OneHealthPort HIE

C-CDA End-to-End Testing User's Guide

Electronic health record vendors, in association with one or more of their provider organization customers, must successfully demonstrate C-CDA submission, C-CDA data rendering and parsing, and receipt of clinical data repository (CDR) response messages before being promoted to Production. This guide outlines the process steps to execute this end-to-end testing.

Purpose of End-to-End Testing

The end-to-end testing involves submission of 16-24 different actual patient C-CDA data files to allow vendors and provider organizations to demonstrate:

1. C-CDA data files can be successfully submitted, rendered, and parsed in the CDR, and
2. CDR response messages are received

The end-to-end testing also allows provider organizations to view (using the CDR test clinical portal access) and validate that C-CDA data submitted parsed successfully and the document is saved for the patient in the CDR.

Prerequisites for End-to-End Testing

Vendors and organizations that have successfully completed the prerequisites listed below are eligible to perform end-to-end C-CDA document submission testing.

1. C-CDA format conformance testing.
2. Connectivity to the OneHealthPort HIE for one or more of the following data submission methods:
    a. AS2
    b. Web Services
    c. Direct Messaging
3. C-CDA data file has been manually submitted to and successfully processed by the CDR (document rendered and parsed).

Preparing for End-to-End Testing

The following scenarios will be tested during the end-to end testing. Vendors and their provider organization customers ***will prepare approximately 16-24 actual patient C-CDAs for testing***.

1. Unknown patient – A C-CDA for an unknown patient will be submitted to observe "no match" error messages. Use the following "unknown patient" information in one of the C-CDAs for this test:
    a. Last Name: RRKRLK
    b. First Name: RLKRRK
    c. DOB: 19600303
    d. Address: 123 Any Street, Anytown, WA 98371

2. C-CDA Data Parsing – C-CDA data files submitted must render and parse for at least one or more of the following sections:

   a. Medications
   b. Vital Signs
   c. Immunizations
   d. Problems
   e. Allergies
   f. Procedures
   g. Results

3. C-CDA Data Document Saved to Patient Record – C-CDA data files submitted contain one or more of the following segments that are not parsed in the CDR, but should display in the CCD rendered document:
   a. Encounters
   b. Plan of Care
   c. Advanced Directives
   d. Family History
   e. Social History
   f. Payers
   g. Any other section not defined above as one that will currently parse

4. Receipt of CDR Response Messages – C-CDA data files processed by the CDR generate messages indicating disposition of the C-CDA submission. Vendors and/or provider organizations will demonstrate ability to receive and interpret CDR response messages during the testing.

End-to-End Testing

Vendors and provider organizations perform the end-to-end testing by doing the following:

1. Submit a OneHealthPort HIE Support Request Form http://www.formstack.com/forms/?1688456-sjNVJY8V7I Select the "Scheduling end-to-end testing" option and indicate you are ready to begin the testing.
2. OneHealthPort will respond to the support ticket and provide information to get set up to view submitted data in the CDR test environment so testing results can be examined and documented on the End-to-End Tracking spreadsheet.
3. OneHealthPort will send a Secure Mail message to the vendor or organization for use in sending the completed End-to-End Tracking spreadsheet back to OneHealthPort. ***Note:*** Secure Mail, NOT regular email, is used to send the completed tracking spreadsheet list containing real patient names to OneHealthPort. The Secure Mail system is a secure, encrypted email system.
4. OneHealthPort will review the End-to-End testing results and provide feedback on testing findings and recommendations for moving to Production.

Note: A vendor or provider organization's End-to-End testing may be suspended if C-CDA data submissions exhibit significant processing and parsing errors. Testing will be resumed once errors are corrected.

Moving to Production

When a vendor and/or provider organization has been promoted to Production (granted permission to submit C-CDA data to the CDR), they will do the following:

1. Ensure all Production and C-CDA data submission requirements are complete
    a. Provider organization is contracted with the OneHealthPort HIE
    b. Provider organization is configured in the Production environment
    c. All appropriate mapping for object identifier (OID) or Direct address is complete
2. Production connection:
    a. Web Services
        i. Certificate exchange complete and verified
        ii. Production URLs are communicated
        iii. Signature validation is tested and enabled
    b. Production Direct address information is exchanged
    c. Activator (AS2) Production profile is configured
3. Validate a Production C-CDA submission is successful
    a. Send 5-10 patient C-CDAs to the Production CDR
    b. Notify OneHealthPort (using the Secure Mail system) of the 5-10 patient names for validation that C-CDAs are:
        i. Submitted successfully
        ii. Data is rendering and parsing in the CDR
        iii. CDR response messages are received