

# INTEROPERABILITY SHOWCASE™



## Early Colon Screening For Better Outcomes

**Short Description:** Quan sees his PCP for possible anemia. A fecal occult blood test comes back positive, and he is referred for a screening colonoscopy. He is on a high-deductible insurance plan, so he discusses concerns about his out-of-pocket cost with his physician prior to deciding he will have the colonoscopy. Upon receiving the colonoscopy, he is diagnosed with colon cancer and referred to an oncologist, who discusses a treatment plan and treatment support options with him and his wife. Quan is scheduled for surgery and chemotherapy. Automatic device integrations ensure correct Smart Pump intravenous medication administration and documentation throughout his treatment. Quan works with his oncologist to remain engaged in his care.

**Value:** Through the interoperability of endoscopy patient record software (Endosoft?), EHR, eRx, POC communication platform, (BBraun product), (Philips product), and an Interoperability Platform(Rhapsody product), Quan receives timely and comprehensive care from multiple providers, and is set-up to manage his disease over the long term.

**Participants:**



Scenario	Vendor	Products	Standards
Quan is at his PCP's office reviewing lab results when he is informed of anemia after his CBC is discussed. Quan is being referred for colonoscopy after his Fecal Occult test turns out positive. Quan is provided with the information about his procedure, and after a H&P he is scheduled for the procedure and provided a copy of his office visit notes.	Endosoft	EndoVault EHR	HL7, CCDA, XDS
While Quan is at his PCP's office reviewing Fecal Occult test results, his PCP enters an ICD-10 code to indicate the context for the colonoscopy recommendation, and receives a message within the Endosoft EHR that there is a colonoscopy prep program that he can enroll in. The program consists of a prompt to make the appointment, multiple appointment reminders, and colonoscopy prep materials.	OptimizeRx	POC Communication Platform	Proprietary API, messaging is triggered off ICD-10 code for colonoscopy

Scenario	Vendor	Products	Standards
<p>Quan arrives for his Colonoscopy and using the consents section of the application Quan is able to digitally review and sign his procedural, HIPAA, Anesthesia consent forms along with his clinicians. After the Pre-op workup is finished, the physicians perform the image capture where quality metrics are captured automatically that can be further reported to the quality registry. Physician further finishes their procedure report where all the appropriate measures are collected and coding is performed automatically. Once the report is finalized, the application optimally generates the post procedure, pathology requisition, discharge report and the referring physicians report automatically bringing in pertinent information from all sections of the application to reduce the amount of work and clicks for the physicians. Once the procedure is signed off, Colonoscopy report and a CCDA summary document is sent to the registry and Oncologist's office.</p>	Endosoft	EndoVault EHR	HL7, CCDA, XDS, DIRECT
<p>Quan is at his Oncologist's office discussing surgery and reviewing his post-op care and treatment plan.</p> <p>Philips ISPM enables comprehensive patient-centric cancer care. Endosoft sends Quan's clinical information to Philips (including Lab report, Medication, Allergies, Vital, Comorbidities, Social history and Colonoscopy procedure report, etc.). The data is displayed on a rich dashboard to support the MDT (Multidisciplinary Tumor Board) members to decide on the next treatment plan. The treatment plan summary report is then sent back to the hospital (Allscripts) and PCP office (Endosoft).</p>	Philips	IntelliSpace Precision Medicine(ISPM)	HL7, CCDA, XDS
<p>Behind the scenes, the Rhapsody interoperability platform allows Quan's clinical information to seamlessly transfer among the clinical systems supporting his care team. The platform manages standard based connectivity across the ecosystem, eliminating the reliance on point to point interfaces. Rhapsody can serve as the gateway between systems irrespective of their adherence to standard communication workflows. Rhapsody enables the normalization, enrichment, translation, and transformation of the underlying data and transfer protocols, to ensure systems are interoperable. This helps to support Quan's care by ensuring his clinical team has the available data necessary for their decision support.</p>	Lyniate	Rhapsody	HL7, CCDA, XDS

