

*Great Lakes Health Connect – Doug Dietzman -- Examples of Successful Interoperability*

<b>Cross Community Referral Management</b>		
<b>Profile Element</b>	<b>Description</b>	
Responsible Entity	The owner of the project	Great Lakes Health Connect
Participating Entities	Types of organizations participating, e.g., hospital, provider	Primary care offices, specialty offices, food bank providing nutritional support, homeless shelter providing dental services, diabetic educators, behavioral health providers, social service agencies, hospitals, rehab centers
Description	Short description of the project	For the past 5 years, GLHC has been working on developing a closed-loop referral network across the state of Michigan for any and all organizations involved in the healthcare ecosystem, including physical health, behavioral health, and social services. The focus has been not just sending an "electronic fax" through uni-directional clinical messaging services (although we support that too), but rather truly solving the workflow and business issues in the current phone/fax referral management workflow today. Every location defines and maintains the questions they must have answered for a referral to be sent to them, uploads the latest forms/documents for the patient or the sending office, and allows the sending office to attach a CCDA and whatever other documentation is required to support each specific referral. Referral status, messages, and other updates are updated simultaneously between both the sending and receiving office to keep them in sync. When complete, the receiving office can attach a consult report which will automatically be send back to the sending office and notify them of the completed status. The largest office receives, manages and closes the loop on over 1,000 referrals each month that were previously handled manually through phones and faxes. Any office on the network has access to all other offices and equally supports both offices with EMRs and those that are still using paper charts.
Standards Implemented	What standards were implemented in the project	CCDA documents are attached from certified EMR systems in support of MU2 TOC requirements
Policies Adopted	What policies were	Sender policies: common expectations for what referral sending offices will do and what

	implemented/adopted to support the implementation	information will be provided in each referral was implemented. Receiver policies: common expectations for what receiving offices will do and how they will close the loop for those sending electronic referrals was implemented.
Timeframe	Start date, key milestones	Fall 2010: Began solution development July 2015: surpassed 1,000 networked locations across Michigan
Volumes	Quantitative indicators, e.g., number of providers, number of records exchanged	As of Dec 2015, 1,106 locations are connected to the network electronically transacting over 17,400 individual care transitions/referrals each month  Referral network participants are in 146 cities and 48 counties across the state
Impacts	Quantitative results, e.g., reduction in delays, cost savings	Less staff time spent coordinating/following up on referrals, less cost associated with fax paper/ink and mailing costs, faster scheduling of referred patients,  The solution is made available to independent community providers at no cost, so the ROI on any administrative and operational savings is infinite.
	Qualitative results, e.g., provider satisfaction, perceptions, testimonies	Better referrals – all information complete the first time based on what each office/physician needs, increased staff satisfaction having a central tool to manage all inbound/outbound referrals, audit trail of all communication associated with referrals, patients don't fall through the cracks as faxes are "lost".  Carrie Strom, Network Referral Manager for Mercy Health Physician Partners said, "The system has allowed our primary care offices to better track their referrals for follow through, and has given our specialty offices a way to sort and pace their incoming referral volume. The Referrals application has become an indispensable tool throughout our network."
References	Links or attached documents	<a href="http://gl-hc.org/our-solutions/referrals/">http://gl-hc.org/our-solutions/referrals/</a>
Contacts	Point of contact for further information	Doug Dietzman Executive Director Great Lakes Health Connect <a href="mailto:ddietzman@gl-hc.org">ddietzman@gl-hc.org</a>

