NC HEALTHCONNEX CLINICAL PORTAL

USER GUIDE

NORTH CAROLINA
HEALTH INFORMATION EXCHANGE AUTHORITY
(NC HIEA)

This user guide was developed jointly by the North Carolina Health Information Exchange Authority (NC HIEA) and SAS Institute to assist NC HealthConnex Clinical Portal users in navigating the system. See contact information below for the primary points of contact in your organization as well as the NC HIEA Business Office.

Contact Details:

Participating Organization: _____

Participant Account Administrator (PAA) Name: _____

Participant Account Administrator (PAA) Phone/Email: _____

NC HIEA Business Office:

For questions related to this user guide, please call 919-754-6912 or email hiea@nc.gov.

Table of Contents

I. INTRODUCTION 6
Welcome 6
Purpose 6
What Is the NC HealthConnex Clinical Portal? 6
Role-Based Permissions 7
II. CLINICAL PORTAL USER INTERFACE 9
Menus 9
Left Global Menu 9
Top Level Menus 10
Working in Windowlets 11
Logging In to the Clinical Portal 11
First-Time Log In 12
Forgotten Password 13
Security Requirements 14
Accepting the Disclaimer 14
Clinical Portal Home Page 14
Logging Out of Clinical Portal 15
III. EDIT ACCOUNT DETAILS AND SPECIFY SYSTEM PREFERENCES 15
Account 16
Preferences 17
IV. PATIENT SEARCH 18
Search by Medical Record Number 18
Search by Demographic Information 18
Search Results 19
Patient Privacy and Opt Out 20
NC HIEA Opt-Out Policy 20
Break the Seal 20
V. VIEWING PATIENT INFORMATION 21
Buttons 21
Demographic Information 22

Quick Reference/Alert Icons 23
Clinical Information 24
Summary 27
Allergies 28
Alerts 29
Encounters 29
Medications 30
History 31
Conditions 32
Procedures 33
Lab Results 34
Diagnostic Studies 35
Immunizations 36
Documents 36
Patient Information from Outside NC HealthConnex 38
CSRS (Controlled Substance Reporting System) Report 39

VI. REPORTS 42
Report Types 43
Report Formats 44
Sharing a Report 44
Downloading or Printing a Report 45
Protecting Patient Health Information 46

VII. CONTROLLED SUBSTANCE REPORTING SYSTEM (CSRS) REPORT 47
Accessing Patients Without a Clinical Record 47

VIII. NC*NOTIFY 51
Learn More About Each Feature 52
Logging Out 54
NC*Notify Enhanced Alerts 55
Uploading a Patient Panel in NC HealthConnex Clinical Portal 56
What is the Self-Service Panel Loader? 56
How to Upload a Panel 57

IX. Patient Lists 62
Patient Lists Main Screen 62
Working Patient Lists 63
X. MESSAGING 64
Messaging Center User Interface 64
Messaging Menus 65
Working with Folders 66
Working with Messages 67
Sorting Messages 67
Marking and Moving Messages 67
Deleting Messages 68
Receiving and Viewing Messages and Attachments 69
Composing Messages 71
Attaching Patient Information to a Message 74
Replying to and Forwarding Messages 77
Working with Draft Messages 79
XI. TECHNICAL REQUIREMENTS 81
Browsers 81
Mobile Devices* 81
XII. HELP DESK 82
SAS® HIE Technical Support Communication Processes 82
XIII. USER GUIDE CONTENT DISCLAIMER 82
XIV. PARTNERS 82
SAS Institute 82
InterSystems and J2 Interactive 82
Secure Exchange Solutions (SES) 83
DirectTrust 83
North Carolina Department of Health and Human Services (NCDHHS) 83

I. INTRODUCTION

Welcome

Welcome to the North Carolina Health Information Exchange Authority (NC HIEA) and the state-designated health information exchange (HIE), NC HealthConnex. Your participation in NC HealthConnex will enable you and other participating organizations to:

- Save time and reduce paperwork
- Facilitate more informed treatment decision-making
- Improve care coordination
- Enable better health outcomes

Purpose

The North Carolina Health Information Exchange Authority (NC HIEA) operates NC HealthConnex to provide a secure and integrated view of a patient's longitudinal health record. Our mission is to link all health care providers across North Carolina to improve health care quality and outcomes.

This document is intended as a guide for all users to provide basic Clinical Portal navigation information for NC HealthConnex. For an up-to-date list of participating organizations, visit the NC HealthConnex website to see Who's Connected.

What Is the NC HealthConnex Clinical Portal?

The NC HealthConnex Clinical Portal is a secure, standardized electronic system through which providers can share important patient health information. The use of this system promotes the exchange and analysis of patient health information from many disparate electronic health record (EHR) systems throughout North Carolina in a consolidated and efficient manner.

Once logged in, clinicians can view a patient's medical history including allergies, medications, problem lists, procedures, lab results, radiology reports, immunization history, and other important information from providers across the state and in bordering states even if those providers are not part of the same practice or health system.

The NC HealthConnex Clinical Portal is available to providers upon having a signed and executed Full Participation Agreement regardless of your connection status. While providers do need EHR software to be live and submitting data to NC HealthConnex, the NC HIEA does not require providers to use an EHR or purchase special software to begin leveraging the NC HealthConnex Clinical Portal, as it is a web-based application.

The basic functions of the NC HealthConnex Clinical Portal include:

- Search for patients
- View demographic and clinical information
- Download or print patient information to include in a patient record
- Send messages and patient records to and receive messages from other providers

The NC HealthConnex Clinical Portal offers its users access to:

- Direct Secure Messaging, which allows providers to securely exchange patient information via a HIPAA (Health Insurance Portability and Accountability Act) compliant email system, and access to the NC HealthConnex provider directory (containing 30,000+ provider addresses).
- Patient records from other HIEs and systems nationwide via eHealth Exchange, which queries other state, interstate and national HIEs, including the Veterans Health Administration HIE and the Department of Defense (DoD), for any available records upon patient search by a user.
- The Patient Centered Data Home, based on triggering alerts of a patient's home zip code, also notifies providers when a care event has occurred outside the patient's "home" HIE and confirms the availability and specific location of the clinical data, enabling providers to initiate additional data exchanges to access real-time information across state and regional lines and the care continuum.

The NC HIEA is working to expand its service offerings to improve the tangible value of a statewide HIE to providers across North Carolina. Many projects currently under development will be added to the NC HealthConnex infrastructure as they are completed. For more information, visit the Suite of Services on the NC HealthConnex website.

Role-Based Permissions

The NC HIEA follows the highest information security standards available and is compliant with all federal and state privacy and security laws. The NC HIEA's commitment to security and privacy includes role-based access to control what information can be seen by authorized users at various levels. You can read more about the NC HIEA's policies on security and privacy on our website.

Access to the NC HealthConnex Clinical Portal is granted to users that provide patient care in a variety of settings, including offices, clinics, emergency departments, hospitals, and others.

The Clinical Portal is configured with various views and functionality that users can access based on appropriateness to their role(s) and responsibilities in the patient care process per HIPAA. Not all views need to be accessed by all users, and access is based on sensitivity of information and relevance to the user.

A full list of the functionality and information accessible to each role is provided below.

Clinical Portal Functionality	Clinician	Clerical	PAA User Admin	Clinician & PAA Admin
View Clinical Portal Home Page	X	X		X
View User Administration Home Page			X	X
Search for Patients	X	X		X
Break the Privacy Seal (Patient Level Access)	X			X
View Demographics **Clerical does not include patient phone number*	X	X		X
View Insurance Information	X			X
View Encounter History	X			X
View Allergies	X			X
View Medication History	X			X
View Problems	X			X
View Procedures	X			X
View Lab & Pathology Results	X			X
View Radiology Reports	X			X
View Clinical Documents	X			X
View Continuity of Care Documents	X			X
Access NC*Notify Notifications **Additional enrollment steps required.*	X		X	X
Search CSRS **Additional enrollment steps required.*	X		X	X
View/Compose DSM Messages **Additional enrollment steps required.*	X	X	X	X

II. CLINICAL PORTAL USER INTERFACE

The NC HealthConnex Clinical Portal user interface refers to the menus, icons, buttons, and other user information on the various screens that help you interact with the application.

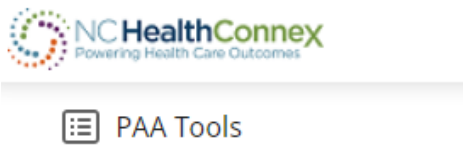
Menus

Depending on where you are within the Clinical Portal, the menu bar will vary in appearance, based on your access, to aid you in navigating to other screens.

Left Global Menu

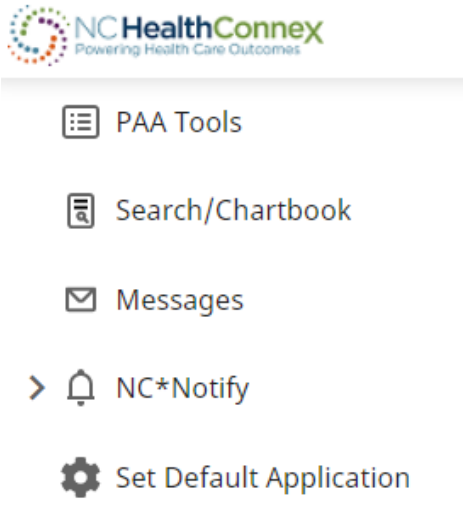
This refers to the primary menu that will display at the top left of the screen upon logging in to the Clinical Portal or while on the Clinical Portal Home Page (also the Patient Search screen).

This menu displays links to various screens depending on your role:



- **PAA Tools:** This view is only available to those with a PAA role. If you **only** have a PAA role, this is the only menu item you will see.

If you have the PAA role and the Clinical role, you will see additional options:



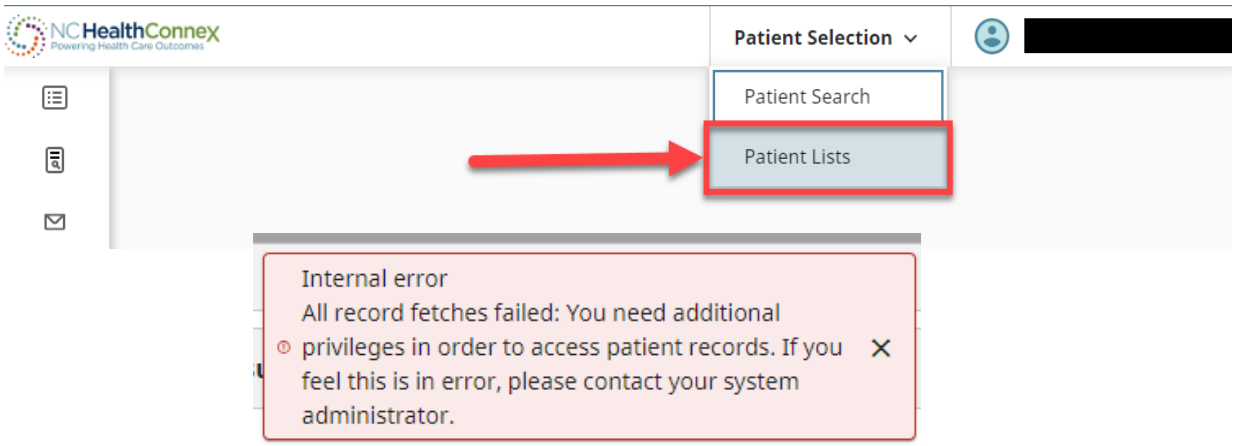
- **Search/Chartbook:** This link takes you to the Patient Search screen.
- **Messages:** This link takes you to your Messaging Center inbox if you are enrolled in Direct Secure Message (DSM) Webmail through the NC HIEA. There you can send and receive message to other providers who have a DSM address. You can also delete and organize your messages in this screen.
- **NC*Notify: If enrolled,** this link will allow you to access the care coordination tool. This tool will provide you with a dashboard-like view of patient activity through event notifications.
- **CSRS (Controlled Substance Reporting System) Report:** This link allows you to access CSRS Reports within the clinical viewer. You must be a prescribing provider and enrolled in this service to see this option.

Top Level Menus

This refers to the dropdown menus that will display at the top right of the screen while on the Clinical Portal Home Page (also the Patient Search screen). The **Patient Selection** menu is found to the left of your username, while the **User Menu** is found by clicking on your username.

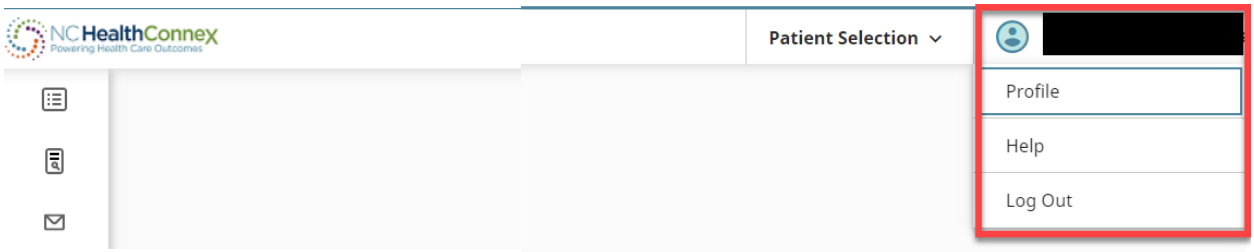
Patient Selection

- **Patient Search:** Takes you to the Patient Search screen to search for patients.
- ***Note** When you click on Patient List, you will encounter the Internal error posted below. To avoid this, click on Patient Search.

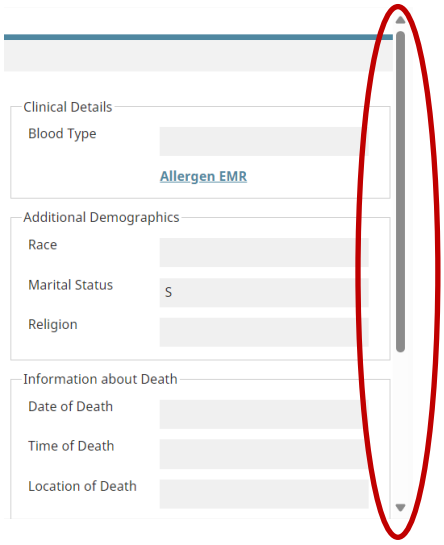


User Menu

- **Profile:** This link takes you to your user profile, where you can update your password and other account details.
- **Help:** This link opens a new window or tab on your web browser to the Training & Tools section of the NC HIEA website. Here you may access Clinical Portal video tutorials, get help with Clinical Portal credentials, and find other tools and information related to the Clinical Portal.
- **Logout:** This link logs you out of the Clinical Portal.



Working in Windowlets

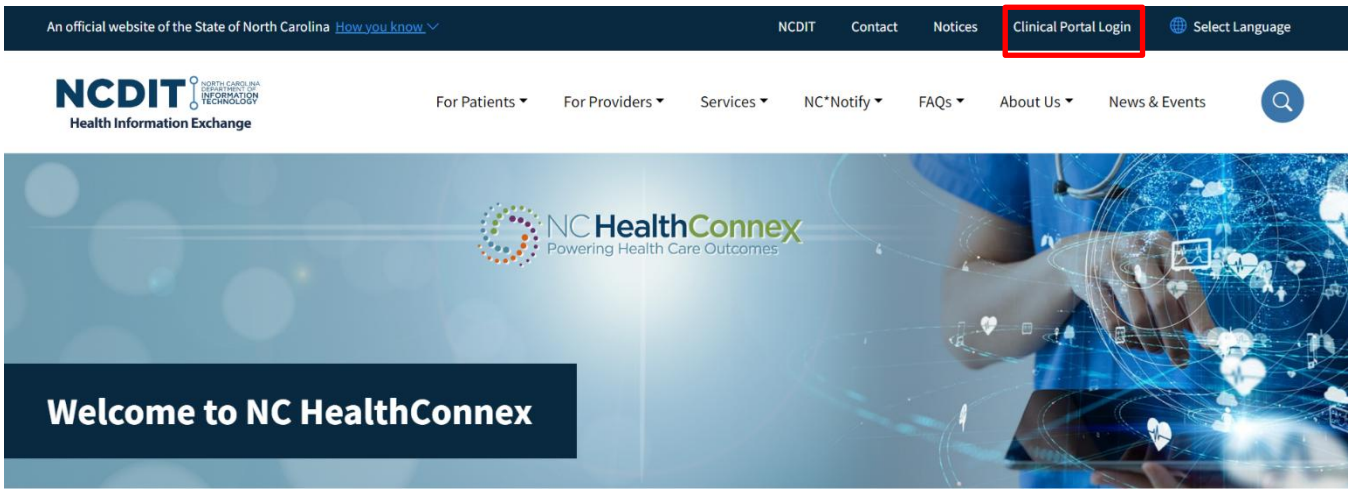


Many links and buttons within the patient record screen of the Clinical Portal will open in a new window. These windowlets may be navigated by adjusting (moving) or scrolling up and down various gray scroll bars. The gray scroll bars may appear on any side of the windowlet (top, bottom, right or left).

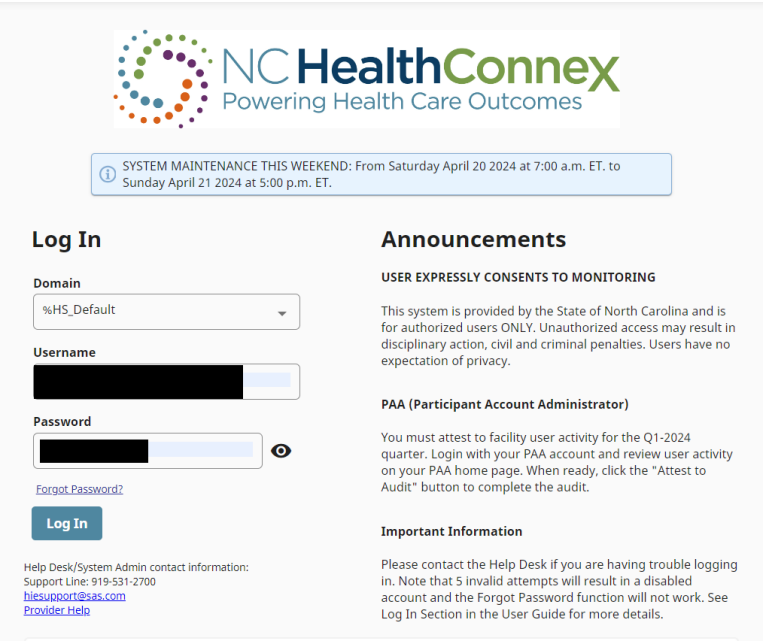
Logging In to the Clinical Portal

This section explains how to log in to the NC HealthConnex Clinical Portal and contains information about password requirements.

To log in to the Clinical Portal, you may do so from the main page of our website (shown below).



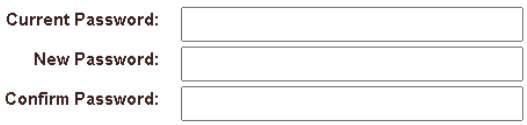
You may also copy and paste the NC HealthConnex Clinical Portal URL (https://portal.nchealthconnex.net) or type it into an Internet browser, such as Microsoft® Edge or Mozilla® Firefox®. Once you have entered the URL, the login screen is displayed, as shown below. Note that the Domain field should show "%HS_Default."



A username and password are required to gain access to the application. To obtain a username and password, contact your organization's Participant Account Administrator (PAA).

First-Time Log In

Once your account is created, you will receive two emails from "no-replies-hie@sas.com" One will include your new username. The second will include a default password. To log in for the first time, you will enter the username and default password from the email. You will be prompted to create a new password.

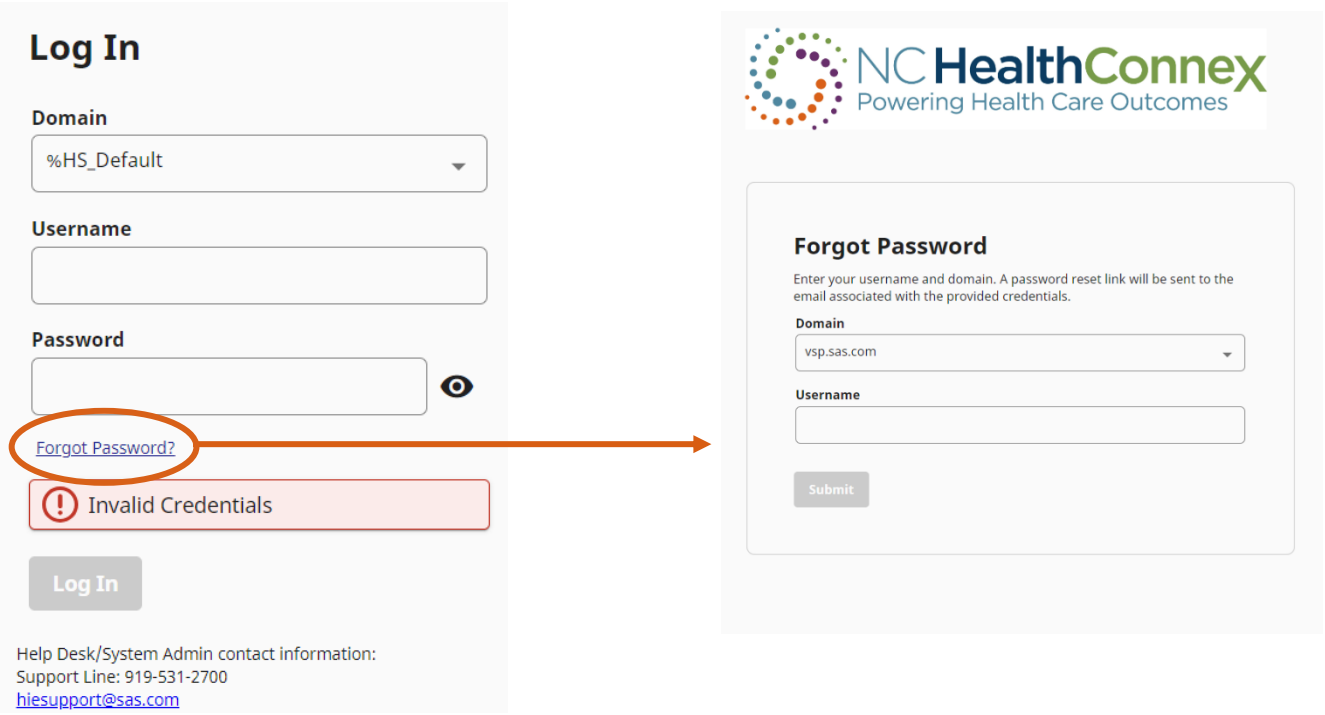


****Note: You may change your password at any time in the **Profile** tab in the **User Menu** section of the Clinical Portal. You will not be prompted to create a challenge question and answer, but should take the time to create one in the **Profile** tab.*

Forgotten Password

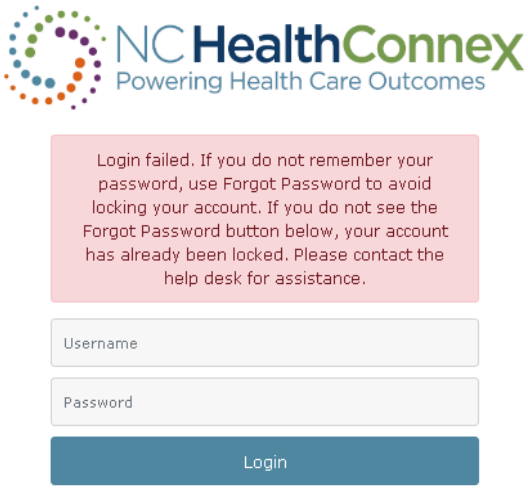
If you enter an incorrect password, a red box appears showing “Invalid Credentials” with a red exclamation mark. Click on “Forgot Password?” above the red box. You will be prompted for your username.

Upon entering the correct username, you will receive a message to the email account on file with a link to reset your password. The email will be sent from no-repies-hie@sas.com.



If incorrect information is entered, the system may lock your account, and you must contact the NC HealthConnex Help Desk to unlock the account.

If you attempt to log in five times with an incorrect username and/or password, please contact the Help Desk at HIESupport@sas.com or 919-531-2700.



Security Requirements

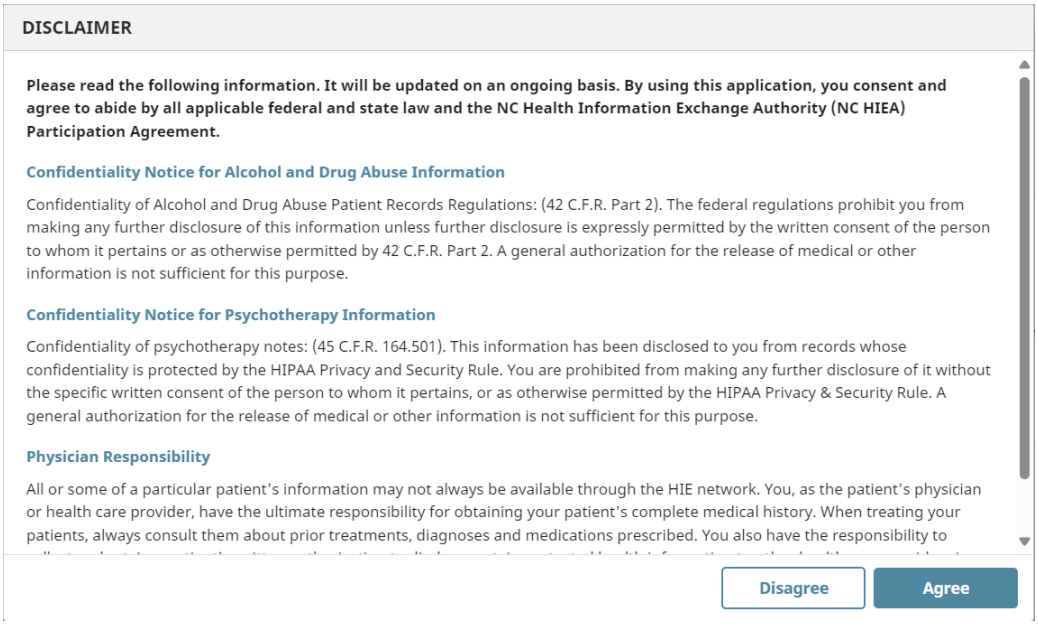
To keep NC HealthConnex secure from unauthorized access, the NC HIEA has implemented the following security requirements relative to user accounts and passwords:

- You must reset your password every 90 days.
- Passwords must contain a minimum of eight characters including a mix of uppercase, lowercase, numeric, and special characters (acceptable special characters include: *.!@#$%^&(){}[]:"";'<>,.?/~`_+-=|\).
- When resetting a password, your past four passwords may not be repeated.
- Your account will become inactive if you have not logged in for 365 days.

If you have trouble logging in or changing a password, you should contact the Help Desk.

Accepting the Disclaimer

Each time you successfully log in to the NC HealthConnex Clinical Portal, you must agree to a standard disclaimer to gain access to the application. You must read and select the **Agree** button within 20 minutes or you will be automatically logged out and returned to the login page. The disclaimer information to which you must agree upon every log in is shown below.

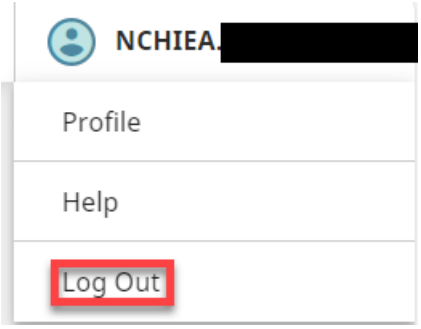


Clinical Portal Home Page

The Clinical Portal home page, which defaults to the **Welcome screen**, appears when you log in to NC HealthConnex. This view contains the **Left Top Menu** at the top left of the display, where you can click links to navigate to other sections within the Clinical Portal. The **Patient Search** box appears at the left of the display, providing quick access to search for a patient.

For more information on the **Patient Search** view and accessing clinical records, see the Patient Search and Viewing Patient Information sections of this user guide.

Logging Out of Clinical Portal



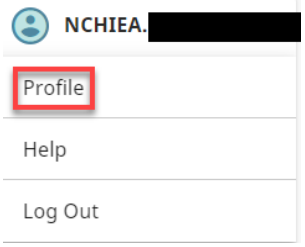
****Note: To protect patient data, you are automatically logged out of the Clinical Portal after 20 minutes of inactivity.*

The **Logout** button is used to exit the NC HealthConnex Clinical Portal. The **Logout** button is located in the dropdown menu at the top right of the page under your username.

It is important to use the **Logout** button as opposed to simply closing your web browser. The **Logout** button will log you out of the application and close the session. If the logout function is not used, the session will remain active for 20 minutes without user activity before the **Automatic Logout** feature is activated. The **Automatic Logout** feature is a security measure to protect patient data in NC HealthConnex from unauthorized users who may share or access your computer.

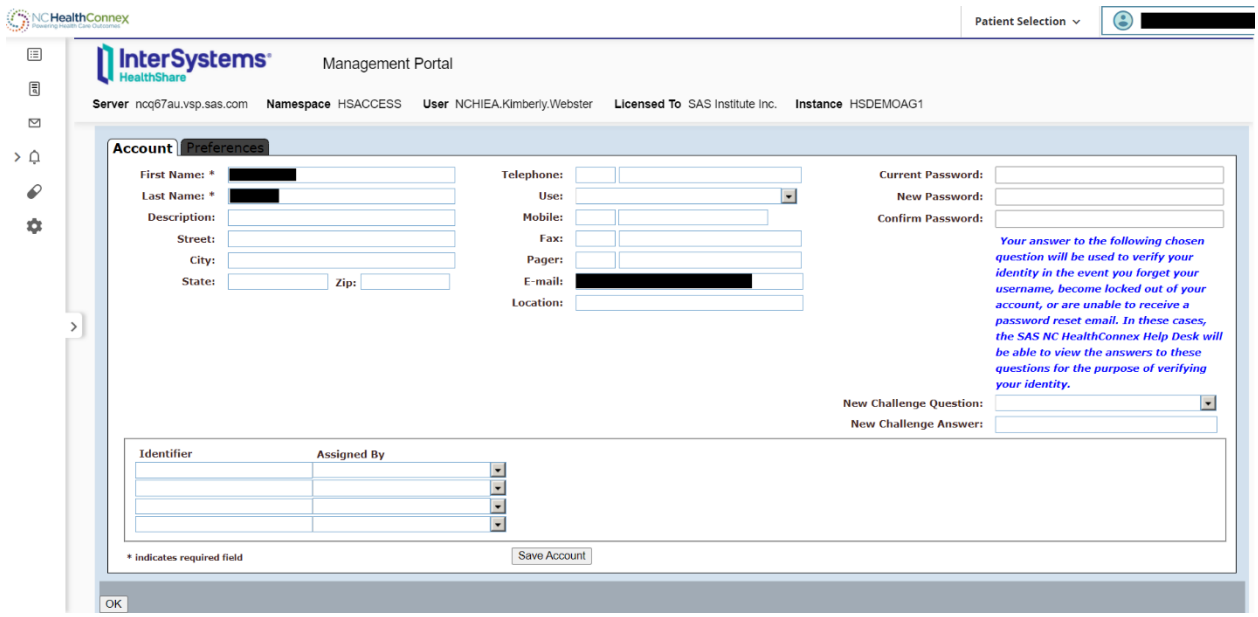
III. EDIT ACCOUNT DETAILS AND SPECIFY SYSTEM PREFERENCES

The **Profile** screen is the central location for changing account details like contact information, as well as customizing some of the ways in which you interact with the NC HealthConnex Clinical Portal.



To access and edit this information, select the **Profile** link from the **User Menu** on the top right of the screen.

Clicking on the **Profile** tab will produce a pop-up window where you may access and edit the information within the **Account** and **Preferences** tabs, as shown below.



