

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.

Care Coordination between San Diego and Santa Cruz Providers Using the iBlueButton Mobile HIE App Platform

This demonstration shows a Veteran receiving care at the San Diego VA, at a private clinic, at a military treatment facility, and at the University of California San Diego (UCSD) using the Humetrix iBlueButton app to access, display, aggregate, and store health records from the VA, Medicare, and DoD with a UCSD C-CDA record transmitted to the app by Direct via the San Diego Health Connect HIE. At an Emergency Department in Santa Cruz, the Veteran transmits these records to the iBlueButton *Professional* iPad app of an ED physician who then sends back an encounter summary by Direct using the Santa Cruz HIE.

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.

The Veteran is a 66 year old man with multiple chronic conditions who is receiving care at multiple sites in San Diego, and who falls acutely ill while visiting his daughter in Santa Cruz. Using the iBlueButton app platform with the HIE infrastructure put in place by San Diego Health Connect and the Santa Cruz Health Information Exchange, coordination of care for the patient is assured wherever he receives care.

At the time of discharge from the UCSD Medical Center, his physician accesses the UCSD Epic EMR system to generate a clinical summary which he then sends to his patient's iBlueButton generated Direct Address. The C-CDA is transmitted to the iBlueButton app via the Mirth mail system of San Diego Health Connect and is displayed, parsed and combined with other records to generate a summary record of medications, allergies, conditions and immunizations.

The iBlueButton app summary record incorporates the Medicare Blue Button record with a comprehensive three year longitudinal history and provides an aggregated view of all records received from Medicare, UCSD, DoD and the VA, and enables the Veteran to easily annotate his record and reconcile his medications to generate an accurate current medical history.

The San Diego Veteran now travels to Santa Cruz to visit his daughter, falls ill and is admitted to a local ED. Using the iBlueButton app, the patient is able to transmit his current medical history (and any other medical record received by the iBlueButton app) including his current list of meds to the Santa Cruz ED physician, from his phone directly to the ED's iPad running the iBlueButton *Professional* app. Upon discharge, the Veteran leaves with an ED discharge summary transmitted to his iBlueButton app by the ED physician using the SCHIE Mirth Mail Direct function. A current list of medications and diagnoses are now updated on the Veterans' iPhone Summary Record for him to review and share with his physicians when back in San Diego.

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>.

The major objective of this demonstration is to show the audience how existing BlueButton+, Direct protocol and Meaningful Use standards enable a patient using a currently available commercial mobile app (iBlueButton for iOS and Android smartphones) in conjunction with existing California HIE infrastructure to now have online or offline 24/7 access to a comprehensive PHR bringing together records from the VA, DoD, multiple EMR systems with the Medicare Blue Button record. This demonstration will be a powerful illustration of “how new standards can enable improved, secure, and timely access to health information in a way that meets the workflow needs of providers and patients”.

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: Humetrix

Role in the demonstration: Coordinator and creator of demonstration; creator of iBlueButton app platform providing anytime/anywhere access to a mobile PHR.

4.2. Supporting Organization(s)

Name of the organization: San Diego Health Connect

Role in the demonstration SDHC Mirth Mail Service for transmitting C-CDAs by Direct to iBlueButton app

Name of the organization: Santa Cruz Health Information Exchange

Role in the demonstration SDHC Mirth Mail Service for transmitting C-CDAs by Direct to iBlueButton app

