation Strategies
- Quality Measures

**Cardiovascular** CardX

- Hypertension Management

**Genomics** GenomeX

- Data Exchange
- Operations

[Image of Stages: Discovery, Planning, Execution]
minimal Common Oncology Data Elements
FHIR Implementation Guide

mCODE STU2:
http://hl7.org/fhir/us/mcode/
Building an **Engaged Network** of Health System Implementers

**mCODE™**

**Active** – Committed or actively participating in planning, design, development, piloting

**Engaged & Previously Expressed Interest** – Engaged in multiple conversations and/or in the process of being Active

Brigham and Women’s Hospital
City of Hope
Dana Farber Cancer Institute
Duke University
Heartland Cancer Research
Massachusetts General Hospital
McGill University
MD Anderson Cancer Center
Metro-Minnesota Community Oncology
Missouri Baptist
Northwell Health
Rush University Medical Center
Saint Joseph Mercy Health System
The Ohio State University

The University of Chicago Medicine
ThedaCare
Trinity Health
UNC Lineberger Comprehensive Cancer Center
University of California San Francisco
University of Kansas Medical Center
University of Michigan
University of Pennsylvania
University of Texas Southwestern
Veterans Health Administration
Virginia Commonwealth University
Wake Forest University
Washington University in St Louis

Oncoclinicas
Taiwan Cancer Registry
Netherlands Cancer Registry
UC Los Angeles
Mayo Clinic

**Scaling through Industry Implementations**

CancerInsights
Cerner
Clinical Pipe
Elekta
Elsevier
Epic
Flatiron
Jitterbit
MassiveBio
Mettle Solutions
IQVIA
Microsoft
NeuralFrame
Nuance
PatientLink
RaySearch
Roche
Semedy
Syntropy
Trial Scope
TrialJectory
Varian
Varian
Wemedoo
Join Us for the

CodeX™ Birds of a Feather

Today, Tuesday September 20
5:30 – 7:00 PM ET

Light refreshments to be served

https://confluence.hl7.org/display/COD/CodeX+Home
Steve Bratt, CodeX Program Manager (sbratt@mitre.org)
Su Chen, CodeX Clinical Director (suchen@mitre.org)
Tuesday

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FHIR Accelerator: Vulcan

Michael van Campen
Program Manager
• Vulcan Update
• September 20, 2022
HL7 Accelerator Program
Focused Standards Development

Vulcan
Connecting translational and clinical research with healthcare

Gravity
Identify and harmonize social risk factor data for interoperable electronic health information exchange

Helios
Equitable and effective use of data for the advancement of public health

*new*

Argonaut
Advance artifacts foundational to healthcare exchange: CDS Hooks, Bulk Data, Subscriptions, Clinical Notes, and US Core

CARIN
Advance the ability for consumers and their authorized caregivers to easily get, use, and share their digital health information

CodeX
Accelerate interoperable data modeling and applications cancer patient care and research

Da Vinci
Adoption of HL7 FHIR® as the standard to support and integrate value-based care (VBC) data exchange across communities
Clinical Research is not Clinical Care

- Goals of Vulcan
  - BRIDGE EXISTING GAPS
  - STRATEGICALLY CONNECT COLLABORATORS
  - MAXIMIZE COLLECTIVE RESOURCES
  - DELIVER INTEGRATED TOOLS AND SOLUTIONS

Clinical Research

- Candidates
- Consent & Privacy
- Data Security
- Identity Management
- Coded Data
- Innovation
- Informed Clinical Practice

Clinical Care

- Updated Practices & Feedback
Current Member Organizations of Vulcan
As of August 24, 2022

- Accenture
- CROHN'S & COLITIS FOUNDATION
- LAEGEMIDDELSTYRELSEN DANISH MEDICINES AGENCY
- Duke University School of Medicine
- Epic
- FDA
- Felleskatalogen
- GSK
- HL7 International
- IgniteData
- Johnson & Johnson
- Medidata
- Microsoft
- MITRE
- National Cancer Center Hospital East
- NIH National Center for Advancing Translational Sciences
- NIH U.S. National Library of Medicine
- OpenClinica
- Oracle
- Oregon Health & Science University
- Parexel
- Pfizer
- Phuse
- Roche
- SCDM Society for Clinical Data Management
- UC San Diego School of Medicine
- TransCelerate Biopharma Inc.
- University of Arkansas for Medical Sciences
- University of Colorado Anschutz Medical Campus
- UT Health San Antonio Joe B. & Tami Lemm School of Medicine
- Vanderbilt University

★ indicates a convening member of Vulcan
# Vulcan Projects

## June 2022

<table>
<thead>
<tr>
<th>Project</th>
<th>Objectives</th>
<th>Vulcan Lead</th>
</tr>
</thead>
</table>
| Schedule of Activities (SoA)    | Represent the schedule of activities in FHIR from a spreadsheet. Enable the consistent description, timing and identification of each activity in a study | **Mike Ward** (TransCelerate)  
**Geoff Low** (PHUSE) |
| Real World Data (RWD)           | Extract data from EHRs in a standardized format to support clinical research and especially submission to Regulators | **Scott Gordon** (FDA)  
**Damion Nero** (Pfizer) |
| Phenotypic Data                 | To increase the availability of high-quality standardized phenotypic information for genomic research and genomic medicine. | **Anita Walden** (University of Colorado Anschutz)  
**Shahim Essaid** (University of Colorado Anschutz) |
| Electronic Product Information (ePI) | Define a common structure for product information (monographs) that supports cross-border exchange of data for patients | **Craig Anderson** (Pfizer)  
**Catherine Chronaki** (Secretary General at HL7 Europe) |
| Adverse Events (AE)             | Support standardizing the reporting and format of an adverse event. Improve the maturity of the relevant FHIR resources | **Michelle Casagni** (MITRE)  
**Ed Millikan** (FDA) |
| FHIR to OMOP                    | Support the development of FHIR to OMOP data transfer for better analysis of clinical data for research | **Davera Gabriel** (Johns Hopkins)  
**Catherine Diederich** (Duke) |

## In Discovery...

<table>
<thead>
<tr>
<th>Project</th>
<th>Objectives</th>
<th>Vulcan Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample data</td>
<td>Develop sets of sample data to support the Vulcan projects</td>
<td></td>
</tr>
</tbody>
</table>
Implementation Guides (i.e. Standards)
## Related Vulcan Activities

<table>
<thead>
<tr>
<th>Event</th>
<th>Details</th>
</tr>
</thead>
</table>
| **Vulcan Implementation Showcase** | Open to Vulcan members  
Implementation focussed sessions, presented by members / non-members  
Frequency  
• Held every 2 months  
• Next session October 13 |
| **Round Tables / Summits**     | Topics include Electronic Product Information, Adverse Events, FHIR to OMOP  
Frequency  
• Planned as necessary |
| **Vulcan 101**                 | Full day course  
More in depth review of HL7 FHIR & each of the major Vulcan Projects  
Vulcan members get 2 free seats, otherwise $200/300 fee applies  
Frequency  
• Held 2-3 times/year  
• Next session planned for November 17 |
Questions?

