Radiology Services Online: Full Process

Full exam processing

Exam creation

Reportwriting

Dictation process

This process is used for fully controlled process. Exam is creating manually.

Main phases to insight:

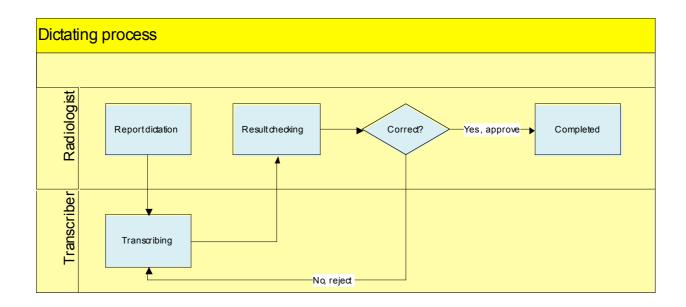
Radiologist

Exam creation – customer or technician creates exam using web form, RSO generates internal exam number automatically.

Image checking

Exam request receiving – technician signs in RSO and looks Active patient list. Client or customer can send notification to technician via SMS, email or fax.

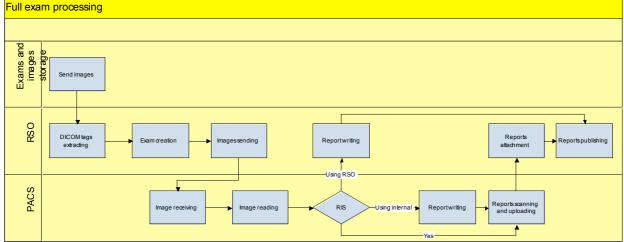
Image uploading – technician edits "Patient id" DICOM tag and put internal RSO exam number there. After this, technician uploads exam using HTTP uploader, FTP client or DICOM SCU.



Integration process

Full exam processing

This process is used for integration with external exams and images storages.



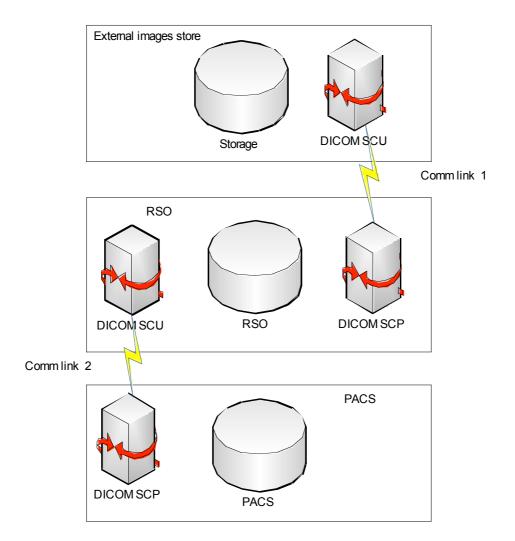
Main phases to insight:

Send images – external storage sends images using DICOM SCU. RSO can recognizes images source using AE_TITLE.

DICOM tags extracting - RSO core extracts patient data (name, patient id) from tags and try to find these values in DB. If it's found, RSO attaches image to the existing exam, otherwise RSO creates new exam and attaches image there.

Image sending - RSO sends images to virtual radiologist which attached to facility. Images can be sent using DICOM SCU into PACS DICOM SCP interface.

Some technical information



Comm link 1 – RSO DICOM SCP published in DMZ and can be accessible from public network

Comm link 2 – PACS DICOM SCP should be published in DMZ or VPN should be adjusted between RSO and PACS $\,$