January Working Group Meeting

Virtual Event

January 25 – 29, 2021
January Working Group Meeting

Virtual Event

Monday, January 25, 2021
Find the hidden dog among the pandas
Find the hidden dog among the pandas
Find the hidden dog among the pandas
Find the hidden dog among the pandas
Hello from HL7 members in their swag…
Welcome from a surprise mystery guest!

- HL7 Board Chair Report
- FHIR Accelerator CodeX Report
- Key Tips for Virtual WGM
Welcome from…

Comedian Cedric the Entertainer!
HL7 Board Chair Report
Walter Suarez, MD, MPH, FHIMSS
Chair of HL7 Board of Directors
Monday

- Welcome from Cedric the Entertainer
- HL7 Board Chair Report
- FHIR Accelerator CodeX Report
- Key Tips for Virtual WGM
FHIR Accelerator CodeX Report

Steve Bratt
CodeX Lead
HL7 FHIR Accelerator

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

http://hl7.org/CodeX
A FHIR-based core set of common data elements for cancer that is standardized, computable and clinically applicable in every electronic patient record with a cancer diagnosis

A **standard health record** for oncology

The **minimal set of data elements** applicable to all cancers, and collected for:

- Standardized information exchange
- Use-case driven and targeted use

**Oncology data element domains:**
- patient, disease, treatment, outcomes, genomics, lab/vital

**mCODE Release 1 STU1:**
http://hl7.org/fhir/us/mcode/
CodeX is building a vibrant community of oncology stakeholders to...

**Prioritize**
- *Use cases* around interest and impact on cancer care and research, and where mCODE is central

**Build**
- New *data FHIR IGs needed to supplement mCODE*
- *Reference implementations and updates to products*
- *Test datasets*

**Execute**
- *Pilots* to demonstrate feasibility and value enabling early adoption and scale
Data are collected and shared via the mCODE standard, and CodeX extensions.
CodeX Use-Case-Based Projects

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

0. mCODE++ Extraction

1. EHR Endpoints for Cancer
   Clinical Trials (future extensions of ICAREdata)

2. Integrated Trial Matching for
   Cancer Patients and Providers

3. Cancer Registry Reporting

4. Radiation Therapy Treatment
   Data for Cancer

5. Oncology Clinical Pathways

6. Prior Authorization in Oncology

7. Alternative Payment Model
   Data Reporting for Cancer

8. Drug Value Based Agreements for
   Cancer

Discovery  Planning  Execution
Example: Cancer Registry Reporting

Leveraging extended mCODE elements to package and report necessary cancer patient data

- Enable low-burden, standardized reporting of cancer data from cancer centers to registries

Centers for Disease Control and Prevention, California Cancer Registry

Registries require a low-burden approach to data reporting from clinical sites

- Patient Information
- EHR-Based Data
- Patient Interaction
- FHIR Endpoints with Automated Solution

Public health monitoring
Accountable care
Treatment effectiveness research
CodeX Members
(January 2021)
Building a Trusted Network of Health Systems
Defining Requirements and Testing Solutions

- MAYO CLINIC
- RUSH UNIVERSITY MEDICAL CENTER
- Trinity Health
- Princess Margaret Cancer Centre
- Intermountain Healthcare
- KAISER PERMANENTE
- UCSF
- UTSouthwestern Medical Center
- MD Anderson Cancer Center
- Dana-Farber Cancer Institute
- BRIGHAM HEALTH BRIGHAM AND WOMEN’S HOSPITAL
- Memorial Sloan Kettering Cancer Center
- Penn University
- Geisinger
- Washington University in St. Louis
Want to learn more?

CodeX Birds of a Feather
Today (Jan 25th)
5-6:30pm PT
8-9:30pm ET

Contact: Steve Bratt (sbratt@mitre.org)
Monday

- Welcome from Cedric the Entertainer
- HL7 Board Chair Report
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- Key Tips for Virtual WGM
Monday

Key Tips for Virtual WGM

Mary Ann Boyle
HL7 Director of Meetings
Where to Go

- Check the schedule on the Whova app
- To ask a question, use the Whova Q&A tab
- Don’t forget to enter the $500 HL7 Education "show us your merch contest" (winners announced at cookie break)
- Network with other attendees in the Community section
- For technical assistance, contact WGMHelpDesk@HL7.org
- All General Session recordings will be available within 24 hours on Whova
WGM Attendee Survey

https://www.surveymonkey.com/r/2021JANWGM

Don’t forget to fill out the survey to be eligible for one $1000 drawing for HL7 Education and Virtual Events!
The winner for today’s Mystery Guest Poll is Allyson Rigel
January Working Group Meeting

Virtual Event

Tuesday, January 26, 2021
Place the numbers 3, 5, 7, 9, 11, and 13 in the circles so that the three numbers on each side of the triangle add up to 25.

