



**Title:** Clinical Exchange & Price Transparency

**Description:** Follow Angela, a 52-year-old with rheumatoid arthritis, as she moves across the country and visits multiple care providers – primary care, specialist and emergency – in different care settings using different EHR technology platforms. Automated processes for clinical information exchange, drug price transparency, electronic prior authorization and specialty prescribing enable Angela and her care team to make better-informed treatment decisions that improve her outcomes and overall healthcare experience.

**Scheduled times:** This demonstration will occur 15 minutes after the hour

**Participants:** Aprima, Cerner, eClinicalworks, Epic, Nextgen, Surescripts

Scenario	Vendor	Product / Service	Standards
Angela Davis is a 52-year-old female with a robust medical history and many visits to her primary care provider (PCP) and specialists to treat her diabetes, hypertension, and rheumatoid arthritis. Angela has been seeing her PCP in Shakopee, MN to manage her diabetes and rheumatoid arthritis.	Surescripts	Introduction	
Angela sees her PCP, Dr. Jacobs, for a routine appointment to check in on her medical conditions. Dr. Jacobs notices her diabetes is getting out of control and adjusts Angela’s medication therapy regimen. Dr. Jacobs is shown cost information and an alternative to prescribe a more affordable medication for Angela. Dr. Jacobs submits an electronic prior authorization, which is immediately approved, then prescribes the medication.	Cerner	Medication History, Real Time Prescription Benefit, Electronic Prior Authorization, Electronic Prescribing	NCPDP
Angela gets a new job that requires her to move across country to Arlington, VA, and change insurance. Months pass and she is experiencing increased tenderness and swelling in her joints that she believes is	Surescripts	Transition	

related to her rheumatoid arthritis, as well as some minor discomfort in her chest. She finds a family medicine provider in her new network (who is part of an ACO) and schedules an appointment.			
Angela arrives at her visit to her newly selected PCP, Dr. Roberts. Since Angela is a brand new patient to Dr. Roberts, he uses a Record Locator & Exchange service to receive Angela's past medical history. He electronically receives and reviews Angela's medication history and her clinical documentation from her previous PCP. Dr. Roberts believes Angela may need an adjustment in her current RA medication regimen, but decides that Angela should visit a new rheumatologist for a more detailed evaluation. Dr. Roberts discusses Angela's chest discomfort with her and refers her to a local cardiologist for further evaluation. He informs Angela of this during the visit and sends a referral message, via Direct Messaging, to both providers to make them aware of the visit and of Angela's upcoming appointment. Angela is also assigned to a care manager and enrolled in Patient Notifications to monitor her encounter activity and ensure she is receiving appropriate care to manage her chronic conditions.	eClinicalWorks	Record Locator & Exchange, Clinical Direct Messaging, Direct messaging services	IHE: ITI-55, ITI-38, ITI-39  HL7 CDA
Angela's care manager helps her schedule an appointment with a cardiologist, Dr. Hassan, a few days later, to perform a more detailed examination of her chest discomfort.	Surescripts	Transition	
Angela presents to her cardiologist appointment with Dr. Hassan. Dr. Hassan reviews the information sent over in the referral note from Dr. Roberts and also queries for her past medical history using Record Locator & Exchange. After reviewing her medical history, including her medication list, Dr. Hassan discusses Angela's symptoms and performs a physical exam. He orders a stress test for Angela, which comes back negative. Angela's blood pressure is high, so Dr. Hassan and Angela discuss changing her blood pressure medication. Dr. Hassan is able to see the medication he wants to prescribe is a very expensive drug. Discussing the alternatives with Angela, they choose a more affordable medication and send that prescription to her preferred pharmacy.	NextGen	Medication History, Record Locator & Exchange, Real Time Prescription Benefit, Electronic Prescribing, Direct Messaging	NCPDP IHE: ITI-55, ITI-38, ITI-39  HL7 CDA
Angela's care manager has gotten her an appointment to see the rheumatologist, Dr. Evans, two weeks later to follow-up on her increased joint swelling and tenderness.	Surescripts	Transition	
In the rheumatologist's office, Angela is able to discuss her recent symptoms with Dr. Evans. He references the materials sent from her PCP. In addition to the referral note he received from Dr. Roberts, he has a complete summary of her previous visits with Record Locator & Exchange. After reviewing Angela's history, performing an exam and discussing therapy options, Dr. Evan's decides to change Angela's medication. The specialty enrollment information is sent to the pharmacy so they may begin the	Aprima	Clinical Direct Messaging, Record Locator & Exchange, Specialty Patient Enrollment, Real Time	NCPDP HL7 FHIR HL7 CDA