Account

The personal information in the **Account** tab may be edited as desired; however, the **First Name** and **Last Name** are required. These fields and the **E-mail** field will be pre-populated during account setup. ****Note: Some fields can only be edited by the NC HealthConnex Help Desk. Contact your PAA to make those changes.*

Fields available for edit/update on the **Account** tab, as shown above, include:

Basic Demographics:

- First Name (may only be edited by the NC HealthConnex Help Desk)
- Last Name (may only be edited by the NC HealthConnex Help Desk)
- Description (indicate the type of address; for example, "Work")
- Street
- City
- State
- Zip
- Telephone
- Use (select the type of telephone line from the drop-down menu)
- Mobile
- Fax
- Pager
- E-mail (this will be pre-populated, but may be edited)
- Location (indicate the type of email account; for example, "Work")

Account Security:

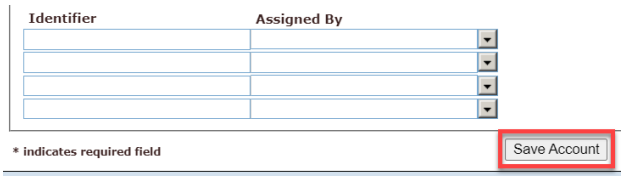
- Current Password
- New Password (enter a new password if desired)
- Confirm Password (enter a new password a second time in this field to reset)
- Challenge Question* (select from the drop-down list of questions)
- Challenge Answer* (enter challenge answer)

****Note: Your answers to the chosen challenge question will be used to verify your identity in the event you forget your username, become locked out of your account, or are unable to receive a password reset email. In these cases, the SAS NC HealthConnex Help Desk will be able to view the answer to these questions for the purpose of verifying your identity.*

Provider Identifiers:

- Identifier*
- Assigned By *

****Note: These fields are only editable by the Help Desk and are populated once DSM or CSRS access is added to a user account. In most cases, these fields will be blank.*



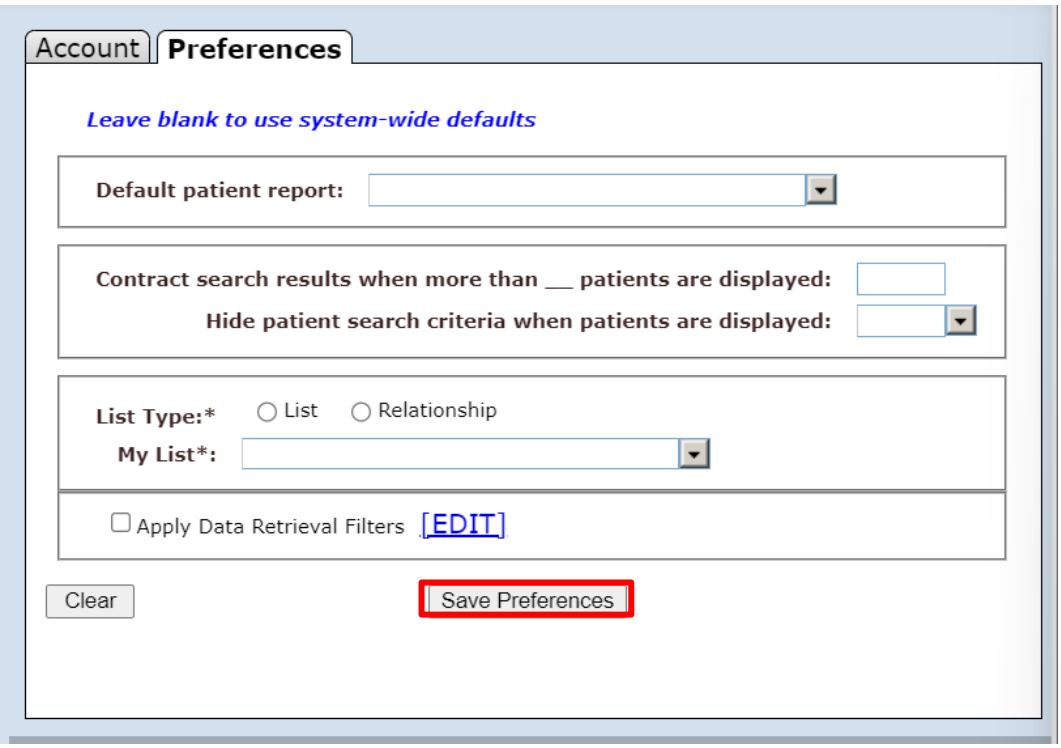
Click the **Save Account** button at the bottom of the window to save your edits.

Preferences

The **Preferences** tab of the **Profile** pop-up window, shown below, allows you to configure some system settings. Fields available for edit/update on the **Preferences** tab include the following:

- **Default Patient Report**: you may use the drop-down menu to select either the regular or expanded patient summary view.
- **Contract Search Results**: you may enter a number to limit the results returned by a patient search when there are many matches.
- **Hide Patient Search Criteria**: the default view upon patient search keeps the search entry/criteria section visible at left, with a list of search results returned at the right. By selecting "**Yes**" from the drop-down menu, the search entry/criteria section at the left of the screen will disappear when search results are returned. This feature may be helpful if you are viewing this information on a small screen or mobile device.
- **List Type** and **My List**: please disregard these fields as they do not have any functionality tied to them and will be removed in a future system release.

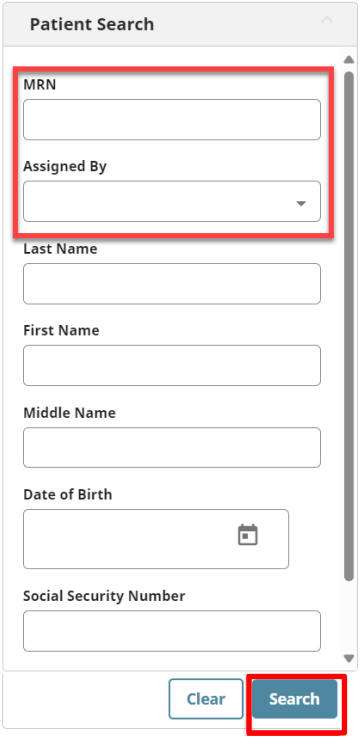
After making edits to account information, you should click the **Save Preferences** button at the bottom of the window to save all changes.



IV. PATIENT SEARCH

The **Patient Search** screen in the NC HealthConnex Clinical Portal allows you to search for patient records by entering medical record identifiers or demographic information.

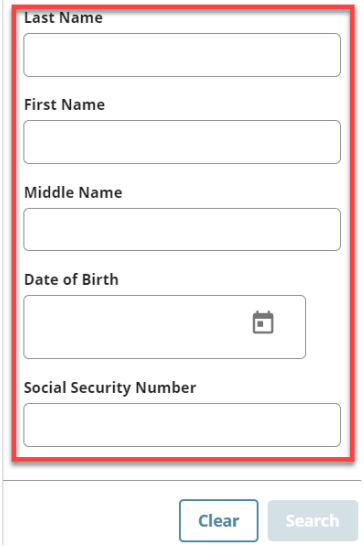
Search by Medical Record Number



Every organization assigns medical record numbers (MRNs) to patients. A patient that has received care from multiple organizations may have more than one assigned MRN. You may search for a patient by any MRN, and the assigning facility for that MRN, and see the patient's records from all systems sharing data with NC HealthConnex.

To search by MRN, key in an **EHR ID** and select an **Assigned By** entity name from the drop-down menu by clicking the magnifying glass or typing the practice name, as shown below. Then, click **Search**.

Search by Demographic Information



Patients may also be searched by entering at least two fields of demographic information. Search results will appear with the closest match at the top of the list, followed by additional possible matches based on phonetically similar names and other matching criteria.

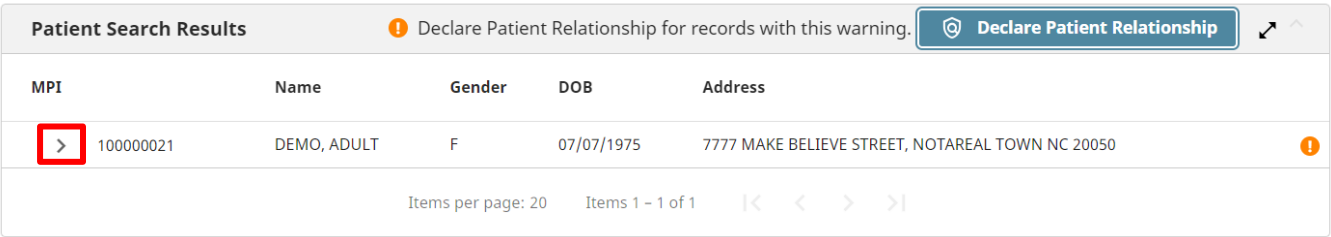
To search by demographic information, key in both a **Last Name** and either a **First Name** or a **Date of Birth**, then click **Search**.

****Note: If the search returns too many results, add additional search criteria (such as **Middle Name**) to filter the results and return a refined list of patients. The search algorithm will return results that are a close match; for example, a search may return results for different spellings of the searched name.*

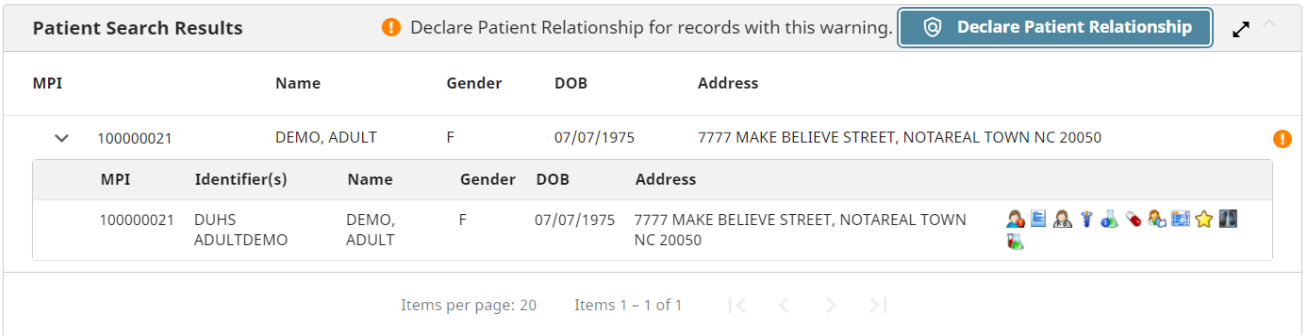
Search Results

Search results will include the following information for any matched patient(s):

- The **Master Patient ID** will be displayed upon initial search under the **Identifiers** column next to the patient's name. This ID is assigned by NC HealthConnex.

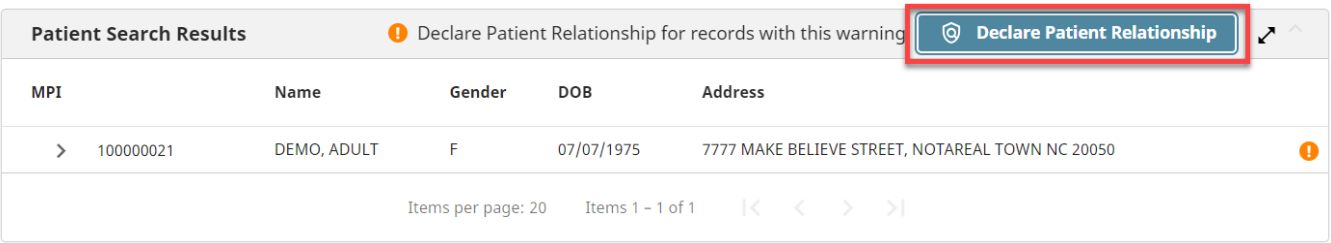


Clicking the > icon to the left of the **Master Patient ID** will expand the entry and list any **Organization-Specific Patient IDs**, along with attached records, in rows below. Note, these IDs are assigned by the EHRs at the organizations that contributed the specific records.



- Name
- Gender
- Date of Birth
- Address

From the search result, you must click on "**Declare Patient Relationship**" to progress any further.

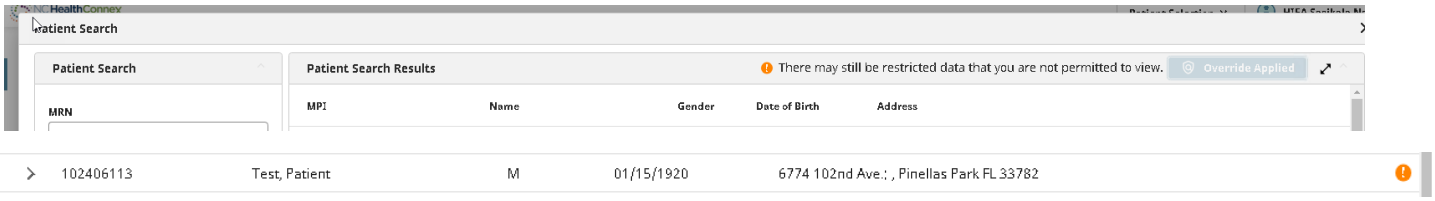


****Note:* *If there is any restriction on the information stored for the patient selected, a pop-up window explaining that the information is restricted will display (for example, if the patient has opted out of having their information shared via NC HealthConnex, or if your access level does not permit viewing of clinical data).*

Patient Privacy and Opt Out

The standard patient consent model implemented in NC HealthConnex, as stated in the North Carolina Health Information Exchange Act, is "Opt Out." This means that patient data is by default opted in to being shared via NC HealthConnex unless a patient explicitly requests to opt out of having their information shared.

If a patient searched has opted out of having their information shared via NC HealthConnex, you may only see a **Master Patient ID** (no **Organization-Specific Patient IDs**). Clicking on the **Patient Name** will result in a message barring access to the patient record, as shown below.



When the user searches for the patient and breaks the seal, the patient will not be enabled to be clicked on to view. Users will see a message: "There may still be restricted data that you are not permitted to view."

NC HIEA Opt-Out Policy

Patients have the right to opt out of having their information shared between providers through NC HealthConnex. If a patient chooses to opt out, they are required to complete a form and mail it to the NC HIEA Business Office. Opting out of having their information shared via NC HealthConnex will not adversely affect patient treatment by any physician and patients cannot be discriminated against if they decide to opt out. Patients may also use the form to rescind a previous opt-out if they change their mind.

The primary opt-out process is for an NC HIEA Administrator/Privacy Officer to manually change a patient's status in the NC HealthConnex Clinical Portal upon receipt and processing of the opt-out form.

****Note: Even if a patient has opted out of having their information shared via NC HealthConnex, their clinical data from participating health care entities will continue to be submitted to the NC HealthConnex data repository. The NC HIEA's privacy and consent permissions simply hide an opted-out patient's clinical data from all NC HealthConnex user's view.*

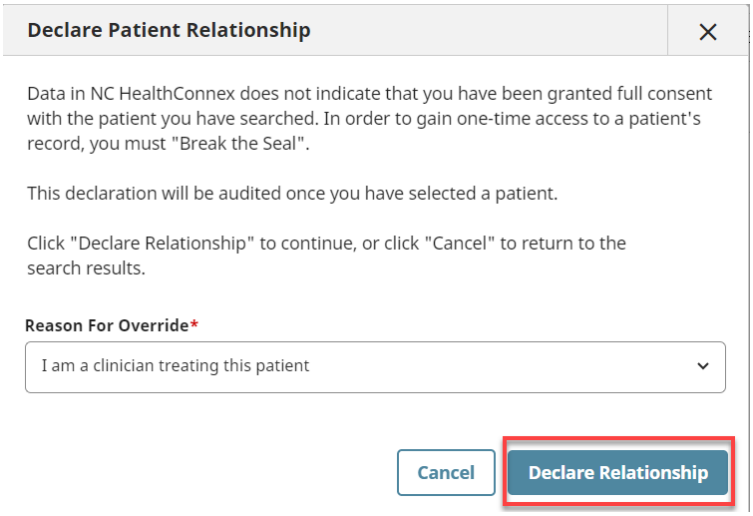
Break the Seal

To access a patient record, you must have an established relationship with a patient. If a data-driven relationship exists (meaning the user, if a clinician, or user's facility has previously seen the patient and their contributed records for that patient are present in NC HealthConnex), you will be able to click a patient name and access the patient record instantly.

If you do not have a prior data-driven relationship with a patient, you have to "Break the Seal" to receive temporary access to view a patient record. ****Note: If you do not declare a relationship, you cannot open the record.*

To gain temporary access, you must do the following:

- Search for and select the patient record by clicking on the Patient Name. This will prompt the "Declare Patient Relationship" pop-up window, as shown below.
- Select a reason to view the record from the drop-down list under "**Reason for Override**."
- After selecting an option, you will be able to click the **Declare Relationship** button to open the patient record.



Permission to view a patient record for a patient with whom you do not have a data-driven relationship is temporary. This means that if you return to the **Patient Search** screen or another area of the Clinical Portal after viewing a record, you will need to repeat the "Break the Seal" process to access the record again or take actions relative to that patient from the **Clinician Tools** screen.

****Note:*** *All instances of "Break the Seal" are logged and subject to audit.*

V. VIEWING PATIENT INFORMATION

Within the NC HealthConnex Clinical Portal, you may access patient information received from various organizations participating with NC HealthConnex.

When a patient record is opened, this information is presented at the top of the patient record through quick reference alert icons and via tabs at the left of the **Patient View** screen that allow you to view an aggregated clinical summary and drill down to specific types of clinical data, like medications and diagnoses.

Buttons

When navigating the clinical information within a patient record, you should note the following buttons/icons and their functions:

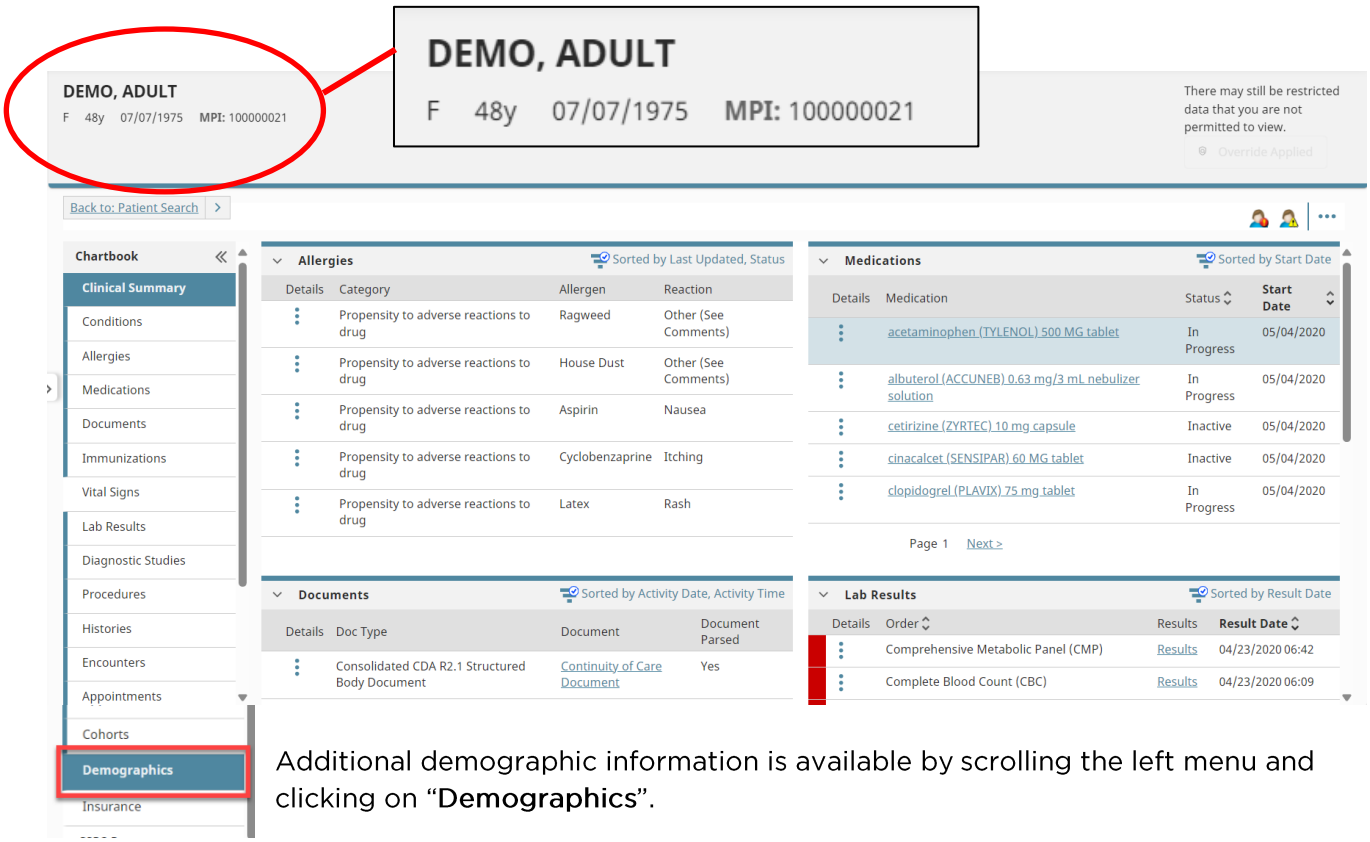
- ⋮ **A vertical blue ellipsis icon**, often seen under a column titled "Details," indicates that more information may be available. Simply click on the icon to open a windowlet at right or a new pop-up window with this information. To close a windowlet, click the **X** in the upper

right-hand corner, or click the blue ellipsis icon next to the original row of data again. To close a new pop-up window, click the **X** in the upper right-hand corner of the window.

- Page 1 Next > **A paging arrow icon** at the bottom of a list of information indicates that additional entries exist. The number to the left of the arrow indicates which page of entries you are currently viewing. You may click the Next arrow icon at the bottom of a list to navigate between pages of entries.
- ••• **A horizontal blue ellipsis icon** on the far right of the patient demographic row will display patient summary reports. See the **Reports** section for additional information.
- A **sort icon** often appears on multiple sections throughout a patient's chartbook. The sort will allow you to sort in chronological or reverse chronological order. In some cases, you can apply a secondary sort.
- A navigation box allows you to return **Back to: Chart**. Back to: Chart >

Demographic Information

When a patient record is opened, the patient's **Name, Age, Date of Birth, and MPI** appear across the top of the screen, as shown below.

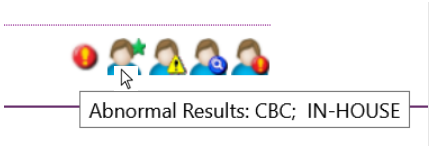


Additional demographic information is available by scrolling the left menu and clicking on "**Demographics**".

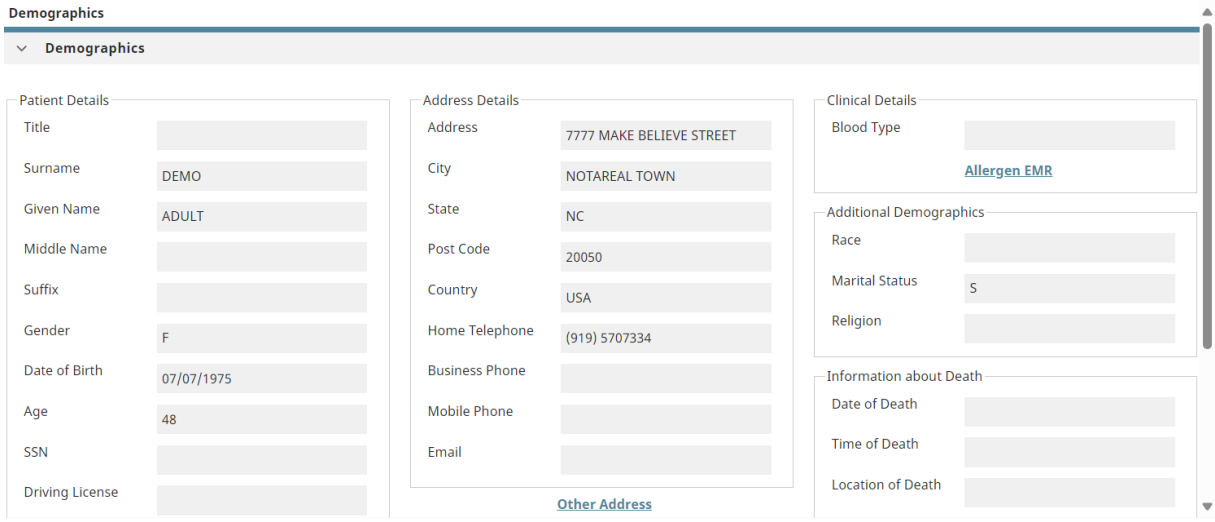
Quick Reference/Alert Icons

To the right of the main patient demographic information displayed on the **Patient View** screen, icons (as relevant) give you a quick visual flag for and one-click access to important clinical information. Hovering over each icon will also provide some information. Examples include the following:

- **Abnormal Results:** hovering over this icon displays information on abnormal test results, as shown below.

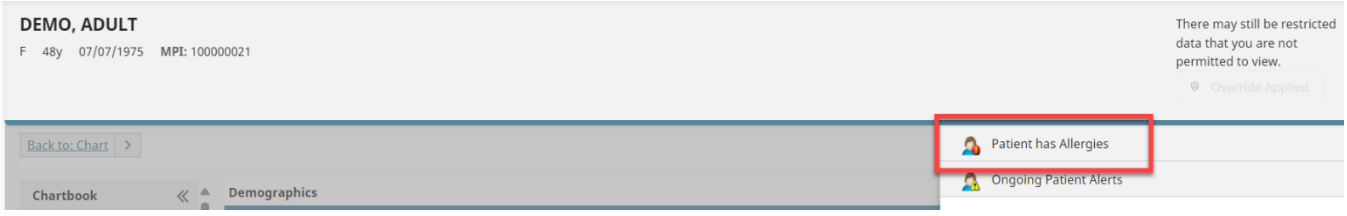


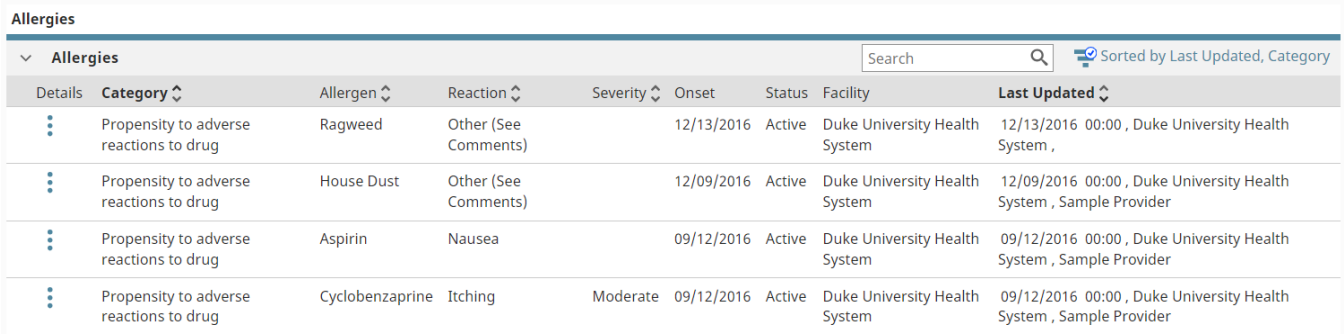
- **Alias Names Exist:** clicking on this icon opens a pop-up window with information on any historical/alternative names for the patient—for example, maiden names—as shown below.
- **Ongoing Patient Alerts:** clicking on this icon opens a pop-up window with more information on any important ongoing patient alerts providers should know about, as shown below.
- **Patient Demographics:** clicking on this icon opens a pop-up window with additional options. When clicking on patient demographic information, another screen will display, as shown below.



- Patient has Allergies: clicking on this icon opens a pop-up window with information on allergies and adverse reactions, including date and source of this information, as shown below.

****Note: These icons will only appear where relevant to the patient. For example, the **Patient has Allergies** icon will not display for a patient with no documented allergies.*



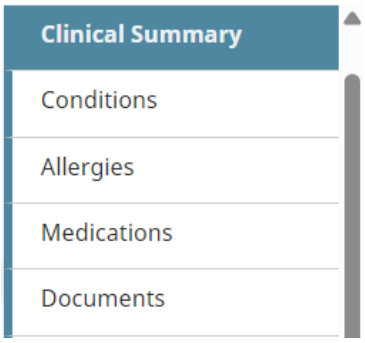


Details	Category	Allergen	Reaction	Severity	Onset	Status	Facility	Last Updated
	Propensity to adverse reactions to drug	Ragweed	Other (See Comments)		12/13/2016	Active	Duke University Health System	12/13/2016 00:00 , Duke University Health System ,
	Propensity to adverse reactions to drug	House Dust	Other (See Comments)		12/09/2016	Active	Duke University Health System	12/09/2016 00:00 , Duke University Health System , Sample Provider
	Propensity to adverse reactions to drug	Aspirin	Nausea		09/12/2016	Active	Duke University Health System	09/12/2016 00:00 , Duke University Health System , Sample Provider
	Propensity to adverse reactions to drug	Cyclobenzaprine	Itching	Moderate	09/12/2016	Active	Duke University Health System	09/12/2016 00:00 , Duke University Health System , Sample Provider

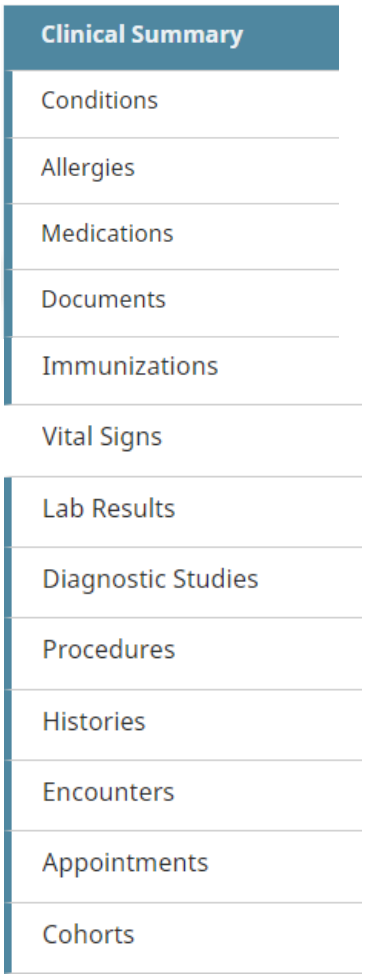
Clinical Information

Below the main patient demographic information and quick reference/alert icons displayed on the **Patient View** screen, a patient record is presented in the following ways, navigable by tabs on the left side of the screen and icons within each screen. (See the Clinical Portal User Interface section of this user guide for a description of icon/button functions).

To arrive at the **Patient View** screen, navigate through the eleven clinical tabs shown below. A patient's **Chartbook** is the top tab that includes the following:



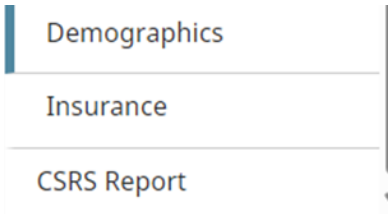
- **Clinical Summary**: The **Clinical Summary** is the default selection when opening a patient's clinical record. This screen includes a single, aggregated record of the most recent information received for an individual patient by NC HealthConnex. This information is categorized into the following lists: **Allergies, Medications, Continuity of Care Documents (CCDs), General Lab Results, Diagnostic Studies**, and **Diagnoses**.
- **Conditions:** The second tab lists the patient's known current and historic conditions (diagnoses). This tab presents three lists: **Diagnoses**, **Current Problems**, and **Historical Problems**. The **Diagnoses** list contains patient diagnoses, including diagnosis type, description, code, status, diagnosis date, and source/time of the data. The **Current Problems** and **Historical Problems** lists contain description, onset date, end date (if past illness), problem, status, and source/time of the data.
- **Allergies**: The third tab lists known patient allergens, nature of allergic reactions, severity level, onset date, status and data source/time.



- **Medications**: The fourth tab presents two lists of medications: **Current Medications** (no end date provided) and **Historical Medications** (end date provided). Each list contains the order name, dose, drug route, and start date for each medication if that information was made available to NC HealthConnex.
- **Documents**: The fifth tab presents any documents received by NC HealthConnex, including the document name (a hyperlink that may be clicked to view document details or the full document, depending on document type), clinician, document type, activity date, and source/time of the data.
- **Immunizations**: The sixth tab presents a list of vaccinations administered, including the order name, dose, drug route, and start date.

  ****Note: Though the NC HIEA shares information with the NC Immunization Registry, all vaccinations currently presented in the Clinical Portal are as received from EHR systems only.*
- **Vital Signs:** The seventh tab lists the patient vital signs, which include: heart rate, respiratory rate, body temperature, blood pressure, body mass index, weight, height, and oxygen saturation.
- **Lab Results:** The eighth tab contains **Lab Results** and the list contains order item, a link to a cumulative list of results for that order item, and individual results (a hyperlinked date/time that may be clicked for each full result information).
- **Diagnostic Studies:** The ninth tab contains diagnostic study orders and results.
- **Procedures:** The tenth tab shows the **Procedures** list, including operation, procedure date, care provider, operation code, and source/time of the data.
- **Histories:** The eleventh tab contains Medical History, Social History, Family History, and Social Determinants.
- **Encounters**: The twelfth tab lists patient encounters in reverse chronological order (most recent first), including relevant dates, encounter type, facility name, relevant department and/or attending physician treating the patient, the local (treating facility) MRN and encounter number, and, if available, insurance information.
- **Appointments:** The thirteenth tab shows current and historical appointments.
- **Cohorts:** The fourteenth tab allows a user can view a cohort and see patients who are part of the cohort depending on the its restriction status. The restrictions available are:
  - **Public**: Available to all clinicians. Not restricted by membership in a particular clinician group, association of a clinician with a particular facility, or relationship of a clinician to a patient.
  - **Clinician Group**: Only members of the specified clinician group may view cohort members.