Brainteaser answers will be displayed on the community wall.
Place the numbers 3, 5, 7, 9, 11, and 13 in the circles so that the three numbers on each side of the triangle add up to 25.
Place the numbers 3, 5, 7, 9, 11, and 13 in the circles so that the three numbers on each side of the triangle add up to 25.
Tuesday

- Welcome from a surprise mystery guest!
- TSC Report
- CTO Report
- International Council Report
Welcome from…

Meditation guru
Deepak Chopra!
Welcome from Deepak Chopra

Mystery Guest Poll Winner

TSC Report

CTO Report

International Council Report
The winner for today’s Mystery Guest Poll is
Ward Weistra

Guess tomorrow’s mystery guest for a chance at $100 in HL7 merchandise!!!
Welcome from Deepak Chopra
Mystery Guest Poll Winner
TSC Report
CTO Report
International Council Report
TSC Report

- Work Group Health
- Expiring Standards
- Update on TSC Reorganization
ASD – EHR, Imaging Integration, Order and Observations, Patient Administration, Payer/Provider Information Exchange

CSD – Clinical Decision Support, Clinical Genomics, CIC, Clinical Quality Information, Emergency Care, Patient Care, Pharmacy, Public Health

ISD – Conformance, FHIR-I, ITS, Structured Documents, Vocabulary

OSD – Cross-Group Projects, Publishing/Electronic Services and Tooling
Check Your Work Groups Expiring Standards

- Normative ANSI Standards approaching expiration
  - https://confluence.hl7.org/display/HL7/ANSI+Standards+approaching+expiration

- STUs Expiring in the Next 6 Months
  - https://confluence.hl7.org/display/HL7/STUs+Expanding+in+Next+6+Months
Upcoming PSS and NIB Deadline Dates for Future Ballot Cycles

- All deadline dates can be seen on the new Balloting, Content Submission, Voting, and Working Group Meeting Schedules on Confluence at:
  - https://confluence.hl7.org/display/HL7/HL7+Calendars
- **February 5, 2021** - Submit Work Group Approved PSS to the PMO for inclusion in Sept 2021 ballot
- **March 7, 2021** – May 2021 NIB deadline
Re-Envisioning the TSC - Agility

- Streamline TSC and processes
- Phase out Steering Divisions (reducing bureaucracy)
  - Contingent on roll out of new PSS workflow process
- Broaden representation on the TSC to include groups not currently included
- Follow the Board pattern for TSC Chair and Chair-Elect positions (overlapping 4-year terms)
- Implement term limits of 2 consecutive 2-year terms for TSC members (encourage new participants in the TSC).
Streamlining the TSC and the Working Group

- As things stand today, when someone has a question or issue, there are a confusing set of choices about where to go to get resolution:
  - TSC, ARB, SGB, Steering Divisions, FMG, CDAMG, V2MG, HTA, USRSC, UTG, etc.
  - Often the answer differs depending on which group you speak with

- Part of the TSC Simplification effort is to reduce level of bureaucracy and provide a streamlined set of places to get answers and action on issues.
TSC Reorganization - Old TSC Composition

- TSC Chair (1)
- CTO (Vice Chair) (1)
- Affiliate Representatives (2)
- ARB (1 Vote, 2 Representatives)
- 4 Steering Divisions (4 votes, 8 Representatives)
- Ad Hoc (as needed) (1 vote each)
- Board Chair (Ex-officio w/vote)

Not Formally Represented

- Product Management Groups (FHIR, V2, CDA)
- US Realm Steering Committee
- Implementers
- HTA
New TSC Composition

- TSC Chair/Vice-Chair (2)
- Affiliate/Realm Representatives (3 including USRSC; Max 6)
- Product Management Groups (1 per group)
- Working Group Representatives (5; Max 8)
- Implementer Representatives (2)
- CTO
- Ad Hoc (as needed)
- Board Chair (Ex-officio)

ARB and SGB functions fully incorporated into new TSC
Re-Envisioning TSC Membership

- Bringing in Implementers, Management Groups, US Realm Steering Committee representation

- TSC positions, except Chair/Chair-Elect, will have a term limit of two consecutive two-year terms.
  - Must have a one year break before running for or being appointed to a TSC position (exception: TSC chair, i.e., you can run for Chair after your two consecutive terms.)

- Broadening requirements on who can be nominated for TSC Chair
Timeline

- Announcement to Members and gain feedback – Now
- Start Steering Division phase out – Q1 2021
- GOM revisions – Q1 2021
- Transition to new TSC structure – May WGM
- Elections for new positions - 2021
Tuesday

- Welcome from Deepak Chopra
- TSC Report
- CTO Report
- International Council Report
Top Priorities for 2021

- Focus on finishing major tooling transitions for a more stable infrastructure
  - Rollout online Project Scope Statement
  - Accelerate transition to other workflow forms (publication, NIB, etc.)
  - Complete transition to JIRA Tracking and Balloting
  - Retiring Gforge/SVN, outdated systems, obsolete content
  - Complete migration of HQ systems to Cloud
  - Stabilize UTG system, terminology.hl7.org content, governance and processes

- Successfully fulfill ONC grant projects
  - Tooling enhancements and expanded operational support of FHIR IG Publisher and C-CDA web publishing, connectathons and implementation-a-thons
  - Five new Covid-19 project areas
  - New US Realm contract to maintain critical base standards and enhance visibility for project management & tracking
  - Project US@ for US mailing addresses.
Other Priorities for 2021 and Beyond

- Replacement of Association Management System & related databases
  - Position HL7 to manage membership and services with more agility
- Increase use of HL7 systems by affiliates
  - Confluence pages, JIRA Balloting, Catalogue of affiliate products
- Ongoing sustainability, continuous improvement and support of core systems
  - Confluence as single source of truth
  - Complete migration of HQ systems to Cloud
  - Increase HL7 IT support of FHIR community systems
  - FHIR registry, publication tooling and standards development processes
  - Expand proactive curation of UTG content, website, Confluence, JIRA
  - Refining virtual meeting systems for a better member experience.
New C-CDA Navigation Tool - [http://hl7.me/viewccda](http://hl7.me/viewccda)
(Courtesy of John D’Amore)

**C-CDA Online**: A navigation website for C-CDA 2.1

This beta navigation tool is generated from the June 2019 Errata published PDF of the Consolidated Clinical Document Architecture (C-CDA) 2.1 and the C-CDA 2.1 Companion Guide R2. For the latest information on C-CDA, always refer to the [HL7 C-CDA Page](http://hl7.me/viewccda).