- To learn more or to get involved, please
  - Join us at the Vulcan Birds of a Feather session
  - Tuesday Q5, 5:30 – 7:00, Baltimore Ballroom B
  - Visit our website HL7.org/Vulcan
  - Visit our HL7 Confluence page
  - or Email us at Vulcan@HL7.org
• Thank you!
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Housekeeping Announcements

Mark McDougall
HL7 Executive Director

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Meeting Schedule

- General sessions begin in this room at 8:00 am through Thursday
- Day is broken into quarters:
  - Q1: 9:00-10:30
  - Q2: 11:00-12:30
  - Q3: 1:45-3:00
  - Q4: 3:30-5:00
- 30-minute breaks start at 10:30 am and 3:00 pm
- Use the Whova to find the location of your desired meetings
Lunches

- Lunch is at 12:30 pm each day
- If you have an allergy and have a Special Meals Ticket in your packet, please speak to a server; they may have a meal for you.
- If you registered for Friday and plan to attend the luncheon, please pick up your ticket by 12:00 pm today at the registration desk.
- **TODAY is the last day for getting Friday lunch tickets!**
Reminder to co-chairs

Schedule Changes

Please notify Mary Ann of any schedule changes
(email WGMHelpDesk@HL7.org)
Wireless Access

- Connect to – HL7SEP2022
- Password – HealthLevel7
  - Yes, the password is case sensitive
HL7 Mobile & Web App – Whova


- You can also scan the QR code at the registration desk
HL7 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.
Evaluations

- Evaluations are collected electronically. Those taking tutorials will be sent a link for their evaluations.
- Meeting attendee evaluation links were sent in your welcome letter and will also be sent after the meeting concludes.
- There will be a drawing for $500 towards HL7 Education and Virtual Events!

https://www.surveymonkey.com/r/Sept2022WGM
Bow Tie SIG
Board of Directors’ Luncheon Today

Board of Directors’ Luncheon begins at 12:30 pm today at Watertable Restaurant
6 Birds of a Feather Meetings occurring tonight

- All meetings start at 5:30 pm tonight
  - CodeX – Baltimore Ballroom A
  - Helios – Homeland
  - FAST – TBA
  - Vulcan – Maryland Ballroom B
  - Patient Empowerment – Maryland Ballroom E
  - Synergies Between HL7, FHIR and BPM+: Exploring Process Workflow Interactions With Data – Maryland Ballroom F
Three slides to express sincere thanks
Thanks to Our Sponsors

Bronze Sponsor

Supporting Sponsor

Collaborating Sponsor

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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 (18)  
Anne Wizauer (22)  
Karen Van Hentenryck (26)  
Mark McDougall (31)
Have a fabulous day!

Tuesday, September 20, 2022
36th Annual Plenary & Working Group Meeting

Baltimore, Maryland

Wednesday, September 21, 2022
Wednesday

Welcome

Mark McDougall
HL7 Executive Director
Wednesday

- **Annual Business Meeting**
  - Secretary’s Report
  - Treasurer’s Report
  - Chair’s Report
  - John Quinn HL7 Fellows Class of 2022
- **Recognition of Individuals & Companies**
- **Volunteers of the Year Award**
- **Housekeeping Announcements**
Annual Business Meeting

Secretary’s Report

Virginia Lorenzi
Secretary, HL7 Board of Directors
Board Election Results

- Chair-Elect: Julia Skapik, MD
- Secretary: Virginia Lorenzi (re-elected unopposed)
- Directors: Lenel James (re-elected) and Ken Rubin
- Affiliate Director: Ron Parker (re-elected)

- Catherine Chronaki will also serve on the HL7 Board as a Director for the 2023 year
International Council Co-Chair Election Results

- International Council Co-Chair: Line Saele
- International Council Co-Chair: Fernando Campos
TSC Election Results

- TSC Implementer Representative: James Agnew
- TSC Work Group Representative: Brian Pech
- TSC Work Group Representative: Juliet Rubini
WG Co-Chair Election Results

- Arden Syntax – Robert Jenders
- Biomedical Research and Regulation – Jean Duteau, Smita Hastak
- Clinical Decision Support – Howard Strasberg, Issac Vetter
- Clinical Genomics – Srikar Chamala, James Jones, May Terry
- Clinical Information Modeling Initiative – Nathan Davis, Claude Nanjo
- Clinical Interoperability Council – James McClay, James Tscheng
- Clinical Quality Information – Juliet Rubini, Anne Marie Smith
- Community Based Care and Privacy – Jonathan Coleman, Mohammed Jafari, Greg White
Co-Chair Election Results

- Conformance – Nathan Bunker, Frank Oemig
- Cross-Group Projects – Jean Duteau
- Devices – Todd Cooper, John Garguilo, Martin Hurrell, John Rhoads, Martin Rosner
- Electronic Health Records – Michael Brody, Gary Dickenson, Michael van der Zel, Pele Yu
- Emergency Care – Laura Heermann Langford
- FHIR Infrastructure – Rick Geimer
- Financial Management – Jeff Brown, Chirs Cioffi, Paul Knapp
- Human Services – Courtney Baldridge, Brian Handspicker, Mohammad Jafari, Chris Shawn, Michele Zancan
WG Co-Chair Election Results

- Imaging Integration – Chris Lindop
- Implementable Technology Specifications – Jeff Brown, Brian Pech
- Infrastructure and Messaging – Tony Julian, Nick Radov, Issac Vetter
- Learning Health Systems – Russ Leftwich
- Mobile Health – Nathan Botts, Gora Datta, Frank Ploeg
- Modeling and Methodology – Ron Shapiro
- Orders and Observations – Hans Buitendijk, Riki Merrick, Jose Costa Teixeira, Marti Velezis
- Patient Administration – Brian Postlewaite, Line Saele
WG Co-Chair Election Results

- Patient Care – Stephen Chu, Jay Lyle
- Patient Empowerment – Virginia Lorenzi, Maria Moen
- Payer/Provider Information Exchange – Durwin Day, Christol Green
- Pharmacy – Jose Costa Teixeira
- Public Health – Craig Newman
- Security – John Moehrke, Chris Shawn, Trish Williams
- Services Oriented Architecture – Vince McCauley
- Structured Documents – Sean McIlvenna
- Vocabulary – Carmela Couderc, Reuben Daniels, Caroline Macumber
Recipients of the Woody Beeler Memorial Scholarship

- Andrii Krylov, Kyiv, Ukraine
- Amanda Rodriguez, Mayaguez, Puerto Rico
Annual Business Meeting

Treasurer’s Report

Floyd Eisenberg, MD
Treasurer, HL7 Board of Directors
Treasurer’s Report

- Highlights of 2022 yearend financial forecast
- Preliminary insight to the 2023 budget that is under development
## Highlights of 2022 Yearend Forecast

<table>
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<th></th>
<th>2022 Budget</th>
<th>Yearend Forecast</th>
<th>Variance</th>
<th>Variance %</th>
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<tbody>
<tr>
<td>Revenues</td>
<td>10,234,850</td>
<td>9,575,502</td>
<td>-659,348</td>
<td>-6.4%</td>
</tr>
<tr>
<td>Expenses</td>
<td>11,040,917</td>
<td>10,807,258</td>
<td>-233,659</td>
<td>-2.2%</td>
</tr>
<tr>
<td>Net Income</td>
<td>-806,067</td>
<td>-1,231,756</td>
<td>-425,689</td>
<td>-53%</td>
</tr>
<tr>
<td>2022 Yearend Reserves</td>
<td>10,115,097</td>
<td>9,689,408</td>
<td>-425,689</td>
<td>-4.2%</td>
</tr>
<tr>
<td>Reserves in months of operating expenses</td>
<td>11</td>
<td>10.76</td>
<td>-0.23</td>
<td>-2.1%</td>
</tr>
</tbody>
</table>
Looking ahead to HL7’s 2023 budget

2023 Budget advance highlights:

- Budget reconfigured from previous years to incorporate the 3 year business plan highlighted during the Monday Plenary meeting
  - 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 8th
Treasurer’s Report

- Should you have any questions, please contact me at feisenberg@iparsimony.com or our HL7 Controller, Kristal Choy at kristal@HL7.org

- Thank you!
Chair’s Report

Andy Truscott
Chair, HL7 Board of Directors
Recognition of the Class of 2022
HL7 John Quinn Fellows Award

Andy Truscott
Chair, HL7 Board of Directors
John Quinn (1949-2020)

Born on July 15, 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 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 2022 HL7 Fellows are…..
Congrats! HL7 John Quinn Fellows Class of 2022

Jay Lyle  Dr. Philip Scott  Stefan Sabutsch  Laura Heermann Langford
Congrats! HL7 John Quinn Fellows Class of 2022

- Davera Gabriel
- Rick Geimer
- Alexander Mense
- Ulrike (Riki) Merrick
Wednesday

- Annual Business Meeting
  - Secretary’s Report
  - Treasurer’s Report
  - Chair’s Report
  - John Quinn HL7 Fellows Class of 2022
- Recognition of Key Individual & Companies
- Volunteers of the Year Award
- Housekeeping Announcements
Recognition of Individuals & Companies

Mark McDougall
HL7 Executive Director
Moment of Silence

Please join us for a moment of silence to remember those from the HL7 community who have passed during the last 12 months…
Honoring HL7 Members

- Dave Garets
  - 1949 – March 28, 2022
  - Healthcare IT Evangelist
  - Former Chair of HIMSS
  - Voted one of the 50 most valuable contributors to health IT
Honoring HL7 Members

