



NORTH CAROLINA HEALTH INFORMATION EXCHANGE AUTHORITY

NC HIEA Advisory Board Meeting March 21, 2022, 2:00-5:00 pm





The Health Data Utility Model

A Vision for the Future of Statewide Health Information Exchange

Civitas Networks for Health

The largest network of its kind in the country, Civitas Networks for Health represents local health innovators sharing and using data to improve outcomes.

Our Guiding Principles

- ✓ We believe the best solutions come from data informed, multi-stakeholder input.
- ✓ We strive for win-win solutions recognizing that change is required by all.
- ✓ The status quo of our health care system is not acceptable in terms of its quality, safety or cost.
- ✓ We commit to advancing health equity for all.





Our Mission

Civitas Networks for Health convenes action-oriented thought leaders and implementers at the local, regional, state, and national level. To achieve our mission, we drive cross-sector, multi-stakeholder, and data-informed initiatives by:

- ✓ Increasing collaboration and shared learning within and across communities that use data to ensure better health outcomes and drive health equity.
- ✓ Educating public and private entities regarding the benefits, functions, and roles of Health Information Exchanges (HIEs), All-Payer Claims Databases (APCDs), Regional Health Improvement Collaboratives (RHICs), and combined organizations.



Health Data Utilities

Civitas' Emerging Definition

Health Data Utilities (HDUs) are statewide entities that combine, enhance, and exchange electronic health data across care and services settings for treatment, care coordination, quality improvement, and public and community health purposes. They enable specific, defined use cases, with extra protections to ensure patient privacy and appropriate data use.





Health Data Utilities

How are HDUs different?

HDUs emphasize multi-stakeholder organizational, use case, and data governance with an emphasis on public health. Most will be designated non-profit organizations or independent state agencies. In all cases, state and stakeholder governance, oversight, and accountability is paramount. HDUs are flexible and uniquely capable of meeting state-specific health data needs.





Necessary Conditions for HDUs

- State policy levers including incentives and/or mandates
- Broad stakeholder participation, connectivity, exchange, and community-level engagement
- Mature use cases in place for Medicaid and public health
- Multistakeholder, transparent corporate and data/network governance
- High standards for data privacy, security, and quality going beyond the baseline of state and federal laws



HDUs Should Build on Existing Infrastructure

- Most states have existing infrastructure in place for clinical data exchange, including regional and statewide HIEs. This technical and relationship infrastructure should be strengthened.
- States without an organization or organizations capable of meeting HDU requirements should be eligible to apply for a planning grant to build these capabilities.
- Most states do not yet have interoperable infrastructure in place for collecting and sharing social care data. States should be eligible to apply for funding to include social care data infrastructure and multi-sector data aggregation.



Sample Use Cases

Access

Query health records based on permitted purposes, including relevant public health data

Care Delivery

ADT/event notifications, alerting, lab results, prescription drug monitoring, imaging, overdose alerts

Social Care

Referral management, resource directories, social determinants of health referrals

Public Health

Enhancing immunization and other disease registries, facilitating reporting and notifiable conditions, heat maps, situational awareness

Consumer

Patient education, individual access, patient-generated data

Quality

Reporting, analytics, benchmarks, provider dashboards



In Summary: What Can HDUs Do?

- HDUs break down data silos; they combine data to enhance data.
- HDUs deliver data back to clinicians and other providers in the field, engaged in care delivery, care coordination, and public health activities.
- They create comprehensive data sets that can enable communities to prepare, respond and make critical improvements in health, health care, public and community health.
- They foster whole-person care and reduce provider burden of additional reporting requirements.
- They leverage existing infrastructure, displaying the critical application and responsible use of federal funds.



PREVENT Pandemics Act

- Senate HELP Committee passed the PREVENT Pandemics Act Tuesday 3/15/22 and held votes on several amendments
 - No amendments relevant to Civitas were offered/considered
 - Committee voted 20-2 to favorably report the bill as amended – Paul and Braun voted NO
- Civitas' supported language changes were included in the Manager's Amendment:
 - HELP members supported Civitas's requests
 - Sec. 201 expanded definition of eligible entities in addressing SDOH
 - Sec. 213 included HIEs around activities related to information sharing
- Alignment with the House and timing is TBD (hearing Thursday)
- Full Senate floor vote is TBD, likely attaching to FDA user fee legislation.





