HL7 International

Better Customer Experiences with
PATIENT COST TRANSPARENCY

PLUS:

Codex Advances Oncology
Data Sharing

DaVinci Project Honors
Community Champions

Vulcan Phenotypic Data Project

ANSI Changes that
Affect Balloting

FAST Establishes
Steering Committee

INSIDE: HL7 APPOINTS
TWO NEW BOARD MEMBERS

GUPTA

GICHOYA

In This Issue

We are Excited to Get the HL7 Band Back Together

Update from Headquarters

We are thoroughly excited to get our HL7 family back together this September for our first in-person working group meeting in the United States since September 2019. It's hard to believe that three years have already flown by since our last in-person WGM. The pandemic clearly required everyone to change how we do things.

In fact, we were pleased to hear from several individuals that HL7 produced the best virtual meetings in our industry. I salute Mary Ann Boyle, our HL7 marketing team and HL7 technical staff for their exceptional effort in producing many events virtually and utilizing various approaches for ensuring the WGMs were productive and engaging.

September FHIR Connectathon, Plenary & WGM

We look forward to seeing many of you at the Renaissance Baltimore Harborplace Hotel. The **September events will all be in-person only** and HL7 will not accommodate remote participation.

The theme for the 36th Annual Plenary meeting *is A Global Healthcare Ecosystem to Meet the Needs of the Next Pandemic*. It will also include a presentation on the new three-year business plan. The schedule of in-person activities in September are:

•   FHIR Connectathon will occur in-person only September 17-18

•   36th Annual Plenary and Working Group Meeting will convene in-person only September 19-23

The Renaissance Baltimore Harborplace Hotel is located in a wonderful area for HL7 colleagues to explore and enjoy. Please join us for a long overdue opportunity to reconnect with our HL7 family.

May Working Group Meeting & FHIR Connectathon

The May WGM was once again produced virtually. Based upon the feedback from our attendees, we are pleased to report that our approach to producing virtual events has continued to provide an experience that is productive and rewarding. Specifically, there were 520 participants in the May FHIR connectathon and 422 in the May WGM. The virtual activities continued to conduct business as usual and advanced the development of our HL7 standards.

A thousand kudos are extended to our work group co-chairs for continuing to manage the HL7 workload with our army of dedicated volunteers. We are also grateful to Computable Publishing for their Gold Sponsorship of the May WGM.

FHIR DevDays

HL7 International and Firely organized HL7 FHIR DevDays 2022, held June 6-9 as a hybrid event. The format included the in-person component taking place at the Global Health Innovation Center in Cleveland, Ohio, a satellite location in Berlin, Germany and others joining virtually from around the world making it possible for the global FHIR community to convene.

The event attracted almost 600 attendees with 244 in-person and 322 virtually, all aiming to learn about FHIR, refine their expertise and connect with the FHIR community. The three pillars for DevDays are education, sharing ideas and networking. The pillars were demonstrated through a program that featured over 120 educational sessions, more than 100 expert speakers, impactful keynote addresses and invaluable networking opportunities. Experts from around the world participated to instruct, guide and discuss how best to implement the HL7 FHIR standard.

For more insight on the event, please review a five minute video with quotes from participants and event highlights at:
https://vimeo.com/721208054

We are pleased to recognize our event sponsors that helped make DevDays possible:

Platinum Sponsors	Gold Sponsors	Silver Sponsor	Bronze Sponsor
• Google Cloud	• Innovaccer	• Smile CDR	• Lyniate
• Microsoft	• InterSystems		
	• Redox		

HL7 FHIR Fundamentals Course

Next edition begins October 27, 2022!

October 27-November 24, 2022

- An introductory online course on HL7 FHIR - no experience necessary!

- Four week course includes new module each week

- Guided real-world exercises with instructor assistance and feedback

- Interactive online community with students and instructors

http://HL7.me/FHIRfun

By Mark McDougall,
HL7 International Executive Director

Update from Headquarters

July FHIR Connectathon for CMS

HL7 produced another virtual FHIR Connectathon for the Centers for Medicare & Medicaid Services (CMS) July 19-21, 2022. The event focused on:

- Educating interested parties at CMS and within the health IT community about HL7 FHIR, FHIR implementation guides (IGs) developed by the Da Vinci Project and the CARIN Alliance and their real-world uses.

- Supporting impacted stakeholders as they comply with the CMS and ONC interoperability rules.

- Engaging providers, payers, and partners to join the growing collaborative FHIR community and directly access associated free and open resources.

Over 1440 registered attendees participated in 13 different tracks organized by subject. CMS has expressed their appreciation for HL7 once again producing a successful FHIR connectathon. Many thanks to Sandy Vance for her role in supporting the management of the FHIR connectathon. For detailed information on the CMS Connectathon, see *https://blog.hl7.org/july-connectathon-brings-implementers-together-plan-now-for-the-september-connectathon*

Mark Your Calendars

In addition to our September events in Baltimore described above, please be sure to add to your calendar the dates and locations of our other upcoming in-person HL7 events:

- January 2023 events near Las Vegas at the Hilton Lake Las Vegas Resort in Henderson, Nevada:
  - *FHIR Connectathon* will occur January 14-15, 2023
  - *January 2023 WGM* will convene January 16-20, 2023
- May 2023 events in New Orleans, Louisiana:
  - *FHIR connectathon* will occur May 6-7, 2023
  - *May 2023 WGM* will occur May 8-12, 2023

We look forward to seeing many of you at these HL7 events. For more details on these events, please visit www.HL7.org/events.

Benefactors and Supporters

We are pleased to recognize HL7's 2022 benefactors and gold members who are listed on page 29. Their support of HL7 is very much needed and sincerely appreciated. We are pleased to recognize our benefactors in all of our HL7 newsletters, on the HL7 website, in all of our HL7 press releases, and at all of our HL7 Working Group Meetings.

Organizational Member Firms

As listed on pages 29-31 HL7 is very proud to recognize the organizations who are HL7 organizational member companies. We sincerely appreciate their ongoing support of HL7 via their organizational membership dues.

Best wishes to you and your loved ones for staying healthy and finding time to enjoy plenty of hugs and laughter.

Google's Aashima Gupta and Emory's Judy Wawira Gichoya, M.D., join the HL7 board of directors

HL7 International Appoints Two New Members to the Board of Directors

HL7 recently appointed two new members to the board of directors to serve a two-year term: Aashima Gupta, director, global healthcare solutions, Google Cloud; Judy Wawira Gichoya, M.D., M.S., assistant professor, radiology and imaging sciences, Emory University School of Medicine.

"These leaders represent a critical cross section of global stakeholders who are committed to advancing health through information technology. We are delighted to welcome them to the HL7 board of directors," said Charles Jaffe, M.D., Ph.D., CEO of HL7. "Their strategic expertise and diverse experience will contribute greatly to HL7's goal of improving the quality of care and reducing costs by overcoming the barriers to interoperability."

About the Appointed Board Members

Aashima Gupta serves as the global leader of healthcare provider solutions at Google Cloud. In this role, she sets the direction for transformative health care solutions. She is focused on the dynamic intersection of industry imperatives, technology, and

Aashima Gupta

interoperability efforts that enable new models for care and improved patient experiences. By incorporating strategic technology elements of artificial intelligence and cloud technologies into the care regimen, Gupta believes that patient care and experiences can be substantially improved. Formerly, Gupta led digital health incubations at Kaiser Permanente and helped launch the Care Connectivity Consortium that worked together to build a health information exchange between health systems. She was also responsible for driving innovation in digital technologies, including a project centered around remote monitoring of diabetic people. Aashima serves on the board of

directors for IntelyCare and board of advisors for HIMSS NA, and GRAIL. She was recently recognized as one of the Most Influential Women in Healthcare IT by HIMSS and as one of the Top 100 Women in Fem Tech and Health Tech by the WomenTech C-Level Network. Aashima received her Bachelor of Science in Computer Science and Master of Science in Computer Applications from Delhi University, India.

Judy Wawira Gichoya, M.D., M.S.

Judy Wawira Gichoya, M.D., M.S., serves as an assistant professor in the department of radiology and imaging sciences at Emory University School of Medicine where she is a multidisciplinary researcher, trained as both an informatician and interventional radiologist. In addition, she is also a NIH Data Scholar at the Fogarty International Center, where she helps with the Open Data Science Platform (OSDP) component of the DSI Africa Initiative to "Harness Data Science for Health in Africa." Her research focusses on curating diverse datasets for AI and validating AI models in real world settings which led to her recognition as the 2021 Most Influential Radiology Researcher by the radiology community website *AuntMinnie.com*. Dr. Gichoya has more than a decade in open-source projects working as a developer, implementor and evaluator of various standards and systems used in low resource settings. She has contributed to supporting the imaging informatics community by developing the SIIM dataset used for the annual datathon, as well as providing multiple tools to work with DICOM standard for imaging workflows. She has also participated in previous IHE connectathon events. Dr. Gichoya serves on the board of SIIM (Society of Imaging Informatics in Medicine), the American College of Radiology AI advisory board and holds committee positions in multiple radiology societies. ■

HL7 Internal Projects and ONC Grant-Funded Projects

HL7 Policy Update

During the DC summer months, Congress has been relatively quiet on healthcare issues, but federal executive aagencies and regulators are busy. One important highlight is the National Committee on Vital and Health Statistics (NCVHS) Subcommittee on Standards June 9, 2022, listening session on Standardization of Information for Burden Reduction and Post-Pandemic America Convergence 2.0. HL7 representatives, including our CEO Dr. Charles Jaffe, testified.

During the hearing and in our follow-up letter, HL7 supported all five considerations below that were examined by the NCVHS *Subcommittee on Standards on June 9, including:*

- **Consideration 1:** Update relevant HIPAA policies to allow for the adoption and use of more than one standard per business function.

- **Consideration 2:** Enable HIPAA covered entities to support multiple versions of adopted standards for business functions.

- **Consideration 3:** Revise the standards exception process for HIPAA covered entities who submit an application with the required justification and business case to automatically authorize them without waiting for review.

- **Consideration 4:** Identify options for improved integration of health information standards, including base standards plus implementation guides, more broadly than at present, and fostering relevant collaboration across HHS Agencies and Offices.

- **Consideration 5:** Develop and publish a guidance framework with recommended definitions, metrics, templates, and pilot test procedures. The specific areas of work include such methods for reporting on standards readiness, standards costs, results of real-world testing and metrics essential for evaluation of standards.

Some key highlights of issues HL7 emphasized are:

HL7 FHIR As an Alternate Standard to Existing Mandated HIPAA Transaction Standards

HL7 urges NCVHS to formally recognize HL7 Fast Healthcare Interoperability Resources (FHIR®) as an alternate standard to existing mandated HIPAA transaction standards, furthering the nation's journey of intersecting of clinical and administrative frameworks and related interoperability objectives. While the information requirements of healthcare data are extremely complex, the HL7 FHIR standard aids in removing many of the barriers to health care data exchange.

Public-Private Sector Partnerships

Ongoing meaningful collaboration between the public and private sectors is essential in the interoperability journey and in particular, is improved through more input from industry stakeholders and continued collaboration among Standards Setting Organizations (SSOs).

Cooperation Across Government

HL7 enthusiastically supports identifying options for improved integration of health information standards, including legacy technologies augmented

by implementation guides, more broadly than those presently available. Furthermore, HL7 encourages strategic collaboration across U.S. Department of Health and Human Services (HHS) agencies and offices, including state, local, tribal & territorial governments.

Value Proposition and Incentive Alignment

HL7 recommends additional federal incentives, funding and support for testing, implementation and maturing of standards in this area. All ecosystem participants must be considered, and should benefit areas identified as HIPAA administrative, financial, and clinical frameworks that increasingly intersect.

Standards Exceptions Process: HIPAA Covered Entities

HL7 strongly supports revising the standards exception process for HIPAA covered entities who submit an "application" with the required justification and business case to automatically authorize them without waiting for review.

Standards Transition Policy

HL7 recommends adequate, additional policy be in place for more agile standards transitions involved in HIPAA administrative transactions and explicit detail about guardrails and sunsets that are a part of this process to ensure efficiency and transparency. A focus on investing, advancing and aligning both federal frameworks and tools is critical, as underscored by the *FHIR Roadmap for Trusted Exchange Framework and Common Agreement (TEFCA) Exchange*. HL7 believes that it is critical to accelerate investment in technical tooling and education, in order to extend existing efforts to coordinate and align regulatory and sub-regulatory methods to advance health IT frameworks.

Increased Standards Testing

HL7 agrees with the need for increased standards testing that was mentioned by multiple speakers at the listening session. HL7 supports and can facilitate more Connectathons and standards pilot testing with adequate assistance.

SOGI, SDOH and Public Health Issues

Greater insight is needed on Sexual Orientation and Gender Identification (SOGI), Social Determinants of Health (SDOH) and public health issues in this space. Moreover, federal, state and local policy should be better aligned. HL7 emphasized in its July 2021 letter to the NCVHS Subcommittee on Standards that, "development and adoption of common data standards is foundational to identifying inequities, identifying potential interventions, coordinating interventions across agencies, measuring progress, and conducting research and evaluation. Requiring that health systems collect standardized data elements indicative of social determinants of health, and report these data, are key to improving the ability to share data that helps our society address inequities."

