

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 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 25 different actual patient C-CDA data files to allow vendors to demonstrate:

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

The end-to-end testing also allows provider customers to view (using the CDR 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 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.

Preparing for End-to-End Testing

The following scenarios will be tested during the end-to end testing session. Vendors and their provider organization customers ***will prepare approximately 25 (or more) 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: RRRRLK
 - 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 parse for at least one or more of the following sections:
 - a. Medications

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- b. Vital Signs
 - c. Immunizations
 - d. Problems
 - e. Allergies
 - f. Procedures
 - g. Encounters/Labs (parsing of these segments will be viewable in the patient record of the CDR in Q1 of 2017)
- 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. Plan of Care
 - b. Advanced Directives
 - c. Family History
 - d. Social History
 - e. Payers
 - f. 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 will demonstrate ability to receive and interpret CDR response messages during the testing.

End-to-End Testing Session

The end-to-end testing will be facilitated by OneHealthPort in a web meeting with the vendor and as appropriate, a provider customer.

a. To schedule the testing, submit a OneHealthPort HIE Support Request Form

<http://www.formstack.com/forms/?1688456-sjNVJY8V7I> Select the “Scheduling end-to-end testing” option and provide suggested scheduling dates and times in the area provided in the form. The end-to-end testing process takes approximately one hour.

b. OneHealthPort will send a Secure Mail message to confirm the test date. Please reply to the message and attach a copy of the completed "C-CDA Vendor Testing Checklist for CDR" document with all patient records that will be tested. Note: Secure Mail is used to securely send the completed list containing real patient names to OneHealthPort prior to the test so OneHealthPort can verify each of the cases during testing.

During the meeting:

- 1. Vendor will submit prepared C-CDAs when prompted and while viewed in the web meeting session.
- 2. Vendors supporting more than one data submission method will test the C-CDA data file submissions for each supported method.
- 3. Each submission will be monitored for:

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- a. Parsing
 - b. Document recording
 - c. Receipt of CDR response message
4. Vendor/Provider will view and validate processed C-CDAs in the UAT CDR portal.
5. Vendors that complete the required testing scenarios are then promoted to Production.

Note: A vendor's End-to-End testing session may be suspended and rescheduled if C-CDA data submissions exhibit significant processing and parsing errors.

Moving to Production

1. Ensure all Production mapping requirements are complete
 - a. Organization is contracted with the OneHealthPort HIE
 - b. Organization is configured in the Production environment
 - c. All appropriate mapping for OIDs or Direct address are complete
2. Production connection:
 - a. Web Services
 - i. Certificate exchange complete and verified
 - ii. Production URLs are communicated
 - b. Production Direct address information is exchanged
 - c. Activator Production profile is configured
3. Validate a Production C-CDA submission is successful