## State Registry Submissions

Profile Element	Description	
Responsible Entity	The owner of the project	Great Lakes Health Connect
Participating Entities	Types of organizations participating, e.g., hospital, provider	Hospitals, physician offices
Description	Short description of the project	Meaningful Use pushed the implementation of electronic submission of immunization, reportable lab, and syndromic surveillance messages to state registries. The challenge for GLHC was how it could scale the implementation of these interfaces to hundreds or even thousands of locations across the state in a quick period of time. GLHC knew it could not build these interfaces in the traditional one-off model of EMR interfaces used across the industry and achieve its scalability requirements. Therefore, it implemented a single gateway to the state for all registries and also created a standard interface capability through its HIE technical infrastructure so new interfaces did not need to be created for every participant onboarded. To avoid the more complex and costly VPN tunnel issues associated with connecting offices to GLHC, it used a software agent from its Medicity vendor partner that uses the public internet to transact encrypted messages to GLHC's core platform. This made the requirement for even the smallest office to just have a simple internet connection and GLHC could install the agent in a few minutes and have them ready to go. Overall, this architecture has allowed GLHC to onboard many offices each week and quickly respond to the needs across the state.
Standards Implemented	What standards were implemented in the project	Standard registry message formats: immunizations, reportable laboratory results, syndromic surveillance
Policies Adopted	What policies were implemented/adopted to support the implementation	Real-time submission of registry messages from the source EMR
Timeframe	Start date, key milestones	October 2015: surpassed 1,000 offices connected in production for immunization submission to state registry
Volumes	Quantitative indicators, e.g.,	April 2015: GLHC sent 4.2 million syndromic surveillance, 379,500 immunization, and

	number of providers, number of records exchanged	39,300 reportable lab messages to the state registries.
Impacts	Quantitative results, e.g., reduction in delays, cost savings	Eliminates manual entry of immunizations to state registry by office staff
	Qualitative results, e.g., provider satisfaction, perceptions, testimonies	More and better data resident in state registry systems
References	Links or attached documents	
Contacts	Point of contact for further information	Doug Dietzman Executive Director Great Lakes Health Connect <a href="mailto:ddietzman@gl-hc.org">ddietzman@gl-hc.org</a>

Formatted ADT Notifications		
Profile Element	Description	
Responsible Entity	The owner of the project	Great Lakes Health Connect
Participating Entities	Types of organizations participating, e.g., hospital, provider	Hospitals, physician offices
Description	Short description of the project	GLHC has many sources of inbound HL7 ADT data from its participating hospitals. It also has the ability to route those messages to community providers based on the information contained within those ADT messages. However, most community providers don't know what to do with an HL7 message, either being unable/unwilling to integrate those messages into their EMR or don't have an EMR system in the first place. In order to meet the real-time notification needs of these providers, GLHC uses its interface engine to create a .pdf formatted notification report by pulling out the data

		<p>from the raw HL7 message. Once completed, GLHC reformats the inbound HL7 ADT message to instead look like a standard HL7 Result message and attaches the newly created report to it. At this point, GLHC uses its standard result delivery process to send those notifications to a GLHC Inbox deployed within each office. Providers not otherwise able to get notifications can see in near real time which of their patients have been admitted and/or discharged from inpatient, urgent care, and emergency settings. This improves their opportunity for additional reimbursement and enhances the speed with which patients are scheduled into the office to ensure compliance with discharge instructions resulting in reduced readmissions. There are a number of notification solutions in the market but this provided a low cost, quick way to use the tools and infrastructure GLHC had to get these important notifications to its providers regardless of the technical sophistication in their office.</p>
Standards Implemented	What standards were implemented in the project	<p>HL7 ADT messages HL7 Result messages</p>
Policies Adopted	What policies were implemented/adopted to support the implementation	
Timeframe	Start date, key milestones	
Volumes	Quantitative indicators, e.g., number of providers, number of records exchanged	<p>August 2015: 20,534 messages sent across 91 offices representing 977 physicians.</p>
Impacts	Quantitative results, e.g., reduction in delays, cost savings	<p>Improved patient outcomes through optimal compliance with discharge instructions and transition to primary care home post-discharge Increased compensation for provider office Reduction in readmissions</p>
	Qualitative results, e.g., provider satisfaction, perceptions, testimonies	
References	Links or attached documents	

Contacts	Point of contact for further information	Doug Dietzman Executive Director Great Lakes Health Connect <a href="mailto:ddietzman@gl-hc.org">ddietzman@gl-hc.org</a>
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