The June 9 listening session agenda and materials can be accessed at: *https://ncvhs.hhs.gov/meetings/standards-subcommittee-meeting-3/*

The NCVHS Subcommittee on Standards July 28 recommendation letter on these issues can be found at: *https://ncvhs.hhs.gov/wp-content/uploads/2022/08/Recommendation-Letter-Modernize-Adoption-of-HIPAA-Transaction-Standards-508.pdf*

As a next step, the NCVHS Subcommittee on Standards is expected to hold a follow-up listening session this fall. We will keep you updated.

Key 2022 HL7 Policy Responses: Current

HL7 is currently compiling responses for:

- **NIH Request for Information (RFI) on Acquiring Electronic Health Record Data from Health Information Networks and Health Information Exchanges for the All of Us Research Program** *https://grants.nih.gov/grants/guide/notice-files/NOT-PM-22-004.html*

- **USCDI v4** *https://www.healthit.gov/sites/default/files/page/2022-07/Standards_Bulletin_2022-2.pdf*

- **Interoperability Standards Advisory (ISA) 2023 Reference Edition** *https://www.healthit.gov/isa/ https://www.healthit.gov/isa/ONDEC* ■

By Ticia Gerber, HL7 Senior Policy Advisor, tgerber@hl7.org
Please contact with questions or for more information on these policy updates.

Important Notice

ANSI Changes that Affect Balloting

Recent changes to ANSI's Essential Requirements eliminate Associations as an interest type for balloting (this does not affect membership). Beginning with the September 2022 ballot cycle, if your organization falls under the Government/Professional Associations/Universities membership category, it will display as General Interest type for purposes of balloting.

ANSI also changed the requirements such that Consultants and Association voters must identify the interest type they are representing for a particular client, consensus group, or constituency. This change was made because many consultants and non-profit organizations are paid or otherwise represent another interest type and ANSI is of the opinion that those votes should be counted under the interest type they actually represent. For example, a consultant may be hired by a provider to participate in a particular consensus group, and their vote should be counted under the provider interest type. Likewise, a non-profit association may represent EHR vendors, and votes cast by that non-profit should be counted under the vendor interest type.

To accommodate these changes to the ANSI Essential Requirements, all Consultant and General Interest voting members will need to choose which interest type they are representing for each consensus group they join. These voters may be representing themselves and can still choose Consultant, Government/Non-Profit, or General Interest for any given consensus group.

Consultant and General Interest voters will see a screen similar to the one at the top of the next column when they join ballot pools:

Consultant and General Interest voters will use the pull-down menu next to the title of each consensus group they are joining to select the interest type they will be representing. An interest type must be selected for each consensus group. The ballot desktop will not allow these members to register

for a consensus group unless an interest type is selected. Additionally, the interest type cannot be changed after ballot signup.

Voting members who are not Consultants or General Interest will not see this option. Instead, you will see a screen similar to the one below. Note that there are no pull-down menus, but there is a significant space between the checkbox and title of the ballot (consensus group).

Should you have questions about this change, please feel free to contact Associate Executive Director Karen Van Hetenryck (*Karenvan@HL7.org*) or Director of Technical Publications, Lynn Laakso (*Lynn@HL7.org*). ∎

By Karen Van Hentenryck, Associate Executive Director, HL7 International

HL7 International

Newly Certified HL7 Specialists

Congratulations to the following people who recently passed an HL7 Certification Exam!

WELL DONE

Certified HL7 Version 2.x Chapter 2 Control Specialist

MAY 2022
Sai Teja D

JUNE 2022
Anudeep Kilaparthi
Niranjan Gajagouni

JULY 2022
Roshani Singh
Estefanía de las Mercedes Ferrera Vizcaino
Antonio Gabriel Sánchez Hernández
Adrian Vargas Rodriguez

AUGUST 2022
Zoe Chimunda
Ritesh Singhvi

Certified HL7 CDA R2.0 Specialist

JULY 2022
Santiago Aso

AUGUST 2022
Anmer Ayala

WELL DONE

HL7 FHIR R4 Proficient Certified

MAY 2022
Srinivas Konchada
Maja Bogdanovic
Mary Burgess
Santiago Aso
Matthew Brewster Storer
Brandon Raab
Meagan Peat
Jesse Barr
Carmen Daniel Moriana
Damir Drnovsek
Kresimir Kers
Ryan Weihler
Xiaoyang Pi

JUNE 2022
Andrii Krylov
Mohamed Omar
Plamen Tassev
Toàn Ngô

JULY 2022
Mario Enrique Cortes Monsalve
Nicolas Riss
Mikel Blanco
Yessica Andrea Dios Fernández
Luc Chatty

AUGUST 2022
Alexander Bennett
Christoph Rettinger

HL7 Internal Projects and ONC Grant-Funded Projects

News from the HL7 Project Management Office

Fonteva: The New Meetings and Membership Software System

Testing continues with Fonteva, a leading association management and membership software solution powered by Salesforce.

Implementation is targeted to be completed by November 1, 2022. At that point, everyone's account and membership information will be migrated to the new platform. Registration for events and educational opportunities will be a much-improved user experience; however, be aware that historical event and education training registrations will not be migrated to the new system.

Jira and the Project Scope Statement (PSS)

While progress has slowed due to the focus on Fonteva, work continues to add the ability for the Jira PSS to accommodate reaffirmation and specification withdrawals. For the time being, those actions will continue to use the PSS form in Confluence. The same applies to efforts by the project team to migrate all active non-Jira PSSs to Jira as well as planning to sunset Project Insight.

ONC Grant Funded Projects Update

September 2022 ends ONC's five-year Cooperative Agreement which awarded $1.36M to HL7 each year for continued maturation of the C-CDA and FHIR standards.

Work completed under the most recent fiscal year (2022) included the following:

- Support of the Unified Terminology Governance (UTG) process and tooling
- Improvements to the FHIR Jira Ballot process
- Administration of the FHIR Connectathons
- Advancement of Bulk Data Access and Push
- Continued support for the FHIR Terminology Server
- Continued support on the HL7 FHIR Build and Implementation Guide Publishing tasks
- Enhancements and support to the FHIR Registry
- C-CDA Implementation-A-Thons held in October 2021 and March 2022
- Enhancements to, and quality assurance of, the C-CDA Web Publishing Tool
- Updates to C-CDA R2.1 value set
- Support of the Gender Harmony project
- Develop and deploy key infrastructure for the FHIR-OMOP community
- Prepare for and ballot the At-Home Test Result Report FHIR Implementation Guide

In addition to the above, work progressed on two additional COVID related ONC grant-funded opportunities for HL7.

The first is a four-year $2M cooperative agreement titled "HL7 Public Health Standards and Solutions for Future Pandemics." Projects under this endeavor include the following:

- Expand the clinical domains supported by HL7 standards by balloting the COVID-19 FHIR Profile Library implementation guide
- Improve the privacy and security of health information by examining the current landscape of relevant security, privacy, and public health standards
- Advance the use of HL7 Bulk Data Access API and other relevant standards-based API technologies to improve surveillance capacity for future pandemics and other public health emergencies by assessing available open-source natural language processing (NLP) tools which unlock high-value information contained in the text of clinical notes
- Support development, advancement, and harmonization of Social Determinants of Health (SDOH) standards by analyzing the current state and emerging activities of SDOH related data
- Advance HL7 public health standards by developing a Physician Orders for Life-Sustaining Treatment (POLST) CDA Implementation Guide

- Analyze and document which HL7 Version 2 messaging standards or FHIR IGs, resources and profiles can be used to support submission of test results from at-home COVID testing applications to state and federal government agencies
- Testing of the Gravity SDOH Clinical Care GHIR Implementation Guide

The second opportunity is a five-year $3.5M contract "COVID-19 support for Accelerating Standards Development for the US Realm." Projects under this effort include the following:

- Ballot, reconcile and publish updates to HL7's US Core Implementation Guide
- Financial support for the US Realm Steering Committee (USRSC) Project Manager, Senior Advisor, Content Administrator and Dashboard Developer
- Fund Helios, the HL7 FHIR Accelerator for Public Health

The objectives of this federal contract are:

- Assist the ONC in gathering, organizing, monitoring, and managing work products associated with HL7 standards development and implementation activities for the US Realm
- Assist the ONC in developing, maintaining, and enforcing governance of US Realm standards and implementation specifications
- Assist the ONC in engaging the US standards development community to increase awareness of US Realm guidelines and identify strategic priorities for US Realm standards development and implementation activities
- Lead the development of new versions of the US Core Implementation Guide and C-CDA standard (including the C-CDA Companion Guide)
- Implement relevant aspects of the governance plan and strategic roadmap to manage and oversee standards development and implementation activities in the US Realm

Progress for all of the above ONC work can be found on HL7's Confluence page at:

https://confluence.hl7.org/display/PMO/ONC+Grant+Project+Page.

HL7 appreciates ONC's continued support of C-CDA and FHIR since 2016. ∎

By Dave Hamill, Director, HL7 Project Management Office

Progress for all of the above ONC work can be found on HL7's Confluence page at: *https://confluence.hl7.org/display/PMO/ONC+Grant+Project+Page*

HL7 appreciates ONC's continued support of C-CDA and FHIR for 2022 and beyond.

HL7 Welcomes New Members

Gold

Asymmetrik, a Blue Halo Company	Brooklyn Data Co.	MY Synergy Ltd.
	MedCom	USAging

Organizational

Allendale County Hospital	CloverDX	Radiological Society of North America
Best Option Healthcare PR	Idaho Bureau of Vital Records& Health Statistics	SoftDev Incorporated
Brightspace Advertising PTY LTD	NeuroPsychiatric Hospitals	SYNCRONYS
CLM Center for Life Management	Oddball, Inc.	Vital Data Technology
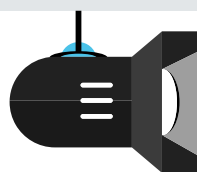
Member Spotlight on Reuben Daniels, FAIDH CHIA

Professional Background

Reuben Daniels, FAIDH, CHIA, is Principal Consultant at Saludax and is based in Brisbane, Australia. He received his Bachelor of Science (majoring in mathematics and computer science) and Bachelor of Science (Honours in Computer Science) from the University of Cape Town. He is also TOGAF 9 certified, an HL7 Certified CDA Specialist, a Certified Health Informatician Australasia (CHIA) and a Founding Fellow of the Australasian Institute of Digital Health (FAIDH).

Reuben's career in health IT began when he moved to Australia and joined the National E-Health Transition Authority (NEHTA) as a Senior Software Developer in 2010. NEHTA was responsible for the development and delivery of Australia's national e-health program. He became the Lead Architect responsible for the development and execution of strategies, and provision of technical oversight and architectural leadership. During his time at NEHTA, he benefitted greatly from the knowledge and experience of colleagues and mentors, including Grahame Grieve and Dr. Andy Bond.

While at NEHTA, he participated in the following major initiatives:

- Healthcare Identifiers Service – Development of a Java-based integration software library and a software conformance scheme to support software vendors integrating with the service that provides the Individual Healthcare Identifier (IHI)—the Australian national patient identifier

- My Health Record System (formerly known as the Personally Controlled Electronic Health Record) – Participated in the development of new technical specifications to support the exchange of prescriptions, dispense records, pathology reports, and radiology reports in the CDA-based national electronic health record. Later, he participated in the development of a FHIR-based API allowing mobile devices to access the system

- CDA Rendering specification – Co-authored a foundation interoperability specification which ensures consistent rendering of HL7 CDA clinical documents based on NEHTA Implementation Guides. Reuben developed a corresponding XSLT CDA Stylesheet which has been broadly adopted in most Australian healthcare software applications that render CDA documents including the My Health Record System's patient and provider web portals

- National Clinical Terminology Service (NCTS) – Participated as the lead architect in the project to establish the NCTS, which supports the distribution and meaningful use of SNOMED CT, LOINC, and FHIR CodeSystem based coding systems through adoption and localization of the FHIR terminology service and IETF Atom specifications

During his time at NEHTA, Reuben was very active in standards development and represented NEHTA in various national and international standards development organizations including HL7, SNOMED International, GS1 and Standards Australia.

Reuben started as Principal Consultant with Saludax in July 2016. In this role he provides professional services related to strategy, architecture, standards, interoperability, health informatics, and governance in healthcare. He is currently engaged as an enterprise architect by the state of Queensland's public health system (Queensland Health) in a team responsible for technical oversight of major IT initiatives, and the development of strategy, policy and standards. In this role Reuben led the design of Queensland Health's first FHIR-based solution—the Queensland Clinical Terminology Service (QCTS).

HL7 Activities

Reuben's involvement with HL7 started when he joined NEHTA in 2010 which, at the time, was an organizational member of HL7 with many employees participating in standards development in HL7 International and HL7 Australia.

The January 2011 HL7 Working Group Meeting (WGM) in Sydney, Australia was his first WGM, which sadly was cut short due to the Brisbane floods, requiring him and other Brisbane-based NEHTA attendees to return to Brisbane. In May 2014, Reuben attended the HL7 FHIR Connectathon and WGM events in Phoenix, Arizona with the primary objective of developing a good understanding of FHIR. This event proved to be an extremely valuable experience in which he not only achieved his primary objective, but also became more familiar with HL7, and made many new friends. Since then, he has remained an active participant in HL7.

