



NORTH CAROLINA HEALTH INFORMATION EXCHANGE AUTHORITY

Teletown Hall

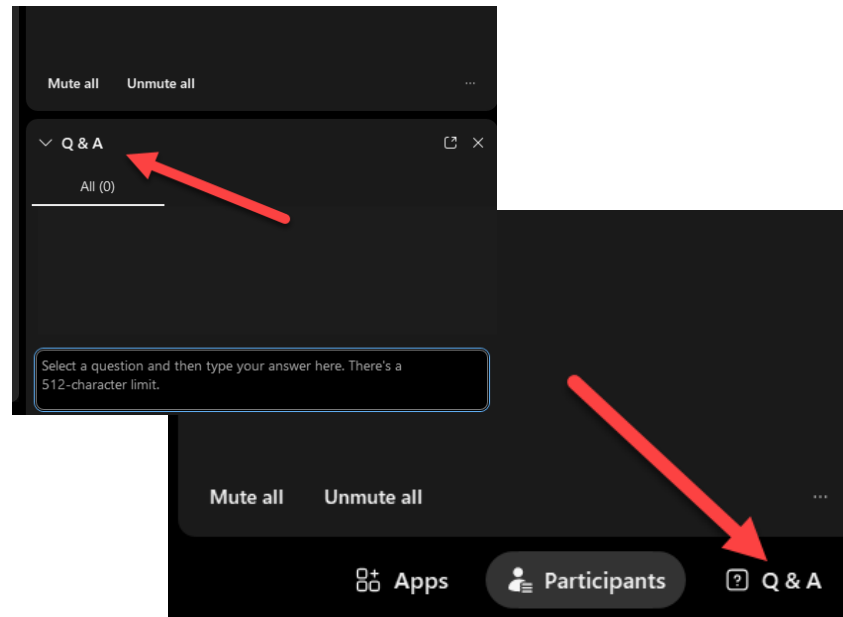
November 15, 2023

N.C. Health Information Exchange Authority



Before We Begin...

Housekeeping Items with WebEx



Please place your questions in Q&A.

NC HIEA Teletown Hall: Quarter Four

Agenda

- **Opening & Welcome** 12:00pm Kenya Servia
- **New Team Members** 12:05pm Kenya Servia
- **Notices Page** 12:10pm Jessica Hagins
- **Upcoming Events** 12:15pm Kim Webster
- **Quarterly User Attestation** 12:25pm Luke Keeler
- **Guest Speaker Introduction** 12:35pm Kenya Servia
- **Data Quality: Patient Matching** 12:35pm Sue Saul
- **Q & A** 12:55pm

NC HIEA Teletown Hall: Quarter Four

Speakers



Kenya Servia
Outreach Specialist

Kenya Servia has worked at the NC HIEA team since April 2018, educating health care providers about NC HealthConnex. She has over 25 years experience working in public health as a social worker, health educator and program consultant.



Luke Keeler
Outreach Specialist

Luke Keeler has 15 years of experience working in public health at local health departments and NC DHHS. He is excited to join the NC HIEA team to help increase access to NC HealthConnex.



Jessie Hagins
Communications Specialist

Jessie has worked in broadcasting and communications for 21 years as a reporter, producer and videographer. She has been with the NC HIEA since September 2022 and enjoys learning about Health IT.



Kimberly Webster, RN
Outreach Specialist

Kim started with the NC HIEA in 2022. She assists participants in understanding how to access and utilize NC HealthConnex. Kim has worked as a nurse since 2004 and maintains her nursing license.



Introducing New Team Members



Edwin Anyimu
Data Quality Analyst

Edwin started with the NC HIEA in June 2023 and is on the data quality team.



Anita Valiani
Health Analytics and Outbound Services Lead

Anita joined the NC HIEA in July 2023. She comes from NCDHHS where she served as surveillance epidemiologist working with communicable diseases for over 10 years. With a strong background in public health, she hopes to help bring the NC HIEA and public health systems together to help improve services for all NC residents.

Her husband and two girls like exploring new restaurants in the triangle area and exploring the coastal areas.



ABM Haider
NCIR Analyst

Abm is a tester with over 10 years of IT experience as a quality analyst, concentrating in functional testing. He is skilled at applying testing methodologies, principles and processes to assess the testing process, including test execution and defect resolution. Abm loves trekking, swimming and travelling.