PREVENT Pandemics Act – Key Changes

TITLE II—IMPROVING PUBLIC HEALTH PREPAREDNESS AND RESPONSE CAPACITY

SEC. 310B. IMPROVING INFORMATION SHARING AND AVAILABILITY OF PUBLIC HEALTH DATA.

(a) IN GENERAL.—The Secretary may, in consultation with State, local, and Tribal public health officials, carry out activities to improve the availability of appropriate and applicable public health data related to communicable diseases, and information sharing between, the Director of the Centers for Disease Control and Prevention, the Assistant Secretary for Preparedness and Response, and such State, local, and Tribal public health officials, which may include such data from—

"(1) health care providers and facilities;
"(2) public health and clinical laboratories

"(3) health information exchanges and health information networks; and

SEC. 317V. ADDRESSING SOCIAL DETERMINANTS OF HEALTH AND IMPROVING HEALTH OUTCOMES.

(b) ELIGIBLE ENTITIES.—To be eligible to receive an award under this section, an entity shall—"(1)(A) be a State, local, or Tribal health department, community-based organization, Indian Tribe or Tribal organization (as such terms are defined in section 4 of the Indian Self-Determination and Education Assistance Act), urban Indian organization (as defined in section 4 of the Indian Health Care Improvement Act), or other public or private entity, as the Secretary determines appropriate; or "(B) be a consortia of entities described in subparagraph (A) or a public-private partnership, including a community partnership;







www.civitasforhealth.org











NORTH CAROLINA HEALTH INFORMATION EXCHANGE AUTHORITY

NC HIEA Advisory Board Meeting March 21, 2022, 2:00-5:00 pm Morgan Lambe, SAS Institute



Proposed Advisory Board Measures

Q1 2022



Background

- NC HealthConnex regularly monitors many <u>operational measures</u> to ensure our system is healthy and our Participants are getting what they expect.
 - Example: Number of patient queries to NC HealthConnex from Participant EMRs.
- We also monitor <u>performance measures</u> where a goal is identified, and we may need to change our actions to improve performance.
 - Example: All NC Hospitals connected to NC HealthConnex
- We are proposing a set of operational and performance measures that will be presented regularly to the Advisory Board. Our intent is these measures <u>foster</u> <u>conversation on opportunities to improve utilization and enhance service offerings</u>.



Strategies

To be meaningful and action-able, we recommend each measure be aligned to one or more of the strategies described below:

- 1) **Growth** NC HealthConnex will continue to grow in number of Participants and in breadth of data collected
- 2) Utilization NC HealthConnex services are meeting current needs, and additional services are being identified to address opportunities
- 3) Impact NC HealthConnex is improving quality of care and efficiency



