HIE: The Interoperability Journey

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HIMSS NORTH CAROLINA Chapter

Learning Objectives

- Outline expansion of access to regional care documents by leveraging HIE framework
- Demonstrate real-time event notifications improving outcomes
- Interoperability 2.0 Roadmap for continued participant value

Coastal Connect HIE

Mission:

To distribute electronic information among health care providers to improve health care delivery and outcomes for citizens in Eastern North Carolina.

Vision:

- Connecting communities for access at the point of care
- Workflow improvements
- Reducing cost
- Improving patient experience and health outcomes
- Data visibility within patient populations for quality and care management

HIE Framework to Connect a Region for Patient Data Sharing

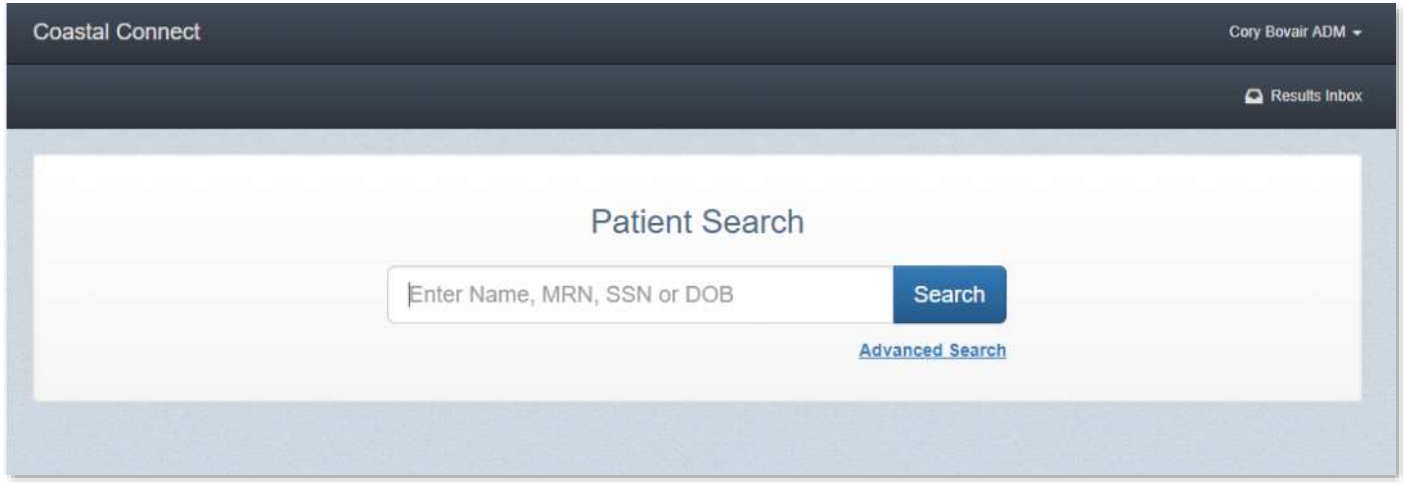
- WHO Needs Access to the Data: Non-affiliated providers
- WHAT Data:
  - Acute EHR data: ADT, lab/pathology/radiology results, discharge summaries, etc.
  - Ambulatory EHR data: ADT, CCDs, procedural documents, provider notes, radiology reports, etc.
- HOW will they access the data:
  - Query-Retrieve On Demand: Longitudinal patient record for point of care access
  - Push Real-time: Electronic encounter notifications for timely intervention