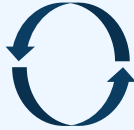
Website Walkthrough

Website Landing Page: For Providers



What You Need to Know

Learn about NC HealthConnex.



How to Connect

Link to other providers and help improve outcomes.



Participation Agreement

Start connecting to NC HealthConnex.



FAQs

Find answers to your questions here.



Patient Education

Discover what patients need to know.



Privacy and Security

Learn how NC HIEA safeguards privacy and security.



Technical Support

Get technical assistance for NC HealthConnex participants.



Clinical Portal User Guide

Learn basic navigation of the NC HealthConnex.

New Pages/Updates on the NC HIEA Website

Notices & Alerts

Exchange Services – Coming Soon

Questions?

To offer suggestions or ask a question, email
jessica.hagins@nc.gov.

NC HIEA Office Hours

New quarterly call that launched 8/16/23

- Developed in response to the 2022 Participant Survey
- Topics included:
 - General HIEA inquiries
 - DSM (Direct Secure Messaging) Provider Directory
 - NC*Notify
 - HIE Act requirements
 - Pharmacy connections
 - Training needs/opportunities
 - Clinical workflow
 - Connection types (Uni-directional, Bi-directional, Single Sign On)
 - Privacy and Security



NC HIEA Office Hours

Key Takeaways



- 200 registrants
- 73 attended the live webinar
- Participants are engaged and curious about how to utilize NC HealthConnex.
- Participants want to know where to find information on the website.
- Participants can [register](#) for the next Office Hours on the [website](#).

Upcoming Events...

- NC AHEC – NC HealthConnex [December 5, 2023, 12:00-1:00 pm](#)
- Office Hours [December 13, 2023, 12:00 – 1:00 pm](#)
- End of Year Survey
- Questions? Contact hiea@nc.gov



Quarterly User Account Audit

The second Monday following the end of each quarter, PAAs are sent an email requesting they conduct a Quarterly User Account Audit within the PAA tools tab of the Clinical Portal.

Their responsibilities include:

- Completing the quarterly user attestation form which can be found in the PAA Tools within the Clinical Portal.
- Reporting any unusual user activity to the NC HIEA. This includes an unusual amount of Patient Search and Break the Seal activity for a particular user.
- Disabling user accounts (if required according to the NC HIEA User Access Policy).

Quarterly User Account Audit

Sample Email



Dear Participant Account Administrator (PAA),

As the PAA you play an important role in helping to manage and monitor usage of the NC HealthConnex Clinical Portal.

As a reminder, user account audits are now completed within your PAA portal account vs. on a PDF as was done previously. The Quarterly User Audit involves reviewing **Break the Seal** and **Patient Search** activity for the users in your facility. You are expected to request invalid accounts be disabled by the Help Desk and report any unusual Break the Seal and Patient Search activity to the NC HIEA.

The deadline to respond to the QX:YEAR audit is Month XX, XXXX. Please review the [Quarterly Audit Quick Reference Guide](#) and the FAQs included below for detailed information.

The link to access the NC HealthConnex Clinical portal is: <https://portal.nchealthconnex.net>.

If you have questions or need assistance, please contact the NC HealthConnex Help Desk Team at hiesupport@sas.com or 919-531-2700.

Please note our updated hours of operation for general technical support are Monday through Friday from 8:00 a.m. to 6:00 p.m. EST.

Thank you,

The NC HIEA Team



Quarterly User Account Audit – The Attestation Form

PAA User Account Management

Your Quarterly Attestation is due now!

Key:

BTS: Break the seal (gained access to patient record without preexisting relationship)
 EXCEEDS AVG BY 50% : User activity exceeds facility average by more than 50%

