



Use Case Title: Nationwide Care Transitions

Overview: Cynthia, 66, is admitted, treated, and discharged at home in Florida for pulmonary embolism. While visiting her daughter in Colorado, she suffers a fractured hip, has surgery, and is discharged with home health. She elects to stay with her daughter until ready to travel home and continue her care, avoiding readmission. Cynthia and her healthcare providers have access to her health records nationwide through CommonWell Health Alliance regardless of where care occurs, resulting in a positive health outcome.

Value: Nationwide Care Transitions: Sharing data across boundaries is critical for optimal care. Boundaries can be geographic in nature, or created by systems, payers, or care providers. Trusted data networks that span those intrinsic boundaries using the CommonWell Framework & IHE Profiles, lead to better care and better care outcomes. Interoperability drives STEPS to value life by enabling care anywhere and breaking down information barriers & silos.

Scenario	Vendor	Products	Standards
While on her daily morning walk in Naples, FL, Cynthia Garcia, 66, experiences significant shortness of breath. She calls her Primary Care Physician (PCP) for a same day appointment.			
Cynthia presents at her PCP with shortness of breath, and she is diagnosed with a probable pulmonary embolism (PE). Her PCP, using the eClinicalWorks EHR and having recently becoming a subscribing CommonWell Health Alliance provider, enrolls Cynthia in the Alliance, and her previous hospital records are linked. This allows her records to be available to other CommonWell-participating providers. Cynthia is immediately referred to her local hospital where she is admitted.	eClinicalWorks integrates with CommonWell and MEDITECH	V10e	FHIR, IHE XCA, CCDA
Cynthia is admitted to the local hospital in Naples through the emergency room, where she is treated for a pulmonary embolism. The MEDITECH EHR queries the CommonWell Health Alliance	MEDITECH integrates with	Web EHR	FHIR, CCDA

<p>Broker using FHIR to pull down her health records from her same-day PCP visit. A d-dimer blood test is taken and returns positive, confirming diagnosis of a PE with CT Angiogram. After three days, Cynthia is discharged on an anticoagulant. She recovers comfortably at home, showing no ongoing symptoms, but continues for the next three months on routine Coumadin to help prevent future blood clots. Her records are also made available via the CommonWell Health Alliance network for downstream care.</p>	<p>CommonWell, eClinicalWorks, Cerner, and Brightree</p>		
<p>A couple months later, Cynthia is visiting her daughter in Colorado for Thanksgiving, as she was playing with her grandchildren outside, she slips on ice and falls, fracturing her right hip. She is taken to the ED. Cynthia was previously enrolled with PatientSecure biometric indicator during an acute care episode in FL. When Cynthia arrives at the ER, the triage nurse authenticates Cynthia via the Imprivata PatientSecure biometric identification solution that is connected to the Cerner Millennium EHR and accesses records of her prior acute care episodes. Upon evaluation by the ED doctor, including hip x-ray, Cynthia is admitted to the hospital for surgery.</p>	<p>Imprivata integrates with Cerner</p>	<p>PatientSecure Cerner FirstNet</p>	<p>W3C</p>
<p>The surgeon discovers that she's currently on Coumadin which Cynthia had not mentioned in the ED. This causes a delay in her surgery, but prevents a potential adverse event including bleeding. She is taken off of Coumadin and prescribed Vitamin K to reverse the blood thinner. Cynthia's surgery proceeds, and after a short inpatient stay, she is discharged to her daughter's home with home health, pain medications, and Coumadin restarted at a new dose.</p>	<p>Cerner integrates with CommonWell, Imprivata, MEDITECH, and eClinicalWorks</p>	<p>Millennium</p>	<p>FHIR</p>
<p>Cynthia arrives at her daughter's home and begins the healing process. She receives great care via her home health provider and is thankful to celebrate the Christmas holiday and New Year with her daughter and grandchildren. Her care team is using the Brightree home health solution and is able to integrate her health records with her providers both in Colorado as well as her providers in her home state of Florida through the CommonWell Health Alliance network. After four weeks of care and moderate rehab, Cynthia is discharged and shortly thereafter flies home to Florida.</p>	<p>Brightree integrates with CommonWell, Cerner, MEDITECH, and eClinicalWorks</p>		<p>FHIR, CCD, ONC Direct</p>
<p>Upon returning to her home in Naples, FL, Cynthia is a bit overwhelmed with the course of what has happened over the last six months. She is set to see a new doctor in the morning to evaluate her post home health and establish a go-forward relationship with a local orthopedist should she have any issues with her hip in the future. To prepare for the visit, Cynthia accesses all of her</p>	<p>OneRecord integrates with CommonWell, Cerner, MEDITECH,</p>	<p>OneRecord</p>	<p>FHIR, XCA</p>