Reuben currently serves as a Co-Chair of both the Vocabulary Work Group and the Terminology Services Management Group (which he played a role in establishing in 2021). In these roles, he is able to influence the development and implementation of terminology-related standards, policies, products and services in HL7, including how both internal and external terminologies may effectively and meaningfully be used in

HL7 standards. Key to this is HL7 Terminology (terminology.hl7.org) and its underpinning Unified Terminology Governance (UTG) process. Reuben was a member of the team that developed the first release of HL7 Terminology, and he continues to support its evolution and broad adoption.

Reuben is also a member of the board of directors of HL7 Australia. In this role, he works with other board directors to promote the effective and consistent use of standards developed by HL7 International and HL7 Australia across the Australian health sector.

Personal Life

Reuben's family of five lives in Brisbane, Australia. It includes his wife, Joanne, daughters Maya (15) and Zara (13), and Doug, the family dog.

Joanne is a Quality Assurance & Regulatory Affairs Manager working in the medical device manufacturing field. They met in Cape Town, South Africa in 2001, and shortly thereafter, moved to the United Kingdom (UK) when Joanne was awarded a scholarship to undertake a PhD in molecular genetics. After eight years in the UK — during which time they were married and had two daughters — the family moved to Brisbane.

Maya is currently in Year Nine in high school and enjoys reading and playing the piano. She recently started her first part-time job in a local coffee shop. Zara is in Year Seven and enjoys camping and playing the violin. Both daughters are Shotokan karate students: Maya hopes to get her provisional black belt and Zara her first Kyu brown belt by the end of 2022.

The family enjoys cooking, restaurants, travel, hiking in the local Australian bushland, beaches, movies, TV shows, boardgames, constructing large LEGO Star Wars sets, and socialising. They regularly travel to South Africa to visit family and friends.

Reuben's other interests include graphic novels, current affairs (often to his own detriment!), as well as the drum & bass genre of electronic dance music. He enjoys fine wines and whiskies—and a good local brew (especially with fellow HL7 standards developers). ■

Standards for Rare Disease and Clinical Genomics

Vulcan Phenotypic Data Project

Some domains, such as rare diseases, genomics and genetics, and cancer, rely on phenotypic information for more accurate treatment of patients, but this information is not typically recorded in a patient's electronic medical record or in a codified format. Phenotypic information is difficult to document for clinical genetics and is often found across medical records, clinical notes, structured labs, image annotations and problem lists. Many times, the data is located in other clinical systems because the EHRs do not fully support what is needed for computational diagnostic tools.

The goal of the Vulcan Phenopackets project is to design an exchange standard using HL7 Fast Healthcare Interoperability Resources (FHIR), for case-level phenotypic and clinical information called a Phenopacket, a GA4GH/ISO standard.

- The Phenopacket can be a single visit encounter or the complete medical history of a patient.
- This standard aims to support the exchange of de-identified case-level information across EHRs, clinical laboratory, registries and journals.
- The result will be an FHIR implementation guide (IG) that will be used by collaborating vendors, healthcare organizations and clinical genetic laboratories.

Included in this package is the Human Phenotype Ontology (HPO) terminology, a standard in many rare disease diagnostic contexts, that has special features such as a full semantic graph with logical underpinnings, i.e., there are multiple inheritances with terms that describe complex relationships not found in clinical terminologies. In clinical genetics, when performing whole exome, genome analysis or targeted gene panels to help diagnose the patient's genetic disease, the HPO terms are used to improve the diagnostic efficacy by

matching against known diseases annotated with HPO or via other algorithms. It would therefore be incredibly impactful if there were a way to extract the HPO terms from all of the locations where such phenotypic descriptors are found within the EHR, to allow a clinician to vet and enhance the description and export the Phenopacket for use by the diagnostic labs.

The September Vulcan Phenotypic Data Connectathon track tests the current implementation guide that aims to do just this.

Connectathon Goals:

- Representing phenotypic information in FHIR based on the IG, or beyond the IG, if and when needed.
- Representing phenotypic profiles.
- Being able to exchange phenotypic data and packets in a reliable way.
- Relating/connecting FHIR-based phenotypic data and packets to other FHIR resources such as laboratory requests and results.
- Converting between the GA4GH Phenopackets Schema format and the equivalent FHIR representations.
- Understanding the possible issues with adopting the GA4GH Phenopacket (version 2) FHIR IG by existing systems such as PhenoTips.

The most recent Connectathon information is here on the HL7 Connectathon Confluence space. We welcome participants!

Phenopacket Community meetings are held on the first and third Mondays at 3 pm PT/6 pm ET.

Zoom information can be found on the Vulcan Phenopacket Confluence page here

If you are interested in the project, contact the Vulcan Project Office (vulcan@hl7.org). ∎

Phenotypic Data Project Members: Anita Walden, Melissa Hanedel, Shahim Essaid, Bryan Laraway

Developing a Standard Data Exchange in Support of Patient Cost Transparency for Devices, Services and Collection of Services Using FHIR APIs for Exchange of Data

Solving Challenges and Creating a Better Customer Experience with Patient Cost Transparency

In its fifth year, the HL7 Da Vinci Project continues to channel industry's best and brightest across provider, payer and vendor sectors to solve interoperability problems and increase efficiencies. More than a dozen use cases and Implementation Guides (IGs) have been developed to date and organizations are using them.

For example, real-world progress was demonstrated at this summer's CMS HL7 FHIR Connectathon. Google, Hook. md, Infor, MCG, Onyx, Palmetto, and Redox collaboratively leveraged CRD, DTR, PAS IGs as building blocks inclusive of using CQL for populating a questionnaire to demonstrate how HL7 Fast Healthcare Interoperability Resources (FHIR®) can reduce administrative burden for prior authorizations.

To learn more about the use cases and the status of all of the Da Vinci IGs, visit the Use Case Status Tracking pages at Da Vinci Implementation Guide Dashboard *(https://confluence.hl7.org/display/DVP/ Da+Vinci+Implementation+Guide+Dashboard*).

Patient Cost Transparency Implementation Guide

Of all the IGs, Patient Cost Transparency (PCT) has particularly gained interest and attention this year. The goal of the IG is to 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 include:

- 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

Cost transparency of services for patients is not historically provided in USA healthcare in a consistent way. The complexities of providing costs are inherent in our systems, especially when multiple providers contributing to one patient's period of care/service (e.g., surgery) and coupled with payer's complex benefits, plan structures, and

By Vanessa Candelora, Project Manager, HL7 Da Vinci Project and Senior Consultant, Point-of-Care Partners
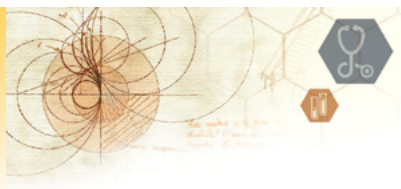
Project Focus

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.

all the contract structure, discounts available and financial aid. Often additional unknown factors also contribute to a patient's care.

Consumers have increasingly been able to achieve better transparency into their costs outside of healthcare. When you want to renovate your home, fix your car, or buy milk—you can request a quote or clearly view the price. Bodies are not as simple as cars. With a mechanic, you can get an estimate and then when your car is being serviced, they stop, call you, and mention, "When I was fixing your brakes, I noticed XYZ was broken...do you want me to fix it?" In contrast, the surgeon is not going to wake a patient up while on an operating table. With healthcare, you frequently sign up for services and then cross your fingers when you receive the bill, often having no idea how hard your wallet will be hit.

The No Surprises Act (NSA) became effective January 1, 2022 and was passed to end surprise billing. One piece of the law requires that patients receive a comprehensive estimate of their out-of-pocket costs for expected services and items in advance, and the ability to shop for the best fit to meet their healthcare needs. Note that cost is one factor of the equation— quality, location, language, providers accepting new patients, are just some of the others—that all need to fit together to truly empower patients to be better stewards of their healthcare.

Da Vinci expects continued regulatory activity to improve cost transparency for patients. The

industry is in a bit of limbo, with emerging standards, but no clearly adopted or mandated way to solve this problem. The community expects continued CMS/ONC interoperability mandates for increased use of APIs and is working to help shape a solution that will fill this void for transparency in coverage, working across payers, providers on a long-term approach to unlock the workflows and data necessary to ensure patients get accurate estimates. Litigation, arbitration and lawsuits that are currently pending show the government is holding the industry accountable for meeting regulations. For example, fines to a few well known hospital systems (https://www.fiercehealthcare.com/providers/after-months-warnings-cms-begins-handing-out-fines-hospitals-failing-price-transparency) have prompted many laggards and reluctant industry participants to get their rates published to demonstrate compliance with the first set of regulations.

While we await more regulatory activity, it's clear to the Da Vinci community that there is an opportunity for FHIR. The promise of pending regulations is allowing parties to reevaluate and update their processes, contracts, and flow of information.

Instead of waiting for the regulations, Da Vinci's Patient Cost Transparency use case team is looking at the long term, end-to-end problem, and encourages this community to take a thoughtful, incremental approach to building FHIR APIs and the necessary crosswalks to other existing and

Solving Challenges and Creating a Better Customer Experience with Patient Cost Transparency

emerging standards, so we can begin to unlock these long standing industry challenges.

While the community acknowledges and is informed by regulatory and potential policy inputs, and where there are specific external regulatory or industry dates that can inform and help prioritize the order of the work, as always the work of Da Vinci is not to be constrained to only meeting regulation or anticipated regulation. In all of our work, the focus is to create the supporting rails and connectors to achieve semantic interoperability and deliver value for all stakeholders to begin to unleash the data needed, so industry participants can get to true price transparency for patients. We acknowledge this is only one part of the necessary activities to move forward." The community appreciates clear support and alignment on goals from Da Vinci's Steering Committee issued statement of scope around PCT. The full text is here: *https://confluence.hl7.org/display/DVPDa+Vinci+Steering+Committee+PCT+Scope+Statement*

The team has developed the initial definition of a standard API for creating a "Good Faith Estimate (GFE)" FHIR bundle and to return an Advanced Explanation of Benefit (AEOB) FHIR bundle. The IG balloted and is slated for initial publication of the STU1 draft standard once ballot reconciliation is complete.

Alongside this work, it is imperative that payers and providers ensure they have a process to update their network directories with accurate provider information, and that this data is available for use by partners now more than ever with NSA requiring verification of information every 90 days and updates to be made within two days of notification. There was a great demonstration at the July CMS HL7 FHIR Connectathon during the combined FAST National Directory and Da Vinci Plan Net/Provider Directory track showing how FHIR standards can be leveraged for providers to update their information once and appropriate business partners (e.g. payers) can leverage updated, authenticated, verified provider data in a distributed directory model, reducing the burden for updating information several times and supporting the goal for patients to access in-network providers for anticipated services.

While business processes and strategy of data management continue to be some of the biggest underlying challenges to price and cost transparency, getting the data flowing between siloed systems and business partners is essential to progress. Thinking about how your data fits together to create a better customer experience for a patient is critical; consider the services they can expect, how their benefits apply and their out-of-pocket costs. ◼

Come join the work underway at an IG work group, upcoming FHIR Connectathon or pick up the guides and use them

Use Case confluence site:
https://confluence.hl7.org/display/DVP/Patient+Cost+Transparency

Implementation Guide:
PCT CI IG: https://build.fhir.org/ig/HL7/davinci-pct/#overview
PCT Jan22 Ballot: http://hl7.org/fhir/us/davinci-pct/2022Jan/

Project Scope Statement:
Project Scope Statement approved by HL7 (FM Sponsor, PIE co-sponsor)

Zulip Chat
https://chat.fhir.org/#narrow/stream/301151-Da-Vinci.20PCT

Eight Professionals Honored as Innovative Health IT Leaders

HL7 Da Vinci Project Honors 2021 Community Champions

As an HL7 Accelerator, the Da Vinci Project's primary mission is to improve the healthcare delivery system by accelerating interoperability standards while reducing administrative burden and improving health outcomes, with a focus in value-based care. Da Vinci is creating change through the collaboration of providers, payers and vendors who have this core mission as their focus. Our greatest strength is our people, and to transform healthcare delivery, we need to foster and attract diverse talent.

Last year Da Vinci created the Community Champions Program to recognize and foster talented problem solvers. The Community Champion Program recognizes individuals who display the unique traits of industry above self, a passion for making the healthcare system work better, supporting others, and promoting change. The honorees are highlighted below.

Dave DeGandi

Senior Interoperability Strategist
Cambia Health Solutions

"The use case implementation guide standards being created by the Da Vinci project are the best option in the healthcare industry for scalable solutions to improve payer/provider interoperability."

Holding the unique honor of appearing in both the inaugural class of champions in 2020 and in the Class of 2021, David DeGandi continues to be a leader in advancing modern healthcare by expanding the implementation of the HL7 Da Vinci Project. Dave has created and worked on the Value Metrics Framework, which can be applied to all use cases. Dave also worked on several "firsts" in the nation, including the release of the CRD Smart on FHIR app into the Epic app orchard, and the CMS 278 exception for prior authorization support. His collaborative spirit and commitment to advancing healthcare through interoperability and the Da Vinci project show his passion for innovation and improving the healthcare experience.

Rajesh "Raj" Godavarthi

Associate Vice President of Technology and Interoperability
MCG Health

"It's an honor to participate in the HL7 Da Vinci Project because it means you have a role in building the future of healthcare technology. This translates to fewer burdens for both payers and providers, and most importantly, improved outcomes for patients."

