NC HealthConnex

Pharmacy Data Specifications

2023 Onboarding Packet

Contents

1 Introduction

1.1 Purpose of this Document

This document contains the Pharmacy Data Specifications for the North Carolina state-operated health information exchange, NC HealthConnex. The following sections provide the required and optional content for pharmacy data that must be shared with NC HealthConnex.

1.2 Project Description

NC HealthConnex is the state-designated health information exchange managed by the North Carolina Health Information Exchange Authority (NC HIEA). SAS has been contracted to deliver the services necessary to support the NC HealthConnex technology infrastructure, to enable health care providers to submit information about their patients to NC HealthConnex, and to provide clinical and claims-based analytics to the State for state-funded health care.

Data flows into the NC HealthConnex via the following connections:

- Pharmacy system of participating pharmacy organizations.

- Pharmacies submit data based on a modified version of the custom delimited file format developed by NC HealthConnex.

Data is stored centrally for the purposes of viewing in a new section of the patient summary report. In the future data will be viewed in the clinical portal.

In addition to the core functionality of the NC HealthConnex health information exchange infrastructure, additional services are available for participants who sign a Full Participation Agreement. These services are designed to integrate more complete patient information into care delivery including:

NC HealthConnex Clinical Portal

The Clinical Portal can be used to query and exchange patient records, view longitudinal patient records, and access other features such as the Veterans Administration (VA) and external HIEs via the eHealth Exchange.

Direct Secure Messaging

NC HealthConnex utilizes Secure Exchange Solutions (SES) as our Health Information Services Provider (HISP), which is also a participant in the DirectTrust framework. Participants who sign a Full Participation Agreement are eligible to receive a unique secure email address assigned in the NC HIEA Direct domain. Users can append files containing Protected Health Information to their Direct messages.

Provider Directory

The Provider Directory is a directory of secure email addresses of NC HealthConnex participants and North Carolina Providers participating in DirectTrust.

NC*Notify

NC*Notify is a subscription-based service that notifies providers as their patients receive services across the care continuum, spanning geography, health care systems, acute and ambulatory care settings.

Registries

The NC HIEA is a proud partner with the North Carolina Division of Public Health (NCDPH) and is working alongside this agency to deliver public health registry reporting for full participants through the NC HealthConnex connection including connection to the North Carolina Immunization Registry (NCIR), Electronic Lab Reporting (ELR), and a Diabetes Registry.

For additional information on NC HealthConnex and available services, please visit https://hiea.nc.gov/.

2   NC HealthConnex Connection Overview

2.1   High-Level Data Flow

Data from pharmacies flows into NC HealthConnex in the following ways:

1. Through TLS direct connection, which allows a pharmacy to communicate with NC HealthConnex.

2. sFTP document exchange is used when a pharmacy's system does not have the ability to connect directly with NC HealthConnex.

When messages and documents arrive in NC HealthConnex, they are stored and, in the future, will be viewable in the Clinical Portal.

2.2   General Implementation Requirements

Participation Agreement

The Participation Agreement is the legal contract that governs data sharing between the pharmacy and the NC HIEA.

- The Full Participation Agreement, which is aligned with the eHealth Exchange Data Use and Reciprocal Support Agreement or DURSA, will allow providers full use of current and future NC HealthConnex value-added features and satisfies the State requirement to submit pharmacy data. Full participants with a unidirectional connection can access patient data using the NC HealthConnex clinical portal.
- The Submission Only Participation Agreement will enable a pharmacy to send the data required by law in a unidirectional technical connection in order to be in compliance with the HIE Act. However, this agreement will prohibit all other data exchange services, including HIE data query and response, clinical or event notifications, and public health registries. Participants with a Submission Only Agreement should consult with legal counsel prior to sending data that does not pertain to health care services paid for with State funds pursuant to the HIE Act. Being able to only submit State funded data will also depend on the technical capability of your system to implement data filtering.

Scope of Data

As noted in the Participation Agreement, pharmacies must submit data pertaining to health care services rendered to Medicaid and other State-funded health care program beneficiaries and paid for with State-funded health care funds. This includes both Medicaid and State Health Plan program beneficiaries, as well as other health care services that are State-funded.

However, NC HealthConnex strongly encourages Participants to submit data pertaining to ALL services regardless of Payer, or if the patient paid out-of-pocket. This allows for a much more robust centralized data repository that can be used to support the services described in Section 1.2.

