



NORTH CAROLINA HEALTH INFORMATION EXCHANGE AUTHORITY

NCIOM Serious Illness Task Force:
*Role of Technological Solutions to Address
Communications Challenges in Serious Illness Care*
July 12, 2019

Christie Burris, NC HIEA Executive Director



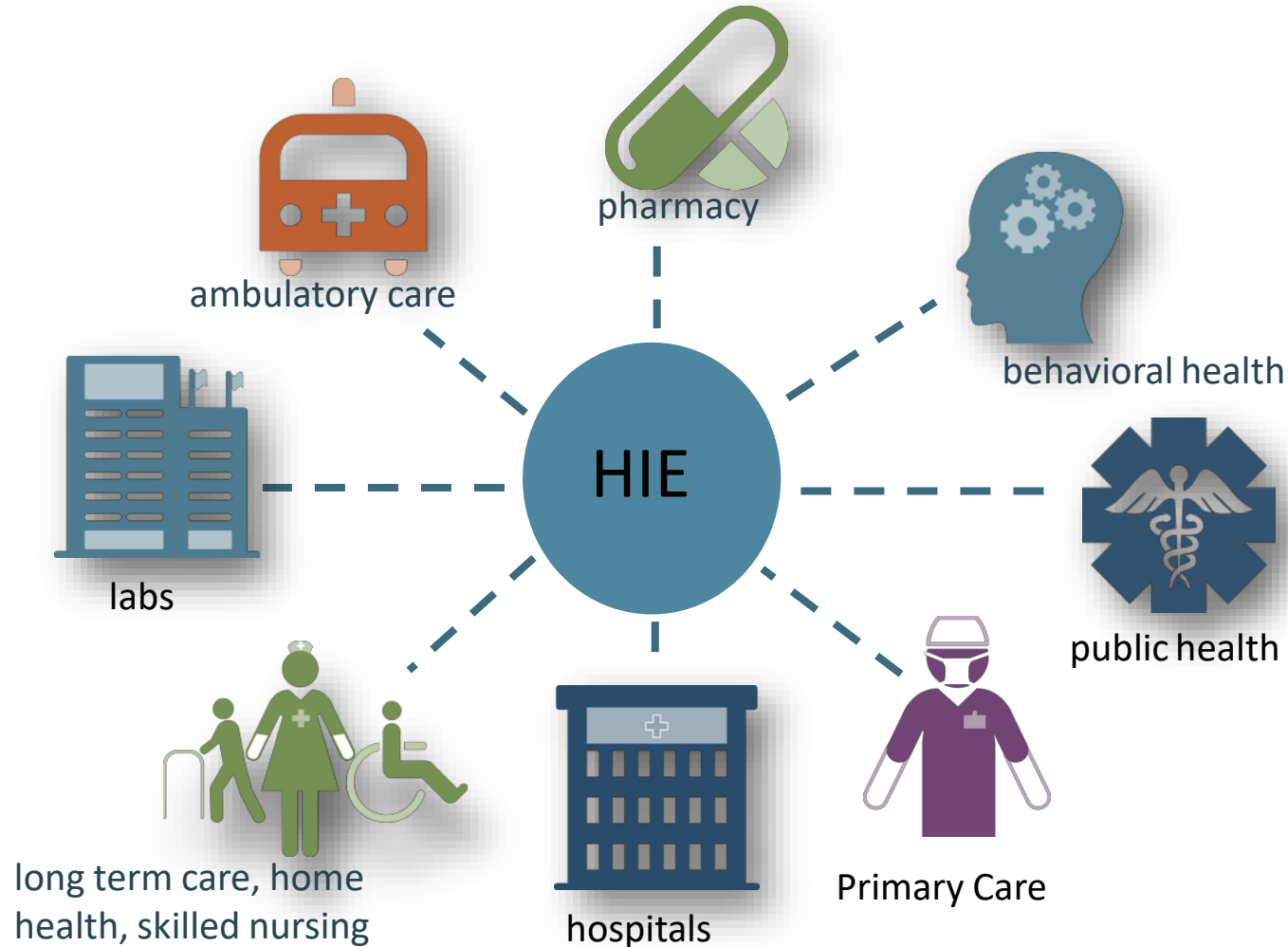
What We Know

“... because as we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns — the ones we don't know we don't know.”

