# September 2022 Working Group Meeting

# Minutes

| **Company** | **Member** | 9/20 Q1 | 9/20 Q3 | 9/21 Q1 | 9/21 Q3 | 9/22 Q1 |
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| **Voting members** | | | | | | |
| | Carolyn Hull | x | x | x | x | x |
| Canon Medical | Jonathan Whitby | x | x | x | x | x |
| GE Healthcare | Chris Lindop | X | X | X | x | |
| | Alexander- S. govt-Netherlands | | | | | |
| Mayo Clinic | Komal Bhandari | X | X | X | X | X |
| Mayo Clinic | Chris Park | | | | | |
| | Andreis Hamster | X | | | | |
| Founda Health | Health Forward of S. Korea | X | | | | |
| | Chey | | | | | |
| | Chu-x3 | | | | | |
| | Eunmin Lim | | | | | |
| | Joon Hyun Song | | | | | |
| | Mihyeon Choi | X | | | | |
| | Hyeongseok Jeon | | | | | |
| By Light Professional Services | John Moehrke | | | | | |

See minutes from 9/20-Q2 in Infrastructure and Messaging

| **Day** | **Quarter** | **Event** | **Topics** |
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| Monday<br><br>19 Sep 2022 | Q1 9:00am | No meeting | |
| | Q2 11:00am | | |
| | Q3 1:45pm | | |
| | Q4 3:30pm | FHIR-I Hosting II Representatives | Status of II Resources and IGs |

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| Tuesday<br><br>20 Sep 2022 | Q1<br>9:00am | II/WG-20 | • Call to order, introductions, and welcome. Completed<br>• Antitrust rules. These were read.<br>• Review & approval of the Agenda. Agenda approved.<br>• Minutes of the previous meeting. Minutes from 6 September were approved.<br>• General Administration<br>  ○ PBS Metrics (Sep 2022)- The group reviewed these metrics.<br>  ○ Workgroup Health Metrics (Sep 2022)- Review of these.<br>  ○ Joint meeting agendas<br>  ○ Review WG Mission and Charter Tracking- The group reviewed this and will keep it as-is.<br>  ○ Other housekeeping topics<br>  ○ Project Review<br>• FHIR R5 plans / FHIR-I discussion output- FHIR R5 is currently in ballot. Make updates by February 24 to be published in May. There are no ballot comments on ImagingStudy or ImagingSelection. No open items around those resources right now. DICOM SR is an R5 IG. Will likely have ImagingSelection and ImagingStudy comments.<br>• Connectathon<br>  ○ Review of Connectathon 31-There was an imaging track during Connectathon the week before the Working Group Meeting. The focus was on the draft of DICOM SR to FHIR IG and ImagingSelection resource. This project is making progress. The IG is still in draft form but initial testing was promising.<br><br>Input of IHE AI Results profile. Trying to standardize imaging results.<br><br>(TID 1500 collection of results. More interested in measurements of the results than the conclusion. SR as many measurements, not the report).<br><br>Another output of the IG is a good model of what you want in an imaging measurement.<br><br>IMR-IHE is looking at diagnostic report but expects observations to exist.<br><br>Next steps are finishing work on drafting the IG.<br><br>  ○ ImagingStudy- overview-goal: EMR view into imaging archive (PACS or VNA). Data model maps to |