CDA and C-CDA are copyright property of Health Level Seven (HL7) and subject to the terms of HL7’s IP policy. Those terms are also included in Volume 1 of the C-CDA guide linked below.

HL7 encourages users to sign up for an account, which is free!

Please [sign up](http://hl7.me/viewccda) if you do not have an account.

### Read Narrative Introductions

1. C-CDA 2.1 Introduction (Volume 1)
2. C-CDA 2.1 Companion Guide

### Navigate Templates (C-CDA Volume 2 and Companion Guide Appendices)

Search C-CDA by description, template OID or conformance number

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<td>123-134</td>
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Welcome from Deepak Chopra

TSC Report

CTO Report

International Council Report
International Council Report

HL7 Working Group Meeting
Jan 26, 2021

Ron Parker, Chair HL7 Canada,
Diego Kaminker HL7 BOD Affiliate Director
Leadership

- **Current Co-Chairs**
  - Line Saele (term ends Dec 2022)
  - Peter Jordan (term ends Dec 2022)
  - Ron Parker (term ends Dec 2021)

- **HL7 International Board – Affiliate Directors**
  - Diego Kaminker (term ends Dec 2022)
  - Peter Jordan (term ends Dec 2021)
40 HL7 International Affiliates

- Changes since Sept WGM Plenary
  - HL7 UAE reactivated
  - HL7 Saudi Arabia reactivated
  - HL7 Slovenia reactivated

- Potential returning or new members
  - Mexico
  - Israel
Virtual Meetings

- Virtual Meeting bi-monthly
- Jan 20\textsuperscript{th}, 2021 - 21 Affiliates represented (19 in June)
- Shifting time slots has been effective
- HL7 Europe 10\textsuperscript{th} Anniversary Celebrated
- Re-envisioning Strategy Update: Global Relevance – Affiliate Relationships
- Launch of Affiliate Function Survey
- Shared HL7 Affiliate Evolutionary Spiral
The path from ‘Informal New Community’ to ‘Core Standard Developer’

Why a spiral? Near the core: few persons, more ‘abstract’ / standard oriented work
In fact, every affiliate/realm has its own spiral, but we share the same [1] core.
Next HL7 International Council Virtual

- March 24th, 19:00 UTC
THANK YOU!
Come back at the Cookie Break to learn who won the “Show us your swag” contest for today!

Remember to Vote for your favorite photo daily – winner receives $500 HL7 dollars in Virtual Education and Meetings!
WGM Attendee Survey

https://www.surveymonkey.com/r/2021JANWGM

Don’t forget to fill out the survey to be eligible for one $1000 drawing for HL7 Education!
January Working Group Meeting

Virtual Event

Wednesday, January 27, 2021
Find the snowman hidden in the snowflakes

Session begins in

3

minutes
Find the snowman hidden in the snowflakes
Find the snowman hidden in the snowflakes
Find the snowman hidden in the snowflakes
Welcome from a surprise mystery guest!

- CEO Report
- FHIR Accelerator Gravity Report
- FHIR Accelerator Vulcan Report
- FHIR Accelerator Da Vinci Report
Welcome from…

TV Host - Sportscaster Erin Andrews!
Welcome from Erin Andrews
Mystery Guest Poll Winner
CEO Report
FHIR Accelerator Gravity Report
FHIR Accelerator Vulcan Report
FHIR Accelerator Da Vinci Report
The winner for today’s Mystery Guest Poll is Maryam Garza

Guess Friday’s mystery guest for a chance at $100 in HL7 merchandise!!!
Wednesday

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CEO Report to the Membership

The HL7 Re-envisioning Initiative is our future

Virtual Work Group Meeting
27 January 2021
Don Rucker, MD MS

For four year as ONC National Coordinator, he made interoperability his priority and his passion. He never compromised his vision or wavered in his integrity. He had a kind word for everyone and a quiet sense of humor. He was true believer in HL7 and a champion of FHIR. Thanks from everyone.
Micky Tripathi, PhD

Author of the JASON Task Force Report that defined the principles of the open API as the path to Interoperability
Founder of the Argonaut Project
Original member of the FHIR Foundation
President & CEO of the Massachusetts eHealth Collaborative
Board Member of HL7 International
A smile for everyone and a friend to all
We congratulate the new National Coordinator of ONC.
The future is what we will make of it.
What HL7 Re-envisioning tells us about the future

Life is not about waiting for the storm to pass. It’s about learning to dance in the rain.

Vivian Greene
Principle 1: *Focus*

“The future of HL7 is dependent upon the ongoing development and adoption of HL7 FHIR. We are nonetheless committed to continue to support essential maintenance updates for other active standards.”
Our Stakeholders focus on FHIR too*

- **ONC** reiterated its commitment to FHIR R4, announced several FHIR-based contracts and grants, explained new initiatives and programs.

- **CMS** reiterated its commitment to a FHIR R4 roll-out timeline, highlighted its development of BlueButton 2.0, applauded the work of the private sector.

- **NIH** described multiple programs FHIR-enabled programs and the requirement for FHIR integration within NIH grants.

- **FDA** elaborated on FHIR integration in a diverse series of initiatives from real-world clinical trials to pharmaco-vigilance.

- **CDC** highlighted the relevance of FHIR for clinical data capture and showcased the eCR Now on FHIR project for COVID-19 and beyond.