The next champion, "Raj" Godavarthi, is highly engaged and is always willing to share the Da Vinci story. He was named the co-lead for the HL7 Da Vinci Project's burden reduction use cases in prior authorization support (PAS), coverage requirement discovery (CRD), and documentation templates and rules (DTR). He has shared his experiences at MCG in numerous presentations to provide a roadmap for others to become involved in the project. He also embarked on an extensive initiative to educate payers and providers about the future of prior authorization automation by creating a free monthly webinar series that has attracted thousands of individual registrations from payers, third-party administrators, providers, government agencies and quality auditors. He continues to lead interoperability efforts and build bonds between other Da Vinci subject matter experts as well as those new to the project.

Eight Professionals Honored as Innovative Health IT Leaders

Heather Kennedy
Principal Interoperability Architect
Humana

"As a twenty something new to healthcare, I never went to the doctor, used a portal or even thought about what a care team was. In my thirties, while navigating cancer, I quickly learned the importance of having the right data at the right place at the right time. It is beautiful to see the healthcare ecosystem partners come together through Da Vinci and solve problems that I know will improve patient outcomes and remove provider burden."

Heather Kennedy has demonstrated innovative technical leadership to improve payer and provider business for members and patients while bringing together other experts and leaders across the industry to deliver on the vision of value-based care that the Da Vinci project supports. She has provided subject matter expertise and thought leadership, and her continued real-world experience is why we are recognizing her continued efforts.

Heidi Kriz
Assistant Director Medical Policy
Regence

"Our goal is to be an industry leader in transforming health care processes to improve care access as well as the patient and provider experience, ultimately resulting in better patient outcomes. FHIR is a next-generation standards framework, and the future of healthcare data exchange allowing for a significantly greater degree of automation. Using data, automation and interoperability technology for service reviews improves speed-to-care for members while reducing the burden for providers."

Heidi Kriz has the heart and the passion to drive prior authorization forward. She is a rising star and is spreading the word to the nation on how we can make healthcare better for patients, members, providers and payers—a "win, win, win, win." She walks the talk of making change to improve upon the opportunities we have in creating a healthier future for all. Her work on prior authorization is where she started, but her intelligence and her drive has led her to seek more about the use of FHIR and its capabilities to achieve better health outcomes.

Alice O'Carroll
Interoperability Product Manager
Florida Blue/GuideWell

"Engagement in Da Vinci is vital for organizations who want to ensure their roadmaps will align with the future industry standards. It also affords organizations the opportunity to have a seat at the table where the standards are being developed. This has taken on an ever-increasing importance as Federal mandates have started to require adherence to some of the IGs coming out of Da Vinci work groups."

Alice O'Carroll has stepped into Da Vinci to represent Florida Blue from a payer perspective and brings her previous provider expertise to the Patient Cost Transparency Implementation Guide efforts. Her leadership as co-chair brings providers and payers together, and she willingly presents on many stages, including HIMSS, in order to bring awareness and transparency to the implementation guide and future regulations.

Semira Singh
Director, Population Health Informatics
Providence

"Da Vinci creates an opportunity for payers, providers, and vendors to come together and develop national standards that promote transparency, success, and help further the adoption of Value Based Care (VBC). This incredibly important work cultivates an ecosystem where a common healthcare data language is spoken to empower organizations to make data driven decisions that positively impact patient care."

Semira Singh has served as a pillar of strength and innovation within Da Vinci's provider community, with a focus on seeking to establish a scalable implementation pathway for value-based care use cases. She has served as a pioneer in working with partners on piloting challenging first initiatives, such as member attribution, and has single handedly led the technical initiatives within Providence that aim to convert these concepts into reality. She has been a great collaborator with Providence's payer partners in engaging them within a Da Vinci framework, championing standards-based approaches and a collaborative sensibility.

DA VINCI
HL7 FHIR

Jason Teeple

Enterprise Architect
Evernorth

"Da Vinci provides us with an opportunity to work cooperatively to use standards, use cases and implementation guides to improve interoperability for the entire healthcare system."

Jason Teeple's dedication to various use cases and implementation guides has truly created an opportunity to improve interoperability for the entire healthcare system. From burden reduction and prior authorization to payer data exchange, his insight and ideas have made a difference.

Brent Zenobia

Chief Strategist
Novillus

"By reducing the administrative burden on health care providers I believe Da Vinci is our best hope for easing physician burnout."

Brent Zenobia has been instrumental in getting the risk adjustment use case off the ground, and he is dedicated to making health care better. He has produced numerous slide decks to educate and help the community increase its understanding and knowledge. He also actively digs into the work, taking several examples and identifying additional elements to strengthen them. He works very cooperatively and, like many of his peers, he is truly passionate about getting it right.

Many Thanks to our Champions!

"On behalf of the HL7® Da Vinci Project, our Steering Committee and members, we are delighted to recognize our 2021 Da Vinci Community Champions. The important work of our FHIR accelerator is powered by people dedicated to solving today's interoperability challenges. Each individual was nominated by their peers based upon their daily applied effort, exemplary achievements and unique contributions to the Da Vinci Project in 2021," said Kirk Anderson, HL7 Da Vinci Project Steering Committee Member and Vice President and Chief Technology Officer at Cambia Health Solutions.

He added, "The growth and advancement of the industry standards, the expansion of FHIR community between payers and providers, and individuals like these champions are fueling the industry towards true interoperability. We will continue to identify and lift up community members who exemplify our goals, and to encourage and inspire others to join us on this incredible journey of building the future standards that are already improving the delivery of care."

Congratulations to all the 2021 HL7 Da Vinci Project Community Champions, whose efforts continue to inspire and transform healthcare! ◼

By Leslie Amoros, Communications Lead, HL7 Da Vinci Project and Vice President and Senior Consultant, Imprado

⬢**HL7**˚FHIR˚

Membership Team Assesses and Prioritizes Possible New Areas of Work

FHIR at Scale Taskforce (FAST) Establishes Steering Committee

Earlier this year, FAST began transitioning from an ONC-convened initiative, focused on solving infrastructure challenges to enable scalable FHIR adoption, into an HL7 FHIR Accelerator and much progress has already been made! Now FAST, while continuing current work in progress, will also look to prioritize new projects moving forward. Before we get into that, let's cover how we got here.

Founding members joined FAST between January and April 2022. Transitioning from a volunteer-driven organization to the HL7 Accelerator membership model seemed like a tall order, but a diverse and prominent group of organizations came forward to join and express their commitment to building the FHIR infrastructure to enable scalable adoption. Once founding members were in place, they implemented weekly member meetings to build the foundation for ongoing governance.

Steering Committee Elections

In June, FAST held elections to establish the Steering Committee whose purpose is to serve as the elected and representative body that will evaluate and prioritize the focus of FAST work and most especially how resources are applied to support the work. The FAST Steering Committee was designed to include representation from two provider organizations, two payer organizations and two technology/health IT vendor organizations as well as have representation from HL7, Centers for Medicaid and Medicare Services (CMS) and the Office of the National Coordinator for Health Information Technology (ONC), HL7 and 4 at-large seats. The results of the election and the new FAST Steering Committee are detailed below.

FAST Steering Committee	
2 Providers	Ashish Atreja, UC Davis Health
	Deepak Sadagopan, Providence
2 Payers	Robert Holzer, HCSC
	Sheryl Turney, Elevance
2 Technology/ HIT Vendors	Sanford Coker, AWS
	Duncan Weatherston, Smile CDR

Next Steps

Now that the FAST governance structure is in place, the team looks to identify the next tranche of work FAST will take on. As stated previously, FAST already had implementation guides underway when

By the FAST Project Team

FAST 2022 Founding Members

the transition to a FHIR Accelerator began, so work on version 2 of the Security, Identify and Directory related implementation guides will likely be on the nearer term horizon for new work. FAST leadership has started consideration of completely new projects as well. It's important that any new project fall squarely in the scope of building infrastructure to enable scalability rather than functional use cases the other FHIR Accelerators are working on. New FAST projects will:

- Address a common need across functional use cases
- Focus on scaling FHIR and driving towards a national, FHIR-based, API network
- Enable dynamic use of restful APIs based on FHIR

Some examples of new projects under consideration are the architecture approach needed for consent" and scaling architecture as it relates to TEFCA among several others. FAST leadership know that broad industry input is important to ensure FAST is addressing the highest priority infrastructure challenges. With that in mind, we're asking for your input and suggestions for possible new use cases by submitting this form.

Learn More!

The interoperability community can learn more about FAST, its current work and schedule of public meetings by visiting the FAST Confluence page at *https://confluence.hl7.org/display/FAST/ FHIR+at+Scale+Taskforce+%28FAST%29+Home*. To learn more about becoming a FAST member, please contact *fast@hl7.org*. ∎

CodeX Advances Oncology Data Sharing, Starts New Domains

CodeX's evolving efforts around prior authorization, plus new domains dedicated to genomics and cardiovascular health, looks to leverage lessons learned from oncology data-sharing

The first half of 2022 has been one of tremendous growth for the CodeX community, with the launch of new domains dedicated to genomics and cardiovascular health. CodeX now boasts 10 different use cases through which community members are working to demonstrate the value of using mCODE-based data in clinical care scenarios. The addition of the new domains offers a variety of new opportunities to positively impact patient care using mCODE and other open data standards to improve system-to-system communication and data sharing. CodeX use cases highlight opportunities to support health care and research in oncology and beyond.

CodeX members began applying mCODE, an open standard language for cancer data, in use cases addressing clinical trial matching, cancer registry reporting, and developing and automating the exchange of radiation therapy treatment summaries. Now teams are advancing use cases through planning phases in preparation for executing pilots, in addition to beginning discovery and pre-discovery work in other areas to address challenges and barriers to care delivery. Some recent use case highlights follow.

Prior Authorization in Oncology Use Case

The CodeX Prior Authorization in Oncology use case team is completing a robust planning phase that addresses the complex process associated with obtaining prior authorization (PA) for aspects of care delivery. A recent public call hosted by CodeX confirmed the prior authorization use case aligns with the Centers for Medicare & Medicaid Services' aspirations to improve the care experience by all involved, including the patient, and to deliver optimal care in a timely manner. The use case team continues with important Coverage Requirements Discovery (CRD) process development, drafting technical specifications and pilot metrics, supporting and leading to the planned synthetic pilot in December 2022/January 2023.

The use case team is interested in having additional stakeholders join this effort. If interested, please contact use case coordinator Kim Boyd. The Prior Authorization in Oncology team meets with the public monthly on the fourth Tuesday of the month. See call details here: *https://confluence.hl7.org/pages/viewpage.action?pageId=66941426#PriorAuthorizationinOncology-ConferenceCallSchedule&Dial-Ins*

GenomeX: Enhancing Access to Genomic Data for Improved Patient Care

Healthcare and EHR workflows lack the collection of standardized, machine-readable data to support reporting and analysis of genomic data. Genomic data provides critical information for identifying treatment options in cancer and other disease states. The standardized transmission of genomic data is important for population health management. The GenomeX community continues their work to identify opportunities to advance the interoperability of genomic data using HL7 Fast Healthcare Interoperability Resources (FHIR®) resources. Over 27 organizations are working together to develop leadership teams and timelines for two use cases:

- FHIR Genomics Data Exchange – Designing and building scalable FHIR genomics interfaces so that genomic data can easily be shared between laboratories, EHRs and/or genomics repositories
- FHIR Genomics Operations – Enabling access to complex genomic data through APIs so that developers can more easily develop and populate data for a range of genomic applications

The community is interested in engaging all stakeholders in the use cases, especially those from laboratories and healthcare organizations. Join the GenomeX effort to accelerate the adoption of FHIR genomics by contacting facilitator Arthur Hermann or coordinator Mallory Carellas.

CardX: Developing Smarter Cardiovascular Data to Improve Adherence and Outcomes

The CardX use case team intends to improve provider and patient adherence to national hypertension management guidelines through FHIR resources and open APIs that leverage treatment standards. This use case is in the early stages of development and, as with the GenomeX use case, takes the CodeX and mCODE experience into new disease states. CodeX invites all interested stakeholders to join in defining and discovering use case possibilities. For information on the goals and objectives of the Cardiovascular domain, please visit: *https://confluence.hl7.org/display/COD/Cardiovascular*. Contact Kim Ball to learn more about becoming involved with the CardX Hypertension Management Use Case. CardX plans to host its first public call in September. Look for more information via the CodeX Calendar and LinkedIn.

Stay in Touch

CodeX encourages stakeholders across the oncology and broader patient health ecosystem to stay up to date with the latest mCODE and CodeX news and project updates by visiting the CodeX Confluence home page and clicking "Sign up for CodeX Communications." Reach out to Steve Bratt *sbratt@mitre.org*, Su Chen *suchen@mitre.org* or Kim Ball *kim.ball@pocp.com* with any questions! Explore these links for ongoing CodeX work and stay informed of upcoming calls and activities:

- For more information about CodeX public calls and activities, please visit: *https://confluence.hl7.org/display/COD/CodeX+Calendar*
- To learn more about the real-world application of mCODE, register for the monthly mCODE Community of Practice call (last Friday of the month, 12-1pm ET): *https://confluence.hl7.org/display/COD/mCODE+Community+of+Practice*
- To view the high-level CodeX Project Plan, please visit: *https://confluence.hl7.org/display/COD/CodeX+Program+Planhttps://confluence.hl7.org/display/COD/CodeX+Program+Plan* ■

By the CodeX Project Management Team

The Gravity Project

Accelerating National SDOH Data Standards

Since May 2019, over 2,500 stakeholders across the health care, health IT, community-based, federal and state agency, payer, academic, and consumer advocacy sectors have signed up as members of the Gravity Project. Key project accomplishments and target milestones over the past year are:

HL7 FHIR Connectathons. The Gravity Project track regularly participates in scheduled HL7 FHIR Connectathons. In July 2022, the Gravity SDOH Track presented at the 2022 July CMS FHIR Connectathon, which consisted of two sessions where industry organizations demoed Use Cases as part of real-world testing scenarios. The goal of of the Gravity track was to understand implementation needs and exercise testing capabilities to advance exchange of health-related social needs information using the Gravity SDOH FHIR Implementation Guide to improve whole-person care.

