Board Report: IHE ITI Domain

Sponsors:

Health Information Management Systems Society (HIMSS)

Leadership:

* Secretariat: Bell, Sarah [Sarah.Bell@himss.org](mailto:Sarah.Bell@himss.org)
* Board Representative: ITI Co-chairs for 2021
* Plan Cmte Co-chair: John Moehrke, ByLight Consulting
* Plan Cmte Co-chair: Steve Nichols, GE Healthcare
* Tech Cmte Co-chair: Luke Duncan, PATH
* Tech Cmte Co-chair: Oliver Egger, ahdis ag

Membership Rosters:

Planning and Technical Committee: <https://docs.google.com/spreadsheets/d/1YcihcqpJERNeTDSzFK7yXtNfs2MTVQTlifW-hmhTAQI/edit?usp=sharing>

ITI Technical Google Group: 580 Members

ITI Planning Google Group: 231 Members

MHD Implementers Google Group: 161 members

IHE XDS Implementors Google Group: (unk)

Activity:

* Domain Scope: The IT Infrastructure Domain defines interoperable infrastructure for the secure sharing  of healthcare information independent of clinical domain. Interoperable infrastructure is necessary to  support common IT functions for a variety of use cases but is rarely visible to the end user. Components  supporting interoperable infrastructure may be embedded in applications but are often deployed as a  shared resource within an organization or a regional or national health information exchange.
* Current Cycle Timeline/Milestones: <http://wiki.ihe.net/index.php?title=IT_Infrastructure>
* Background: IHE ITI was established by HIMSS & RSNA in 2002 in order to address use cases that cross multiple clinical domains and rely on a common IT Infrastructure.

Most Significant Profiles:

| **Title** | **# vendor @Cthon** | **# product @Registry** | **Description** | **External Significance** |
| --- | --- | --- | --- | --- |
| Audit Trail and Node Authentication (ATNA) | 360 | 138 | Establishes security measures which, together with the Security Policy and Procedures, provide patient information confidentiality, data integrity and user accountability | Endorsed by the European Commission  1,300 results Google Scholar search terms “IHE XDS”  Support / Alignment with   * MDR 17.4, 23.4 * NEMA Manufacturer Disclosure Statement for Medical Device Security MDS2 * DoD App Security STIGs |
| Cross-Enterprise Clinical Documents Share (XDS.b) | 295 | 51 | Provides a standards-based specification for managing the sharing of documents between any healthcare enterprise. | * Endorsed by the European Commission * Active Implementors Group * 2,360 results Google Scholar search terms “IHE XDS” (Enterprise and regional document sharing) |
| Cross Community Access (XCA) | 99 | 7 | Provides query and retrieve patient relevant medical data held by other communities. | Endorsed by the European Commission |
| Patient Demographics Query (PDQ) | 213 | 9 | An application query to a central patient information server to retrieve a patient’s demographic and visit information | Endorsed by the European Commission  Supports other profiles in enterprise and regional architectures by maintaining and reconciling the identity of a patient who may be identified in different ways by disparate systems |
| Patient Demographic Query HL7 V3 (PDQ V3) | 134 | 8 |
| Patient Demographics Query for Mobile (PDQm) | 57 | 3 |
| Patient Identifier Cross-referencing for MPI (PIX) | 185 | 14 | Supports the cross-referencing of patient identifiers from multiple Patient Identifier Domains |
| Patient Identifier Cross-Reference HL7 V3 (PIX V3) | 131 | 9 |
| Patient Identifier Cross-reference for Mobile (PIXm) | 41 | 3 |

# vendor @CThon is a total count of successful vendors from Connectathon-results.ihe.net   
# product @Registry is a count of registered Statements from Product-registry.ihe.net.

Significant Deployment Activity:

Several regional document and image exchanges based on XD\* and XC\* profiles.