PS: Patient search

FLAGGED : User exceeds BTS and/or PS facility average by more than 50%

Page size: 25 Results: 85 Page: 1 of 4

<input type="checkbox"/>	NAME	USER ID	EMAIL ADDRESS	ASSIGNED ROLES	LAST LOGIN	ACTIVE	FLAGGED	BTS LAST QTR	BTS 2 QTR AGO	BTS 3 QTR AGO	BTS 4 QTR AGO	BTS AVG LAST QTR	B
<input type="checkbox"/>	[REDACTED]	[REDACTED]	[REDACTED]	%HS_Clinician %HS_PAAUserAdministrat HSGroup_NCHealthConne	07/18/2023	X	No	N/A	N/A	N/A	N/A	0.00	
<input type="checkbox"/>	[REDACTED]	[REDACTED]	[REDACTED]	%HS_Clinician %HS_PAAUserAdministrat HSGroup_NCHealthConne		X	No	N/A	N/A	N/A	N/A	0.00	
<input type="checkbox"/>	[REDACTED]	[REDACTED]	[REDACTED]	%HS_Clinician %HS_PAAUserAdministrat HSGroup_NCHealthConne		X	No	N/A	N/A	N/A	N/A	0.00	
<input type="checkbox"/>	[REDACTED]	[REDACTED]	[REDACTED]	%HS_Clinician %HS_Clinician %HS_PAAUserAdministrat %HS_PAAUserAdministrat HSGroup_NCHealthConne	06/14/2022	X	No	N/A	N/A	N/A	N/A	0.00	
<input type="checkbox"/>	[REDACTED]	[REDACTED]	[REDACTED]	%HS_Clinician %HS_PAAUserAdministrat		X	No	N/A	N/A	N/A	N/A	0.00	
<input type="checkbox"/>	[REDACTED]	[REDACTED]	[REDACTED]	%HS_Clinician %HS_PAAUserAdministrat HSGroup_NCHealthConne		X	No	N/A	N/A	N/A	N/A	0.00	
<input type="checkbox"/>	[REDACTED]	[REDACTED]	[REDACTED]	%HS_Clinician %HS_PAAUserAdministrat HSGroup_NCHealthConne	10/14/2019	X	No	N/A	N/A	N/A	N/A	0.00	
<input type="checkbox"/>	[REDACTED]	[REDACTED]	[REDACTED]	%HS_Clinician %HS_PAAUserAdministrat HSGroup_NCHealthConne	08/25/2022	X	No	N/A	N/A	N/A	N/A	0.00	

Users Found for Facility NCHealthConnex (click on a name to select):

Please note:

As facility PAA you are required to review and attest to activity no less than once a quarter for the previous quarter.

Activity for the current quarter will not be shown until the quarter is complete.

Please review the [NCHIEA User Access Policy](#) and the [NC HealthConnex Audit Reference Guide](#) for more information.

Days left in this quarter: 77

Date of last attestation: 2023-06-06 13:52:38

Quarter attesting to: Q3-2023

Attest to Audit

Close

- Found on the PAA Tools tab within the Clinical Portal.
- Lists all user accounts from your organization. Please check that all have been granted the correct user access.
- Review the number of times users have broken the seal to access patient records and the number of patient queries the user has completed.
- If you notice any unusual or suspicious user behavior, please contact the NC HIEA immediately at 919-754-6912 or HIEALegal@nc.gov.



Quarterly User Account Audit – The Attestation Form

ATTEST TO AUDIT ACTIVITY

By electronically signing this form, I acknowledge that:

- a) The information provided in the portal around user activity is accurate to the best of my knowledge; and
- b) I or my designee have requested that the SAS Help Desk team make the necessary changes to ensure that only currently active users employed by my HCO are included in the list and therefore have authorized access and use of the NC HealthConnex clinical portal; and
- c) I have reviewed the user activity information and confirmed it is acceptable under the participation agreement and applicable laws, and in the case of suspicious or aberrant activity, that all user anomalies have been, or will be investigated and appropriate action taken as necessary.

Type Name Here:

Current Date and Time: 2023-11-15 15:35:52



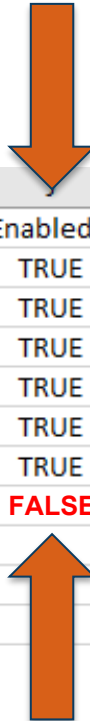
ATTESTATION CONFIRMED

Thank you for attesting to the portal activity for your facility.

This event will be logged, and an email will be sent to your email on file from Health Information Exchange Communications (DO NOT REPLY) (no-replies-hie@sas.com) with the subject "NC HealthConnex PAA portal user activity attestation". Please keep this email for your records.

