Imagingstudy Fhir Resource Proposal
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ImagingStudy

Owning committee name

Imaging Integration WG

Contributing or Reviewing Work Groups

- IHE Radiology workgroup
- DICOM WG27

FHIR Resource Development Project Insight ID

Project number is 1107

Scope of coverage

Manifest of a set of images produced in study. The set of images may include every image in the study, or it may be an incomplete sample, such as a list of key images.

This resource summarizes a series of images generated as part of an imaging study, and provides references to where the images are available using WADO-RS (todo: reference). This resource is used to record that images are available in other clinical contexts such as diagnostic reports, Care Plans, etc. Also, see the use case case description below.

RIM scope

This resource is related to DICOM study and therefore not RIM relevant. RIM concepts will be used when appropriate.

Resource appropriateness

Expected implementations

Various Imaging departments, Health Information Exchanges, and Personal Health Record systems.

Content sources

- DICOM WG27 - WADO-RS http://medical.nema.org/dicom/
- IHE Key Image Note http://www.ihe.net/Technical_Framework/index.cfm#radiology

Example Scenarios

An oncologist, Karen, is seeing patients in her clinic, and would like background on the patients she is seeing today. Her first patient of the day, Alex, has arrived. She launches her Electronic Medical Record (EMR) software, and makes a Patient query on Alex using his last name. The EMR software makes a FHIR query on the Patient resource, to provide background demographic information for cover page rendering. The EMR software makes a subsequent FHIR query on the Problem resource, and reports that Alex is suspected to have prostate cancer. With this information, Karen decides to check for two further tests - the results of a Prostate-Specific Antigen (PSA) laboratory test, and of a CT exam performed at the local diagnostic facility. First, a FHIR query is made against the Observation resource to query for the most recent value of PSA (the EMR also queries previous values of PSA for trending). For the CT exam, the EMR software queries on the ImagingStudy resource to retrieve a list of available images with other relevant constraints (such as modality, body region etc). This returns back the studies available, with relevant meta-data about each study, it's series and images. This information will help Karen to select which study she would like to review. Using the WADO-RS references provided, the artifacts Karen would like to review can be downloaded and viewed using capable DICOM viewing software.

Resource Relationships

unknown

Timelines

2015?
gForge Users

john_moehrke

Issues

- Need to clarify connection to IHE and RIM sources as needed.
- Need to define resource appropriateness as it is defined/refined.
- how is interpretation of the study linked to the study? (dh)