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| | | | DICOMweb QIDO or C-Find and XDSI. Basic meta-data, etc. Using endpoint resource to provide links to DICOMweb and points for the study. EMR should be able to search for reports, imaging studies, and those can be presented into patient timeline and can launch into viewer with resource endpoints.<br><br>ImagingStudy is a FHIR representative of the DICOM real-world model. XDSI common practice is the entire study is shared but some parts.<br><br>Imaging Study is fairly mature, many vendors have implementations. Main outstanding q: who supports, when does it get created?<br><br>In practice, many EMRs do not have native viewers but store study instance UID.<br><br>ImagingSelection- Goal is for this resource to link to specific set of images, frames, etc. This will be going to R5 at Maturity 1. ImagingSelection has gone through basic review with other DICOM Committees. Can also support where know study and volume space but not specific image. Observation to reference ImagingSelection and Study and Selection to reference the Study. ImagingStudy in DICOM can have an end-to-end relationship between procedure and study.<br><br>Jonathan Whitby and Chris Lindop have proposed an IHE profile on HL7 scheduled workflow. However, it needs to be piecemealed. This will be a discussion for this week week. In IHE there is a table of DICOM to V2 mapping. There is a V2 to FHIR mapping. May be able to connect after this.<br><br>ImagingStudy is always a single study and a single series.<br><br>-Radiation Dose Summary-aiming to get to STU in the next few months. An IHE profile exists on this as well.<br><br>-V2 to FHIR<br><br>-Netherlands radiologists want a nationwide repository(?) of all of imaging patients. (IHE profile, internal**). Connect 35 regions, hospital only. Private |

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| | | | hospitals do not want XPS and GPs say the same. There hasn't been index harmonization. |
| | Q2<br>11:00am | Infrastructure and Messaging Hosting II | • FHIRcast |
| | Q3<br>1:45pm | II/WG-20 | • V2 to FHIR Imaging use cases- FHIR Service request mapping to Imaging Order. IHE has said this is too big of a job to do. Chris' suggestion is to first build use cases. DICOM Modality Worklist- lowest level where DICOM and HL7 meet. Link to map-already mapped by HL7.<br>• Only mapping things going into Modality Worklist and mandatory items for FHIR worklist.<br><br>Link to project:<br>https://confluence.hl7.org/display/IMIN/FHIR+Mapping+to+v2+and+DICOM+MWL<br><br>**Action:** Chris Lindop will redo chart based on Modality Worklist and we can review at another meeting.<br><br>Propose that we own it. Review in Q1 tomorrow, talk with O&O Q2, Q1 on Thursday talking with WG-6. |
| | Q4<br>3:30pm | No meeting | |
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| Wednesday<br><br>21 Sep 2022 | Q1<br>9:00am | II/WG-20<br><br>Chris<br>Jonathan<br>Carolyn<br>John M.<br>Komal<br>Chris Park<br>Reinhardt | • V2 to FHIR Imaging use cases<br><br>Continued review of this project and identified questions for O&O.<br><br>One member suggested adding additional examples generally.<br><br>Jonathan Whitby added a Jira item making an update on: Jira item #: FHIR- 38673.<br><br>Chris Lindop to edit bottom table and update. |

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| | Q2<br>11:00am | Orders and Observations hosting II | • Imaging Selection-Review of this with OO-Service.Request-feedback. suggestion to talk to FHIR CDS group because they have examples of how it is defined.<br>• DICOM SR to FHIR Observation IG- review of this with O&O.<br>• 2 to FHIR, future plans and OMI- IN IHE there is a V2 to DICOM modality worklist. Now doing FHIR to MWL. Note to make sure matches with lab process. Likely can use definition of a task. Looking at basedOn and would like confirmation of this. TBD on whether O&O will be involved in the project. II will be drafting this as a next step and reviewing with DICOM WG-6.<br><br>**Action:** After meeting with WG-6, **c**heck with DICOM WG-26 Pathology.<br><br>Alex to share sample plan definition that references an activity definition<br><br>• OO projects with II as co-sponsor:<br>  ○ https://www.hl7.org/Special/committees/imagemgt/projects.cfm?action=edit&ProjectNumber=1453<br>  ○ https://www.hl7.org/Special/committees/imagemgt/projects.cfm?action=edit&ProjectNumber=1010 |
| | Q3<br>1:45pm | II/WG-20 | • DICOM SR to FHIR IG Mapping<br>• V2 to FHIR Imaging use cases<br>• The group prepared for the presentation to WG-6 on group updates.<br>• Jira items:<br>  ○ 38673-will update spec: passed;<br>  ○ 38678-will update spec: passed.<br>  ○ 38679-**review. |
| | Q4<br>3:30pm | No meeting | |