dispensing process. Angela now knows what the pharmacy will charge her for this new medication, and she is happy it will be sent directly to her home, saving her another trip to the pharmacy.		Prescription Benefit, Electronic Prescribing,	
At the Specialty Pharmacy, the medication order has been received and the pharmacist sees the completed specialty enrollment form and the prior authorization within their system. All of the necessary approvals have been processed by the pharmacy benefits manager and the pharmacist validates Angela's address to send the supply of her new medication.  A couple weeks later, Angela is playing soccer with her daughter and niece and experiences some tightness and pain in her chest. Her daughter takes her to the closest Emergency Room.	Surescripts	Transition	
The ED physician, Dr. Wong, is able to pull up Angela's history via Record Locator & Exchange and sees the PCP and specialists' information for Angela. Seeing that the stress test performed by Dr. Hassan was negative, her examination indicated the chest pain was coming from reflux. Because she had access to Angela's stress test result from a couple of weeks ago, Dr. Wong was able to avoid performing a duplicate stress test or admitting her to the hospital. After reviewing Angela's medication history and confirming that her chest pain is subsiding, Dr. Wong feels confident sending Angela home with a prescription for reflux. When writing the prescription for reflux, Dr. Wong can see the estimated patient cost, along with pricing details for less expensive alternative medications. A summary of her ED visit is then sent to the PCP via Direct Messaging and a Patient Notification is sent to the Care Manager at the practice. Angela is sent home with instructions to rest, and follow up with her PCP in one week. On her after visit summary, Angela is able to see her estimated cost for the reflux medication with instructions to pick up the medication at her local pharmacy.	Epic	Record Locator & Exchange, Medication History, Real Time Prescription Benefit, Electronic Prescribing, Clinical Direct Messaging	NCPDP IHE: ITI-55, ITI-56, ITI-38, ITI-39  HL7 CDA
When Angela is discharged, a notification is sent to the Care Manager from Angela's PCP. The Care manager reviews the notification and the ED visit summary and contacts her on Monday to schedule a follow up appointment to check in on her chest pain.	Surescripts	Transition	
The Care Manager reviews the information sent from the ED and makes the notations in the system in preparation for Angela's visit the following week.	eCW	Record Locator & Exchange Event Notifications	HL7 ADT

HIMSS18 Interoperability Showcase Use Case

Data exchange standards:

Vendor	Product	Category	Protocol	Interop Body	Interop Profile	Interop Actor	Interop Message	Send or Receive	Transaction Description
NextGen	NextGen Enterprise EHR	EHR	ebXML	IHE ITI	XCPD	Patient Demographics Query	ITI-55	Send	Patient Demographics Query
			ebXML	IHE ITI	XCA IG	Document Source	ITI-37, ITI-38	Send	Provide and Register Document Set-b
			ebXML	IHE ITI	XCA RG	Document Consumer	ITI-18	Send	Registry Stored Query
			CDA	HL7	N/A	Content Creator			CDA
			C-CDA	HL7	N/A	Content Consumer			C-CDA
			ebXML	IHE ITI	XDR	Content Sender	ITI-41	Send	Provide and Register Document Set-b
				NCPDP		Patient External Medication History Query	RxHistoryRequest, RxHistoryResponse	Send & Receive	Patient External Medication History (claims & fill)
			ebXML	IHE ITI	XCPD	Patient Demographics Query	ITI-55	Send	Patient Demographics Query

