

**Minutes**  
**DICOM WORKING GROUP TWENTY**  
**(Imaging Integration Information Systems)**  
**&**  
**HL7 IMAGING INTEGRATION WORK GROUP**  
**January 15-18, 2019**  
**@HL7 WGM**  
**San Antonio, TX**

**Attendees:**

<https://confluence.hl7.org/display/IMIN/IIWG+Attendance+2019-01>

Presiding Officers: Brad Genereaux, Agfa Healthcare  
Elliot Silver, Change Healthcare  
DICOM Secretariat: Luiza Kowalczyk, MITA

**1. Opening**

- 1.1. The meeting was called to order at 9:00 US Central Time Zone
- 1.2. The antitrust rules and DICOM patent policy were reminded.
- 1.3. The agenda was approved
- 1.4. The minutes from the previous meeting were approved.

**2. Dental Interoperability - Dental Interop Project #1482**

<http://www.hl7.org/special/Committees/projman/searchableProjectIndex.cfm?action=edit&ProjectNumber=1482>

- Discussion (II is an "interested party")
- Discussion from imaging point of view
- Let's talk about the entire dental industry (integrating images)
- What about 3D images using for crowns, Gemini project too, improving dental imaging across Europe, reading images,
- DICOM images in 3D format are good for crowns etc and has a good impact on practice
- Where is the value? Is it worth pushing on it?

**ACTION ITEMS:**

1. Harry Solomon will send contact information to Todd.
2. Todd Cooper will provide a WG-20 II with a draft white paper on dental interoperability in February. The whitepaper will explore interoperability in the dental domain, including identifying gaps.

### 3. **Project 1230: HL7 Endorsement of DICOM PS3.20: Imaging Reports using HL7 CDA**

- HL7 is a periodic maintenance model and DICOM is a continuous maintenance model
- Not retiring PS3.20, the content is valid.

**MOTION:** Next steps are:

- To update the PSS so that the project goal is to retire the current informative BIR (2005; [http://www.hl7.org/implement/standards/product\\_brief.cfm?product\\_id=13](http://www.hl7.org/implement/standards/product_brief.cfm?product_id=13)) and replace with a pointer to DICOM PS. 3.20.
- Provide the Art Décor conformance resources for PS 3.20.

**ACTION ITEM:**

3. Harry is willing to help but he has no official standing with any organization. Find out what the process is for him to do that on the HL7 side.

### 4. **General Administration**

- Change in leadership of WG-20 II
  - Call for Co-Chair Elections for WG-20 II is closed. We will discuss this topic on our next call scheduled for Jan. 24, 1:00 US ET.
- Reviewed PBS Metrics ([Jan2019 interim](#))
- Reviewed Workgroup Health Metrics ([Jan2019 interim](#))
- Reviewed joint meeting agendas: WG-29 Education, Communication, and Outreach & WG-10 Strategy
- Review and approve DMP document – Elliot and Brad

### 5. **Cancer interoperability project**

- Rich gave updates on his efforts to collaborate with Chris Carr from RSNA / ACR, and his participation next week with the IHE / SDC group at their connectathon in Cleveland.
- Here is a link to the Breast-Cancer Modeling PSS from the HL7 site:
- <https://www.modelinglab.org/>
- [http://tscwiki.hl7.org/wiki/index.php?title=CIC PSS: Breast Cancer Modeling](http://tscwiki.hl7.org/wiki/index.php?title=CIC_PSS:_Breast_Cancer_Modeling)

### 6. **Project Gemini**

Chris Carr on Project Gemini

- Gemini is outgrowth of confusion between FHIR and IHE.
- HL7 is aware of hype surrounding FHIR. There is a recognition of the role of IHE.
- Good faith effort work together
  - Includes sync 4 science (<http://bit.ly/bof-s4s>)
- Drew parallel to IHE development of SWF (scheduled workflow)
- Move things forward with pilots, connectathons
- Focus includes leveraging FHIRcast, CDShooks, better capture of data elements, SMARTonFHIR/S4S for imaging

imaging

- ACR's Ditch the Disk initiative may be a chance to show benefits of Imaging Access for Consumers.

