



Quality and Patient Safety Technology:  
NC Health Connex (NC Health Information Exchange)



## NORTH CAROLINA HEALTH INFORMATION EXCHANGE AUTHORITY

NC HealthConnex Training  
Critical Access Hospital Meeting  
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# North Carolina Health Information Exchange Authority

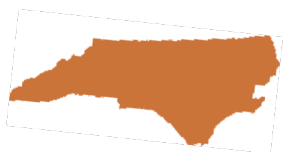
## Overview of Topics



- Overview of NC HealthConnex
- HIE Mandate
- Suite of Services
- Portal Overview & Demo
- Questions?

# 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



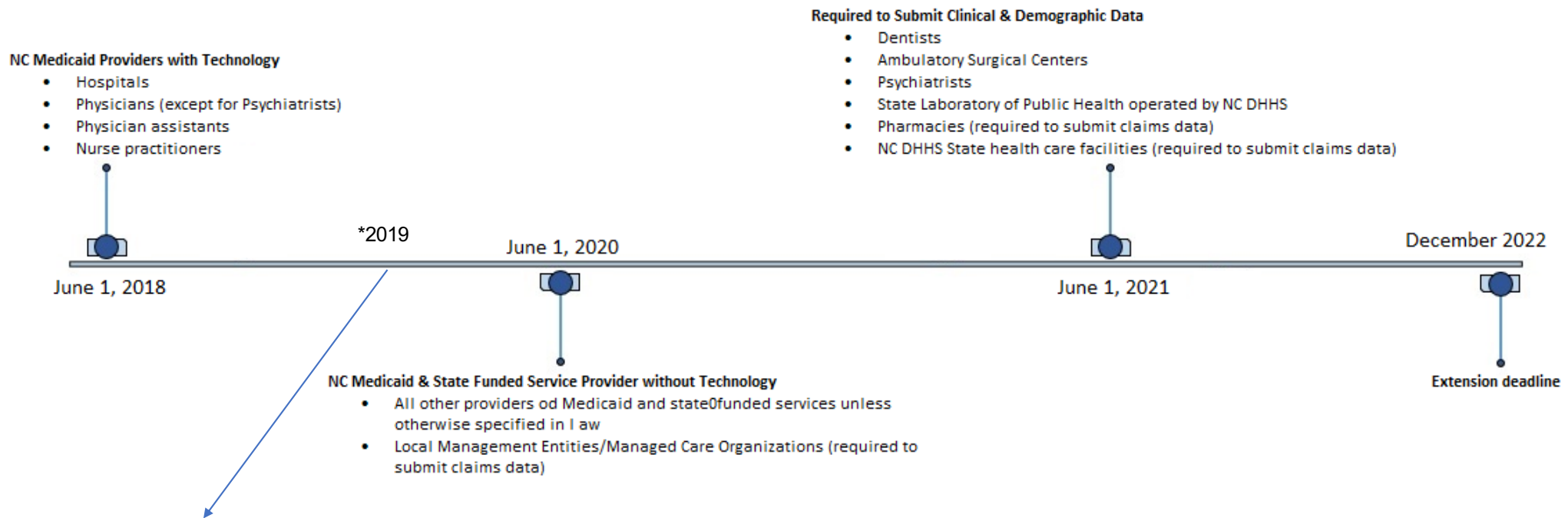
PARTNERSHIP

## NC HealthConnex, By the Numbers:

- Over 40,000 providers with contributed records
- 4,500 plus health care facilities live submitting data, including 97 hospitals
- 5,000 plus health care facilities in onboarding
- 52 million+ continuity of care documents (CCDs)
- 7M+ unique patient records
- Over 150 unique EHRs engaged
- 6 border and intra-state HIEs connected



# What Does the Law Mandate?



\*Prepaid health plans must connect by the start of their capitated contracts entered into with the NC Division of Health Benefits

## Patient Education & Opt-Out



Patient Education materials provided to organization via email (*welcome packet*).

Includes:

- Sample Notice of Privacy Practices
- Fact Sheet
- [Tri-fold Brochure Order Form](#)
- Talking Points
- FAQs
- Employee Education Materials
  - Employee Newsletter
  - Leadership Emails

\*Patients have the right to opt out of having their information shared between providers through NC HealthConnex.

All NC HIEA Policies are posted on our website, [nchealthconnex.gov](https://www.nchealthconnex.gov).