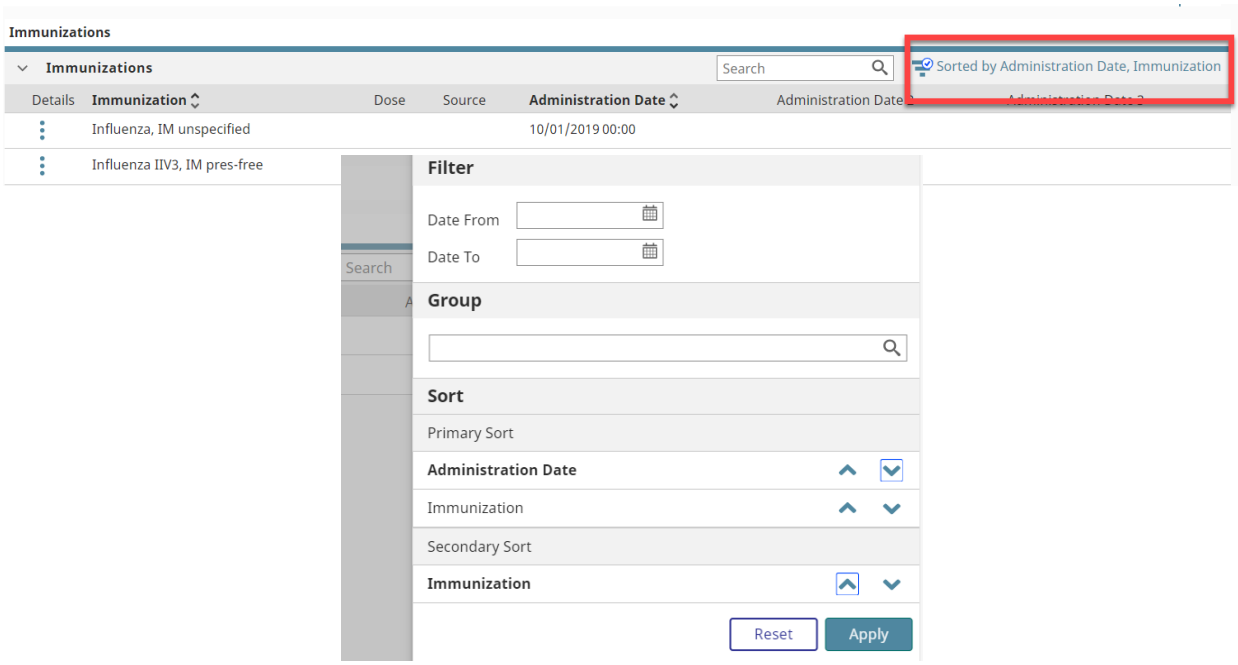
- **Facility**: Only clinicians associated with the specified facility may view cohort members.
- **Private to me**: Available only to an individual user. Only that user may view cohort members.
- **Consent Required:** MPI consent is required for a user to learn of the patient's cohort membership status



- **Demographics:** The fifteenth tab shows the patients demographic information, including name, DOB, age, SSN, address, race, contacts, etc.
- **Insurance:** This tab shows the patient's insurance information.
- **CSRS Report**: The final tab allows you to check prescription fill history to meet the STOP Act Requirement while being in the patient's chartbook.

All the information in the clinical tabs described in this section has the following characteristics:

- It is presented in ***reverse chronological order***, with the most recently received data at the top of each list. The data lists are not subject to filter or search functionality, but you can sort it. In some cases, a secondary sort is an option.
- The sections may also be grouped, for example grouping influenza immunizations.



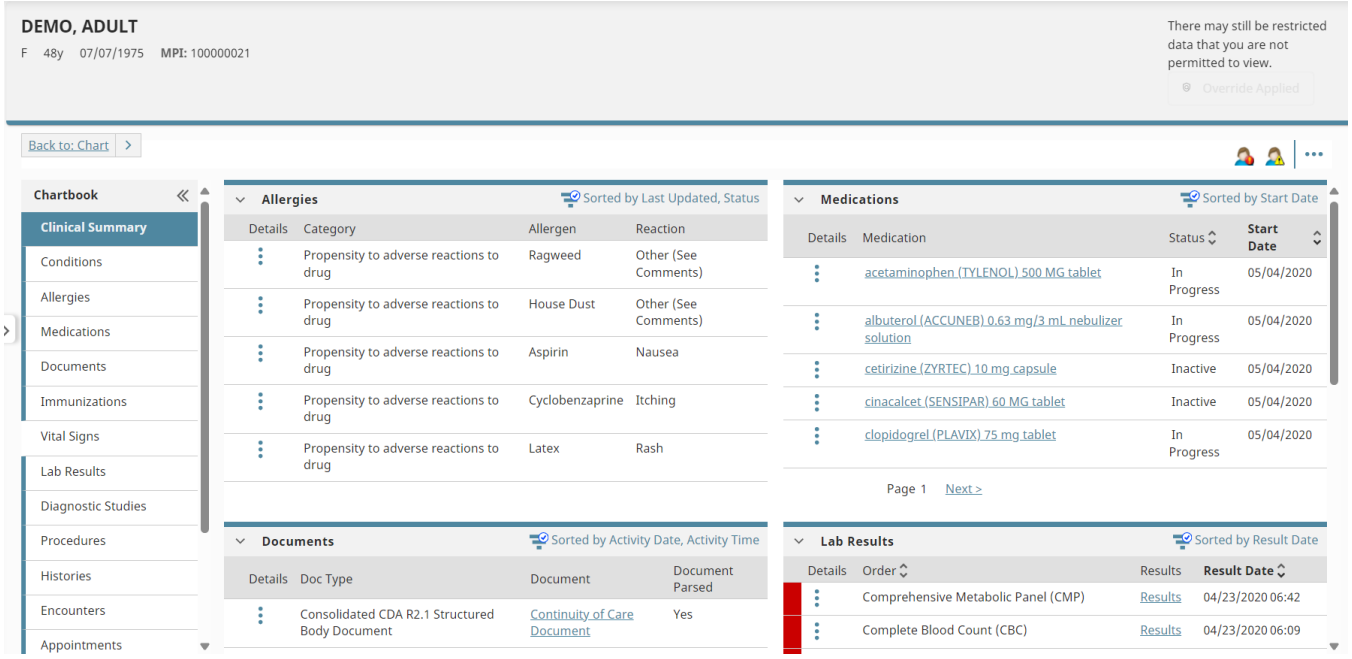
- It is ***view-only***. To send a patient record to another provider, see the Messaging section of this user guide. To download or print a patient record, see the Reports section of this user guide.

- It is presented ***exactly as received from EHR systems***, meaning that some data fields may be blank or contain information displayed in a variety of different ways based on how it was formatted in the source system.
- It may ***require a refresh*** to present the most up-to-date information. If you see, "*Awaiting Patient Data"* text below the Patient View Menu, you should click the **Refresh** button, as shown below, to ensure the most recent data from all data sources is presented.

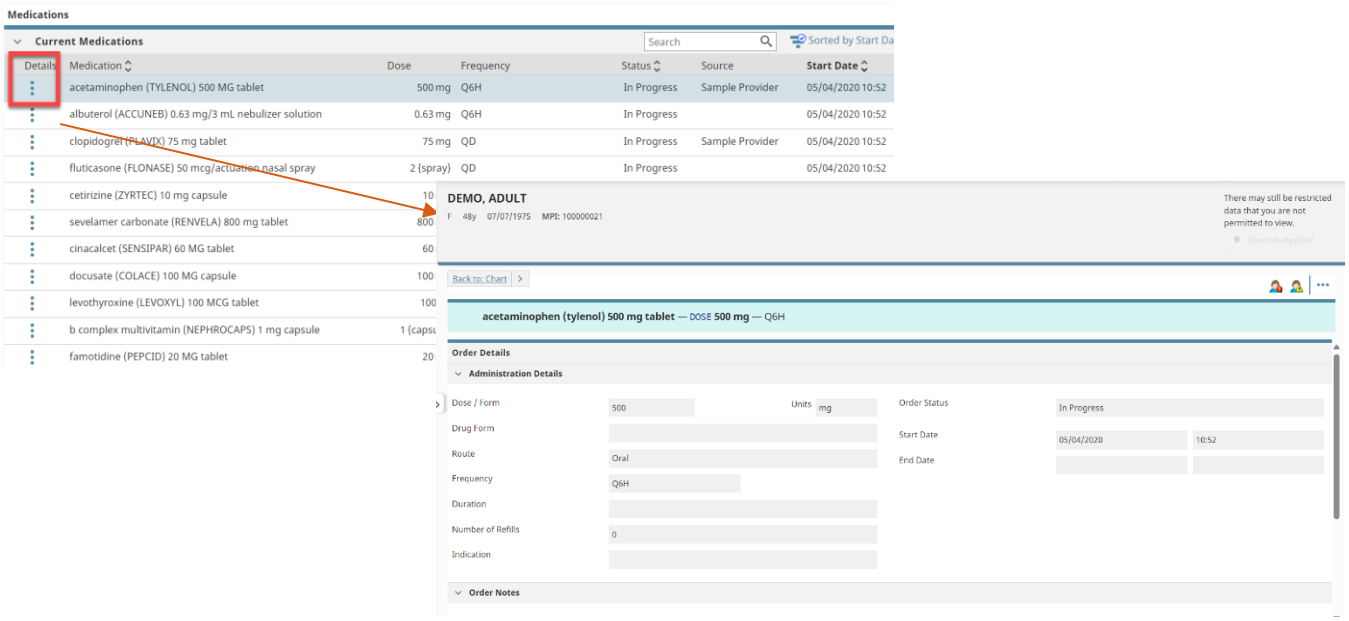
Summary

The **Summary** screen, shown below, displays a snapshot of the most recent components of a patient's aggregated record. It is the first screen you see when a patient's name is selected from the results of a search or a list, and displays six abbreviated lists of information: **Allergies, Medications, Continuity of Care Documents (CCDs), General Lab Results, Other Results and Notes, and Diagnoses**. (Full lists of information for each category may be found by navigating through the tabs at left or by clicking the arrows at the bottom of each list.)

Some of the fields within each section and information entry may be blank, as data is not always sent/received from the source system.



Data inputs that appear as blue dots (vertical ellipses, kabab menu) may be clicked to open a new window with additional information, as shown below.

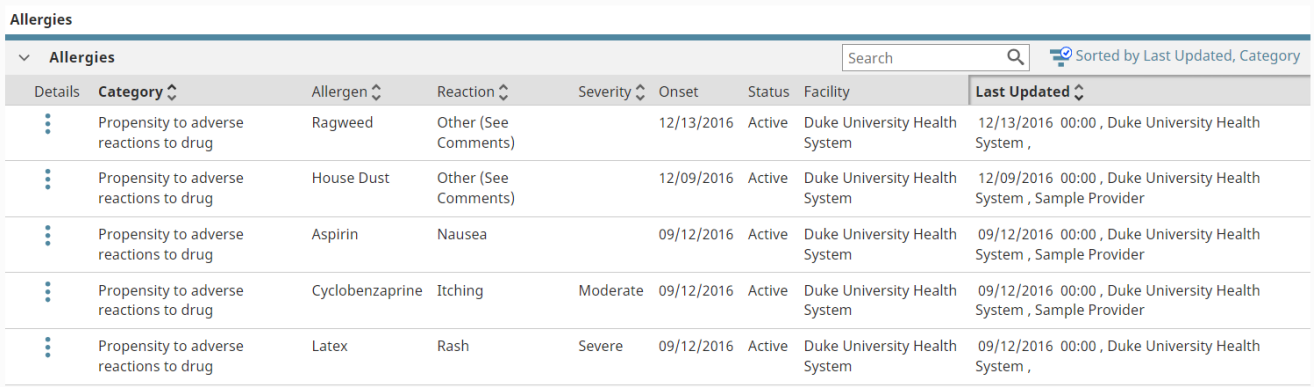


Allergies

The **Allergies** screen lists the patient's recorded allergies. Some of these fields may be blank, as data is not always sent/received from the source system. This screen includes the following section:

The **Allergies and Adverse Reactions** list includes any documented allergen, the nature of the patient's reaction following contact with the allergenic substance or event, the severity level, the recorded date of onset, the status, and the date/time/facility/sender of the update, if that information was made available to NC HealthConnex, for each allergy.

The **Allergies** screen is shown below.

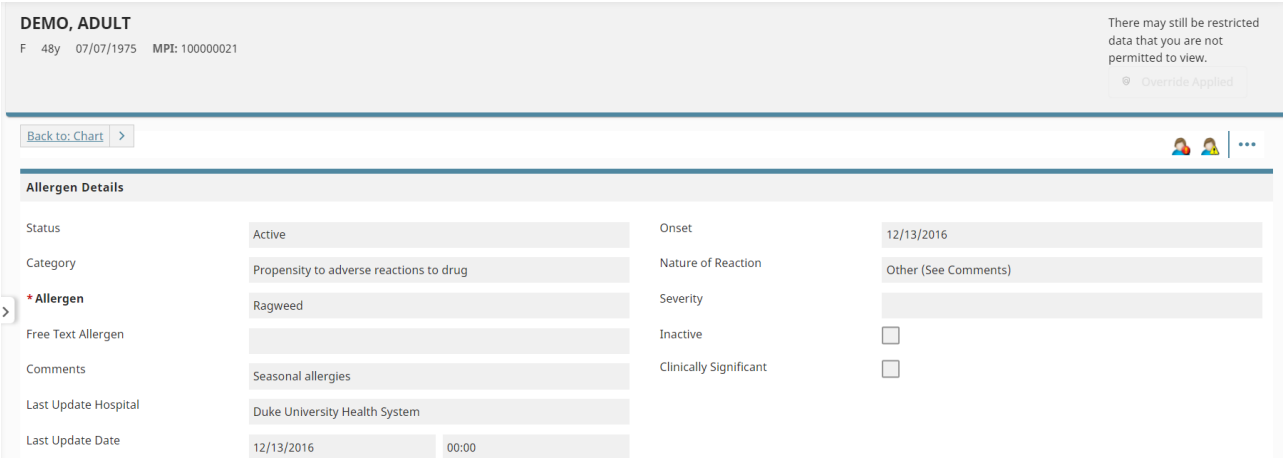


Allergies

Allergies — Search — Sorted by Last Updated, Category

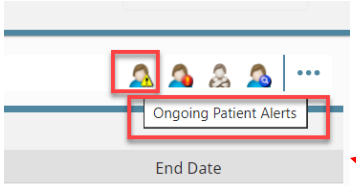
Details	Category	Allergen	Reaction	Severity	Onset	Status	Facility	Last Updated
	Propensity to adverse reactions to drug	Ragweed	Other (See Comments)		12/13/2016	Active	Duke University Health System	12/13/2016 00:00 , Duke University Health System ,
	Propensity to adverse reactions to drug	House Dust	Other (See Comments)		12/09/2016	Active	Duke University Health System	12/09/2016 00:00 , Duke University Health System , Sample Provider
	Propensity to adverse reactions to drug	Aspirin	Nausea		09/12/2016	Active	Duke University Health System	09/12/2016 00:00 , Duke University Health System , Sample Provider
	Propensity to adverse reactions to drug	Cyclobenzaprine	Itching	Moderate	09/12/2016	Active	Duke University Health System	09/12/2016 00:00 , Duke University Health System , Sample Provider
	Propensity to adverse reactions to drug	Latex	Rash	Severe	09/12/2016	Active	Duke University Health System	09/12/2016 00:00 , Duke University Health System ,

To view additional information about an entry on the **Allergie and Adverse Reactions** list (such as a provider's comments), click on the **blue vertical ellipsis icon** at the left of the row and a pop-up window will appear, as shown below.

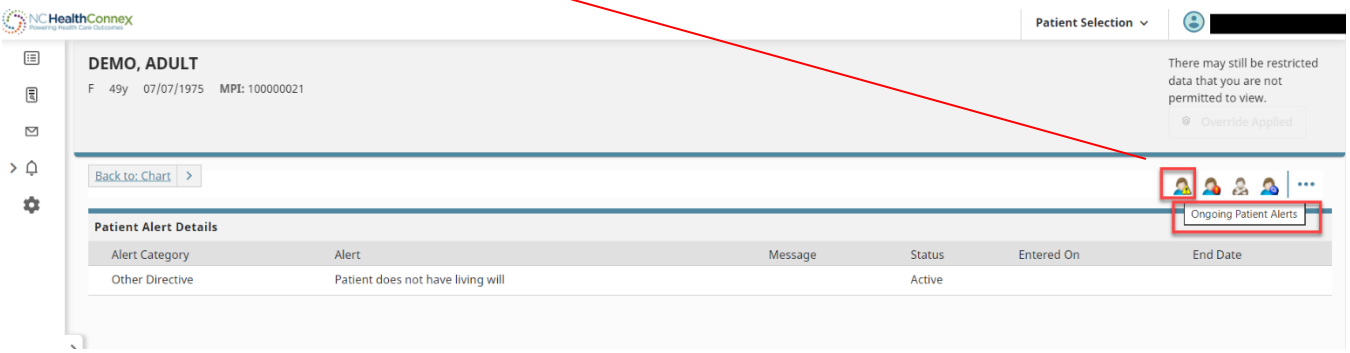


Alerts

This section contains any important patient alerts. Some of these fields may be blank, as data is not always sent/received from the source system. The **Patient Alerts** list includes important alerts for providers, such as the direction *"Do Not Resuscitate."* This list includes the type of alert, the alert message, the status, the date the alert was entered, and the facility/sender of the information for each alert. This screen includes the following sections:



1. Ongoing Patient Alerts
2. Patient has Allergies
3. Deceased
4. Patient Demographics



Encounters

The **Encounters** screen displays a list of a patient's encounters with care providers. The list includes the date of the encounter, end dates, the type of encounter, the organization name, facility name, the relevant department and/or attending physician treating the patient (with contact information), the local (treating facility) MRN and encounter number, and insurance information for each encounter.

Encounter information from NC HealthConnex participants will be displayed here, as will encounter information received from the Patient Centered Data Home (PCDH) Network. More details on PCDH will be provided in the section below titled "Patient Information from Outside NC HealthConnex".

Some of these fields may be blank, as data is not always sent/received from the source system.

The **Encounters** screen is shown below.

Encounters

Encounters

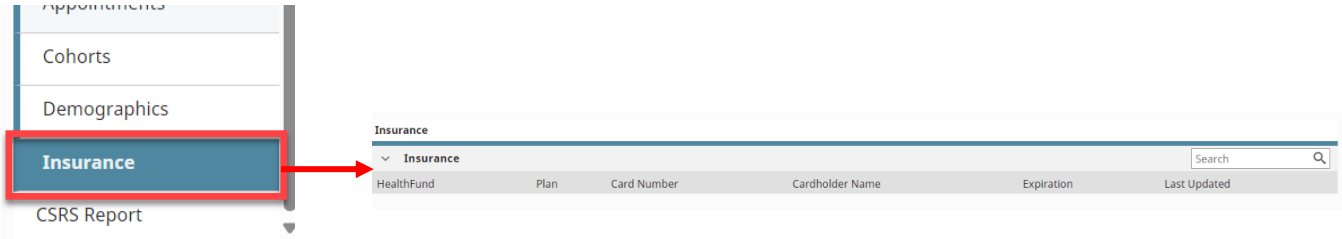
Search

Start Date	Type	Organization	Facility	Department	Treating Care Provider	Encounter Number	End Date	Insurance	Local MRN
05/04/2020 10:37	Outpatient	Duke University Health System	Duke University Health System			19246822023207919246 8	05/04/2020 10:52		ADULTDEMO
04/27/2020 00:00	Outpatient	Duke University Health System	Duke University Health System			19246822052810619246 8	04/27/2020 00:00		ADULTDEMO
04/24/2020 00:00	Outpatient	Duke University Health System	Duke University Health System			19246822046133319246 8	04/24/2020 00:00		ADULTDEMO
04/20/2020 11:41	Inpatient	Duke University Health System	Duke University Health System			19246822016934319246 8	04/23/2020 14:16		ADULTDEMO
04/20/2020 10:54	Outpatient	Duke University Health System	Duke University Health System			19246821995553719246 8	04/20/2020 11:09		ADULTDEMO

****Note: Attending Physician information is typically only sent to NC HealthConnex for emergency and inpatient events for ease of follow-up by a patient's care team.*

Insurance

Insurance information, if made available to, may be accessed by clicking on the **insurance tab.** The information will be displayed to the right.



Medications

The Medications screen lists recent and historical medications prescribed for the patient. This screen includes the following sections:

- The **Current Medications** list contains the order name, the prescribed dose, the drug route, and the start date, if that information was made available to NC HealthConnex, for each medication.
- The **Historical Medications** list contains the order name, the prescribed dose, the drug route, and "ordered on" date, if that information was made available to NC HealthConnex, for each medication.

Some of these fields may be blank, as data is not always sent/received from the source system.

The **Medications** screen is shown below.

Back to: Chart

Chartbook
- Clinical Summary
- Conditions
- Allergies
- Medications
- Documents
- Immunizations
- Vital Signs
- Lab Results
- Diagnostic Studies
- Procedures
- Histories
- Encounters

Medications

Current Medications — Search — Sorted by Start Date

Details	Medication	Dose	Frequency	Status	Source	Start Date
	acetaminophen (TYLENOL) 500 MG tablet	500 mg	Q6H	In Progress	Sample Provider	05/04/2020 10:52
	albuterol (ACCUNEB) 0.63 mg/3 mL nebulizer solution	0.63 mg	Q6H	In Progress		05/04/2020 10:52
	clopidogrel (PLAVIX) 75 mg tablet	75 mg	QD	In Progress	Sample Provider	05/04/2020 10:52
	fluticasone (FLONASE) 50 mcg/actuation nasal spray	2 {spray}	QD	In Progress		05/04/2020 10:52
	cetirizine (ZYRTEC) 10 mg capsule	10 mg	QD	In Progress		10/21/2016 10:23
	sevelamer carbonate (RENVELA) 800 mg tablet	800 mg	Q.333333333333333333D	In Progress		10/03/2016 12:00
	cinacalcet (SENSIPAR) 60 MG tablet	60 mg	QD	In Progress		10/03/2016 11:59
	docusate (COLACE) 100 MG capsule	100 mg	Q1H	In Progress		10/03/2016 11:59
	levothyroxine (LEVOXYL) 100 MCG tablet	100 ug	QD	In Progress		10/03/2016 11:59
	b complex multivitamin (NEPHROCAPS) 1 mg capsule	1 {capsule}	QD	In Progress		03/29/2011 00:00
	famotidine (PEPCID) 20 MG tablet	20 mg	QD	In Progress		03/29/2011 00:00

Additional details for each medication prescription—such as order status, ordering clinician or number of refills, if made available to NC HealthConnex—may be accessed by clicking on the **blue vertical ellipsis icon.** ⋮ A new window containing the information will appear, as shown below.

Back to: Chart

acetaminophen (tylenol) 500 mg tablet — DOSE **500 mg** — Q6H

Order Details

Administration Details

Dose / Form	500	Units mg	
Drug Form			
Route	Oral		
Frequency	Q6H		
Duration			
Number of Refills	0		
Indication			

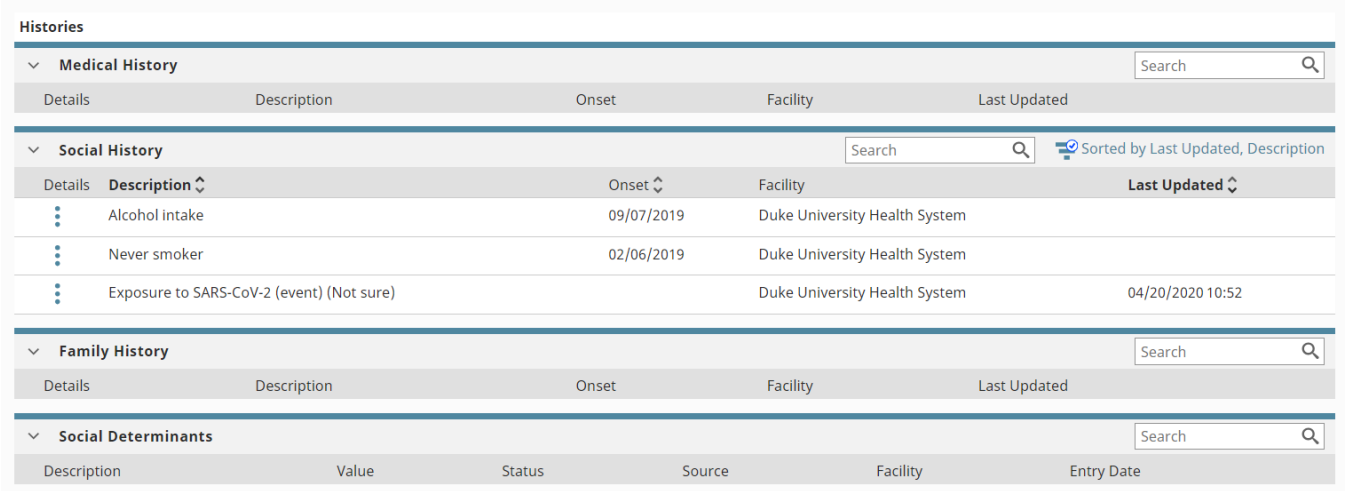
Order Status	In Progress	
Start Date	05/04/2020	10:52
End Date		

History

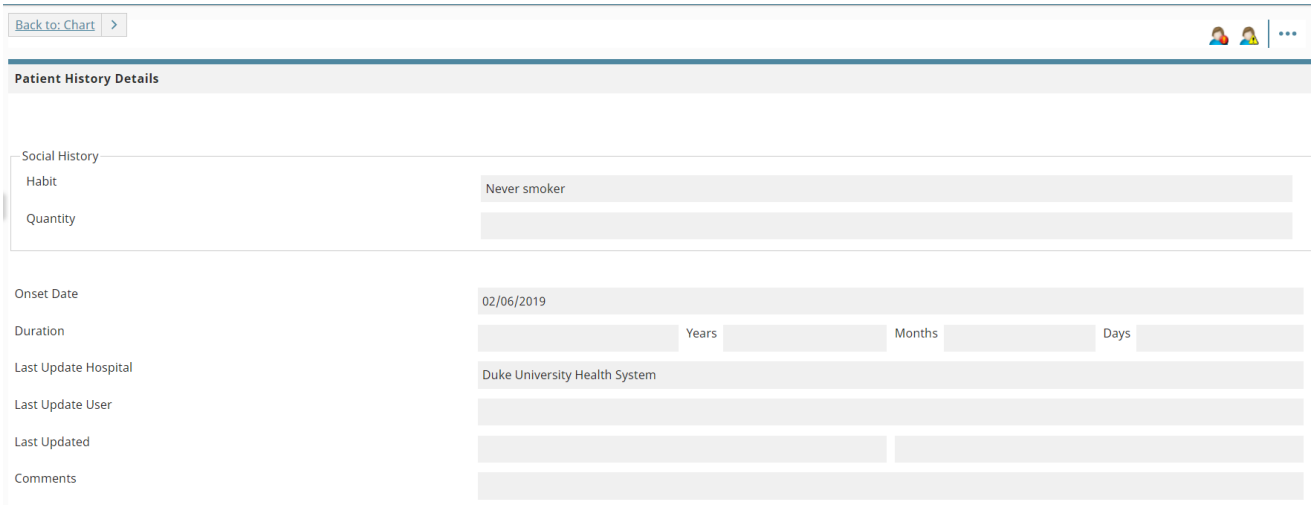
The **Histories** screen presents information on a patient's family, social, medical history as well as social determinants. This list includes the type of information (e.g., "family" may describe a family history of a certain condition, or "social" may describe smoking status), the description, the onset date, any comments, and the date/time/facility/sender of the update, if that information was made available to NC HealthConnex, for each entry.

Some of these fields may be blank, as data is not always sent/received from the source system.

The **History** screen is shown below.



Additional details for each history entry—such as the family member who carries the family history of a condition or the duration of an issue/condition, if made available to NC HealthConnex—may be accessed by clicking on the **blue vertical ellipsis icon.** ⋮ A new window containing the information will appear, as shown below.



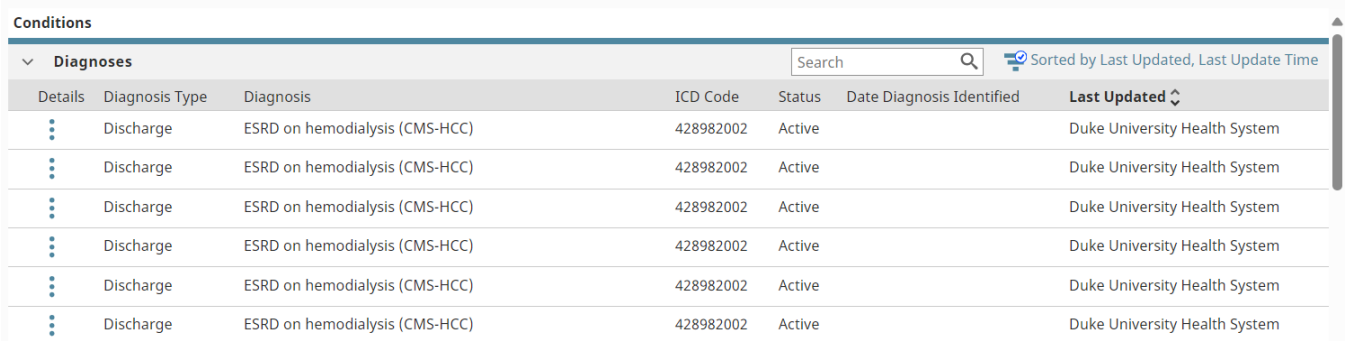
Conditions

The **Conditions** screen provides information on a patient's diagnoses and any present and past illnesses. This screen includes the following sections:

- The **Diagnoses** list contains patient diagnoses, including the diagnosis type, the description, the code, the status, the diagnosis date, and the date/time/facility/sender of the update, if that information was made available to NC HealthConnex, for each diagnosis.
- The **Historical Problems** list entries contain the description, the onset date, the end date (if past illness), the problem, the status, and the date/time/facility/sender of the update, if that information was made available to NC HealthConnex, for each illness.

Some of these fields may be blank, as data is not always sent/received from the source system.

The **Conditions** screen is shown below.

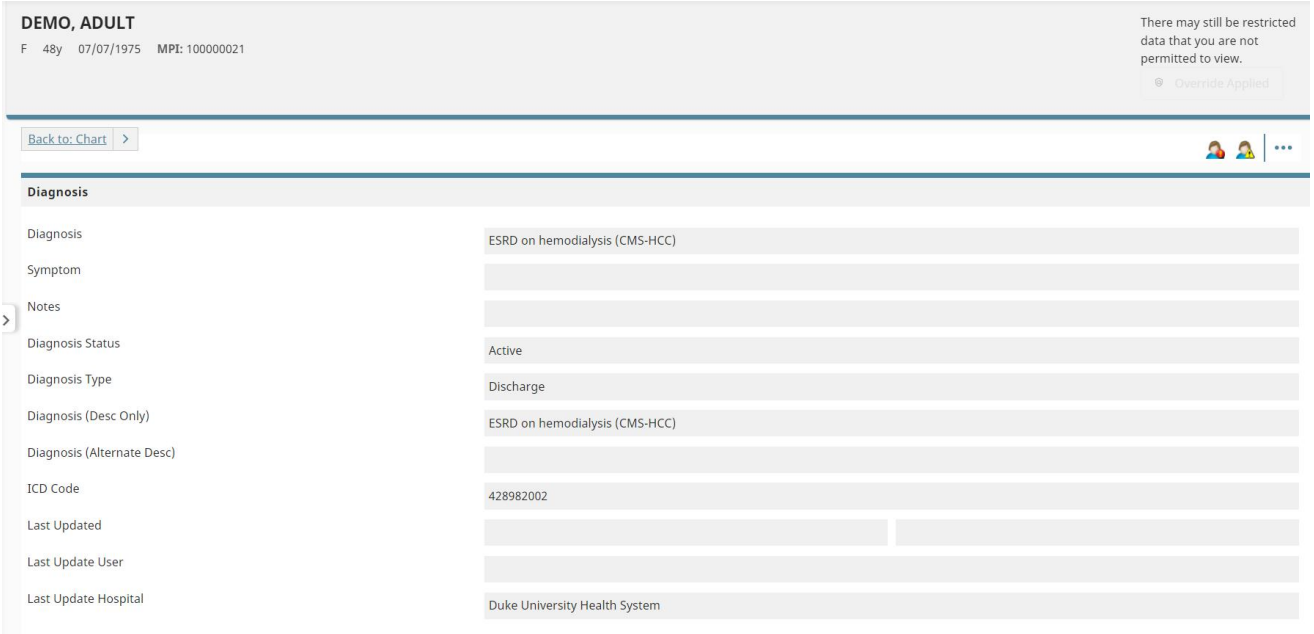


Conditions

Diagnoses — Search — Sorted by Last Updated, Last Update Time

Details	Diagnosis Type	Diagnosis	ICD Code	Status	Date Diagnosis Identified	Last Updated
	Discharge	ESRD on hemodialysis (CMS-HCC)	428982002	Active		Duke University Health System
	Discharge	ESRD on hemodialysis (CMS-HCC)	428982002	Active		Duke University Health System
	Discharge	ESRD on hemodialysis (CMS-HCC)	428982002	Active		Duke University Health System
	Discharge	ESRD on hemodialysis (CMS-HCC)	428982002	Active		Duke University Health System
	Discharge	ESRD on hemodialysis (CMS-HCC)	428982002	Active		Duke University Health System
	Discharge	ESRD on hemodialysis (CMS-HCC)	428982002	Active		Duke University Health System

Additional details for each diagnosis (e.g., notes) may be accessed by clicking on the **blue vertical ellipsis icon.** ⋮ A new window containing the information will appear, as shown below.