- Craig Knier
  - 1968 – April 27, 2022
  - Senior Director at Change Healthcare
  - Active in FHIR Accelerator Da Vinci
Honoring HL7 Members

- Patrick Kurlej
  - Passed on March 9, 2022
  - Director of Data Exchange and EMR at Health Net
Honoring HL7 Members

- Thomson Kuhn
  - 1948 – October 23, 2021
  - HL7 member since 2001
  - Recipient of HL7’s Volunteer of the Year Award in 2007
Recognition of Long Time Members

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

- Noam Arzt
- Ann Badame
- Carol Broverman
- Christopher Chute
- Kathleen Connor
- Ray Duncan
- Carl Dvorak
- Gerard Freriks
- Sheldon Gilmer
- Hugh Glover
Recognition of Long Time Members

HL7 members for 20-24 years include:

Matthew Greene
Norman Gregory
Grahame Grieve
Peter Haug
John Hatem

Robert Hausam
William Hess
Martin Hurrell
Jeff Jacobs
Robert Jenders
HL7 members for **20-24 years** include:

Anthony Julian
Phillip Kiefer
Elizabeth King
Gunnar Klein
Peter Kranich

Austin Kreisler
Steve Lobach
James McClay
Lloyd McKenzie
Tim McNeil
Recognition of Long Time Members

HL7 members for 20-24 years include:

Linda Noffsinger  
Charles Parisot  
Craig Parker  
David Parker  
Vassil Peytchev  

Nick Radov  
Christine Raine  
John Ritter  
Ken Rubin  
Sandra Stuart
Recognition of Long Time Members

HL7 members for 20-24 years include:

- Paul Schluter
- Judith Snow
- Denise Warzel
- Franklin Wilcox
- Igor Yuabov
Recognition of Very Long Time Members

HL7 members for 25-29 years include:

Liora Alschuler  Virginia Lorenzi
Philip Caillouet  Christopher Melo
Robert Godin  AbdulMalik Shakir
Freida Hall  Siu Wing Tong
Ted Klein
Recognition of Very Long Time Members

HL7 members for 30-34 years include:

Hans Buitendijk
Gary Dickinson
Clem McDonald

Charles Meyer
Doug Pratt
Mead Walker
Recognition of Very Long Time Members

HL7 members for 35+ years include:

Ed Hammond
Recognition of Long Time Affiliates

Affiliates for more than 20 years include:

- HL7 Argentina
- HL7 Australia
- HL7 Brazil
- HL7 Canada
- HL7 China
- HL7 Croatia
- HL7 Germany
- HL7 India
- HL7 Japan
- HL7 Korea
- HL7 Netherlands
- HL7 New Zealand
- HL7 Switzerland
- HL7 Taiwan
- HL7 UK
Organizations for **more than 20 years** include:

- Accenture
- ARUP Laboratories
- Blessing Hospital
- Blue Cross Blue Shield of South Carolina
- Cedars-Sinai Medical Center
- Cerner Corporation
- Contra Costa County Health Services
- Epic
Organizations for more than 20 years include:

- Food and Drug Administration
- Health Care Service Corporation
- HLN Consulting
- Intermountain Healthcare
- Lyniate (formerly Corepoint Health)
- Merative (formerly IBM Watson Health)
- National Library of Medicine
Organizations for more than 20 years include:

- New York-Presbyterian Hospital
- NICTIZ
- North Carolina Baptist Hospitals
- Quest Diagnostics
- Regenstrief Institute
- Stanford Children’s Health
- U.S. Department of Veteran Affairs
- XIFIN, Inc
Thanks to Our Sponsors

Bronze Sponsor

Supporting Sponsor

Collaborating Sponsor
Benefactor Members

Accenture
Allscripts
Amazon Web Services, Inc.
American Medical Association
AmeriHealth Caritas
Centers for Disease Control and Prevention (CDC)
Cerner Corporation
CVS Health
Duke Clinical & Translational Science

Institute
Edifecs, Inc
Epic
European Medicines Agency
Federal Electronic Health Record Modernization
Food & Drug Administration (FDA)
Google
Graphite Health
Independence Blue Cross
Benefactor Members

Intermountain Healthcare
InterSystems
Kaiser Permanente
MAK-SYSTEM Group Limited
MuleSoft
Office of the National Coordinator for Health IT (ONC)
Onyx Technology LLC
Optum
Partners HealthCare System, Inc.
Pfizer
Philips Healthcare
Quest Diagnostics, Incorporated
Ready Computing Inc.
U.S. Department of Defense, Military Health System
U.S. Department of Veterans Affairs
UnitedHealthcare
Gold Members

Academy of Nutrition & Dietetics  
ACS Solutions  
ADVaults, Inc.  
Aetna  
Alphora  
Altarum  
American College of Physicians  
American Heart Association  
Analog Informatics Corporation  
ASSYST, Inc.  
Asymmetrick, A Blue Halo Company  
ATGENOMIX  
Audacious Inquiry  
Availity, LLC  
Azuba Corporation  
BlueCross BlueShield of Alabama  
Brooklyn Data Co.  
CAL2CAL Corporation  
Carradora Health, Inc.  
CITRIOM LLC
Gold Members

Cohere Health
Computable Publishing LLC
Computrition, Inc.
Connecticut Department of Public Health
CORMAC Corp
Council of State and Territorial Epidemiologists
CU Anschutz Medical Campus
DasLab GmbH

Datavant
Drummond Group
Duteau Design Inc.
EBSCO Health
eHealth Initiative
EMI Advisors LLC
etherFAX, LLC
Evernorth
EyeMD EMR Healthcare Systems, Inc.
Flexpa
<table>
<thead>
<tr>
<th>Gold Members</th>
<th>3/6</th>
</tr>
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<tbody>
<tr>
<td>Health Care Service Corporation</td>
<td>Isoprime Corporation</td>
</tr>
<tr>
<td>Health Intersections Pty Ltd</td>
<td>Johnson &amp; Johnson</td>
</tr>
<tr>
<td>Henry M. Jackson Foundation</td>
<td>Kailo Medical</td>
</tr>
<tr>
<td>HHS/Office of Inspector General</td>
<td>Karkinos Healthcare Private Limited</td>
</tr>
<tr>
<td>ICF</td>
<td>Labware, Inc.</td>
</tr>
<tr>
<td>ICHOM</td>
<td>Massachusetts Health Data Consortium</td>
</tr>
<tr>
<td>Innovacer Inc.</td>
<td>MaxMD</td>
</tr>
<tr>
<td>Inovalon Inc.</td>
<td>Medallies, Inc.</td>
</tr>
<tr>
<td>Intelligent Medical Objects (IMO)</td>
<td>MedCom</td>
</tr>
<tr>
<td>INTERFACEWARE, Inc.</td>
<td>Michigan Health Information Network</td>
</tr>
</tbody>
</table>
Gold Members

Microsoft Corporation
Milliman IntelliScript
MY Synergy Ltd.
National Association of Community Health Centers
National Association of Dental Plans
National Marrow Donor Program
NeutralFrame
NICTIZ
NIH/Department of Clinical Research
Informatics
Northwestern Medicine
Novillus
Optimoz, Inc.
OtisHealth
P.G.M.D. Consulting S.r.l.
PenRad
PROMTIME
Public Health Informatics Institute
Redox
Gold Members

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Reliv
Rhoads Systems, Inc.
Rochester RHIO
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Samvit Solutions
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Security Risk Solutions, Inc. (SRS)

SenecaGlobal
Seoul Medical Informatics Intelligence Lab Inc.
SMART Health IT
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Tata America International Corp (TAIC)
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Therap Services LLC
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UCSF Center for Digital Health Innovation
Univ of TX Health Science Center San Antonio
University of Arkansas Medical Services
USAging

UW Medicine Information Technology Services
Vermont Oxford Network
VICO Open Modeling
Vynyl
WSO2
Zocdoc, Inc.
Wednesday

- **Annual Business Meeting**
  - Secretary’s Report
  - Treasurer’s Report
  - Chair’s Report
  - John Quinn HL7 Fellows Class of 2022

- **Recognition of Key Individual & Companies**

- **Volunteers of the Year Award**

- **Housekeeping Announcements**
26th Annual Volunteers of the Year Award

W. Ed Hammond, PhD
26th Annual Volunteers of the Year Award

Giorgio Cangioli
26th Annual Volunteers of the Year Award

Carol Macumber
26th Annual Volunteers of the Year Award

Mary Kay McDaniel
26th Annual Volunteers of the Year

Giorgio Cangioli
Carol Macumber
Mary Kay McDaniel
Wednesday

- Annual Business Meeting
  - Secretary’s Report
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  - Chair’s Report
  - John Quinn HL7 Fellows Class of 2022
- Recognition of Key Individual & Companies
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- Housekeeping Announcements
Reminder to co-chairs

Schedule Changes
Please notify Mary Ann of any schedule changes
(email WGMHelpDesk@HL7.org)
Evaluations

- Evaluations are collected electronically. Those taking tutorials will be sent a link for their evaluations.
- Meeting attendee evaluation links were sent in your welcome letter and will also be sent after the meeting concludes.
- There will be a drawing for $500 towards HL7 Education and Virtual Events!

https://www.surveymonkey.com/r/Sept2022WGM
Wednesday

BPM+ Health Workshop

Ken Rubin
Executive Director
Have a smashing day!

