Proposal for Demonstrating at California Connects 2014

Use this template to communicate critical information for each demonstration proposed for the **2014 California Connects Interoperability Exhibition**, to be held at the *Connecting California to Improve Patient Care in 2014* conference sponsored by Redwood MedNet.

Prospective participants in California Connects 2014 must complete a proposal following this template for each proposed demonstration, and submit it for approval to the California Connects Steering Committee via email c/o Karen Boruff at karen.boruff@ca-hie.org. Please see the California Connects 2014 page at http://www.ca-hie.org/projects/california-connects-2014 for more information. Direct any questions to Karen Boruff at karen.boruff@ca-hie.org or Rim Cothren at robert.cothren@ca-hie.org.

1.   Demonstration Synopsis

Please provide a title for your demonstration and a brief description of the demonstration. Try to limit the description to no more than 100 words. The title and description will appear on our web site in advance of the Exhibition to attract meeting participants to your demonstration.

Query-Based Exchange via eHealth Exchange

The demonstration will showcase query-based exchange via the eHealth Exchange between Dignity Health's private HIE, "Mercy Health Information Exchange", and UC Davis' Epic EHR. The connection allows clinician's to access clinical information from another health system for a given patient that in the past, would not have been accessible. This integration is anticipated to help clinicians provide more efficient and comprehensive care for our patients, improve outcomes and help to reduce the cost of healthcare through eliminated duplicative tests.

2.   Demonstration User Story

Please provide a user story describing the demonstration, with specific emphasis on its clinical relevance. Be specific, illustrating how you will weave the technology you are demonstrating into real clinical flow.

A patient complaining of chest pain is brought into UC Davis Health System's Emergency Department and is admitted. The patient mentions that he or she has recently been treated at a Dignity Health hospital in Sacramento.

The treating physician knows that they are electronically connected to the Mercy Health Information Exchange (HIE) and logs into his EHR application to see if records are available. The physician performs a patient discovery query (PD) to see if the patient is present in the Mercy HIE. This request is sent over the eHealth Exchange connection established between the two systems and returns the expected patient demographics. The physician then selects the patient who matches the search criteria and proceeds to see if any documents are available for that patient by performing a query for documents (QD) query. The physician will be presented with the documents that are available in the exchange and will then perform a retrieve documents query (RD) to obtain the most current Continuity of Care Document (CCD).

After the system processes the request, the retrieved CCD provides the treating physician with key clinical information such as allergies, current medications, immunizations, last filed vitals, problem list, recent lab results and recent procedures. As a result of the clinical information obtained through the eHealth Exchange connection, the treating physician is able to provide the patient more efficient and comprehensive care and will help to reduce unnecessary, duplicative tests.

3. Goals and Objectives of the Demonstration

Please provide a brief description of the goals and objectives of the demonstration, emphasizing what you expect your audience to learn. Be sure to indicate how your demonstration aligns with the objectives and guidelines found in the California Connects Demonstration Charter at http://www.ca-hie.org/projects/california-connects-2014/charter.

Goals/Objectives:

- Demonstrate interoperability between a private Health Information Exchange and disparate EHR, Epic
- Showcase query-based exchange via the eHealth Exchange; successfully executing the three distinct steps :
  - Patient Discovery Query (PD)
  - Query for Documents (QD)
  - Retrieve Documents (RD)

Success Criteria:

- Using the HIE, successfully search for a patient in the Epic EHR and retrieve their CCD

- Using the Epic EHR, successfully search for a patient in the HIE and retrieve their CCD

4.   Participant Information

Please list information about the primary organization and any supporting organizations and/or sponsors for the demonstration. The primary organization will be responsible for creating, testing, and showcasing the demonstration. Supporting organizations might be collaborating to demonstrate the user story or otherwise deserve recognition. A sponsor may be funding or otherwise providing resources for the development of the demonstration.

