

Interoperability Scenarios

Care Theme: Emergency Care

Act 3 - Emergency Encounter with Imaging Distribution

Scenario Primary Goal: To demonstrate ability to share patient information across multiple care provider systems.

Key Points

- The demonstration will feature use of the IHE Cross-enterprise Document Sharing profile for exchange of medical imaging between Emergency Department Systems with the electronic medical record (EMR) and personal health record (PHR).
- A patient arrives in the emergency department with symptoms requiring medical imaging.
- The emergency department (ED) physician receives results from the Imaging Dept and concludes the patient needs surgery.
- All clinical information from ED encounter and imaging results made available for PCP follow-up.
- PCP is able to see the results of the emergency encounter and update the patient's PHR.

Meaningful Use Relevance

MU Objective 2: Improving Care Coordination

Clinical Workflow:

Sandy is evaluated in the local hospital emergency department (ED) due to complaints of severe headache with vomiting for the past week. After her exam in the ED, Sandy is taken to the imaging department. The medical diagnosis is a leaking cerebral aneurysm causing a subarachnoid hemorrhage. After her treatment and discharge Sandy visits her primary care physician (PCP). The PCP accesses the emergency encounter summary and images via the EMR and updates information in Sandy's PHR.

Care Scenario Steps:	Care Setting From	Care Setting To	IHE Profiles*	Title	HITSP Constructs	Title
3-1 Patient is treated in the ED where an image is taken, completed, and results are made available in the EMR.	Imaging Dept	ED	RAD XDS-I.b (RAD)	Radiology [XDS-I Report and Image Sharing]	HITSP/TP49 HITSP/TP89 (CAP128)	Sharing Imaging Results / Sharing Radiology Results, Sharing Imaging Results
3-2 The ED receives the report from the Imaging Dept and creates Emergency Dept Encounter Summary (w/ imaging results) to be shared with her PCP	ED	PCP Office	EDES (or SD equivalent) (PCC)	Emergency Department Encounter Summary (or XDS-SD equivalent for some instances)	HITSP/C28 (CAP119) HITSP/C62 (CAP120)	Communicate Structured Document / Emergency Care Summary Document Using IHE Emergency Department Encounter Summary Communicate Unstructured Document / Unstructured Document
3-3 After discharge, patient visits her PCP who reviews the emergency encounter summary with image results and updates the patient's PHR	PCP Office	Home	RAD XDS-I.b (RAD) XPHR (PCC)	Radiology [XDS-I Report and Image Sharing] Exchange of Personal Health Record Content	HITSP/TP49 HITSP/TP89 (CAP128) HITSP/C32 (CAP119)	Sharing Imaging Results / Sharing Radiology Results, Sharing Imaging Results Communicate Structured Document / Summary Document Using HL7 Continuity of Care Document (CCD)

Health Information Exchange (HIE) Core Services			
IHE Profiles		HITSP Service Collaborations / Constructs	
XCA XDS/XDR/XDM	Cross-community and Cross-enterprise Document Sharing	SC112 / TP13, T31, T33	Healthcare Document Management Manage Transfer of Documents, Document Reliable Interchange, Transfer of Documents on Media
PIX	Patient Identity Cross-reference	SC112 / TP22	Patient ID Cross-Referencing
PDQ	Patient Demographics Query	SC112 / T23	Patient Demographics Query
ATNA	Audit Trail and Node Authentication	SC112 / T15, T17	Collect and Communicate Security Audit Trail, Secured Communication Channel
CT	Consistent Time	SC112 / T16	Consistent Time