CLINICAL DOCUMENT COLLECTOR API

Getting Started Guide

for Sandbox Access

Revised: July 18, 2022

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OVERVIEW

What is Clinical Document Collector?

A **cloud-based interoperability solution** with access to the industry's leading EHR systems that connects requesters and submitters to deliver electronic clinical data in batch and near real-time.

- Significant improvement of delivery time for electronic chart retrieval.
- Reduction in costs across all parties.
- Provider abrasion is eliminated!

Two methods of document retrieval are available:

- Single Patient – Request documents for a single patient at any time.
- Patient Roster – Submit a patient roster that conforms to our standard into a preconfigured inbound folder. Documents are delivered to an outbound folder for retrieval at your convenience.

Types of clinical documents available include:

- CCD Continuity of Care
- Consultation Notes
- Discharge Summary
- History and Physical (H&P)
- Operative Note
- Progress Notes
- Procedure Notes

Contacts

Onboarding

Andrew Wright
Andrew.Wright@changehealthcare.com

Support

CISSupport@changehealthcare.com

Not all documents are available from all document suppliers. Available data is EHR dependent.

CommonWell vendors provide USCDI v1 documents. https://www.healthit.gov/isa/sites/isa/files/2020-10/USCDI-Version-1-July-2020-Errata-Final_0.pdf

ONBOARDING PROCESS

Connect

- Connect to Change Healthcare Marketplace
- Request sandbox access
- Obtain security credentials
- Set up security
- Connect to sandbox environment

Develop

Single Patient

- Use dev tools and sample data to exercise APIs
- Create functionality in customer edge system per API docs

Patient Roster

- Configure inbound and outbound folders
- Create a test file with sample data for sandbox testing

Certify

Upon signing sales agreement:

- Register for certification
- Perform test transactions
- Pass certification
- Receive access instructions for the production environment

TERMINOLOGY

Onboarding: The process for bringing a new customer live. Onboarding includes setup, development, testing, and certification.

Testing: The process of using activities and transactions to verify the customer system and the Clinical Document Collector API are performing per specification. Testing is done during onboarding and is also performed when new functionality is released.

Certification: The process by which Change Healthcare verifies that a customer meets the Clinical Document Collector specification.

Validation: The process by which Change Healthcare works with EHRs to ensure the health of customer and provider endpoints.

Sandbox: The environment used for testing.

Production: The environment for live transactions.

Edge System: Customer healthcare information system that interacts with the Clinical Document Collector API.

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ONBOARDING CHECKLIST

- [ ] **1.** Access the Change Healthcare Developer Portal and view the Clinical Document Collector API
    a. Click Data Access and Interoperability
    b. Locate Clinical Document Collector API Overview
    c. Click Request Sandbox Access
    d. Complete request form by selecting Data Access and Interoperability sandbox and Submit

- [ ] **2.** Security: Obtain access to the sandbox
    a. Receive client credentials (client_id, client_secret) via email
    b. Generate and return an authorization token using client credentials by following these instructions: https://developers.changehealthcare.com/apitools/reference/security-and-authorization-v2-overview

- [ ] **3.** Review the remaining technical documentation including this Getting Started Guide

Process

Checklist

Close Section

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DATA ELEMENTS

- As you begin development, it is important to understand required fields for the Clinical Document Collector API.
- Some document suppliers require additional data elements. If the required data is not provided, documents will only be retrieved from document suppliers that do not require the additional data elements.
- If you have questions about supplying required data elements, contact your Onboarding representative for options. (See Overview section.)