4.3. Demonstration Sponsor(s)

Name of the organization San Diego Health Connect

Role in the demonstration Providing Mirth Mail support for the demonstration

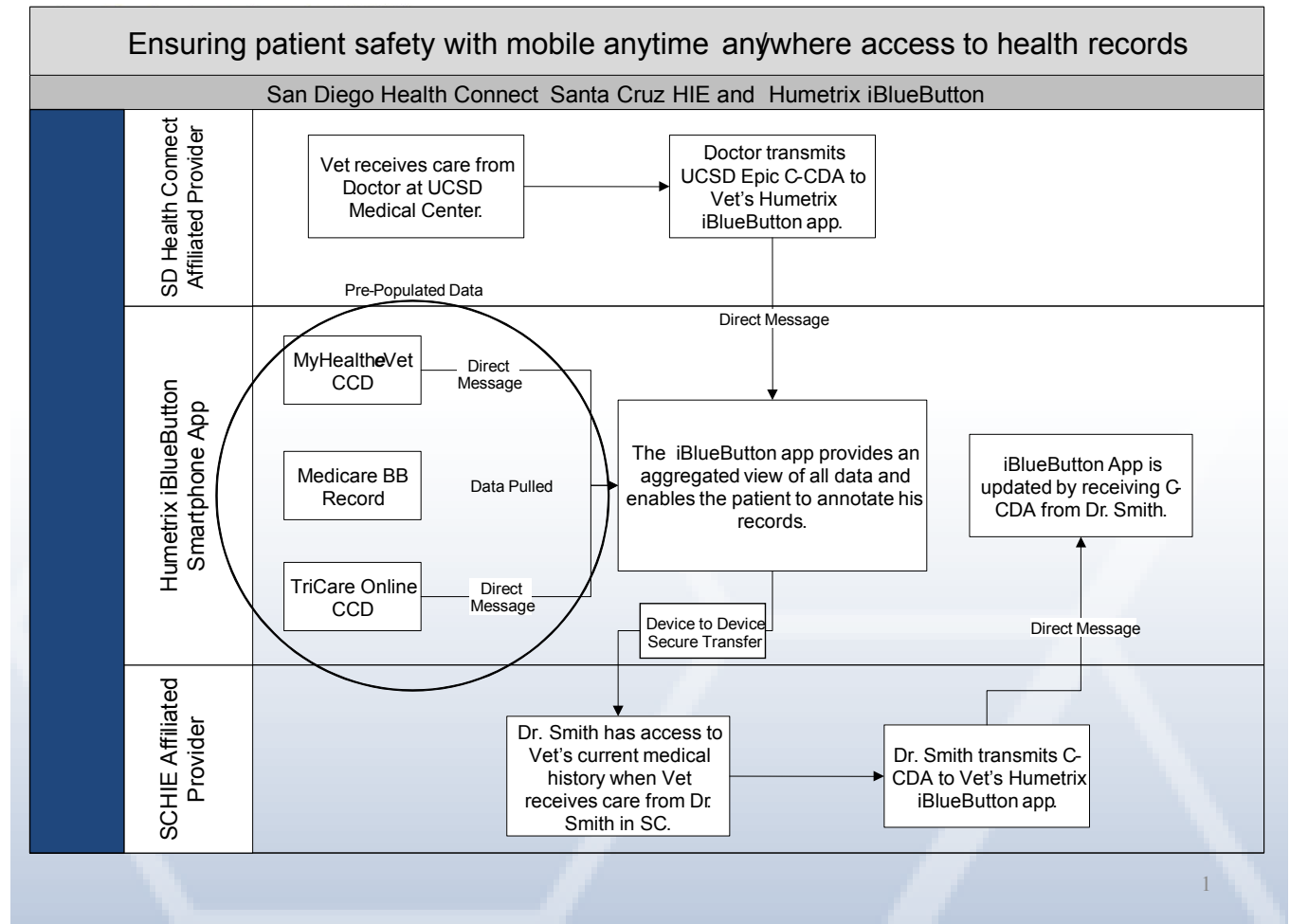
Name of the organization Santa Cruz Health Information Exchange

Role in the demonstration Providing Mirth Mail support for the demonstration and providing personnel to demonstrate use of iBlueButton Professional app

5. Technical Information

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.

5.1. Business Workflow



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.

This demonstration illustrates the use of the San Diego Health Connect and Santa Cruz Health Information Exchange HIE IT Infrastructure providing Mirth Mail, a directed exchange solution based on the Direct Protocol specification, operating in conjunction with the Humetrix iBlueButton app which has implemented the ONC's BlueButton+ standards to receive MU-2 C-CDAs by Direct. The iBlueButton app also leverages the Medicare Blue Button record standard to process this record and display it in a user-friendly actionable format (for which the iBlueButton app won the ONC/HHS Blue Button i2 industry innovation challenge in 2012).

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.

The Humetrix iBlueButton apps for iOS smartphones and tables and Android smartphones are commercially available now through the online Apple App and Google Play stores.