EMDI MedAllies, Netsmart, & eClinicalWorks (360x) Pilot

Pilot Overview

Stream	Pilot Information	Status	Pilot Use Case	Link to IPG
HHA	EMDI MedAllies, Netsmart, & eClinicalWorks (360x) Pilot	COMPLETE	USE CASE 1	Click Here

Hospital	Interface Vendor	Document Transfer Vendor	Transfer Standard	Document Transfer Vendor	Interface Vendor	Home Health Agency
N/A	eClinicalWorks	MedAllies	Direct, 360x	MedAllies	Netsmart	N/A

Content Standard: HL7 CCDA

Pilot Date: Start: **24 Jul 2017** End: **18 Nov 2020**

MedAllies, Netsmart, & eClinicalWorks (360x) Pilot Summary

Organization Name	MedAllies
Piloting Organization(s) Name	eClinicalWorks, Netsmart
Pilot Stream (e.g. DME, HHA)	HHA
POC Email	hmiller@medallies.com
Pilot Summary Date	18 Nov 2020

Category	Question/Description	Pilot Response

Background	High-level overview about the piloting organization(s)	MedAllies securely delivers vital health information to impact patient care by operating a nationwide interoperable network supporting all healthcare constituents. We are focused on optimizing the adoption and usage of healthcare interoperability for the people, systems and services connected to our MedAllies network, eliminating information care gaps and fostering a truly interoperable and connected future. We serve more than 600 hospitals, 100,000 providers and dozens of vendor partners bringing together millions for a more fluid healthcare experience.
		eClinicalWorks offers unified and integrated healthcare IT solutions for medical professionals of every size and type — ambulatory practices, urgent care facilities, health centers, and hospitals. More than 130,000 doctors and 850,000 medical professionals rely upon eClinicalWorks, and through interoperability we seek to control costs, reduce errors, and improve the quality of care. eClinicalWorks has partnered with eClinicalDirect a HITRUST certified and Direct Trust accredited Health Information Service Provider (HISP). eClinicalDirect provides Direct Messaging as a service which allows providers to send and receive authenticated and encrypted transition of care documents with trusted recipients in a simple, standard, and secure manner.
		Netsmart has implemented behavioral health and chemical dependence service solutions across the U.S. healthcare system, and in the last few years, we have continued to implement our strategy of expansion into the Post-Acute market. Netsmart's CareConnect interoperability engine was built from the ground up to represent the Substance Use, Behavioral Health, Child & Family Services, Autism, and Intellectually /Developmentally Disabled markets, and has since grown to include the Home Health, Hospice, and Senior Living markets.
	Describe each participating organization role in the EMDI pilot	EMDI requires cross-organizational interoperability. This pilot is a demonstration of the ONC sponsored 360X IHE standard for referral management. eCW and Netsmart are the two EHR vendors and they selected clients to participate in the pilot. To achieve the interoperability across the eCW and Netsmart client implementations for this pilot, MedAllies and eCW's HISP are the two HISPs (Health Information Service Providers) transmitting the 360X necessary referral data as Direct secure messages across the two systems.
	Describe what encouraged you to participate in the EMDI program	There are significant issues with patient transitions of care and more specifically, patient referrals. These issues cause treatment delays, duplicate testing, transcription burden and errors. 360X is an IHE approved standard designed to greatly enhance referral management. All of the organizations in this pilot wanted the opportunity to demonstrate the advantages of 360X for CMS.
	Describe the onboarding strategies used to get other organizations involved in piloting	The eCW and Netsmart healthcare organization sites were selected based on documented paired referral /Direct messaging activity as shown in HISP logs. In October one of the healthcare organizations unexpectedly dropped out of the pilot. eCW and Netsmart are in the process of identifying "super user organizations" in close proximity to one another to be the new pilot sites.