Potential for demo at RSNA.

- Other potential: immunization projects, IHE dynamic care plan profile
- Tie in to CDE (common data elements) shows mapping between domains. - initial focus may be cancer, but that may change.
- Wants to run S4S track at next FHIR connectathon, then possibly at an IHE connectathon (non-testing) track, and at the HIMSS interop showcase.

Imaging Access for Consumers demo:

<https://imaging.demo.syncfor.science/>

### 7. Co-sponsor

- Status of [Project 1343](#) (Eye Care and Ophthalmology on FHIR)
  - Status of [Project 1010](#) (Ordering service interface spec)
  - Status of [Project 862](#) (Unique Specimen Identifier Requirements)
  - Status of [Project 682](#) (Specimen CMET)
- 8. Revise Imaging Integration 3 Year Plan [Project 1315](#)**
- 9. Orders and Observations hosting II Mesquite Boundary between Observation, Media, and DocumentReference**
- Discussion about boundaries and use cases for Media, Observation and DocumentReference resource.
    - Minutes:
      - <https://confluence.hl7.org/display/OO/OO+January+2019+Workgroup+Meeting+Minutes#OOJanuary2019WorkgroupMeetingMinutes-Q4-OO/II>
    - Action Item: 3 teams will prep content for discussion at Jan 29 O&O con call:
      - Elliot Silver/Jonathan Whitby (Merge Media and DocumentReference; add necessary elements to Attachment datatype; add Observation value Attachment)
      - Eric Haas/David Burgess (Revert Media to DSTU 2 content; add Observation value Attachment)
      - Dan Rutz/JD Nolen/Grahame Grieve (Maintain current design. Also, will work on building out use cases.)
- 10. Project 1392 (FHIRcast: Application Context Synchronization in FHIR)**
- Please access the slides for more details: <https://bit.ly/fhircast201901>
    - FHIRcast
    - Connectathon report
  - Next Steps
    - Experimental websocket support in specification
    - Polish WebSub spec
    - Ballot process and time line
      - PSS submission to PMO: 1/27
      - NiB deadline: 2/17
        - Create NiB on Project Desktop website
      - Consensus group sign-up: 2/25
      - Content deadline:
        - Initial: 3/3
        - Final (freeze): 3/24
      - Ballot sign up: 3/25-3/26
      - Ballot opens on: 3/29, closes on 4/29. WGM: 5/4
    - Security considerations: <https://github.com/fhircast/docs/pull/60>
- 11. Walk through Radiology Workflows in FHIR**
- It was not discussed during this meeting because of lack of time
- 12. Sync for Science**
- Josh Mandel, Microsoft, gave a presentation on Patient-Centric Imaging Data Sharing: <http://bit.ly/bof-s4s>
  - It was recommended to define an imaging track for the connectathon in Montreal, Canada, next WGM. Jonathan volunteered to work with Josh on it, 2-3 weeks.
- ACTION ITEM:** Get Josh Mandel, Microsoft, in touch with DICOM WG-14 Security and MITA Cyber Group-Luiza Kowalczyk

### **13. Event pattern and ImagingStudy**

- Lloyd McKenzie provided background and context for the FHIR workflow patterns, and rational for why ImagingStudy belongs in the Event pattern.
- He also explained the impact of a resource being put in a particular pattern (essentially, they provide a set of common elements for a resource to *consider* including, in a fashion appropriate to the resource).
- Questions were raised about the boundaries between the Definition, Request and Event patterns, and whether the Event pattern was overly broad. The observation was made that there was a high similarity between resources in the Definition pattern and in the Request pattern, but many resources in the event Pattern had little similarity. The optional nature of pattern conformance, and overly broad patterns was seen as diluting the value of a pattern by some. Comments were made that the Event pattern was a dumping ground for “other” resources. Lloyd indicated that all resources in the Event pattern met the HL7 RIM definition of an event, and they were open to creation of new patterns if logical sets of resources could be identified.
- The consensus of the committee was that ImagingStudy had an uneasy fit with the Event pattern, but that there wasn’t an existing pattern that provided a better fit. Further since a resource was able to deviate from a pattern when appropriate, there was no harm in ImagingStudy remaining an Event.
- Kevin O’Donnell indicate he may investigate sub-groupings of Event resources that would have higher alignment with each other.
- A tracker item ([20177](#)) was submitted to review the ImagingStudy.status values to ensure alignment with imaging practice.