Donald Rumsfeld

What is Health Information Exchange (HIE)?

A Health Information Exchange (HIE) is a secure, electronic network that gives authorized health care providers the ability to access and share health-related information across a statewide information highway.



Who Are We?

We connect health care providers to safely and securely share health information through a trusted network to improve health care quality and outcomes for North Carolinians.



STATE DESIGNATED



SECURE



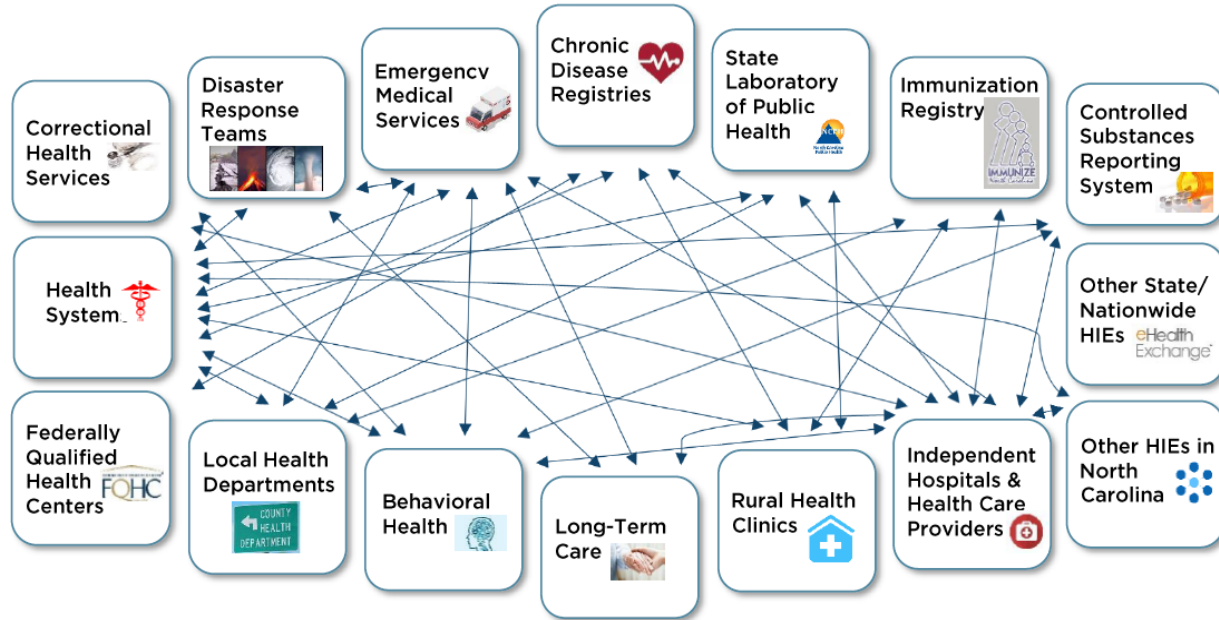
PARTNERSHIP

NC HealthConnex, By the Numbers:

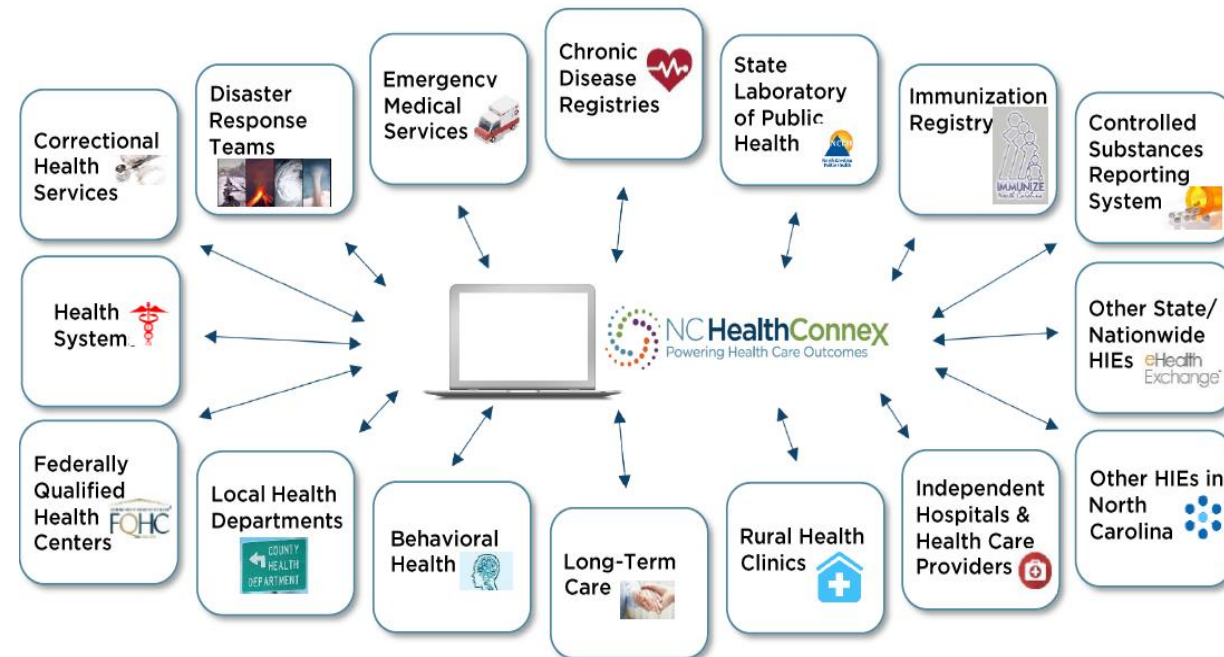
- Over 40,000 providers with contributed health records
- 4,500 plus health care facilities live submitting clinical and demographic data, including 97 hospitals
- 5,000 plus health care facilities in onboarding
- 52 million+ continuity of care documents(CCDs)
- 700,000 messages received per day (HL7 and CCD)
- 7M+ unique patient records
- Over 150 unique EHRs engaged
- 6 border and intra-state HIEs connected, including the VA (DoD is in process)