Wednesday, September 21, 2022
36th Annual Plenary & Working Group Meeting

Baltimore, Maryland

Thursday, September 22, 2022
Welcome

Mark McDougall
HL7 Executive Director
TSC Affiliate Representative:
Christof Gessner
Thursday

- FHIR Accelerator: Helios
- FHIR Accelerator: FAST
- FHIR Accelerator: CARIN
- FHIR Accelerator: Da Vinci
- FHIR Accelerator: Argonaut
- FHIR Accelerator: Gravity
- Upcoming Education & Meetings
- Final Announcements
FHIR Accelerator: Helios

Craig Newman
Program Manager
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

01 Multi-Sector Alliance
Diverse teams—across public health, healthcare, philanthropic organizations, and the private sector—work together to tackle longstanding challenges and explore new opportunities to advance interoperability.

02 Align Efforts
Align with and address known gaps in the FHIR standard to help promote more flexible and effective data exchanges with healthcare, the public, and other sectors beyond public health.

03 Focus on Impact
Prioritize a small set of use cases that complement what exists today and make it easier for public health officials to act swiftly, share insights effectively, and have a greater impact in their communities.
Core Principles

High Value and High Impact

Feasible Within A Year

Align With and Address Gaps in Core FHIR Capabilities

Desirability: Serves an immediate and pressing public health need.

Feasibility: Initial scope can be accomplished within a year.

Compatibility: Prioritize and address deviations in public health implementations of FHIR.
Priority Areas for 2022

**Deliver Aggregate Information to Public Health**
Leads:
- Hans Buitendijk (Cerner)
- Ravi Kafle (Washington)

**Make Data in Public Health Systems Accessible in Bulk**
Leads:
- John Stamm (Epic)
- Leslie Lenert (MUSC)
- Mary Beth Kurilo (AIRA)

**Align and Optimize Public Health Data Sharing**
Leads:
- Michelle Barber (Oregon)
- Steven Hill (Cerner)
- Gillian Haney (CSTE)
Align and Optimize Public Health Data Sharing

Get Involved!
- Participate on calls
- Identify pain points
- Share your expertise

Public Health Goals That Could Be Achieved
- Lay the groundwork to help provide more complete and up to date data to public health that would not be available easily under existing data channels
- Provide access to specific information needed to take public health action as authorized and agreed upon

Project Team Objectives
- Explore options for sharing data with public health and returning actionable information to care providers
- Describe a process for assessing the interoperability needs of a use case and identifying optimal FHIR-based approaches for achieving data sharing

90-Day Goals (and Beyond)
- Explore available FHIR exchange paradigms (e.g., RESTful API Query, messaging, subscriptions) to better understand the capabilities they offer to public health
- Evaluate how a small number of high priority use cases can adopt these paradigms to develop concrete examples which resonate with public health and implementers

Topics for Exploration
- Establishing context or authorization for accessing data
- Patient identification between systems
- Auditing and data provenance
Public Health Goals That Could Be Achieved

- Ensure authorized users of IIS data have a standardized pathway to access information (in bulk) on patient immunization histories to help address gaps in care
- Increase coverage rates through improved access to complete, accurate information

Project Team Objectives

- Develop guidance for bulk FHIR query
- Leverage current tools, guidance, and reference implementations including work performed by the AIRA/HIMSS Immunization Integration Program (IIP)
- Socialize guidance and build investment across the IIS and immunization data exchange community

90-Day Goals (and Beyond)

- Define use cases for bulk data exchange
- Describe the architecture necessary to make IIS data available in bulk
- Evaluate the existing FHIR Bulk IG relative to public health needs
- Pilot bulk data exchange between IIS and authorized users in their jurisdiction

Topics for Exploration

- Definition of patient rosters
- Scope of data returned by the query as it relates to specific use cases

Get Involved!

Participate in a pilot:
- State IIS
- Authorized User
  - Payer
  - Provider
- Research
Deliver Aggregate Information to Public Health

Get Involved!

Participate in a pilot:
- Data Submitters
- Data Recipients

Identify key indicators

Public Health Goals That Could Be Achieved
- Provide mission-critical aggregate information (e.g., bed count, supply inventory) to public health during pandemics, natural disasters, and other preparedness events
- Use the same method for aggregating information to improve ongoing situational awareness and surveillance of non-reportable diseases during “normal” operations

Project Team Objectives
- Focus on the reporting of sentinel indicator measures comprised of rolled up, summary data that can enable identification and response to public health and other emergencies
- Establish an infrastructure for exchanging sentinel indicator measures, independent of the content of a given measure

90-Day Goals (and Beyond)
- Evaluate existing aggregate reporting standards for adoption
- Identify the likely sources of data for measures
- Implement pilot exchanges

Topics for Exploration
- Which of the existing reporting requirements are the most important and most viable to test?
- How can existing reporting be moved to FHIR?
Get Involved

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

Learn more about Helios priority areas for 2022:
https://confluence.hl7.org/display/PH/2022+Use+Cases

Join a Helios project team, email:
helios@hl7.org
Thursday

- FHIR Accelerator: Helios
- **FHIR Accelerator: FAST**
- FHIR Accelerator: CARIN
- FHIR Accelerator: Da Vinci
- FHIR Accelerator: Argonaut
- FHIR Accelerator: Gravity
- Upcoming Education & Meetings
- Final Announcements
Tuesday

FHIR Accelerator: FAST

Michael Marchant
Member
Michael Marchant

Director, Health Information Exchange and System Integration, UC Davis Health, FAST Founding Member
FAST as FHIR Accelerator

**HL7 FHIR® ACCELERATOR / COMMUNITY**

- **Functional Use Cases**
  - Payers/Providers
  - Provider/Provider
  - Social Determinants of Health
  - Cancer Care and Research
  - Consumers
  - VULCAN
  - Clinical Research
  - DA VINCI
  - Argonaut Project
  - Public Health
  - Helios
  - Other FHIR Initiatives

- **ARCHITECTURE**
  - Sandbox, Testing, Feedback
  - TBD
  - Pilots & Certification
  - TBD
  - HL7 Working Groups

- **Standards**

**STAKEHOLDERS**
- Non-Accelerator/Use Case Specific Initiatives
- SDOs
- IHE
- Networks/HiEs
- Carequality
- CIVITAS
- And More…

**ADOPITION AND FEEDBACK**

**HL7 Governance Structure**
- Government Participation/Contributions (ONC, CMS, CDC, VA, DoD, etc.)
What is FAST Trying to Solve?