Business Workflow/ Requirements	What are some benefits to your customers from implementing EMDI?	360X allows for pertinent clinical, scheduling and status information to securely flow across disparate EHR systems for patients transitioning care. The use case selected for the EMDI Pilot is referral management from a PCP to a Specialist. The information is expected to flow in real time. Initially, a referral request is "accepted" or "declined" and critical clinical information is included in a C-CDA with additional information such as tests or studies. Throughout the process a unique referral ID is maintained for easy patient identification and the status of the referral is regularly updated with status information such as "cancelled", "no-show", "rescheduled" and interim consult summaries allowing the PCP to update the patient's care plan throughout the process until the referral loop is closed. The referral recipient organization can use the discrete data in the C-CDA to reconcile an existing patient chart or create a new patient chart. Thus, reducing provider organization transcription burden and eliminating errors. The pertinent tests and studies that are included prevent duplicate testing decreasing the cost of care. Having the necessary information at the point of care enhances care efficiency and patient experience of care.
	Detailed description of how the use case(s) helped the piloting participants meet their goal	Both organizations greatly appreciated the perceived enhancements that 360X would offer them. The primary care organization was particularly frustrated with the lack of follow up information from the behavioral health organization once the referral had been made. Both organizations strongly believed that 360X would enhance not only their referral tracking but their clinical care of their shared patients. The primary care organization credited 360X with reducing staff time currently devoted to referral management. The pilot unfortunately was terminated prior to implementation due to a staff resignation eliminating the pilot leadership at the healthcare organization.
	Describe any pain points that you've incurred before piloting and how electronic interoperability assisted in resolving them	From the pre-pilot surveys, it was clear that both healthcare organizations were dissatisfied with their time and resource consuming current-state workflows. The organizations had never met with each other to work on enhancing their communication and interactions regarding referral management. Neither organization was optimally using the current functionality provided by their software vendors. Pre-Pilot workflows were noted by both healthcare organizations to be exceedingly time consuming and staff resource heavy. They both noted in their pre-pilot surveys excessively long delays in receiving information and, in fact, many times no information was available regarding the shared patients despite follow-up efforts to search for this information. The pilot would have resulted in information flowing in real time for all shared patients between the two organizations via Direct interoperability and substantial decrease in provider and staff burden.

Detailed description of the implementation of the use case (s)	Pilot Implementation Workflow:
	Primary Care Organization (PCO): Electronically via Direct secure messaging, sends referral request with C-CDA and any other pertinent information, e.g. completed PHQ9 form for depression and Consent form for Behavioral Health Organization (BHO) to send PCO ongoing patient information. Takes a couple of minutes or less.
	Behavioral Health Organization (BHO): Electronically receives referral request and sends PCO "Accept" or "Decline" with appointment scheduled if accepted. Patient comes for appointment and is treated – BHO sends. PCO interim consult note including diagnoses and medications. In this case PCO reconciles this discrete data in the patient's chart updating the care plan. Patient "No Shows" for appointment - BHO sends PCO a "No Show" message. In this case PCO follows up with the patient. Patient "Reschedules" the appointment - BHO sends PCO a "Rescheduled" message. Once the patient is seen, BHO sends PCO interim consult note including diagnoses and medications. In this case PCO reconciles this discrete data in the patient's chart updating the care plan. Patient "Cancels" the appointment - BHO sends PCO a "Cancelled" message. In this case PCO follows up with the patient. In all cases patient matching on both sides is automated due to a unique referral ID Patient is seen multiple times by BHO until treatment is no longer required. BHO sends PCO an ultimate consultation note. This closes the consult loop in the PCO system.

| | Detailed description of the pilot participants workflow before and after the EMDI use case(s) | BEFORE:
Primary Care Organization (PCO):

• Requests referral via phone or fax. Request process takes 1- 2 days and entire process requires 1-2 additional staff.
• 100% of the time, no information is received back from the Behavioral Health Organization (BHO).
• 100% of the time information is requested. This request takes 1-2 days and requires 6 manual steps.
• 50% of the time there is still no information received after 1 month. NB: In their pre-pilot survey the participating PCO stated they are "Not Satisfied" with the process.