Deactivating a User Account

If you wish to deactivate a user, ensure the user ID is correct and change the ENABLED column value to **FALSE**



	A	B	C	D	E	F	G	H	I	J	K
1	Facility	Facility Co	Roles	User ID	Last Name	First Name	Suffix	Email	Descriptio	Enabled	DSM Address
2	Richmond	RCHD	%HS_Clinician	DemoID1	Man	EMR		EMR.Man@RCHD.co		TRUE	DemoAccount@servcie.directaddress.net
3	Richmond	RCHD	%HS_Clinician	DemoID2	Duck	Donald		Donald.Duck@RCHD		TRUE	DemoAccount@servcie.directaddress.net
4	Richmond	RCHD	%HS_Clinician	DemoID3	Lady	Clinical		Clinical.Lady@RCHD.		TRUE	DemoAccount@servcie.directaddress.net
5	Richmond	RCHD	%HS_Clinician	DemoID4	Man	DSM		DSM.Man@RCHD.co		TRUE	DemoAccount@servcie.directaddress.net
6	Richmond	RCHD	%HS_Clerical	DemoCler	Doctor	Doctor		Doctor@RCHD.com		TRUE	DemoAccount@servcie.directaddress.net
7	Richmond	RCHD	%HS_PAAUserAdministrator	DemoAdn	Doctor	Another		Another.Doctor@RC		TRUE	DemoAccount@servcie.directaddress.net
8	Richmond	RCHD	%HS_Clinician %HS_PAAUserAdministrator	DemoAdn	Administr	Lady		Administrator@RCH		FALSE	DemoAccount@servcie.directaddress.net
9											
10											
11											

Disabling User Accounts

Select your request type and enter your request into the **Request Comments** field. Click **Submit Request to Help Desk** to send your request to the NC HIEA Help Desk team.

The screenshot shows a web form for submitting user management requests. It includes input fields for 'Last Name', 'First Name', and 'User ID', followed by 'Search Users' and 'Reset Search' buttons. A 'Request Type' dropdown menu is highlighted with an orange arrow pointing to a list of options: 'Create User', 'Update User', 'Enable User', 'Disable User', 'Reset Password', and 'Other'. Below this is a large 'Request Comments' text area, also indicated by an orange arrow. A red note states: 'Note: For all new user requests, upload a completed user management spreadsheet with your submission. (Sample File)'. A file upload section shows a 'Choose File' button and 'No file chosen' text, with an orange arrow pointing to the note. At the bottom is a 'Submit Request to Help Desk' button.

Guest Speaker: Demographics Data Quality



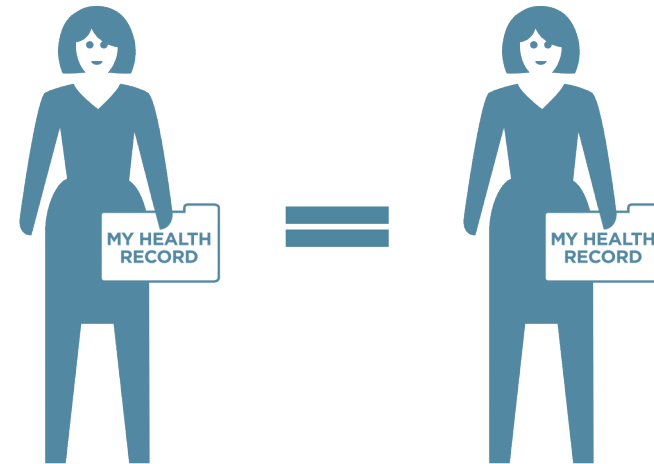
Sue Saul MPI Analyst

Sue Saul has been with NC HIEA since 2020. She supports the HSPI Master Patient Index, including ongoing tuning and other maintenance activities.

Sue has a B.S. in management information systems and a Master of Public Administration with more than a decade of experience working in non-profit and government environments.

Demographics and Patient Matching

- Terminology
- Data Elements
- Patient Matching Process
- Challenges
- Potential Impacts
- Best Practices
- Additional Considerations
- Questions and Contact Information



Terminology

MPI (Master Patient Index) - Unique group identifier for a patient's records across a variety of systems, settings and populations to enable a single, unified health record within NC HealthConnex.

HSPI (Health Share Patient Index) – A database within NC HealthConnex used to maintain consistent and accurate information about each patient.

MRN (Medical Record Number) – A unique number assigned by an organization or facility to an individual for identification purposes. In combination with the assigning authority and source facility, a medical record number should uniquely identify a patient. Medical record numbers should not be reused for multiple patients within the same assigning authority.

Assigning Authority - The entity which assigns a local unique patient identifier, typically a medical record number, that is sent to NC HealthConnex with each patient record.