DEMO, ADULT
F 48y 07/07/1975 **MPI:** 100000021

There may still be restricted data that you are not permitted to view.
Override Applied

Back to: Chart

Diagnosis

Diagnosis	ESRD on hemodialysis (CMS-HCC)
Symptom	
Notes	
Diagnosis Status	Active
Diagnosis Type	Discharge
Diagnosis (Desc Only)	ESRD on hemodialysis (CMS-HCC)
Diagnosis (Alternate Desc)	
ICD Code	428982002
Last Updated	
Last Update User	
Last Update Hospital	Duke University Health System

Procedures

The **Procedures** screen provides information on a patient's procedures, general lab results and other types of results and notes. This screen includes the following sections:

- The **Procedures** list contains the procedure, the procedure date, the care provider, the operation code, and the date/time/facility/sender of the update, if that information was made available to NC HealthConnex, for each procedure.

For quick reference, any red text that appears within the Procedures/Results screens and pop-up windows indicates a result or test item that is abnormal or outside of normal range (e.g., a result lower or higher than the provided reference range).

Some of these fields may be blank, as data is not always sent/received from the source system.

The **Procedures** screen is shown below.

Procedures

Procedures Search Sorted by Last Updated, Procedure

Procedure	Procedure Date	Care Provider	Facility	Last Updated
106004	10/01/2019	Sample Provider	Duke University Health System	
106004	09/09/2019	Sample Provider	Duke University Health System	
106004	09/06/2019	Sample Provider	Duke University Health System	

Lab Results

Lab Results may be viewed cumulatively or individually.

Cumulative:

The **cumulative** results window is shown below. For quick reference, note that any red block that appears next to a test item name indicates the test item is abnormal or outside of normal range.

Lab Results by Date

Order	Trend	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6
Complete Blood Count (CBC)		04/23/2020 05:36 Duke University Health System	04/22/2020 05:10 Duke University Health System	04/21/2020 07:28 Duke University Health System	04/20/2020 12:39 Duke University Health System	02/25/2020 07:49 Duke University Health System	01/30/2020 11:32 Duke University Health System
Comprehensive Metabolic Panel (CMP)		04/23/2020 05:36 Duke University Health System	04/22/2020 05:10 Duke University Health System	04/20/2020 12:39 Duke University Health System	01/04/2020 11:43 Duke University Health System	10/01/2019 12:31 Duke University Health System	09/09/2019 10:10 Duke University Health System
POC Glucose Whole Blood		04/22/2020 05:26 Duke University Health System					

Results Detail

Complete Blood Count (CBC)

Start Date	04/23/2020	05:36	Date Lab Received		00:00
Ordering Clinician			Result Date	04/23/2020	06:09
Order Status	Executed		Result Status	Final	
Specimen			Last Updated		
Collection Date		00:00	Age at Time of Test	44 Years	

Trend

Test Item	Flag	Value	Units	Reference Range	Test Item Status	Comments	Sensitivities	Message Flag	Collection Date	Performed At
Results narrative would be documented here		4.8		3.2 - 9.8x109/L	Final				04/23/2020	DRH CLINICAL LABORATORY
Hemoglobin	Low	8.7	g/dL	12 - 15.5	Final			Low	04/23/2020	DRH CLINICAL LABORATORY
Hematocrit	Low	29.5	%	35 - 45	Final			Low	04/23/2020	DRH CLINICAL LABORATORY

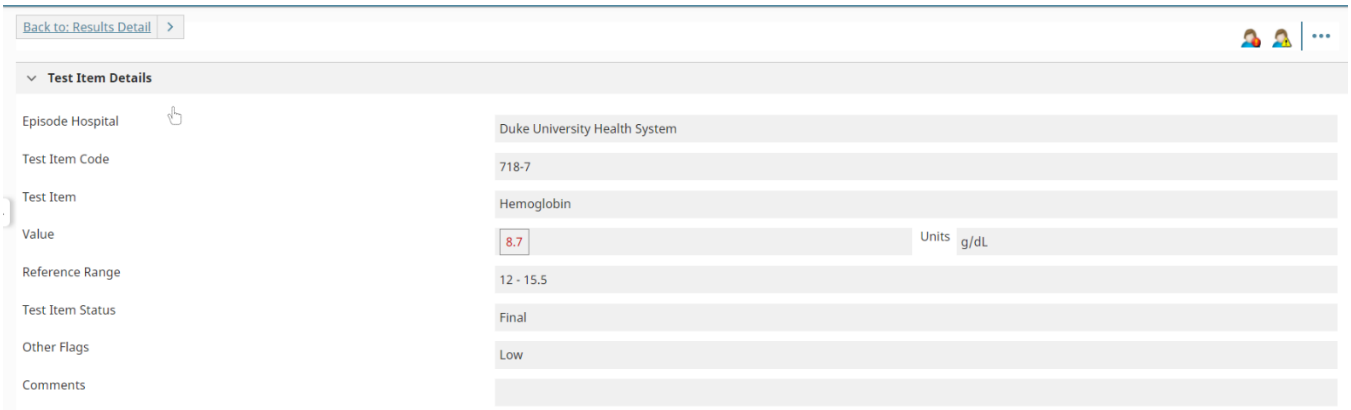
Any individual result from the cumulative results window may be viewed in more detail by clicking the hyperlink in the desired date/time result column.

This will open a new pop-up window, as shown above.

Individual:

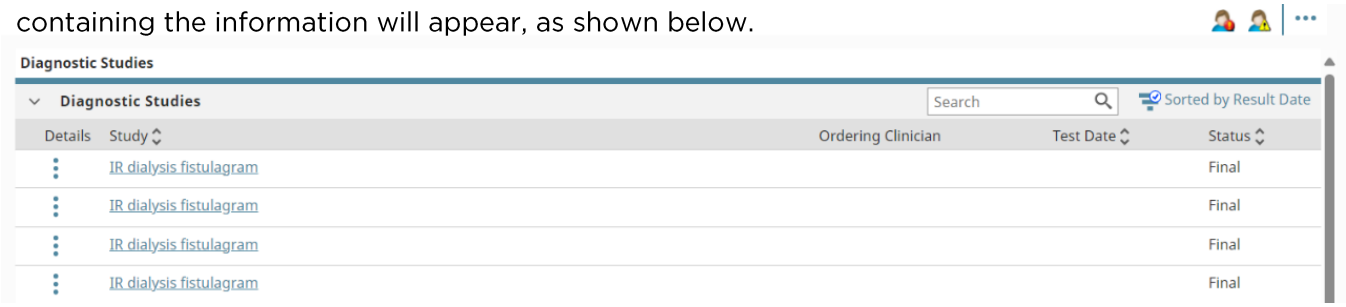
To view individual results for a lab results order item, click the hyperlinked **Test Item** and a new pop-up window will appear, as shown below.

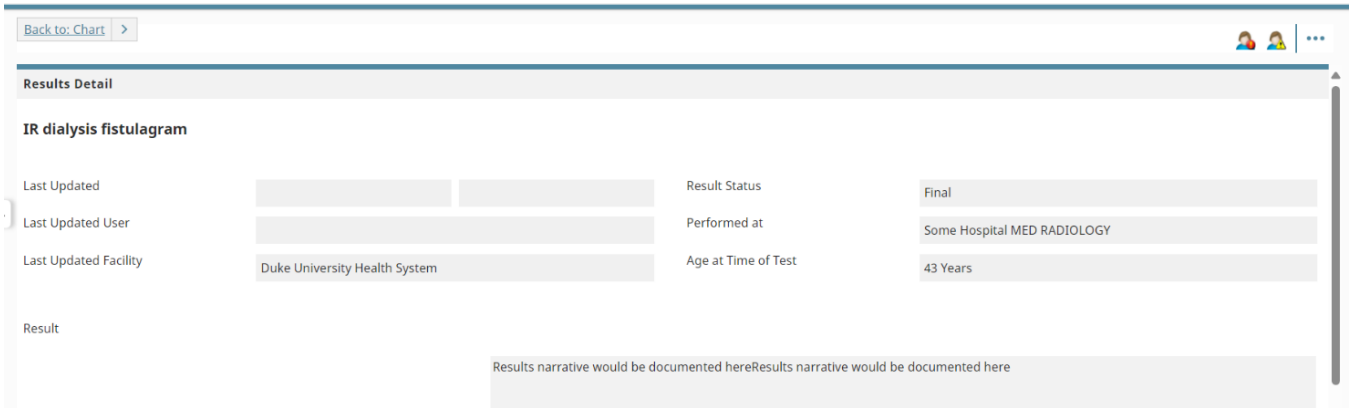
****Note: Each test item is itself a hyperlink that may be clicked to open a pop-up window including additional notes or other information, as shown below.*



Diagnostic Studies

In the **Diagnostic Studies** table, additional details for each entry in the table (e.g., ordering clinician, notes, etc.) may be accessed by clicking on the **blue vertical ellipsis icon** ⋮ in that row within the Details column or the **Results** blue hyperlink in that row within the Results column. A new window containing the information will appear, as shown below.



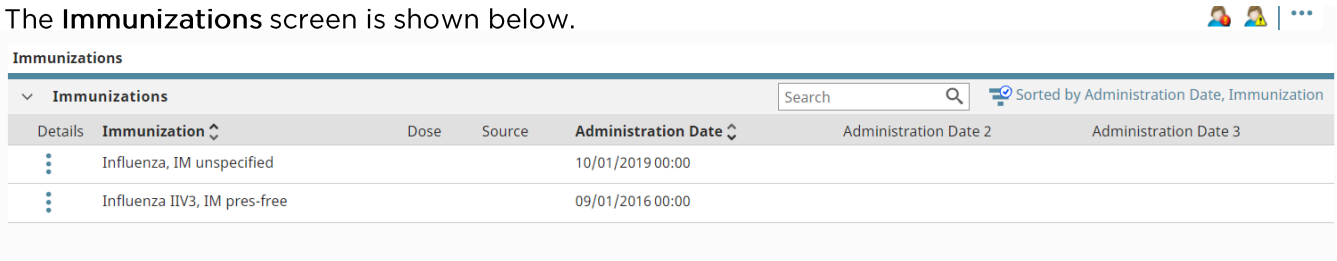


Immunizations

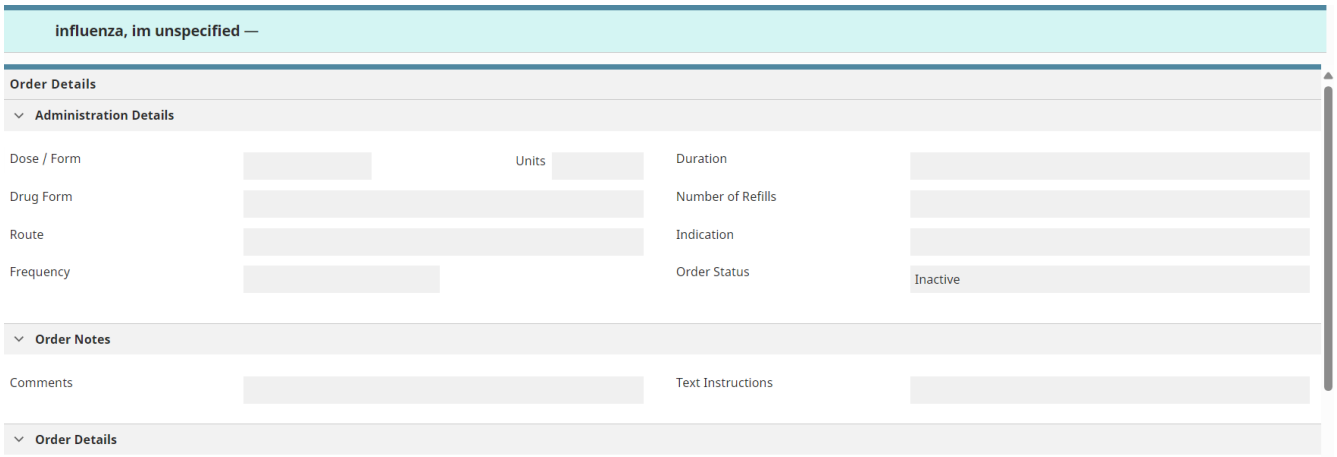
The **Immunizations** screen provides information on a patient's documented vaccinations, including the order name, dose, drug route and start date.

Some of these fields may be blank, as data is not always sent/received from the source system.

The **Immunizations** screen is shown below.



Additional details for each vaccination (e.g., ordering clinician or any comments or instructions) may be accessed by clicking on the **blue vertical ellipsis icon** ⋮ next to an entry. A new window containing the information will appear, as shown below.



****Note:** Though NC HealthConnex shares information with the NC Immunization Registry, all vaccinations currently presented in the Clinical Portal are as received from EHR systems only.*

Documents

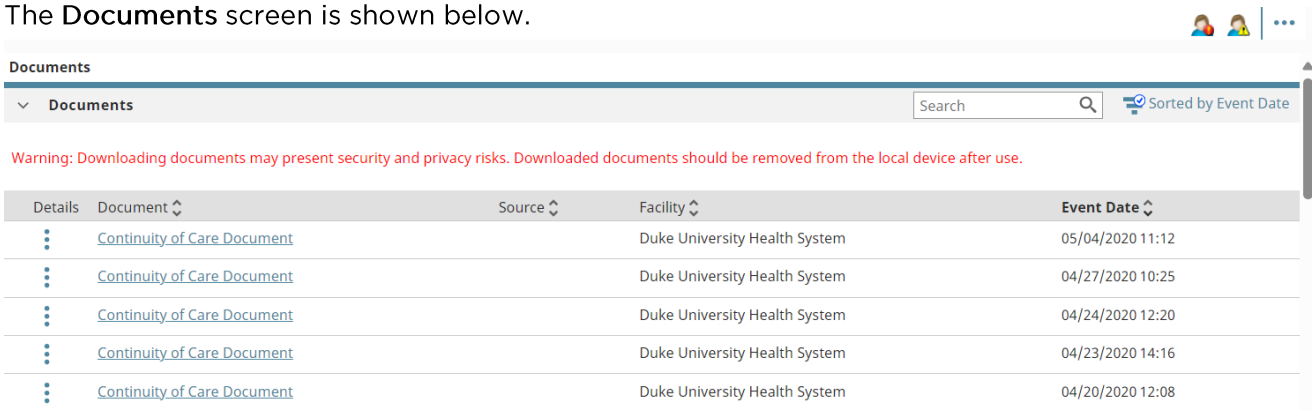
The **Documents** screen allows you to view information on C-CDA (Consolidated Clinical Document Architecture) documents received by NC HealthConnex, including a hyperlink that may be clicked to view document details or the full document itself (depending on the document type), the clinician, the document type, the activity date, and the date/time/facility/sender of the document, where that information was made available to NC HealthConnex.

USCDI (United States Core Data for Interoperability) version 1 **Clinical Notes** are now available in the Clinical Portal within the **Documents** section when they are sent by the source. Some of these fields may be blank, as data is not always sent/received from the source system.

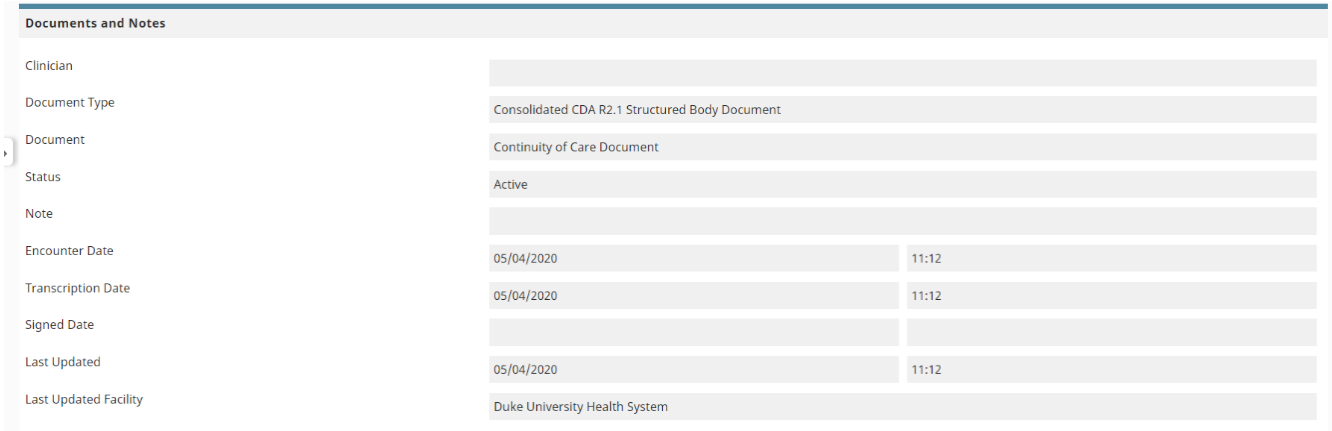
The **USCDI Clinical Notes** section will include:

- Consultation Notes
- Discharge Summary Notes
- History and Physical Notes or Narratives
- Procedure Notes
- Progress Notes
- Laboratory Report Narratives
- Pathology Report Narratives
- Imaging Narratives

The **Documents** screen is shown below.



Additional details for each document (e.g., notes) may be accessed by clicking on the **blue vertical ellipsis icon** ⋮ next to the document name. A new window will appear containing the information, as shown below.



Patient Information from Outside NC HealthConnex

NC HealthConnex is a proud member of the nationwide eHealth Exchange network. Active in all 50 states, the eHealth Exchange is the largest query-based, health information network in the country. It is the principal network that connects federal agencies and non-federal organizations, allowing them to work together to improve patient care and public health.

Through eHealth Exchange, NC HealthConnex automatically queries external systems for available patient records when a patient is searched in the Clinical Portal. Neighboring connections include:

- Atrium Health CareConnect HIE (Charlotte, NC)
- Carolina eHealth Network (South Carolina)
- eTHIN (East Tennessee)
- GaHIN (Georgia's state-designated HIE)
- GracHIE (Georgia Regional Academic Community Health Information Exchange)
- MedVirginia (Richmond, VA)
- OCHIN (Portland, OR)
- Sentara Healthcare
- VADoD (Veterans Health Administration and Department of Defense Joint HIE)

Any results from these and other connected systems through eHealth Exchange will be returned and stored as documents in the **Documents** tab, and identifiable as such by viewing the facility information (displayed within a row in the **Facility** column, or by clicking on the **blue vertical ellipsis icon** ⋮ for more details). When searching a patient, you may see a temporary message appear under the patient demographic row noting that the system is *"awaiting results from"* external systems, as shown below.

NC HealthConnex participates in the Patient Centered Data Home™ (PCDH), which is a secure health data exchange initiative with Civitas Networks for Health. This functionality serves to proactively send an alert when a patient has a health event away from home. Based on triggering episode alerts, the system proactively notifies NC HealthConnex that a care event has occurred outside of the patient's "home" HIE. PCDH alerts consist of a push of information based on a patient's home zip code. NC HealthConnex has loaded all 45 participating HIE's zip codes into our system to capture out-of-state visits.

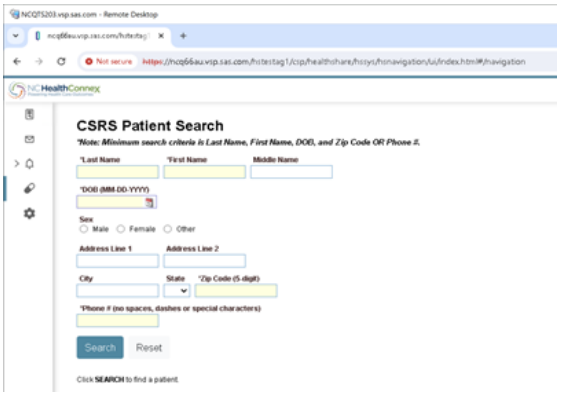
****Note:** If a record for a patient doesn't already exist in NC HealthConnex, a search for that patient through our eHealth Exchange partners will not be successful. A patient must have at least one prior record contributed by an NC HealthConnex participating organization to return and display external information in the patient record.*

CSRS (Controlled Substance Reporting System) Report

The **CSRS** button allows you to access CSRS reports within the clinical viewer. This feature helps providers meet the STOP Act Requirement.

On clicking the **CSRS Report** tab, you will be presented with one of the following screens:

- Access Granted:



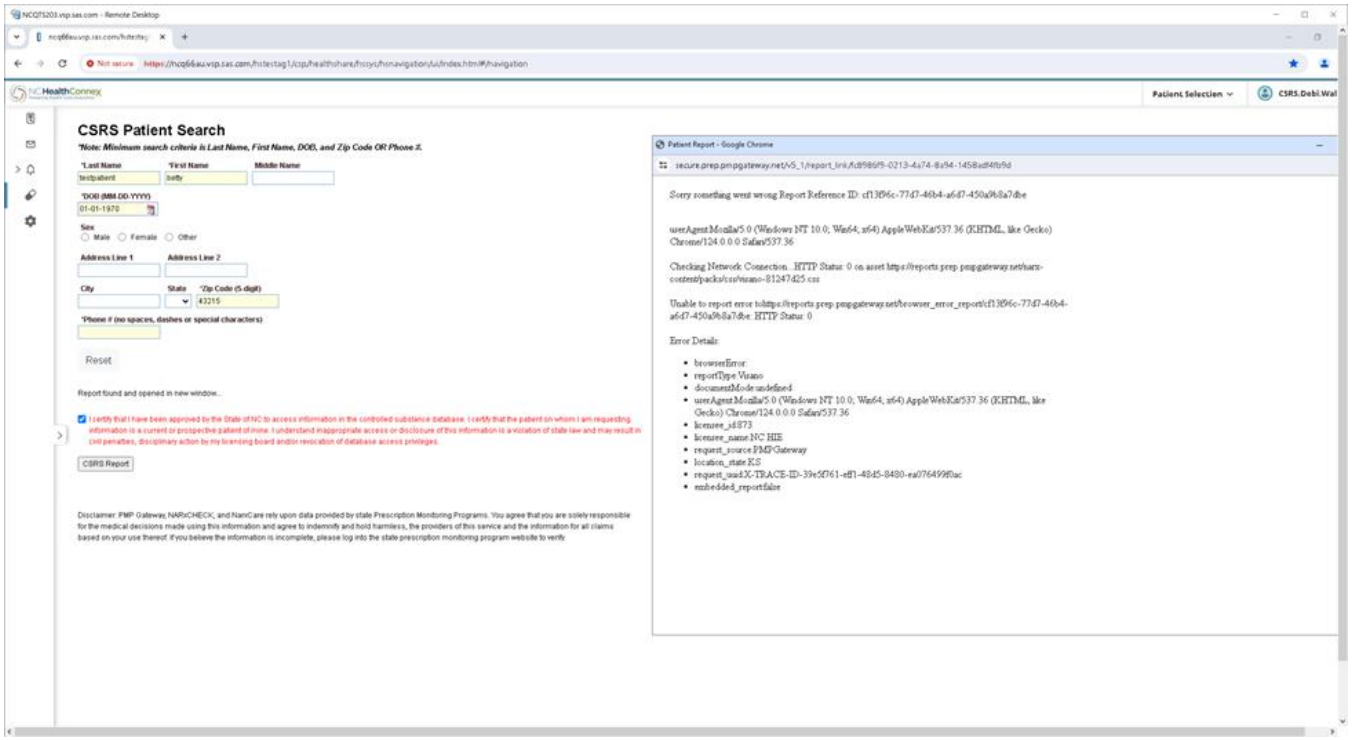
- Access Denied:

To initiate the process of retrieving a **CSRS Report,** you must:

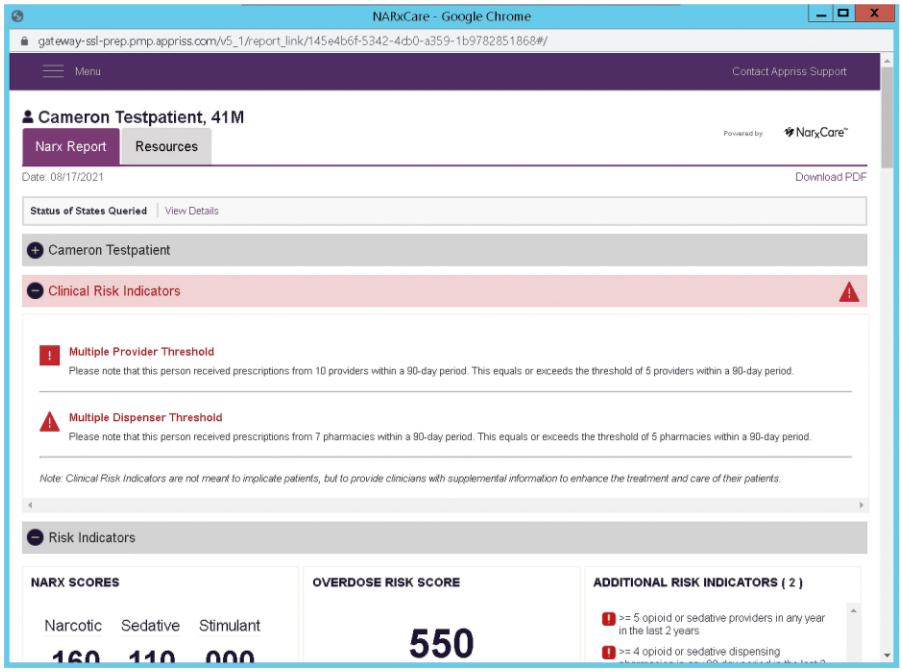
- First confirm that you want to access the CSRS Report. This is done by checking the consent box, which will enable the CSRS Report button.

- You will then need to click the CSRS Report button to fetch the report for this patient.
  - If the CSRS Report search returns an error, it will display within the CSRS Report window. (See Appendix A for a list of errors)
  - If the CSRS Report request prefetch was successful, retrieval of the CSRS Report will be initiated.
  - If report retrieval returned an error in the response, it will display within the CSRS REPORT window. (See Appendix B)
- If report retrieval was successful, a message will display within the CSRS REPORT window stating "*Report found and opened in new window.*" Additionally, the disclaimer information from CSRS will be displayed:

  Disclaimer: PMP Gateway, NARxCHECK, and NarxCare rely upon data provided by state Prescription Monitoring Programs. You agree that you are solely responsible for the medical decisions made using this information and agree to indemnify and hold harmless, the providers of this service and the information for all claims based on your use thereof. If you believe the information is incomplete, please log into the state prescription monitoring program website to verify.



- A new window will launch displaying the CSRS Report:



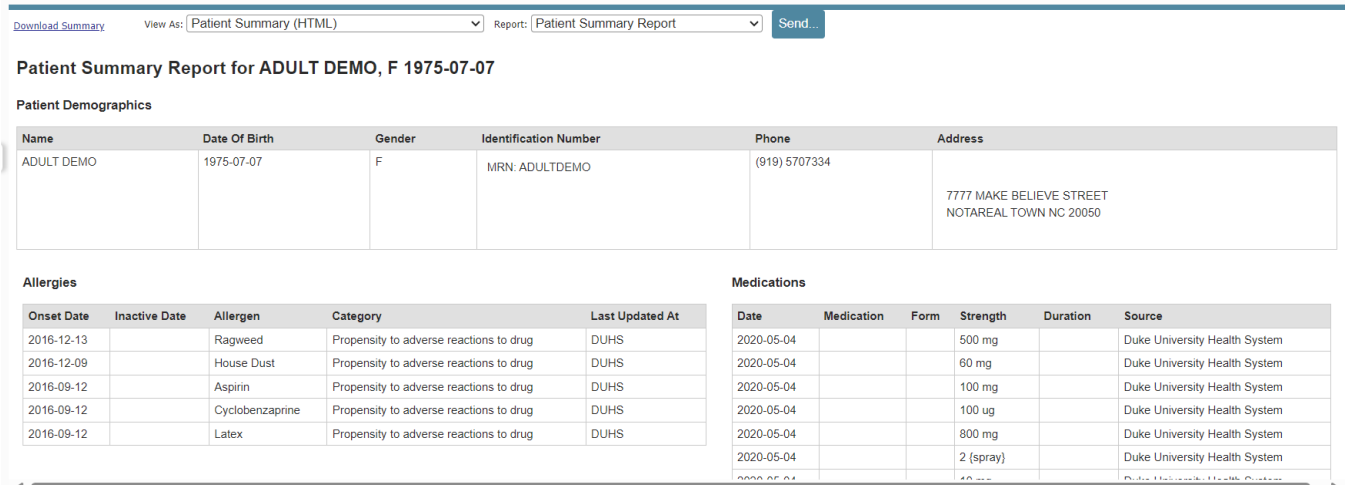
- If there is an error with the Report Link an error message will be displayed in the new window. (See Appendix C)
- To download the PDF report, click, **Download PDF** in the top right-hand corner. The download toolbar with document will display at the bottom of webpage.
- If you close the popup window, you may view the report again using the CSRS Report button. This will create a subsequent Report Request to CSRS.

****Note: Additional enrollment steps are required to access CSRS reports within the clinical viewer. Participant Account Administrators can request access for users at their organization.*

VI. REPORTS

The NC HealthConnex Clinical Portal provides two types of patient summary reports (Regular or Expanded) in three different formats (CCD, HTML, or PDF) for viewing, printing, and sharing. Once a patient record has been opened, these can be accessed from the patient demographic row. You may click the **blue horizontal ellipsis icon** ••• to the far right of the patient demographic row, as shown below:

Once you click the **blue horizontal ellipsis icon**, ••• you will land on the default **Patient Summary Report** screen, as shown below. The data in this report will likely be too large to fit on the screen at one time; the browser scroll bar, page-down ("pg dn") and page-up ("pg up") keys will allow you to navigate the report and view all data.



To navigate back to the view-only patient record, click the **Back to Chart** hyperlink at the top left of the screen, as shown below.

Report Types

There are three types of patient summary reports available for viewing, printing, and sharing. These reports and their contents are as follows:

Download Summary View As: Patient Summary (HTML) Report: Patient Summary Report Send...

Patient Summary Report for ADULT DEMO, F 1975-07-07

Patient Demographics

Name	Date Of Birth	Gender	Identification Number	Phone	Address
ADULT DEMO	1975-07-07	F	MRN: ADULTDEMO	(919) 5707334	7777 MAKE BELIEVE STREET NOTAREAL TOWN NC 20050

Allergies

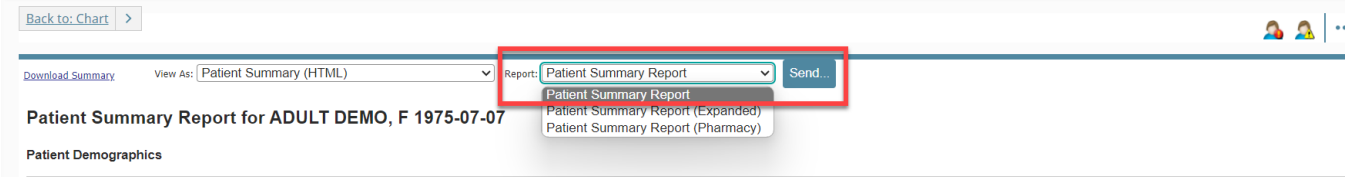
Onset Date	Inactive Date	Allergen	Category	Last Updated At
2016-12-13		Ragweed	Propensity to adverse reactions to drug	DUHS
2016-12-09		House Dust	Propensity to adverse reactions to drug	DUHS
2016-09-12		Aspirin	Propensity to adverse reactions to drug	DUHS
2016-09-12		Cyclobenzaprine	Propensity to adverse reactions to drug	DUHS
2016-09-12		Latex	Propensity to adverse reactions to drug	DUHS

Medications

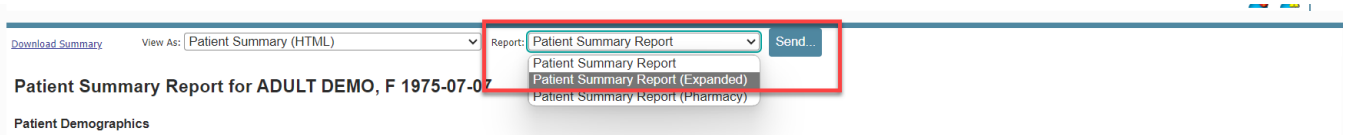
Date	Medication	Form	Strength	Duration	Source
2020-05-04			500 mg		Duke University Health System
2020-05-04			60 mg		Duke University Health System
2020-05-04			100 mg		Duke University Health System
2020-05-04			100 ug		Duke University Health System
2020-05-04			800 mg		Duke University Health System
2020-05-04			2 {spray}		Duke University Health System

You may select the preferred type of report from the **Report** drop-down menu at the top of the screen, as shown below.

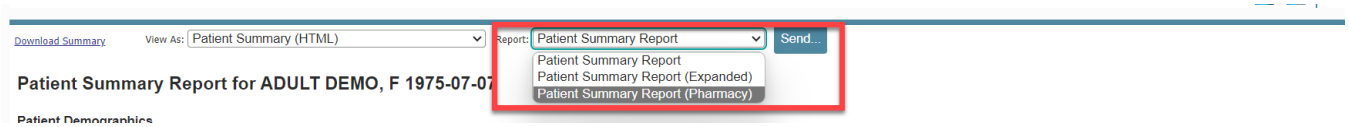
- **Patient Summary Report:** the default report upon clicking **View Summary**, this report shows patient demographics, allergies, medications, encounters, diagnoses, and laboratory results.



- **Patient Summary Report (Expanded):** this report shows more information, including patient demographics, allergies, alerts, advance directives, patient-clinician relationships, program memberships, encounters, appointments, diagnoses, medications, immunizations, laboratory results, radiology results, observations, procedures, physical exams, problems, history, documents, and sections for additional information about people and organizations related to the patient.



- **Patient Summary Report (Pharmacy):** this report shows pharmacy claims dispense data.



