



**BYLIGHT**  
Lighting The Path

# IHE on FHIR

John Moehrke

<John.Moehrke@byLight.com>

Co-Chair: IHE ITI Planning Committee, HL7 Security WG

FHIR Foundation founding member

FHIR Management Group, FHIR Facilitator



# IHE Domains

- Cardiology
- Dental
- Eye Care
- IT Infrastructure (ITI)
- Pathology and Laboratory Medicine
- Patient Care Coordination
- Patient Care Devices
- Pharmacy
- Quality, Research and Public Health
- Radiation Oncology
- Radiology
  - Mammography
  - Nuclear Medicine

\* Marked in red are domains using FHIR

# Mobile

- Most profiles from IHE that leverage FHIR have the word “Mobile” in their title.
- Indicates FHIR was used
- Usually only used when historic use-case is re-evaluated using FHIR
- Does NOT restrict the use to non-Mobile use

# ITI Profiles on FHIR

- Mobile Access to Health Documents (MHD)
- Audit Trail and Node Authentication (ATNA) - Query
- Mobile Alert Communication Management (mACM)
- Mobile Care Services Discovery (mCSD)
  - Healthcare Provider Directory
- Mobile Cross-Enterprise Doc Data Element Extraction (mXDE)
- Non-patient File Sharing (NPFS)
- Patient Identifier Cross-reference for Mobile (PIXm)
- Patient Demographic Query for Mobile (PDQm)
- Internet User Authentication (IUA) – Special Mention
- *Patient Identity Management*

# Appendix Z on FHIR

- Common text for all IHE Domains to re-use
- Introduction to FHIR profiling concepts
- Common query parameter clarifications
- Relationship between CapabilityStatement and IHE Integration Statement
- Pointer to library of conformance resources
- Mapping of FHIR Identifier datatype to HL7 v3 root, and XDS Cxi
- Security Considerations

# Patient Care Coordination Profiles on FHIR

- Clinical Mapping (CMAP)
- Dynamic Care Planning (DCP)
- Dynamic Care Team Management (DCTM)
- Point of Care Medical Device Tracking (PMDT)
- Query for Existing Data for Mobile (QEDm)
- Reconciliation of Clinical Content and Care Providers (RECON)
- Routine Interfacility Patient Transport (RIPT)
- Paramedicine Care Summary (PCS)

# Pharmacy Profiles on FHIR

- Mobile Medication Administration (MMA)
- Uniform Barcode Processing (UBP)

# QRPH Profiles on FHIR

- Mobile Retrieve Form for Data Capture (mRFD)
- Vital Records Death Reporting (VRDR)
- Birth and Fetal Death Reporting – Enhanced (BFDE)
- Quality Outcome Reporting for EMS (QORE)



# Radiology Profiles on FHIR

- Standardized Operational Log of Events (SOLE)
- Special mention as these use compatible DICOM web
  - Web Image Capture (WIC)
  - Web Image Access (WIA) formerly called MHD-I
  - Invoke Image Display (IID) - Special mention

# Move to FHIR R4

- All profiles are expected to be revised to use FHIR R4
- IHE Governance prevents normative until underlying standard is normative
- Priority set of Profiles are updated to R4 and are in Public Comment
  - Mobile Access to Health Documents (MHD)
  - Mobile Care Services Discovery (mCSD)
  - Patient Demographic Query for Mobile (PDQm)
  - Query for Existing Data for Mobile (QEDm)
  - Appendix Z
  - *Mobile Cross-Enterprise Doc Data Element Extraction (mXDE)*
- Equivalent to US-Core

# IHE on FHIR

- 23 Profiles and growing
  - IT Infrastructure (ITI) - 8
  - Patient Care Coordination - 8
  - Pharmacy - 2
  - Quality, Research and Public Health - 4
  - Radiology - 1
- <https://wiki.ihe.net/index.php/Category:FHIR>
- <http://www.ihe.net>
- Blog – John Moehrke’s **Healthcare Exchange Standards**
  - <https://healthcaresecprivacy.blogspot.com>



# Questions?

John Moehrke

Gmail JohnMoehrke

Twitter JohnMoehrke

Skype johnmoehrke

Blog [healthcareSecPrivacy.blogspot.com](http://healthcareSecPrivacy.blogspot.com)