<p>patient records from the past six months, as well as many records previous to that at her local PCP and hospital, using her connected PHR, OneRecord. She is able to aggregate all of her records from those previous visits through the access provided to the CommonWell Health Alliance network through the OneRecord platform. She reviews the records and sees that her records state that she is still taking her pain medications, even though she has stopped taking them. She makes a note to tell the doctor at her appointment the following day, as well as notes in her OneRecord that she stopped her pain medication.</p>	<p>eClinicalWorks, and Greenway</p>		
<p>She meets with the Orthopedist, who has already reviewed her records, as he is a connected CommonWell provider through the Greenway EHR. Following his own physical exam and x-ray, the orthopedist confirms that Cynthia has healed well from the care she received in Colorado. He is happy to hear Cynthia is no longer taking the pain medications and recommends she start her daily walks again and perhaps visit Colorado in the summer months only going forward.</p>	<p>Greenway integrates with CommonWell, Cerner, MEDITECH, eClinicalWorks, and OneRecord</p>	<p>Intergy</p>	<p>FHIR, XCA</p>

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
eClinicalWorks		EHR	FHIR	HL7	CommonWell Health Alliance REST API	N/A	N/A	Send	Person Enrollment Patent Link
			XCA	IHE ITI	CommonWell Health Alliance Broker	Initiating Gateway	ITI-38 ITI-39	Retrieve	Cross-Gateway Query Cross-Gateway Retrieve
			XCA	IHE ITI	CommonWell Health Alliance Broker	Responding Gateway	ITI-38 ITI-39	Respond	Cross-Gateway Query Cross-Gateway Retrieve
			CDA	HL7	CCDA	N/A	N/A	Create and Consume	Content Creator Content Consumer
MEDITECH		EHR	FHIR	HL7	CommonWell Health Alliance REST API	N/A	N/A	Retrieve	Find Documents Retrieve Documents
			FHIR	HL7	CommonWell Health Alliance REST API	N/A	N/A	Respond	Find Documents Retrieve Documents
			CDA	HL7	CCDA	N/A	N/A	Create and Consume	Content Creator Content Consumer

Imprivata		Biometrics	Cerner REST API	W3C	N/A	N/A	N/A	Send	Biometric Template Capture Provide CW Identifier
Cerner		EHR	FHIR	HL7	CommonWell Health Alliance REST API	N/A	N/A	Send	Person Enrollment Patent Link
			XCA	IHE ITI	CommonWell Health Alliance Broker	Initiating Gateway	ITI-38 ITI-39	Retrieve	Cross-Gateway Query Cross-Gateway Retrieve
			XCA	IHE ITI	CommonWell Health Alliance Broker	Responding Gateway	ITI-38 ITI-39	Respond	Cross-Gateway Query Cross-Gateway Retrieve
			CDA	HL7	CCDA	N/A	N/A	Create and Consume	Content Creator Content Consumer Unstructured Document
Brightree		Home Health	SMTP	ONC	Direct	Document Recipient	N/A	Receive	
			FHIR	HL7	CommonWell Health Alliance REST API	N/A	N/A	Retrieve	Find Documents Retrieve Documents
			XCA	IHE	CommonWell Health Alliance REST API	Responding Gateway	ITI-38 ITI-39	Respond	Cross-Gateway Query Cross-Gateway Retrieve
OneRecord	OneRecord	PHR	FHIR	HL7	CommonWell Health Alliance REST API	N/A	N/A	Send	Person Enrollment Patent Linking

			XCA	IHE ITI	CommonWell Health Alliance Broker	Initiating Gateway	ITI-38 ITI-39	Retrieve	Cross-Gateway Query Cross-Gateway Retrieve
			XCA	IHE ITI	CommonWell Health Alliance Broker	Responding Gateway	ITI-38 ITI-39	Respond	Cross-Gateway Query Cross-Gateway Retrieve
Greenway	Intergy	EHR	FHIR	HL7	CommonWell Health Alliance REST API	N/A	N/A	Send	Person Enrollment Patent Linking
			XCA	IHE ITI	CommonWell Health Alliance Broker	Initiating Gateway	ITI-38 ITI-39	Retrieve	Cross-Gateway Query Cross-Gateway Retrieve
			CDA	HL7	CCDA	N/A	N/A	Create and Consume	Content Creator Content Consumer
CommonWell		Infrastructure	FHIR	HL7	CommonWell Health Alliance REST API	N/A	N/A	Receive	Patient Enrollment Patient Linking
			FHIR	HL7	CommonWell Health Alliance REST API	N/A	N/A	Send	Find Documents Retrieve Documents
			FHIR	HL7	CommonWell Health Alliance REST API	N/A	N/A	Respond	Find Documents Retrieve Documents
			XCA	IHE ITI	CommonWell Health	Responding Gateway	ITI-38 ITI-39	Respond	Cross-Gateway Query Cross-Gateway Retrieve