Data Element	Necessity
Given Name: Patient First Name	Required
Family Name: Patient Last Name	Required
Patient Date of Birth	Required
Patient Postal Code	Required Note: Requires dash if zip+4 is included
Service Start Date	Required
Service End Date	Required
Patient Gender	Required Note: Must be lower case
NAIC Company Code[1]	Required by some document suppliers Note: Requires valid 5-digit code
Member Insurance ID	Required by some document suppliers Required for Patient Roster feature
National Provider Identifier (NPI)	Required – Must supply either NPI (type 1 or type 2) or TIN[2]
Provider Tax ID Number (TIN)	
Purpose of Use (POU) – in all caps PAYMENT OPERATIONS	Required

DATA ELEMENTS

Data Element	Necessity
Patient Phone Number	Optional
Requested Pipelines	Optional
Patient Middle Initial	Optional
Address Type	Optional
Address Line 1	Optional
Address Line 2	Optional
City	Optional
State	Optional
Social Security Number (SSN)	Optional
Patient Email Address	Optional
Payer Claim ID	Optional

[1]The National Association of Insurance Commissioners (NAIC) company code represents the organization on whose behalf you are requesting documents. If you do not know this code, search for codes by selecting Health in the Insurance Type list in the search form on the NAIC website: https://content.naic.org/cis_consumer_information.htm. Please verify the code you plan to use with the company with whom you have a Business Associate Agreement (BAA).

[2]Details about the NPI/TIN required data element:

- Only one of these elements (NPI or TIN) is required; however, Collector will successfully process requests that include both NPI and TIN if both values are valid. If one value is invalid, you will receive an unsupported targetIdentifier system error.
- If a request only includes an NPI or TIN value, don't include the other element. If you do:
  - The data element with a missing value will cause a null error.
  - The data element with an empty value will cause an invalid format error.

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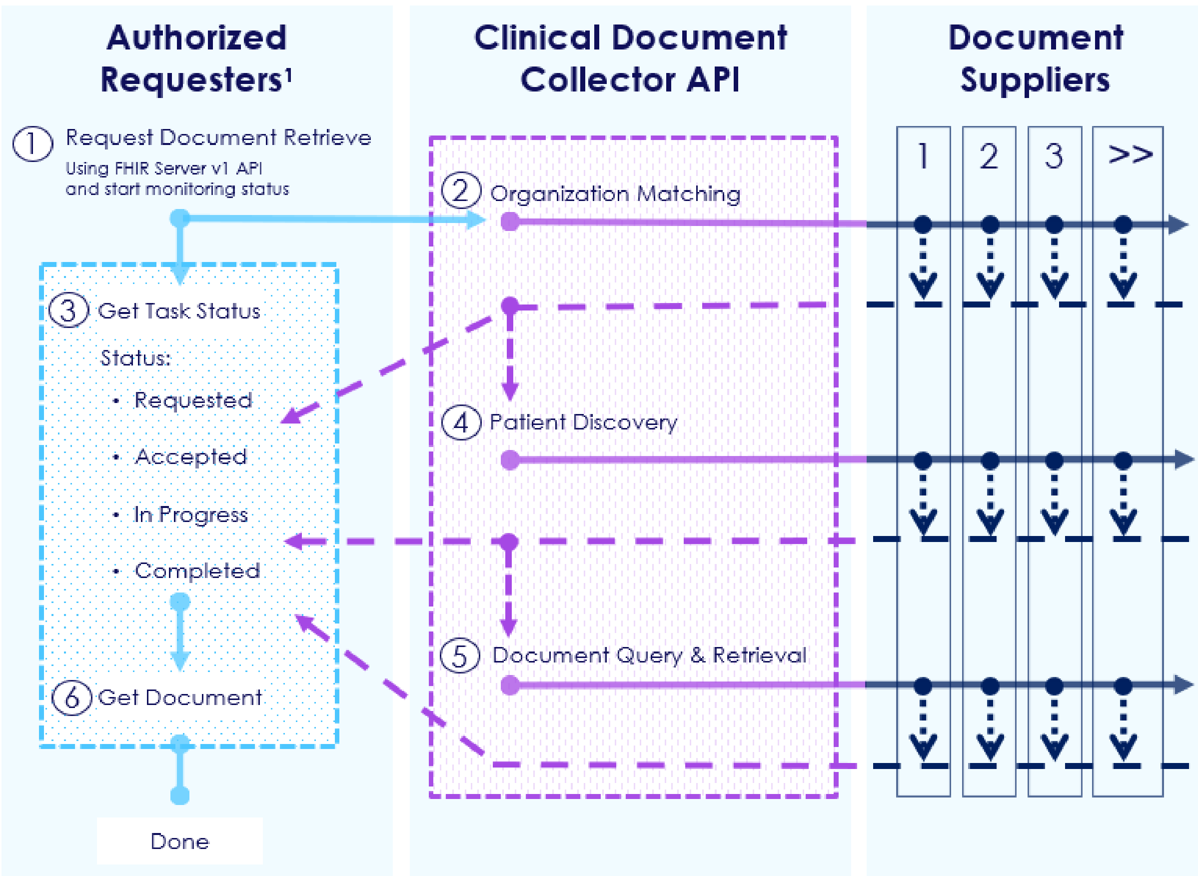
SINGLE PATIENT TRANSACTION SEQUENCE