### **14. Tracker Items:**

[17179](#): ImagingStudy status codes - conforming to Event pattern

[19637](#): Update cardinality of ImagingStudy.procedureReference

[17441](#): Update description in Endpoint to use DICOMweb thumbnail API

[17279](#): Confirm ImagingStudy.modality and ImagingStudy.series.modality binding

### **15. II/WG-20 Topics- II/WG-20 hosting DICOM WG-10 & WG-29**

- The minutes of DICOM WG-10 Strategic Advisory and WG-29 ECO will be posted on the DICOM website: <https://www.dicomstandard.org/wgs/>

### **16. ISO/TC 215 WG-2 hosting WG10 / II / WG-20**

- xSDO Genomics Update
  - 3 breakout groups – xSDO coordination (TC215, HL7, GA4GH); Form 3 for Genomics SC; FHIR Terminology Services for Genomics
- Thank you to Greg Zeller for his leadership and contribution to DICOM WG-10
- HL7 Imaging Integration/DICOM WG20 – continued collaboration; imaging-related aspect of FHIR; Elliot will be stepping down as Co-Chair effective as of January 2019.
- ISO/TC215 WG2 – RSP Clinical Imaging is ongoing
- The 15th European Congress on Digital Pathology, 11-13 April, 2019, <https://www.ecdp2019.org/>
- Conference: Machine Intelligence in Medical Imaging Conference (MIMI-C) – Austin TX Fall 2019
- HL7 Meeting February 2020 – Sydney Australia? To Be Determined. We will probably have quorum, but US leadership is undetermined.
- BRIDG Model & CRDC
  - BRIDG Stakeholders – HL7, CDISC, ISO, DICOM, NCI, FDA, NCATS
  - Open Terminology is important – NCI, CDISC Terminology, LOINC, etc.
  - Greg – it’s important to always keep the patient in mind and what is best for the patient.
  - BRIDG Clinical Data Model Harmonization Project – OMOP, Sentinel, PCORnet, CDISC. Next iteration will be to connect with FHIR.

- RSP for Clinical Imaging:
  - DICOM will work with HL7 and work on Imaging Table Rows, Radiation Table Rows. There will be 30 new entries.
- More notes from this meeting on ISO/TC215 in DICOM WG-10 minutes

### **17. Next Meetings**

T-cons:

- Thursday, January 24, 2019, 1:00-2:00 US ET
- Wednesday, February 6, 2019, 1:00-2:00 US ET
- Wednesday, February 20, 2019, 1:00-2:00 US ET
- Wednesday, March 20, 2019, 1:00-2:00 US ET
- Wednesday, April 24, 2019, 1:00-2:00 US ET

#### In Person

- HL7 – May 4-10, 2019, Montreal Quebec, Canada
  - A detailed schedule has not been finalized yet.

### **Future Meetings of HL7**

#### **2019**

- May 4-10, 2019, Montreal Quebec, Canada, International Conference & WGM

<http://www.hl7.org/events/workgroupmeetings.cfm?ref=nav>

- September 14-20, 2019, Atlanta, GA, 33<sup>rd</sup> Annual Plenary & WGM

#### **2020**

- February 1-7, 2020, Sydney, Australia, International Conference & WGM
- May 16-22, 2020, San Antonio, TX, WGM
- September 19-25, 2020, Baltimore, MD, 34<sup>th</sup> Annual Plenary & WGM

### **18. Adjournment**

The meeting was adjourned on Friday, January 18, 2019, 1:00 US CT.

Submitted by Luiza Kowalczyk, Secretary

Reviewed by Legal Counsel, Clark Silcox, January 25, 2019.