* ONC webinar: Accelerating APIs in Healthcare: A Year in Review and Momentum for 2021 (Dec 1, 2020)
Principle 2: **Global Relevance**

“HL7 relies upon a global community. We shall significantly grow our efforts around the world toward the adoption of meaningful changes that expands the adoption of HL7 FHIR to enable global interoperability.”
Global Stakeholders are committed to FHIR

• Strengthening the Affiliate structure and influence on their national bodies

• Cultivating our relationship with global organizations (WHO and its regional subsidiaries, ISO, World Bank, GDHP)

• Enhancing our relationships with the academic communities (EFMI, IMIA, Consortium of Universities for Global Health)

• Supporting emerging collaboration with global corporations (Bio-pharma, Technology developers, healthcare IT vendors, device manufacturers)

• Reinforcing cooperation with international SDOs

• Growing support for patient-centric, outcome-based care organizations
Principle 3: *Agility*

“The future HL7 must focus on outcomes and not process. There is a growing demand to increase our pace and efficiency of standards development.”
Continuing our commitment to agility and process improvement

- Streamlining our internal processes and commitment to process improvement
- Enhancing our tooling for standards development, publishing, communication, and organizational functionality
- Developing internal processes more closely aligned with other re-envisioning principles
- Innovating new processes and structure to support the globalization of healthcare
Principle 4: Sustainability

“Current funding is insufficient to adequately address the current and future needs of the organization. HL7 must maximize existing funding sources and identifying new sources to advance our vision and mission.”
Sustainability is achieved when all future needs have been met

- Improving internal business processes and optimizing human and fiscal resources
  - Insuring business efficiencies
  - Leveraging ever-changing business model predicated by dramatic changes in travel and meeting capabilities
  - Optimizing opportunities that support education, training, and certification

- Growing funding
  - Capitalizing existing funding opportunities
  - Building upon a comprehensive, integrated globally relevant revenue development fundraising strategy across all organizational offering
  - Vigorously pursuing new funding opportunities
  - Implementing strategies to expand global advocacy and communications efforts
Principle 5: Community

“HL7 is formed by multiple communities. As a global organization, we must inspire our membership and expand our reach and engagement of broader communities to support the development and implementation of HL7 standards.”
Community means expanding our reach

“HL7 is formed by multiple communities. As a global organization, we must inspire our membership and expand our reach and engagement of broader communities to support the development and implementation of HL7 standards.”
HL7 Communities Spiral

The path from ‘Informal New Community’ to ‘Core Standard Developer’

Why a spiral? Near the core: few persons, more ‘abstract’ / standard oriented work

Developed by Diego Kaminker
The future of HL7 will be forever changed by new Communities

- Argonaut Project changed the FHIR landscape and imagined the future
- DaVinci Project brought payers and providers together to drive value-based care
- CARIN Alliance made patients first
- CodeX envisioned a changing world of cancer care & research
- Gravity Project attracted a new community dedicated to SDOH
- Vulcan Project supports a new paradigm for conducting research
HL7 promise to our stakeholders

“Leading wherever innovation will take us”
Thanks

cjaffe@hl7.org
Wednesday

- Welcome from Erin Andrews
- CEO Report
- **FHIR Accelerator Gravity Report**
- **FHIR Accelerator Vulcan Report**
- **FHIR Accelerator Da Vinci Report**
FHIR Accelerator Gravity Report

Bob Dieterle, Technical Director
Evelyn Gallego, Program Manager
The Gravity Project: Consensus-driven Standards on Social Determinants of Health

HL7 January WGM General Session
January 27, 2021

Evelyn Gallego, EMI Advisors LLC, Gravity Program Manager
Bob Dieterle, EnableCare LLC, Gravity Technical Director
Meet Our Speakers

Evelyn Gallego
Gravity Project
Program Manager

Bob Dieterle
Gravity Project Technical
Director
Why Social Determinants of Health (SDOH) are Important

There is broad consensus that SDOH information improves whole person care and lowers cost. Unmet social needs negatively impact health outcomes.

- **Food insecurity** correlates to higher levels of diabetes, hypertension, and heart failure.
- **Housing instability** factors into lower treatment adherence.
- **Transportation barriers** result in missed appointments, delayed care, and lower medication compliance.

Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)

Adapted from The Bridgespan Group
Challenges in SDOH Data Capture and Exchange

- Consent Management
- Standardization of SDOH Data Collection and Storage
- Data Sharing Between Ecosystem Parties
- Access & Comfort with Digital Solutions
- Concerns about Information Collection and Sharing
- Social Care Sector Capacity and Capability
- Unnecessary Medicalization of SDOH

Enter the Gravity Project...

**Goal**
Develop consensus-driven data standards to support use and exchange of social determinants of health (SDOH) data within the health care sectors and between the health care sector and other sectors.
In May 2019, the Gravity Project was launched as a multi-stakeholder public collaborative with the goal to develop, 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.

**Gravity Project Scope:** Develop data standards to represent patient level SDOH data documented across four clinical activities: screening, assessment/diagnosis, goal setting, and treatment/interventions.
**SDOH Interoperability Glide Path**

**HL7 FHIR Accelerator:** In August 2019, Gravity officially joined the HL7 FHIR Accelerator Program and balloted the first HL7 SDOH FHIR IG in Dec. 2020.

**Public Collaboration:** Gravity has convened over 1,500+ participants from across the health and human services ecosystem from clinical provider groups, community-based organizations, standards development organizations, federal and state government, payers, and technology vendors.