For Payment and Operations purpose of use (POU), consent is granted via patient agreement with their healthcare entities and business associates.



1. The retrieval transaction sequence begins by the requester posting a FHIR Task to the Clinical Document Collector FHIR Server API to initiate the Request Document Retrieve. The Task must contain the required data elements as specified in the API documentation.
2. The Clinical Document Collector service validates and accepts the request. It then determines which organizations across the participating networks have documents pertaining to the patient in context and updates the status.
3. The requester monitors the API status using Get Task Status to know if and when documents are available to be retrieved. [2]
4. Discovery is performed to identify and confirm activity for the desired patient in the identified organizations. [2]
5. Document query and retrieval transactions are processed for the identified patients based on discovery results. [2]
6. The requester retrieves documents from the server using the reference URL provided in the Task resource output property.

[1]Requesters may include healthcare payers, life insurance underwriters, disability administrators, etc. See HHS.gov for disclosure guidance on Payment and Operations POU.
[2] Some transactions vary by document supplier.

CHANGE HEALTHCARE

PREPARATION

Single Patient

ACCESS THE SPECIFICATION

- [ ] **1.** Download the OpenAPI YAML file
- [ ] **2.** Import the YAML file into a YAML editor and review the API
    a. Go to editor (e.g., https://editor.swagger.io/)
    b. Choose File > Import file and import the downloaded YAML file

Note: HTTP Error 429 is an HTTP response status code that indicates the client application has surpassed its rate limit requests and applications will see the status message "429 - Too many requests." To avoid triggering these limits, customers are strongly encouraged to implement a backoff algorithm as a standard error-handling strategy for network applications. In this approach, a client application periodically retries a failed request with increasing delays between requests. AWS and Collector both recommend the use of this AWS exponential backoff strategy to alleviate these issues. More detail can be found here: https://docs.aws.amazon.com/general/latest/gr/api-retries.html.

CHANGE HEALTHCARE

PREPARATION

Single Patient

TEST DATA

Use these patient records to test the APIs.

