

INTEROPERABILITY SHOWCASE™



Use Case Title: Complete Care for Special Needs Patients

Short Description: Joey, a 12-year-old, was diagnosed with autism spectrum disorder (ASD) and attention deficit hyperactivity disorder (ADHD) at 5 years old and asthma at 7 years old. Joey is taking Vyvanse for ADHD, Albuterol for asthma, has bi-weekly nebulizer treatments and sees a psychiatrist. Joey has not seen a dentist in over 2 years and is experiencing oral discomfort. He currently does not have health insurance and needs medication assistance immediately. Joey is struggling in school and his parents are unsure of their legal rights and accommodations. They are also struggling to manage the numerous appointments, medical records and care plans from the various professionals who offer services to Joey.

Understandably, his family is overwhelmed and needs some support. The problem is exacerbated by disconnected care planning, lapses in care coordination, logistical complexities in the delivery of clinical and non-clinical services and a lack of information and insights where they are needed most – at the point of care and delivery of social services. Orchestration, coordination, and consolidation of data between all of Joey's providers is vital to helping him and his family receive the care and social services he needs to thrive.

Come learn how to enable seamless interactions between Joey and his multidisciplinary care team, from intake to appointment and care plan management to patient participation, education, and monitoring. By leveraging a connected care platform, the care team can automate care coordination, referrals and connections with healthcare consumers while also making the information and intelligence available at scale that is required to personalize care. Within this scenario, we are personalizing Joey's care experience while meeting his clinical and non-clinical needs – all while easing the strain on his family as they look after and help manage his well-being. This is interoperability with a purpose.

Participating Vendors: Dedalus Group, Rx.Health

Scenario	Vendor	Products	Standards
<p>Introduction</p> <p>Families struggle to manage numerous appointments, medical records and care plans from various professionals. The problem is exacerbated by disconnected care planning, lapses in care coordination, logistical complexities in the delivery of clinical and non-clinical services and a lack of information and insights where they are needed most – at the point of care and delivery of social services. Orchestration, coordination, and consolidation of data providers are vital to help families receive the care and social services needed.</p> <p>Dedalus’ flagship product in North America, Digital Connect for Health (DC4H), enables seamless interactions between you and your multidisciplinary care team, from intake to appointment and care plan management to patient participation, education, and monitoring. By leveraging a connected care platform, the care team can automate care coordination, referrals and connections with healthcare consumers while also making the information and intelligence available at scale that is required to personalize care.</p> <p>To see how DC4H can personalize your care experience, let’s follow Joey through his journey navigating the various services he needs to meet his clinical and non-clinical needs – all while easing the strain on his family as they look after and help manage his well-being.</p> <p>This is interoperability with a purpose.</p>	Dedalus	Digital Connect for Health (DC4H)	
<p>Joey visits the website of the Assistance Center, an organization designed to provide medical and non-medical services for individuals with special needs, to learn more about services available to him and completes a pre-screening form to determine if the Assistance Center can help.</p>	Dedalus	DC4H	HL7® FHIR®



<p>Joey and his mom are seeking assistance with managing his numerous appointments, medical records and care plans from the various professionals he sees.</p> <p>The information Joey’s mom enters to the pre-screen form is sent to the Assistance Center and is received by a Care Navigator who reviews his information. If it’s a good match, a Care Navigator schedules a meeting with Joey and his family.</p> <p>Joey’s information is passed through an API Gateway to DC4H’s FHIR Server and a record is created in DC4H’s EMPI component. The EMPI component also will determine if Joey already exists in the system.</p>			
<p>Joey arrives at the Assistance Center and begins the self-service check-in process via tablet/kiosk. He meets with an assigned Care Navigator who will create a care plan specifically for him. Additionally, the Care Navigator will document his consent to search for and ingest his health data from health information networks to his integrated care record.</p> <p>Joey may have recently moved to the area, and saw multiple providers like a Therapist, Neurologist and more out of state but was unable to bring along his records.</p> <p>DC4H allows organizations like the Assistance Center to connect with systems to integrate, ingest, link datasets across disparate applications, create an integrated care record, gain insights about their consumer base, and support clinical workflows across organizations. Qualified Health Information Networks (QHINs), as designated by TEFCA and the RCE, are examples of systems of records DC4H will utilize. This is enabled by the standards-based (HL7 v2/v3 and FHIR) open architecture (API) DC4H uses.</p> <p>DC4H documents and manages Joey’s consent and utilizes a built-in terminology server to ingest and semantically link data received from systems of records.</p>	Dedalus	DC4H	HL7 FHIR



<p>The Care Navigator will then refer Joey to providers (on and off site) who will best serve him, sharing his integrated record as requested and managing all his appointments.</p> <p>DC4H sends a referral to the on-site provider via HL7 FHIR and HL7 Outbound Patient Referral messages to off-site providers.</p> <p>Typically, individuals with special needs get fragmented, uncoordinated health and social services from their community. Many families, like Joey’s, feel they don’t have the support or knowledge to identify and navigate through services options. This problem often leaves individuals overwhelmed to seek appropriate and necessary assistance.</p>	Dedalus	DC4H	HL7 REF
<p>The providers who were sent the referrals contact Joey and/or his mom to schedule an appointment for a visit.</p> <p>On-site providers can schedule appointments within their own calendar system. This triggers a request to update the master scheduler via HL7 FHIR. DC4H receives this message via an API Gateway and incorporates it in Joey’s integrated care record and personalized schedule.</p> <p>Off-site providers schedule appointments which will trigger HL7 SIU messages sent to the master scheduler updating Joey’s care plan. DC4H receives this message via an API Gateway and incorporates it in Joey’s integrated care record and personalized schedule.</p> <p>DC4H includes built-in notifications that alert providers to carry out intervening actions.</p>	Dedalus	DC4H	HL7 REF, SIU
<p>Joey’s information is also sent to the Assistance Center’s dedicated Patient App, where Joey and designated extended care team members are able to view his appointments, care plan, integrated record and patient education material on mobile devices.</p>	Rx.Health	Rx. Health	HL7 FHIR R4



<p>Using HL7 FHIR standards, Rx. Health, a digital health platform that is SMART on FHIR, connects to DC4H's FHIR API endpoint.</p> <p>Joey is able to request appointment updates, view his records, care plan, and receive patient education material offered by Rx.Health's unified digital health platform. He can also communicate via chat with his Care Navigator if he has questions.</p>			
<p>After meeting with Joey and his family, Joey's providers send to DC4H a CDA to update his integrated care record and care plan.</p> <p>The HL7 CDA document enters DC4H via an API Gateway and updates Joey's integrated care record and care plan.</p> <p>Joey and his family will continue to meet with his Care Navigator for coordinated access to the best providers for him.</p> <p>DC4H includes built-in views to help Care Navigators visualize Joey's data.</p>	Dedalus	DC4H	HL7 CDA



Data exchange standards:

Vendor	Product	Category	Protocol	Interop Body	Interop Profile	Interop Actor	Interop Message	Send or Receive	Transaction Description
Dedalus	Digital Connect for Health (DC4H)	Interoperability	HL7	IHE	XDS.b	Document Administrator/Repository/Registry/Consumer			
				IHE	XCPD	Initiating Gateway/Responding Gateway			
				IHE	PIX	Patient Identity Feed Source			
				IHE	PDQ	Patient Demographics Supplier			
				IHE	BPPC	Content consumer			