# NC HealthConnex Services



## NC HealthConnex Suite of Services



### Promoting Interoperability and Meaningful Use

NC HealthConnex helps providers meet specific requirements and measures set by the Centers for Medicare and Medicaid Services.



### Notification Services

Notifications provide insight into patients' health care activity across North Carolina.



### Controlled Substance Reporting System Migration

NC HealthConnex is working with the NC Department of Health and Human Services and Appriss Health to combat the opioid epidemic in North Carolina.

## Foundation

## Exchange

- Clinical Portal
- DSM
- CSRS
- NCIR
- ELR

## Notifications

- NC\*Notify

## Pop Health & Analytics

- Diabetes Registry

# Exchange

## Expanding Exchange Reach & Capabilities

### Access a Patient's Clinical Record

- Clinical Portal
- EHR Integration

### Communicate PHI Securely

- DIRECT Secure Messaging

### Neighboring Connections via eHealth Exchange

- ETHIN (East Tennessee)
- GaHIN (Georgia's state-designated HIE)
- MedVirginia (Richmond, Va.)
- SCHIEX (South Carolina)
- Veterans Administration (VA HIE)
- Dept. of Defense (2019)

### Integrations

- CSRS
- Recovery Platform
- Patient Centered Data Home (PCDH)

### Public Health Reporting

- ELR
- NCIR

Foundation

Exchange

Notifications

Pop Health & Analytics

Exchange

Patient Data Exchange

### Access a Patient's Clinical Record

- Clinical Portal
- EHR Integration



Foundation

Exchange

Notifications

Pop Health &  
Analytics

# Exchange

## Direct Secure Message

Improves coordination of care between health care providers and their patients by providing the ability to communicate with other health care providers securely.

Messaging can be used:

- Transitions of Care
  - CCD
  - CCD-A documents
- Lab Tests/Results
- Referrals
- Reports

The screenshot displays the NC HealthConnex web interface for sending a Direct Secure Message. The top navigation bar includes 'Patient Search' and 'Logout'. A left sidebar contains links for 'Compose', 'Inbox', 'Sent', 'Deleted', and 'Drafts'. The main content area features a table of messages with columns for 'Delete', 'Mark as', 'Move to', 'TYPE', 'RECEIVED', 'SUBJECT', 'RECEIVED FROM', 'PATIENT NAME', and 'IDENTIFIERS'. Below the table, a 'Compose Message - Internet Explorer' window is open, showing a form with fields for 'Send To...', 'CC...', 'Patient...', 'Message Type' (set to 'Referral'), 'Reason', 'Subject', and 'Note'. The 'Attachments' section at the bottom includes a green plus icon and buttons for 'Send', 'Save Draft', and 'Cancel'. The NC HealthConnex logo is visible in the top right corner.

Delete	Mark as	Move to	TYPE	RECEIVED	SUBJECT	RECEIVED FROM	PATIENT NAME	IDENTIFIERS
<input type="checkbox"/>			Direct Message	2019-03-18 10:59:20	Secure Message From: Demo.Two	demo-id-2@service2.directaddress.net		
<input type="checkbox"/>			Direct Message	2019-02-12 14:45				
<input type="checkbox"/>			Direct Message	2019-02-12 13:45				
<input type="checkbox"/>			Direct Message	2019-02-07 16:45				

Exchange

## Controlled Substance Reporting System

- NC HealthConnex will help providers meet the STOP act requirement
- **Single sign-on** to the NC HealthConnex clinical portal will query the Appriss/CSRS database
- Create an additional pathway for providers to access the state's prescription drug monitoring program



Exchange

Project OBOT



PROJECT OBOT

DOB  
Date of Visit  
Visit Location  
Patient Name  
Referrals  
Reason for Visit  
Care Plans  
Problems  
Medications  
Lab Results  
Procedures  
Vital Sign



Foundation

Exchange

Notifications

Pop Health &  
Analytics

Exchange

Public Health Reporting

- ELR
- NCIR

Foundation

Exchange

Notifications

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Analytics

## Exchange

## Electronic Lab Reporting

- Electronic reporting from laboratories to the NC DPH of laboratory reports which identify required reportable communicable diseases and conditions.

### Register with DPH

#### 6. Set Up Secure Message Transport Connectivity

- N.C. DPH can accept ELR messages sent through NC HealthConnex.

