Partners in Interoperability Workshop

April 26-27, 2016
Kaiser Permanente® Center for Total Health, Washington DC
Why We’re Here

- **HL7 Vision:** A world in which everyone can securely access and use the right health data when and where they need it.

- **HL7 Mission:** to empower global health data interoperability by developing standards and enabling their adoption and implementation.

- **Today’s Meeting:** We can achieve the vision, with FHIR, if we work collaboratively and incrementally to address and resolve the barriers that stand in our way.
Workshop Overview - Tuesday

- 9:00 Opening – Welcome and FHIR
- 10:30 Break
- 11:00 Breakout 1 – Opportunities & Priorities
- 12:30 Lunch (provided)
- 1:30 Current State of Interoperability
- 2:30 Break
- 3:00 Breakout 2 – What needs to change?
- 5:00 Reception
- 6:30 Adjourn
Overview - Wednesday

- 9:00 Breakout Reports
- 9:30 The Art of the Possible
- 10:30 Break
- 11:00 What’s Holding Us Back?
- 12:00 Lunch (provided)
- 1:00 Breakout 3 – How to make it happen
- 2:00 Breakout Final Reports
- 3:00 Adjourn
Breakout Topics

- Breakout 1:
  - What are we trying to achieve?
  - What opportunities, use cases and requirements can we define for improving interoperability?
  - What are the top 3 priorities to focus on – by vote?

- Breakout 2:
  - What systems and processes need to be introduced or changed internally to use HL7’s FHIR to improve interoperability?

- Breakout 3:
  - Are we on the right track? What’s holding us back?
  - What do we need to do to make it happen?
Biopharma Challenge Track

■ How can the BioPharma industry adapt to capitalize on rapid advances in digital healthcare, improved quality of data arising from value-based care, and the opportunities offered by HL7's FHIR to speed the development of new therapies and enhance patient safety?

■ Opportunity areas include:
  ➢ 1) FHIR-based patient-centric applications to access healthcare data records and integrate patient-generated data
  ➢ 2) Capture and use of genetic information to support precision medicine
  ➢ 3) Use of a standard FHIR API to capture real world evidence from multiple EHR systems
  ➢ 4) Use of a FHIR API to enhance clinical study planning, recruitment and data processes
Payer/Provider Challenge

- Payer/provider collaborations needed to improve patient care and increase healthcare value under the new payment models. What are some of the processes that will need to be addressed in order to implement FHIR standards within your organization?
Clinician Challenge

- In order for precision medicine to achieve its goals, a number of informatics problems need to be solved, including:
  - (1) gaining access to all relevant information about a patient across systems and organizations,
  - (2) closing the gap between what is known and what is deemed to be clinically actionable and
  - (3) developing point-of-care decision support that presents treatment alternatives and risks for the individual based on their composite data and their preferences
Ground rules and Logistics

- Lunch and plenaries here; Payers and Biopharma breakouts in other rooms
- At each breakout, discuss feedback from presentations, how it relates to your challenge, and breakout topics
- Minute-takers are assigned
- Prepare slides for report-outs
- Focus on achieving business outcomes - eave the technical details for other meetings
- Be creative, be open-minded, be nice.
Challenge Rooms

- Clinicians – Social Lounge (this room)
- Biopharma – Innovation Center
- Payers – Convergence Center

Meeting objective: To bring us closer to a world in which everyone can securely access and use the right health data when and where they need it.
Breakout Reports – Day 1

- State of the Challenge
- What do we plan to achieve?
- What opportunities, use cases and requirements did we define for improving interoperability?
- Which are the top 3 priorities?
- What systems and processes need to be introduced or changed internally to use HL7’s FHIR to improve interoperability?
- What other great thoughts to share with each other?
Biopharma Report – Day 1

- State of the Challenge: High Interest in FHIR

- What opportunities and use cases did we identify for improving interoperability?
  - Aligned with the clinical research process:
    - Study design/planning; recruitment;
    - Data collection; aggregation

- Which are the top 3 priorities? - Next Slide

- What systems and processes need to be introduced or changed internally to use HL7’s FHIR to improve interoperability? - TBD
## Opportunity Voting Results

<table>
<thead>
<tr>
<th>Opportunity Area</th>
<th>Opportunity</th>
<th>Importance</th>
<th>Actionable in 1 year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Protocol Feasibility - counts of potential subjects who meet eligibility criteria</td>
<td>3</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>Recruitment</td>
<td>Apps to support Subject Recruitment and consent</td>
<td>3</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>Data Collection</td>
<td>Harvesting EHR data that already exists for study databases</td>
<td>12</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Collection of patient provided data (ePro Questionnaires, etc.)</td>
<td>11</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Collecting additional CRF data not typically in EHRs</td>
<td>0</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Accessing EHR bulk data for secondary research purposes (e.g., drug safety)</td>
<td>11</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Data Aggregation &amp; Sharing</td>
<td>Making research data accessible to patients</td>
<td>20</td>
<td>6</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Sharing aggregate study results with patients and research community</td>
<td>7</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Enabling aggregation of data from multiple sites and multiple studies</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Mapping patient data to CDISC formats</td>
<td>3</td>
<td>7</td>
<td>10</td>
</tr>
</tbody>
</table>
Breakout Reports Day 2

- What did we learn about FHIR implementations?
- Given what we’ve learned, are we on the right track?
- What’s holding us back? How can we remove obstacles?
- What next steps can we suggest to make it happen?
- What other great thoughts to share with each other?
Pharma Breakout Next Steps

• Continue the conversation – set up collaboration space and listserv
• Build awareness: publications, webinars with more consumable information
  • Overview for general pharma audiences
  • Executive summary for high-level decision-makers
• Prepare training
• FHIR 101 for Pharma
• Explore potential participation in FHIR September Connectathon (Baltimore):
  • Clinical Genomics use case
  • Protocol feasibility & eligibility design (UCSF and Georgia Tech apps)
  • Sample sharable SMART on FHIR patient-focused apps
• Engage other stakeholders: FDA, IMI EHR4CR in Europe, TransCelerate…
• Clarify semantics and perform gap analyses with FHIR resources:
  • Clinical study, subjects and investigator resources
  • Adverse Events resource
  • CDISC and BRIDG mappings
• Explore other opportunities:
  • NIH Sync for Science program
  • SDC data element resource
  • EMA, Japan and other global participants.