Download Summary View As: Patient Summary (HTML) Report: Patient Summary Report (Pharmacy) Send...

Patient Summary Report with Pharmacy Data for ADULT DEMO

Patient Demographics

Name	Date Of Birth	Gender	Identification Number	Phone	Address
ADULT DEMO	1975-07-07	F	MRN: ADULTDEMO	(919) 5707334	7777 MAKE BELIEVE STREET NOTAREAL TOWN NC 20050

Pharmacy Claims

Disp Date	Sending Org Name	Disp Pharm Name	Disp Pharm Phone	Presc Provider Name	Presc Provider Phone	Disp Code Desc	Disp Compound	Disp Strength	Disp Strength UOM	Disp Form Desc	Disp Dose Freq	Disp Refills Auth	Disp Refills #	Disp Qty	Disp Days Sup

(none)

Report Formats

There are three report format options available to you: **Consolidated CDA CCD**, **Patient Summary (HTML)**, and **Patient Summary (PDF)**. You may select the preferred format from the **View As** drop-down menu at the top of the screen, as shown below.

Download Summary View As: Patient Summary (HTML) Report: Patient Summary Report Send...

Consolidated CDA CCD
Consolidated CDA v2.1 CCD
Patient Summary (HTML)
Patient Summary (PDF)

Patient Summary Re 7

Patient Demographics

Name	Date Of Birth	Gender	Identification Number	Phone	Address
ADULT DEMO	1975-07-07	F	MRN: ADULTDEMO	(919) 5707334	7777 MAKE BELIEVE STREET NOTAREAL TOWN NC 20050

Allergies

Onset Date	Inactive Date	Allergen	Category	Last Updated At
2016-12-13		Ragweed	Propensity to adverse reactions to drug	DUHS
2016-12-09		House Dust	Propensity to adverse reactions to drug	DUHS
2016-09-12		Aspirin	Propensity to adverse reactions to drug	DUHS
2016-09-12		Cyclobenzaprine	Propensity to adverse reactions to drug	DUHS
2016-09-12		Latex	Propensity to adverse reactions to drug	DUHS

Medications

Date	Medication	Form	Strength	Duration	Source
2020-05-04			500 mg		Duke University Health System
2020-05-04			60 mg		Duke University Health System
2020-05-04			100 mg		Duke University Health System
2020-05-04			100 ug		Duke University Health System
2020-05-04			800 mg		Duke University Health System
2020-05-04			2 {spray}		Duke University Health System

Sharing a Report

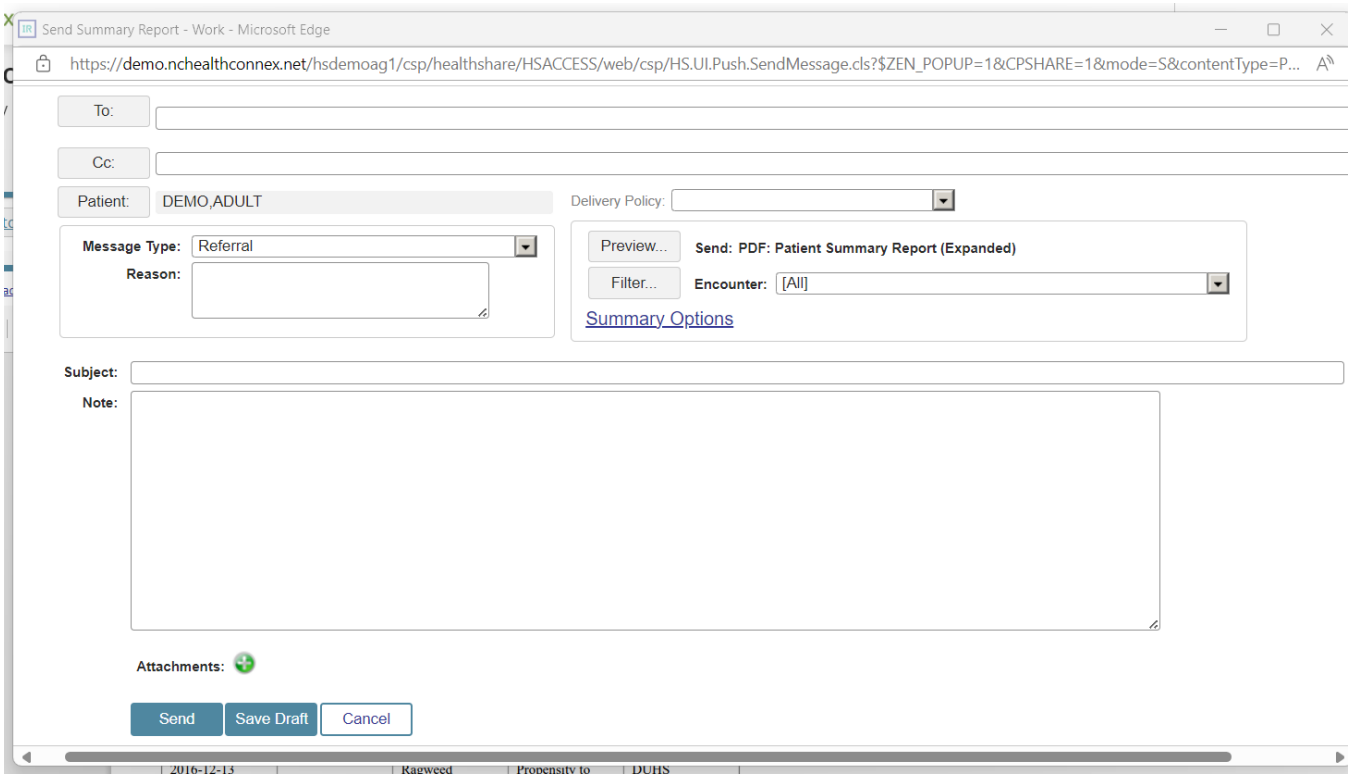
A key feature of the NC HealthConnex Clinical Portal is the ability for users to proactively share patient information with other members of a patient's care team. Please note that this feature is only available to those users who have a Direct Secure Messaging (DSM) address issued by NC HealthConnex and associated with their Clinical Portal account. To share a patient report with another health care provider with a Direct Secure Messaging mailbox, complete the following steps:

- Select the desired report type and format, per the instructions in the Report Types and Report Formats sections of this user guide, above. Then, click the **Send** button at the top of the screen, as shown below.

Download Summary View As: Patient Summary (PDF) Report: Patient Summary Report (Expanded) Send...

Draw 1 of 115

- A new message pop-up window will appear. Fill in all applicable fields, and filter the report as desired, per the Messaging section of this user guide. Then click **Send** at the bottom left, as shown below.

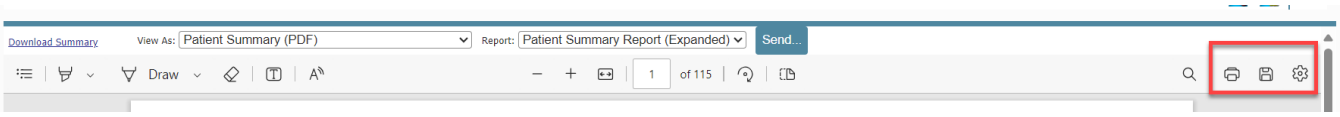


Downloading or Printing a Report

The patient summary reports described in the previous few pages are available for you to download or print for use during a patient encounter or as an addition to a local patient record.

To download or print a patient report, **Patient Summary (PDF)** is the recommended format option. Once the report type (Regular or Expanded) is selected per the Report Types section of this user guide, if the browser presents a preview window, use the "print" and "download" icons at the top right of the screen to take each action, as shown below.

****Note: Some browsers may be configured to automatically download the Patient Summary PDF file. In this case, you will need to locate the file and print from the downloaded PDF file.*



Protecting Patient Health Information

Care must be taken to keep Protected Health Information (PHI) safe. Information downloaded to local systems or printed for office use may be accessed by unauthorized persons if care is not taken. This may happen if:

- The system is left in an insecure state; for example, you leave your computer unattended while logged into the Clinical Portal with a patient record or report open.
- A patient summary report is downloaded to a local system or printed for office use, and is not properly encrypted, stored or filed to prevent unauthorized access by others.

To ensure PHI is not accessed by an unauthorized user:

- Always log out of the Clinical Portal at the end of your session. To do so, select the Logout button in the menu bar at the top of the screen. This action closes all open windows, message drafts and attachments automatically.
- Always check that all windows and tabs are closed before stepping away from your computer, as attachments or drafts may be open in separate windows in your browser.
- Follow all security guidelines recommended by your system administrator.

Please download and print patient reports with caution and remember it is your responsibility to safeguard patient data per the Health Insurance Portability and Accountability Act (HIPAA) and your participation agreement with the NC Health Information Exchange Authority (NC HIEA).

VII. CONTROLLED SUBSTANCE REPORTING SYSTEM (CSRS) REPORT

The CSRS menu button allows you to access CSRS reports within the clinical viewer. You will be able to access reports for patients that do not have a clinical record in NC HealthConnex as well as those that have opted out. The menu button can be used without being in a patient record. This feature helps providers meet the STOP Act Requirement.

Accessing Patients Without a Clinical Record

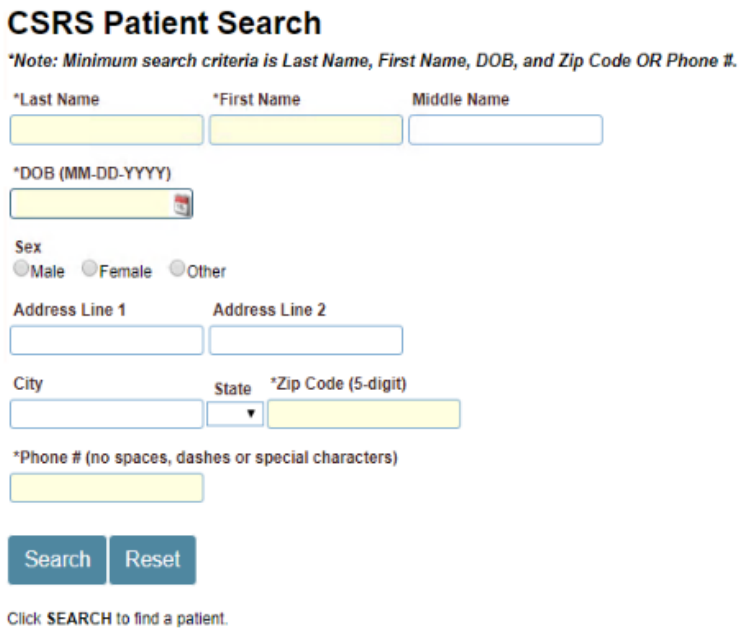
****Note: Patients who have opted out of NC HealthConnex cannot opt out of CSRS pursuant to state law and can be searched through this method.*

There may be instances in which you are searching for a patient that may not have clinical records stored in NC HealthConnex. In this situation, you may still access the CSRS report for that patient.

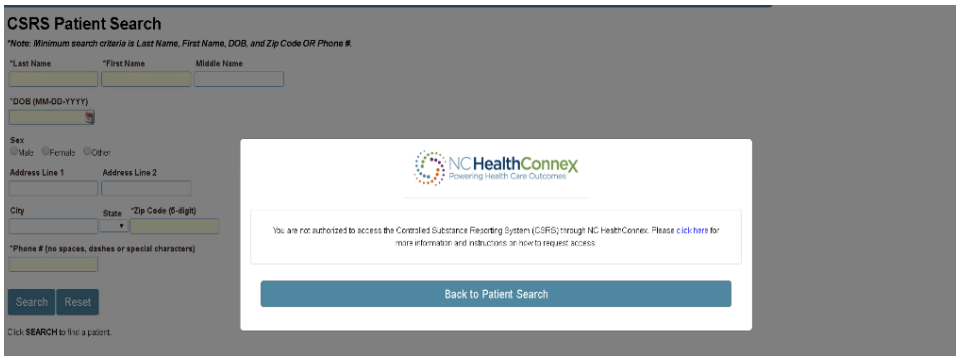
If you have a CSRS role, select the CSRS Report tab in the left menu.

You will be presented with one of the following screens:

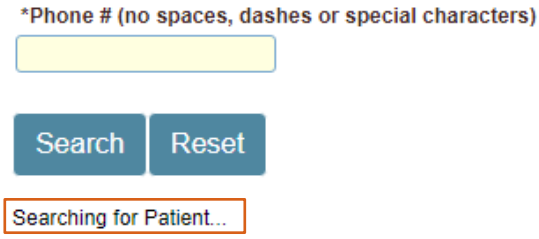
- Access Granted:



- Access Denied:



- You will fill out the form, entering at least the following (minimum required fields):
- Last Name
- First Name
- Date of Birth
- Zip Code or Phone #
- Click on the Search button.
  - If minimum required fields are not populated, you will receive an error message. (See Appendix D).
- The CSRS screen will display a message *"Searching for patient…"*



- Once the patient search has completed, the response will be returned to the CSRS screen.
- If an error is returned, the Error Message will be displayed. (See Appendix A)
- Once a patient has been found, you can initiate the process of retrieving the CSRS report:
  - First confirm that you want to access the report from the CSRS. This is done by checking the consent box, which will enable the CSRS Report button.
  - Then, click the CSRS Report button.

CSRS Patient Search

**Note: Minimum search criteria is Last Name, First Name, DOB, and Zip Code OR Phone #.*

*Last Name: demo
*First Name: jane
Middle Name:
*DOB (MM-DD-YYYY): 05-11-2020
Sex: Male Female Other
Address Line 1:
Address Line 2:
City:
State:
*Zip Code (5-digit): 12345
*Phone # (no spaces, dashes or special characters):

Reset

Patient Found...
No prescription data is available from your state PMP for this patient.

☑ I certify that I have been approved by the State of NC to access information in the controlled substance database. I certify that the patient on whom I am requesting information is a current or prospective patient of mine. I understand inappropriate access or disclosure of this information is a violation of state law and may result in civil penalties, disciplinary action by my licensing board and/or revocation of database access privileges.

CSRS Report

- The CSRS screen will display *"Fetching Report…"*
  - If report retrieval returned an error in the response, it will display within the CSRS screen. (See Appendix B.)
- If report retrieval was successful, A message will display within the CSRS Report window stating: *"Report found and opened in new window."*
- Additionally, the disclaimer information from the CSRS will be displayed:

*Last Name: demo
*First Name: jane
Middle Name:
*DOB (MM-DD-YYYY): 05-11-2020
Sex: Male Female Other
Address Line 1:
Address Line 2:
City:
State:
*Zip Code (5-digit): 12345
*Phone # (no spaces, dashes or special characters):

Reset

Patient Found...
No prescription data is available from your state PMP for this patient.

☐ I certify that I have been approved by the State to access information in the controlled substance abuse database. I
information is a current or prospective patient of mine. I understand inappropriate access or disclosure of this inform
penalties, disciplinary action by my licensing board and/or revocation of database access privileges.

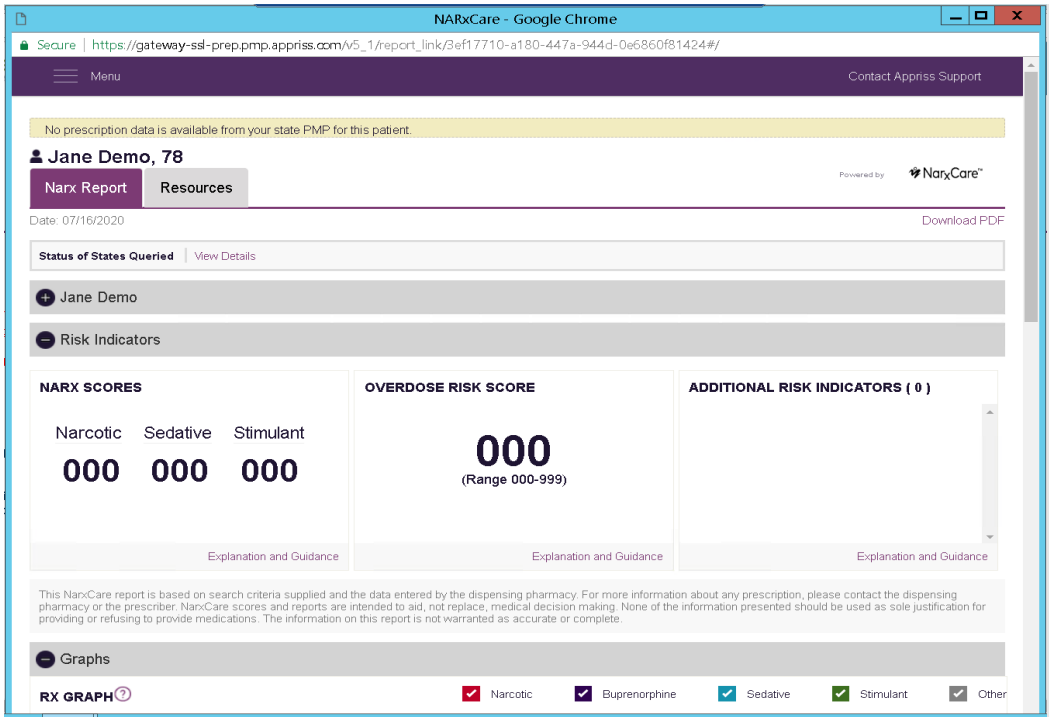
CSRS Report

Disclaimer: PMP Gateway, NARxCHECK, and NarxCare rely upon data provided by state Prescription Monitoring Programs. You agree that you are solely responsible for the medical decisions made using this information and agree to indemnify and hold harmless, the providers of this service and the information for all claims based on your use thereof. If you believe the information is incomplete, please log into the state prescription monitoring program website to verify.

Disclaimer: PMP Gateway, NARxCHECK, and NarxCare rely upon data provided by state Prescription Monitoring Programs. You agree that you are solely responsible for the medical decisions made using this information and agree to indemnify and hold harmless, the providers of this service and the information for all claims based on your use thereof. If you believe the information is incomplete, please log into the state prescription monitoring program website to verify.

****__Note:__ Pop-up blocker must be disabled.*

- A new window will launch displaying the CSRS Report:



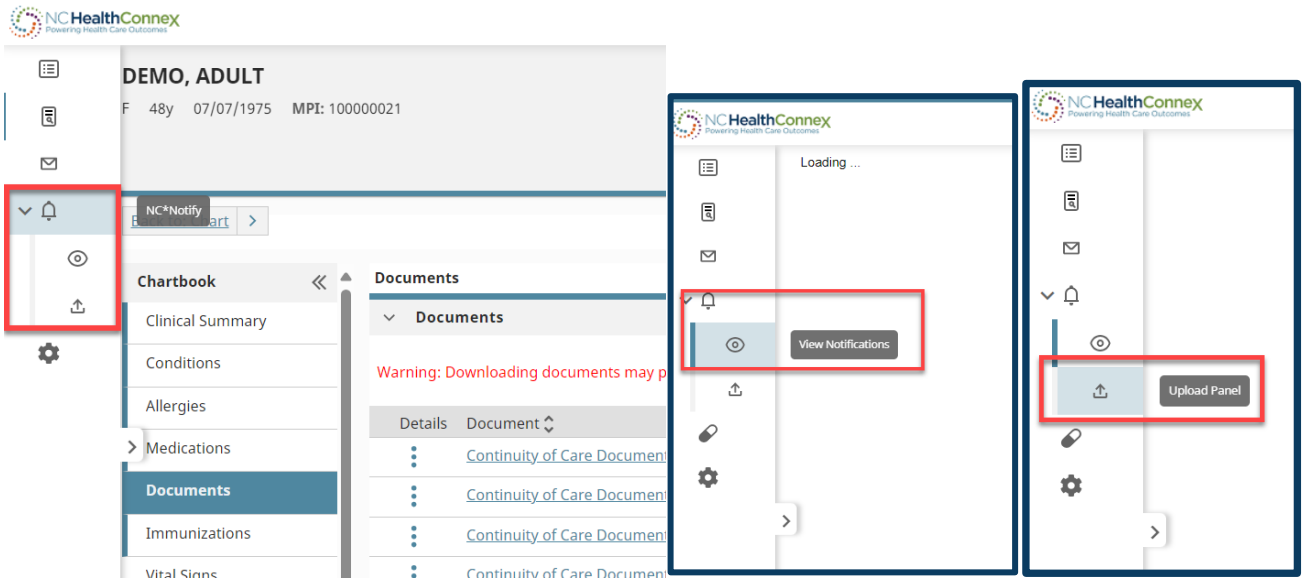
  - If there is an error with the Report Link an error message will be displayed in the new window. (See Appendix C)
  - To download the PDF report, click, **Download PDF** in the top right-hand corner. The download toolbar with document will display at the bottom of webpage.
- If you close the popup window, you may view the report again using the CSRS Document button. This will create a subsequent Report Request to CSRS.

****Note: Additional enrollment steps are required to access CSRS reports within the clinical viewer. Participant Account Administrators can request access for users at their organization.*

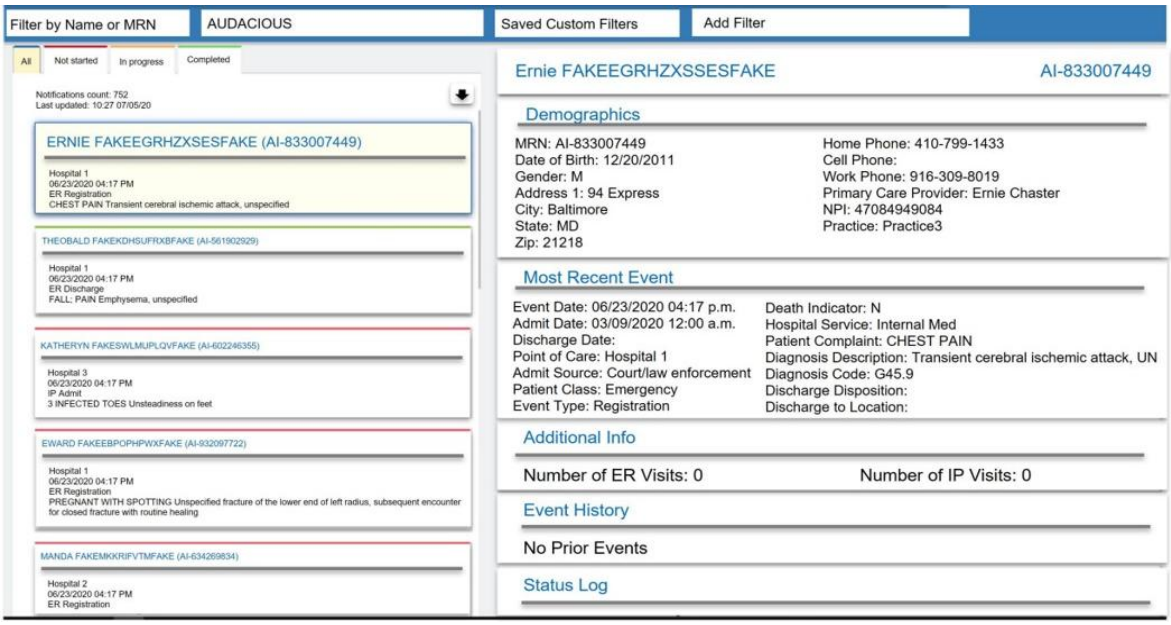
VIII. NC*NOTIFY

Within the NC HealthConnex portal, you will have access to the NC*Notify event notification and care coordination tool if you have subscribed to this service. This tool will provide participants with a dashboard-like view of patient activity through notifications.

If you have a NC*Notify role, select the NC*Notify tab in the top left menu. You are presented with the following options, **View Notifications** or **Upload Panel**.

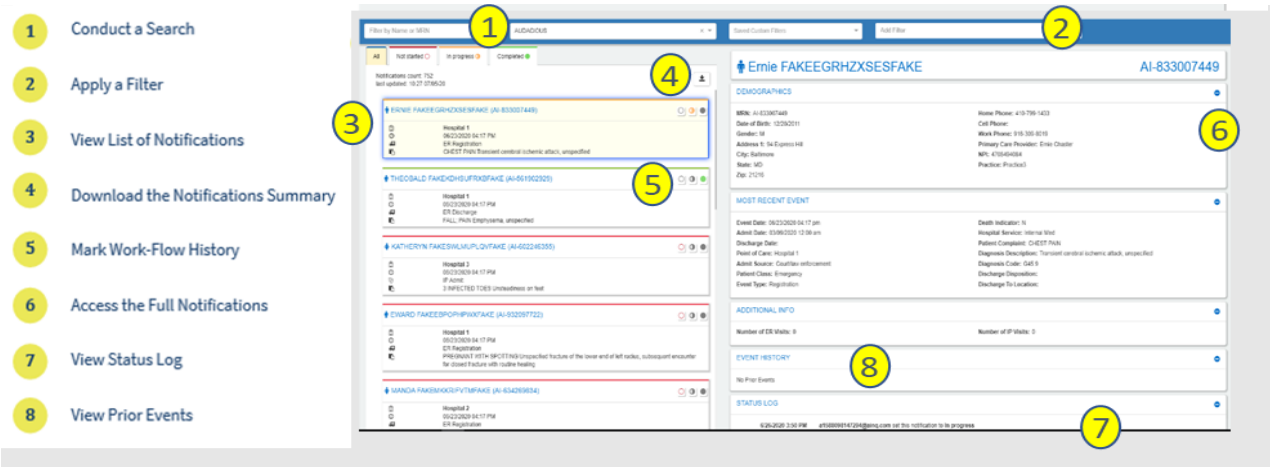


If you have been granted access to view NC*Notify notifications via the clinical portal, the screen below will appear:



If you are not a NC*Notify subscriber, the screen below will appear with directions on how to enroll and an overview of the NC*Notify service.

If you have been granted access to NC*Notify notifications via the clinical portal, the screen below will appear. The screenshot shown provides a brief overview of each section.



Learn More About Each Feature

1 Conduct a Search

You can use the search box to filter results by patient name or MRN (Patient ID). The Patient ID or MRN is pulled from the patient panel submitted by the participant. If you prefer to search for the MRN of the source facility (i.e., where the event took place), you can use the **Add Filters** drop-down and apply a filter for Source MRN.

2 Apply a Filter

There are a variety of filter options that can be used to improve the view of notifications. First, if you have access to more than one participant's notification panels (i.e., if you have submitted more than one patient panel), you can click the **Participant** drop-down to see notifications from a single panel or all panels combined. Additionally, you can filter by specific data elements in the notification using the Add Filters drop-down (e.g., number of ER Visits, Diagnosis, Chief Complaint, PCP, Event Type).

This feature allows you to apply specific search criteria to the notifications view. For example, you could search for frequent ED utilizers with filters for Patient Class = Emergency (E), Event Type = Discharge (A03), and Number of ER visits > 3.

3 View List of Notifications

The notifications preview provides a quick summary of the following items:

- Gender
- Name
- MRN/Unique identifier assigned by you (the Participant)
- The date and time of the encounter/event
- The notification event type
- Patient complaint followed by the diagnosis (if provided)

4 Download the Notifications Summary

One of the buttons in the upper right corner of the notifications preview section is the download button. This allows you to download all notifications or a list of notifications that have been selectively filtered (up to a maximum of 500 notifications). The downloaded notifications are saved as a comma-separated file (.csv), which will open in Microsoft Excel. This feature allows you to download notifications at any time based on his/her selected criteria and share data with outside users or care teams, add additional data to the spreadsheet, and more.

5 View Workflow Status

The NC*Notify dashboard within the clinical portal has three basic workflow statuses (Not Started, In Progress, and Completed) to allow you to track actions taken during care coordination. Each status corresponds to the respective tab in the notifications preview screen and will also be recorded in the Status Log section of the full notification view.

6 Access the Full Notification

When a notification is selected from the list, a more detailed view will display on the right with information from both the ADT message and the patient panel submitted by the Participant. This includes key demographic and event information including, but not limited to:

- Name
- Patient ID or MRN
- Date of Birth

- Address
- Number of IP and ER Visits (last 6 months)
- Number of IP and ER Visits (last 6 months)
- Recorded Event Date and Time
- Patient Class (e.g., ER, IP, OP)
- Event Type (e.g., Admit, Discharge)
- Event Location
- Patient Diagnosis
- Discharge Disposition
- Discharge Location
- Patient Complaint
- Admit Source

7 View Status Log

A Status Log section is displayed below the **Most Recent Event** and/or **Additional Information** sections of the detailed notification view. This section provides a history of actions you have taken when changing the status. Each entry will record the username, date and time, and which work-flow status was set for the notification.

8 View Prior Events

At the bottom of the detailed notification view, the event notification service also displays a list of historical events for the patient. The **Event History** begins when you go live on NC*Notify (when the first patient panel/roster was submitted). Each prior event is populated by information from the Admission Discharge Transfer (ADT) messages that are received.

Logging Out

To log out of NC*Notify and the Clinical Portal, click the logout menu item at the top right of the screen. You will see this menu under your username. Once logged out, close the browser tab.

****Note: NC*Notify sits inside of the NC HealthConnex Clinical Portal which automatically times users out after 15 minutes of inactivity. This can cause NC*Notify users to time out unexpectedly if they are not actively engaged with a Clinical Portal window.*

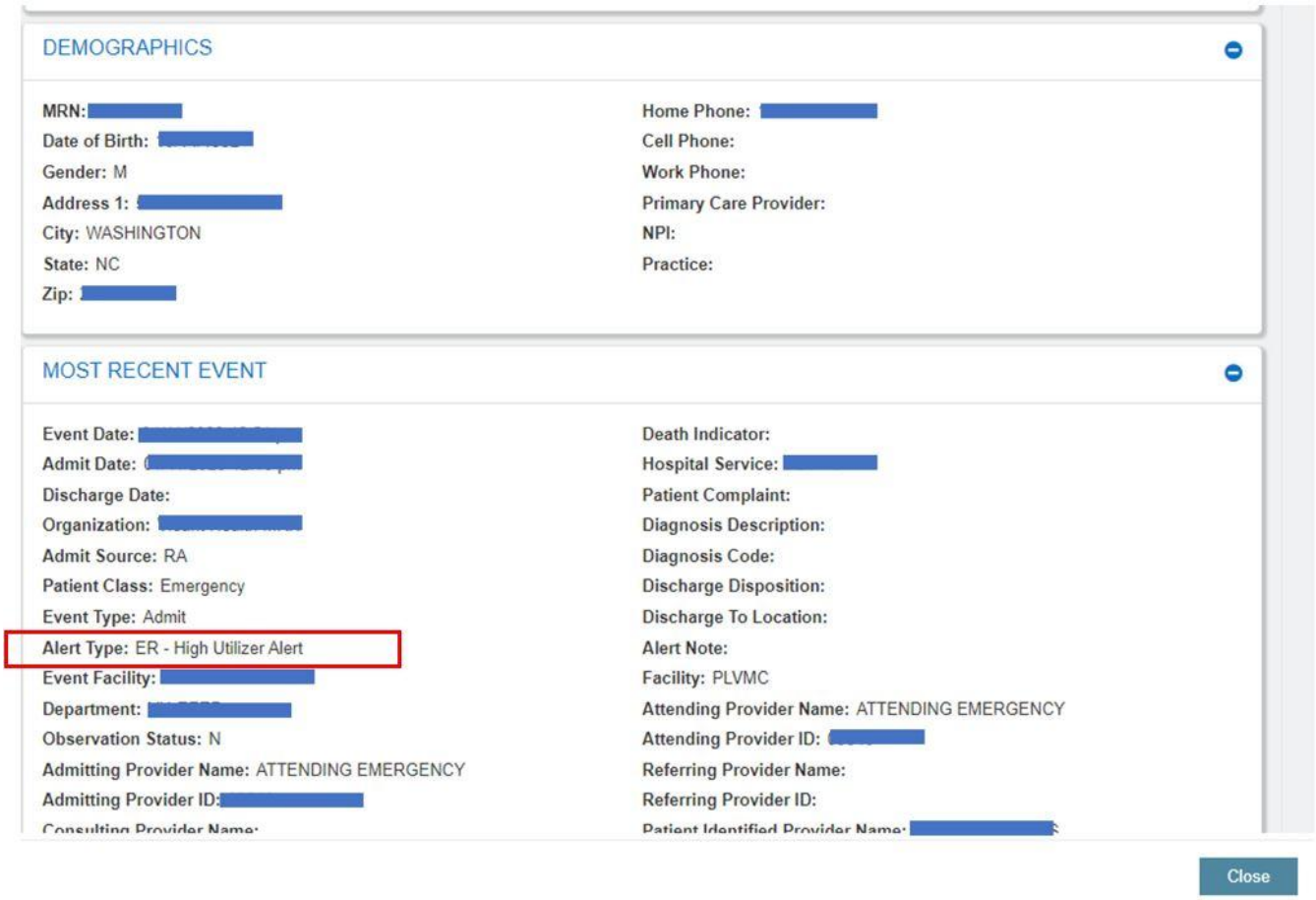
****Note: Additional enrollment steps are required to access the NC*Notify notification and care coordination tool within the clinical viewer. Participant Account Administrators can request access for users at their organization.*

NC*Notify Enhanced Alerts

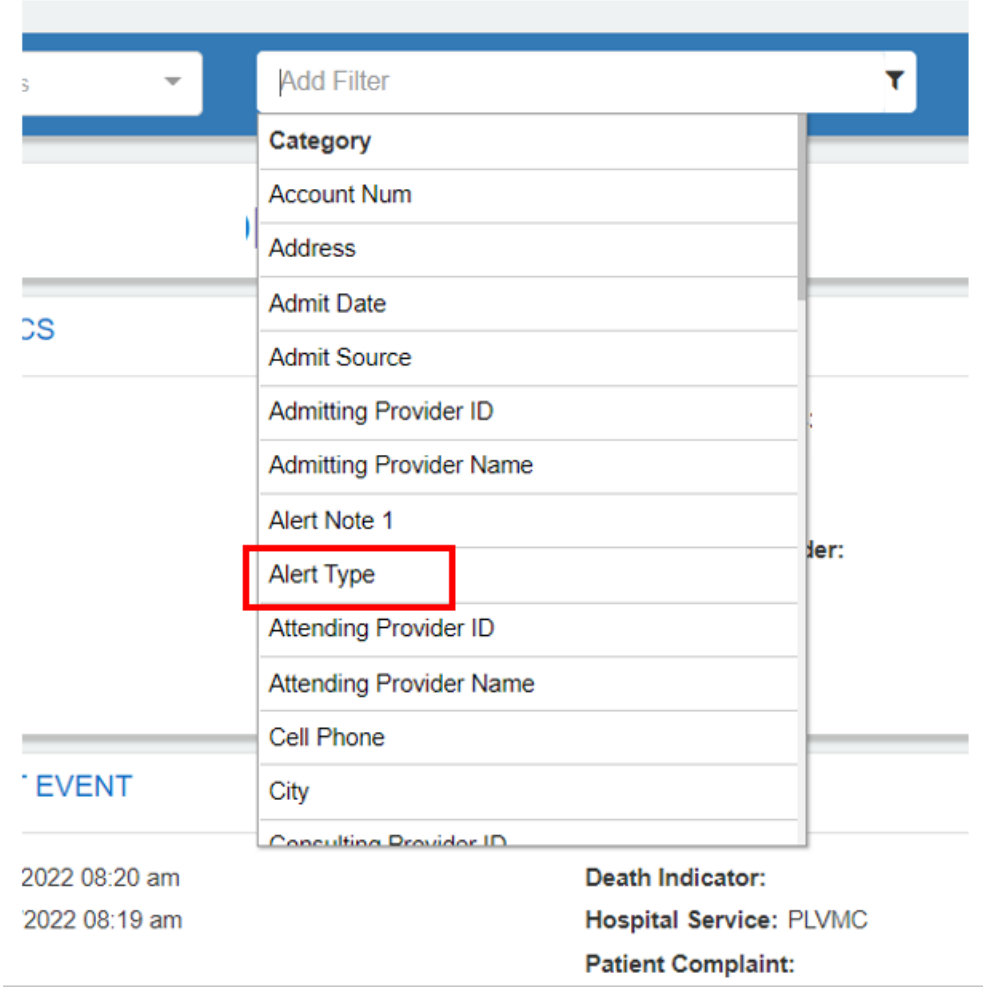
NC HealthConnex also offers enhanced alerts that go over and above the standard ADT notifications. Along with new COVID-19 alerts, the following alerts will go out to NC*Notify subscribers when triggered by patient activity:

- **High utilizer alert** – This notification helps you identify frequent visitors to emergency departments (two or more visits in 90 days or less) or patients at high risk for readmission (four or more admissions in 12 months).
- **Dental alerts** – You are alerted when patients visit the emergency department for dental care.
- **Care team change alert** – Triggered when a new organization has subscribed to your patient.
- **Diabetes diagnosis alert** – You are alerted upon a new diabetes and/or pre-diabetes diagnosis for patients you are monitoring.
- **Chronic care management alert** – You receive an alert when a patient meets the Centers for Medicare and Medicaid Services' chronic care management services criteria.

