Partners in Interoperability Workshop

March 21-22, 2017
Georgia Institute of Technology
Atlanta, GA
Why Partners in Interoperability?

An ongoing series of workshops involving stakeholder groups with the intent of:

- Identifying desired interoperability business outcomes
- Describing activities to accomplish these
- Working to remove barriers and address challenges

HL7 believes that HL7® FHIR® standard offers the best opportunity to achieve interoperability.

Collaboration among different stakeholder groups is essential to make interoperability a reality.
Clinician Topics (Room 119B)

Russ Leftwich, MD, Sr. Clinical Advisor for Interoperability, InterSystems
Stan Huff, MD, Chief Medical Informatics Officer, Intermountain Healthcare

- Review topics discussed at the last Partners meeting, particularly the expressed need to standardize terminologies and information models across the different specialty societies and related registries
- Provide an overview of overall vision of such standardization, work accomplished to date, lessons learned, the impact this work will have on overall interoperability if accomplished, and the effort required
- Discuss impact such standardization will have on registry development
- Begin development of a plan to accomplish the work, including how to prioritize the work to move it forward, process for making the work authoritative, and proposed sources for funding the needed work
Value-Based Care Topics (Room 119C)

Rahul Dubey, Senior Vice President, Innovation and Solutions, AHIP
Shahid Shah, Co-Founder and CEO, Netspective Communications

- Discuss and develop actionable next steps for the following issues:
  - Gaps in care
  - Utilization management / over utilization
  - Reimbursement innovation
  - Relationship innovation (trust/alignment)
  - Workflow / training of healthcare professionals / culture
  - New administration and policies around healthcare; speculations vs. regulation
Biopharma & Clinical Research (Room 119A)

Wayne Kubick, CTO, HL7

- Review current state of FHIR APIs from multiple EHR systems and progress on pre-populating CRFs with data elements from the Common Clinical Data Set.

- Discuss additional high priority use cases:
  - Applying protocol eligibility criteria against EHRs to assess protocol feasibility and identify potential study subjects and sites
  - Use FHIR API to apply potential data clarifications against EHR data to keep in synch with EDC DB
  - Explore use of Structured Data Capture and SMART-on-FHIR to support research needs
  - Explore use of CDS-Hooks to alert for critical procedural deviations from protocol
  - Other regulatory and industry use cases as appropriate

- Discuss how to progress on policy issues, including access, consent, and data provisioning.

- Discuss how to collaborate/synergize with clinician and payer activities.
The Fundamentals of FHIR

- **FHIR**: Fast Healthcare Interoperability Resources
  - The web, for healthcare
- A next generation **standards framework & platform**, built on 30 years of HL7 experience and industry best practice, with a focus on simplicity and implementation
- Advanced RESTful Services technology platform (used by Facebook, Twitter…)
  - Can Create, Read, Update and Mark Deletion
- Based on Resources: essential modular information components easily assembled into working systems
- Flexible outputs: messages, documents, data, services
FHIR Resources

Smallest logically discrete unit of transaction “of interest” to healthcare
The Common Clinical Data Set

- The Common Clinical Data Set includes key health data that should be exchanged using specified vocabulary standards and code sets as applicable.

<table>
<thead>
<tr>
<th>Patient name</th>
<th>Lab values/results</th>
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<tbody>
<tr>
<td>Sex</td>
<td>Vital signs</td>
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<tr>
<td>Date of birth</td>
<td>Procedures</td>
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<tr>
<td>Race</td>
<td>Care team members</td>
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<td>Ethnicity</td>
<td>Immunizations</td>
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<tr>
<td>Preferred language</td>
<td>Unique device identifiers for implantable devices</td>
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<tr>
<td>Problems</td>
<td>Assessment and plan of treatment</td>
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<td>Medications</td>
<td>Goals</td>
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<td>Medication allergies</td>
<td>Health concerns</td>
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<td>Lab tests</td>
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ONC Interoperability Roadmap Goal

2015-2017
Send, receive, find and use a common clinical data set to improve health and health care quality.
Principles of FHIR

- Data resides at the **source of truth**
- **APIs** access data: *pull* what you need, instead of taking what’s *pushed*
- Focus on a vast, open community of **implementers**
- Include rigorous **semantics**
- Design for the common **80%**; extensions for the rest
- Off-the-shelf **security and authorization**
- **Speed**, **scalability**
- Human **readable**, ease of understanding
- Open source, **freely** available, open community.
The *FHIR Maturity Model* allows developers to assess the stability of FHIR components and realize the value of FHIR as it evolves.
The Current State of FHIR

- Release 3 published this week!
  - Improved stability of API, infrastructure, conformance
  - Extended clinical support & measures, decision support
- Release 4 ballot (in 2018) will include normative content (infrastructure/framework, resources)
- Argonaut, US Core and Structured Data Capture IGs now available
  - Argonaut Phase 2 underway
- Preparing credentialing program for developers
- Next Connectathons: 5/6 Madrid; 9/9 San Diego.
Workshop Overview - Tuesday

- 8:30 Welcome, Logistics, Updates
- 9:00 ONC Update: MU3 APIs
- 9:20 HL7 FHIR in the Real World Today
- 10:20 Break
- 10:45 Key Considerations for Implementing FHIR
- 12:15 Overview of Breakout Sessions
- 12:30 Lunch
- 1:30 Breakout Sessions
- 3:00 Break
- 3:30 Breakout Sessions
- 5:00-6:30 Networking Reception
Overview - Wednesday

- 8:45 Introductory remarks/Report-outs
- 9:00 HL7 FHIR Presentations
- 10:30 Break
- 11:00 Topic-based Breakout Sessions
  - Elements, Models & Profiles
  - Diabetes Quality Guidelines and Outcomes
  - Using FHIR to Power Clinical Registries
- 12:30 Lunch
- 1:30 Biopharma, Clinician, Value Care Breakouts
- 2:30 Breakout Final Reports and Discussion
- 3:00 Adjourn