Success Story: Transforming Assessments and Referrals for NJ Residents. A project funded by the Centers for Medicare & Medicaid Services, called Integrated Care for Kids (InCK), aims to significantly improve health outcomes for at-risk pediatric Medicaid recipients by identifying them far earlier, and then delivering integrated care coordination that connects them to health and human services across an array of partner organizations (e.g., schools, housing, food, and child welfare, and mobile crisis-response services). In doing so NJ InCK's team partnered with MayJuun and Open City Labs (OLC) to scale the Gravity Project's standards for identifying and addressing patients' social needs.

Gravity's Comments to CMS's Proposal in 2023 Hospital IPPS Proposed Rule (CMS-1771-P). The Gravity Project submitted comments to the CMS proposed rule on the Hospital Inpatient Prospective Payment System and associated changes for 2023, File No. CMS-1771-P, published May 10, 2022, and specifically

Launched in May 2019 by the Social Interventions Research and Evaluation Network (SIREN) with funding from the Robert Wood Johnson Foundation, the Gravity Project is a national public collaborative that is developing data standards to help reduce current barriers for documenting and exchanging social risk and protective factors within health care and other sectors. In August 2019, the Gravity Project became an official HL7 FHIR Accelerator Project.

By Evelyn Gallego, Program Manager, Gravity Project

To learn more about the Gravity Project, please visit: *https://thegravityproject.net/*

For more information on the multi-SDOH domain ICD-10 CM submission, please visit: *https://confluence.hl7.org/display/GRAV/ICD-10+Coding+Submissions*

To view the latest consensus voted master datasets by SDOH domain, please visit: *https://confluence.hl7.org/display/GRAV/Terminology+Workstream+Dashboard*

For more information on the HL7 FHIR Accelerator Program, please visit: *https://www.hl7.org/about/fhir-accelerator/*

on CMS's welcome proposal to require two new screening measures in the Hospital Inpatient Quality Reporting (IQR) Program to measure social drivers of health and integrate social drivers of health factors into Medicare quality reporting and payment. View comment letter here.

CMS Proposed Rules, requiring standards. On January 12, 2022, CMS published proposed policy and technical changes for Medicare Advantage in 2023. Proposed MA 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 intends to align the required standardized questions with the SDOH Assessment data element integrated in USCDI v2. Final rule just released. Medicare Program; Contract Year 2023 Policy and Technical Changes to the Medicare Advantage and Medicare Prescription Drug Benefit Programs, 87 Federal Register 27704, 27726-27727 (May 9,

2022) (requiring Special Needs Plans to include standardized questions on housing stability, food security, and access to transportation aligned with Gravity Project's assessment standards in USCDI v2)

Upcoming Activities

The Gravity Project will begin addressing the digital inequity domain from August to November. We are looking for a wide range of community engagement for content submission and domain subject matter experts to serve as expert references in vetting screening tools for validity, developing necessary diagnosis terms and definitions aligned with the evidence, identifying appropriate patient-centered goal statements, and ensuring core programs and professions are included in all intervention terminology. If you are interested in learning more about the pilots, please email: *gravityproject@ emiadvisors.net* ∎

HL7 Standards Published Since May 2022

STU Publication of HL7 FHIR® Implementation Guide: Risk Adjustment, Release 1 – US Realm

Informative Publication of HL7 Short Term Solution – V2: SOGI Data Exchange Profile

Errata Publication of US Core STU5 Release 5.0.1

STU Publication of HL7 FHIR® Implementation Guide: Digital Insurance Card, Release 1 – US Realm

STU Publication of HL7 FHIR® Implementation Guide: Subscription R5 Backport, Release 1

STU Update Publication of HL7 CDA® R2 Implementation Guide: Reportability Response, Release 1 STU Release 1.1- US Realm

STU Update Publication Request of HL7 CDA® R2 Implementation Guide: Public Health Case Report – the Electronic Initial Case Report (eICR) Release 2, STU Release 3.1 – US Realm

Informative Publication of HL7 FHIR® Implementation Guide: COVID-19 FHIR Clinical Profile Library, Release 1 – US Realm

STU Publication of HL7 CDA® R2 Implementation Guide: NHSN Healthcare Associated Infection (HAI) Reports, Release 4, STU 2 – US Realm

STU Publication of HL7 FHIR® Implementation Guide: Clinical Data Exchange (CDex), Release 1 STU1.1.0 – US Realm

STU Update Publication of HL7 FHIR Profile: Occupational Data for Health (ODH), Release 1.2

2022 Technical Steering Committee Members

EX-OFFICIO
Charles Jaffe MD, PhD
Health Level Seven International
cjaffe@HL7.org

Andrew Truscott
Accenture
andrew.j.truscott@accenture.com

CHIEF STANDARDS DEVELOPMENT OFFICER
Daniel Vreeman, DPT
Health Level Seven International
dan@HL7.org

CDA MANAGEMENT GROUP REPRESENTATIVE
Linda Michaelsen
Optum
linda.michaelsen@optum.com

FHIR MANAGEMENT GROUP REPRESENTATIVE
Josh Mandel, MD
SMART Health IT
jmandel@gmail.com

IMPLEMENTER REPRESENTATIVE
Rick Geimer
Lantana Consulting Group
rick.geimer@lantanagroup.com

Bryn Rhodes
Alphora
bryn@alphora.com

INTERNATIONAL AFFILIATE REPRESENTATIVE
Giorgio Cangioli
HL7 Italy
giorgio.cangioli@gmail.com

Christof Gessner
HL7 Germany
christof.gessner@gematik.de

TSC CHAIR
Austin Kreisler
Leidos, Inc.
AUSTIN.J.KREISLER@leidos.com

TSC CHAIR ELECT
Jean Duteau
Duteau Design Inc
jean@duteaudesign.com

US REALM REPRESENTATIVE
Chris Shawn
U.S. Department of Veterans Affairs
christopher.shawn2@va.gov

V2 MANAGEMENT GROUP REPRESENTATIVE
Amit Popat
Epic
amit@epic.com

WORKING GROUP REPRESENTATIVE
Gora Datta
CAL2CAL Corporation
gora@cal2cal.com

Ulrike Merrick
Vernetzt, LLC
rikimerrick@gmail.com

Melva Peters
Jenaker Consulting
melva@jenakerconsulting.com

AbdulMalik Shakir
Hi3 Solutions
abdulmalik.shakir@hi3solutions.com

Sandra Stuart
Kaiser Permanente
sandra.stuart@kp.org

TSMG REP TO TSC
Robert McClure, MD
MD Partners, Inc.
rmcclure@mdpartners.com

ADHOC MEMBER
David Pyke
Audacious Inquiry
dpyke@ainq.com

Benefactors

Organizational Members

BENEFACTORS

Accenture
Allscripts
Amazon Web Services, Inc.
American Medical Association
AmeriHealth Caritas
Apple Inc.
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 Office
Food and Drug Administration
Google
Graphite Health Inc
Independence Blue Cross
Intermountain Healthcare
InterSystems
Kaiser Permanente
MAK-SYSTEM Group Limited
MuleSoft
Office of the National
    Coordinator for Health IT
Onyx Technology LLC
Optum
Partners HealthCare
    System, Inc.
Pfizer
Philips Healthcare
Quest Diagnostics, Incorporated
Ready Computing Inc.
U.S. Department of
    Veterans Affairs
UnitedHealthcare

GOLD

Academy of Nutrition & Dietetics
ACS Solutions
ADVault, Inc.
Aetna
Alphora
Altarum
American College of Physicians
American Heart Association
Analog Informatics Corporation
ASSYST, Inc.
Asymmetrik, a Blue
    Halo Company
Audacious Inquiry
Availity, LLC
Azuba Corporation
Blue Cross Blue
    Shield Association
BlueCross
    BlueShield of Alabama

Brooklyn Data Co.
CAL2CAL Corporation
Carradora Health, Inc.
CITRIOM LLC
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
Health Care
    Service Corporation
Health Intersections Pty Ltd
Henry M. Jackson Foundation
HHS/Office of Inspector General
ICF
ICHOM
Innovaccer Inc.
Inovalon Inc.
Intelligent Medical
    Objects (IMO)
iNTERFACEWARE, Inc.
Isoprime Corporation
Johnson & Johnson
Kailo Medical
Karkinos Healthcare
    Private Limited
Labware, Inc.
Massachusetts Health
    Data Consortium
MaxMD
Medallies, Inc
MedCom
Michigan Health
    Information Network
Microsoft Corporation
Milliman IntelliScript
MY Synergy Ltd.
National Association of
    Community Health Centers
National Association of
    Dental Plans
NeuralFrame
NICTIZ
NIH/Department of Clinical
    Research Informatics

Northwestern Medicine
Novillus
Optimoz, Inc.
OtisHealth
P.G.M.D. Consulting S.r.l.
Particle Health
PenRad
PROMTIME
Public Health
    Informatics Institute
Redox
Regenstrief Institute, Inc.
Registry Clearinghouse
Reliv
Rhoads Systems Inc.
Rochester RHIO
RTI International
Samvit Solutions
Security Identification
    Systems Corporation
Security Risk
    Solutions, Inc. (SRS)
SenecaGlobal
Seoul Medical Informatics
    Intelligence Lab Inc.
SMART Health IT
St. Jude Children's
    Research Hospital
Starwest Tech
System Soft Technologies
Tata America
    International Corp (TAIC)
The Sequoia Project
Thenoz Médica S.A. de C.V.
Therap Services LLC
UC Davis School of Medicine
UCSF Center for Digital
    Health Innovation
Univ of TX Health Science
    Center San Antonio
University of Arkansas
    Medical Sciences
USAging
UW Medicine Information
    Technology Services
Vermont Oxford Network
VICO Open Modeling
Vynyl
WSO2
Zocdoc, Inc.

CONSULTANTS

Accenture
ACS Solutions
AEGIS.net, Inc.
Alphora
Altarum
Amazon Web Services, Inc.
ASSYST, Inc.
BookZurman
Brooklyn Data Co.

Calian Digital Solutions Ltd.
Carradora Health, Inc.
CITRIOM LLC
Computable Publishing LLC
Curandi
Drummond Group
Duteau Design Inc
DynaVet Solutions, LLC
Elimu Informatics Inc.
EMI Advisors LLC
EnableCare LLC
EPAM
GigaTECH LLC
Health eData Inc.
Health Intersections Pty Ltd
Healthcare Integrations, LLC
Hi3 Solutions
HLN Consulting, LLC
ICF
iNTERFACEWARE, Inc.
J Michael Consulting, LLC
Lantana Consulting Group
Mathematica Policy Research
Oddball, Inc.
Outburn Ltd.
P.G.M.D. Consulting S.r.l.
Point-of-Care Partners
Professional Laboratory
    Management, Inc.
Rhoads Systems Inc.
Rochester RHIO
Samvit Solutions
SavantSolutions4HIT, LLC
Security Risk
    Solutions, Inc. (SRS)
Stedi
SynergyReactor LLC
System Soft Technologies
Telligen
Thenoz Médica S.A. de C.V.
Vernetzt, LLC
VICO Open Modeling
Vitamin Software Inc
WaveOne Associates Inc.
Wi4 Corporation

GENERAL INTEREST

Academy of Nutrition & Dietetics
Administration for Children
    and Families
Agence eSante Luxembourg
Alabama Department of
    Public Health
Alliance for Cell Therapy Now
Alliance Health
American Academy
    of Neurology
American Clinical
    Laboratory Association
American College of Physicians
American Dental Association

Organizational Members *(continued)*

American Heart Association
American Immunization Registry
    Association (AIRA)
American Medical Association
American Society of Clinical Oncology
Avaneer Health
Baylor College of Medicine
Blue Cross Blue Shield Association
CA Department of Public Health
California Department of Health
    Care Services
CAQH
CDISC
Centers for Disease Control and
    Prevention/CDC
Centers for Medicare & Medicaid Services
Centre for Development of
    Advanced Computing
Centrum e-Zdrowia (e-Health Centre)
College of American Pathologists
Connecticut Department of Public Health
Contexture
Contra Costa County Health Services
Council of State and Territorial
    Epidemiologists
CU Anschutz Medical Campus
DGS, Commonwealth of Virginia
DirectTrust
Duke Clinical & Translational
    Science Institute
eHealth Initiative
European Medicines Agency
Federal Electronic Health Record
    Modernization Office
Florida Department of Health
Food and Drug Administration
Georgia Department of Public Health
Government of the Northwest Territories
Graphite Health Inc
HAS (Haute Autorite de Sante)
Health and Welfare Information
    Systems Centre
Health Sciences South Carolina
Henry M. Jackson Foundation
HHS/Office of Inspector General
HSE - Health Service Executive
I3L @ GaTech
ICCBBA, Inc.
ICH
ICHOM
Idaho Bureau of Vital Records
    and Hlth Stats
Indian Health Service
IPRO
Japan Pharmaceutical
    Manufacturers Association
Massachusetts Health Data Consortium
MedCom
Michigan Health Information Network