Public Workgroup Meets bi-weekly Thursdays 4 to 5:30 PM ET

Gravity Project Sponsorship (Financial & In-Kind)

https://confluence.hl7.org/display/GRAV/Gravity+Project+Sponsors
Gravity Overview: Two Streams

Terminology (SDOH Domains)
- New Code Submissions
- Data Set Identification
- Publication in NLM, VSAC & ONC ISA

Technical (HL7 FHIR)
- FHIR IG Testing
- Community & FHIR Coordination
- FHIR IG Development
- FHIR IG Ballot & Publication
Terminology Workstream

Data Element and Ensuring Gap Analysis

- All data is sorted across four activities into a master set.
- For data within each domain, we ask:
  - What concepts need to be documented across the four activities?
  - What codes reflecting these concepts are currently available?
  - What codes are missing?
# Terminology Stream Status

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**Legend**
- Green Complete (100%)
- Light Green Partially Complete (+50%)
- Grey Not Complete (0%)
Where to find Published Gravity Data Sets & Coding Submissions?

https://confluence.hl7.org/display/GRAV/Terminology+Workstream+Dashboard
Technical Stream – SDOH Clinical Care FHIR Implementation Guide

1. This is a framework Implementation Guide (IG) and supports multiple domains

2. IG support the following clinical activities
   - Assessments
   - Health Concerns / Problems
   - Goals
   - Referrals
   - Consent
   - Aggregation for exchange/reporting

3. Completed January 2021 ballot as a Standard for Trial Use Level 1 (STU1)

Gravity FHIR SDOH Clinical Care IG Scope

1. Document SDOH data in conjunction with the patient encounter
2. Set SDOH related goals.
3. Establish and related interventions to completion.
5. Gather and aggregate SDOH data or uses beyond the point of care (e.g. population health management, quality reporting, and risk adjustment/risk stratification).
6. Manage patient consent

1. Assessment/Survey (LOINC coded)
2. Health Concerns / Problems (ICD-10-CM and SNOMED-CT)
3. Interventions (SNOMED-CT, CPT/HCPCS)
4. Outcomes (Procedures/Quality Measures)
5. Coding
6. Consent

http://build.fhir.org/ig/HL7/fhir-sdoh-clinicalcare/
Enabling Survey Instruments

Survey → LOINC Panel (Survey Instruments) → Include Health Concern Algorithm → Conversion to FHIR Questionnaire (enhanced NLM LHC-Forms Widget) → Build executable FHIR Questionnaire with logic to create LOINC-LOINC Observations and SNOMED-CT/ICD10-CM Health Concerns

Execute FHIR Questionnaire (enhanced NLM SDC Questionnaire App) → QuestionnaireResponse → Observation (survey question-answer pair) → Condition Health Concern

Dynamic Value Sets

Condition Problem

Provider Evaluation → Condition Diagnosis

Goals Interventions

Other “clinical” findings

Note: all Survey instruments SHALL produce Health Concerns with Gravity defined value sets

Need to be able to express in the health concern any “hidden” computational logic
SDOH Interactions / workflow
What's Next?

- Continue to engage with NLM, Regenstrief and other stakeholders to advance tooling that supports the multi-domain Gravity IG, externally maintained dynamic value sets, and questionnaires
- Continue to engage the community to establish the clinical content required for multiple SDOH domains
- Continue to advance the development of the reference implementation development
- Respond to January 2021 ballot comments
- Begin Gravity Pilots Design for Summer 2021 Start
- Please join us at the Gravity SDOH FHIR IG Workgroup Calls every Wednesday from 3 to 4 pm ET
  - [https://confluence.hl7.org/display/GRAV/FHIR+IG+Work+Group+Meetings](https://confluence.hl7.org/display/GRAV/FHIR+IG+Work+Group+Meetings)
Questions?

Evelyn Gallego  
evelyn.gallego@emiadvisors.net  
Twitter: @egallego  
LinkedIn: linkedin.com/in/egallego/

Bob Dieterle  
rdieterle@enablecare.us  
LinkedIn: https://www.linkedin.com/in/bob-dieterle

Additional questions? Contact:  
gravityproject@emiadvisors.net  
@thegravityproj  
https://www.linkedin.com/company/gravity-project
Welcome from Erin Andrews
CEO Report
FHIR Accelerator Gravity Report
FHIR Accelerator Vulcan Report
FHIR Accelerator Da Vinci Report
FHIR Accelerator Vulcan Report

Amy (Nordo) Cramer, MMCi, RN, CPHQ
Vulcan Steering Committee Co-Chair
VULCAN,
AN OVERVIEW

Amy Cramer, Co-Chair of Vulcan Accelerator
January 2021
Vulcan HL7® FHIR® Accelerator for Research Video
The growing digitalization in healthcare brings along modernized electronic health record standards such as HL7 FHIR.

Maturity in this space varies across the markets; however, the transition to a more digital environment is happening.

Several Accelerators exist already to spur development of digital solutions for healthcare:

- **Project Argonaut** (providers to providers)
- **Project DaVinci** (providers to payers)

**Experts Blazing the Path Forward for Research**

The September 2019 HL7 FHIR® Conference in Atlanta included a half-day forum drawing participation across government, academia and industry.

The goal of the forum was to help the research community align toward leveraging HL7 FHIR® for more effective acquisition, exchange and use of data for clinical research.
Vulcan Vision Statement

Why Vulcan?
Fully integrate research into the delivery of healthcare by streamlining data collection and exchange into a singular process.

What are we doing to reach that vision?
- Collaborating with the international research community to align clinical data and clinical research data at the point of collection.
- Developing out the HL7 FHIR standard to support the bidirectional flow of data.

