

Workflow & Dataflow

Data

- Diagnostic Reports (Radiologist -> Referring)
- "Evidence" (Tech / Rad -> Radiologist -> Report)

Workflow

Worklists, Status / Progress Tracking

(& Data Routing)

 Flagging what images should go where and what should be done with them

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Dataflow Profiles

Radiology

- Evidence Documents (ED)
 - · Measurements in DICOM SR
- Simple Image & Numeric Reports (SINR)
 - · Diagnostic Reports in DICOM SR
- Portable Data for Imaging (PDI)
 - · Images & Reports on media (CD, DVD, USB)
 - · Note issue with Stale reports
- Cross-Enterprise Doc. Sharing for Imaging (XDS-I)
 - · Network sharing of Images / Reports between sites

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Dataflow Profiles

Cardiology

- Displayable Reports (DRPT)
 - Diagnostic Reports in PDF wrapped in DICOM or HL7/CDA
- Evidence Documents (ED)
 - Several Options requiring Specific Templates
 - · Cath, Echo, CTA/MRA, Stress

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Dataflow Profiles

IT Infrastructure

- Retrieve Information for Display (RID)
 - Diagnostic Reports over the network as PDF, HTML or CDA/XML
- Cross-Enterprise Document Sharing (XDS)
 - The core profile for XD*
 - · Prefers Diagnostic Reports in CDA
 - · Plain-text content vs coded content
- XDS for Scanned Documents (XDS-SD)
 - · Diagnostic Reports in PDF wrapped in CDA
- XDS for Media (XDM)
 - Diagnostic Reports in PDF or CDA or text on media or in email

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Evidence Documents



- Coded measurement values
- Image references provide explicit evidentiary trail for clinical findings

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How it *should* work

Radiologist selects "Next Patient"

- Reporting station automatically performs the following steps:
- Goes to next study
- Loads and displays images
- Notes procedure code
- Loads SRs
- Compares measurement values to normal ranges
- Selects initial report template based on procedure and values
- Inserts patient demographics and procedure details into draft report
- Inserts measurement values from SR into draft report
- Displays draft report

Radiologist decides to either

- Accept report
- Dictate additional comments
- Switch template

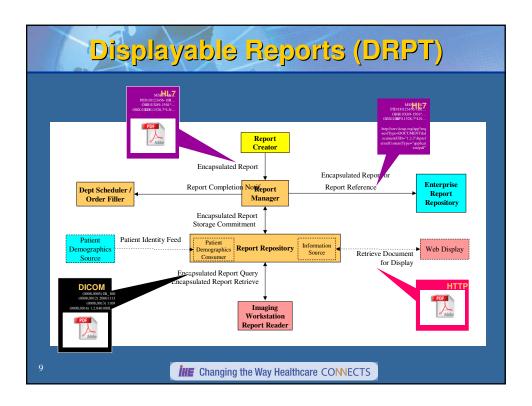
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How it usually works

Radiologist selects "Next Patient"

- Reporting station automatically performs the following steps:
- Goes to next study
- Loads and displays images
- Radiologist notes Patient / Accession / Procedure
- Radiologist locates corresponding paper screen dump of measurements
- Radiologist compares values to normal ranges
- Radiologist selects appropriate report template
- Radiologist reads / dictates measurements off paper
- Transcriptionist listens / transcribes measurements into draft report
- ⇒ Radiologist reviews draft report and checks measurement values were not mis-read, mis-spoken, mis-heard or mis-typed.
- Radiologist decides to either
 - Accept report
 - Submit corrections

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Radiology Reporting Workflow (RWF) Reading worklists using DICOM GP-Worklist Post-Processing Workflow (PWF) Processing worklists using DICOM GP-Worklist E.g. CAD, Measurements, etc. Explicit workflow (worklist) vs Implicit workflow (datadriven)

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