Minnesota Department of Health
NAACCR
National Association of Community
    Health Centers
National Association of Dental Plans
National Cancer Institute
National Council for Prescription
    Drug Programs
National Institute of Standards
    and Technology
National Library of Medicine
NC Division of Public Health
NCQA
Nebraska Dept of Health and
    Human Services
Nebraska Health Information
    Initiative (NeHII)
New York State Office of Mental Health
NHS Digital
NICTIZ
NIH/Department of Clinical
    Research Informatics
NJ Division of Developmental Disabilities
NJDOH
NYS DOH, Office of Quality and
    Patient Safety
Object Management Group (OMG)
Office of the National Coordinator
    for Health IT
OR.NET
Oregon Health and Science University
Oregon Public Health Division
PA Health and Human Services
    Delivery Center
Pharmaceuticals & Medical Devices Agency
Public Health Informatics Institute
Radiological Society of North America
RTI International
SLI Compliance
SMART Health IT
Social Security Administration
State of New Hampshire
SYNCRONYS
Tennessee Department of Health
The Joint Commission
The Sequoia Project
U.S. Department of Veterans Affairs
UC Davis School of Medicine
UC Irvine Health Sciences
UCSF Center for Digital Health Innovation
United Network for Organ Sharing
United Physicians
Univ of TX Health Science
    Center San Antonio
University of AL at Birmingham
University of Arkansas Medical Sciences
University of Minnesota
University of Texas Medical Branch
    at Galveston

USAging
UW Medicine Information
    Technology Services
Vermont Oxford Network
Virginia Department of Corrections
Virginia Department of Health
Westat
Wisconsin Department of Health Services
WNY HEALTHeLINK
WorldVistA
WV Department of Health and
    Human Resources

PAYERS

Aetna
AmeriHealth Caritas
Anthem, Inc.
Arkansas Blue Cross Blue Shield
Blue Cross Blue Shield of South Carolina
BlueCross BlueShield of Alabama
BlueCross BlueShield of Tennessee
Cambia Health Solutions
Clover Health
Evernorth
GuideWell
Health Care Service Corporation
Healthspring
Humana Inc
Independence Blue Cross
Magellan Health
SCAN Health Plan
UnitedHealthcare
WPS Health Solutions

PHARMACY

Johnson & Johnson
Merck & Co. Inc.
Parexel International
Pfizer

PROVIDERS

1Life, Inc.
Affidea Spain
Albany Medical Center
Allendale County Hospital
ARUP Laboratories, Inc.
Babylon Health
Benedictine Health System
Best Option Healthcare PR
Blessing Hospital
Boston Medical Center
Cedars-Sinai Medical Center
Central Illinois Radiological Associates
Children's Mercy Hospitals and Clinics
CLM Center for Life Management
Curai Health
CVS Health
Diagnostic Laboratory Services
HCA IT&S
Intermountain Healthcare

JBH Solutions
Johns Hopkins Hospital
Kaiser Permanente
Laboratory
    Corporation of America
Mary Greeley Medical Center
Mayo Clinic
Mediclinic Southern Africa
MolecularDx, LLC
MultiCare Health System
NeuroPsychiatric Hospitals
New York-Presbyterian Hospital
North Carolina Baptist
    Hospitals, Inc.
Northwestern Medicine
Partners HealthCare
    System, Inc.
Providence St. Joseph Health
Quest Diagnostics, Incorporated
Rady Children's Hospital
Redington-Fairview Hospital
Regenstrief Institute, Inc.
Spectrum Health
St. Jude Children's
    Research Hospital
Stanford Children's Health
StationMD, PC
The Children's Hospital of
    Philadelphia
UK HealthCare
University of Nebraska
    Medical Center
University of Utah Health Care
UT M.D. Anderson
    Cancer Center

VENDORS

3 Net Wise, Inc.
Advanced Concepts AG
ADVault, Inc.
Allscripts
Analog Informatics Corporation
Apelon, Inc.
Apple Inc.
Applied PilotFish
    Healthcare Integration
Applied Research Works
Appriss Health
Asymmetrik, a Blue
    Halo Company
athenahealth
Audacious Inquiry
Availity, LLC
Azuba Corporation
Beckman Coulter, Inc.
Becton Dickinson
Biology Works
Brightspace
    Advertising PTY LTD

By Light Professional IT
    Services LLC
CAL2CAL Corporation
Care Everywhere, LLC
Caristix
Cerner Corporation
Change Healthcare
CitiusTech Healthcare
    Technology Private Limited
Clinetic, Inc.
Clinical Architecture LLC
Clinical Software Solutions
Clinicomp, Intl
CloverDX
Cognitive Medical Systems
Cognizant
Cohere Health
Community Computer
    Service, Inc.
Computrition, Inc.
Conéctate Soluciones y
    Aplicaciones SL
Consento
CORMAC Corp
CoverMyMeds
Cyrus-XP LLC
DasLab GmbH
Datavant
Dataware Sdn Bhd
Deer Creek Pharmacy Services
Diameter Health
Digital Healthcare Solutions
    Arabia (DHS Arabia)
Document Storage
    Systems, Inc.
Dynamic Health IT, Inc.
EBSCO Health
eClinicalWorks
Edifecs, Inc.
Electronic Health Management
    Applications
Elekta
EMR Direct
Envi
Epic
Equideum Health
etherFAX, LLC
Evident
EXTEDO
EyeMD EMR Healthcare
    Systems, Inc.
ezEMRx
FEI.com
Flatiron Health
Flexpa
Foothold Technology
GE Healthcare
Goldblatt Systems, LLC
Google

Greenway Health
HCL America, Inc.
Health Catalyst
HealthTrio, LLC
Infor(US), LLC
Innosoft Corporation
Innovaccer Inc.
Inovalon Inc.
Intelligent Medical
    Objects (IMO)
Interbit Data, Inc.
Interopion
InterSystems
iPatientCare, LLC
IPRD Solutions, Inc.
Isoprime Corporation
Kailo Medical
Karkinos Healthcare
    Private Limited
Labware, Inc.
Leidos, Inc.
LexisNexis Risk Solutions
Logibec
Los Angeles Network for
    Enhanced Services (LANES)
Lyniate
MacroHealth
MAK-SYSTEM Group Limited
MaxMD
MayJuun
McKesson Corporation
Medallies, Inc
MedConnect, Inc.
MedEvolve, Inc.
MedicaSoft
Medicomp Systems, Inc.
Medicus Clinical, LLC
MediSked, LLC
Medisolv Inc
MEDITECH, Inc
Medtronic
Merative
MHNEXUS SDN BHD
Microsoft Corporation
Milliman IntelliScript
ModuleMD LLC
Moxe Health
MuleSoft
Nagnoi
NeuralFrame
NextGen Healthcare
    Information Systems, Inc.
NoMoreClipboard.com
Novillus
Objective Medical
    Systems, LLC
OneHealthPort
Onyx Technology LLC
Optimoz, Inc.

Optum
OtisHealth
Particle Health
Patient Resource LLC
PenRad
Peraton
Philips Healthcare
Premier Healthcare Alliance
Prometheus Computing LLC
PROMTIME
QS Systems
QS/1 Data Systems, Inc.
Qvera
Ready Computing Inc.
Real Seven, LLC
Redox
Registry Clearinghouse
Reliv
Retarus Inc.
Roche Diagnostics
    International Ltd.
Rosch Visionary Systems
Sabiamed Corporation
SanctiPHI Tech Inc
Security Identification
    Systems Corporation
SenecaGlobal
Seoul Medical Informatics
    Intelligence Lab Inc.
SIVSA SOLUCIONES
    INFORMATICAS, S.A.U.
Smart Reporting GmbH
SoftDev Incorporated
Softek Solutions, Inc.
Software AG USA, Inc.
Starwest Tech
Surescripts
SurgiVision Consultants, Inc.
Synopsys Finland Oy
Tata America
    International Corp (TAIC)
The MITRE Corporation
Therap Services LLC
TIBCO Software Inc.
Varian Medical Systems, Inc.
Vital Data Technology
Vynyl
West Coast Informatics
WithmyDoc
Wolters Kluwer Health
WSO2
XchangeWorx
XIFIN, Inc.
Yardi Systems, Inc.
Zane Networks LLC.
Zeus Health
Zocdoc, Inc.

HL7 Work Group Co-Chairs

ARDEN SYNTAX

Peter Haug, MD
Intermountain Healthcare
peter.haug@imail.org

**Robert Jenders,
MD, MS, FHL7**
Charles Drew University/UCLA
jenders@ucla.edu

BIOMEDICAL RESEARCH AND REGULATION

Maryam Garza
University of Arkansas
 Medical Sciences
mygarza@uams.edu

Hugh Glover, FHL7
Blue Wave Informatics
hugh_glover@
 bluewaveinformatics.co.uk

Smita Hastak
Samvit Solutions
shastak@samvit-solutions.com

Andy Iverson
Medtronic
andy.iverson@medtronic.com

CLINICAL DECISION SUPPORT

Guilherme Del Fiol, MD, PhD
University of Utah Health Care
guilherme.delfiol@utah.edu

**Robert Jenders,
MD, MS, FHL7**
Charles Drew University/UCLA
jenders@ucla.edu

Kensaku Kawamoto, MD, PhD
University of Utah Health Care
kensaku.kawamoto@utah.edu

Bryn Rhodes
Alphora
bryn@alphora.com

Howard Strasberg, MD, MS
Wolters Kluwer Health
howard.strasberg@
 wolterskluwer.com

CLINICAL GENOMICS

Robert Freimuth, PhD
Mayo Clinic
freimuth.robert@mayo.edu

James Jones
SMART Health IT
james.jones@chip.org

Bob Milius, PhD
National Marrow Donor Program
bmilius@nmdp.org

Mullai Murugan
Baylor College of Medicine
mullai.murugan@bcm.edu

Kevin Power
Children's Mercy
 Hospitals and Clinics
kmpower@cmh.edu

Patrick Werner
HL7 Germany
pa.f.werner@gmail.com

CLINICAL INFORMATION MODELING INITIATIVE

Richard Esmond
Graphite Health Inc.
richard.esmond@gmail.org

Stanley Huff, MD, FHL7
Graphite Health Inc.
stan.huff@graphitehealth.io

Claude Nanjo
University of Utah Health Care
cnanjo@gmail.com

CLINICAL INTEROPERABILITY COUNCIL

Bruce Bray
University of Utah Health
bruce.bray@hsc.utah.edu

**Laura Heermann
Langford RN, PhD**
Graphite Health Inc
laura.heermann@graphitehealth.io

Russell Leftwich, MD
InterSystems
russell.leftwich@
 Intersystems.com

James McClay, MD
NextGen BMI,
 University of Missouri
jmcclay@unmc.edu

James Tcheng, MD
Duke University Health System
james.tcheng@duke.edu

CLINICAL QUALITY INFORMATION

Paul Denning
The MITRE Corporation
pauld@mitre.org

Floyd Eisenberg, MD
iParsimony LLC
FEisenberg@iParsimony.com

Yan Heras
Optimum eHealth LLC
yanheras@gmail.com

Stan Rankins, MIS, MSIT
Telligen
srankins@telligen.com

Juliet Rubini, MSN, MSIS
Mathematica Policy Research
julietkrubini@gmail.com

COMMUNITY-BASED CARE AND PRIVACY

Johnathan Coleman
Security Risk
 Solutions, Inc. (SRS)
jc@securityrs.com

Suzanne Gonzales-Webb
U.S. Department of
 Veterans Affairs
suzanne.
 gonzales-webb@va.gov

Mohammad Jafari (INTERIM)
U.S. Department of
 Veterans Affairs
jafarim@gmail.com

David Pyke
Audacious Inquiry
dpyke@ainq.com

**Ioana
Singureanu, MSCs, FHL7**
US Dept. of Veterans Affairs
ioana.singureanu@va.gov

CONFORMANCE

Nathan Bunker
American Immunization
 Registry Association
nbunker@immregistries.org

Frank Oemig, PhD, FHL7
Cerner Corporation
frank.oemig@cerner.com

**Ioana
Singureanu, MSCs, FHL7**
US Dept. of Veterans Affairs
ioana.singureanu@va.gov

Robert Snelick, FHL7
National Institute of Standards
 & Technology
robert.snelick@nist.gov

CROSS-GROUP PROJECTS

Jean Duteau
Duteau Design Inc
jean@duteaudesign.com

Floyd Eisenberg, MD
iParsimony LLC
FEisenberg@iParsimony.com

DEVICES

Todd Cooper
OR.NET
todd@ORNET.org

Chris Courville
Epic
ccourvil@epic.com

John Garguilo
National Institute of Standards
 and Technology
john.garguilo@nist.gov

