Imagingobjectselection Fhir Resource Proposal

Contents

ImagingObjectSelection

Owning committee name

Imaging Integration WG

Contributing or Reviewing Work Groups

- IHE Radiology workgroup
- DICOM WG27
- HSI

FHIR Resource Development Project Insight ID

Status: Project number is 1107

Scope of coverage

A set of DICOM SOP Instances of a patient, selected for some application purpose, e.g., quality assurance, teaching, conference, consulting, etc. Objects selected can be from different studies, but must be of the same patient.

Manifest of a set of DICOM objects (images or other data types) from one or more studies, with an intended purpose. The referenced objects may include every image in a study to be shared through a health information exchange, a list of key images for a referring or treating physician, a set of images to be included in a teaching file, or similar purposes.

RIM scope

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

Resource appropriateness

This resource summarizes a set of images or other instances gathered for some specified purpose, and provides references to where the images are available using WADO-RS. This resource is used to make available information concerning images etc. that are intended to be exchanged into other clinical contexts such as diagnostic reports, Care Plans, etc.

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 Cross-Enterprise Document Sharing for Imaging http://www.ihe.net/Technical_Framework/index.cfm#radiology
- 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

DiagnosticReport, Procedure, DocumentManifest, DocumentReference, List

Timelines

2015 - DSTU2

gForge Users

john_moehrke

Issues