How will we accomplish this?
- Bridge existing gaps
- Strategically connect industry collaborations
- Maximize collective resources
- Deliver integrated tools and solutions
Organization Members of Vulcan

Want to join? Download the Vulcan SOU at HL7.org/Vulcan
### Guiding Principles of Vulcan

<table>
<thead>
<tr>
<th>BRIDGE EXISTING GAPS</th>
<th>STRATEGICALLY CONNECT COLLABORATORS</th>
<th>MAXIMIZE COLLECTIVE RESOURCES</th>
<th>DELIVER INTEGRATED TOOLS AND SOLUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work to close gap between clinical care and clinical research to improve patient lives, decrease costs and improve efficiency</td>
<td>Coordinate strategy between stakeholders and leverage existing work within HL7 and other groups including FDA, NCATS, NLM, SCDM, TransCelerate, and numerous academic research sites</td>
<td>Leverage shared community and resources to be able to communicate the return on investment and return on value that a unified network could realize to various parties, and provide comprehensive recommendations to global regulators</td>
<td>Develop necessary FHIR Research Resources to maturity. Vulcan will handle identified and prioritized use cases for secondary use of EHR data that meet interested parties needs and goals</td>
</tr>
</tbody>
</table>
Phenopackets

Phenopackets is a GA4GH standard for exchanging phenotype data to support de-identified case level patient information that can be shared broadly and used in a wide variety of settings, such as EHRs, Journals, Clinical Labs, Patient Registries, and Knowledgebases.

Project Leads:
- Anita Walden, Oregon Health & Science University
- Davera Gabriel, John Hopkins University

Real World Data

Utilizing EHR source data to directly populate clinical research data capture systems wherever feasible would save cost and time. The July 2018 FDA guidance [Use of Electronic Health Record Data in Clinical Investigations](https://www.fda.gov/RegulatoryInformation/Guidances/ucm602659.htm) encourages this and there is a clear need to develop HL7 FHIR capabilities to fulfil this requirement.

Project Lead:
- Mitra Rocca, FDA
- Scott Gordon, FDA

Schedule of Activities

Adoption of a FHIR based representation of the Schedule of Activities in a study will introduce consistency, avoid repeated data entry, and enable automation.

Project Leads:
- Hugh Glover, Blue Wave Informatics
Thank you!

To learn more or to get involved, please visit our website (HL7.org/Vulcan), our HL7 Confluence page, or email us at Vulcan@HL7.org

Please attend the Vulcan Birds of a Feather session today from 1PM – 2:30PM PT to hear from Vulcan’s Technical Director, Hugh Glover
Wednesday

- Welcome from Erin Andrews
- CEO Report
- FHIR Accelerator Gravity Report
- FHIR Accelerator Vulcan Report
- FHIR Accelerator Da Vinci Report
Wednesday

FHIR Accelerator Da Vinci Report

Jocelyn Keegan
Da Vinci Program Manager
HL7 Da Vinci Project Workgroup
General Session Update

January 27, 2021
To ensure the success of the industry’s shift to Value Based Care

Transform out of Controlled Chaos:
Develop *rapid multi-stakeholder* process to identify, exercise and implement initial use cases.

Collaboration:
Minimize the development and deployment of *unique solutions*. *Promote* industry wide *standards* and adoption.

Success Measures:
Use of FHIR®, implementation guides and pilot projects.
Program To Date

Da Vinci

Concept Proposed

Initial Working Session @ Optum Labs

Initial 2 Use Cases Balloted

1st Da Vinci Focused Connection @ Guidewell

HIMSS19 Demonstrations

By Sept19 HL7 12 IGs Progressing Balloting

HIMSS20 Virtual Demonstrations

Initial Production Deployments & Education Events

Publish IGs and Expand Implementor Support

Progress To Date
<table>
<thead>
<tr>
<th>Standard Phase</th>
<th>Future</th>
<th>Build</th>
<th>Ballot</th>
<th>Published/ing</th>
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</thead>
<tbody>
<tr>
<td>Connectathon</td>
<td>&lt;1</td>
<td>2-4</td>
<td>5+</td>
<td></td>
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<tr>
<td>Live</td>
<td>&lt;1</td>
<td>1-3</td>
<td>&gt;4</td>
<td></td>
</tr>
<tr>
<td>Progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Use Case Maturity**

**Quality Improvement**
- Data Exchange for Quality Measures
- Gaps in Care & Information

**Coverage/Burden Reduction**
- Coverage Requirements Discovery
- Documentation Templates and Rules
- Prior-Authorization Support

**Member Access**
- Clinical Data Exchange
- Payer Data Exchange
- Directory
- Formulary
- Coverage Decision Exchange
- Price Cost Transparency

**Clinical Data Exchange**
- Payer Data Exchange
- Clinical Data Exchange
- Notifications
- Patient Data Exchange
- Performing Laboratory Reporting

**Process Improvement**
- Risk Based Contract
- Member Identification
- Risk Based Coding

**Future Use Cases**
- Proposed CMS Rules
- Aligned with final ONC or CMS rule
Implementor Support

FHIR 101 Resources

IG Summary & Relationships

FHIR & DV Community Tools

Learn about Implementation Guides

https://confluence.hl7.org/display/DVP/DaVinci+Implementer+Support
Membership Opportunity
Da Vinci 2021 Multi-Stakeholder Membership

**PROVIDERS**
- athenahealth
- Cerner
- Epic
- healow | Insights
- veradigm.

**EHRs**

**PAYERS**
- *Anthem*
- *Blue Cross Blue Shield of Arkansas*
- *Blue Cross Blue Shield Association*
- *Blue Cross of Idaho*
- *Cigna*
- *CVS Health*
- *GuideWell*
- *Humana*
- *Independence*
- *UnitedHealthcare*