			ebXML	IHE ITI	XCA IG	Document Source	ITI-37, ITI-38	Send	Provide and Register Document Set-b	
			ebXML	IHE ITI	XCA RG	Document Consumer	ITI-18	Send	Registry Stored Query	
eClinicalWorks	V11	EHR	ADT	HL7	ADT		A03, A04	Send	Patient Provider Notifications	
			ADT	HL7	ADT		A03, A04	Receive	Patient Provider Notifications	
			CDA	HL7	N/A	Content Creator				CDA
			X12	ASC X12	N/A	Patient Eligibility Query	X12 270, X12 271	Send & Receive	Patient Eligibility Coverage	
				NCPDP		Patient External Medication History Query	RxHistoryRequest, RxHistoryResponse	Send & Receive	Patient External Medication History (claims & fill)	
						Medication Treatment	BenefitRequest, BenefitResponse	Send & Receive	Prescription Drug Price Transparency	
Surescripts	Eligibility	Network		NCPDP		Medication Treatment	NCPDP 2013101 PAInitiationRequest, PAInitiationResponse, PAResponse, PACancelRequest, PACancelResponse, Status	Send & Receive	Electronic Prior Authorization	
	Medication History			NCPDP		Medication Treatment	NCPDP version 10.6 SCRIPT	Send & Receive	Electronic Prescription	

						Standard NewRX XML			
	Real Time Prescription Benefit		SMTP	Direct Project	S/MIME	HISP	Applicability Statement for Secure Health Transport v1.2	Send & Receive	CDA
	Electronic Prior Authorization			IHE FHIR	XCPD; PLQ; XCA	Responding Gateway; Initiating Gateway; Record Locator Service	ITI-55; ITI-56; ITI-38, ITI-39  Patient Search Document Search	Send & Receive	Cross -Community Patient Discovery; Patient Location Query; Cross-Community Access  Patient Search Document Search
	Electronic Prescribing			HL7	ADT		A01; A03	Send & Receive	Patient Event Notifications
	Clinical Direct Messaging							Send	
	Record Locator & Exchange		ebXML	IHE ITI	XCPD	Initiating Gateway	ITI-55, ITI-56	Send	Cross -Community Patient Discovery
	Record Locator & Exchange 2.0		ebXML	IHE ITI	XCA	Initiating Gateway	ITI-37, ITI-38	Send	Cross-Community Access
	Specialty Patient Enrollment		ebXML	IHE ITI	XDR	Content Sender	ITI-41	Send	Provide and Register Document Set-b
Epic	Epic	EHR		ASC X12		Medication Treatment Planner/Pre	X12 270, X12 271	Send	Pharmacy Benefit Eligibility

				scription Placer			
	NCPDP			Medication Treatment Planner/Pre scription Placer	RxHistoryRequest, RxHistoryResponse	Send	Medication History
				Medication Treatment Planner/Pre scription Placer	BenefitRequest, BenefitResponse	Send	Real Time Prescription Benefit
	NCPDP			Medication Treatment Planner/Pre scription Placer	NewRx	Send	Electronic Prescribing
CDA	HL7	N/A		Content Creator/Con sumer			CDA
	ASC X12			Patient Eligibility Query	X12 270, X12 271	Send & Receive	Patient Eligibility Coverage
	NCPDP			Patient External Medication	RxHistoryRequest, RxHistoryResponse	Send & Receive	Patient External Medication History (claims & fill)

						History Query			
						Medication Treatment	BenefitRequest, BenefitResponse	Send & Receive	Prescription Drug Price Transparency
Cerner	Eligibility	EHR							
	Medication History			NCPDP		Medication Treatment	NCPDP 2013101 PAInitiationReques, PAInitiationResponse, PARequest, PAResponse, PACancelRequest, PACancelResponse, Standard Status	Send & Receive	Electronic Prior Authorization
	Real Time Prescription Benefit			NCPDP		Medication Treatment	NCPCP version 10.6 SCRIPT Standard NewRX XML	Send & Receive	Electronic Prescription
			RESTful	API	FHIR	Push	JSON	Send	
	Electronic Prior Authorization		RESTful	API	FHIR	Pull	JSON	Receive	
	Electronic Prescribing								
Aprima	Version 18.1	EHR							