Data Elements Used for Patient Matching

- First name
- Middle name
- Last name
- Date of birth (DOB)
- Social security number (SSN)
- Address
- Telecommunications (phone and email)
- Gender
- Insurance information (ex. Medicaid number, BCBS number)

- Race (*manual review only*)
- Parent/emergency contact (*manual review only*)



Patient Matching Process - Overview

For each new record:

- Normalize data elements
(ex. remove extra characters like “-” in social security numbers and phone numbers)
- Algorithm matching
- Manual review (if needed)



Patient Matching Process - Algorithm

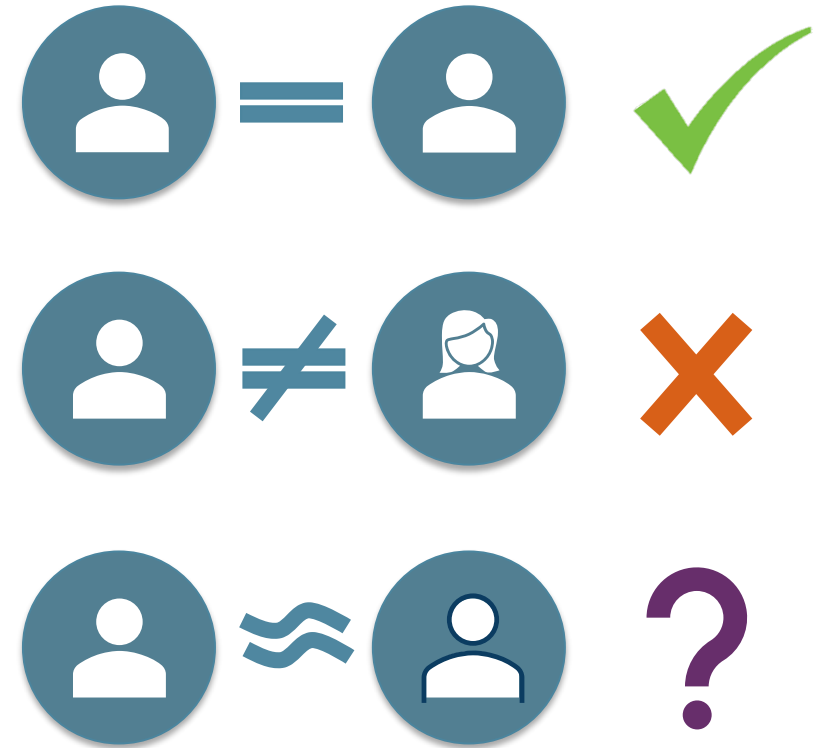
An internal algorithm compares data elements for record pairs to determine if both records refer to the same patient.

Record pairs with the same MRN and same Assigning Authority are matched regardless of demographics.

Three possible outcomes:

- Matched (same patient)
- Not matched (different patients)
- Undetermined (possibly same, score not high enough)

‘Undetermined’ record pairs move to the review queue for manual review.



Patient Matching Process – Manual Review

The NC HIEA MPI Analyst selects a record pair from the review queue and looks for errors in data entry (ex. misspellings, transpositions in DOB, SSN) and verifiable name changes or alternate names.

Manual review includes use of resources like:

- History of current records from all providers
- Free publicly available data sites
- Medical records (especially for minors)
- NC eLink

If a record pair cannot be resolved, the MPI Analyst will contact the provider(s) for either verification of the demographics or resolution of errors.

Challenges

Incomplete data – records without sufficient data may result in related records never being matched.

Misspellings – Kaila, Kayla, Kyla, Cayla, Kaylah sound like same person but could be multiples (twins, triplets, etc.).

Patient data comingled – Patient A and Patient B are registered at the same time and the SSN's are switched (usually with multiples or spouses).