Current Statewide Coverage

Medicaid

82% of patients eligible for Medicaid have data in NC HealthConnex

Patients eligible for Medicaid 2,732,330 as of **March 1, 2022**

Patients found in NC HealthConnex 2,256,557

State Health Plan

95%
of State Health Plan
members with data in
NC HealthConnex

State Health Plan Members 569,658 as of **February 28, 2022**

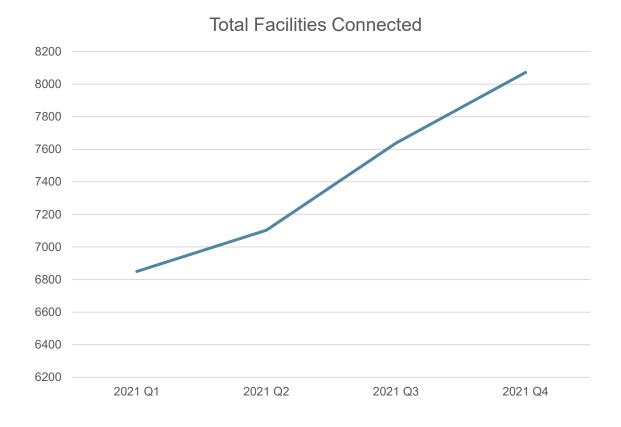
Patients found in NC HealthConnex

543,616

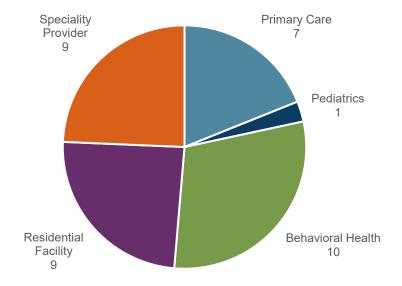
Note: Slide presented at the March 21,2022 meeting did not correctly report State Health Plan membership metrics. A retraction is noted on publicly-available slides from this meeting. NC HIEA expects to provide updated metrics aligned with State Health Plan at future meetings.



Connection Status Update



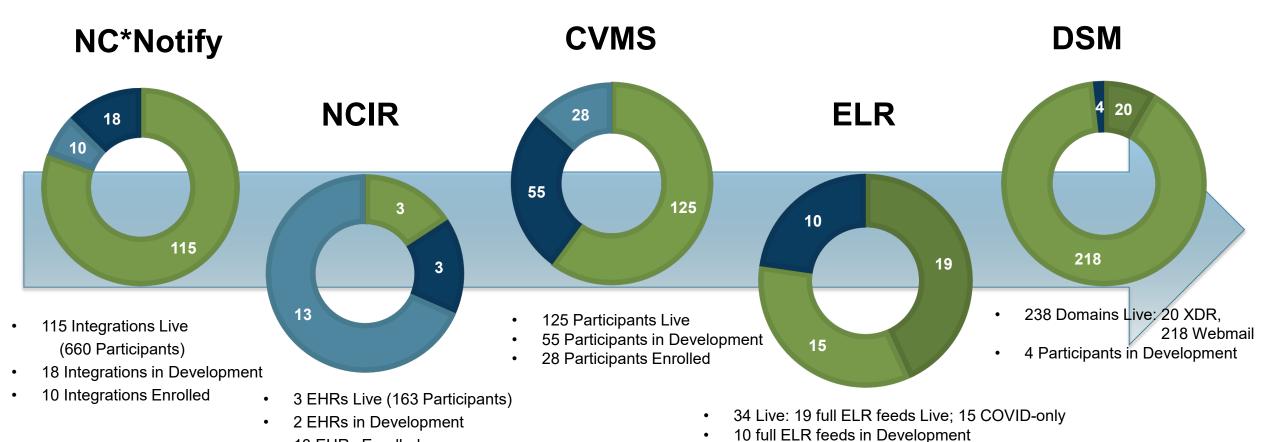
Metric Details		
Facilities Connected	2022 Q1 Cumulative Total	36
includes tech connection complete, but not live	Cumulative All Time	8,109





Enrollment in Services

13 EHRs Enrolled





Review Proposed Measures Using:

- Brief Description of the Measure
- Strategy the Measure aligns to
- How we expect the Measure will be used by the Advisory Board

We welcome input on all proposed measures.

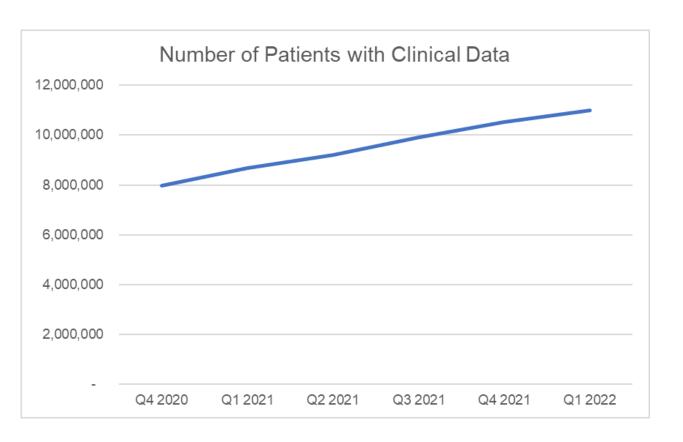
NOTE: Some proposed measures are for display purposes only and do not represent the full calculated measure.