Behavioral Health Organization (BHO): Receives fax /phone referral request staff takes 1-2 days and state they are "Slightly Satisfied" with the quality of the documentation received. The referral management process in their organization requires 1-12 additional resources. BHO does not know the number of referrals missing documentation, but that it takes 1-2 days to process additional documentation requests. The number of additional documentation requests that go unanswered is unknown. NB: In their pre-pilot survey the participating BHO stated they are "Slightly Satisfied" with the process.

AFTER:
Primary Care Organization (PCO): Electronically via Direct secure messaging, sends referral request with C-CDA and any other pertinent information, e.g. completed PHQ9 form for depression and Consent form for Behavioral Health Organization (BHO) to send PCO ongoing patient information. Takes a couple of minutes or less.

Behavioral Health Organization (BHO):

• Electronically receives referral request and sends PCO "Accept" or "Decline" with appointment scheduled if accepted
• Patient comes for appointment and is treated – BHO sends PCO interim consult note including diagnoses and medications. In this case PCO reconciles this discrete data in the patient's chart updating the care plan.
• Patient "No Shows" for appointment - BHO sends PCO a "No Show" message. In this case PCO follows up with the patient.
• Patient "Reschedules" the appointment - BHO sends PCO a "Rescheduled" message. Once the patient is seen, BHO sends PCO interim consult note including diagnoses and medications. In this case PCO reconciles this discrete data in the patient's chart updating the care plan. Patient "Cancels" the appointment - BHO sends PCO a "Cancelled" message. In this case PCO follows up with the patient.
• In all cases patient matching on both sides is automated due to a unique referral ID.
• Patient is seen multiple times by BHO until treatment is no longer required. BHO sends PCO a final consultation note. This "closes the consult loop" in the PCO system. |
| **Technical Specifications** | Describe the lessons learned while implementing the technical standards | All of the standards used in 360X are ubiquitously adopted throughout the health information technology industry. When the EHR vendors implemented and demonstrated the 360X standard they learned how valuable the enhancement would be for their customers due to positive feedback and pervasive demand for this new functionality. The Direct messaging infrastructure is already in place and operating extremely well. All three organizations are already well established on the Direct network with a high volume of Direct messages each day. |

| Detailed description of why you've chose certain industry standards for piloting the use case(s) | 360X was selected for this pilot as it uses ubiquitously deployed health information technology industry standards (Direct secure messaging, HL7 v2 messages and others). 360X is an ONC sponsored HIE approved standard and is in the process of being implemented for general availability in multiple electronic health record systems including Netsmart and eClinicalWorks. In addition, 360X works with other emerging standards such as FHIR. 360X referral management has been demonstrated using FHIR for scheduling. It is also anticipated that 360X transitions of care will also be used with FHIR prior authorization for payer interactions. Again, 360X is not a product but an ONC supported standard that is being incorporated in multiple EHR vendor systems. It is clearly the best standard available for transition of care management. From the: 360X Project - Closed Loop Referral - Implementation Guide: 60X+Implementation+Guide. General Guiding Principles The following list presents five general principles that are guiding decisions regarding 360X-compliant EHRT capability requirements. In a medical home/neighborhood, where closed-loop referrals take place: The maximum possible number of clinicians' EHRTs should be able to implement 360X, so even EHRTs with minimal capabilities should be able to implement key components of 360X The referral process should be as easy and useful as possible for all clinicians For transport, all three Direct transport capabilities (as described in MU requirements) are included: Required transport capability: "Simple SMTP" (no XDM/XDR) Optional transport capability: SMTP + XDM Optional transport capability: SOAP + XDR (only when both sides agree to this communication method) Payload requirements should be minimal: C-CDA content: Require as little patient data and metadata as is useful for transition of care, e.g., using a TOC (or other) template/profile that includes reason for referral. |