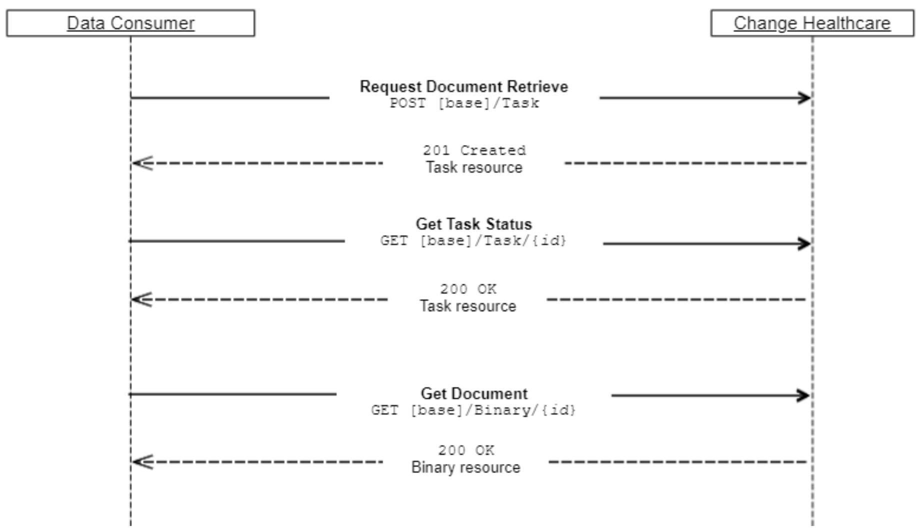
Documents Available	• CCDA v1.1.1.1 • PDF	
Test Patient #1: • John Wright • DOB: 03/23/1980 • Gender: male • Zip Code: 80304	targetIdentifier: • Name: Dr. Andrew's Practice • NPI: 1003810581 • Tax ID: 47-3078461 • NAIC: 29696	Service date range • start: 2019-01-01 • end: 2020-10-26
Documents Available	• CCDA v2.1 • CCDA v1.1	
Test Patient #2: • Jennifer Bright • DOB: 10/11/2001 • Gender: female • Zip Code: 80234	targetIdentifier: • Name: Dr. Andrew's Practice • NPI: 1003810581 • Tax ID: 47-3078461 • NAIC: 29696	Service date range • start: 2020-10-26 • end: 2020-12-10

CHANGE HEALTHCARE

DEVELOPMENT PLAN

Single Patient

Create functionality in the edge system by including all required data elements.



- [ ] **1.** Request Document Retrieve (Create Task)
    - Issue a POST to the Task API

- [ ] **2.** Get Task Status
    - Issue a GET to the Task API with the Task ID

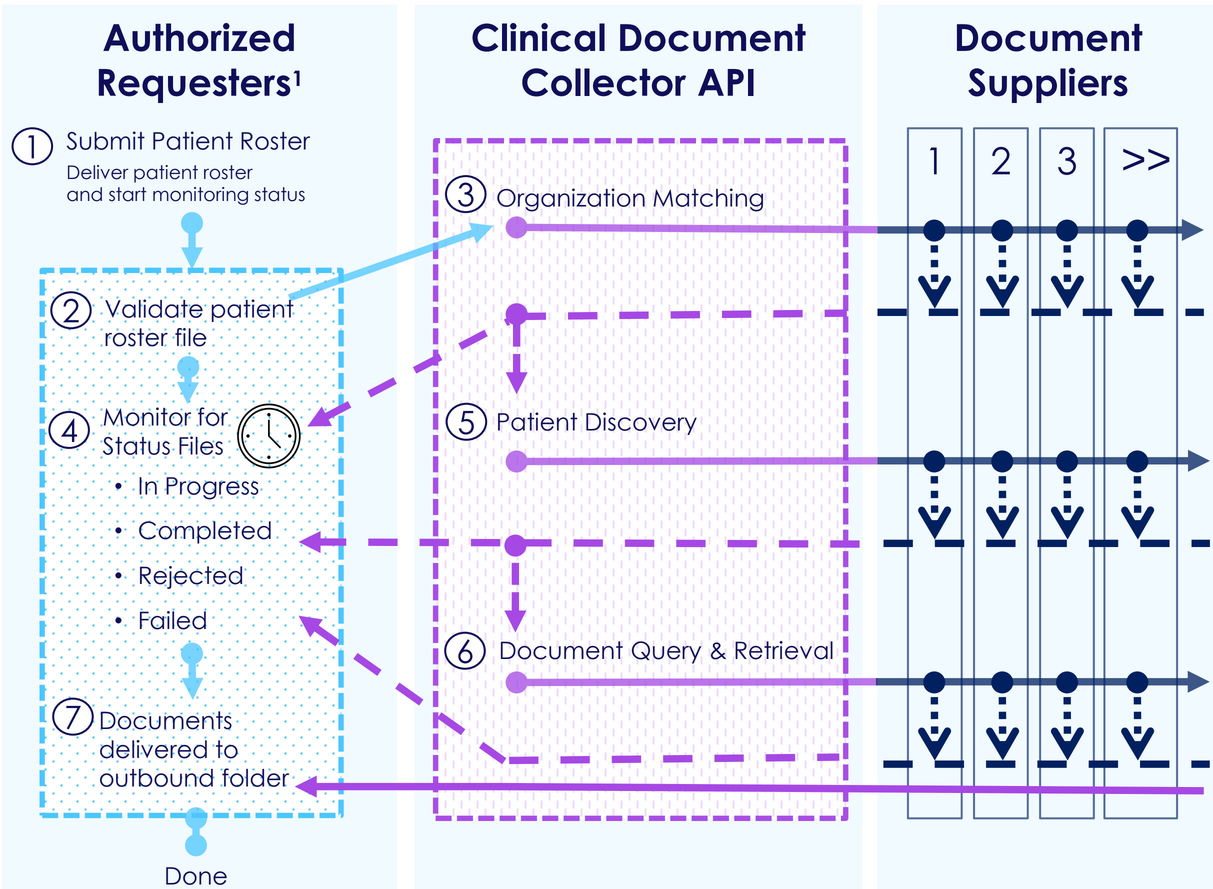
- [ ] **3.** Get Document
    - Issue a GET to the binary API to retrieve a document using URL from the Task Status response.