These will be clearly noted with the following label:

NOTE: Numbers shown are for display purposes.



Number of Patients with Clinical Data Over-Time



Description	Number of unique patients with clinical data (HL7 and/or CCD), trended 18-24 months
Strategy	GROWTH
How to Use	Understand if the HIE population continues to grow over-time Strategic planning to support growth, e.g. resource and technical requirements



Clinical Data Content

• Encounters: 340M

Diagnosis: 722M

Medications: 375M

Lab Results: 289M

Immunizations: 72M

Allergy: 20M

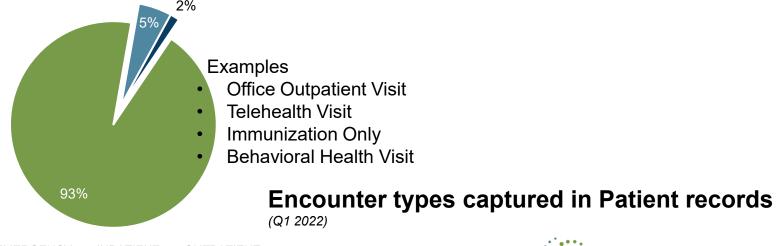
Procedures: 214M

• Vitals: 526M

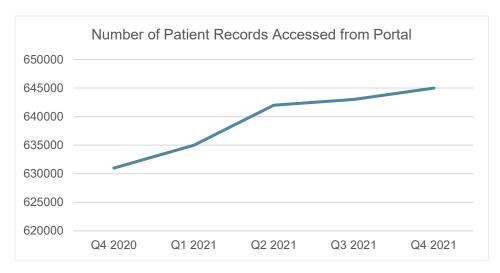
Description	Clinical concepts represented in Patient records Distribution of clinical encounters by Encounter Type – Inpatient, ED, Other
Strategy	GROWTH
How to Use	Describe the breadth of data available to stakeholders

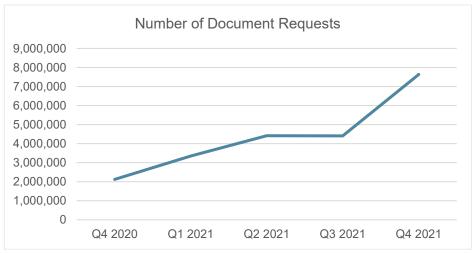
Clinical Data Volume

(as of March 2022)



Proposed Measures Patient Records Accessed from Portal and EHRs





Description	Number of patient records accessed from the NC HealthConnex Provider Clinical Portal, trended 18-24 months Number of requests to retrieve documents by NC HealthConnex Bi-
	directional and eHealth Exchange Participants, trended 18-24 months
Strategy	UTILIZATION
How to Use	Identify areas of under-utilization and advise on strategies to improve

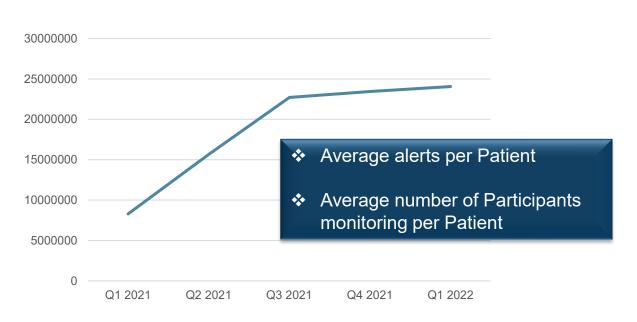
NOTE: Numbers shown are for display purposes.



Proposed Measures NC*Notify Utilization

NC HealthConnex

Total number of Patients monitored



Description	Number of patients being monitored, trended 18-24 months Number of Organizations live on NC*Notify
Strategy	GROWTH, UTILIZATION
How to Use	Ensure continued growth of the NC Notify service Identify areas of under-utilization and advise on strategies to improve

Total number of organizations Live on NC*Notify
(as of March 2022)

NOTE: Numbers shown are for display purposes.