The screenshot below highlighting the High Utilizer alert, is an illustration of how these alerts will appear on the NC*Notify dashboard.



For new NC*Notify enrollees, these new alerts can be requested during enrollment. For current users of the service, you can simply reach out to the HIEA team and request access to the new alerts. As mentioned above, the filtering option helps you find the notifications that are most meaningful to you. The screenshot below is an example of how this feature is currently being used:



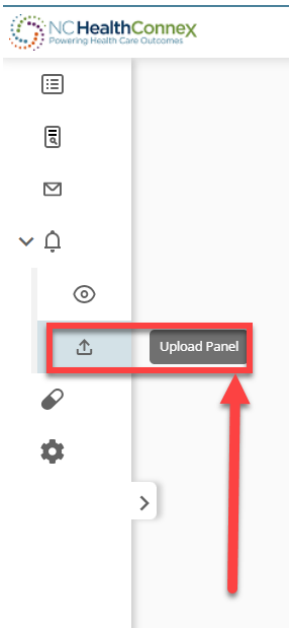
Uploading a Patient Panel in NC HealthConnex Clinical Portal

What is the Self-Service Panel Loader?

The Self-Service Panel Loader (SSPL) is a panel management tool available if you are a user who is assigned the %HS_NCNotify_SSPL role. SSPL provides an easy, fast, and convenient method for submitting panels for practices. You will also receive an immediate response when panels are loaded successfully or incorrectly.

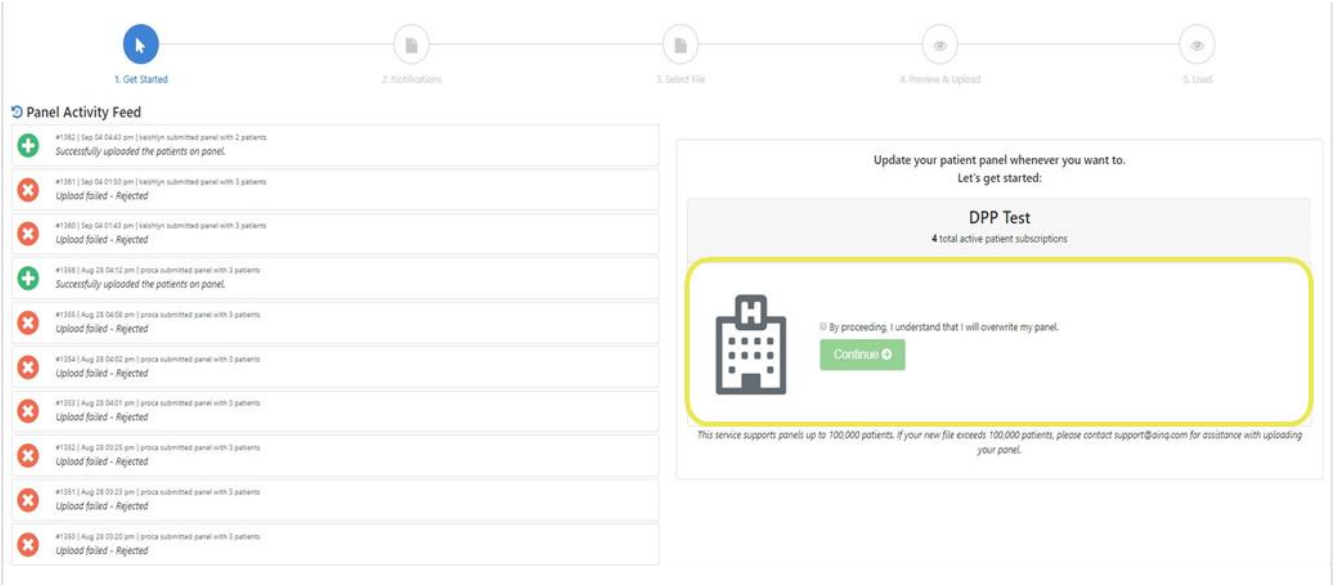
How to Upload a Panel

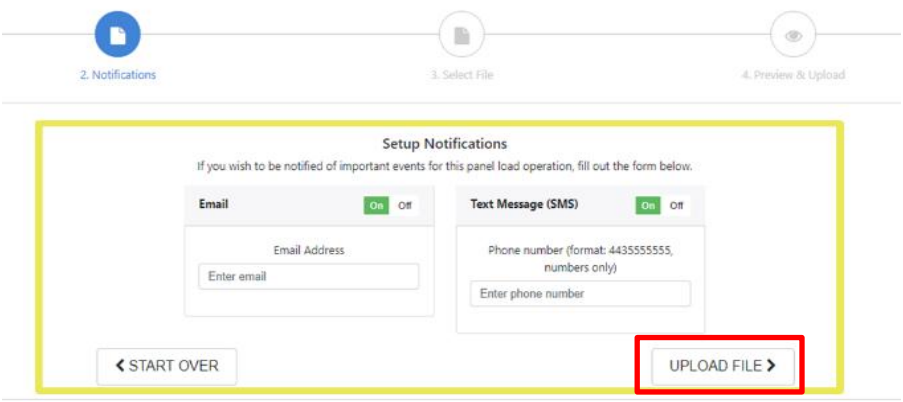
Step 1 – Upload Panel



Hover over NC*Notify on the menu bar and click Upload Panel.

On the default screen, you will notice your panel activity feed. The left-hand side of the screen will show you the status of your panel, whether it was successfully loaded or not. To proceed with uploading your panel, click the check box next to *"By proceeding, I understand that I will overwrite my panel,"* and click **Continue.**





Step 2 – Push Notifications

Once panel loading is completed, turn on the email or text notification to be notified. Enter the email or phone number that will be used, then click on **Upload File** to attach panel.

Step 3 – Patient Panel Template

If you need the most updated **Patient Panel Template**, click the **Download Template File** link to download a panel template.

To prevent panels from failing when being loaded, ensure that all required fields are populated:

- MRN
- First Name
- Last Name
  - Note: _ or $ are useable, but ASCII characters or blank patient id are not valid
- Address 1
- City
- State
- Zip
- Birth Date (MM/DD/YYYY)
- Gender

Ensure that all the information is in the right format. Click **View Formatting Information** link for each field.

More details on the file naming structure will be provided by our technical team during onboarding.

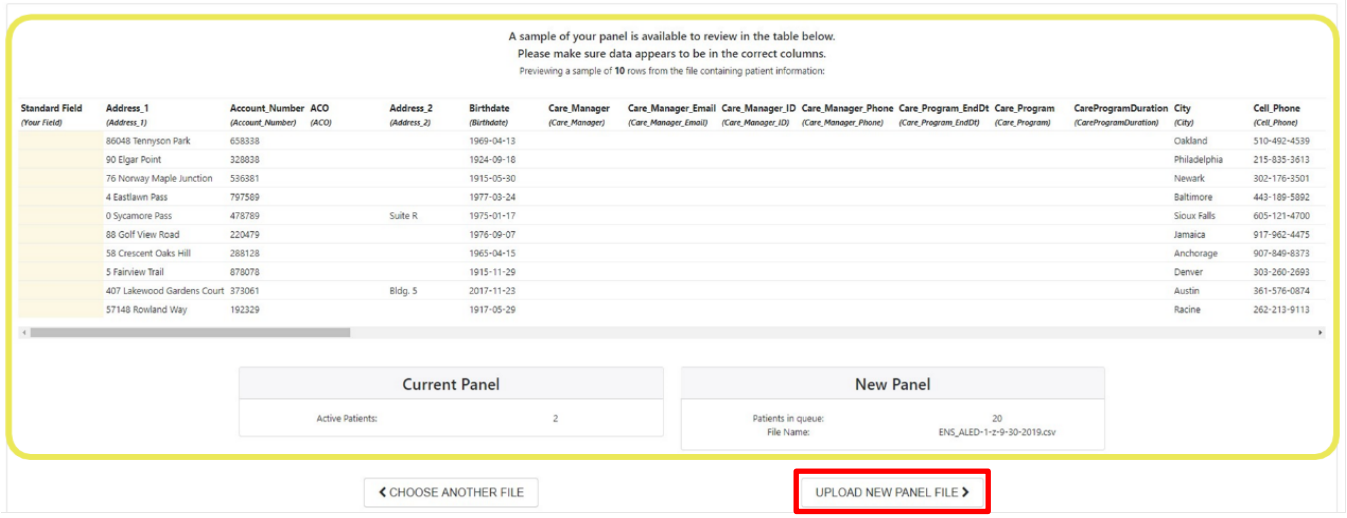
Example: ENS_TEST-1-z-09-23-2019

The file must be saved as a .CSV prior to uploading.

Step 4

After attaching the file, the system will give you a preview of the rows to be loaded. Review the fields to ensure the headings match the data. It will also show the number of new patients that will replace your current patient panel and the correct naming convention.

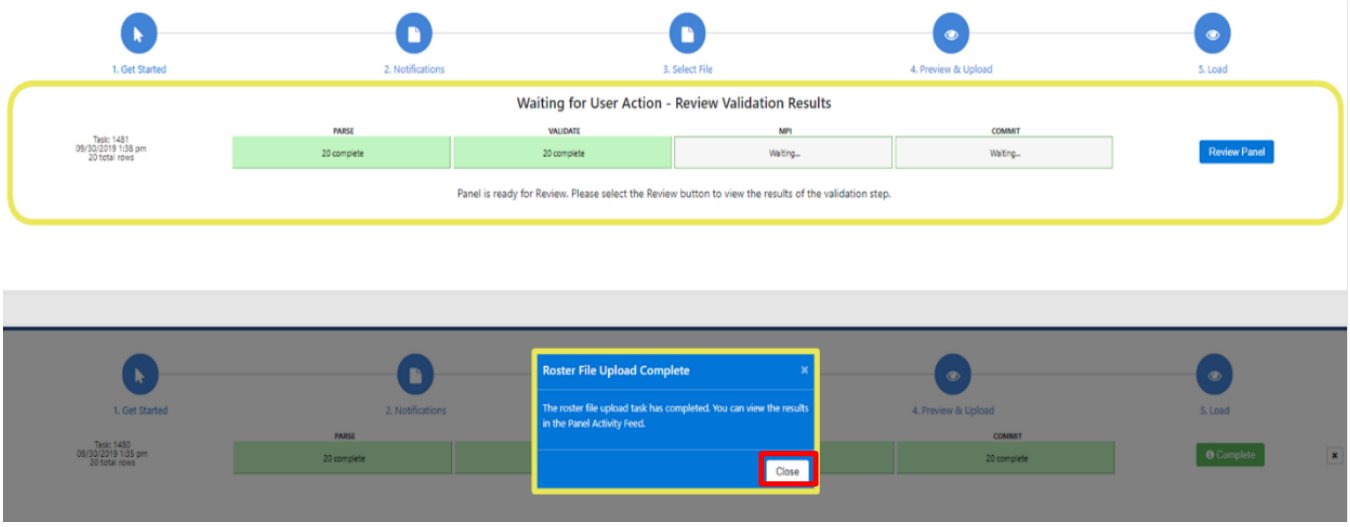
Click on **Upload New Panel File**.



Step 5

A status bar will appear showing the progress of the upload. Once the panel is loaded successfully, the **Roster File Upload Complete** notification will appear.

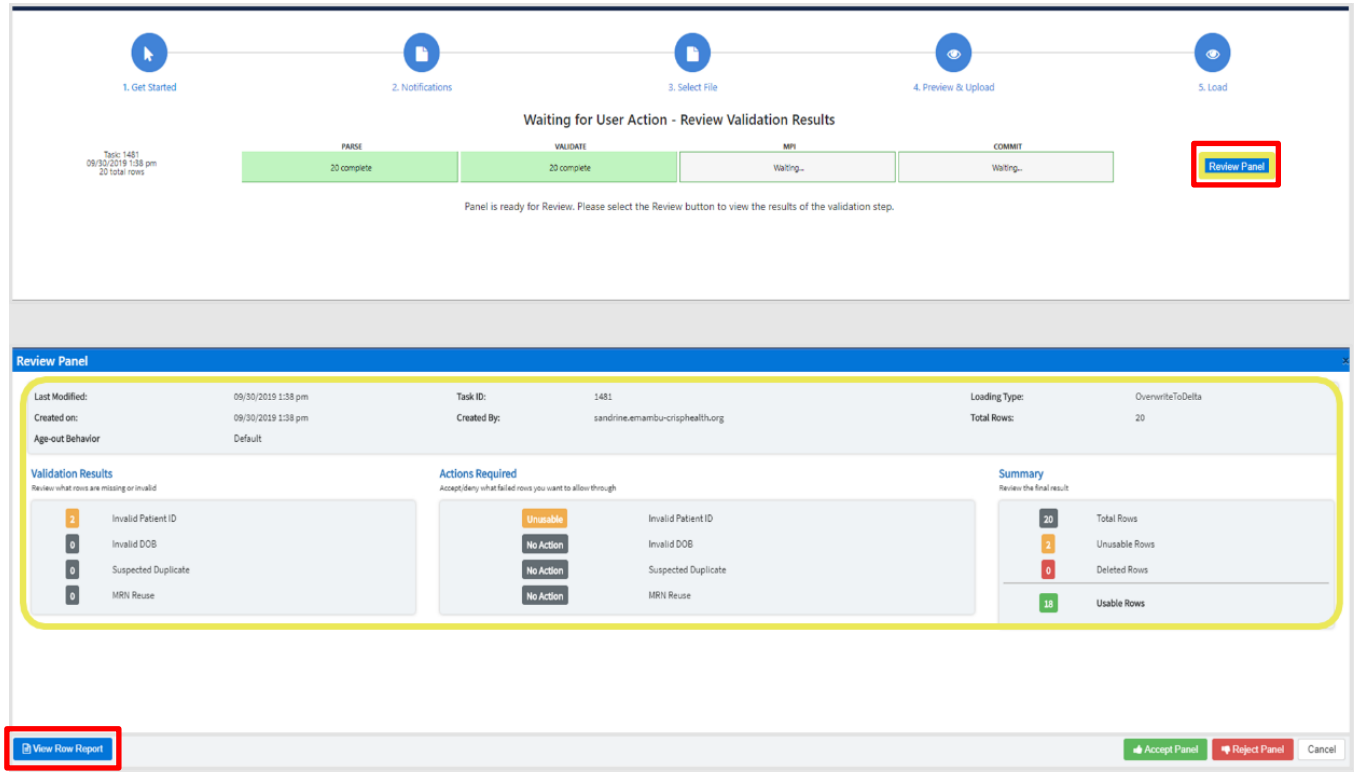
Click the **Close** button to proceed.



Panel Size	Average Upload Time
80–120 patients	8 minutes
900–1,100 patients	18 minutes
7,000–14,000 patients	25 minutes
95,000–105,000 patients	1 hour 27 minutes

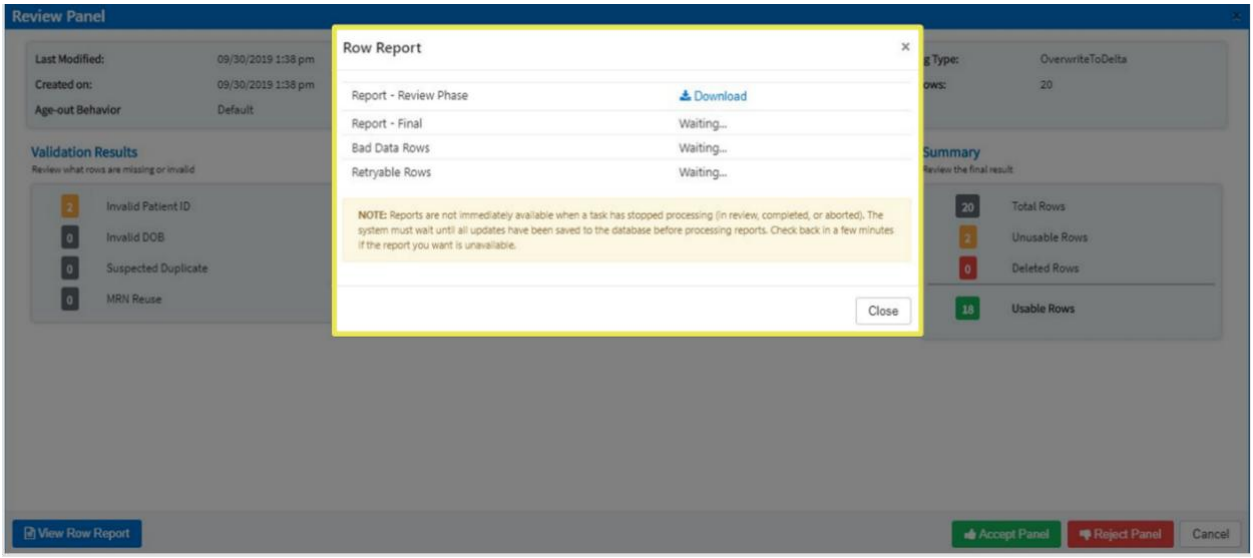
Step 6 – Review Panel

Some panels may require additional review prior to upload completion. To review, click the **Review Panel** button. The review button will show the number of rows that must be reviewed.



Step 7

Click the **View Row Report** button then select the download link to view specifics rows within the panel that requires additional review.

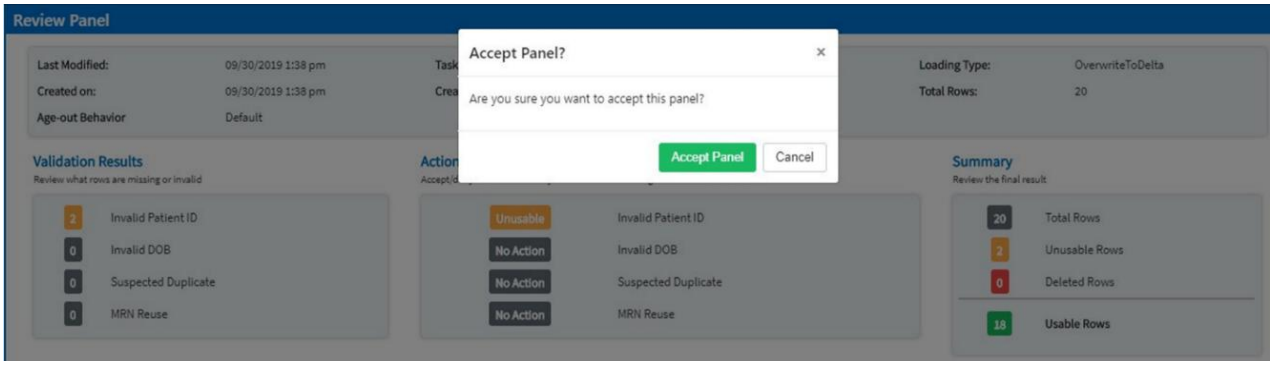


Step 8

After reviewing the report, select the thumbs up button to accept or the thumbs down button to reject the panel.

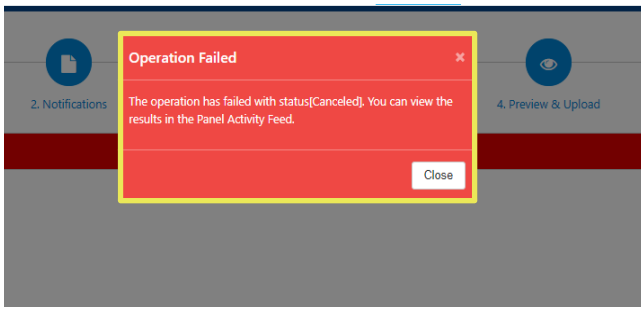
Accepting the Panel = Panel will be uploaded without the rows with the errors.

Rejecting the Panel/Cancel = Upload task will be cancelled, allowing you to make corrections before re-uploading.



Step 9

If a panel fails after the review and loading stage, complete the following steps:



- Go to the Panel Activity Feed
- Find the panel fail notification.
- Click on the **X** button on the notification.
- Review rows and failure reasons by clicking on the **View Row Error Report** button.

Common reasons why panels fail are:

- The file is not saved as .CSV format.
- Headers/Column Names in **Patient Panel Tablet** have been altered.
- Download a patient panel template and use as is.
- Review rows and failure reasons by clicking on the **View Row Error Report** button.
- File naming convention is incorrect.

Step 10 - Confirmation

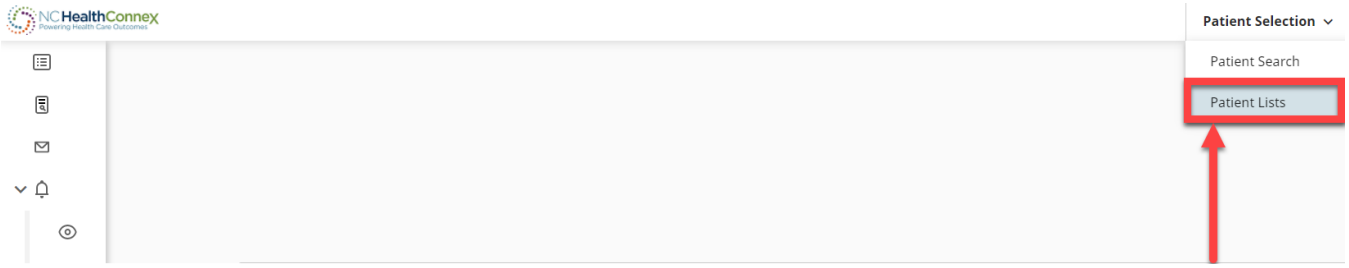
Our System will send a confirmation email or text after every successful upload if you have entered your information in step 2.

IX. Patient Lists

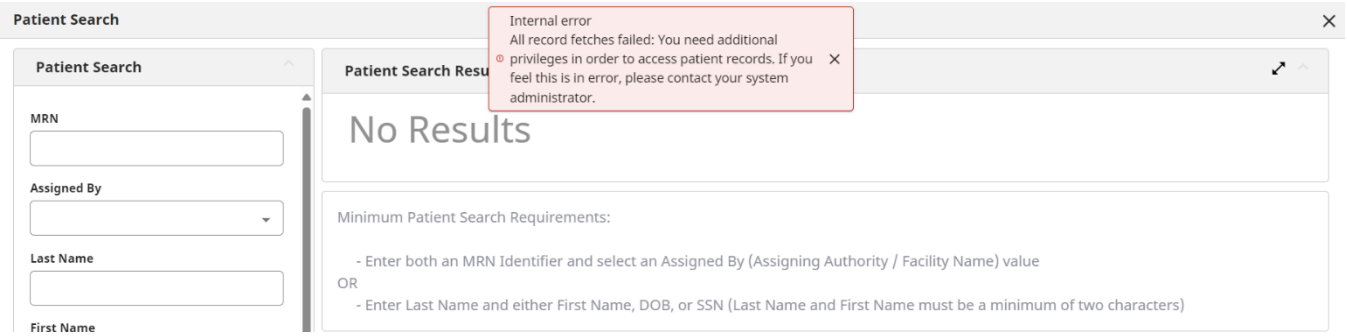
The Patient Lists feature of the NC HealthConnex Clinical Portal allows you to tag patients with one of three common patient-provider relationships.

Patient Lists Main Screen

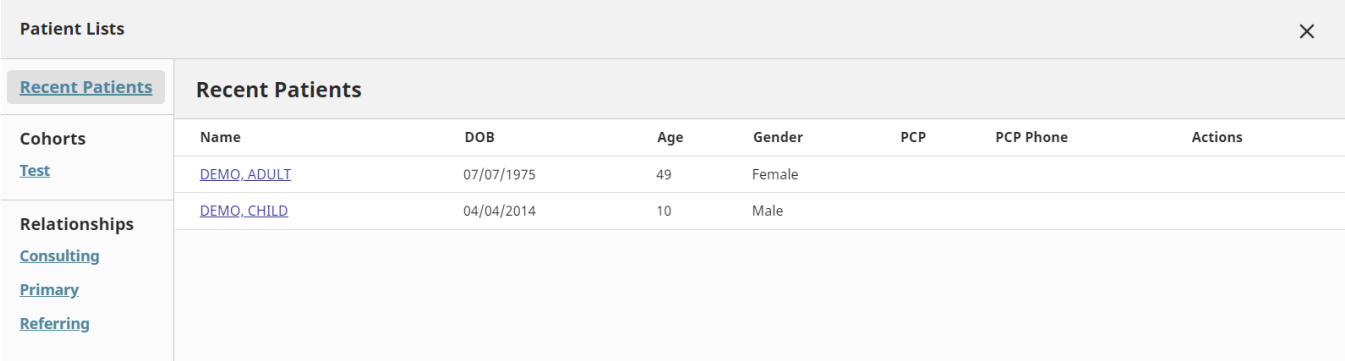
To access **Patient Lists**, click the **Patient Selection** tab from the **Top**, as shown below. Please note that **Patient Lists** will open in a new tab in your browser. When you are finished working in Patient Selection, simply close the tab and you may resume working in the original Clinical Portal tab that you had open.



****Note: If you do not have a data-driven relationship (organizational tie) with a patient, clicking on a patient name will yield a pop-up message, as shown below.*



Once opened, the **Patient Lists** main screen displays your **Recent Patients** list, including patients for whom you have recently viewed the patient record (clinical information). Patients are listed in alphabetical order. This list includes the patient's name, date of birth, age, gender, primary care provider (PCP), PCP phone number, and three quick action icons at right. The **Patient Lists/Recent Patients** list is shown below.



From the **Patient Lists** main screen, you may:

- Work a patient list, including:
  - View a patient record by clicking on the patient's name*,
- Tag patients with a patient-provider relationship by clicking on the button at the top left menu. Relationships

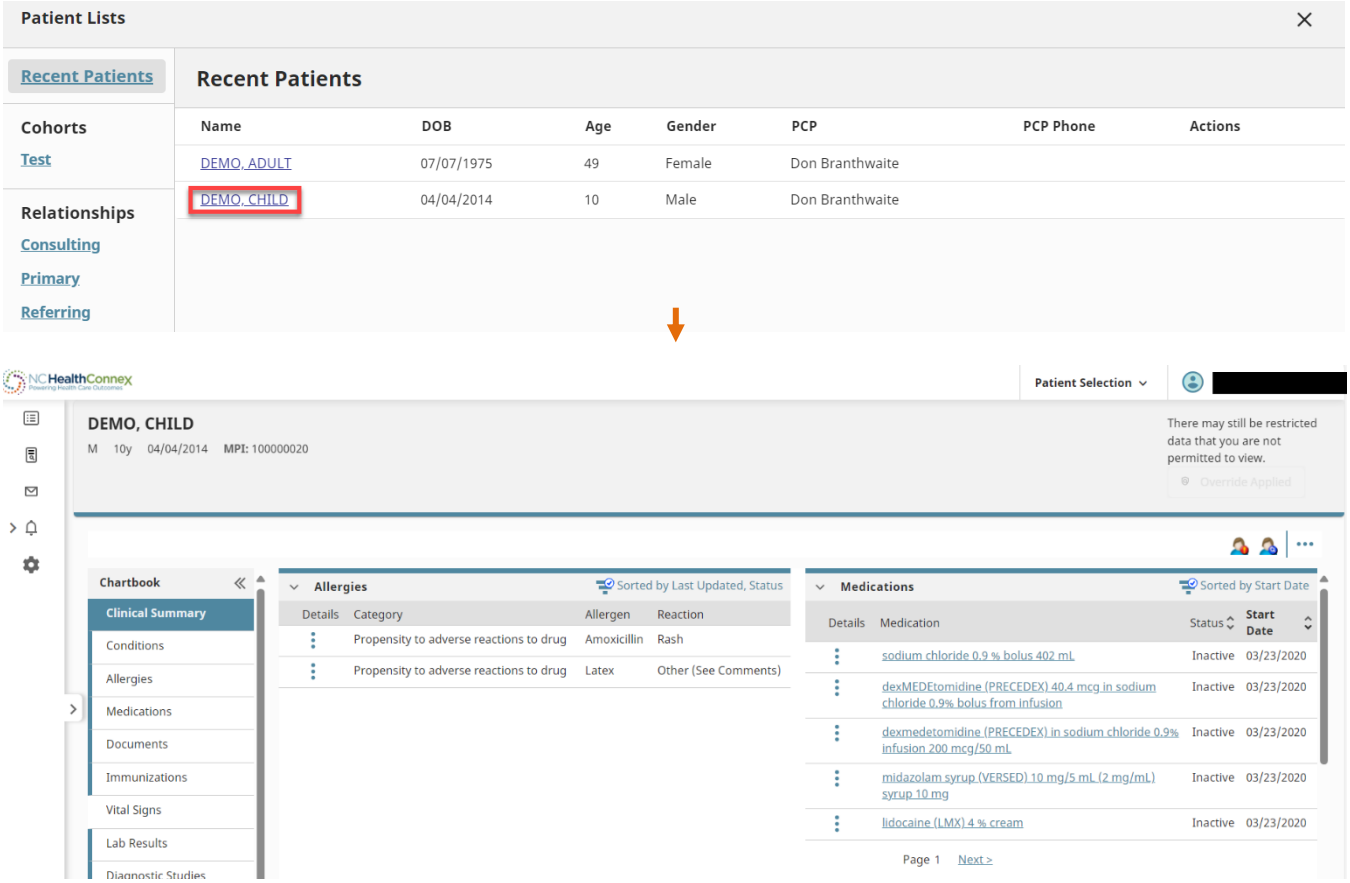
****Note*: If you do not have a data-driven relationship (organizational tie) with a patient, you will have to break the privacy seal to view the patient record, as described in the Break the Seal section of this user guide, and below in Working Patient Lists.*

Working Patient Lists

As described above, you may view the patients from any patient list within the **Patient Lists** area of the Clinical Portal. These actions are described below.