Health Care Communications Without NC HealthConnex



Vision for Health Care Communications With NC HealthConnex, 2021

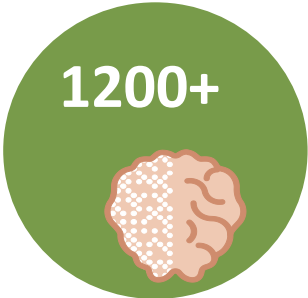


Types of Provider Facilities Connecting

Total number of facility types = onboarding + live in production



Primary Care



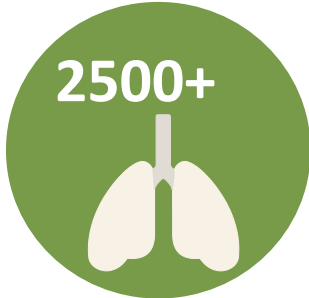
Behavioral Health



Hospitals



Public Health/FQHC



Specialists



Eye & Dental

Home & Hospice Care



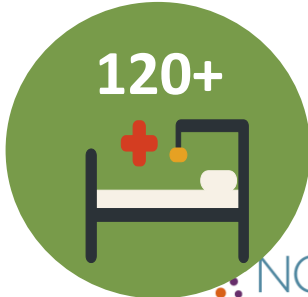
Skilled Nursing



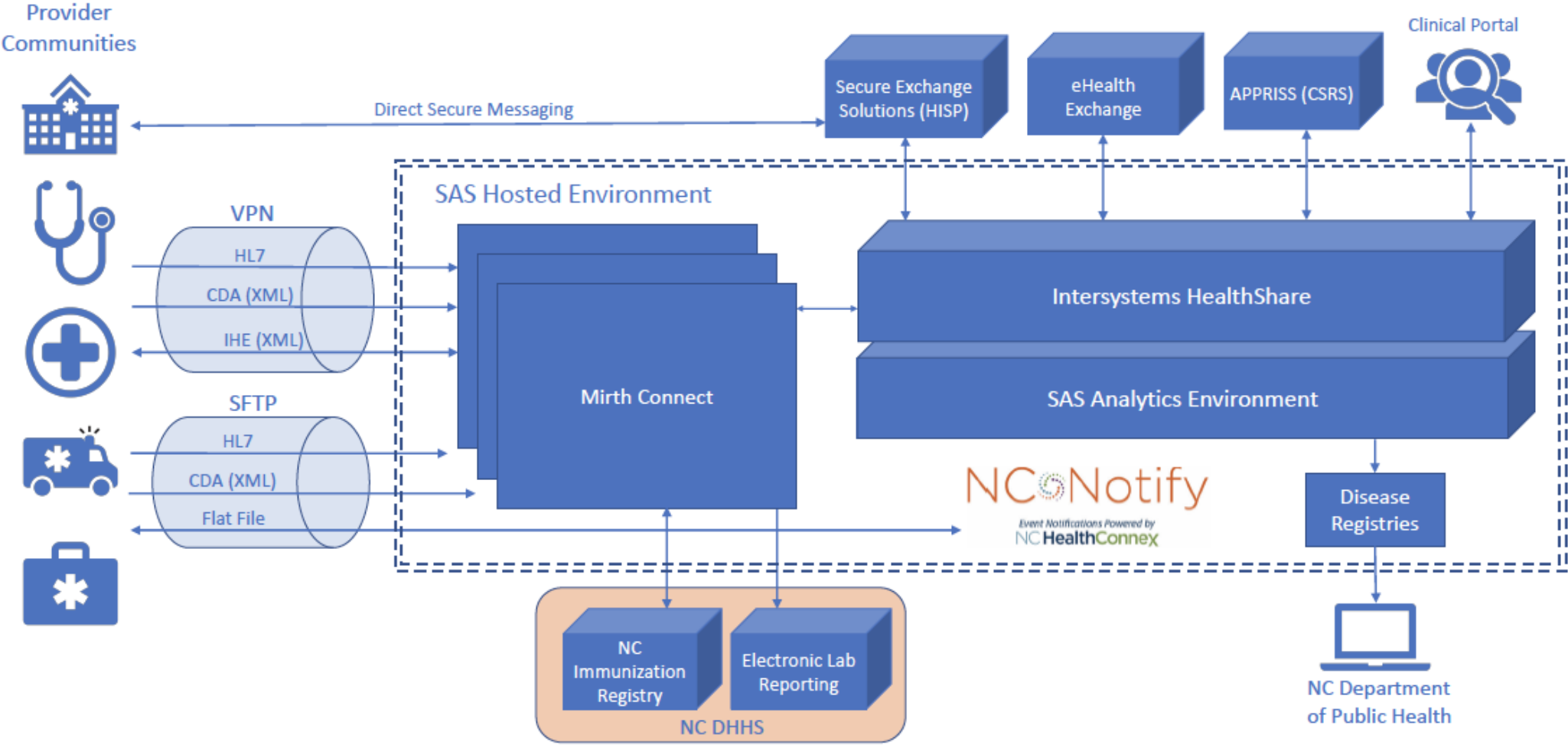
Long-term Care



Assisted Living



NC HealthConnex Ecosystem



- Future Possibilities:
- Chronic Disease - Cardiovascular, Stroke, Asthma
 - Cancer
 - Care360
 - POLST???

Challenges for Serious Illness Care:

- Ease of Access to timely Clinical Data to Care for Seriously Ill Patients
- Communicating, Storing and Accessing Advanced Care Planning Documents

NC HealthConnex provides patient records via a web-based clinical portal and/or EHR-integrated back into the workflow – providing a longitudinal, more complete health record whenever and wherever needed.