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

**FUTURE - Interoperability**
A consistent infrastructure approach to API implementation
Consensus on implementation guides for key enablers, such as directory, security, patient matching, exchange and testing

**DESIZED 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 2022 Founding Members

AEGIS
avaneer Health
aws
BlueCross BlueShield Association
CMS
edifecs
Elevance Health
EVERNORTH
Google
HCSC
Health Care Service Corporation
The Office of the National Coordinator for Health Information Technology
HL7
Humana
KAISER PERMANENTE
Optum
Providence
UNIVERSITY OF CALIFORNIA HEALTH
Conceptual Integrated Architecture

Security (Authenticate/Authorize)
UDAP Trusted Dynamic Client Registration - UDAP Tiered OAuth User Authentication - UDAP JWT-Based Client Authentication - UDAP JWT-Based Authorization Assertions

Exchange Routing
Direct Connect or via Intermediaries

Identity
Interoperable Digital Identity & Patient Matching

National Directory
Endpoints – Profiles – Versioning – Trust - Conformance
• FAST established a Backlog Workgroup with the purpose to:
  – Review work in FAST’s original scope to determine priority
  – Assess additional work projects suggested by
    • FAST Members
    • Other FHIR Accelerators
    • Stakeholders participating in public meetings
  – Identify near and long term project priorities and make recommendations to FAST Steering regarding resource allocation
• HL7 community can submit new ideas: FAST Use Case Submission Form
Want to learn more about becoming a member of the HL7 FAST FHIR Accelerator? Contact fast@hl7.org

CONTINUE THE CONVERSATION!

Join the FAST Community to stay up to date – receive updates about FAST presentations & events, provide additional input and follow our progress.

VISIT FAST PROJECT PAGE
JOIN THE LINKEDIN GROUP
Thank you!

For more information on the FAST Initiative, visit the FAST Project Page

Have any further questions/suggestions?

Please contact fast@hl7.org
Thursday

- FHIR Accelerator: Helios
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- Final Announcements
FHIR Accelerator: CARIN

Ryan Howells
Principal, Program Manager

Amol Vyas
Technical Architect
The CARIN Alliance

Overview and Update

Ryan Howells, Amol Vyas, Corey Spears

9/22/2022
The CARIN Alliance

Multiple APIs

API 1

API 2

API 3

API 4

Consumer-Directed Exchange

App #1

App #2

App #3

App #4

App #5
Our Vision

To rapidly advance the ability for consumers and their authorized caregivers to easily get, use, and share their digital health information when, where, and how they want to achieve their goals.
<table>
<thead>
<tr>
<th>Implementation Guide</th>
<th>Purpose</th>
<th>Latest Updates</th>
<th>IG Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARIN Consumer Directed Payer Data Exchange (CARIN IG for Blue Button®) STU1 and STU2</td>
<td>This implementation guide 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.</td>
<td>STU1 published in Nov 2020. STU 1.1 published in July 2021 STU2 (Dental and Vision) balloted in January 2022 and will be published in Sept / Oct 2022. 85% + of all CMS plans have implemented.</td>
<td><a href="https://build.fhir.org/ig/HL7/carin-bb">https://build.fhir.org/ig/HL7/carin-bb</a></td>
</tr>
<tr>
<td>CARIN Digital Insurance Card STU1</td>
<td>This guide will develop 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.</td>
<td>STU1 published in July 2022. Implementers are beginning to put the IG into production.</td>
<td><a href="https://build.fhir.org/ig/HL7/carin-digital-insurance-card/">https://build.fhir.org/ig/HL7/carin-digital-insurance-card/</a></td>
</tr>
<tr>
<td>CARIN Consumer Real-Time Pharmacy Benefit Check STU1</td>
<td>Provide a patient with RT pharmacy information associated with their benefit and formulary information, out of pocket costs, therapeutic alternatives, and cash price options.</td>
<td>STU1 published in June 2020. IG can be used by Medicare Part D plans to be compliant with Beneficiary RTBT rule by 1/1/2023.</td>
<td><a href="https://build.fhir.org/ig/HL7/carin-rtpbc">https://build.fhir.org/ig/HL7/carin-rtpbc</a></td>
</tr>
</tbody>
</table>
An approach to Digital Identity Federation

Digital Federated Trust Agreement: Content Oversight Board

Contractual language that links each of the trust framework organizations together and outlines the standards, policies, conformance, and contractual terms for how relying parties can trust ID providers across trust frameworks; the content board will oversee the content for the federated trust agreement.

Trust Framework organizations (Certifiers)

Third-party orgs who certify the legal, policy, and technical aspects of the products being provided by identity providers. Organizations such as: DirectTrust, Kantara, SAFE Identity, and others.

Identity Providers (Issuers)

Identity providers or issuers who provide organizational or individual identity products at an NIST 800-63-3 IAL2 level or higher. These identity providers (e.g., Login.gov, ID.me, etc.) may use technologies such as Open ID Connect/APIs or PKI.

Relying Parties

Anyone who wants to accept an IAL2 certified credential

Focus is on policy equivalency across technologies and trust frameworks (NIST 800-53, 800-63-3, RFC 3647)

To access the Digital ID and Federation whitepaper, go to: CARINAlliance.com and select Our Work → Digital Identity → Download our Digital Identity and Federation White Paper

Contractual language that links each of the trust framework organizations together and outlines the standards, policies, conformance, and contractual terms for how relying parties can trust ID providers across trust frameworks; the content board will oversee the content for the federated trust agreement.

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Anyone who wants to accept an IAL2 certified credential

Focus is on policy equivalency across technologies and trust frameworks (NIST 800-53, 800-63-3, RFC 3647)

To access the Digital ID and Federation whitepaper, go to: CARINAlliance.com and select Our Work → Digital Identity → Download our Digital Identity and Federation White Paper

Contractual language that links each of the trust framework organizations together and outlines the standards, policies, conformance, and contractual terms for how relying parties can trust ID providers across trust frameworks; the content board will oversee the content for the federated trust agreement.

Identity Providers (Issuers)

Identity providers or issuers who provide organizational or individual identity products at an NIST 800-63-3 IAL2 level or higher. These identity providers (e.g., Login.gov, ID.me, etc.) may use technologies such as Open ID Connect/APIs or PKI.

Relying Parties

Anyone who wants to accept an IAL2 certified credential

Focus is on policy equivalency across technologies and trust frameworks (NIST 800-53, 800-63-3, RFC 3647)

To access the Digital ID and Federation whitepaper, go to: CARINAlliance.com and select Our Work → Digital Identity → Download our Digital Identity and Federation White Paper

Contractual language that links each of the trust framework organizations together and outlines the standards, policies, conformance, and contractual terms for how relying parties can trust ID providers across trust frameworks; the content board will oversee the content for the federated trust agreement.
## ROLE ORGANIZATIONS

### Application
- b.Well
- Citizen / Invitae
- OneRecord
- Otis Health
- Patient Centric Solutions
- MaxMD

### CSP
- AllClear ID – API (Full Service – IAL2/AAL2 in process)
- ID.me – API (Full Service)
- LexisNexis – API (Component)
- MaxMD – PKI
- Mastercard – API (Component – IAL2)
- EMR Direct – API

### Certificate Issuers
- EMR Direct (UDAP Tiered Oauth)
- MaxMD (UDAP Tiered Oauth)

### Identity Broker
- Department of HHS XMS team

### Relying Party
- Cambia Health Solutions (Health Plan)
- CVS Health (Health Plan)
- Cedars-Sinai Health System (Provider)
- Kaiser Permanente (Provider)
- Marshfield Clinic Health System (Provider and Health Plan)
- Providence Health System (Provider)

### Trust Framework
- DirectTrust
- Kantara Initiative

### Government Observer
- The Office of National Coordinator (ONC)
- Centers for Medicare and Medicaid Services (CMS)
- National Institutes of Health (NIH)
Provides a series of best practice recommendations for how applications register with data holders that are centered around 5 specific areas:

1. Easily search for and find CMS-regulated payers’ respective developer portals (Section 5.1).
2. Testing the required APIs in a sandbox environment (Section 5.2).
3. Registering with a payer (Section 5.3).
4. Sample questions to ask applications related to the CARIN code of conduct (Section 5.4).
5. Best practices for payer policies regarding session and refresh tokens (Section 5.5).