See

* <https://bit.ly/maging_Taskf_Survey>
* <https://ec.europa.eu/health/sites/default/files/cross_border_care/docs/ev_20161024_co09_en.pdf>

Connectathons, Demonstrations and Other Events:

* The last 3 Connectathons were held online: EU Nov 2020 (28), NA Mar 2021 (23), EU June 2021 (28). The number in parentheses indicates the number of ITI profiles tested at each event, which was only a slight drop from the prior face-to-face events (30 for EU 2019 and 32 for NA 2019).
* While system registration for IHE’s online Connectathons were lower than face-to-face Connectathons prior to 2020, IHE maintained the high level of testing rigor our participants have come to expect, using the same test definitions and tools for the online Connectathons as were deployed for prior face-to-face Connectathons, and with exceptional support from experienced Connectathon monitors and IHE
* [Youtube videos](https://www.youtube.com/playlist?list=PLqKdd_74t4IL86rg1DhfsPq1LVS3jF4QK) to introduce / promote Trial Implementations and Whitepapers: SNIF, PMIR, Document Sharing on FHIR
* Outreach to solicit public comment through various forums (SNIF Whitepaper)
  + Google groups, UK Imaging Informatics Group, chat.fhir.org, Aunt Minnie PACS forum (formerly Yahoo)
* FHIR IG publisher open forums (how to, FAQs, etc..)

New Profiles:

* See: <https://github.com/IHE/IT-Infrastructure/projects/2>

| **Trial Implementations** | **Status** | **Date** |
| --- | --- | --- |
| Cross-Community Document Reliable Interchange (XCDR) | Revised | 8/6/2021 |
| Add RESTful ATNA (Query and Feed) | Revised | 7/2/2021 |
| Advanced Patient Privacy Consents (APPC) | Revised | 7/2/2021 |
| Cross-Community Patient Discovery (XCPD) Health Data Locator and Revoke Option | Revised | 7/2/2021 |
| Mobile Care Services Discovery (mCSD) | Revised | 7/2/2021 |
| Remove Metadata and Documents (RMD) | Revised | 7/2/2021 |
| Restricted Metadata Update (RMU) | Revised | 7/2/2021 |
| Secure Retrieve (SeR) | Revised | 7/2/2021 |
| XDS Metadata Update | Revised | 7/2/2021 |
| Mobile Access to Health Documents (MHD) | Revised | 6/4/2021 |
| Internet User Authorization (IUA) | Revised | 3/19/2021 |
| Patient Master Identity Registry (PMIR) | Revised | 12/11/2020 |
| Healthcare Provider Directory (HPD) | Revised | 8/28/2020 |
| Sharing Valuesets, Codes, and Maps (SVCM) | Revised | 6/4/2020 |
| Mobile Health Document Sharing (MHDS) | Publish | 5/29/2020 |
| **White Papers** | **Status** | **Date** |
| Survey of Network Interfaces Form | Publish | 5/29/2020 |
| Enabling Document Sharing Health Information Exchange Using IHE Profile | Revised | 3/19/2021 |
| **Public Comment** | **Status** | **Date** |
| mCSD Whitepaper | Publish | 8/06/2021 |
| Patient Demographics Query for Mobile (PDQm) | Revised | 7/30/2021 |
| Patient Identifier Cross-reference for Mobile (PIXm) | Revised | 7/30/2021 |

FHIR Implementation Guides (http://www.fhir.org/guides/registry/)

* MHD
* PIXm
* PDQm

Publication of Final Text Volumes to HTML

* Publication site: <https://profiles.ihe.net/>
* Staging / archive: https://github.com/IHE/publications

Trends:

* Each year, we see more Connectathon participants supporting ITI’s profiles based on HL7 FHIR, with PDQm, PIXm, and MHD being the most popular. In 2021, we were pleased to see the first testing of our newer FHIR based profiles, PMIR, SVCM, and mXDE.
* Connectathon participants continue to want to test the ATNA, XC\* and XD\* profiles and related profiles like, BPPC, XUA, and more. Most participants are now doing supportive testing of these profiles, yet we still have new participants testing them each year.

\*Last datapoint from Japan 2019

Summary of Future Plans:

* See: <https://github.com/IHE/IT-Infrastructure/projects/2>
* ONC
  + J. Moehrke and IHE-USA are working with ONC to continue to use the Document Sharing as an existing and functional network. This parallel with the other efforts to use FHIR.
  + ONC will be promoting the HIE-Whitepaper.
  + ONC also has interest in the MHDS family, the conversion to IG publisher, the conversion to HTML publication of the TF.