Clinical Document Collector does not warranty or recommend specific CCDA viewers. If you would like to implement a CCDA viewer in your application, there are many options. Some of them are listed on the following HL7 website: http://www.hl7.org/events/toolingchallenge.cfm.

CHANGE HEALTHCARE

PATIENT ROSTER TRANSACTION SEQUENCE

For Payment and Operations purpose of use, person consent is granted via patient agreement with their healthcare entities and business associates.



1. The retrieval transaction sequence begins by the requester submitting a patient roster file to the preconfigured inbound folder.
2. The patient roster is reviewed for formatting and data validation.
3. The service accepts the request and determines which organizations across the participating networks have documents pertaining to the patient in question and updates the status. Initial status file indicates acceptance.
4. The requester monitors the preconfigured outbound folder for patient roster status files to know if and when documents are available to be retrieved. Status is provided every six hours until processing is completed.
5. Discovery is performed to identify and confirm activity for the desired patient in the identified organizations.
6. Document query and retrieval transactions are processed for the identified patients based upon discovery results.
7. The requester retrieves documents from the preconfigured outbound folder.

[1]Requesters may include healthcare payers, life insurance underwriters, disability administrators, etc. See HHS.gov for disclosure guidance on Payment and Operations POU.
[2] Some transactions vary by document supplier.

CHANGE HEALTHCARE

PREPARATION

Patient Roster

CONFIGURE INBOUND/OUTBOUND FOLDERS

- [ ] **1.** Contact Support by creating a case through Customer Connection, if access has been provided, or by sending an email to CISSupport@changehealthcare.com to request the configuration of the inbound and outbound folders
    - Inbound folder – This is where you deliver patient roster files that are ready to be processed by Collector
    - Outbound folder – This is where you retrieve information from Collector such as status reports, error files, and patient documents (results)

Note: HTTP Error 429 is an HTTP response status code that indicates the client application has surpassed its rate limit requests and applications will see the status message "429 - Too many requests." To avoid triggering these limits, customers are strongly encouraged to implement a backoff algorithm as a standard error-handling strategy for network applications. In this approach, a client application periodically retries a failed request with increasing delays between requests. AWS and Collector both recommend the use of this AWS exponential backoff strategy to alleviate these issues. More detail can be found here: https://docs.aws.amazon.com/general/latest/gr/api-retries.html.