4.1.   Primary Organization

Name of the organization   Dignity Health

Role in the demonstration   Sending and Receiving Continuity of Care Documents

Name of the organization   UC Davis Health System

Role in the demonstration   Sending and Receiving Continuity of Care Documents

4.2.   Supporting Organization(s)

Name of the organization

Role in the demonstration

4.3.   Demonstration Sponsor(s)

Name of the organization

Role in the demonstration
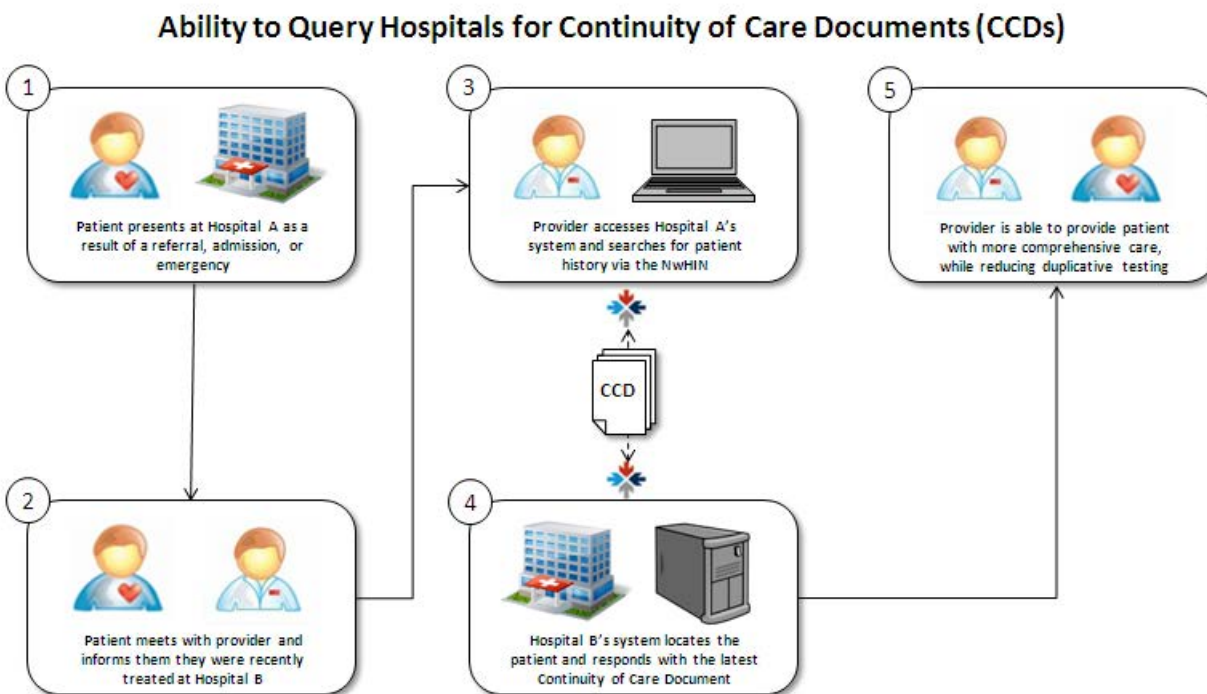
5.   Technical Information

5.1.   Business Workflow

Please provide a description of the business workflow for the user story, showing the various actors and systems involved in the health information exchange. A diagram may be used.

An example work flow diagram might be:

Continuity of Care Document Exchange Workflow

Ability to Query Hospitals for Continuity of Care Documents (CCDs)

1 Patient presents at Hospital A as a result of a referral, admission, or emergency

2 Patient meets with provider and informs them they were recently treated at Hospital B

3 Provider accesses Hospital A's system and searches for patient history via the NwHIN

CCD

4 Hospital B's system locates the patient and responds with the latest Continuity of Care Document

5 Provider is able to provide patient with more comprehensive care, while reducing duplicative testing

5.2. Technical Standards

Please provide a brief discussion of the technical transport and content standards used in the demonstration. Include security, authentication and authorization standards as necessary. Please review http://www.ca-hie.org/projects/california-connects-2014/charter for the technical priorities for California Connects 2014.

The eHealth Exchange leveraging CONNECT technical standards and protocols are based off a broad set of industry standards, with additional constraints applied. This demonstration will exercise the following eHealth Exchange services and protocols. Please reference below specifications for additional details regarding the standards and protocols implemented as part of the underlying specification.

- Authorization Framework Specification v2.0
- Messaging Platform Specification v2.0
- Patient Discovery Specification v1.0 (PD)
- Query For Documents Specification v2.0 (QD)

- Retrieve Documents Specification v2.0 (RD)
- Cross-Enterprise Document Sharing (XDS)
- Cross-Community Access (XCA)

The primary use case assumes participating parties are engaged in the exchange of HITSP C32 CCDs. The C32 CCD is a constrained version of the HL7 CCD specification. However, the underlying vendor solution supports exchanging C32 level CCDs and/or other document types as agreed upon by the participating exchange partners.

6. Maturity of the Demonstrated Technologies

Please describe the maturity of the technologies highlighted in your demonstration, and when they might be available for use, and what barriers there are to reducing them to practice, if any. Technologies in the demonstration might be emerging and experimental, under development and soon to be available, or commercially available now.

Both Organizations are live on the eHealth Exchange Network and actively exchange Continuity of Care Documents.