Table 5.3.1 - App Registration Workflow: Information Requested, and Verification Methods

<table>
<thead>
<tr>
<th>Information Requested</th>
<th>Verification Methods</th>
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<tbody>
<tr>
<td>About the Developer</td>
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<tr>
<td>What’s the legal name for the developer requesting an API connection?</td>
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<tr>
<td>What type of legal entity is the requestor (legal corporation, partnership, LLC, sole proprietor)?</td>
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<td>Under the laws of what jurisdiction is the entity organized?</td>
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<tr>
<td>What is the name, job title, phone number and email address for the registrant’s primary business point of contact?</td>
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<tr>
<td>What is the name, job title, phone number and email address for the registrant’s primary technical/developer point of contact?</td>
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<tr>
<td>What is a physical address for the entity (not a P.O. box)? (home address for a sole proprietor)</td>
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<tr>
<td>What is the URL for the entity’s corporate website?</td>
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</tbody>
</table>

About the Application

- What is the name of the application?
- If different from the developer, what’s the legal name for the owner of the application, according to its terms of service and privacy policy?
- Redirect URLs

As applicable, what is the application’s:
- Homepage URL?
- SOS site FAQ?
- Android link?
- Legal Terms of Service URL?
- Privacy Policy URL?

1. Check corporate information against public records.
   - Most jurisdictions support business entity search through their respective corporation departments.
2. Use public or subscription-based look-up service to validate legal existence.
3. Validate the developer’s provided email address and number.
4. Use a recognized third-party legal entity verification service. CARIN Alliance recommends using the Global Legal Entity Information Foundation (GLEIF) which is used and accepted globally in multiple countries, regulators, and more: [https://www.gleif.org/en/about-blef/verifying-the-legal-entity](https://www.gleif.org/en/about-blef/verifying-the-legal-entity)

4. Transparency
   - The Organization includes a publicly accessible link to the site, website and through the application.
   - Yes
   - No
   - The Privacy Policy covers collection, use, and disclosure of Personal Data
   - Yes
   - No
   - The Privacy Policy covers collection, use, and disclosure of Deidentified Information
   - Yes
   - No
   - The Organization provides updates when Privacy Policies have changed, and provides individuals with the option to opt-in or withdraw consent.
   - Yes
Thanks for attending! For more information…

Ryan Howells
Program Manager, CARIN Alliance

Twitter: @RRyanHowells
LinkedIn: https://www.linkedin.com/in/ryanhowells

@carinalliance | www.carinalliance.com | HL7.org/CARIN
Thursday

- FHIR Accelerator: Helios
- FHIR Accelerator: FAST
- FHIR Accelerator: CARIN
- **FHIR Accelerator: Da Vinci**
- FHIR Accelerator: Argonaut
- FHIR Accelerator: Gravity
- Upcoming Education & Meetings
- Final Announcements
Tuesday

FHIR Accelerator: Da Vinci

Viet Nguyen, MD
Technical Director
HL7 Da Vinci Project
HL7 WGM Update

September 2022
Use Case Readiness

**Clinical Data Exchange**

- Clinical Data Exchange (CDex) ♦
- Payer Data Exchange (P Dex) ♦

**Quality & Risk**

- Data Exchange for Quality Measures inc. Gaps In Care (DEQM/GIC)
- Risk Adjustment (RA)

**Coverage, Transparency & Burden Reduction**

- Coverage Requirements Discovery (CRD) ♦
- Documentation Templates and Rules (DTR) ♦
- Prior-Authorization Support (PAS) ♦

- Formulary ♦
- Plan Net/Directory ♦
- Patient Cost Transparency (PCT) ♦

**Foundational Assets**

- Member Attribution List
- Notifications ♦
- Health Record Exchange (HRex)

---

* Referenced in or supports Federal Regulation
♦ Aligned with expected Federal Regulation

Dial denotes progress in current STU Phase

Overall Maturity:

- Most Mature
- Active Growth
- Least Mature

Use Cases: [https://confluence.hl7.org/display/DVP/Da+Vinci+Use+Cases](https://confluence.hl7.org/display/DVP/Da+Vinci+Use+Cases)
2022 Da Vinci Implementation Guide Roadmap

- **Off Cycle (Early MAY) BALLOT (Feb 21 – Mar 23)**
  - STU2 Payer Data Exchange (PDex)
  - STU2 Coverage Requirements Discovery
  - STU2 Documentation Templates and Rules
  - STU2 Prior Authorization Support

- **JANUARY BALLOT (Dec 10 – Jan 10)**
  - STU2 PDex Formulary
  - STU1 Patient Cost Transparency
  - STU1 Risk Adjustment

- **MAY BALLOT**
  - CDex STU1.1 Attachments Exchange New Content
  - Publication
    - STU1 Health Record Exchange framework
    - STU1 Clinical Data Exchange (CDex)
    - STU1.1 PDex Plan Net

- **SEPTEMBER BALLOT**
  - CDex STU2 Attachments Request and Response
  - Publication
    - STU1.1 CDex
    - STU2 Formulary

- **Expected Publication**
  - STU2 Payer Data Exchange (PDex)
  - STU2 Coverage Requirements Discovery
  - STU1 Patient Cost Transparency

- **JANUARY 2023 BALLOT**
  - STU2 Member Attribution List
  - STU2 Risk Adjustment

---

**Deliverable – HL7 Ballots are for STU with the exception of DTR in May**

**Event - see calendar on Confluence:**
https://confluence.hl7.org/display/DVP/DaVinci2022+-+Calendar

---

2022

- HL7 Connectathon
- HIMSS22 Demonstration, Showcase, and Presentations

2023

- VIVE Conference
- HL7 Connectathon

---

303
Clinical Data Exchange (CDex)

1. **Payer or External Provider System Initiates Request**
   - e.g., What are the patient’s active conditions?
   - e.g., What are the patient’s HbA1C results after 2020-01-01?
   - e.g., Send the patient’s latest History & Physical

2. **Provider System Retrieves Data**

3. **Practitioner Intervention (if required)**

4. **Provider System Returns Data**

**Benefits**
- Requestors can be explicit about the data they are requesting
  - e.g., FHIR Condition, Medication, Observation resources
  - Specific documents or labs identified by LOINC Document codes
- Leverage widely implemented “Out of the Box” FHIR transactions for automated workflows
- Provides mechanism for workflow that requires human intervention
- Provides mechanism for automated completion of the request
Da Vinci Patient Cost Transparency (PCT)

Use Case Summary

**Goal:**
- Develop a *standard data exchange* in support of patient cost transparency for devices, services and collection of services using *FHIR APIs* for exchange of data

**Objectives:**
- Ability to communicate *good faith estimates (GFE)* for single service, collection of services, and items from *provider to payer*
- Ability to communicate *advanced explanation of benefits (AEOB)* prior to scheduled service or upon request to *patient* and optionally, to *provider*
- Support current and future regulations and enable compliance
Good Faith Estimate and Advanced EOB
Simple FHIR-based Workflow

Phase 1

- Good Faith Estimate (Provider to Payer) and Advanced Explanation of Benefits (Payer to Patient)
- Starting Trigger for Phase 1 IG is the GFE Submit to the Payer
- Support for the Return AEOB to Provider is not outlined in CAA Law but Da Vinci agrees it’s critical for health equity
- FHIR<>X12 mapping (supported and published by X12)
- The IG is meant to facilitate the necessary data sharing to meet the legislative and future regulatory requirements without limiting provider and payer implementation.

Note: **There are no HIPAA mandated transactions for PCT. There are transactions that HIPAA mandates for OTHER transactions (claims) that can support PCT transactions too.**

AEOB = Advanced Explanation of Benefits
Prior Authorization -- Burden Reduction

- Coverage Requirements Discovery
- Documentation Templates and Coverage Rules
- Prior Authorization Support
- CDS Hooks
- FHIR APIs
- X12 278 Request/Response
- FHIR Bundle / Attachments
- Transformation Layer (Optional)
- Prior Authorization Processing

Improve Transparency
Reduce Effort for Prior Authorization
Leverage Available Clinical Content and Increase Automation
Establish VBC Relationship Agreements

On-Boarding and Establishing Infrastructure

Performance on Contract

Measurement and Reporting

Payment Reconciliation

Value Based Performance Reporting
Da Vinci Member Attribution
Da Vinci Payer Data Exchange and Clinical Data Exchange
Da Vinci Data Exchange for Quality Measures and Risk Adjustment
Out of Band Process
PAYER
Generates Performance Reporting Summary

Population Level Detail
(Population Performance is calculated by payer)

PROVIDER
Reconciles Internally

PROVIDER
Provides feedback to the payer

On Boarding and Establishing Infrastructure

VBPR Workflow
Get Involved!
Join the Community

Getting Started
1. Register for Confluence
2. Sign up for Listserv
3. Find Implementer Pages
4. Download IGs and Resources
5. Watch for Meetings, Connectathons
6. View Demo and Testimonial Recordings
7. Access Reference Implementation Code, Sandboxes

https://confluence.hl7.org/display/DVP/DaVinciWelcome

Create an Account to Watch Key Pages

Sign Up for Listserv for Project Updates
Orientation Resources for Public New to Da Vinci
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 Team

Brett Marquard
Project Manager

Josh Mandel
SMART App Launch
...many others!