**DEPLOYMENT**
- Availity
- MICH
- CHANGE HEALTHCARE
- Cognizant

**VENDORS**
- casenet
- cognosante
- edificecs
- infor
- InterSystems
- juxly
- mcg
- OPTUM
- surescripts
- ZeOmega

**INDUSTRY PARTNERS**
- HIMSS
- HL7 International
- NCQA

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

For current membership: [http://www.hl7.org/about/davinci/members.cfm](http://www.hl7.org/about/davinci/members.cfm)
### Summary Ways to Engage

<table>
<thead>
<tr>
<th>Type</th>
<th>Cost (000s)</th>
<th>Vote on Operating</th>
<th>Number of Sponsored Providers*</th>
<th>Pledge Resource</th>
<th>Access to Playbook</th>
<th>Access to Use Case Artifacts</th>
<th>Provide Feedback</th>
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<tbody>
<tr>
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<td>1-2</td>
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<tr>
<td>Partner</td>
<td>In Kind</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>By Partner</td>
<td>By Partner</td>
<td>By Partner</td>
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<tr>
<td>Clinical Advisory Council</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>Use Case Clinical Advisor</td>
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<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Community</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

- Premier and Associate Members have the opportunity to nominate partner organizations to join the Operating Committee (proxy membership) and must be approved by the operating and steering committees.
- Clinical roles are appointed or contracted.
Project Structure

• All members sign identical Statement of Understanding between member & HL7
• Initial agreement 2-year commitment
• All outputs to HL7 open-source licensing for public use
• Coordinate closely with HL7 standards development process to obtain workgroup ownership of Implementation Guides
• Commitment to implement in 2021

Da Vinci expanding 2021 membership. Focus on missing stakeholders: small and community-based providers, regional, Medicaid, CHIP, QHP Plans, missing integration partners; EHRs, platforms, population health. Contact davincipmo@pocp.com if interested.
Da Vinci Program Manager:
Jocelyn Keegan, Point of Care Partners
jocelyn.keegan@pocp.com

Da Vinci Technical Lead:
Dr. Viet Nguyen, Stratametrics LLC
vietnguyen@stratametrics.com

Da Vinci Project Manager:
Vanessa Candelora, Point of Care Partners
vanessa.candelora@pocp.com
Don’t forget to fill out the survey to be eligible for one $1000 drawing for HL7 Education and Virtual Events!
The winner for today’s Mystery Guest Poll is Erin Roche!

Guess Friday’s mystery guest(s) for a chance at $100 in HL7 merchandise!!!
Come drink, taste and mingle – don’t forget your taste-along drinks and treats!
Rules of the Pub Crawl - 4:30pm-???

- All pubs will open in Zoom; links in Whova
- You need to control your own screen view – Use Speaker view for events; gallery view to mingle
- Video on! If you’re not talking, please MUTE!
- Please mingle between pubs
- Bartenders may also be mingling outside their “open” times – but pubs may stay open anyway
- No Zoom recordings! Drink (sorta) responsibly!

Event Schedule (PST):
4:30 - Colorado Mountain Beer Lodge
5:15 - America’s Toque - Scavenger Hunt
6:15 - Last Call (FHIR Tiki Bar)
11:59 - Last Call for Pub Crawl (some of us have to show up for Friday WGM)

And Stay tuned for a future out-of-cycle Whisky SIG before the May WGM!

https://confluence.hl7.org/display/VPCDD2/Virtual+Pub+Crawl
Virtual Pub Crawl - 4:30pm: Colorado Mountain Beer Lodge

• Welcome to the Mountains!
• Bartender: Dave Shaver
• Ski/snowboard outfits or cowboy gear required
• So get your beer and cheese ready
Virtual Pub Crawl - 5:15 pm: America’s Toque

• Welcome to an HL7 Canada Cocktail bar
• Bartenders: James Agnew, Mark Iantorno
• Toques and Parkas encouraged
• Libations – anything Canuck

• Special Event: A short FHIR scavenger hunt will finally give you the chance to think about things you had forgotten you owned.
Virtual Pub Crawl – 6:15: Last Call (FHIR Tiki Bar)

• Welcome to an HL7 Tiki bar
• Bartenders: Matt Rahn, Julia Skapik, Rob McClure & Mystery Guests
• Creative pajamas welcome
• Cocktail demos from Rob & Julia
• Tell your best HL7 WG night out story
• Last one out - turn off the lights!
Thanks for joining us
January Working Group Meeting

Virtual Event

Friday, January 29, 2021
What goes all the way around the world but stays in a corner?
What goes all the way around the world but stays in a corner?
What goes all the way around the world but stays in a corner?
A STAMP!

Session begins now
2021 Education & Events Highlights

Melinda Stewart
HL7 Education Marketing Manager
HL7 Education & Events Highlights

- What’s new in education?
- Highlights of popular courses
- 2021 Education Catalog
- FHIR Connectathons & WGMs
- FHIR DevDays
- More upcoming events
What’s NEW in HL7 Education?