Action 1

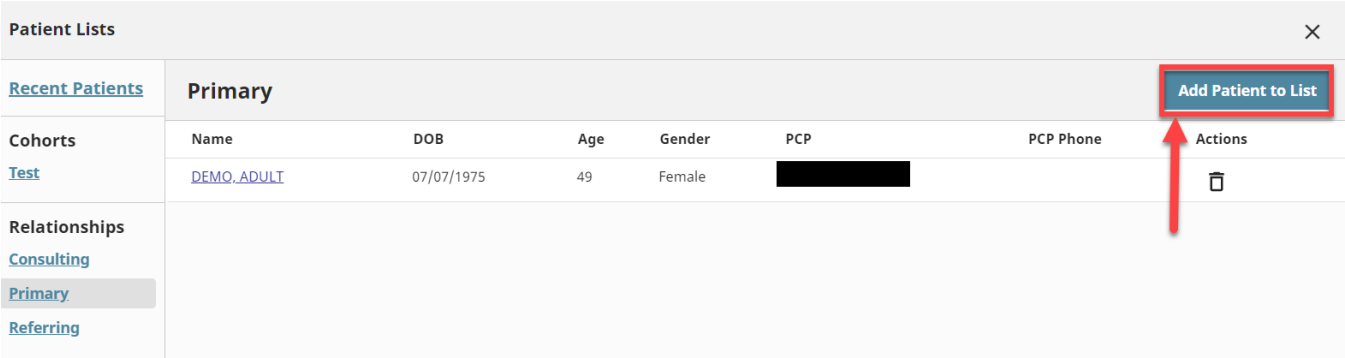
To view a patient record, click on the patient's name within a list. If you have a data-driven relationship (organizational tie) with a patient (as described in the Break the Seal section of this user guide), the record will open instantly, as shown below.



To continue to the patient record, click **X** to the above message, then proceed to search for the

patient, then clicking the "**Declare Relationship**" button.

Once you have searched and declared a relationship, you will be able to open the record and add the patient to your lists by clicking "**Add Patient to List**".



X. MESSAGING

The messaging feature of the NC HealthConnex Clinical Portal allows you to send messages to and receive messages from any trusted Health Information Service Provider (HISP) Direct Secure Messaging (DSM) accounts registered with DirectTrust™ and within the NC HealthConnex Provider Directory.

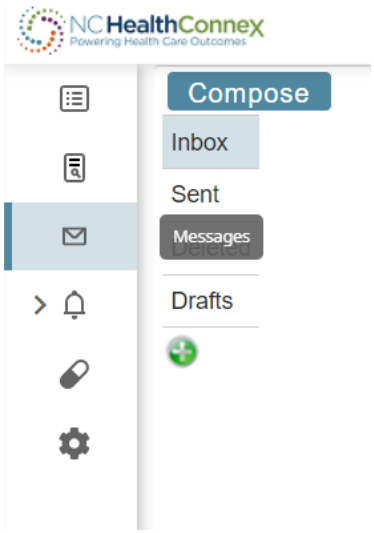
This means you may share encrypted messages containing patient health information with other users within the NC HealthConnex Provider Directory only (not to/from standard e-mail accounts like Gmail or Yahoo).

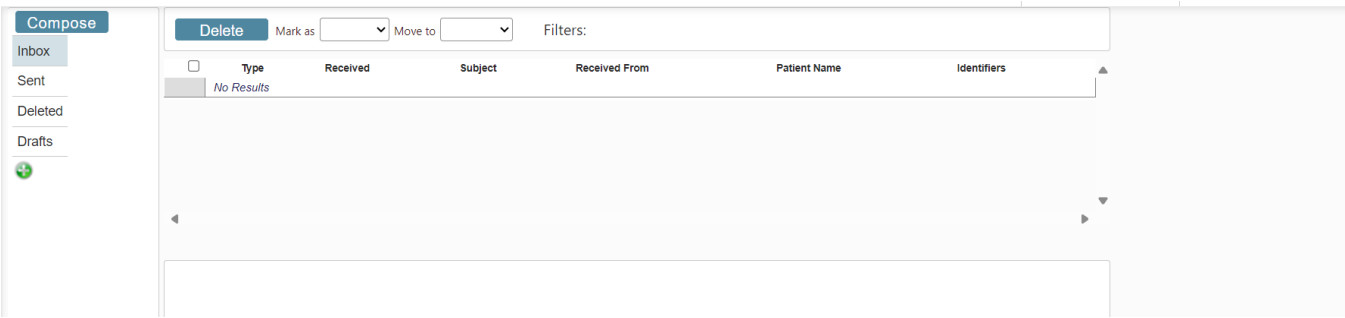
Only users who are associated with a facility that has a NCHIE DSM may access this feature. A NCHIE DSM address will have "nchie.net" as the last part of the domain. For example: "firstname.lastname@direct.participantorganization.nchie.net". If you do not know if your facility has a DSM domain, please ask your Participant Account Administrator.

Messaging Center User Interface

The **Messaging Center** looks much like a standard webmail application, with menu bars to the left and at the top, a list of messages at the middle/center of the screen, and a message viewing pane at the middle/bottom of the screen with **Reply/Reply All/Forward** buttons to the top right of the open message.

To access the **Messaging Center**, click the **Messages** tab from the **Main Menu**.

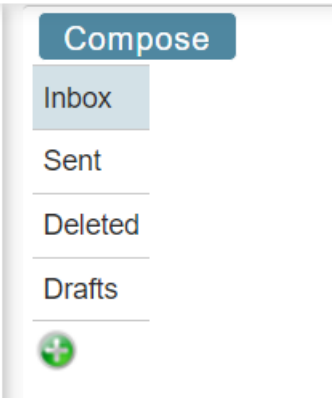




A message row appears in **bolded blue text** when its contents are unviewed and un-bolded black text once viewed.

Messaging Menus

Two menus appear in the Messaging Center, at the left and the top of the screen. These menus display your folders for storing and organizing messages and allow you to take actions off messages (such as moving or deleting messages), respectively. These menus and their contents/functions are shown below.



The menu bar at the left of the screen allows you to **compose** a new message; view and work with messages in the **Inbox**, **Sent**, **Deleted**, and **Drafts** folders; or **add a folder** using the **green plus sign icon**.

The menu bar at the top of the screen allows you to **delete** a message, **mark a message** (read or unread) from the drop-down menu, or **move a message** (to any standard or customized folder). To do this, you must first select one or multiple messages from the list by clicking its checkbox.

Working with Folders

Folders enable you to manage your mailbox and organize messages so you can find them easily. There are two types of folders: standard **system folders** and **user-defined folders**.

The standard **system folders** may not be moved, renamed or deleted. These folders are always displayed at the top of the list of folders, and include the following:

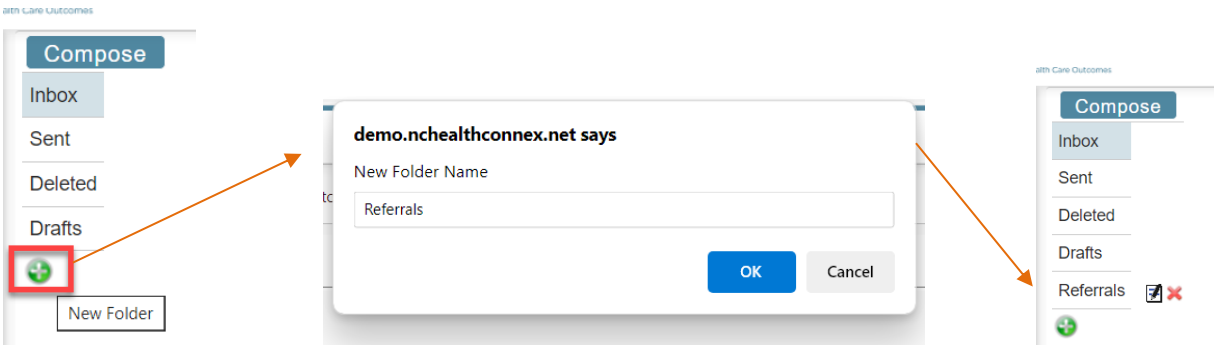
- **Inbox**: this is the default folder displayed when the Messaging Center is opened and shows all received messages that have not been deleted or moved to another folder.
- **Sent**: this folder contains copies of all messages you have sent, listed in reverse chronological order (most recent at the top).
- **Deleted**: this folder contains all messages you have deleted, listed in reverse chronological order (most recent at the top). Deleted messages remain in this folder until you select and delete the message permanently from this folder (and confirm the action in a pop-up window), after which point the message cannot be restored.
- **Drafts**: this folder contains any draft/unsent messages you have saved. Any type of message may be saved as a draft, whether it is a new message, a forward, a reply, or a reply all message.

In addition to the standard **system folders**, you may create and name your own folders for storing and organizing messages. An example of a **user-defined folder** may be "Referrals," to store messages about patients referred to other providers, or "High-Risk," to store messages about a provider's high-risk patients. These **user-defined folders** appear below the list of **standard folders** in alphabetical order.

An example of a user-defined folder may be "Referrals," to store messages about patients referred to other providers.

Note that a folder name is **bolded** when its contents are being displayed to the right.

To create a new **user-defined folder**, click the **green plus sign icon** below the standard **system folders** and enter the desired folder name as prompted in the pop-up window. Click **Ok** and the new folder will appear in alphabetical order within the list of **user-defined folders**, as shown below.



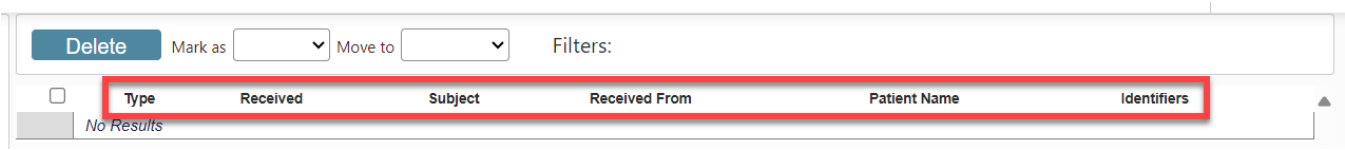
To rename or delete a **user-defined folder**, click the and icons, respectively, to the right of the folder name (see above right screenshot). Any contents of deleted folders will be moved to the **Deleted** folder; if there are messages you wish to save, you should move them from the **Deleted** folder to another folder.

Working with Messages

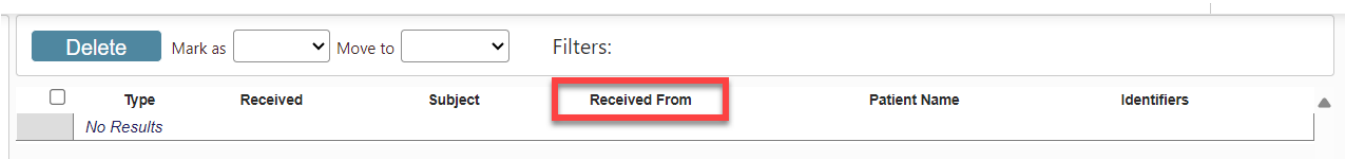
Sorting Messages

Messages within a folder may be sorted by clicking on their header titles. This will sort messages by date/time (**Received** column, with most recent first), subject name (**Subject** column, alphabetically), sender (**Received From** column, alphabetically), patient name (**Patient Name** column, alphabetically) or identifier (**Identifier** column, numerically). Clicking on the header a second time will sort the messages in the reverse order.

For example, to sort messages by date/time with the *most recent* messages at the top, click **Received** once, as shown below.



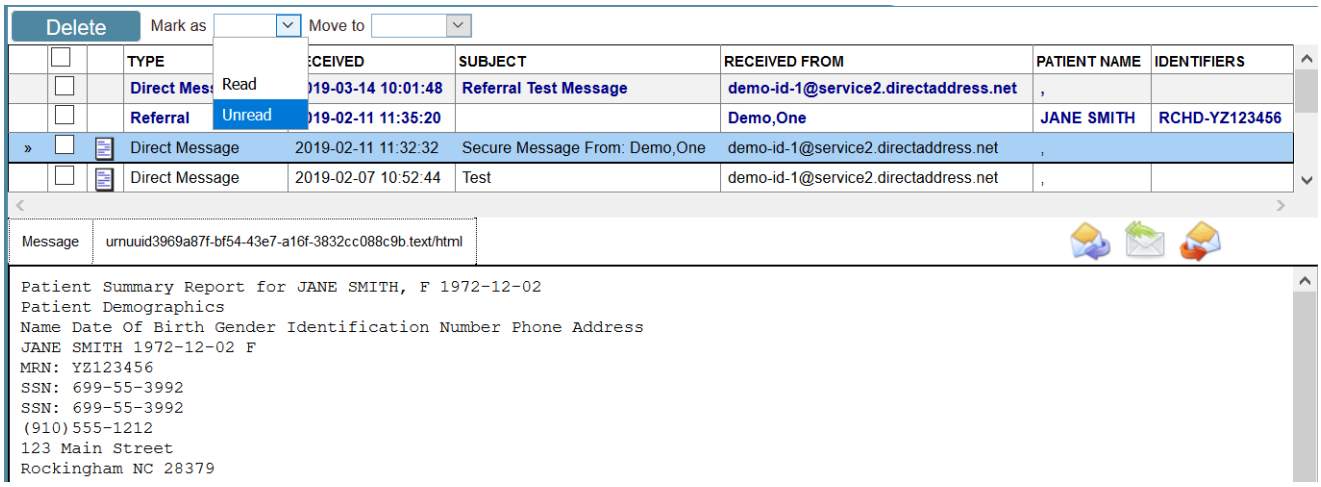
As another example, to sort messages by sender, in *reverse alphabetical order*, click **Received From** twice, as shown below.



Marking and Moving Messages

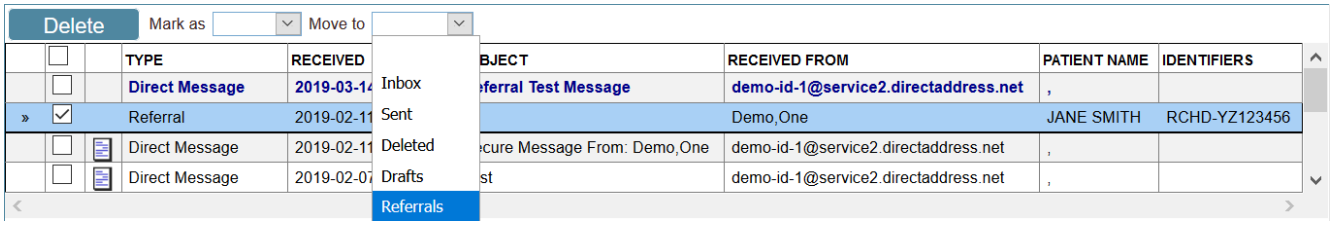
For better organization and usability, messages within any folder may be marked as **Read** or **Unread**, and moved from the **Inbox** to another folder or between folders.

To mark a message **Read** or **Unread**, select the message by clicking the empty checkbox at the left of the message row, and select **Read** or **Unread** from the **Mark as** drop-down menu in the top menu bar, as shown below.



Once this action is taken, the message row will appear **bolded** (if marked **Unread**) or un-bolded (if marked **Read**).

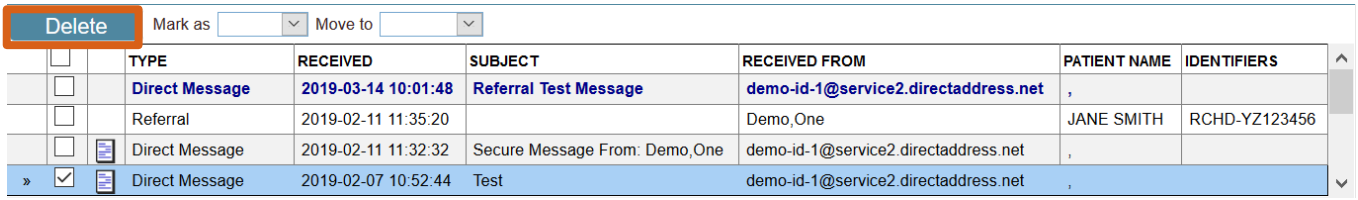
To move a message between folders, select the message by clicking the empty checkbox at the left of the message row, and select the folder to which the message should be moved from the **Move to** drop-down menu in the top menu bar, as shown below.



Multiple messages may be marked or moved at once by checking all the desired messages' boxes at the left of the message row, and then taking the action to mark or move, as described.

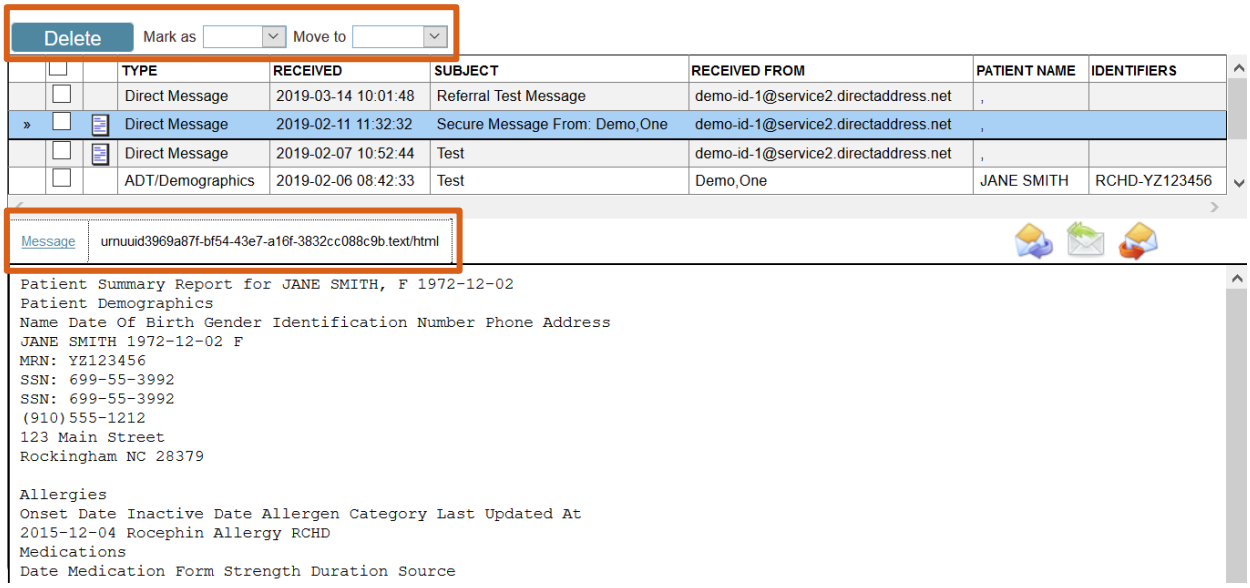
Deleting Messages

Messages may be deleted from any folder by clicking the empty checkbox at the left of the message row, then clicking the **Delete** button in the top menu bar, as shown below.

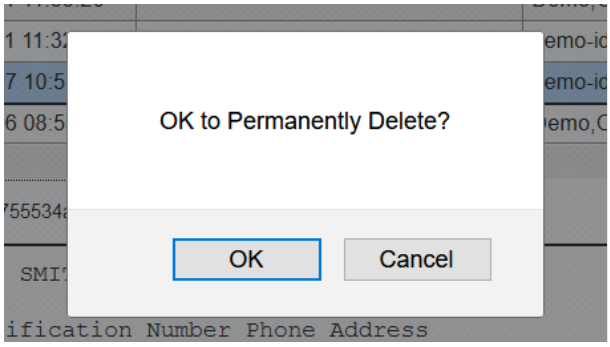


Note that multiple messages may be deleted at once by selecting all desired message checkboxes at the left of the message row, and then clicking **Delete**, as described above.

To permanently delete a message, you should select the message within the **Deleted** folder by clicking the empty checkbox at the left of the message row and clicking the **Delete** button in the top menu bar.



This action will prompt a pop-up window asking you to confirm you would like to permanently delete the message. By clicking **Ok**, you agree to permanently delete the message, after which point the message cannot be restored.



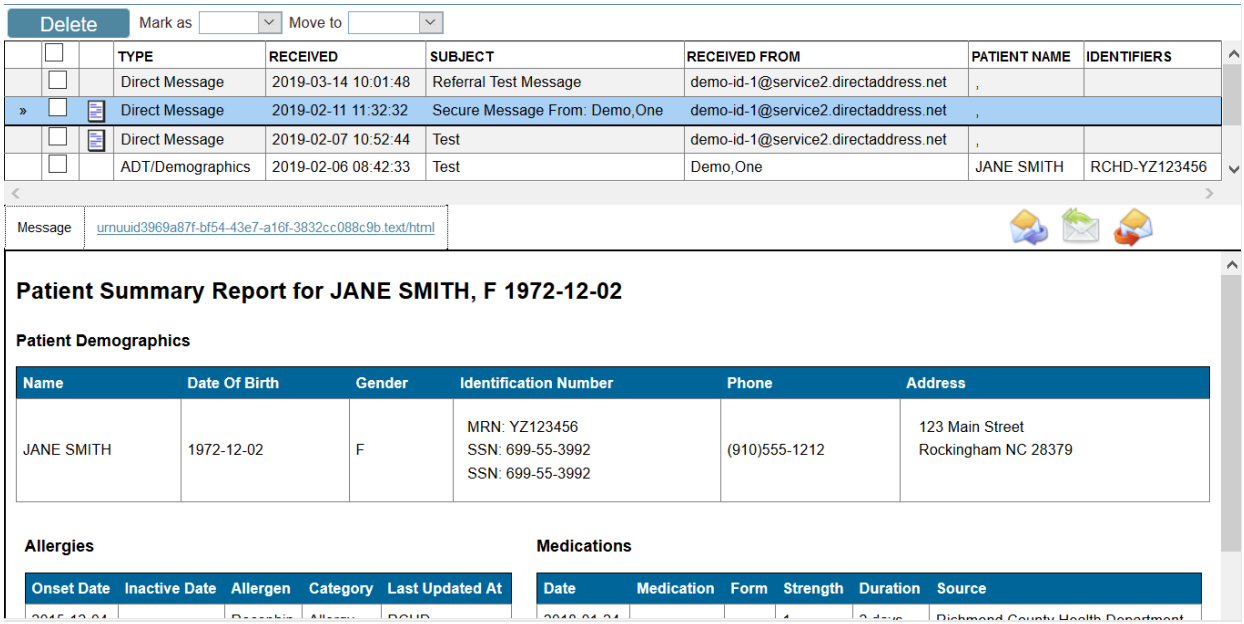
Receiving and Viewing Messages and Attachments

You will receive new incoming messages in your **Inbox**, the default folder upon entering the **Messaging Center** that displays a list of messages at the middle/center of the screen, and a message viewing pane at the middle/bottom of the screen.

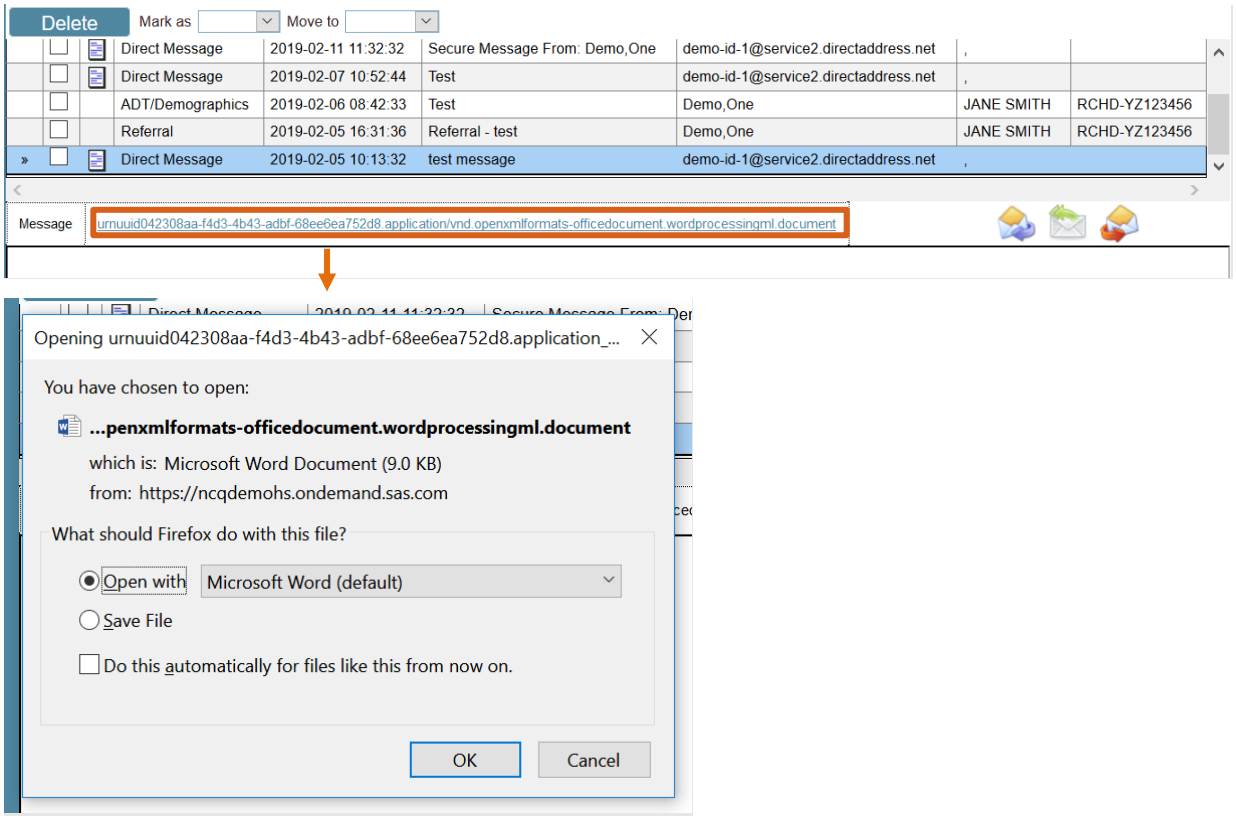
New, unread messages will display as **bolded** in the list. Once you click on any part of the message row, the text in the row will be un-bolded, indicating the message has been opened, and the message body text, message delivery information, and/or attachment details will appear in the message viewing pane below the messages list.

Please note: If you receive an email in XML format, it will display inline as markup language by default. These messages are generally Clinical Documents but cannot be downloaded directly. Ask the sender if they can resend the document in a readable format, such as .docx or .pdf.

If a patient report is attached, you may toggle between the message body text itself (if any) and the patient report by using the tabs above the message viewing pane and below the messages list, as shown below.



If another type of document is attached from a sender's local computer, clicking on the hyperlinked document name will open a new pop-up window asking you to open or save the file, as shown below.



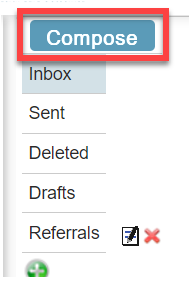
Composing Messages

You may compose a new message from the **Messaging Center**, the **View Summary** page, or from a patient list within **Clinician Tools.**

If you wish to attach a patient report from the Clinical Portal to a message, you should initiate the message from the **View Summary** page or from a patient list within **Clinician Tools**. See the Attaching Patient Information to a Message section of this user guide below for more information.

To compose a new message from the **Messaging Center**, you will take the following steps.

Step 1

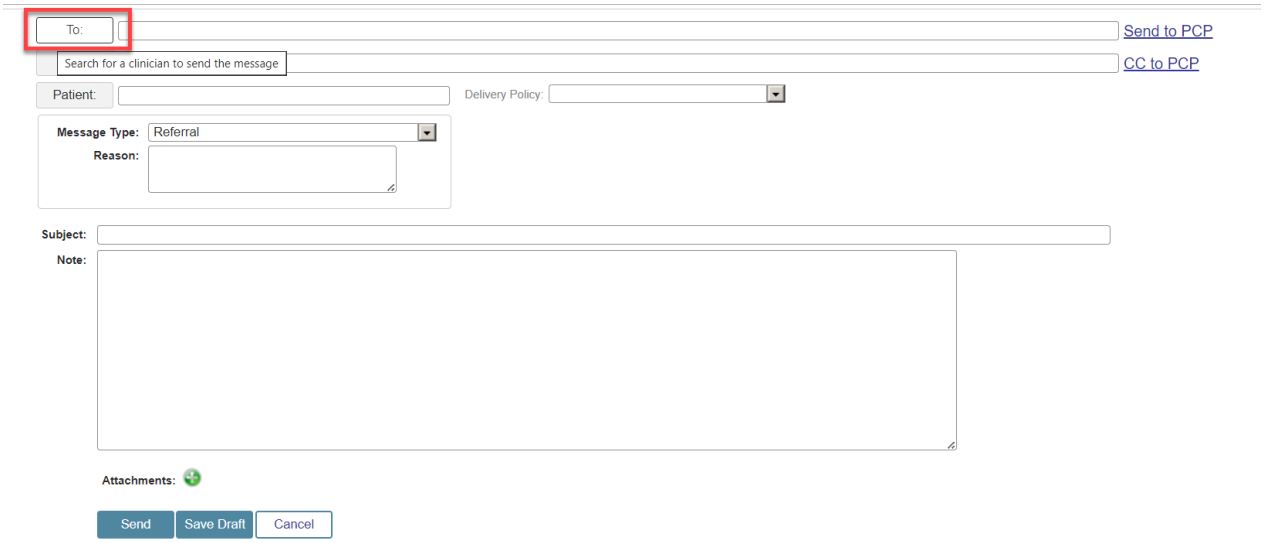


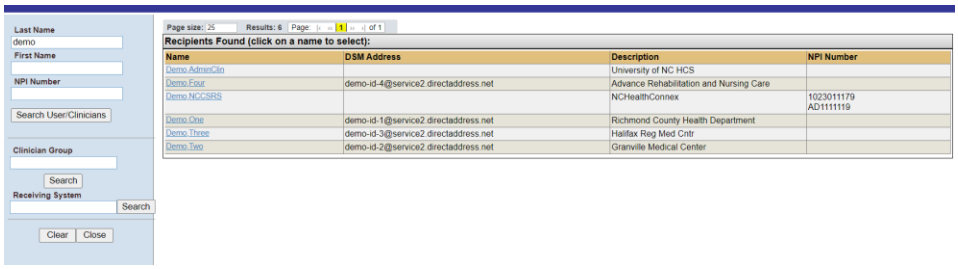
Click the **Compose** button at the top of the left menu bar, and a new message pop-up window will appear, as shown below.

Step 2

Enter a recipient into the **To...** field by either:

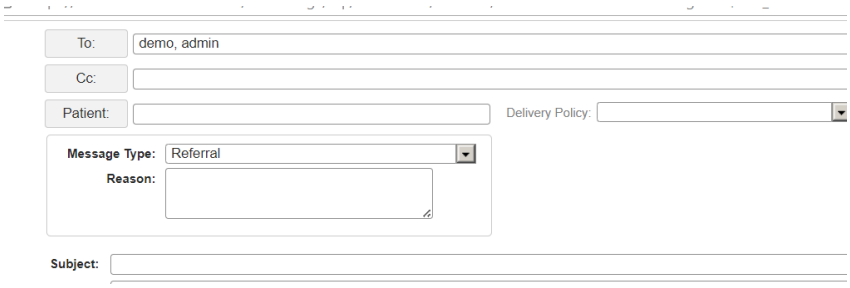
Searching the Provider Directory. To search for a recipient address, click the **To...** button and key in recipient details to at least one of the available fields in the **Find Recipient** window, then select a recipient by clicking on a blue hyperlinked name in the results list, as shown below. Note that each search result will return a name, Clinical Portal user ID, description, ID number and assigning authority, and indication of whether the user is or is not a clinician, as this information is available.





OR

Typing the recipient's last name into the **Send To…** field (*only available if you have sent a message to the recipient at least once before). To use this quick option, start to type the recipient's last name into the field directly. This action will prompt a drop-down menu directly below the **Send To…** field containing any prior recipient matching name(s), from which you may click on the intended recipient and populate the field, as shown below.



To add additional recipients, repeat the steps above.

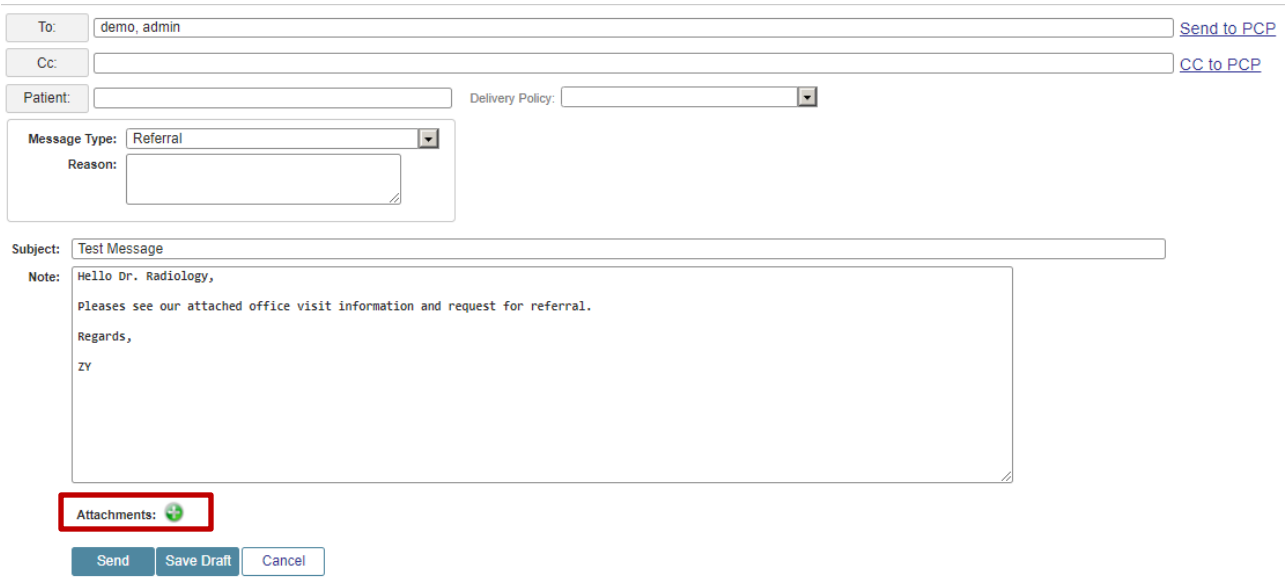
Note that once a recipient is successfully entered into the **Send To…** field, the system recognizes the message as a Direct Secure Message and the **Delivery Policy** field defaults to "DSM Direct Delivery" and may not be changed. In addition, the **Patient**, **Message Type**, and **Reason** fields disappear. As the NC HealthConnex Clinical Portal is configured to send and receive messages only between Direct mailboxes, these additional fields do not apply to users.