					Alliance Broker				
			XCA	IHE ITI	CommonWell Health Alliance Broker	Initiating Gateway	ITI-38 ITI-39	Send	Cross-Gateway Query Cross-Gateway Retrieve
			XCA	IHE ITI	CommonWell Record Locator Service			Respond	

[HIMSS Value STEPS Framework:](#)

Step	Description	Point of View	Point Of View	Point of View	Point Of View
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<p>S: Satisfaction</p>	<p>This type of value focuses on people, process and technology use cases that increases stakeholders' satisfaction with the delivery of care. Satisfaction includes types of value such as: Patient satisfaction Provider satisfaction Staff satisfaction Other satisfaction</p>		<p>Facing an illness is hard, but it's even harder when you are away from home. Systems and networks that help patients get the care they need, no matter where they are, improves patient satisfaction. Better access to complete information about the patient's health history and current care plan makes it possible for care providers to deliver quality care, even if they are not the providers that usually care for the patient. Having the information needed to give good care improves provider satisfaction too.</p>	<p>Having a way to access all treatment history in different providers, especially providers in different states, is a key element to provide timely and proper care. The provider could avoid prescribing duplicated or potential harmful services. It will lead to more provider satisfaction and patient satisfaction.</p>	<p>Easy access to aggregated data is a recurring theme. A provider who can view historical medical information and use it as a comparison to current treatment and diagnosis is a huge resource. This task is completed manually can be long and difficult and simply lead to complacency.</p>
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T: Treatment/Clinical	<p>This type of value focuses on effective and improved treatment of patients, reduction in medical errors, inappropriate/duplicate care, increase in safety, quality of care and overall clinical efficiencies.</p> <p>Treatment/Clinical includes types of value such as:</p> <ul style="list-style-type: none"> Efficiencies Quality of Care Safety Other treatment/clinical 			<p>It will reduce the chances to prescribe duplicated services such as lab; with secure data share a potential adverse event was prevented.</p> <p>The safety of the patient care is improved and quality of care is improved by not performing a potential harmful service.</p>	<p>Medical redundancy is reduced. This leads to less errors and drug interactions.</p>
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<p>E: Electronic Secure Data</p>	<p>This type of value focuses on improved data capture, data sharing, reporting, use of evidence-based medicine, and improved communication by and between physicians, staff and patients. Electronic Secure Data includes types of value such as: Privacy & Security Data sharing Data reporting Enhanced communication</p>		<p>Sharing data across boundaries is critical for optimal care. The boundaries could be geographic in nature, or they could be boundaries created by systems, payers, or care providers. Trusted data networks that span those intrinsic boundaries leads to better care and better care outcomes.</p>	<p>Sharing data across different providers, especially providers in different states will help the providers to contact each others and communicate the completed cases and may share their thoughts on the treatment plans.</p>	<p>When you share data you exponentially increase the size of your care team. Making resources available that you may not have had before.</p>
<p>P: Patient Engagement & Population Management</p>	<p>This type of value focuses on improved population health and reduction in disease due to improved surveillance/screening, immunizations and increased patient engagement due to improved patient education and access to information. Patient</p>	<p>The patient value for interoperability is life saving information; ongoing treatment will be based upon care 'anywhere'.</p>		<p>For the patient engagement point of view, knowing a more detailed history, especially the history of multiple providers for different diseases, can increase patient engagement.</p>	<p>Patient portals enable a empowered and engaged patient.</p>

	<p>Engagement & Population Management includes type of value such as:</p> <ul style="list-style-type: none"> Patient education Patient engagement Prevention Population Health 				
S: Savings	<p>This type of value focuses on documented financial, operational and efficiency savings resulting from factors such as improved charge capture, use of staff resources and workflow and increased patient volume and more efficient use of space .</p>			<p>Sharing data, instead of creating multiple local copies, can lead to more efficient use of resources.</p>	<p>Insurance aside, patients will see reduced costs as repeated tests and imaging are no longer needed. However, it could be argued that the medical facility may lose revenue by not doing these tests.</p>

Other			<p>Family member engagement is an important aspect of quality care and improves care outcomes. The nationwide network helps Cynthia's daughter stay engaged with her mom's care and recovery even after she travels home. Keeping Cynthia's daughter engaged in her mom's care may be an important aspect of avoiding readmission and achieving a good recovery.</p>		
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