

Interoperability Scenarios

Care Theme: Chronic Care

Act 6 - Congestive Heart Failure (CHF) Monitoring via personal health record (PHR) Pass-thru *New Directions*

Scenario Primary Goal: To demonstrate the ability for providers and patient to share information electronically between electronic medical record (EMR) and PHR.

Key Points:

- The demonstration will use XPHR profiles to demonstrate exchange of information between PHR and EMR systems.
- This scenario features a remote monitoring device which provides patient updates to the patient's PHR for self-management of a chronic condition. The patient then shares this information with their primary care physician (PCP). The provider uploads a summary of the patient visit to the patient's PHR.
- The demonstration will use HITSP constructs to demonstrate interoperability between remote monitoring devices and provider offices, e-prescription and e-dispensing, and EMR-PHR integration.

Meaningful Use Relevance

MU Objective 1: Engaging Patients & Families in Their Healthcare

- This scenario demonstrates the ability for a patient to remotely share monitor information with a PCP and for the provider to upload information to the PHR and send prescriptions electronically. patients with an electronic copy of their health information upon request within 96 hours of the encounter

Clinical Workflow:

R.J. is a 67 year old female with history of essential hypertension and congestive heart failure. She is enthusiastic about a new program that allows her to send her weight and blood pressure measurements to her primary care physician by using a remote monitoring set-up at home. She is concerned because her blood pressure is higher than usual at 165/110 mmHg, and she notes an increase in her weight of about 2 pounds over the last week. R.J. sends these results to her physician.

Dr. Harris receives R.J.'s remote monitoring results. Dr. Harris decides to increase her Furosemide (Lasix) dose from 40mg to 80mg by mouth daily. Dr. Harris calls R.J. to discuss the plans to change the medication doses and lets her know that he will be sending the prescriptions electronically to her preferred pharmacy.

A week later R.J. goes to Dr. Harris' office for a medical follow-up. Her vital signs are recorded as part of the examination. Her blood pressure is now better controlled better at 130/85 mmHg and her weight has decreased by 3 pounds. Dr. Harris sends an electronic summary of this office visit to R.J.'s PHR which she uses to help manage her chronic diseases.

Care Scenario Steps:	Care Setting From	Care Setting To	IHE Profiles*	Title	HITSP Constructs	Title
6-1 Remote Monitoring (via Continua devices)	Home (Devices/Hub)	Home (PHR)			HITSP "new directions"	Remote Monitoring of Home Devices Hub to PHR
6-2 Personal Health Record Summary	Home (PHR)	PCP Office	XPHR (PCC)	Exchange of Personal Health Record Content	HITSP/CAP119 HITSP/C32	Communicate Structured Document Summary Document Using HL7 Continuity of Care Document (CCD)
6-3 Ambulatory Encounter Summary (update to PHR)	PCP Office	Home	XPHR (PCC)	Exchange of Personal Health Record Content	HITSP/CAP119 HITSP/C32	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