Helios Aggregate Data
Project Team

January 23, 2023
Professional Associations that bring together competing entities, such as HL7, are subject to strict scrutiny under applicable antitrust laws. HL7 recognizes that the antitrust laws were enacted to promote fairness in competition and, as such, supports laws against monopoly and restraints of trade and their enforcement. Each individual participating in HL7 activities, regardless of venue, is responsible for knowing the contents of and adhering to the HL7 Antitrust policy as stated in §05.01 of the Governance and Operations Manual (GOM).
Contributing to the Priority Areas

- Introduce yourself in the chat (name, affiliation, interest area/skills)
- All interested groups are encouraged to participate
  - Use the chat
  - Raise your hand
  - Discuss on Zulip
- This meeting will be recorded
- No membership fee for the first round of project work
  - In-kind resource support for developing and piloting Priority Areas
- We are all working towards the same goal
Desired Outcomes

- **High Value and High Impact**
- **Feasible Within A Year**
- **Align With and Address Gaps in Core FHIR Capabilities**

**Desirability**: Serves an immediate and pressing public health need.

**Feasibility**: Initial scope can be accomplished within a year.

**Compatibility**: Prioritize and address deviations in public health implementations of FHIR.
Project Team Meeting Agenda

Agenda:

• HL7 Connectathon Report-out
• Start thinking toward May Connectathon
• What is next for Helios Aggregate Data
Track Report-Out:
Participants:
Thank You!

[Logos of various companies]
Track Report-Out:
• What was the track trying to achieve?

  • Test the sharing of FHIR MeasureReport resource instances between a submitter (e.g. healthcare provider/EHR/HIT) and a recipient (e.g. PHA/STLT) to identify priority situational awareness indicators (e.g., bed counts, staffing levels, availability of supplies, and other aggregate measures).
  • Provide mission-critical situational awareness information to public health during pandemics, natural disasters, and other preparedness events.
  • Test standardized and scalable ways of providing high-quality, timely, and on-demand summary data (e.g., bed count, supply inventory, and other sentinel indicator measures) in ways that lessen the strain on both healthcare and public health.
  • Support both emergency response and ongoing monitoring needs (e.g., chronic disease indicators for community health assessments, small area analyses, etc.).
  • Assess existing DEQM and/or SANER IGs for scalable approaches that can help calculate the prioritized indicators.
  • Identify possible additions to USCDI+ (plus).
**Track Report-Out:**

- Notable achievements:
  
  - Oracle Cerner was able to generate a MeasureReport resource example with a set of measures (all hospital beds, hospital inpatient beds, hospital inpatient bed occupancy, ICU beds, ICU bed occupancy, mechanical ventilators, and mechanical ventilators in use) and successfully shared it with 5 FHIR servers – Altarum, Audacious Inquiry, ICF, NAVOMI, and Washington State/University of Washington.
  
  - Oracle Cerner was able to generate a MeasureReport resource example with an expanded set of measures including Encounters (Hospitalized COVID-19 Patients, Hospitalized and Ventilated COVID-19 Patients, Hospital Onset COVID-19 Patients, ED/Overflow COVID-19 Patients, ED/Overflow and Ventilated COVID-19 Patients, COVID-19 Patient Deaths, All COVID-19 Confirmed or Suspected Patients, Ventilated COVID-19 Patients,) and successfully shared it with 5 FHIR servers.
  
  - Oracle Cerner was able to generate a MeasureReport resource instance with contained Organization and Location resources and successfully shared it with 5 FHIR servers.
  
  - Point-of-Care Partners built a test client and was able to retrieve, create and submit MeasureReports (with and without contained Organization and Location resources) with multiple servers.
Track Report-Out:

• Discovered issues / questions (if there are any)
  • POSTing to PHA FHIR Servers
    • Issue with references to Organization from Subject (not in FHIR R4 but is in FHIR R5) and Location from Reporter (location resource not loaded)
  • References to other resources were a challenge in the MeasureReport
    • Particularly a contained resource referencing another contained resource
    • Referenced resources having valid source paths
• Now what?
  • Need discussion on how to improve measure definitions and MeasureReport definitions. For example how to reference LOINC codes that define the measure concept, and how to support reusable measure definitions supporting different measure reports re-using the same (composite) measures.
  • Need to review measure definition examples for accuracy and intended use of the Measure resource.
  • Need to establish guidance on when to use contained resources for MeasureReport vs. straight reference or including resources in a Bundle
Helios Confluence Page: https://confluence.hl7.org/display/PH/Helios+FHIR+Accelerator+for+Public+Health+Home
Helios HL7 Homepage: https://www.hl7.org/helios/
Helios Email Inbox: helios@hl7.org
Helios Zulip Chat: https://chat.fhir.org/#narrow/stream/307807-Helios-Accelerator
Helios ListServ: http://www.hl7.org/myhl7/managelistservs.cfm (manage your own ListServ subscriptions)
Helios Conference Calls: http://www.hl7.org/concalls/index.cfm

HL7 FHIR Connectathon 32 Homepage: https://confluence.hl7.org/display/FHIR/2023+-+01+Connectathon+32
HL7 FHR Connectathon – Helios Aggregate Data Track: https://confluence.hl7.org/display/FHIR/2023+-+01+Helios+FHIR+Accelerator+Aggregate+Data+Track
Thank you for joining today!

Next Call:
February 6, 2023 at 2PM EST