660 Live Participants

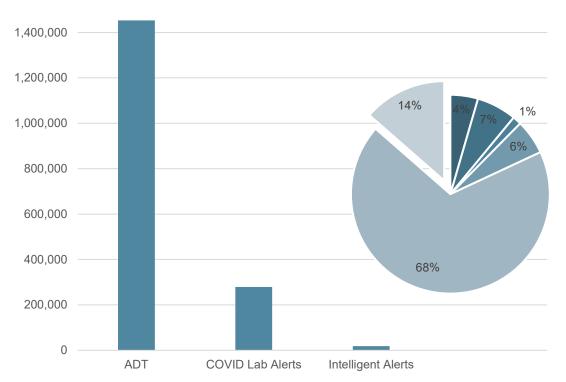


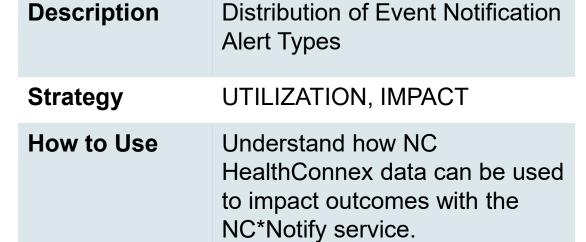
Proposed Measures NC*Notify Utilization

Event Notifications Powered by NC HealthConnex

Event Notification Alerts

(Feb 2022)





4% Dental

7% Diabetes

1% High Utilizer

■ 6% PreDiabetes

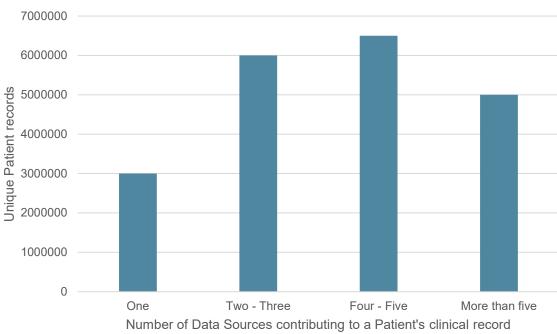
• 68% Care Team Change

 14% Multiple Chronic Conditions



Care Continuum: Patient Records Across Sources





Description	Number of Sources Contributing to Unique Patient Records
Strategy	GROWTH, IMPACT
How to Use	For communicating the benefit that NC HealthConnex brings supporting care coordination and providing access to data that crosses multiple Participant's systems.

NOTE: Numbers shown are for display purposes.



Use Case Measures

We recognize the need to provide use-case specific information that may explain or drill-down in measure results.

Potential examples of Use Case Measures:

- Explore the distribution of Payer Type associated with Encounters in NC HealthConnex.
- Top chronic conditions of Patients whose data has been contributed by more than one source.
- Identifying missed notification opportunities, alerts that could have been generated due to an event, but no one was subscribed to that Patient.
- Detailed information on Data Extract projects.







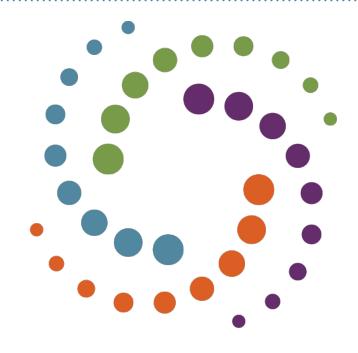
NORTH CAROLINA HEALTH INFORMATION EXCHANGE AUTHORITY

NC HIEA Advisory Board Meeting March 21, 2022, 2:00-5:00 pm Christie Burris, NC HIEA



Operations Update

- 1. Legislative Report, Connectivity and Outreach Update
- 2. Operating Budget Fiscal Year 21/22
- 3. Q2 Activities