Foundation

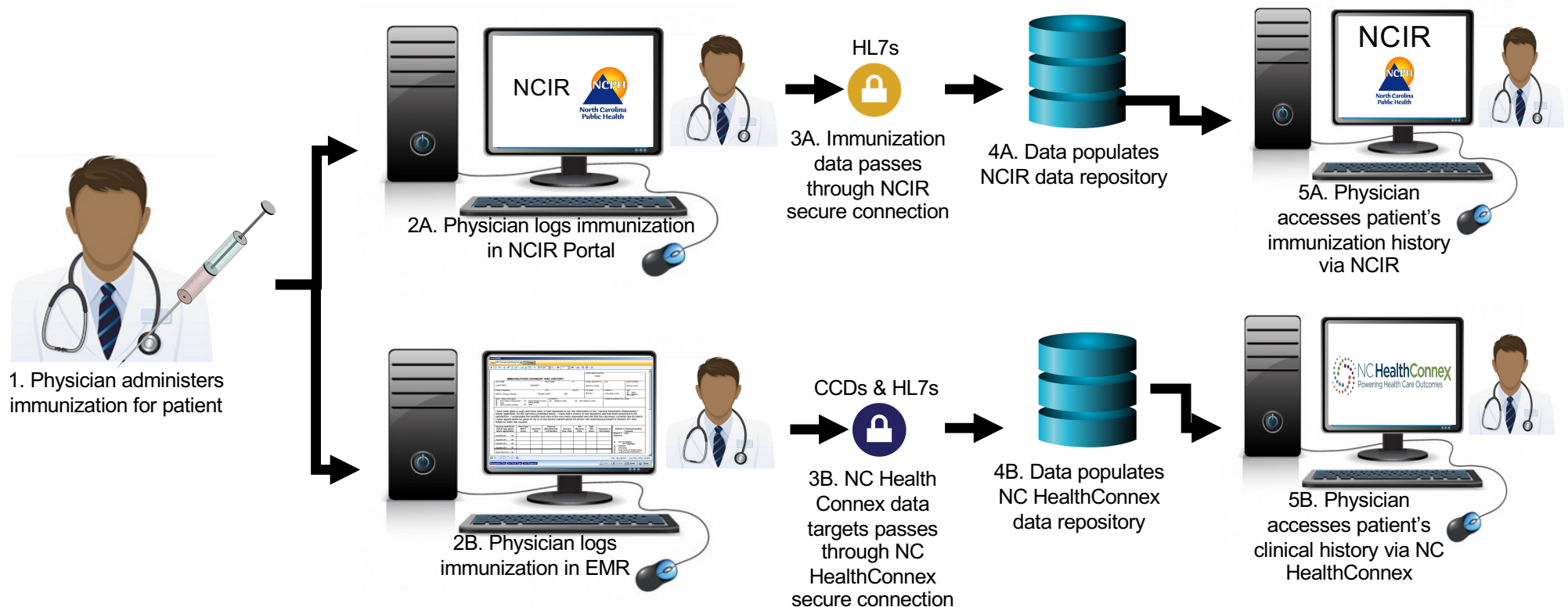
Exchange

Notifications

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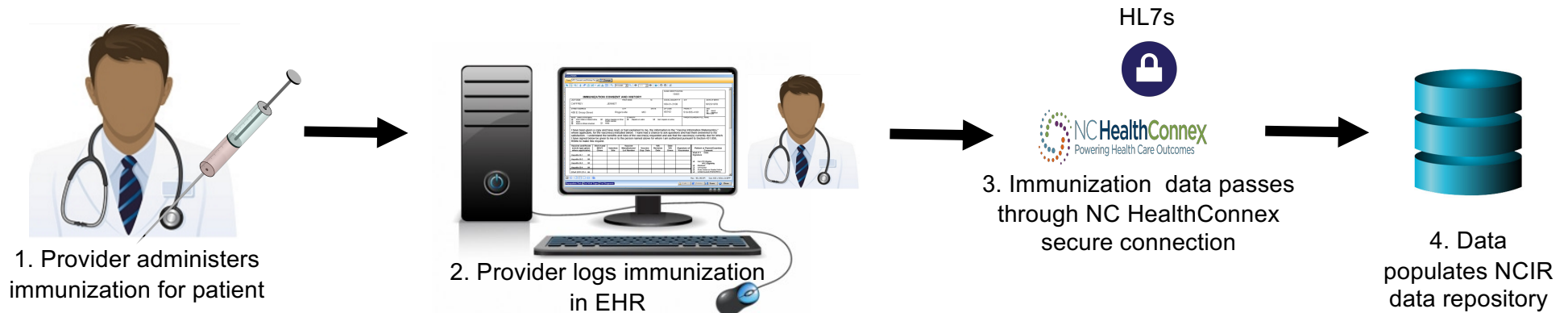
# Exchange