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| Thursday<br><br>22 Sep 2022 | Q1<br>9:00am<br>Alex Jonathan<br>Chris P. Reinhardt<br>S.Korea team x3<br>Joon Hyun Song<br>Eun Min Komal<br>J. Moehrke | II/WG-20 | • DICOM SR to FHIR IG Mapping- Review of this project and Connectathon items. Results were promising and still seems viable. Have some still to be defined. Need to still finish documentation on the logic for this. Seems to be working.<br><br>Still need to also add the actors.<br><br>At Connectathon, tested some of the ImagingSelection also.<br><br>Plan is to fill out use cases to test at January Connectathon and then publish after R5 is out.<br><br>Potentially could add some guidance that if using R4, most everything works except ImagingSelection.<br><br>Also, need more sample data. Potentially could work with IHE on this to get more test cases between now and January Connectathon. Have some draft reference implementations available possibly for the Connectathon.<br><br>Suggestion to link to Observation Grouping guidance on build.fhir.org/observation.html . Intent was to have some element of structure. In SR defines measurement groups and individual measurements. Planing to keep that structure. Reference to images is at reference group level. Plan is to preserve measurement groups. Would not have a value but members that have the actual code or numerical values.<br><br>One question: Do we need an operation on observation to get dx report and everything else? To get the whole tree, then would be multiple transactions. OR all observations related to an imaging study. Considering doing an operation and make it one transaction.<br><br>Another outstanding question: how often will you get one single measurement? Possibly in an AI system. If there's an element of user selection around these observations. This is reason to include the parent. Keep the imaging reference with the parents as well.<br><br>One member suggested to update diagram at the SR architecture page to include delineations of DICOM v. FHIR. Also change two of the contains to hasmember. (complete) |

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| | | | In the template, Imaging Measurement is always a child of the Imaging Measurement Group.<br><br>In practice, getting the device apart from the algorithm is more difficult.<br><br>Suggestion to do a new comparison with IMR. Reviewed the IMR (Interactive Media Review)- IHE profile. This is smaller and there does not seem to be anything incompatible. This is a new IHE trial report. (linking to image in report)<br><br>• WG-06 report- WG-20/II made a report to WG-6 at its regular meeting in Trento, Italy. See presentation from Jonathan Whitby.<br><br>R5 includes ImagingSelection.<br><br>**Action:** Talk with Lynn from IHE and maybe harvest some artifacts from the IHE Connectathon on DICOM SR to FHIR Observation mapping.<br><br>**Q:** when would be good to get public comments from DICOM people? Review by WG-6 at January, then after. Request a two-hour slot for January meeting to review. Do two hour slot in November AND January.<br><br>**Action:** Solicit comments after January 2022 WG-6 meeting. Give DICOM community the best way to get comments. Written as an implementation guide. We will look at the IG in November and WG-6 can decide if we can provide more info to DICOM.<br><br>**Action:** Next time WG-20 reports about a Connectathon at report out on consumers v. producers at Connectathon.<br><br>**MWL-** who has validated service request already and can we list a couple. Note of swapping name to FHIR to DICOM MWL mapping. Request to ask O&O if we profile ServiceRequest if they would move along to 3.<br><br>WG-6 motion- Approved submitting IG proposal from DICOM perspective.<br><br>RDSR- dose report summary. |

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| | Q2<br>11:00am | II/WG-20 | • DICOM SR to FHIR IG Mapping<br>• V2 to FHIR Imaging use cases |
| | Q3<br>1:45pm | II/WG-20 | |
| | Q4<br>3:30pm | No meeting | |
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| Friday<br><br>23 Sep 2022 | Q1<br>9:00am | No meeting | |
| | Q2<br>11:00am | No meeting | |
| | Q3<br>1:45pm | No meeting | |
| | Q4<br>3:30pm | No meeting | |

Adjourned: Thursday, 9/22/22 1:00PM US ET.

Submitted: 11/18/22

Legal: 11/20/22