Legislative, Communications & Outreach Update

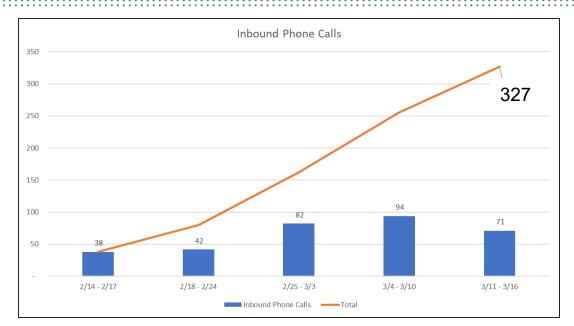
- March 21 NC HIEA Report Submitted to HHS JLOC
- March 25 Budget expansion requests due; finalizing NC DIT short session priorities
- April 4-6 Members return then adjourn until May 4-6
 (Anticipating 1-2 potential JLOC IT meetings to be scheduled in the month of April; if JLOC meetings are not scheduled, NC DIT will schedule individual meetings to preview priorities)
- April 10-16 Agency bill language to be finalized for submission to members/bill drafting – Governor's budget anticipated near end of April
- May 18 Short Session Convenes
- June 30 Short Session Adjourns

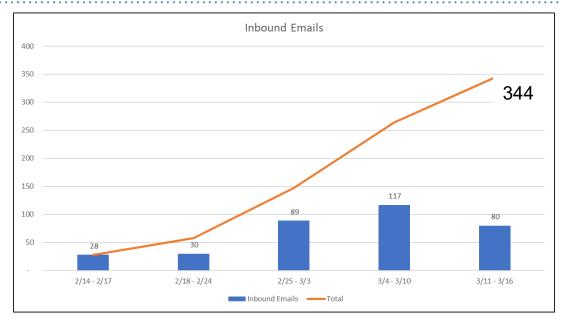


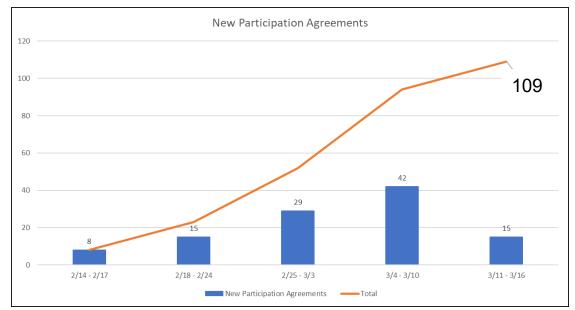
Outreach Communications Background:

- Data tracking for this outreach effort started on 2/14/2022.
- Data within this report is through March 16.
- A total of 28,395 letters and emails were sent to providers between February 14 and March 7.
 - 8,799 letters
 - 19,596 emails
- Phone call and email totals represent a combined total between the NC HIEA and SAS Help Desk teams.











Common Themes

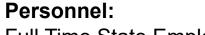
- Many calls relate to providers already in the process of connecting.
- Some calls relate to providers that:
 - are unaware of the mandate/not previously engaged,
 - no longer treat Medicaid/SHP patients, or
 - closed their practice.
- As suspected, we are finding that some providers received letters/emails in error due to data attribution of provider to entity affiliation based on the data sets used by the NC HIEA to perform the analysis.



NC HIEA 2022 Operational Budget



NC HIEA FY 21/22 State Budget (July 1-June 30 General Fund Appropriations)



Full Time State Employees -\$2,087072.00

Contractors - \$644,314.00

Vendor Contract:

SAS-\$10,250,000.00

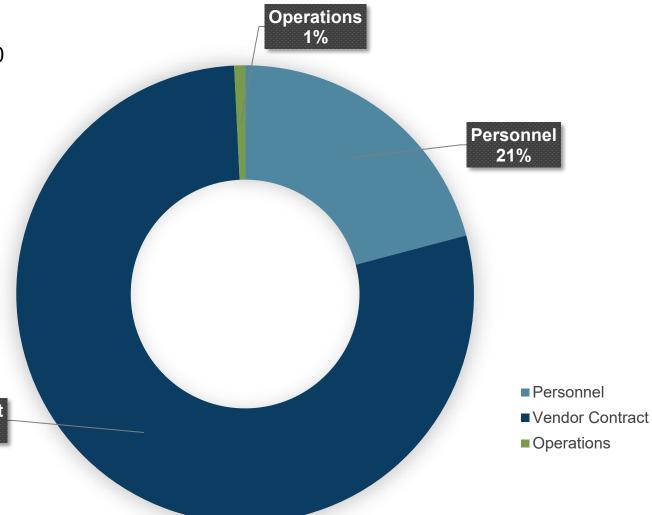
Operations:

\$100,336.00

Total General Fund Appropriations:

\$13,081,722.00

Vendor Contract 78%





NC HIEA Additional CY 2022 Funding from Federal/Grant Funds

Population Health:

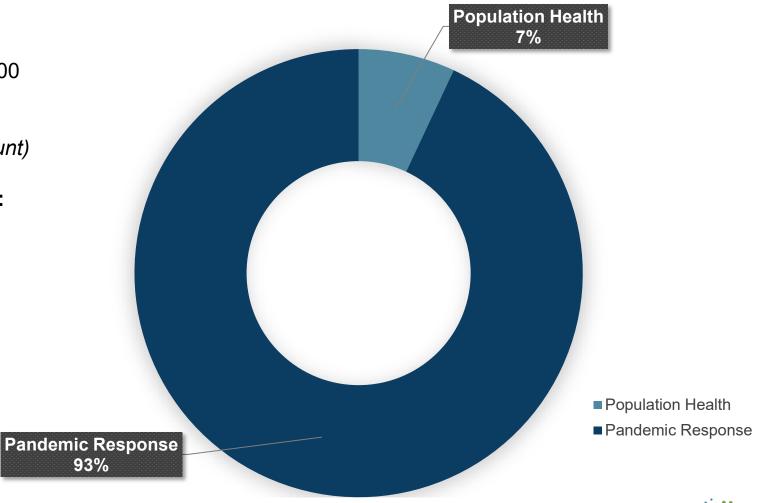
Stroke Registry-\$300,000.00

Pandemic Response:

\$4,000,000.00 (up to amount)

Total Additional Funding:

\$4,300,000.00 (up to)





NC HIEA Additional CY 2022 Medicaid Analytic Funding

General Fund Appropriations:

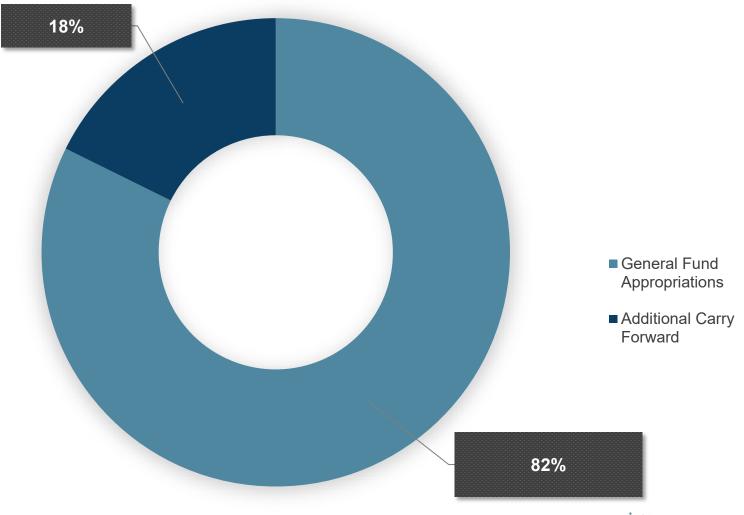
\$250,000.00

Additional Carry Forward:

\$53,760.00

Total Medicaid Analytic Funding:

\$303,760.00





NC HIEA Vendor Funding CY 2022

NC HIEA/SAS Contract CY 2022:

\$10,250,000.00

Hosting Infrastructure – 40%

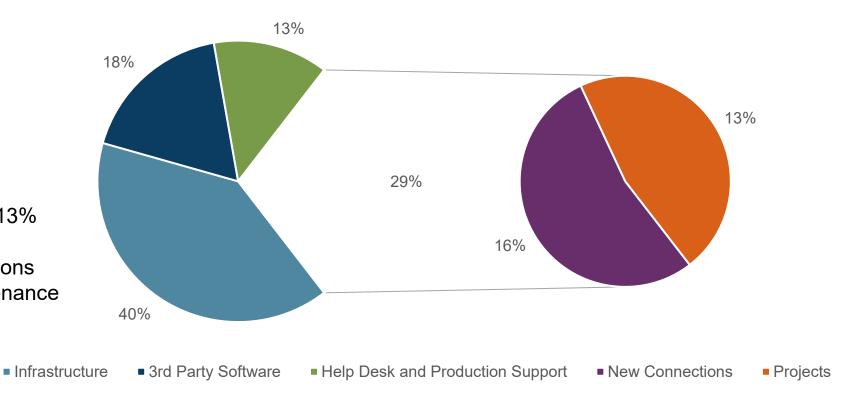
3rd Party Software – 18%

Help Desk/Production Support – 13%

New Development: 29%

15% - new participant connections

13% - new project work/maintenance





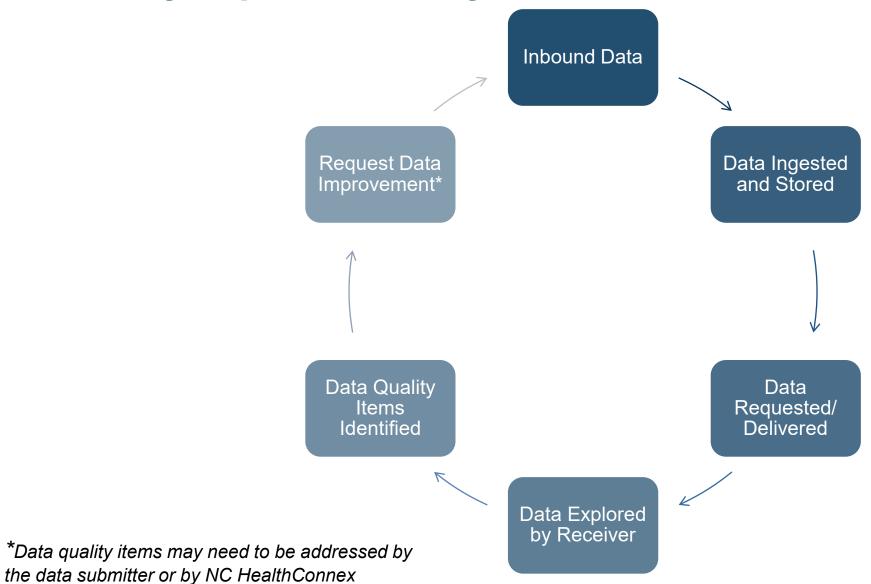
Quarter 2 2021 Activities:

- Staffing Compliance Officer, Outreach Specialist, Data Quality Analysts, Applications Systems Specialists
- Preparation for Legislative Short Session
- Outreach Presentations planned for the Providers Council and NC TIDE in April,
 NC HIMSS in May, i2i in June
- Data Connections ambulatory clinics, Medicaid claims, pharmacy pilot, SNF pilot, Epic pop health queries
- Data Retention Planning
- Data Quality Dashboard Enhancements
- HSPI Tuning
- Medicaid Priority Data Elements, 834 Eligibility File and NCQA DAV planning
- Stroke Registry Development
- CVMS, NCIR & IDDHUB
- Use Case Work Group reconvening April/May





Data Quality Improvement Cycle





Data Quality: Types of Issues

- Missing/incomplete data from data sources
- Clinical workflow issue
- EHR configuration issue
- Inaccurate or unstructured data
- Local codes as opposed to standard codes
- Unexpected source system changes, such as EHR upgrades or migrations
- Changes in Healthcare IT standards, such as the progression from USCDI v1 to USCDI v2



State of Data Quality

20200.1

2020/2021 V1 2021 V2

2022 V3

- Data Target finalized with data element-level expectations for HIE Participants.
- Review of Hospital Place of Service reporting completed.
- Data Quality integrated in onboard materials

 Creation of the Data Quality Dashboard to easily view Participants' data elements with % populated and export to provide report to Participants

- USCDI Webinars
- Creation of Jira Ticketing System
- 1:1 Calls with the Participants to review Data Quality Scorecard
- Iterative working sessions/emails with the Participants to improve Data Quality/Place of Service

- Data Quality Dashboard Enhancements
- Data Target Refinement
- Code Normalization Pilot
- Continuation of Place of Service improvements
- NCQA DAV Certification
- Enhance Data Quality
 Participant Feedback Loop



Questions?