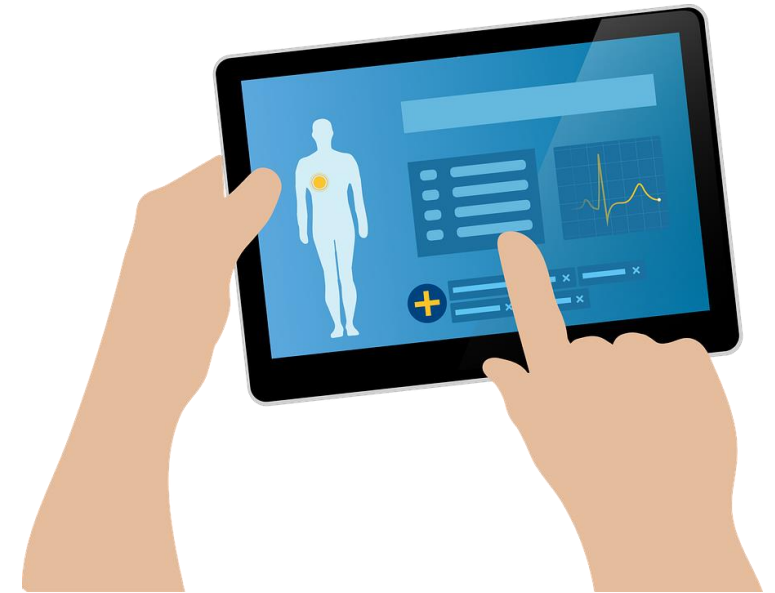
Literature review shows that between 30-45% of adults have executed an ACP, but a much smaller number are known to be available “whenever and wherever needed.”

Source: NCIOM Serious Illness Task Force



NC HealthConnex Clinical Portal: Overview

- **View the longitudinal patient record:**
 - Demographics
 - Allergies/Alerts (alerts of Advance Directive present here)
 - Encounters
 - Medications
 - History
 - Conditions
 - Procedures/Results
 - Vaccinations
 - Documents/Clinical Notes (Progress Notes, Discharge Summaries, etc.)
- **Direct Secure Messaging (DSM)**



NC HealthConnex Clinical Portal: User Testimonials

“I was able to confirm that a patient of mine who had **several outstanding referrals** to different care organizations had not rescheduled her appointments as planned – this saved time for me and the medical records staff from having to log into three separate Epic systems to get the same information.”

Independent Physician’s Office

“I use the portal to look up labs, test results, consult notes from other providers for quality reporting. This data is provided to insurance companies and other agencies. I also use it to see if the patient has changed practices or has seen specialists. It provides an accurate picture of where the patient has been in their health care journey, while saving valuable time and research.”

FQHC Case Manager

“At the Open Door Clinic, we see many **patients that have visited the ED and have been hospitalized for chronic medical conditions**. The documents we receive directly from NC HealthConnex allow us to have all of the information we need at our fingertips. **There is no interruption of work flow to request records, rescheduling patients until we have all of the information we need, or even having to track down specialist referral notes.**

Those providers are in the system and are sending the data that we need via NC HealthConnex! The other side to this is the **ED and hospital providers have access to the information we are sharing since our doctors are not on call at all hours**. The continuity of care is incredible! We Love it!”

*Mandy Horner, RN, BSN – Clinical Director for the Open Door Clinic
dba Urban Ministries of Wake County*



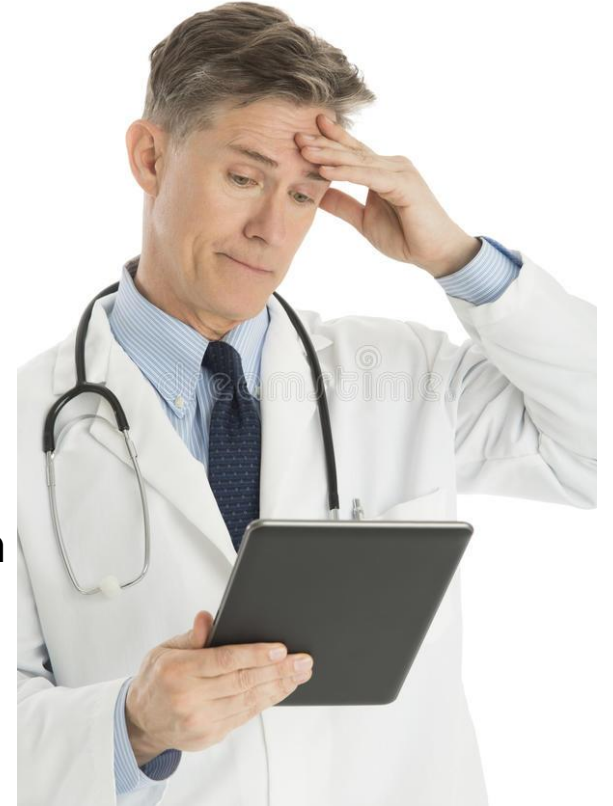
Challenges for Serious Illness Care:

- Care Coordination

Data and Health IT:

- Interoperability between EHRs remains an issue for communication between the palliative care team and other clinicians
- There is a need for near real-time data for care management, such as from HIEs

Source: June 2019, Health Affairs, ACO Serious Illness Care: Survey And Case Studies Depict Current Challenges And Future Opportunities



NC HealthConnex Event Notification Service

- Subscription-based service to notify Providers as their patients receive services across the care continuum – spans geography, hospital systems, acute and ambulatory care settings, etc.
- Custom lists allow cohorts of Patients tuned to Providers' interest
- Custom delivery methods to integrate into Provider workflows



Notifications

NC*Notify - How It Works

Step 1

Participant Submits Patient File for NC HealthConnex to Monitor

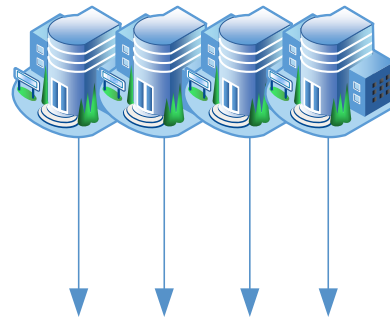
Technical Details

- Flat file with patient demographics
- Sent via sFTP/DSM



Step 2

Other Participants Submit Admission & Discharge Messages (ADT)



NC HealthConnex
Powering Health Care Outcomes

Step 3

Participant Receives Notification File

Technical Details

- Flat file with patient Demographics and visit details
- Sent via sFTP/DSM
- Participant defines delivery schedule



NC*Notify Current State

| Patient Panel |
|------------------------|
| Organization |
| Patient ID (MRN) |
| Patient Name |
| Date of Birth |
| Gender |
| Address |
| Phone |
| SSN |
| Drivers License # |
| Primary Care Physician |
| Custom Fields |

Current Metrics

- ✓ 400,000 Patients Tracked
- ✓ 97 Facilities in queue
- ✓ Most receiving daily files
- ✓ Most updating panels weekly

| Notification Content |
|------------------------|
| Patient Info |
| Event Date |
| Date Received |
| Event Type |
| Patient Class |
| Participant Feed |
| Facility |
| Diagnosis |
| Visit Number |
| Discharge Disposition |
| Discharged To Location |
| Death Indicator |
| Date of Death |

Notifications

Benefits - NC*Notify

- Providers are notified when their patients have received care in other care settings
 - Pull updated patient record via HIE
 - Schedule required follow-ups
 - Reconcile new medications
 - Ensure adherence to discharge instructions
- Insight to provide continuity in care to **reduce avoidable readmissions**
- Insight to **achieve financial goals** under value-based care contracts
- Utilize for compliance with state and federal quality initiatives, including Meaningful Use/Promoting Interoperability

Use Case Reports

“The emergency ADT feed from NC Notify I reviewed yesterday was **timely** and when I went into HealthConnex to pull the CCD I was able to get some valuable information regarding the physical condition of the client which could then be **shared with the direct care staff** in the program as the guardian failed to let us know when she dropped the child off for treatment.”