One MRN with multiple names (usually siblings) – can be caused by registration errors or suboptimal practices

Non-standard newborn indicators with no connection to given name – Baby Girl 1 and Baby Girl 2 without the given name added later or both names in one record

Patients with same/similar names and DOB, no SSN and/or other identifiers (often in institutional settings)

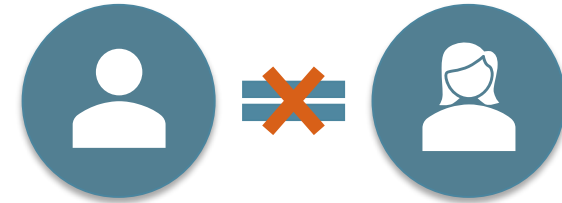
Patients experiencing homelessness with various addresses/phones, no SSN and/or other identifiers

Minors (no public data available)

Potential Impacts of Demographic Data Quality Issues

Unrelated records matched (multiple patient records incorrectly joined):

- Incorrect diagnoses
- Labs results attributed to wrong patient
- NC*Notify alerts for wrong patient



Related records separated in multiple MPI (incomplete patient record):

- Missing history and/or test results
- Unnecessary repetition of tests/procedures
- Missed NC*Notify alerts



Best Practices

- Ask the right questions: Is ‘...’ still the best address/phone, etc?; Is ‘...’ your emergency contact?
- Verify spelling: If a name is unfamiliar, has various spellings (ex. Shawn, Shaun, Sean) or verbal communication is difficult, use identification such as a driver’s license or insurance card to capture the legal full name; if none of these are available, ask the person to write it down.
- Include full first and middle names rather than using initials (in some cultures, siblings may have the same first name, but a different middle name).
- Double-check the data fields to avoid name transposition (Smith Mary vs Mary Smith) or other typos.
- Partial SSN (last 4 digits) is better than no SSN (ex. 2252); leave blank if none is available. If your EHR requires entry, enter the same digit (ex. 111-11-1111) for clarity.

Best Practices

Trauma patients and newborns:

- Update the name and date of birth as soon as possible.

Multiple births/siblings:

- Double-check which child's information is being entered.

Trauma patients:

- For trauma patients with an unknown DOB, use an obvious temporary DOB (ex. 1/1/1888).
- Avoid reusing trauma names (these alternate names are part of patient matching).

Patients experiencing homelessness:

- If the patient is in a shelter, use the shelter's address.
- If they are unsheltered, use an indicator like "Homeless" or "No permanent address" in the street line; enter city & state fields.
- Do not use the medical provider's address.
- It is very helpful to get an email address since address and phone will vary.



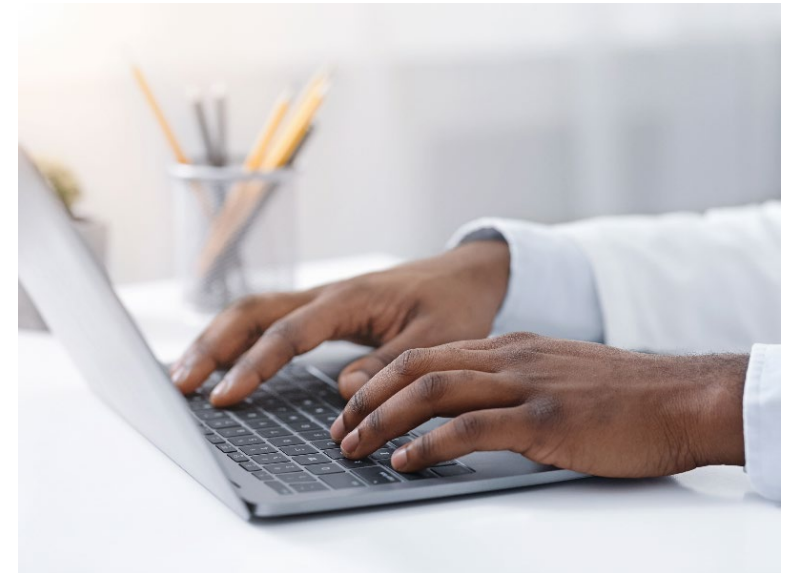
Additional Considerations

Are patient updates, deletions and merges sent to NC HealthConnex via ADT feed?

Notify the NC HIEA (HIESupport@sas.com) about:

- Facility additions or closures
- Personnel changes for roles like PAA or IT contact
- Changes in Electronic Health Record vendors
- Modifications to MRN format
- Field reconfiguration

(ex. Sending MRN in field 13 rather than 14)



Questions and Contact Information

Sue Saul

MPI Analyst, NCHIEA

susan.saul@nc.gov

919-754-6597

Thank You!

Questions or feedback?

919-754-6912

www.nchealthconnex.gov

hiea@nc.gov

Technical Issues:

SAS NC HealthConnex Help Desk

HIESupport@sas.com

Phone: 919-531-2700 or Toll Free: 800-727-0025