Timely Data

The submission of timely data is required to connect to NC HealthConnex. For pharmacies, data must be submitted within 24 hours of the **dispensed event.**

The frequency of data submissions to NC HealthConnex will be determined during Technical Discussions. NC HealthConnex supports both daily and more frequent submissions of data from pharmacies.

Required and Optional Data

Participants must submit all data elements they collect from the NC HealthConnex Pharmacy Data Target (Section 3). The data target elements must be submitted via a custom flat file:

- NC HealthConnex Pharmacy Submission Delimited File

If specific information from the Data Target cannot be supplied, this must be clarified and documented during the onboarding process.

2.3 Connection Pathways

mTLS (mutualTLS)

This type of connection provides encryption utilizing mutual TLS and requires certificate exchange between the Healthcare Organization and NC HealthConnex. mTLS is the preferred method to encrypt data to and from NC HealthConnex.

To set up a mTLS connection to NC HealthConnex, the following information is needed:

Participant Information: Organization name and address
Contact Information: Contact information for staff working to set up connection including a business or project manager and IT contact who will set up the connection
Technical Details: Sending IP address (for both test and production servers) as well as IP Service Provider

Note: The highest version of TLS that is supported is minimum 1.2.

SFTP Connection

This type of connection is used for unidirectional submission of data files.

Information needed to set up the SFTP connection include:

- Participant Information: Organization name and address

- Contact Information: Contact information for staff working to set up connection including a business or project manager and IT Contact who will set up the connection

- SFTP Technical Details: Sending IP address (for both test and production servers) as well as IP Service Provider

2.4   Overview of the Connection Process

Figure 1: Connection Process Flow

The process to set up a submission of pharmacy data to NC HealthConnex follows the steps listed in Figure 1. At each step in the connection workflow there may be actions required of the pharmacy, the NC HIEA, and/or the NC HIEA's technical vendor SAS.

1. **PA Executed:** The process to connect to NC HealthConnex starts with the pharmacy signing the Participation Agreement. The Participation Agreement is the governing document between the NC HIEA and the pharmacy.

2. **Intake Process:** Once the Participation Agreement has been executed by the NC HIEA, the participant is placed in the queue to connect. HIEA contacts the participant and confirms their path to connect. HIEA staff will also work with the participant to complete the scoping checklist.

3. **Technical Discussions:** Technical discussions are held with participants, their pharmacy system, or their data connector once all stakeholders are engaged and ready to proceed with the connection. During the technical discussion, SAS reviews the connection requirements outlined in this document and the scoping checklist for pharmacies. sFTP form will be filled out by the participant during this phase.

4. **Provide Portal Credentials:** During the technical onboarding of the participant, if they have signed a Full Participation Agreement, then the participant is provided credentials to access the NC HealthConnex Clinical Portal. The participant may be provided with portal credentials prior to SAS engaging with them or their pharmacy system or data connector for technical onboarding. If the participant has a Submit Only Participation Agreement, then this step is skipped.

5. **Connectivity:** sFTP or TLS secured through mutual certificates are available connection options. There is a preference for TLS. During this step SAS works with the participant connecting to establish and test connectivity. If the participant connects through a pharmacy system or data connector who has an established, live connection to NC HealthConnex for Retail Pharmacy Claims, then this step is skipped.

6. **Development & Analysis:** SAS requests sample flat files to analyze and ensure fields contents meet the data target requirements. If any data elements are missing or are not being sent in the correct format, SAS will work with the participant connecting on options to adjust the data being sent. Once adjustments are made, a new sample file is provided, and the analysis is re-run. There may be several rounds of analysis depending on the number of changes required.

7. **Approvals:** During the approvals step, the NC HIEA will confirm a participant has a valid participation agreement on file prior to moving into a Live state.

8. **Testing/QA:** SAS and the NC HIEA perform QA and User Acceptance Testing on the connection to ensure no additional development is required, and the participant's data displays in the portal as expected.

9. **Live in Production:** The participant is moved into production, and SAS confirms receipt of the participant's data in the production environment.

3 Field-Level Data Target and File Specifications

To ensure quality data is submitted, the embedded spreadsheet outlines the minimum pharmacy data elements required for connection to NC HealthConnex. The data elements in the spreadsheet are broken down into two categories; R=Required and RC = Required if Collected. File Specifications are also outlined in the embedded document. (Click on the icon below to open the document)

Pharmacy Claims
Onboarding Packet A

Contact Information

If you have questions regarding this document, contact us at HIEA@nc.gov.