## Pre NCIR – NC HealthConnex Integration



# Exchange

## Post NCIR – NC HealthConnex Integration



**\*NOTE:** This workflow is applicable to provider's and/or healthcare organizations who have a bi-directional data connection to the NC HealthConnex. Providers/healthcare organizations leveraging a unidirectional connection must access NCIR via the NCIR web portal.

# Notifications

## NC\*Notify (Event Notifications) – How

### Step 1

Participant Submits Patient File for NC HealthConnex to Monitor

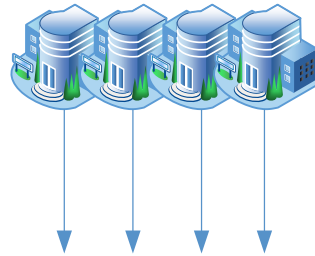
#### Technical Details

- 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



# Notifications

## Advancing Notification Services

### Roadmap



<b>Frequency of Notifications</b>	Daily		Realtime	
<b>Format/method</b>	File via SFTP	DSM SMS Text Notification	EHR via HL7	FHIR API
<b>Triggers Generating Notifications</b>	ED, Inpatient, Ambulatory Admissions & Discharges		Immunization administered; Patient monitored by another organization	Disease registry addition; Critical lab value received
<b>Panel Details</b>	Participant defined; Multiple files per panel		Use health plan member file	Computed real time via message flow and attribution methodology
<b>Subscription Configuration</b>				Defined in Panel; Self-service portal
<b>Content</b>	Basic visit details (date, visit type, location)	Chief complaint and diagnosis	Provider details (admitting, attending, etc.); Immunization gaps	CCD Social data Disease state data CIE data

Help Meet  
Tier 3  
Requirement

## Notifications

### Benefits - NC\*Notify

- Providers are notified when their patients have received care in other care settings
- Schedule follow up appointments with patients
- Follow up on medications prescribed or other 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

## Pop Health & Analytics



### Classify & Measure Patient Populations

- Clinical Intelligence Engine
  - Abnormal Lab Reporting
  - Immunization Gaps
  - Controlled Substance Reporting System (CSRS)
- Population Registries
  - Diabetes
  - Future Possibilities: Stroke, Asthma
- Quality Measurement
  - Future Possibilities: eCQM

Foundation

Exchange

Notifications

Pop Health & Analytics

Pop Health &  
Analytics

## Diabetes Registry

- Tool for tracking the clinical care and outcomes of the patient population in North Carolina.
- Electronic submission to the Diabetes Registry via the NC HealthConnex interface supports your organization's Meaningful Use attestation for Meaningful Use Stage 3 and Modified Stage 2.