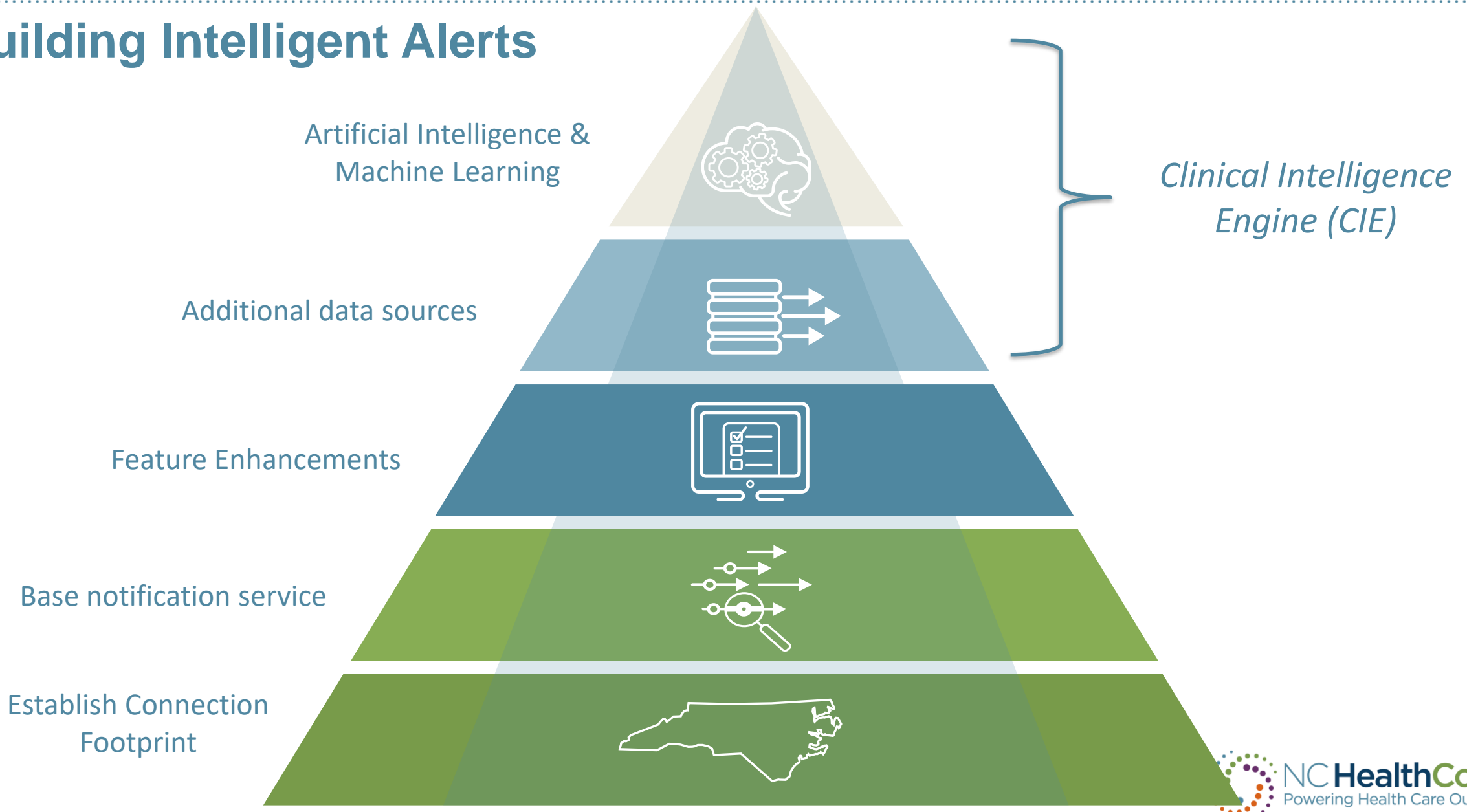
-Behavioral Health Agency

“With services like NC*Notify – the entire care team can have much-needed information to keep patients safe during the riskiest times: when they **transition between one care entity and another.**”

- FQHC Participant

A large hospital system is utilizing NC*Notify to gain insights into other facilities **in their system** that are not on the same EHR as well as for feeding of **downstream care management dashboards.**

Building Intelligent Alerts



Beyond ADT Notifications

