



Sharing Lab Results with another Provider

HIE Scenario, Workflow and Specifications

Provided By:

The National Learning Consortium (NLC)

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NATIONAL LEARNING CONSORTIUM

The National Learning Consortium (NLC) is a virtual and evolving body of knowledge and tools designed to support healthcare providers and health IT professionals working towards the implementation, adoption and meaningful use of certified EHR systems.

The NLC represents the collective EHR implementation experiences and knowledge gained directly from the field of ONC's outreach programs ([REC](#), [Beacon](#), [State HIE](#)) and through the [Health Information Technology Research Center \(HITRC\)](#) Communities of Practice (CoPs).

The following resource is an example of a tool used in the field today that is recommended by "boots-on-the-ground" professionals for use by others who have made the commitment to implement or upgrade to certified EHR systems.

DESCRIPTION & INSTRUCTIONS

This resource is intended to aid providers and health IT implementers in understanding health information exchange (HIE) solutions related to the Meaningful Use Core Measure 14 – Electronic Exchange of Clinical Information.

This scenario provides a practical example of how the contents of the Nationwide Health Information Network (NwHIN) portfolio can be used to achieve meaningful electronic exchange of health information. This is part of a series of HIE scenarios intended to provide a straightforward view into the standards, services and policies behind HIE solutions.

Each document in the HIE scenarios series describes an everyday situation where patient care is improved through information exchange between health care professionals.

The scenario is presented through a narrative description of events and a corresponding graphic, followed by a detailed description of the workflow steps involved. The resource concludes with an inventory of the key specifications and resources necessary to implement the information exchange described.

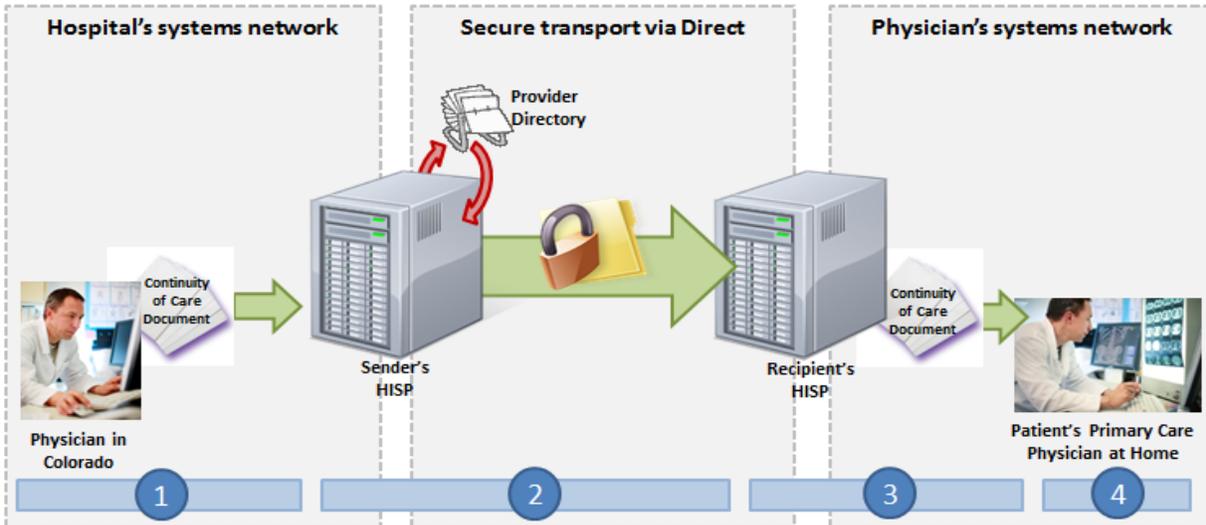
Other scenarios and their related specifications can be found on the S&I Framework Repository at: <http://www.siframework.org/>. Additional questions may be sent via email to: info@siframework.org.

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1 Sharing Lab Results with another Provider

An ordering physician sends a continuity of care document and patient's lab results to a specialist:



A patient visits his primary care physician after experiencing low energy levels. The primary care physician sends the patient to a reference lab for blood tests. After the primary care physician receives the lab results report, he determines that his patient should visit a hematologist for more specialized care. Prior to the patient's visit with the hematologist, the primary care physician sends a continuity of care document and the structured lab data to the hematologist via Direct. Later, the primary care physician uses the hematologist's recommendations during a follow-up visit with the patient.

Meaningful Use Stage 1 Objectives related to the exchange of clinical information: Capability to exchange key clinical information (for example, problem list, medication list, medication allergies, and diagnostic test results) among providers of care and patient authorized entities electronically. (Meaningful Use Core Measure 14 for EPs, Meaningful Use Core Measure 13 for EH/CAHs)

1.1 COMMON WORKFLOW STEPS FOR THIS SCENARIO

1. The primary care physician extracts a continuity of care document from his EHR, which has been properly formatted according to the HL7 CDA Release 2 CCD, including using the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), Logistical Observation Identifiers names and Codes (LOINC) 2.38, RxNorm, and Systemized Nomenclature of Medical--Clinical Terms (SNOMED-CT) vocabularies. He then authors a Direct message and attaches the relevant structured lab data, which is formatted according to the HL7 v.2.5.1 Laboratory Results Interface Implementation Guide using LOINC 2.38. In order to select the hematologist as the recipient, the primary care physician accesses a search dialogue in the HISP's user interface, which queries a Provider Directory (following the Certificate Discovery for Direct implementation guide) for the right Direct address.
2. When the primary care physician sends the message, it passes through the primary care physician's Health Information Service Provider (HISP), a contracted brokering agent responsible for the management of security and transport for directed exchange. As it passes through the HISP, the message is encrypted using the x.509 Certificate associated with the hematologist's Direct address, and delivered to the hematologist's Direct address in accordance with the Applicability Statement for Secure Health Transport.
3. The hematologist's HISP decrypts the message and routes it to the hematologist.
4. The hematologist uses the HISP's user interface to access the lab results report in his Direct inbox.

1.2 NWHIN 1.0 SPECIFICATIONS AND RESOURCES RECOMMENDED FOR THIS SCENARIO

Specifications	Resources
Content Structure Guidance that specifies how to structure health information to ensure proper exchange	<ul style="list-style-type: none"> • HL7 CDA Release 2 CCD • HL7 v.2.5.1 Laboratory Results Interface Implementation Guide
Vocabulary & Code Sets Specifications that identify common naming conventions necessary for proper health information exchange	<ul style="list-style-type: none"> • ICD-9-CM • RxNorm • Systematized Nomenclature of Medicine--Clinical Terms (SNOMED-CT) • Logistical Observation Identifiers names and Codes (LOINC) 2.38
Transport and Security Mechanisms and processes that safely exchange health information over the Internet	<ul style="list-style-type: none"> • Certificate Discovery using Domain Name System (DNS) and Lightweight Directory Access Protocol (LDAP) • Applicability Statement for Secure Health Transport • x.509 for Certificates