Foundation

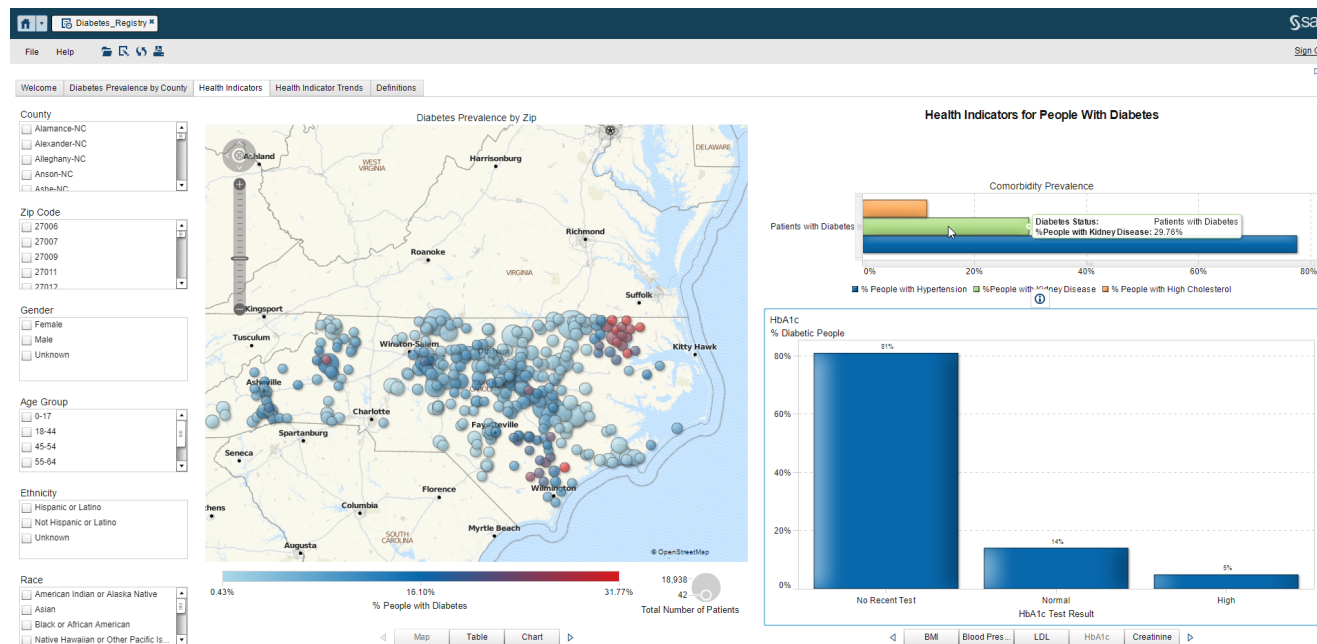
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# Pop Health & Analytics

## Diabetes Registry



Foundation

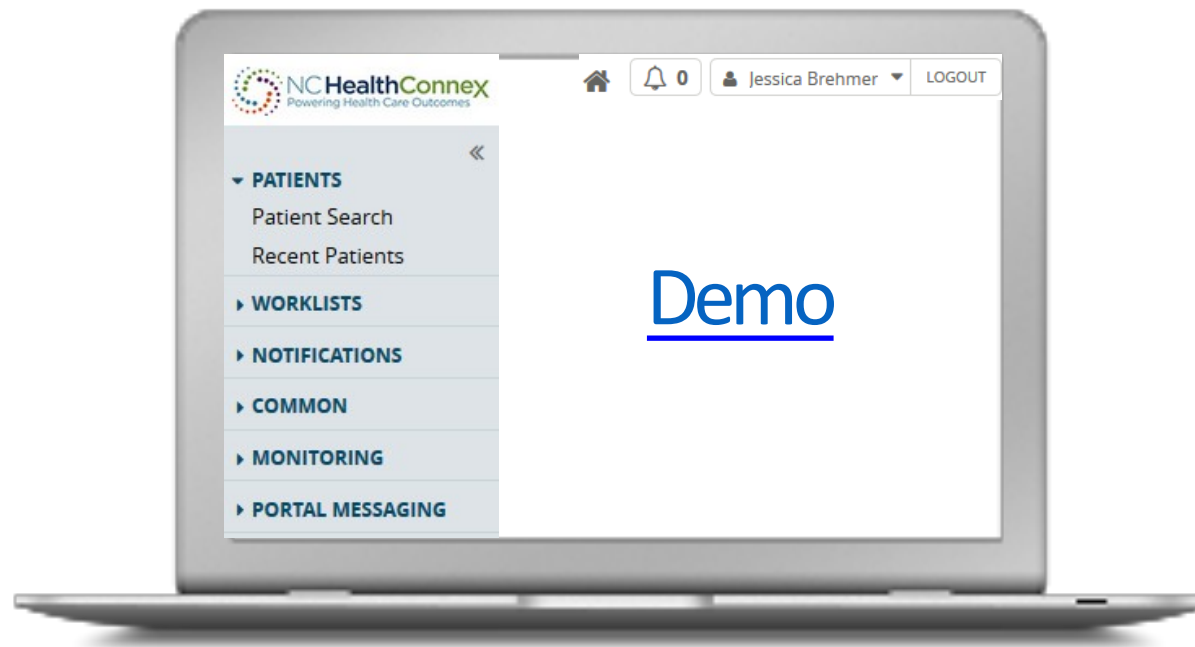
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Pop Health & Analytics

\*Electronic submission to the Diabetes Registry via the NC HealthConnex interface supports attestation for Meaningful Use Stage 3 and Modified Stage 2.

# Portal Demo





## Questions?

For more information visit:  
[www.nchealthconnex.gov](http://www.nchealthconnex.gov)

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