HL7® FHIR® Accelerator Panel: Solving Real World Challenges with FHIR

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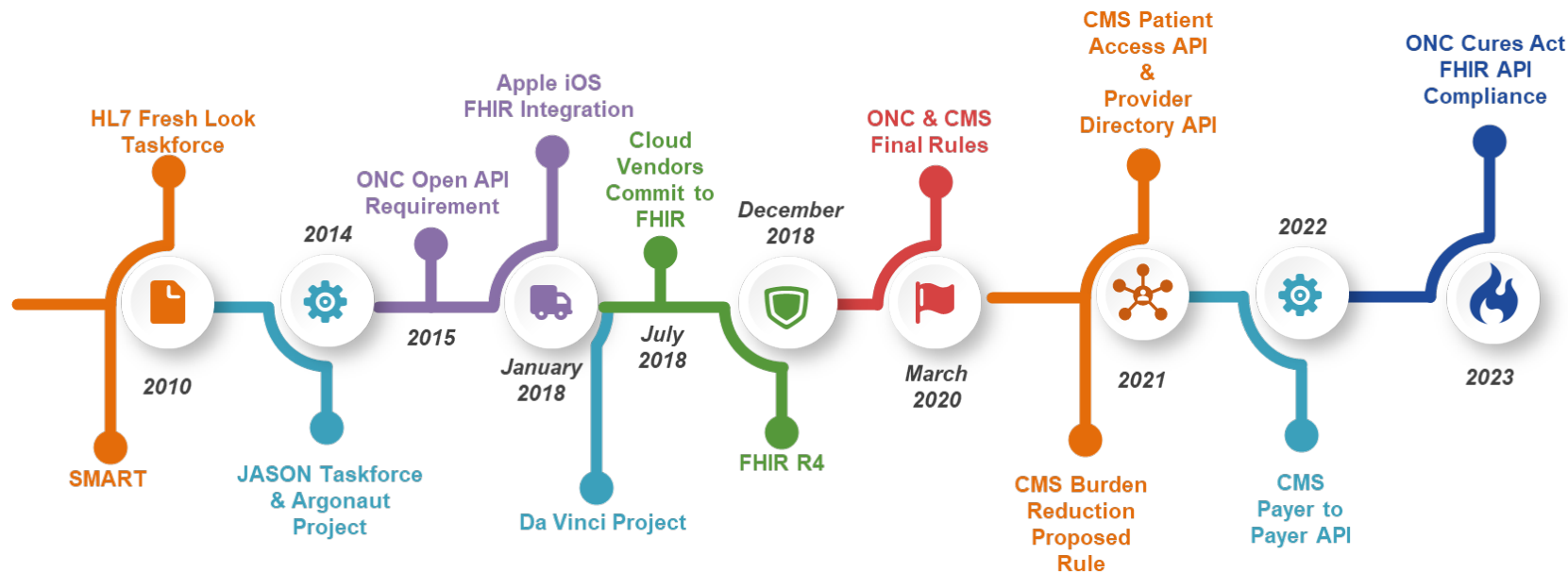**Ryan Howells**, Program Manager, CARIN Project

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Steve Bratt, PhD, Program Manager, CodeX

Paul Oats, Chief Architect, FAST

HL7 FHIR Timeline

HL7 Fresh Look Taskforce

2010

SMART

2014

JASON Taskforce & Argonaut Project

ONC Open API Requirement

2015

Apple iOS FHIR Integration

January 2018

Da Vinci Project

Cloud Vendors Commit to FHIR

July 2018

FHIR R4

December 2018

ONC & CMS Final Rules

March 2020

CMS Patient Access API & Provider Directory API

2021

CMS Burden Reduction Proposed Rule

2022

CMS Payer to Payer API

ONC Cures Act FHIR API Compliance

2023

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Re-envisioning HL7 Initiative[1]:
Role of the Implementation Division

Focus: Initially, on FHIR + bridging HL7 V2.x/CDA R2 to FHIR

Agility: From the requirements to the wire, as fast as possible with the right amount of rigorous quality assurance. Intimate collaboration with the Standards Development Division.

Global Relevance: Our single perspective is to begin and remain global. Each Implementation Division program must support adaption and/or adoption by national affiliates or global organizations.

Sustainability: The Implementation Division will be self-sustainable. If possible, each implementation program will be self-sustaining.

Community: Hearing the voice of our community inside HL7, but always trying to expand to new stakeholders all along the community spiral.
Our mandate is to **listen**.

HL7® FHIR

HL7 FHIR Accelerator Program

Begun only 4 years ago, the program assists implementers across the healthcare and research ecosystem in the creation of FHIR implementation guides and critical public- and private-sector solutions.

Provider, payer and vendors working together to accelerate the adoption of FHIR® as the standard to support and integrate value-based care (VBC) data exchange across communities.

Accomplishments
- Founded in 2018, members include over **50 Providers, Payers and Vendors**
- Advancing **12 balloted** how to use **FHIR guides** to support Payer and Provider collaboration
- Provides a robust community of FHIR adopters to prioritize and solve how APIs can solve business problems
- Referenced widely in existing and emerging regulation, widespread early adoption

Current projects
- Active build and additions to **Prior Authorization automatization, Exchange of Quality and Risk Data, Bidirectional Provider Payer Clinical Data**

Upcoming activities
- VBC Contract Performance Metrics Data

COME FIND YOUR USE CASE AND PARTNERS!