Martin Hurrell, PhD
martinjhurrell@gmail.com

John Rhoads, PhD
Rhoads Systems Inc.
johnrhoads@johnrhoads.net

Martin Rosner (INTERIM)
Philips Healthcare
martin.rosner@philips.com

ELECTRONIC HEALTH RECORDS

Michael Brody, DPM
Registry Clearinghouse
mbrody@
 registryclearinghouse.net

Gary Dickinson, FHL7
EHR Standards Consulting
gary.dickinson@ehr-standards.com

Stephen Hufnagel, PhD
Registry Clearinghouse
shufnagel@
 registryclearinghouse.net

Mark Janczewski, MD, MPH
Medical Networks, LLC
mark.janczewski@gmail.com

John Ritter, FHL7
johnritter1@verizon.net

Michael Van der Zel BSc
HL7 Netherlands
m.van.der.zel@umcg.nl

Feliciano Yu, Jr., MD, MS
University of Arkansas
 Medical Sciences
fbyu@uams.edu

HL7 Work Group Co-Chairs *(continued)*

EMERGENCY CARE

Dominik Brammen
HL7 Germany
dominik.brammen@aktin.org

Laura Heermann Langford, RN, PhD
Graphite Health Inc
laura.heermann@
  graphitehealth.io

James McClay, MD
NextGen BMI,
  University of Missouri
jmcclay@unmc.edu

FHIR INFRASTRUCTURE WORK GROUP

Rick Geimer
Lantana Consulting Group
rick.geimer@lantanagroup.com

Josh Mandel, MD
SMART Health IT
jmandel@gmail.com

Lloyd McKenzie, FHL7
HL7 Canada / Accenture
lloyd@lmckenzie.com

Yunwei Wang
The MITRE Corporation
yunweiw@mitre.org

FINANCIAL MANAGEMENT

Jeff Brown
The MITRE Corporation
jeffbrown@mitre.org

Paul Knapp
Knapp Consulting Inc.
pknapp@pknapp.com

Celine Lefebvre, JD
American Medical Association
celine.lefebvre@ama-assn.org

Mary Kay McDaniel
mk_mcdaniel_hl7@outlook.com

Andy Stechishin
HL7 Canada
Phone: +1 780-903-0885
andy.stechishin@gmail.com

HL7 TERMINOLOGY AUTHORITY

Caroline Macumber
Clinical Architecture
Phone: +1 317-580-8400
carol_macumber@
  clinicalarchitecture.com

HUMAN AND SOCIAL SERVICES WORK GROUP

Grey Faulkenberry MD, MPH
University of Pennsylvania
faulkenbej@chop.edu

Mohammad Jafari
U.S. Department of
  Veterans Affairs
jafarim@gmail.com

Lizz Olson MD
Atrium Health Carolinas
  Medical Center
lizzgilmore@gmail.com

Liz Oppenheim JD
The MITRE Corporation
eoppenheim@mitre.org

Chris Shawn
U.S. Department of
  Veterans Affairs
christopher.shawn2@va.gov

IMAGING INTEGRATION

Chris Lindop
GE Healthcare
christopher.lindop@ge.com

Jonathan Whitby
Canon Medical System
  HIT Division
Jonathan.whitby@
  mi.medical.canon

IMPLEMENTABLE TECHNOLOGY SPECIFICATIONS

Jeff Brown
The MITRE Corporation
jeffbrown@mitre.org

Paul Knapp
Knapp Consulting Inc.
pknapp@pknapp.com

Brian Pech, MD, MBA, FHL7
Kaiser Permanente
brian.pech@kp.org

INFRASTRUCTURE AND MESSAGING

Anthony Julian, FHL7
Mayo Clinic
ajulian@mayo.edu

Nick Radov
UnitedHealthcare
Phone: +1 800-328-5979
nradov@uhg.com

Isaac Vetter (INTERIM)
Epic
Phone: +1 608-271-9000
isaac@epic.com

INTERNATIONAL COUNCIL

Peter Jordan, MSc LLB
HL7 New Zealand
pkjordan@xtra.co.nz

Ron Parker
HL7 Canada
ron@parkerdhc.com

Line Saele, MSc
HL7 Norway / Norwegian
  Institute of Public Health
lineandreassen.saele@fhi.no

LEARNING HEALTH SYSTEMS

Bruce Bray, MD
University of Utah Health
bruce.bray@hsc.utah.edu

Russell Leftwich, MD
InterSystems
russell.leftwich@
  intersystems.com

Maria Michaels (INTERIM)
Centers for Disease Control and
  Prevention/CDC
Maria.michaels@cdc.gov

MOBILE HEALTH

Nathan Botts, PhD, MSIS
Westat
nathanbotts@westat.com

Gora Datta, MS, BE, FHL7
CAL2CAL Corporation
gora@cal2cal.com

Matthew Graham
Mayo Clinic
mgraham@mayo.edu

Frank Ploeg
HL7 Netherlands
r.f.ploeg@umcg.nl

MODELING AND METHODOLOGY

Jean Duteau
Duteau Design Inc.
jean@duteaudesign.com

Grahame Grieve, FHL7
Health Intersections Pty Ltd
grahame@
  healthintersections.com.au

AbdulMalik Shakir, FHL7
Hi3 Solutions
abdulmalik.shakir@
  hi3solutions.com

Ron Shapiro
Qvera
ron@qvera.com

ORDERS AND OBSERVATIONS

Hans Buitendijk, MSc, FHL7
Cerner Corporation
hans.buitendijk@cerner.com

Lorraine Constable
HL7 Canada
lorraine@constable.ca

Robert Hausam, MD, FHL7
rrhausam@gmail.com

Ralf Herzog
Roche Diagnostics
  International Ltd.
ralf.herzog@roche.com

Ulrike Merrick
Vernetzt, LLC
rikimerrick@gmail.com

Ruby Nash (INTERIM)
Lantana Consulting Group
Ruby.Nash@lantanagroup.com

John David Nolen, MD, PhD
Children's Mercy
  Hospitals and Clinics
jdlnolen@gmail.com

Marti Velezis (INTERIM)
Food and Drug Administration
Marti.velezis@
  sonrisaconsulting.com

PATIENT ADMINSTRATION

Alexander de Leon
Kaiser Permanente
alexander.j.deleon@kp.org

Brian Postlethwaite, BaSc
Microsoft Corporation
brian.postlethwaite@
  microsoft.com

Line Saele MSc
HL7 Norway / Norwegian
  Institute of Public Health
lineandreassen.saele@fhi.no

Cooper Thompson
Epic
cooper@epic.com

HL7 Work Group Co-Chairs *(continued)*

PATIENT CARE

Stephen Chu
Australian Digital Health Agency
chuscmi88@gmail.com

Laura Heermann Langford, RN, PhD
Graphite Health Inc
laura.heermann@graphitehealth.io

Emma Jones
Allscripts
emma.jones@allscripts.com

Jay Lyle
U.S. Department of Veterans Affairs
jaylyle@gmail.com

Michelle Miller
Optum
michelle.m.miller@optum.com

Michael Padula, MD, MBI
Children's Hospital of Philadelphia
padula@chop.edu

Michael Tan
Nictiz
Mihata44@outlook.com

PATIENT EMPOWERMENT

Kim Herman (INTERIM)
Epic
kherman@epic.com

Virginia Lorenzi
New York-Presbyterian Hospital
vlorenzi@nyp.org

Maria Moen (INTERIM)
ADVault, Inc.
mmoen@advaultinc.com

Abigail Watson
The MITRE Corporation
awatson@mitre.org

PAYER/PROVIDER INFORMATION EXCHANGE

Durwin Day
Health Care Service Corporation
dayd@hcsc.net

Christol Green
Elevance Health
Christol.green@elevancehealth.com

PHARMACY

Danielle Bancroft
Fred IT Group
daniellekbancroft@gmail.com

Jean Duteau
Duteau Design Inc
jean@duteaudesign.com

John Hatem, MS, MBA, FHL7
jnhatem@hotmail.com

Melva Peters
Jenaker Consulting
melva@jenakerconsulting.com

Scott Robertson, FHL7
Kaiser Permanente
scott.m.robertson@kp.org

PUBLIC HEALTH

Erin Holt, MPH
Tennessee Department of Health
erin.holt@tn.gov

Craig Newman
Altarum
craig.newman@altarum.org

Laura Rappleye
Altarum
laura.rappleye@altarum.org

AbdulMalik Shakir
Hi3 Solutions
abdulmalik.shakir@hi3solutions.com

Danny Wise
Allscripts
Phone: +1 919-239-7401
danny.wise@allscripts.com

SECURITY

Kathleen Connor, MPA, FHL7
The MITRE Corporation
Kathleen_connor@comcast.net

Alexander Mense
HL7 Austria
alexander.mense@hl7.at

John Moehrke
By Light Professional IT Services LLC
johnmoehrke@gmail.com

Chris Shawn
U.S. Department of Veterans Affairs
christopher.shawn2@va.gov

Patricia Williams, PhD, MSc
HL7 Australia
patricia.williams@flinders.edu.au

SERVICES ORIENTED ARCHITECTURE

Jerry Goodnough
Cognitive Medical Systems
jgoodnough@cognitivemedicine.com

Stefano Lotti
HL7 Italy
Phone: +39 06-42160685
slotti@invitalia.it

Vincent McCauley, MBBS, PhD
McCauley Software
vincem@bigpond.com

STRUCTURED DOCUMENTS

Gay Dolin, MSN RN
Namaste Informatics
gdolin@namasteinformatics.com

Benjamin Flessner
Redox
benjamin@redoxengine.com

Austin Kreisler, FHL7
Leidos, Inc.
austin.j.kreisler@leidos.com

Sean McIlvenna
Lantana Consulting Group
sean.mcilvenna@lantanagroup.com

Russell Ott
Deloitte Consulting LLP
rott@deloitte.com

Matt Szczepankiewicz
Epic
mszczepa@epic.com

VOCABULARY

Jessica Bota
Apelon, Inc.
jbota@apelon.com

Carmela Couderc
Office of the National Coordinator
 for Health IT
carmela.couderc@hhs.gov

Reuben Daniels
HL7 Australia / Saludax
reuben@saludax.com

Robert Hausam, MD, FHL7
rrhausam@gmail.com

Caroline Macumber
Clinical Architecture LLC
carol_macumber@clinicalarchitecture.com

Robert McClure, MD, FHL7
MD Partners, Inc.
rmcclure@mdpartners.com

HL7 Work Group Facilitators

BIOMEDICAL RESEARCH AND REGULATION

D. Mead Walker, FHL7
Modeling and Methodology
Mead Walker Consulting
+1 610-518-6259
dmead@comcast.net

Julie James, FHL7
Vocabulary
Blue Wave Informatics
julie_james@
bluewaveinformatics.co.uk

CLINICAL DECISION SUPPORT

Craig Parker, MD, MS, FHL7
Modeling and Methodology; Publishing
Parexel International
craig.parker@parexel.com

Robert McClure, MD, FHL7
Vocabulary
MD Partners, Inc.
mcclure@mdpartners.com

CLINICAL GENOMICS

Amnon Shabo, PhD, FHL7
Modeling and Methodology
Philips Healthcare
amnon.shvo@gmail.com

Grant Wood, FHL7
Publishing
Intermountain Healthcare
grant.wood@infinitehealth.care

Joel Schneider
Vocabulary
National Marrow Donor Program
jschneid@nmdp.org

CLINICAL INFORMATION MODELING INITIATIVE

Susan Matney, PhD, RN, FHL7
Vocabulary
susana.matney@gmail.com

CLINICAL INTEROPERABILITY COUNCIL

AbdulMalik Shakir, FHL7
Modeling and Methodology
Hi3 Solutions
abdulmalik.shakir@hi3solutions.com

Amy Nordo, MMCi, BSN
Publishing
Pfizer
amy.nordo@pfizer.com

Sarah Ryan
Vocabulary
saryan2034@gmail.com

COMMUNITY-BASED CARE AND PRIVACY

Ioana Singureanu, MSCs, FHL7
Modeling and Methodology; Publishing
US Dept. of Veterans Affairs
ioana.singureanu@va.gov

Kathleen Connor, MPA, FHL7
Vocabulary
The MITRE Corporation
kathleen_connor@comcast.net

DEVICES

Ioana Singureanu, MSCs, FHL7
Modeling and Methodology
BookZurman
loana.singureanu@bookzurman.com

Todd Cooper, BA
Vocabulary
OR.NET
todd@ORNET.org

Christof Gessner
Vocabulary
HL7 Germany
christof.gessner@gematik.de

ELECTRONIC HEALTH RECORDS

Corey Spears
Modeling and Methodology
The MITRE Corporation
cspears@mitre.org

John Ritter, FHL7
Publishing
johnritter1@verizon.net

EMERGENCY CARE

Kevin Coonan, MD
Modeling and Methodology
kevin.coonan@gmail.com

FINANCIAL MANAGEMENT

Kathleen Connor, MPA, FHL7
Modeling and Methodology; Vocabulary
The MITRE Corporation
kathleen_connor@comcast.net

Beat Heggli, FHL7
Modeling and Methodology; Publishing
HL7 Switzerland
beat.heggli@netcetera.com

Mary Kay McDaniel
Publishing; Vocabulary
mk_mcdaniel_hl7@outlook.com

IMAGING INTEGRATION

Elliot Silver, M.Sc.
Vocabulary
HL7 Canada
elliot@argentixinfo.com

INFRASTRUCTURE AND MESSAGING

Grahame Grieve, FHL7
Modeling and Methodology
Health Intersections Pty Ltd.
grahame@healthintersections.com.au

