IHE Work Item Proposal (Short)

# Proposed Work Item: 360X – Closed Loop Referrals

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Domain: Patient Care Coordination

# The Problem

Today when a primary care provider refers a patient to another provider or clinic for specialty care, the health IT utilized often does not provide adequate tools or information to ensure that both providers have sufficient information about the patient and about the referral process. Recent studies indicate that roughly 60%-70% of referrals go unscheduled. When referrals are scheduled, 68% of specialists report not having received information from the patient’s primary care provider prior to the referral visit, and one-quarter of primary care providers do not receive timely information from specialists following the referral. Without effective health IT tools to facilitate communication and tracking of the referral process, providers resort to performing duplicate tests, and patients may miss out on vital care.

In cases where the two providers are using the same EHR environment, there are often proprietary tools that health IT developers have implemented to support the referral process. To more fully realize the benefits of health IT, the Office of the National Coordinator for Health Information Technology (ONC), through the State HIE Program, instantiated the 360Exchange (360X) Project in 2012 to accelerate interoperable health care data exchange in heterogeneous EHRT environments. In particular, the 360X Project seeks to enable providers—using existing health data exchange standards and technologies—to exchange:

* Referral requests containing relevant patient clinical information
* Additional information during the episode of care as needed (optional)
* Result of referral containing relevant patient clinical information

from within their workflow, regardless of the EHR technology used. This will allow providers to communicate electronically the related patient information even if utilizing different EHRT/HIT. This scope indicates that the 360X Project includes defining the transport and content of:

* the Referral Request
* the Result of Referral
* additional information to facilitate the referral process and closing the loop.

This scope is intended to enable improved care coordination between providers utilizing different EHR technology.

# Key Use Case

Mr. Packton, age 58, presents to Dr. Allen's office on September 2nd, 2016, with complaints of shortness of breath. The patient has a BMI of 30, no history of smoking, no complaints of chest pain, no physical signs of respiratory and cardiac problems, and a familial history of coronary artery disease.

Without 360X:

Dr. Allen, his PCP, orders a referral to a cardiologist, and sends a fax with Mr. Packton’s visit summary and a referral request to the cardiologist for further review.

The cardiology practice receives the fax, calls Mr. Packton, and schedules an appointment for September 8th, 2016. Mr. Packton keeps the appointment with Dr. Brown, and unfortunately is diagnosed with coronary artery disease and a cardiac catheterization is scheduled.

Dr. Allen’s practice has no way to know whether the appointment was scheduled, whether Mr. Packton kept the appointment as scheduled, what the diagnosis was, or that a catheterization was scheduled. To track this information, members of Dr. Allen’s care team must expend resources to obtain this information, and remember to do so using manual processes.

Using 360X:

Dr. Allen, his PCP, orders a referral to a cardiologist, stating the clinical question as “Determine the origin of Mr. Packton’s shortness of breath”. Based on the practice's workflows and the PCP's system's handling of referrals, a referral package is created, which contains:

* the above noted findings
* demographic information
* patient history
* lab results
* patient insurance

The referral request is sent to the cardiologist's practice. The cardiology practice receives the referral request, sends for and receives prior authorization, and based on the practice's workflows and their system's handling of referral requests, an affirmative response to the request is sent to Dr. Allen's practice.

Dr. Brown's office at the cardiology practice calls Mr. Packton, and schedules an appointment on September 8th, 2016. Based on the practice's workflows and their system's handling of referral requests, a notification is sent of the appointment date/time to Dr. Allen. Mr. Packton keeps the appointment with Dr. Brown, and unfortunately he is diagnosed with coronary artery disease and a cardiac catheterization is scheduled.

Dr. Brown's initial consultation note is completed and it is sent to Dr. Allen, answering the clinical question and stating the date of the cardiac catheterization. After the catheterization is performed, the results are reviewed by Dr. Brown, and a final consultation note is sent to Dr. Allen, including a suggested plan of care. Dr. Allen reviews the consultation notes and closes the referral loop.

# Standards & Systems

[XDM](http://www.ihe.net/uploadedFiles/Documents/ITI/IHE_ITI_TF_Vol2b.pdf); [XD Metadata](http://www.ihe.net/uploadedFiles/Documents/ITI/IHE_ITI_TF_Vol3.pdf); HL7 v2.x Messaging; HL7 C-CDA (Summary of Episode Note, Consultation Note, or Referral Note preferred); [Direct Applicability Statement](http://wiki.directproject.org/file/view/Applicability+Statement+for+Secure+Health+Transport+v1.1.pdf); [XDR / XDM for Direct Messaging Specification](http://wiki.directproject.org/file/view/2011-03-09%20PDF%20-%20XDR%20and%20XDM%20for%20Direct%20Messaging%20Specification_FINAL.pdf);

# Discussion

A community of HIT developers and other stakeholders has advanced significant work toward an implementation guide for 360X, largely self-driven with ONC support, since 2012. Providers continue to identify a need for standards to support and manage referrals to improve patient care coordination. An implementation guide is in the completion stages, and ideally it can become a national extension to the IHE PCC Framework. In order for 360X to advance and be seen as a viable tool to support provider needs, recognition by an SDO, and further review to enhance the implementation guide by PCC domain members will be invaluable.