Step 3

Enter any additional recipient(s) to be carbon-copied on the message into the **CC…** field by clicking the **CC…** button and repeating either of the bulleted instructions in step 2 above.

Step 4

Type a subject into the **Subject** field and a message into the **Note** field, as shown below. Note, clicking the **Save Draft** button frequently will prevent losing a message mid-composition should the application time out during the drafting process.

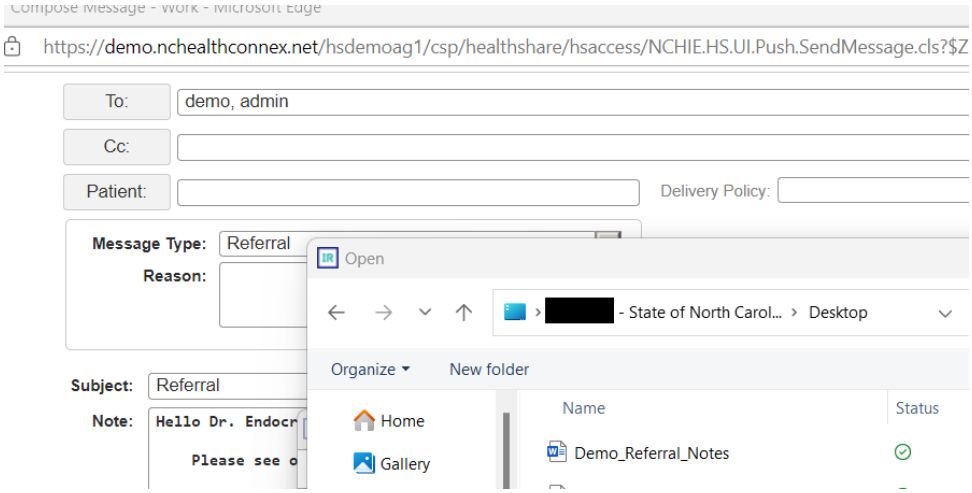


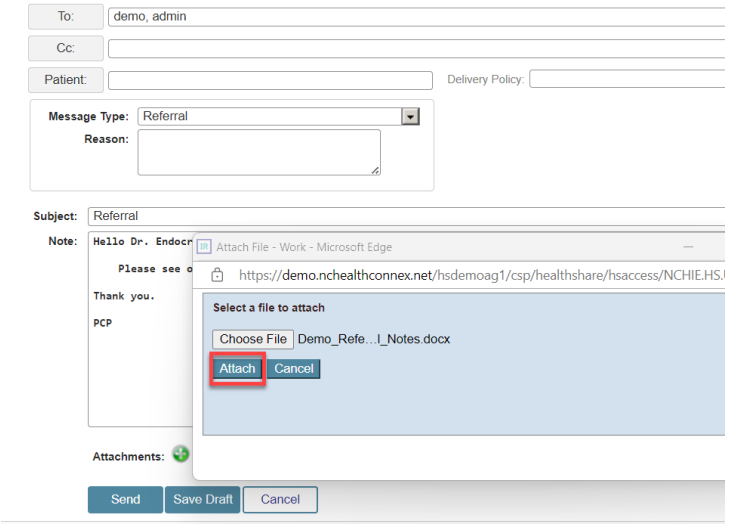
Step 5

If desired, add an attachment from the computer by first clicking the **green plus sign icon,** then clicking the **Browse** button in the **Attach File** pop-up window, locate the file from the computer's local folders, and click **Open**, as shown below.

*Note: If the attachment is in the *.txt format, the text contained in the file will be displayed as the message itself and will overwrite any text written in the body of the message.*

Finally, click the **Attach** button after confirming the filename above it represents the desired document.





If you select the wrong file or changes your mind, you may click the **Cancel** button or the **X** in the upper right of the **Attach File** window to cancel the attachment process.

Step 6

Once all desired message fields are complete, click the **Send** button to send the message (a copy will be stored in the **Sent** folder), the **Save Draft** button to save it for sending later (a copy will be stored in the **Drafts** folder), or the **Cancel** button to discard the message (a copy will be stored in the **Deleted** folder). Note that once a message has been sent, it cannot be recalled.

Attaching Patient Information to a Message

Should you wish to attach patient information from the Clinical Portal to a message, you should initiate the message from the **View Summary** page (once a patient record has been opened) or from a patient list within **Clinician Tools**.

Initiating a message with a patient report attached from one of these two areas will also allow you to filter the report's contents, select report type and format preferences or default to a recipient's preferences based on your Clinical Portal preference configurations, and preview a copy of the report before sending.

To attach a patient report to a new message from the **View Summary** page, complete the following steps:

Step 1

Select a report format from the **View As** drop-down menu and a report type from the **Report** drop-down menu at the top of the screen, then click **Send**.

Download Summary View As: Patient Summary (HTML) Report: Patient Summary Report Send...

Patient Summary Report for ADULT DEMO, F 1975-07-07

Patient Demographics

Name	Date Of Birth	Gender	Identification Number	Phone	Address
ADULT DEMO	1975-07-07	F	MRN: ADULTDEMO	(919) 5707334	7777 MAKE BELIEVE STREET NOTAREAL TOWN NC 20050

Allergies

Onset Date	Inactive Date	Allergen	Category	Last Updated At
2016-12-13		Ragweed	Propensity to adverse reactions to drug	DUHS
2016-12-09		House Dust	Propensity to adverse reactions to drug	DUHS
2016-09-12		Aspirin	Propensity to adverse reactions to drug	DUHS

Medications

Date	Medication	Form	Strength	Duration	Source
2020-05-04			500 mg		Duke University Health System
2020-05-04			60 mg		Duke University Health System
2020-05-04			100 mg		Duke University Health System

Step 2

A new message window will appear. Complete the basic message fields (**Send To…, CC…, Subject** and **Note**) and any desired attachments from the local computer by following steps 2-5 in the Composing Messages section above.

Step 3

If desired, filter the report's contents by one of the following:

- A unique encounter: click the **Encounter** down-down menu and select the desired encounter based on the listed date, facility code, encounter type, and description, as shown below. Note, only one encounter may be selected using this option.

To: Demo,AdminClin;

Cc:

Patient: DEMO,ADULT

Delivery Policy:

Message Type: Referral

Reason:

Preview... Send: HTML: Patient Summary Report

Filter... Encounter: [All]

Summary Options

[All]
2020-05-04 DUHS (O) 19246822023207919246 8
2020-04-27 DUHS (O) 19246822052810619246 8
2020-04-24 DUHS (O) 19246822046133319246 8
2020-04-20 DUHS (I) 1924682201693431924 68
2020-04-20 DUHS (O) 19246821995553719246 8
2020-04-15 DUHS (O) 19246821984161619246 8
2020-04-13 DUHS (O) 19246821984017119246 8
2020-03-09 DUHS (O) 19246821625514719246 8
2020-02-24 DUHS (I) 1924682162536891924 68
2020-02-20 DUHS (O) 19246821653403619246 8
2020-02-20 DUHS (O) 19246821653132219246 8
2020-02-14 DUHS (O) 19246821594046719246 8
2020-02-12 DUHS (O) 19246821570056119246 8
2020-02-12 DUHS (O) 19246821593898719246 8
2020-02-01 DUHS (O) 19246821511467219246 8

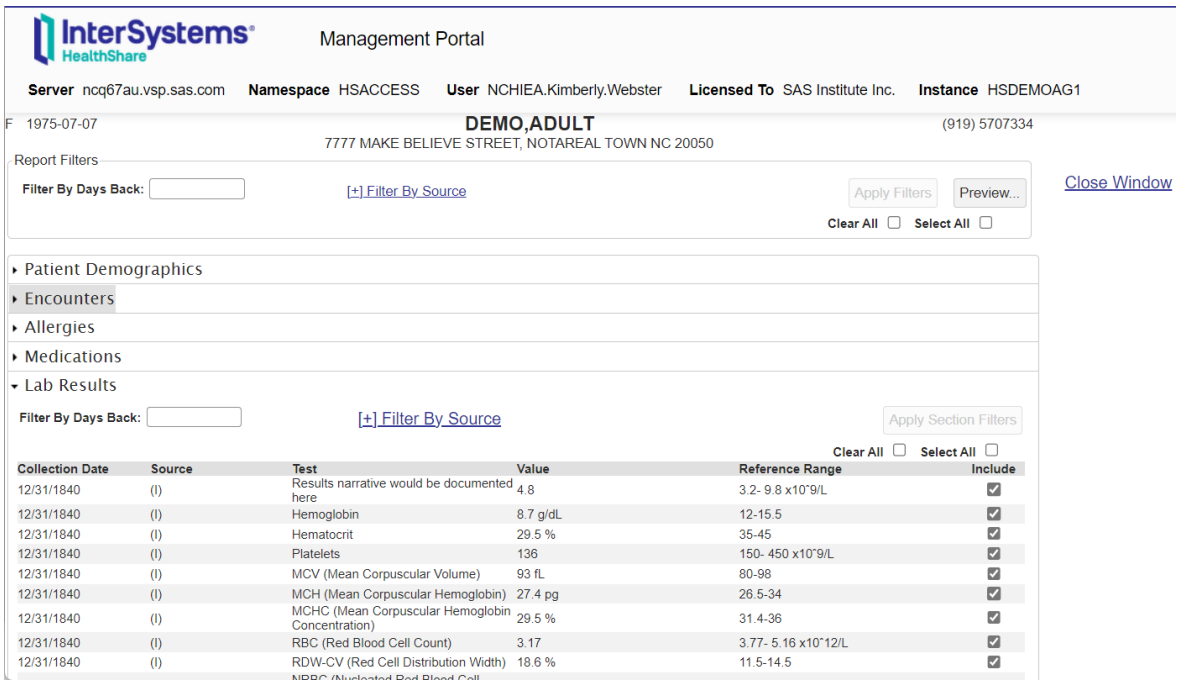
Subject:

Note:

Attachments:

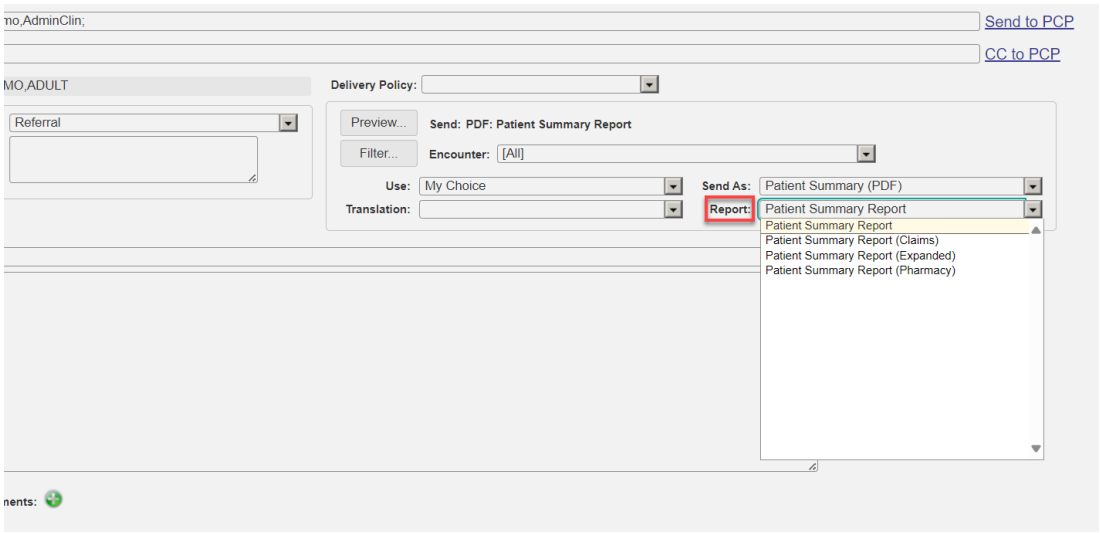
Send Save Draft Cancel

- Other parameters, including period of time, data source, and inclusion/exclusion of specific data elements within the clinical categories listed (dependent on the report type): click the **Filter…** button, select the criteria as desired to fully customize the report to a recipient's "need-to-know," and click **Apply Filters**, as shown in the examples below. Use the **Clear All** or **Select All** checkboxes as needed to populate or de-populate all fields in a section.



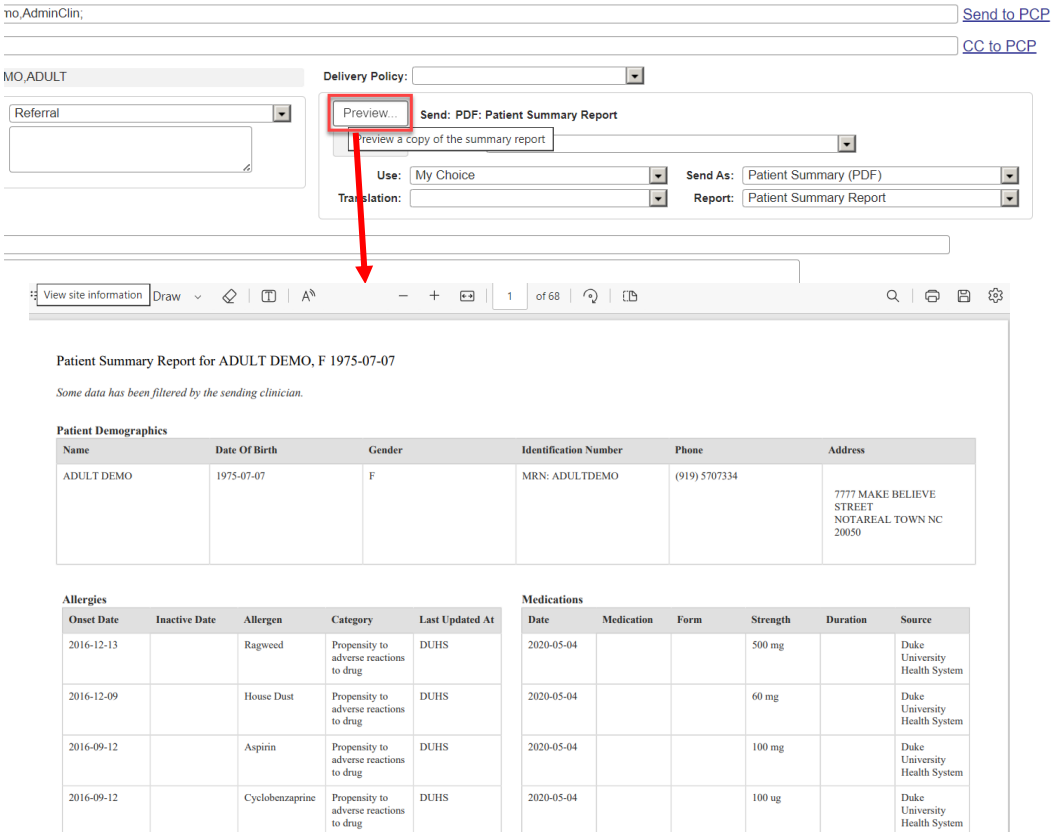
Step 4

If desired, select report type and format preferences or default to a recipient's preferences based on your Clinical Portal preference configurations. To do this, click the bold word "**Report**" and select the desired options, as shown below.



Step 5

If desired, preview the report about to be sent by clicking the **Preview...** button. A pop-up window will appear with the report as customized by the user in steps 4-5 above.



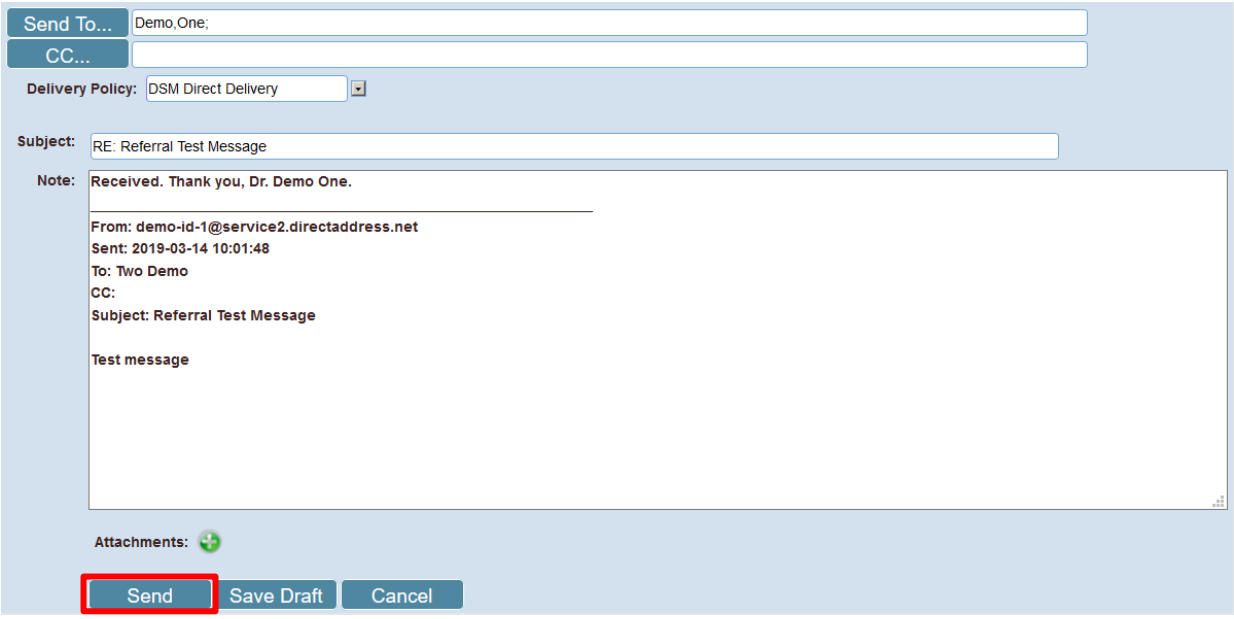
Step 6

Once all desired message fields and patient information filtering are complete, click the **Send** button to send the message (a copy will be stored in the **Sent** folder), the **Save Draft** button to save it for sending later (a copy will be stored in the **Drafts** folder), or the **Cancel** button to discard the message (a copy will be stored in the **Deleted** folder). Note that once a message has been sent, it cannot be recalled.

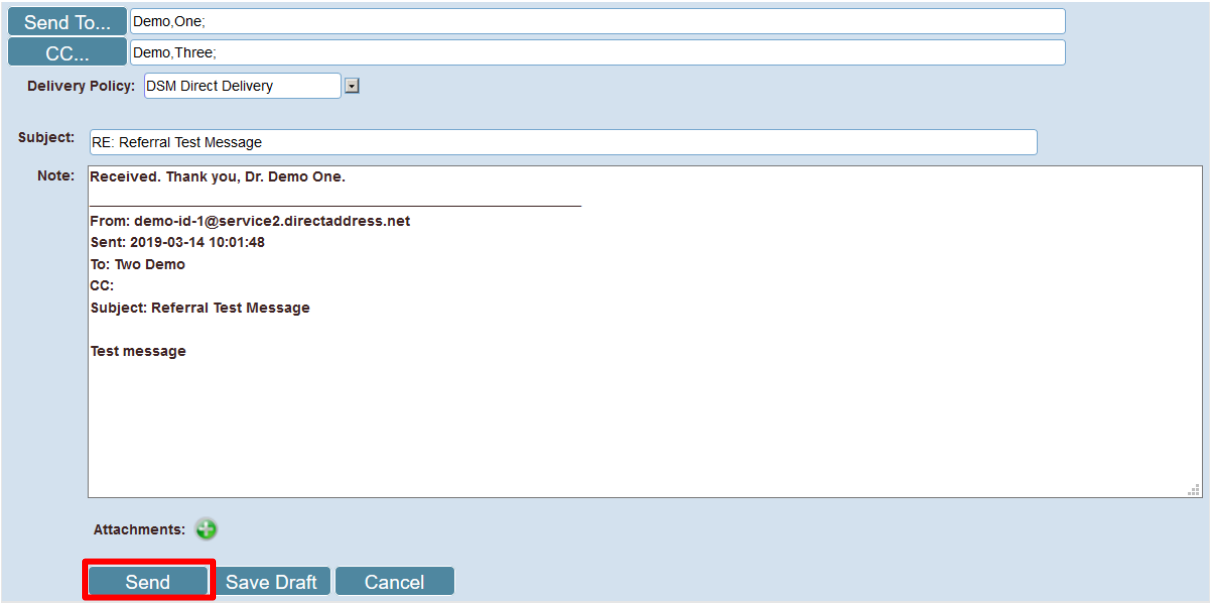
Replying to and Forwarding Messages

Once a message within any folder is open in the message viewing pane at the middle/bottom of the screen, you may use the quick action icons at the top right of the pane to reply to a sender, reply to all (if others were copied on the original message), or forward a message to another party. Hovering over each icon will display the associated action (Reply, Reply All, or Forward).

To reply to the sender of a message, click the **Reply** quick action icon. A new message pop-up window will appear, addressed to the sender, with the original message and sent details in the body of the message, as shown below. Fill in the **Note** field and click **Send**.



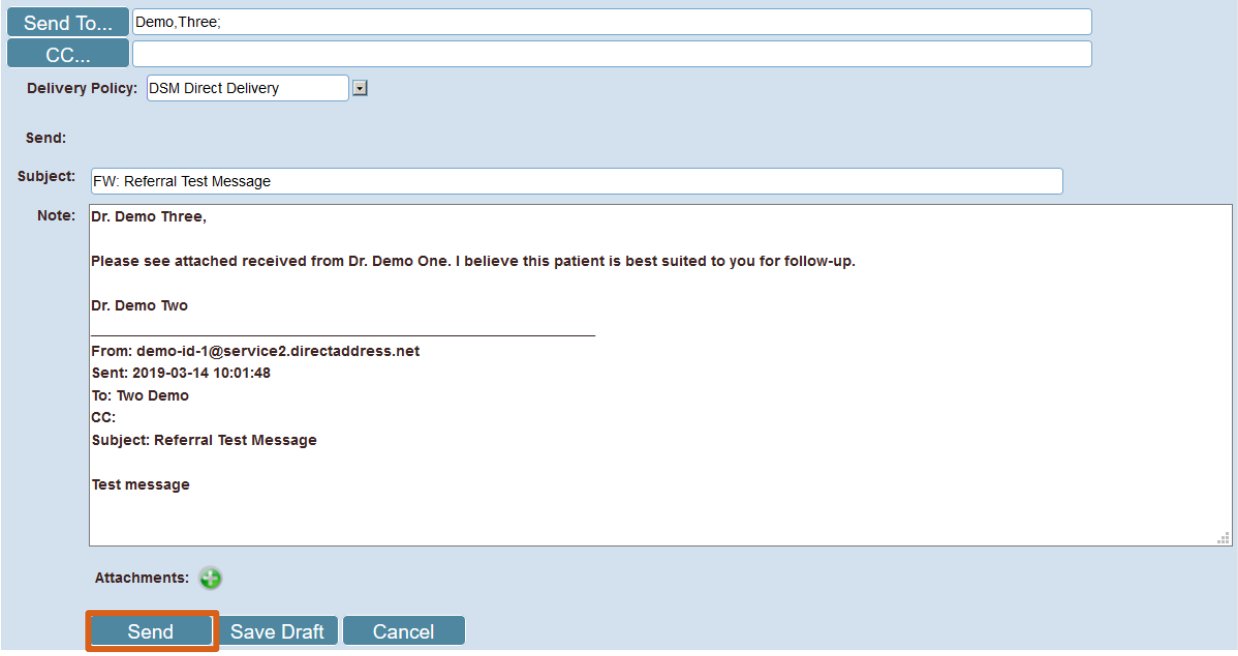
To reply to the sender and all other parties copied on the original message, click the **Reply All** quick action icon. A new message pop-up window will appear with all parties copied and the original message and sent details in the body of the message, as shown below. Fill in the **Note** field and click **Send**.



****Note: You may receive messages from DSM accounts outside of the NC HealthConnex Provider Directory, but you may not be able to reply to those messages. Depending on the endpoint's configuration (HISP, EHR, and how their direct address account is set up), it may not be possible to*

reply to those messages, or their system will only accept specific types of messages. Please contact the Help Desk at hiesupport@sas.com if you have any questions or issues.

To forward a message to another party, click the **Forward** quick action icon. A new message pop-up window will appear with the original message and sent details in the body of the message, as shown below. Fill in the **Send To...**, **CC..** (if applicable) and **Note** fields and click **Send**.



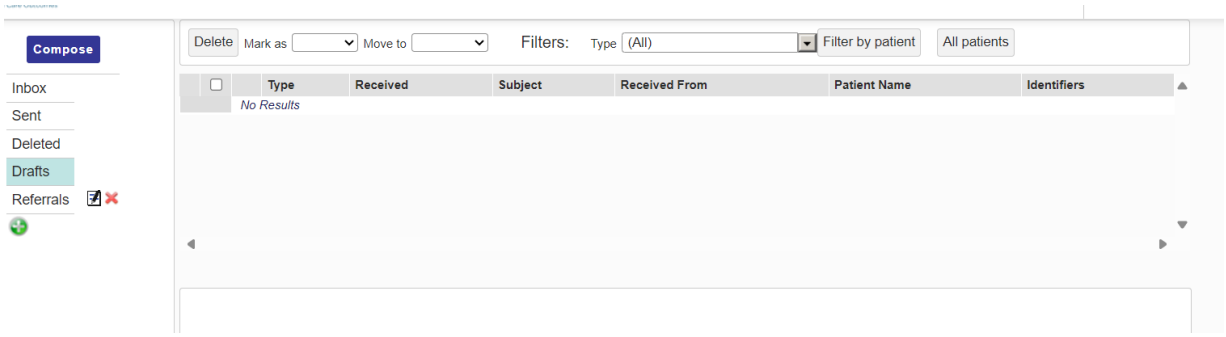
Working with Draft Messages

Draft messages are messages that have been composed, but not yet sent. Drafts may be viewed, edited or sent from the **Drafts** folder tab in the left menu bar.

To edit and/or send a draft message, take the following steps:

Step 1

Open the composed draft from the message list in the **Drafts** folder by double-clicking anywhere in the message details row. This will open the draft message, as shown below.



Step 2

Edit any of the basic message fields (**Send To…, CC…, Subject** and **Note**) and any desired attachments from the local computer by following steps 2-5 in the Composing Messages section of this user guide, above. If a patient report is attached, filter, edit summary options, or preview, as desired, by following steps 4-6 in the Attaching Patient Information to a Message section of this user guide, above.

Step 3

Once all desired message fields and patient information filtering are complete, click the **Send** button to send the message (a copy will be stored in the **Sent** folder), the **Save Draft** button to save it for sending later (a copy will be stored in the **Drafts** folder), or the **Cancel** button to discard the message (a copy will be stored in the **Deleted** folder). Note that once a message has been sent, it cannot be recalled.

Tip: clicking the Save Draft button frequently will prevent losing a message mid-composition should the application time out during the drafting process.

XI. TECHNICAL REQUIREMENTS

The NC HealthConnex Clinical Portal is supported on various web browsers and mobile devices, as indicated below.

Browsers

Platform	Chrome	Firefox	Internet Explorer	Microsoft Edge	Opera	Safari
Mac	Supported	Supported	N/A	N/A	Supported	Supported
Windows	Supported	Supported	Not supported	Supported	Supported	Not supported

Mobile Devices*

Platform	Android Browser & WebView	Chrome	Firefox	Microsoft Edge	Safari
Android	Android v5.0+ supported	Supported	Supported	Supported	N/A
iOS	N/A	Supported	Supported	Supported	Supported
Windows 10 Mobile	N/A	N/A	N/A	Supported	N/A

****Note: The Clinical Portal is generally supported on the latest version of each major platform's default browser. To ensure the latest version is installed, check the Help>About Menu on your browser for information on whether the browser is up to date, or see options to download the latest version. If unsure, contact your organization's system administrator.*

Proxy browsers (e.g., Opera Mini, Opera Mobile's Turbo mode, UC Browser Mini, Amazon Silk, etc.) are not supported.

XII. HELP DESK

SAS® HIE Technical Support Communication Processes

All Participants of the NC Health Information Exchange Authority (NC HIEA) should designate one or two **Participant Account Administrators (PAAs)** for their organization who will have authority to utilize the SAS® HIE Technical Support Team and Help Desk.

PAAs should communicate their name and contact information to the SAS® HIE Technical Support Team at HIEsupport@sas.com, as well as future changes in administration so that contact information is kept up to date.

All end users from an organization should communicate any questions about usage of the Clinical Portal to their organization's PAA(s). The PAA(s) should first try to answer the questions for their end users. If the PAA(s) is unable to answer the question or has discovered an issue with the application, they should then direct questions, themselves, to the SAS® HIE Technical Support Team on behalf of their end users using one of four contact options as detailed in the Participant Account Administrator Reference Guide, available in the Training & Tools section of the NC HIEA website.

XIII. USER GUIDE CONTENT DISCLAIMER

The screenshots and presentations herein are intended as examples only and may differ from the actual screenshots and presentations generated by the released product in commercial production.

XIV. PARTNERS

SAS Institute

The NC HIEA's technical partner for delivering NC HealthConnex is SAS Institute.

Through innovative analytics, business intelligence and data management software and services, SAS helps customers at more than 80,000 sites make better decisions faster. Its world headquarters are based in Cary, North Carolina. SAS also operates the NC HIEA Technical Support Help Desk. For more information, visit SAS.com.

InterSystems and J2 Interactive

The NC HealthConnex HIE Platform is powered by the InterSystems HealthShare product, and J2 Interactive is InterSystems' integration partner.

InterSystems is the engine behind many important applications in health care, finance, government, and other sectors where lives and livelihoods are at stake. Founded in 1978, InterSystems is a privately held company headquartered in Cambridge, Massachusetts (USA), with offices worldwide, and its software products are used daily by millions of people in more than 80 countries. For more information, visit InterSystems.com.

J2 Interactive is an award-winning software development and IT consulting firm specializing in customized solutions for hospitals, labs, research institutions, and health information exchanges. For more information, visit J2Interactive.com.

Secure Exchange Solutions (SES)

NC HealthConnex Direct Secure Messaging is powered by Secure Exchange Solutions (SES).

SES sets the standard for seamless, scalable, secure connectivity across organizational boundaries. As an industry-leading health information technology provider, SES protects, streamlines and delivers sensitive and critical health care information while ensuring compliance and improving efficiency and quality. Hospitals, health systems, physicians, health plans and channel partners rely on SES for integrated secure communications that expand their reach and empower them to improve patient care. SES is a committed member of DirectTrust, helping healthcare stakeholders leverage standards-based communications to communicate across organizational boundaries. For more information, visit SecureExSolutions.com.

DirectTrust

NC HealthConnex, in connection with SES, is part of the DirectTrust nationwide network.

DirectTrust is a collaborative non-profit association of 121 health IT and health care provider organizations to support secure, interoperable health information exchange via the Direct message protocols. DirectTrust has created a “trust framework” that makes it easy for health care professionals, health IT vendors and their patients/customers to communicate securely, with identity proofing and regardless of end-user application. Over 300 EHR and personal health record (PHR) vendors’ products, and over 50 HIEs, participate in the DirectTrust network, ensuring interoperability and security via Direct for exchange of health information to more than half the professionals in the U.S. health care system. For more information, visit DirectTrust.org.

North Carolina Department of Health and Human Services (NCDHHS)

The NC HIEA works closely with NCDHHS to support Medicaid and public health efficiencies.

The North Carolina Department of Health and Human Services (NCDHHS) manages the delivery of health- and human-related services for all North Carolinians, especially our most vulnerable citizens – children, elderly, disabled and low-income families. The Department works closely with health care professionals, community leaders and advocacy groups; local, state and federal entities; and many other stakeholders to make this happen. The Department is divided into 30 divisions and offices. NCDHHS divisions and offices fall under four broad service areas - health, human services, administrative, and support functions. NCDHHS also oversees 14 facilities: developmental centers, neuro-medical treatment centers, psychiatric hospitals, alcohol and drug abuse treatment centers, and two residential programs for children. For more information, visit NCDHHS.gov.