- NEW formats!
  - Longer class times (4.5, 6, 9, 12 hours)
  - Applied sessions
  - Using Zoom and breakout rooms

- NEW offerings!
  - FHIR Bootcamp
  - FHIR for Healthcare Information Analysts
  - V2 Advanced
This session is LIVE!
- Solve FHIR assignments in real time, in groups, guided by your instructor
- 3 hours x 3 days

2021 Sessions:
- April 13-15
- July 20-22
- November 9-11
FHIR for Healthcare Analysts

- Live online class
  - Review the FHIR Clinical Reasoning Module for clinical quality improvement
  - 3 hours x 4 days

- 2021 Sessions:
  - March 22, 23, 25 & 26
  - October 16, 17, 23 & 24 (weekends!)
HL7 V2 Advanced

- Self-paced course to become proficient in V2 standard

- 2021 Session:
  - May 6 – June 17

- Registration opens February 6!
HL7 Fundamentals

- Self-paced course for those new to HL7 and our standards

- 2021 Sessions:
  1. February 11 – May 6
  2. May 27 – August 19
  3. September 9 – December 2
HL7 FHIR Fundamentals

- Self-paced, in-depth overview of HL7 FHIR

- 2021 Sessions:
  1. April 1 – April 29
  2. July 15 – August 12
  3. October 28 – November 25
HL7 FHIR Intermediate

- Self-paced course for DEVELOPERS to dive deeper
  - SMART on FHIR, CDS Hooks, Argonaut and IPS IG

- 2021 Sessions:
  1. February 18 – April 1
  2. June 3 – July 15
  3. September 16 – October 28
HL7 FHIR Proficiency Exam Prep

- Self-paced course to prepare for the HL7 FHIR R4 Proficiency Exam

- 2021 Sessions:
  1. March 4 – April 1
  2. June 17 – July 15
  3. September 30 – October 28
<table>
<thead>
<tr>
<th>Course</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied FHIR for Designers</td>
<td>Feb 16-18</td>
</tr>
<tr>
<td>Clinical Quality Language</td>
<td>Mar 30-Apr 1</td>
</tr>
<tr>
<td>Overview of Interoperability</td>
<td>Apr 21-22</td>
</tr>
<tr>
<td>FHIR for Software Developers</td>
<td>May 4-6</td>
</tr>
<tr>
<td>Whirlwind Tour of FHIR Resources</td>
<td>May 12-13</td>
</tr>
<tr>
<td>SMART on FHIR &amp; CDS Hooks</td>
<td>Jun 22-24</td>
</tr>
<tr>
<td>FHIR Security &amp; Privacy</td>
<td>Jul 13-15</td>
</tr>
<tr>
<td>C-CDA &amp; C-CDA on FHIR</td>
<td>Aug 3-5</td>
</tr>
<tr>
<td>Mapping V2 to FHIR</td>
<td>Aug 17-18</td>
</tr>
<tr>
<td>Clinical Quality &amp; Decision Support on FHIR</td>
<td>Oct 5-7</td>
</tr>
<tr>
<td>FHIR Profiling</td>
<td>Oct 19-21</td>
</tr>
<tr>
<td>Applied Questionnaire &amp; Data Capture</td>
<td>Nov 2-4</td>
</tr>
<tr>
<td>FHIR Terminology</td>
<td>Nov 30-Dec 2</td>
</tr>
<tr>
<td>HAPI FHIR</td>
<td>Dec 7-9</td>
</tr>
</tbody>
</table>
1. Go to HL7.org
2. Click on Training tab
3. Fill out form to download
HL7 Education on Demand

- 24/7 source for HL7 training and education!

1. Go to HL7.org
2. Click the Training tab
3. Select Education on Demand
4. Try “View All Courses”, sort by Newest
HL7 Certification

- HL7 CDA Specialist
- HL7 FHIR Proficient
- HL7 V2 Control Specialist
- HL7 V3 RIM Specialist

- VA eligible veterans can apply for reimbursement of HL7 certification exam fees!
HL7 EVENTS
2021 FHIR Connectathons & Working Group Meetings

- **Virtual FHIR Connectathons**
  - May 17 – 19 (in GMT/UTC)
  - Sep 13 – 15 (in Eastern Time)

- **Virtual WGMs**
  - May 24 – 28 (in GMT/UTC)
  - Sep 20 – 24 (in Eastern Time)
  (35th Annual Plenary)
2022 Working Group Meetings

- **January WGM**
  - January 15 – 21, 2022
  - Henderson, Nevada

- **May WGM**
  - Date and location TBD

- **36th Annual Plenary & WGM**
  - Sep 17 – 23, 2022
  - Baltimore, MD
HL7 FHIR DevDays

- **2021 Virtual Edition (US)**
  - June 7 – 10, 2021

- **2022 Edition (US)**
  - June 6 – 9, 2022
  - Cleveland, Ohio

https://www.devdays.com/
More upcoming events...

- **Virtual C-CDA Implementation-A-Thon (IAT)**
  - March 24, 2021

- **Virtual Digital Quality Summit with NCQA**
  - July 13 – 15, 2021
Friday

In case you missed it – and some new ones!!!

Welcome from…
Welcome from…

Comedian Cedric the Entertainer!
Welcome from...

Comedian Colin Mochrie from *Whose Line Is It Anyway!*
Welcome from…

Carol Baskin from Big Cat Rescue who became infamous via *Tiger King: Murder, Mayhem and Madness!*
Welcome from…

Actor Sean Astin who starred in *Lord of the Rings*, *Rudy*, *The Goonies*, *Stranger Things* and more!
Welcome from…

Meditation guru
Deepak Chopra!
Welcome from…

TV Host - Sportscaster Erin Andrews!
The winner for today’s Mystery Guest Poll is
Andrea Kent (Colin Mochrie)
And
David Jones (Sean Astin)
Congratulations to our winners!
HL7 Board Members would like to thank you for participating...
WGM Attendee Survey

Don’t forget to fill out the survey to be eligible for one **$1000 drawing** for HL7 Education and Virtual Events!

https://www.surveymonkey.com/r/2021JANWGM