CHANGE HEALTHCARE

PREPARATION

Patient Roster

TEST DATA

Provider Data	Purpose of Use Practitioner Role	TaxID NPIs
Dr. Andrew's Practice • Address: 1244 Canyon Blvd., Boulder CO • Zip Code: 80304 • Phone: 303-723-0823	OPERATIONS Vail Valley Medical Center	TaxID: 47-3078461 NPIs: • 1003810581
Dr. Nancy's Practice • Address: 22 Archer Trail Golden CO • Zip Code: 80011 • Phone: 720-488-3001	OPERATIONS Vail Valley Medical Center	TaxID: 81-4145087 NPIs: • 1003819707
Dr. Brian's Practice • Address: 22 University Dr. Denver CO • Zip Code: 80015 • Phone: 720-777-2822	OPERATIONS Vail Valley Medical Center	TaxID: 81-5115661 NPIs: • 1023011764
Vail Valley Medical Center • Address: 215 Summit Ave. Vail CO • Zip Code: 81658 • Phone: 970-366-9753	OPERATIONS	TaxID: 91-1234123 NPIs: • 1003810581 • 1003819707 • 1023011764

Payer Data	Payer Member Data Last Name (Member Insurance ID)
Red Coat Health Plan • Status: Inactive • Payer NAIC: 76199	None (None)
Colonial Health Plan • Status: Active • Payer NAIC: 89222	Hamilton (55667890) Madison (65745676)
Royal Health Plan • Status: Active • Payer NAIC: 23977	Jefferson (48823453) Burr (34565612) Schuyler (98798222)
American Health Plan • Status: Active • Payer NAIC: 29776	Mulligan (57454567) Washington (23421222) Eacker (34523453)

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PREPARATION

Patient Roster

TEST DATA

Patient Data	Provider #1 Encounter Date Documents Available	Provider #2 Encounter Date Documents Available
Alexander Hamilton • DOB: 03/23/1980 • Gender: male • Address: 1234 Redwood Ave., Boulder, CO • Zip Code: 80304 • Ins/Member ID: 55667890	Dr. Andrew's Practice • Encounter: 11/03/2021 • Progress Note • Surgical Note	Vail Valley Medical Center • Encounter: 11/05/2021 • Discharge Summary
Eliza Skyler • DOB: 03/01/2001 • Gender: female • Address: 11 Bay St., Emeryville, CA • Zip Code: 94608 • Ins/Member ID: 12432222	Dr. Nancy's Practice • Encounter: 12/01/2011 • H&P	
Elizabeth Schuyler • DOB: 03/01/2001 • Gender: female • Address: 2411 Main St., Emeryville, CA • Zip Code: 94608 • Ins/Member ID: 98798222	Dr. Brian's Practice • Encounter: 11/12/2021 • Surgical Note	
Aaron Burr • DOB: 02/11/1997 • Gender: male • Address: 181 Mercer St., New York, NY • Zip Code: 10154 • Ins/Member ID: 34565612	Dr. Andrew's Practice • Encounter: 12/22/2021 • Progress Note • Surgical Note	
Thomas Jefferson • DOB: 08/04/1994 • Gender: male • Address: 88 Main St., Lake Monticello, VA • Zip Code: 22963 • Ins/Member ID: 48823453	Dr. Nancy's Practice • Encounter: 02/11/2022 • H&P	Vail Valley Medical Center • Encounter: 2/15/2022 • Discharge Summary

