



**Use Case Title: School Telehealth & Social Determinants**

**Short Description:** Wendy is a 10-year-old student visiting a rural school clinic. She is assessed through telehealth resources and receives referrals for both dental and endocrinology care that would otherwise not be provided. Network continuity, telemedicine, and other applications all come together to ensure the best care for an underserved population.

**Scheduled times:** This demonstration occurs 15 minutes past the hour.

**Participants:** Altarum, Arista, Epic, National Consortium of Telehealth Resource Centers, ViTel Net

Scenario	Vendor	Products	Standards
<p>Place matters. Geography and rurality affect health outcomes. Families living in rural America tend to have higher levels of unemployment and poverty and experience barriers to care related to transportation and a lack of access to primary care, oral health and specialty care providers. In this story, Wendy has recently been diagnosed with diabetes and has been experiencing persistent tooth pain for the past week, causing her to be on a liquid diet consisting mainly of sugary drinks. Wendy experiences many of the issues that rural families experience - a sparsity of providers, issues with transportation, and concerns about lost time and wages associated with traveling long distances to get healthcare. Fortunately for Wendy, her small rural school has recently established a telehealth-enabled integrated school-based health clinic. Wendy is able to visit her school nurse's office for regular blood sugar checks, and when her condition requires a consultation with her</p>	<p>National Consortium of Telehealth Resource Centers (NCTRC)</p>	<p>Technical Assistance and Training</p>	<p>N/A</p>

<p>primary care provider (PCP), the school nurse is able to quickly connect using telehealth. The acute care telehealth visit uncovers an abscessed tooth and a need for an immediate referral to both a dentist and an endocrinologist.</p>			
<p><b>Dental Referral:</b> Her PCP launches SmileConnect Clinical’s SMART-on-FHIR application from within Epic. The SMART-on-FHIR app pulls patient and provider demographic data from Epic, pre-populating the SMART dental referral form. Since the student does not have a dental home established, the PCP selects a local dentist, enters exam information, and generates a referral. The dentist receives a notification in SmileConnect Clinical, accepts the referral, and reviews past oral health treatment history. An appointment with the patient, Wendy, is scheduled. The dentist sees Wendy and performs a dental exam, enters treatment notes, and marks the referral as completed.</p>	<p>Altarum Epic</p>	<p>SmileConnect Clinical EpicCare</p>	<p>FHIR OAUTH2 SOAP SAML 2.0</p>
<p><b>Endocrinologist Referral:</b> The PCP orders the endocrinologist telehealth consult from EPIC. The nurse sees the endocrinologist encounter in ViTelNet and the endocrinologist receives the consult request in the worklist in the EHR. She is able to review the PCP and Nurse's notes and orders before clicking to initiate the video consult with the nurse, Wendy and PCP. The interprofessional care team discusses the need for coordination of care. The care team agrees that Wendy’s blood sugar needs to be carefully monitored and managed as the first course of action. The endocrinologist orders remote monitoring of blood sugar from home and makes adjustments to insulin. After discussion, the care team also recommends that Wendy take an over-the-counter pain medication. The endocrinologist completes the encounter with results and both the nurse and the PCP’s records are updated with the summary note.</p>	<p>ViTelNet EHR</p>	<p>vCareCommand vCareNet Hyperspace</p>	<p>HL7 v2 ORM FHIR OAUTH2 HL7 v2 MDM</p>
<p>Per the Endocrinologist’s care plan, the nurse creates an order for blood chemistry as follow up with the PCP. PCP receives order to fulfill when Wendy comes in for follow up reading.</p>	<p>ViTel Net Epic</p>	<p>vCareCommand Hyperspace</p>	<p>HL7 v2 ORU</p>

<p>Expanding digital healthcare use cases requires secure, reliable, affordable networked services. In many universities and public schools, student healthcare clinics are driving requirements for healthcare application traffic prioritization over gaming and streaming applications to ensure that limited bandwidth is managed to support student health related applications. Additionally, with care being delivered over a school network infrastructure, differentiated security for healthcare applications and use cases becomes critical to ensure regulatory compliance. Arista Networks software-driven cloud networking and wireless infrastructure provide an advanced network telemetry tool set for healthcare and school IT administrators to optimize and protect the IP infrastructure for mixed clinical and non-clinical use cases, such as school-based clinics and beyond.</p>	<p>Arista</p>	<p>Cognitive Cloud Networking - Agile, Available and Automated Across Any Cloud</p>	
<p>Wendy is on the road to managing her conditions and living her healthiest life thanks to the access to care the integrated school based clinic affords.</p>			

HIMSS19 Interoperability Showcase Use Case

Data exchange standards:

Vendor	Product	Category	Protocol	Interop Body	Interop Profile	Interop Actor	Interop Message	Send or Receive	Transaction Description
Altarum	SmileConnect Clinical	Dental Referral Tool	SMART on FHIR	FHIR and OAUTH2	N/A	PCP and Dentist	PCP and Patient	Receive	FHIR resources for PCP and Patient
Epic	Hyperspace	EHR	HL7 v2			PCP	ORM	Send	PCP orders Endocrinologist consult
Epic	Hyperspace	EHR	HL7 v2			PCP	MDM	Receive	PCP receives result of Endocrin result
Epic	Hyperspace	EHR	SMART on FHIR	FHIR and OAUTH2		PCP		Send	Context aware launch of vCareNet
Epic	Hyperspace	EHR	SMART on FHIR	FHIR and OAUTH2		PCP		Send	Context aware launch of SmileConnect
ViTel Net	vCareCommand	Telehealth Platform	HL7 v2			Nurse & Endocrinologist	ORM	Receive/ Send	vCareCommand receives Endocrin consult order from PCP, generates encounter, and sends ORM to Endocrin EHR
ViTel Net	vCareCommand	Telehealth Platform	HL7 v2			PCP & Endocrinologist	MDM	Receive/ Send	Nurse receives Endocrin result and vCareCommand sends MDM to PCP EHR
ViTel Net	vCareNet	Telehealth Application	SMART on FHIR	FHIR and OAUTH2		PCP & Endocrinologist		Receive	Launch with patient context from Epic and RPMS
ViTel Net	vCareCommand	Telehealth Platform	HL7 v2			PCP	ORU	Send	PCP receives lab order from Nurse



