Radiology Module (2013)

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⚠ Warning

In November, 2013, it was determined that this module broke the Spring binding mechanism. See this devlist chain.

Abstract

The module manages the clinical workflow of a radiology department. It implements the core functionality of a RIS and PACS based on the IHE integration profile Scheduled Workflow (SWF) and in accordance with DICOM standard. Therefore, manage radiology information from the patient record, through the issuance of the physician's order, the generation of the work list, track the status of procedures, to generate a report with the appropriate diagnosis. It also facilitates communication with the modalities (CT, MR, CR, US and NM) and allows to store, view and manipulate digital medical images in DICOM format.

Objectives

Develop a module capable of manage information in a radiology department.

- Identify radiology's department workflow according to radiology experts.
- Design an architecture that supports basic radiology's department services.
- Implement the module as suggested by architecture, by using free and open source software.
- Satisfy modules' quality parameters set by community.

Features

- Design based on IHE Scheduled Workflow integration profile.
- Communication with modalities (CR, MR, CT, NM y US) using the DICOM services: MWL, MPPS and Storage.
- Access to medical images through WADO.
- Generation of radiology orders.
- Generates a worklist. Allows you to search, filter and sort patient information and procedure. Exchanges information with the modality.
- Tracking the status of the procedure.
- Assignment of reading physician.
- Storage of digital medical images.
- Visualization and manipulation of digital medical images in DICOM format.
- Display of DICOM metadata relating to the procedure, the study, equipment, etc..
- Generation of radiology reports.
- Association of imaging studies and reports of a patient.
- Generation of various reports of the same order, allowing other experts give their opinion.
- Access to the system based on user roles and privileges. Shows different views depending on the role.
- Internationalization: English and Spanish.

Extra Credit

- Well documented code.
- OpenMRS UI styling.
- Installation guide.
- User guide.

Beyond Scope

- Able to create an inventory management for radiology department.
- Billing.
- Scheduling.

Resources

IHE Radiology Technical Framework