HL7 content: Include generic order in HL7 that is packaged in XDM to be consumed by EHRTs that can handle XDM and HL7 A second C-CDA that is not stored in the XDM is included for EHRTs that cannot handle 360X requirements Required workflow functions and related payload content depend on EHRT capabilities: HL7 content necessary for 360X workflow automation must be included in the payload by EHRTs that can handle XDM and HL7 EHRTs that cannot handle XDM or HL7 will have no 360X automated workflow capabilities beyond the required ability to create and display C-CDAs, as well as send and receive them via Direct EHRTs that can handle XDM and HL7 must consume them and use them to automate defined 360X workflows Implementers are encouraged to develop workflow capabilities that add value beyond the workflow requirements defined in this Implementation Guide; these value-add capabilities are product advantages. 360X processes are designed to improve coordination of care in patient-centered medical homes (PCMHs) and other such care coordination models by, for example: Fostering care team collaboration around patients through information sharing Notifying care teams when specific patients move across settings. Enabling wide-spread interoperability Providing referral data that supports reporting and decision making. Overview and Scope. This Implementation Guide describes common patterns of exchange and content/payload standards for the secure and interoperable sharing of clinical data for the purposes of referrals. This document represents guidance for vendor use of the referenced standards in order to electronically communicate: a referral request from one provider (referral initiator) to another (referral recipient) across EHRT updates to the progress of the referral the outcome of the referral, including relevant patient data as part of the successful completion of the closed loop. Within the 360X Project, the use case focuses on the exchange of this referral related information between two providers using disparate EHRT where the referral is for outpatient services such as from PCP to specialist or specialist to specialist. It is important to note that the care venue of the actors may be immaterial; for example, the specialist actor may be hospital based or clinic based. The material aspects of the scope of the actors are that they are: requesting outpatient services (vs. requesting admissions) using different EHRT The use case includes ongoing, related coordination activities between the actors (e.g., providing interim consultation reports, communicating patient's missed/canceled/rescheduled appointments, etc.) and provision of the outcome of the referral. The primary goal is to enable electronic exchange to support improvement in the quality and timeliness of information available to both the referral initiator and referral recipient throughout the referral life cycle. To effectively implement the secure electronic exchange of referral request, status, relevant health information, and result, it is important to have appropriate interoperability standards as well as clear implementation guidance for their use in context of this use case. In order to promote rapid adoption, the 360 Exchange Project has chosen to base its requirements on standards identified in the 2014 Edition Meaningful Use certification criteria and mature HL7 specifications. The combination of these two standards provide the ability to raise the bar from simple data sharing in the form of a C-CDA per 2014 Edition Meaningful Use certification to managing workflow with the addition of HL7 messages.

	Describe the level of effort used for the infrastructure when using the document transfer vendor or describe how you had to improve your infrastructure to align with EMDI	The pilot sites were not required to purchase any additional software or hardware, however, they would have needed to upgrade their software to include the new functionality. The pilot sites new 360X functionality and workflows would have resulted in needing far less resources to manage their referrals. There wasn't any additional effort from MedAllies, eCW, and Netsmart. The Direct messaging infrastructure is already in place and operating extremely well. All three organizations are already well established on the Direct network with a high volume of Direct messages each day.
Additional Considerations	Note any additional implications	This pilot involved a primary care organization and a behavioral health organization. 360X functionality is designed to work for all referral management and additional transitions of care such as acute to skilled nursing facility. During this pandemic which has increased the need for transition of care coordination, the 360X team is now in the process of working on referrals for social determinants of health issues to community based organizations and skilled nursing facility to acute transfers.
Recommendations	Note any recommendations for the EMDI program	EMDI staff provided excellent support. We would have liked to have the opportunity to demonstrate the project to a broader audience

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Related Links
MedAllies
eClinicalWorks
Netsmart