CHANGE HEALTHCARE

PREPARATION

Patient Roster

TEST DATA

Patient Data	Provider #1 Encounter Date Documents Available	Provider #2 Encounter Date Documents Available
James Madison • DOB: 11/06/1985 • Gender: male • Address: 344 Birch Rd., Montpelier, VA • Zip Code: 23192 • Ins/Member ID: 65745676	Dr. Brian's Practice • Encounter: 02/03/2021 • Progress Note • H&P	
George Washington • DOB: 12/05/1971 • Gender: male • Address: 888 Broadway, Alexandria, VA • Zip Code: 20598 • Ins/Member ID: 23421222	Dr. Andrew's Practice • Encounter: 01/12/2022 • H&P	
George Eacker • DOB: 10/8/1998 • Gender: male • Address: 110 Bluff St., Weehawken, NJ • Zip Code: 07086 • Ins/Member ID: 34523453	Dr. Nancy's Practice • Encounter: 1/22/2021 • Surgical Note • H&P	
Hercules Mulligan • DOB: 08/01/1983 • Gender: male • Address: 4233 42nd Ave., New York, NY • Zip Code: 10154 • Ins/Member ID: 57454567	Dr. Brian's Practice • Encounter: 03/01/2022 • Progress Note	
Angelica Schuyler • DOB: 07/14/2003 • Gender: female • Address: 2411 Main St., Emeryville, CA • Zip Code: 94608 • Ins/Member ID: 76453245	Dr. Andrew's Practice • Encounter: 03/08/2022 • H&P	
Peggy Schuyler • DOB: 07/14/2006 • Gender: female • Address: 2411 Main St., Emeryville, CA • Zip Code: 94608 • Ins/Member ID: 87325353	Dr. Nancy's Practice • Encounter: 03/19/2021 • H&P	

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DEVELOPMENT PLAN

Patient Roster

CREATE PATIENT ROSTER TEST FILE

☐ **1.** Copy your preferred template, using either the pipe-delimited or comma separated value format, to create a sample patient roster file

Pipe Delimited Template
INSURANCEID | LASTNAME | FIRSTNAME | MIDDLEINITIAL | GENDER | DOB | ZIP | ADDRESS1 | ADDRESS2 | CITY | STATE | HOMEPHONE | MOBILEPHONE | EMAIL | SERVICESTARTDATE | SERVICEENDDATE | REQUESTUUID | REQUESTEXPIRATIONPERIOD | PROVIDERNPI | PROVIDERTIN | CLIENTSOURCE | PURPOSEOFUSE | NAICSOURCEID | PATIENTCONSENT | REQUESTEDPIPELINES | ADDRESSUSE | PARTNERCLAIMID | PARTNERCLAIMID | ADDEDPATIENTDATA

Comma Separated Value Template
INSURANCEID,LASTNAME,FIRSTNAME,MIDDLEINITIAL,GENDER,DOB,ZIP,ADDRESS1,ADDRESS2,CITY,STATE,HOMEPHONE,MOBILEPHONE,EMAIL,SERVICESTARTDATE,SERVICEENDDATE,REQUESTUUID,REQUESTEXPIRATIONPERIOD,PROVIDERNPI,PROVIDERTIN,CLIENTSOURCE,PURPOSEOFUSE,NAICSOURCEID,PATIENTCONSENT,REQUESTEDPIPELINES,ADDRESSUSE,PARTNERCLAIMID,ADDEDPATIENTDATA

☐ **2.** Save the file in the approved format and using the naming conventions outlined in this table.

Roster File Type/Format	Details	Example
Pipe Delimited **ClientID_DtTime_n.txt** **Comma Separated Value** **ClientID_DtTime_n.csv**	• ClientID is the name established to represent your company • DtTime is the date/time in the following format: YYYYMMDDHHMM (year, month, day, hour, minutes • n is a sequence number used to indicate multiple files that are part of a larger file	YourCompany_202112082315_3.txt YourCompany_202112082315_3.csv

Note: All files should be UTF-8 encoded. No other encoding is supported.