Dan Gottlieb
Bulk Data

Gino Canessa
Subscriptions

Eric Haas
US Core and IPA
Argonaut 2022

*Only data modeling - if full reference implementation + testing then FULL project!

- EHI Export – only wrapper to support invocation + response
- SMART Health Links
- FHIR Write use case 1: App State
- FHIR endpoint + structure*
- (add-on) IPA – PM + Ballot Support
- US Core Argonaut Mini Design Sessions (Small)
- USCDI v3 published!
- HL7 Formal Ballot Prep
Argonaut 2022

2022 Projects ‘completed’

✓ FHIR Endpoint and Structure
  • Develop a recommended format, for servers to publish customer endpoint information
  • Patient-access Brands and Endpoints

✓ EHI Export API
  • Enable patients to move and share all their healthcare data without requiring them to take on cumbersome and complex file management tasks
  • Draft EHI Export API IG

✓ FHIR Write App State
  • Enable patients to share data directly with their providers if they choose.
  • SMART App State specification

2022 Publications

- Subscriptions
  - R4b and R4 backport published
- US Core R5.0.1
- CDS Hooks STU2 Published last week!

January 2023 Ballots

- Design input on USCDI v3 design in US Core

Future

- FHIR Write – App State
- International Patient Access
- Bulk Data update for EHI export API
What problem are we solving, and for whom?
- Standardized international API to access clinical data

Is there an existing solution?
- HL7 submitted a formal ballot in the January 2022 cycle
- Goal of this Argonaut project is not to replace the existing work, but provide logistical support!

Who needs to participate for a successful outcome?
- Client applications
- EHR vendors or national health IT teams + clinical users

What does success look like?
- Getting engagement/feedback from 1-3 international supporters/implementers of the project to confirm the basic building blocks are sound and will work in their jurisdictions
- Successful end-to-end connection from a client to multiple test servers representing different jurisdictions
Argonaut In-Flight

SMART Health Links
What problem are we solving, and for whom?
Share any health record by presenting a QR
• Consumers can provision, review and adjust access at any time
• Recipients view data in a browser or access structured FHIR data
• Ex: back to school night - party can present QR code with a child's full vaccination record that the nurse can access and use
• Ex: new provider access - patient can just present QR in person and grant access to full record.
• Draft spec and reference implementation
• Builds on learnings from SMART Health Cards

USCDI v3 Design Sprints
…early designs on HackMD - will migrate to HL7 FHIR build in next 7-14 days!

Argonaut Office Hours
• October 19th – CDS Hooks with Isaac Vetter and Bryn Rhodes
• November 16th – Bulk Data with Dan Gottlieb
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 Web Messaging
- Clinical Data Subscriptions
- US Core Argonaut R4 - USCDI
- SMART on FHIR Granular Controls
- Patient List
- FHIR Write
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
Thursday

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FHIR Accelerator: Gravity

Aaron Seib
Member
Consensus-driven Standards on Social Determinants of Health

HL7 WGM | Sept 2022
Gravity Project

A collaborative public-private initiative launched in May 2019 with the goal to develop consensus-driven data standards to support the collection, use, and exchange of social determinants of health (SDOH) data.
Project Scope

• Develop data standards to represent and exchange patient level SDOH data documented across four clinical activities:
  • Screening
  • Assessment/diagnosis
  • Goal setting
  • Treatment/interventions.

• Test and validate standardized SDOH data for use in patient care, care coordination between health and human services sectors, population health management, public health, value-based payment, and clinical research.

Domains grounded by those listed in the NASEM “Capturing Social and Behavioral Domains in Electronic Health Records” 2014
Project Execution: Three Workstreams (Terminology, Technical, Pilots)

Terminology (SDOH Domains)
- Coding Gap Analysis & Recommendations
- Data Set Identification*
- Publication in NLM VSAC & ONC ISA

Technical (HL7 FHIR)
- New Code Submissions
- FHIR IG Testing
- FHIR IG Development
- Community & FHIR Coordination

CODED VALUE SETS

*Using US Core value sets where possible

Pilots (Testing & Implementation)
Public Collaboration via 2 Public Workgroups

Gravity has convened over 2,500+ participants from across the health and human services ecosystem.

Terminology Workstream Products developed via Public Collaborative.

Technical Workstream Products developed via HL7 SDOH FHIR IG WG.

- Meet weekly on Wednesdays from 3 to 4 pm ET.

# Project Founders, Grants, and In-Kind Support To-Date

<table>
<thead>
<tr>
<th>PROVIDER</th>
<th>SOCIAL SERVICES</th>
<th>PAYER</th>
<th>TECHNOLOGY VENDOR</th>
<th>GOVERNMENT</th>
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<td>AAFP</td>
<td>Children's HealthWatch</td>
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[https://confluence.hl7.org/display/GRAV/Gravity+Project+Sponsors](https://confluence.hl7.org/display/GRAV/Gravity+Project+Sponsors)
Terminology Workstream Accomplishments

- Data definitions and code submissions for 17 SDOH Domains
- **LOINC** screener codes available for 16 domains
- **ICD-10** z-codes and/or SNOMED CT codes available for 14 domains (8 codes included in FY2023 CMS IPPS Proposed Rule)
- **SNOMED-CT** intervention codes available for 16 domains
- Published 140 value sets in National Library of Medicine (NLM)
- Data class included in ONC USCDI v2

https://confluence.hl7.org/display/GRAV/Social+Risk+Data+Elements+And+Status
Technical Workstream Accomplishments

• Balloted **Gravity SDOH Clinical Care STU2** in January 2022 Ballot Cycle
  • Fall 2022 Publication is targeted
  • Tested at January, May, and July 2022 HL7 & CMS FHIR Connectathons
  • Incorporated draft specifications for race/ethnicity exchange

Pilots Workstream Accomplishments

• Funded Pilots Testing Gravity Standards
  • ONC / HL7 Cooperative Agreement: OCHIN and AllianceChicago
  • Leading Edge Acceleration Projects (LEAP) Awardee: The University of Texas at Austin
  • ACL Phase 2 Social Care Referrals Challenge Teams: Closing the Loop Together in Southeast Michigan, FHIR-FLI, Missouri Aging Services Data Collaborative (MASDC), and Thrive Hub.

• Presented on the Gravity Project Piloting Approach and new Workgroup at the IHE USA’s Path to Production Digital Series in August 2022.

• Announced the launch the monthly Gravity Pilots Affinity Workgroup meetings on September 29, 2022.
  • We are projected to convene over 150 stakeholders at the first call.
  • 44 entities have submitted interest forms via Confluence Interest Form.

• Published the Gravity Pilots Affinity Workgroup Confluence site, https://confluence.hl7.org/display/GRAV/Gravity+Project+Pilots+Affinity+Workgroup+Home
Three-Tiered Piloting Approach

Defines incremental tiers for testing and implementing Gravity standards (terminology and technical).

- Entities may participate at any Tier.

**Tier I**
- **Basic, information content verification**
  - Establish information infrastructure and terminology for Tiers II and III
  - Information can be exchanged by any method or not at all

**Tier II**
- **Secure, Electronic Information Exchange**
  - Exchange data defined in Tier I
  - Leverage established content and transport standards

**Tier III**
- **Complete Gravity SDOH Data Model and Exchange**
  - Implement complete Gravity FHIR IG data model
  - Implement Gravity FHIR IG exchange standards
  - Import/export SDOH datasets via robust technologies

* Minimum requirements for Gravity Pilots

Primary focus of FHIR Pilots
Pilots Call for Participation!

We are thrilled to announce the launch of our Gravity Pilots Affinity Workgroup! The Workgroup, sponsored by the Office of the National Coordinator for Health Information Technology (ONC), AARP, and IHE USA, is a peer-to-peer learning forum for real-world testing of Gravity terminology and technical standards. Gravity Pilots Affinity Workgroup will hold monthly public meetings starting September 29, 2022 from 2:30pm to 4:00pm ET.