Key Points

CARIN Alliance Code of Conduct
CARIN Alliance Code of Conduct App UX Guide (Apps)
CARIN Application Registration Guide (Data Holders)
MyHealthApplication.com

3 FHIR API Implementation Guides
- CARIN IG for Blue Button (STU2)
- CARIN IG for Real-Time Pharmacy Benefit Check (STU1)
- CARIN IG for Digital Insurance Card (STU1)

CARIN / HHS Digital Identity Proof of Concept
- 20 organizations
- ONC and CMS will be government observers

Call to Action:
- Need more organizations willing to test more IGs

Our vision is to rapidly advance the ability for **consumers** and their **authorized caregivers** to easily **get, use, and share their digital health information** when, where, and how they want to achieve their goals.

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Private sector initiative to advance industry adoption of modern, open interoperability standards.

Key Points

Accomplishments: consumer API (policy goal, app participation, EHR vendor collaboration)

Current projects:
1. Electronic Health Information Export API (wrapper only)
2. Publication of FHIR endpoint and structure
3. FHIR Write - App State -
4. SMART Health Links (Q3)
5. International Patient Access (IPA)
6. USCDI v2 + US Core (data model only)
7. Argonaut Long-Term Support (office hours)

Upcoming activities: Q2 drafts to be published

Call to action: More real-world testing, feedback to iterate on already published IGs (bulk FHIR, subscriptions, questionnaire)
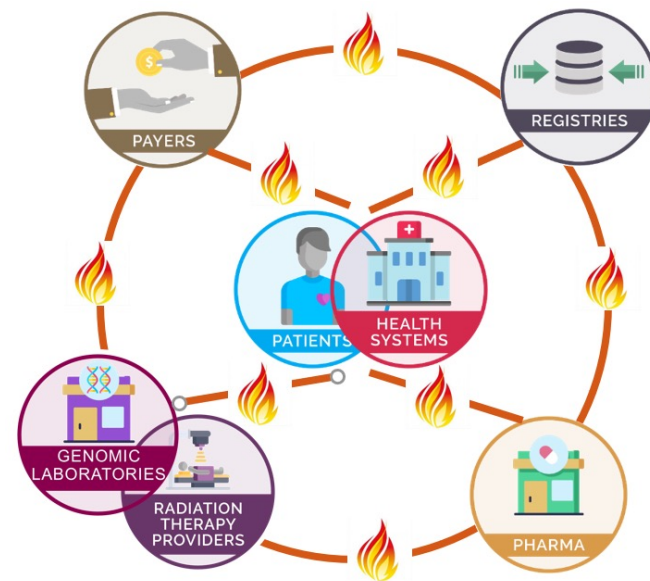
CodeX™

Demonstrating step-change improvements in patient care

CodeX Community: 30 Members and 130 others

- **45** Health Systems
- **7** Payers
- **4** Pharma
- **70** EHRs and other tech companies
- **12** Medical Societies and Consortia
- **10** Government Agencies
- **5** Research Organizations
- **7** Nonprofits/ Foundations
- **2** Patient Advocacy Organizations

- **Vision: Collect patient data once Reuse for many use cases**
- Cancer, cardiovascular, genomics
- Challenging use cases
- New, low-burden, valuable workflows
- FHIR IGs: mCODE and more
- Integrating into healthcare and vendor systems
- Testing in the field with stakeholders

PAYERS
REGISTRIES
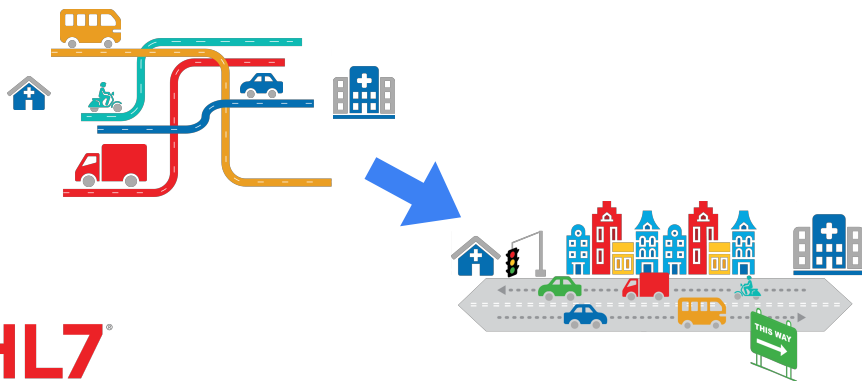PATIENTS
HEALTH SYSTEMS
GENOMIC LABORATORIES
RADIATION THERAPY PROVIDERS
PHARMA

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Join us: https://confluence.hl7.org/display/COD/CodeX+Home

Defining solutions to address current barriers and identifying needed infrastructure for scalable FHIR solutions.

Key Points

Accomplishments
- Approved HL7 standard for FHIR API security and FHIR Exchange between networks

Current projects
- API directory IG in progress – May 2022
- Patient matching for FHIR transactions IG in progress – May 2022

Upcoming Activities
- Move FAST to HL7 accelerator
- Determine the next round of focus: testing, certification, versioning, consent, workflow, eventing, etc

Call to action
- Come Join
- Call for founding members to continue progress. fast@hl7.org for more info

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

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

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

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

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