Data Elements | Single Patient | Patient Roster | Close Section

CHANGE HEALTHCARE

DEVELOPMENT PLAN

Patient Roster

CREATE PATIENT ROSTER TEST FILE

☐ **3.** Monitor the outbound folder for:

a. Error files (.err) that contain validation errors for the roster file as a whole

b. Status files (_status.txt or _status.csv) that contain record level detail; status files include all records so a roster file with 100 records produces a status file with 100 records

Sample Status File

```
Task ID|Unique Request ID|Insurance ID|Status|Document Delivered|Outcome
Code|Error(s)
TSK1|REQ1|MBR1|In Progress|0||
TSK2|REQ2|MBR2|Rejected||400|Missing: insuranceId
TSK3|REQ3|MBR3|Completed|3|200|
TSK4|REQ4|MBR4|Rejected||400|Missing: insuranceId Format Issue: lastName
TSK5|REQ5|MBR5|In Progress|0||
TSK6|REQ6|MBR6|Rejected||400|Missing: zip, insuranceId
TSK7|REQ7|MBR7|In Progress|0||
TSK8|REQ8|MBR8|Failed|0|500|
TSK9|REQ9|MBR9|Rejected||400|Incorrect Date: serviceEnd
TSK10|REQ10|MBR10|In Progress|0||
TSK11|REQ11|MBR11|Rejected||400|Missing: zip Format Issue: lastName
TSK12|REQ12|MBR12|Completed|5|200|
TSK13|REQ13|MBR13|Completed|0|200|
TSK14|REQ14|MBR14|Rejected||400|Missing: insuranceId Format Issue: lastName
TSK15|REQ15|MBR15|Rejected||400|Missing: insuranceId Format Issue: address1
```

☐ **4.** Review the status file for errors that might need to be corrected and resubmit using an updated DtTime in the file name.

☐ **5.** When documents are delivered to the outbound folder, retrieve them to your local environment and view the sample results

Clinical Document Collector does not warranty or recommend specific CCDA viewers. If you would like to implement a CCDA viewer in your application, there are many options. Some of them are listed on the following HL7 website: http://www.hl7.org/events/toolingchallenge.cfm.

CHANGE HEALTHCARE

LOOKING AHEAD[1] – CERTIFICATION OVERVIEW

Purpose

To ensure:

- Requesters can successfully process transactions with the Clinical Document Collector API or with a patient roster file.
- A customer cannot access production without certification.

Business Benefits

- Ensures compliance and eliminates roadblocks to transaction processing.
- Protects the integrity of the provider networks.
- Maximizes throughput.
- Minimizes security breaches.

[1]Applicable once a sales contract has been executed.

Approach

- Customer completes preparation checklist and performs a series of sandbox transactions as defined by Change Healthcare.
- Customer creates a support case through Customer Connection advising that they are ready for certification.
- Support reviews the transactions, captures the necessary evidence, and responds in the case whether the certification passed or failed. If support fails the certification, additional information is included.
- Finally, production credentials are provided by the Support team.

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EXPECTATIONS

Certification or Recertification is necessary:

- When a contracted customer is onboarding and has completed development and testing.
- When a customer makes a significant change to their system (customer completes recertification checklist).
- When a customer expands their role or starts using previously unused services.
- When a new use case is introduced.

Process parameters:

- Certification standards are applied consistently to all customers.
- Certification should be completed within two weeks of starting.
- Certification is done in the sandbox environment.
- All certification evidence is stored by Change Healthcare.
- Certification does not review the workflow or error handling in the customer's system.

Resources for certification:

- Change Healthcare provides best practices and troubleshooting support to customers going through onboarding and certification.
- Customers must have appropriate development and business resources assigned.

CHANGE HEALTHCARE

REFERENCES

- Change Healthcare Developer Portal
- HHS: Uses and Disclosures for Treatment, Payment, and Health Care Operations (Purpose of Use)

References

Close Section