Anthony Julian, FHL7
Publishing
Mayo Clinic
ajulian@mayo.edu

Sandra Stuart, FHL7
Vocabulary
Kaiser Permanente
sandra.stuart@kp.org

MODELING & METHODOLOGY

AbdulMalik Shakir, FHL7
Modeling and Methodology
Hi3 Solutions
abdulmalik.shakir@hi3solutions.com

William Ted Klein, FHL7
Vocabulary
ted@tklein.com

ORDERS AND OBSERVATIONS

Patrick Loyd, FHL7
Modeling and Methodology
patrick.e.loyd@gmail.com

Lorraine Constable
Publishing
HL7 Canada
lorraine@constable.ca

Robert Hausam, MD, FHL7
Vocabulary
The MITRE Corporation
rrhausam@gmail.com

PATIENT ADMINISTRATION

Alexander Henket
Modeling and Methodology; Publishing
Nictiz
henket@nictiz.nl

Wendy Huang
Vocabulary
wendyyjhuang@gmail.com

PATIENT CARE

Jean Duteau
Modeling and Methodology
Duteau Design Inc.
jean@duteaudesign.com

Susan Matney, PhD, RN, FHL7
Vocabulary
susana.matney@gmail.com

PHARMACY

Jean Duteau
Modeling and Methodology
Duteau Design Inc.
jean@duteaudesign.com

Scott Robertson, FHL7
Publishing
Kaiser Permanente
scott.m.robertson@kp.org

Julie James, FHL7
Vocabulary
Blue Wave Informatics
julie_james@
bluewaveinformatics.co.uk

PUBLIC HEALTH

Joginder Madra
Modeling and Methodology
Madra Consulting Inc.
hl7@madraconsulting.com

Jean Duteau
Publishing
Duteau Design Inc.
jean@duteaudesign.com

Sunanda McGarvey, BS
Vocabulary
Northrop Grumman
Technology Services
sunanda.mcgarvey@ngc.com

SECURITY

Kathleen Connor, MPA, FHL7
Vocabulary
The MITRE Corporation
kathleen_connor@comcast.net

STRUCTURED DOCUMENTS

Austin Kreisler, FHL7
Modeling and Methodology
Leidos, Inc.
austin.j.kreisler@leidos.com

Sheila Abner, PhD
Vocabulary
Centers for Disease Control and Prevention/CDC
sha8@cdc.gov

VOCABULARY

William Ted Klein, FHL7
Modeling and Methodology
+1 307-883-9739
ted@tklein.com

HL7 ARGENTINA
Fernando Campos, FHL7
fernando.campos@hospitalitaliano.org.ar

HL7 AUSTRALIA
Isobel Frean MS, PhD
chair@HL7.org.au

HL7 AUSTRIA
Stefan Sabutsch
stefan.sabutsch@HL7.at

HL7 BELGIUM
Jose Costa Teixeira
jose.a.teixeira@gmail.com

HL7 BRAZIL
Guilherme Zwicker Rocha, MD
guilherme.zwicker@gmail.com

HL7 CANADA
Ron Parker
ron@parkerdhc.com

HL7 CHILE
César Galindo, Msc
chair@HL7Chile.cl

HL7 CHINA
Haiyi Liu
liuhaiyi@mail.tsinghua.edu.cn

HL7 COLOMBIA
Mario Cortes
mario.cortes@HL7co.org

HL7 CROATIA
Miroslav Koncar
chair@HL7.hr

HL7 DENMARK
Jens Villadsen, MSc
jenskristianvilladsen@gmail.com

HL7 FINLAND
Jari Porrasmaa
jari.porrasmaa@ksshp.fi

HL7 FRANCE
Nicolas Riss, PharmD
Nicholas.riss22@gmail.com

HL7 GERMANY
Mathias Aschhoff
aschhoff@cmais.de

HL7 GREECE
Alexander Berler
a.berler@gnomon.com.gr

HL7 HONG KONG
Pascal TSE BSc, MA
pascaltse@hl7.org.hk

HL7 ITALY
Stefano Lotti
slotti@invitalia.it

HL7 JAPAN
Michio Kimura, MD, PhD
kimura@mi.hama-med.ac.jp

HL7 KOREA
Byoung-Kee Yi, PhD
byoungkeeyi@gmail.com

HL7 MEXICO
Victor Medina
chair@HL7mx.org

HL7 NETHERLANDS
Rob Mulders
rob@fire.ly

HL7 NEW ZEALAND
Peter Jordan, MSc, LLB
pkjordan@xtra.co.nz

HL7 NORWAY
Line Saele, MSc
lineandreassen.saele@fhi.no

HL7 PHILIPPINES
Raymond Francis Sarmiento MD
sarmiento2008@gmail.com

HL7 POLAND
Roman Radomski, MD, MBA
radomski@iehr.eu

HL7 PORTUGAL
Antonio Martins
antonio.martins@HL7.pt

HL7 ROMANIA
Florica Moldoveanu
florica.moldoveanu@cs.pub.ro

HL7 RUSSIA
Sergey Shvyrev, MD, PhD
sergey.shvyrev@gmail.com

HL7 SAUDI ARABIA
Abdullah Alsharqi
a.alshrqi@cchi.gov.sa

HL7 SINGAPORE
Adam Chee
adam@enabler.xyz

HL7 SLOVENIA
Brane Leskosek EE, PhD
brane.leskosek@mf.uni-lj.si

HL7 SPAIN
Francisco Perez, FHL7
fperezfernan@gmail.com

HL7 SWEDEN
Mikael Wintell
mikael.wintell@vgregion.se

HL7 SWITZERLAND
Roeland Luykx, PhD
roeland.luykx@rally.ch

HL7 TAIWAN
Marc Hsu
701056@tmu.edu.tw

HL7 UAE
Osama Elhassan, PhD
osama.elhassan@gccehealth.org

HL7 UK
Ben McAlister
chair@HL7.org.uk

HL7 UKRAINE
Leonid Stoyanov
leo@hl7.org.ua

2022 HL7 Staff

CHIEF EXECUTIVE OFFICER

Charles Jaffe, MD, PhD
cjaffe@HL7.org

CHIEF STANDARDS DEVELOPMENT OFFICER

Daniel Vreeman
dan@HL7.org

CHIEF STANDARDS IMPLEMENTATION OFFICER

Viet Nguyen, MD
viet@HL7.org

DEPUTY STANDARDS IMPLEMENTATION OFFICER

Diego Kaminker
diego@HL7.org

EXECUTIVE DIRECTOR

Mark McDougall
+1 734-677-7777 x103
markmcd@HL7.org

ASSOCIATE EXECUTIVE DIRECTOR

Karen Van Hentenryck
+1 313-550-2073
karenvan@HL7.org

DIRECTOR OF EDUCATION

Sadhana Alangar, PhD
+1 734-677-7777 x116
sadhana@HL7.org

DIRECTOR OF MEETINGS

Mary Ann Boyle
+1 734-677-7777 x141
maryann@HL7.org

FHIR PRODUCT DIRECTOR

Grahame Grieve
grahame@HL7.org

DIRECTOR OF MARKETING

Patricia Guerra
+1-773-516-0943
patricia@HL7.org

DIRECTOR, PROJECT MANAGEMENT OFFICE

Dave Hamill
+1 734-677-7777 x142
dhamill@HL7.org

DIRECTOR OF MEMBERSHIP & ADMINISTRATIVE SERVICES

Linda Jenkins
+1 734-677-7777 x170
linda@HL7.org

DIRECTOR OF TECHNICAL PUBLICATIONS

Lynn Laakso, MPA
+1 906-361-5966
lynn@HL7.org

WEB DEVELOPER

Laura Mitter
+1 740-963-9839
laura@HL7.org

SENIOR APPLICATIONS MANAGER

Joshua Procious
+1 231-220-3129
joshua@HL7.org

DIRECTOR OF COMMUNICATIONS

Andrea Ribick
+1 734-726-0289
andrea@HL7.org

ACCOUNTING MANAGER

Theresa Schenk, CPA
+1 734-677-7777 x106
theresa@HL7.org

DIRECTOR OF TECHNICAL SERVICES & WEBMASTER

Eric Schmitt
eric@HL7.org

EDUCATION MARKETING MANAGER

Melinda Stewart
+1 810-522-8070
melinda@HL7.org

SYSTEM ADMINISTRATOR

Jon Williams
+1 734-677-7777
jon@HL7.org

HL7 PROJECT MANAGER

Anne Wizauer
+1 734-677-7777 x112
anne@HL7.org

2022 HL7 Board of Directors

BOARD CHAIR	VICE-CHAIR	BOARD SECRETARY	BOARD TREASURER

Andrew Truscott
Accenture
andrew.j.truscott@accenture.com

Walter Suarez, MD, MPH
Kaiser Permanente
walter.g.suarez@kp.org

Virginia Lorenzi
New York Presbyterian Hospital
vlorenzi@nyp.org

Floyd Eisenberg, MD
iParsimony LLC
feisenberg@iparsimony.com

CHAIR EMERITUS   **APPOINTED DIRECTORS**   **AFFILIATE DIRECTORS**

W. Edward Hammond, PhD, FHL7
Duke Clinical & Translational Science Institute
william.hammond@duke.edu

Aashima Gupta
Google Cloud
aashimagupta@google.com

Judy Wawira Gichoya, M.D., M.S.
Emory University
judywawira@emory.edu

Ron Parker
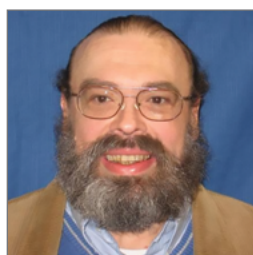HL7 Canada
ron@parkerdhc.com

Peter Jordan
HL7 New Zealand
pkjordan@xtra.co.nz

TSC CHAIR   **DIRECTORS-AT-LARGE**

Austin Kreisler, FHL7
Leidos, Inc.
austin.j.kreisler@leidos.com

John Loonsk, MD CMIO/VP, JHU / APHL
Hi3 Solutions
john.loonsk@jhu.edu

Lenel James
Blue Cross Blue Shield Association
lenel.james@bcbsa.com

Janet Marchibroda
Alliance for Cell Therapy Now
jmarchibroda@allianceforcelltherpaynow.org

Julia Skapik, MD
National Assoc. of Community Health Centers
jskapik@nahc.org

NON-VOTING MEMBERS

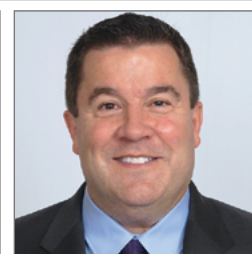**Charles Jaffe, MD, PhD**
HL7 CEO
cjaffe@HL7.org

Daniel Vreeman, DPT
HL7 Chief Standards Development Officer
dan@HL7.org

Viet Nguyen, MD
HL7 Chief Standards Implementation Officer
viet@HL7.org

Diego Kaminker
HL7 Deputy Chief Standards Implementation Officer
diego@HL7.org

Mark McDougall
HL7 Executive Director
markmcd@HL7.org

HL7 Collaborates

HL7 has renewed an SOU with the following organizations:
• **Web3D**
• **ISO**

FIND HL7 ON SOCIAL MEDIA

https://www.linkedin.com/groups/2478980

http://twitter.com/HL7

http://www.facebook.com/HealthLevel7

2022 HL7 FHIR ACCELERATOR™ Program

HL7® FHIR® ARGONAUT PROJECT

FAST FHIR AT SCALE TASKFORCE HL7 FHIR

CodeX Common Oncology Data Elements eXtensions

VULCAN HL7 FHIR

carin Creating Access to Real-time Information Now through Consumer-Directed Exchange

DA VINCI HL7 FHIR

gravity PROJECT

HELIOS

http://www.hl7.org/about/fhir-accelerator

HL7 International

Upcoming HL7 Meetings

September 17 - 23, 2022
36th Annual Plenary & Working Group Meeting and FHIR Connectathon

Baltimore, Maryland

January 14-20, 2023
January 2023 Working Group Meeting and FHIR Connectathon

Las Vegas, Nevada

April 17-21, 2023
HIMSS23

Chicago, Illinois

May 6-12, 2023
May 2023 Working Group Meeting and FHIR Connectathon

New Orleans, Louisiana

For the latest information on all HL7 events please visit

www.HL7.org/events

Get Your Training Straight from the Source!

COURSE
HL7 FHIR Exam Prep
Online Self-Paced
STARTS: September 29, 2022
ENDS: October 27, 2022
Clinical Quality & Decision Support on FHIR
Online
STARTS: October 4, 2022
ENDS: October 6, 2022
HL7 FHIR for Healthcare Information Analysts
Online
October 8-9, 2022
October 15-16, 2022
HL7 FHIR Fundamentals
Online Self-Paced
STARTS: October 27, 2022
ENDS: November 24, 2022
Applied Questionnaire and Data Capture
Online
STARTS: November 1, 2022
ENDS: November 3, 2022
HL7 V2 to FHIR Mapping
Online
STARTS: November 3, 2022
ENDS: December 9, 2022
HL7 FHIR Bootcamp
Online
November 10, 11 and 14, 2022
HL7 FHIR Terminology
Online
STARTS: Novemer 29, 2022
ENDS: December 1, 2022

Visit HL7.org/training for more information