We designed these meetings for participants to share successes and challenges, seek partnerships, and ask questions.

Sign up here: https://confluence.hl7.org/display/GRAV/Pilots+Affinity+Workgroup+List

It’s an opportunity you won’t want to miss!
### Pilot Participant Roles

We are seeking entities that will serve in one or more of the following roles for testing:

<table>
<thead>
<tr>
<th>System Role Types</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Coordination Platform</td>
<td>Systems acting as SDOH clinical care 'coordination platforms' that receive information from partners and update information in SDOH clinical care referral sources.</td>
</tr>
<tr>
<td>Patient Application</td>
<td>Systems acting as apps for patients and caregivers who need to monitor progress on SDOH referrals and may need to take actions such as filling out forms, booking appointments, etc.</td>
</tr>
<tr>
<td>Referral Recipient</td>
<td>Typically community-based organization systems that provide services such as food bank access, housing remediation, etc.</td>
</tr>
<tr>
<td>Referral Recipient - Light</td>
<td>System requires access to information from referral recipients to update information in SDOH clinical care referral sources and/or coordination platforms that have solicited the filling of SDOH-related referrals.</td>
</tr>
<tr>
<td>Referral Source</td>
<td>Typically EHRs or Payer systems that initiate the process of identifying patients with SDOH needs and request appropriate services.</td>
</tr>
</tbody>
</table>
Gravity Standards Included in Policy, Programs, & Grants

▪ April 2022: CMS FY 2023 inpatient prospective payment system and long-term hospitals proposed rule includes voluntary reporting of screening for Social Drivers of Health, including using USCDI v2 SDOH data classes.

▪ May 2022: CMS CY 2023 Medicare Advantage (MA) and Part D final rule requires Special Needs Plans (SNPs) include standardized questions on housing stability, food security, and access to transportation as part of their currently required health risk assessments.
  ▪ CMS will issue sub-regulatory guidance on the questions but intends to align them with the SDOH Assessment data element in USCDI v2.

▪ Gravity standards included in three federal grant programs:
  ▪ Administration for Community Living (ACL) Social Care Challenge Grant
  ▪ ONC Leading Edge Acceleration Projects (LEAP) in Health IT Referral Management to Address SDOH Aligned with Clinical Care
  ▪ Administration for Children & Families (ACF) Human Services Interoperability Innovations Grant
Join the Gravity Project!

Learn More
https://confluence.hl7.org/display/GRAV/Join+the+Gravity+Project

- SDOH FHIR IG Workgroup meets weekly on Wednesdays’ 3:00 to 4:00 pm ET.

- Gravity Pilots Affinity Workgroup meetings monthly Thursdays 2:30pm to 4:00pm ET. View meeting details here:
  https://confluence.hl7.org/display/GRAV/Meeting+Schedule+and+Materials

Help us with Gravity Education & Outreach

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

@thegravityproj
https://www.linkedin.com/company/gravity-project

Help us find new sponsors and partners

Partner with us on development of blogs, manuscripts, dissemination materials
Thursday

- FHIR Accelerator: Helios
- FHIR Accelerator: FAST
- FHIR Accelerator: CARIN
- FHIR Accelerator: Da Vinci
- FHIR Accelerator: Argonaut
- FHIR Accelerator: Gravity

**Upcoming Education & Meetings**

**Final Announcements**
Thursday

HL7 Education Report & Upcoming Meetings
Sadhana Alangar, PhD
HL7 Director of Education
Agenda

- 2022 Online Synchronous Classes
- 2022 Asynchronous (Self-Paced) Classes
- Corporate Training
- Regional Partner: Africa
- EAC 2023
- World Standards Day
- Upcoming Meetings
2022 Education Catalog

- Visit HL7.org
- From Training tab on top
  Select Education Calendar
- Download the Education Catalog
## 2022 Synchronous Online Classes

<table>
<thead>
<tr>
<th>Course</th>
<th>Dates</th>
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</thead>
<tbody>
<tr>
<td>Clinical Quality &amp; Decision Support on FHIR (4.5 hours)</td>
<td>October 4, 5, 6</td>
</tr>
<tr>
<td>HL7 FHIR for Healthcare Information Analysts (weekend class, 4 days, 12 hours)</td>
<td>October 8, 9, 15, 16</td>
</tr>
<tr>
<td>Applied Questionnaire &amp; Data Capture (4.5 hours)</td>
<td>November 1, 2, 3</td>
</tr>
<tr>
<td>HL7 FHIR Bootcamp (12 hours)</td>
<td>November 10, 11, 14</td>
</tr>
<tr>
<td>HL7 FHIR Terminology (6 hours)</td>
<td>November 29, 30, December 1</td>
</tr>
</tbody>
</table>
2022 Asynchronous Courses

- HL7 FHIR Fundamentals – October 27
- HL7 FHIR Exam Preparation – September 29
- Comprehensive V2 to FHIR Mapping Course – November 3
Corporate Training

- Total Number of Corporate Trainings: 10
  - Introduction to FHIR: 2
  - FHIR Bootcamp: 5
  - FHIR Certification Prep Course: 1
  - FHIR Terminology: 1
  - Clinical Quality Language (CQL): 1
Regional Partnership: Africa

- HELINA is the regional partner in Africa
  - Single non-voting member, International Council
  - Can offer HL7 International tutorials
    - HL7 International gets a share of total revenue
  - One complimentary registration, Plenary & WGMs
  - Will pay a nominal annual fee
  - Submit financial statements & annual reports
EAC 2023

Current members who will continue:

- Iryna Roy (Chair), Matt Blackmon, Mark Braunstein, Gora Datta, Aditya Joshi (India), Diego Kaminker (Argentina), Li-Hui Lee (Taiwan), Virginia Lorenzi, Desla Mancilla, John Ritter, Renato Sabbatini (Brazil)

New members who will continue:

- John Moehrke, Heather Grain (Australia), Nathalia Ortega (HL7 Columbia), Tim Benson (U.K.), Fernando Campos (Argentina), Derek Ritz (Canada)
World Standards Week, October 10-14, 2022

Webinars:

- HL7 FHIR and the Future of Global Health, October 11 @ 10 am EDT
- Health IT Career Path Discussion: Opportunities and Outlook

Coming soon! HL7 Student Academy:

- Resource kit for instructors
- Volunteers to visit universities and colleges
- Offering free webinars and shorter classes to students
2023 WGMs & FHIR Connectathons

January 14-20, 2023
Hilton Lake Las Vegas Resort
Henderson, Nevada

- FHIR Connectathon
  - January 14-15
  - Saturday through Sunday

- WGM
  - January 16-20
  - Monday through Friday
2023 WGMs & FHIR Connectathons

May 6-12, 2023
Hilton New Orleans Riverside Hotel
New Orleans, Louisiana

- FHIR Connectathon
  - May 6-7
  - Saturday through Sunday

- WGM
  - May 8-12
  - Monday through Friday
Thursday

- FHIR Accelerator: Helios
- FHIR Accelerator: FAST
- FHIR Accelerator: CARIN
- FHIR Accelerator: Da Vinci
- FHIR Accelerator: Argonaut
- FHIR Accelerator: Gravity
- Upcoming Education & Meetings
- Final Announcements
Don’t forget to fill out the survey to be eligible for drawings for $500 towards HL7 Education and Virtual Events!

https://www.surveymonkey.com/r/Sept2022WGM
Thanks to Our Sponsors

Bronze Sponsor

Supporting Sponsor

Collaborating Sponsor
• We opened HL7’s office in October of 1991

• Published HL7 Version 2.2 in 1994

• Ed shares some of his wisdom
This week’s meeting may be the last HL7 WGM that two long time HL7 members will attend:

Christian Hay
- Orchestrated MOU between HL7 and GS1
- Started the Bow Tie Special Interest Group
This week’s meeting may be the last HL7 WGM that two long time HL7 members will attend:

Abdul-Malik Shakur

- Long time member
- 25 years ago in 1997, he was one of two recipients of the inaugural Ed Hammond Volunteer of the Year Award
• “How lucky I am to have something that makes saying goodbye so hard.”
  Alan Alexander Milne
  (Author of Winnie-the-Pooh)
Best wishes for a rewarding day!

Thursday, September 22, 2022