Scenario	Vendor	Products	Standards
Quan is admitted to the hospital for a partial colectomy. The RN navigates to the Sunrise™ Surgical Case List, finds Quan, and then pulls the Oncologist’s report, results, etc. The RN performs an assessment and documents on the pre-op note. The RN pulls up the patient’s current orders to review. A NaCl infusion, along with antibiotics were ordered.	Allscripts	Sunrise™ Surgical Care	XDS, CCDA
The RN primes the tubing, primary infusion and secondary infusion, inserts the IV ready for administration. The RN uses the Allscripts Sunrise™ Knowledge-based Medication Administration module to perform the 5 rights of drug administration. The primary infusion details are sent to the B. Braun’s Space Pump, where the RN reviews the information and starts the pump. The Allscripts Sunrise™ eMAR task is automatically complete, having received the start message from the B. Braun pump. The nurse moves to the secondary infusion and repeats the same process. Once the infusion has started, the RN navigates to the Intake and Output Flowsheet and pulls the infusion data into the flowsheet. Here, the accurate time is captured for the start time of the primary and secondary infusions, along with volume to be infused and volume infused (NaCl already running, antibiotic programmed) (start at 10 after so that it’s been running for a while when we get to this point in the script).	B Braun	Interoperability with Space Pump Integration and documentation.	IHE PCD-03 PCD-01 PCD-10
Quan’s surgery is completed, he is transferred to the PACU, and then to the floor where he is recovered and discharged a few days later. As part of the discharge process, a CCDA is generated and sent to his PCP for review and record retention.	Allscripts	Sunrise™ Clinical Manager	CCDA
Quan reviews the biopsy results, discharge information, treatment plan and summary with his PCP	Endosoft	EndoVault EHR	DS, CCDA
While Quan is reviewing his discharge information and treatment plan with his PCP, his PCP enters an NDC code to select treatment, and receives two messages within the Endosoft EHR: <ol style="list-style-type: none"> <li>1. A link to a clinical case study about common patient outcomes on that specific treatment, and statistics around outcomes when paired with patient engagement programs - which are available with the treatment</li> </ol> A prompt to finalize Specialty Hub Enrollment paperwork so that the patient has authorization to receive treatment, and financial assistance available when visiting the specialty pharmacy	OptimizeRx	POC Communication Platform	Proprietary API, messaging is triggered off NDC code entry for long term treatment

**Data Exchange Standards:**

Data exchange standards:

Vendor	Product	Category	Protocol	Interop Body	Interop Profile	Interop Actor	Interop Message	Send or Receive	Transaction Description
Allscripts	Sunrise™ Surgical Care (SSC)	CCDA	CDA	IHE ITI	XDS	Document Consumer	ITI-41	Receive	Receive CCDA from Oncologist
		Smart Pump Integration	HL7	IHE PCD	PIV	IOP	PCD-03	Send	Send Infusion Programming order to B. Braun pump
		Smart Pump Integration	HL7	IHE PCD	DEC	DOC	PCD-01	Receive	Receive periodic infusion details.
		Smart Pump Integration	HL7	IHE PCD	IPEC	DOC	PCD-10	Receive	Receive event driven infusion details.
		CCDA	CDA	IHE ITI	XDS	Document Consumer	ITI-41	Send	Transmission of Care sent from Sunrise™ to
	Space Infusion Pump, and	Smart Pump Integration			PIV	IOC	PCD-03	Receive	Receive Infusion Programming order from Allscripts

B. Braun	DoseTrac & DoseLink s/w		HL7	IHE PCD	DEC	DOR	PCD-01	Send	Send periodic infusion details to Allscripts
					IPEC	DOR	PCD-10	Send	Send event driven infusion details to Allscripts
Endosoft	Endovault EHR	CCDA	XDS	IHE-ITI	XDS	Content Creator / Document Source	ITI-41	Send	Send Clinical Summary and Treatment Plan (CCDA) to Philips and Rhapsody
		CCDA	XDS	IHE-ITI	XDS, DIRECT		ITI-41	Receive	Receive Treatment plan and Summary report from Philips and Rhapsody
Philips	IntelliSpace Precision Medicine (ISPM)	MDT Dashboard	CCDA,HL7	IHE ITI	XDS	Document Consumer		Receive	Patient demographics Symptoms,Medications, Allergies,Height, Weight, BMI, Performance Score-COG/Karnofsky etc. Comorbidities,Family history of cancer,Smoking history Alcohol consumption, Lab test results (incl. CEA), Colonoscopy procedure report,Colonoscopy pathology report, CT scan report

			CCDA,HL7-ORU	IHE ITI	XDS	Content Creator		Send	Treatment Plan Summary report
Lyniate	Rhapsody	Interoperability Platform	CCDA	IHE ITI	XDR, XDS	Document Consumer, Document Source	ITI-41	Send/Receive	Treatment Plan Summary Report, Discharge Summary, Clinical Summary (CCDA)

**Patient:**

**First Name: Quan**

**Last Name: HIMSS2020**

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**Date of Birth: March 1, 1976**

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