



DIAGNOSTIC IMAGING LEVEL 2 PROMOTION

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DATA ELEMENTS

Imaging Reference

The retrieval access path to indicate network services that can be used to access DICOM studies, series, or instances content and metadata

Accession Number

Links the scheduled procedure, images, and their resulting diagnostic imaging report, created by the radiologist

Requested Procedure Identifier

The unit of work resulting in one Diagnostic Imaging Report as the Order/Imaging Service Request generates one or more Requested Procedures

SUMMARY OF IMAGING REFERENCE USE CASES

- Source institution can appropriately update records as the source of truth (name change, unmatched data, etc.)
- Imaging Reports in CDA and DICOM Release 1 includes references to key images, frames and the DICOM object catalog through unique identifiers (UIDs) based on the DICOM study, series and image information model. The standard also includes optional Web Access to DICOM Persistent Object (WADO), also known as DICOMweb as visible hyperlinks within the report
- IHE has profiled Interactive Multimedia Report (IMR) which specifies how a diagnostic report with interactive multimedia content can be reliably encoded, communicated and presented
- The endpoint is a reference API to resources provided by a VNA, PACS or Image Display and include “DICOM WADO-RS, which is used to retrieve DICOM instances in native or rendered (e.g., JPG, PNG), formats using a RESTful API
- DICOM Part 18 WADO-RS added in 2011 and well supported
- Rendered allows for less infrastructure in cases where viewing is all that is required (GET {s}/studies/{study}/rendered)
- Retrieving instances is possible for continuum of care or surgical planning (GET {s}/studies/{study})
- FHIR ImagingStudy is at Maturity Level 4 in the current CI-Build
- All models are documented in IHE Web-Based Image Access and have been successfully tested globally at multiple IHE Connectathons



PATIENT CARE IMPACT

Prevent duplicate exams and unnecessary radiation events

Prevent rescheduling appointments due to missing data

Prevent the need for unnecessary infrastructure

Data immediately available to consumers (ER transfer, referring physician, surgeon, etc.)

Data available for continuum of care in format needed by the consumer (rendered, search and retrieve all supported with DICOMweb endpoints)

Facilitates Image Viewing as well as discovery of imaging exams enabling Exam Transfer in their original DICOM format when required, for continual local use (Radiology diagnostic imaging, Surgical planning on in the OR, etc.)

Creator maintains source of truth



DISCUSSION