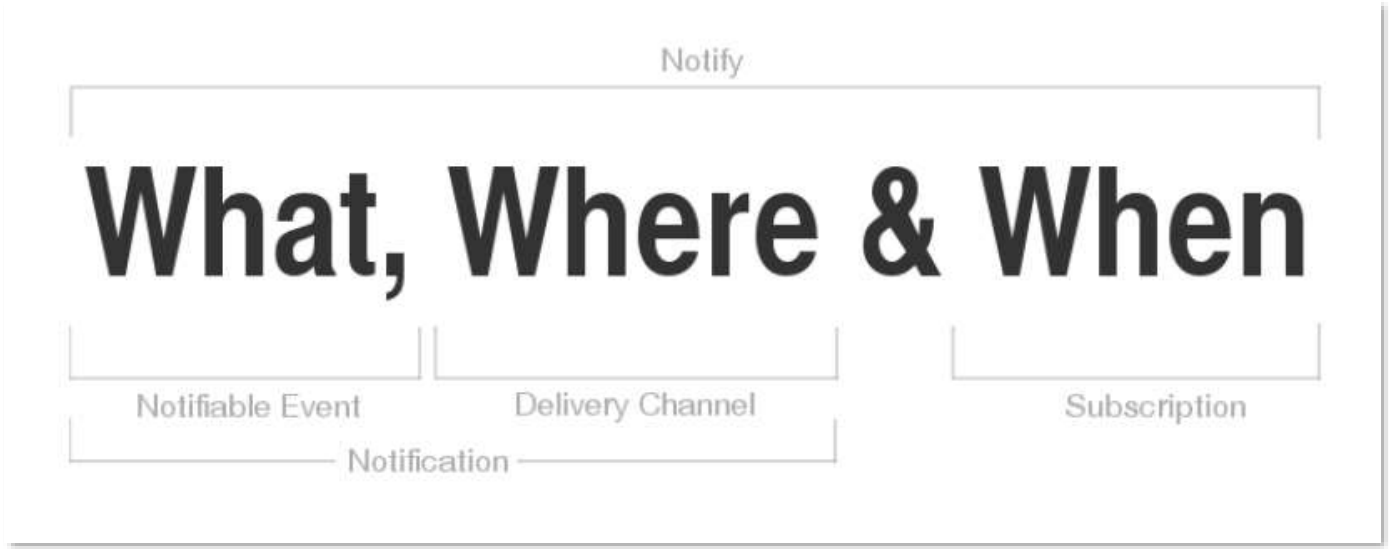
HIE Framework to Connect a Region

Interoperability Challenges

- Vast number of EHR vendors in our region: Epic, CPSI, McKesson, Cerner, eClinicalWorks, Allscripts, Athena, NexGen,
- Functionality and Technology Readiness
- Trust Relationship
- Readiness and Workflow of Care Providers
- Cost

Regional Data Sharing Network: Solving Care Gaps





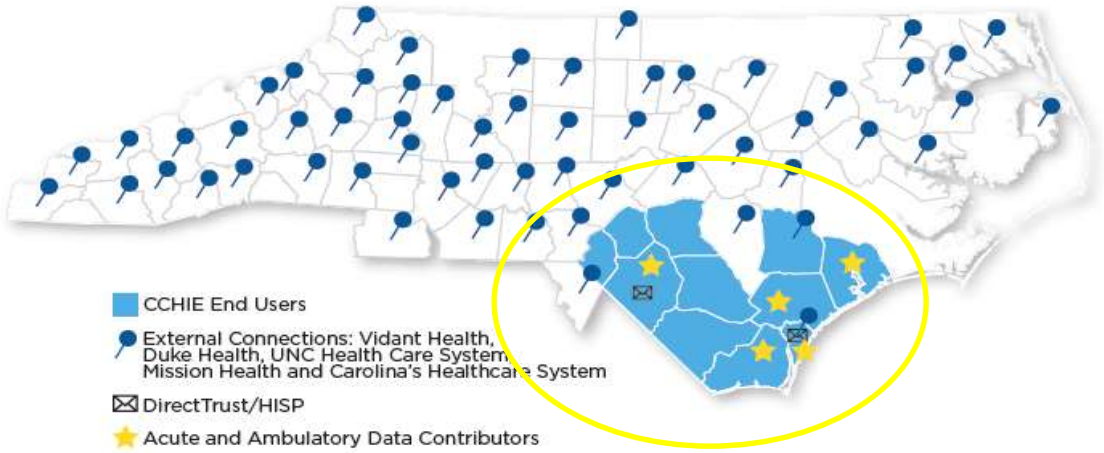
Regional Framework: Care Transition Use Cases

Emergency Care Setting

Cancer Treatment

Prenatal Care and OB Emergency Encounters

Care coordination for Medicaid population



Emergency Care Setting

Participants:

Coastal Horizons

Delta Behavioral Health

Coastal Southeastern United Care

SouthCare

Outcomes:

- Bridges connection between mental and physical health
  - ✓ *Medication coordination*
- Improved care transition
  - ✓ *Embedded case managers in ED facilitating appropriate treatment center*

User Feedback:

"Being able to get to know what has been done in the ER when the patient doesn't know what was all done…get accurate information and know where to go from there."

– Coastal Horizons Center

CHRECO MACLOR MUNITY

Prenatal Care and OB Emergency Encounters

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Participants:

PENDER COUNTY NC HEALTH DEPARTMENT

New Hanover Regional Medical Center

Outcomes:

- 'Provider Note' information
  - ✓ *Richer data set than CCD: latest physician, OB notes, maternal flowsheet*
- Improved care transition
  - ✓ *High value for maternity patients*
- Workflow improvement for patient registration
  - ✓ *Eliminated duplicate manual registration*

User Feedback:

"Ecstatic to have real time, electronic access to (Pender) county health department maternity patient records." – NHRMC Labor and Delivery

Cancer Centers Use Case

Participants:

New Hanover Regional Medical Center
Zimmer Cancer Center

SOUTHEASTERN HEALTH
Better Health—Starting With You
Gibson Cancer Center

Columbus Regional HEALTHCARE SYSTEM
Donayre Cancer Center

SCOTLAND HEALTH CARE SYSTEM
Duke Cancer Treatment Center

Outcomes:

- Patients scheduled more timely
  - ✓ *Confirmation of tests*
- Improved care transition
  - ✓ *Cancer Center with primary care and other specialty providers*
- Cancer Registry "confirmed follow up" rate improved

User Feedback:

"I was able to obtain a pathology report quickly before the patient was seen by the oncologist therefore making their consult visit more informative for the patient."

– Gibson Cancer Center

CHROMECORD COMMUNITY

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Care coordination for Medicaid population

Participant:

Outcomes:

- Data available to case managers in the field
  - ✓ *Improved care plans prior to home visits*
- Improved care coordination
  - ✓ *Follow up and specialty visits*

User Feedback:

"HIE has assisted me with coordination and continuum of care with my priority patients … allowed for better care of the patients and help foster a patient centered care that allows us to assist with their chronic health care needs."

– Community Care of Lower Cape Fear

COMMUNITY HEALTH RECORD

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Coronary Artery Bypass (CABG) Use Case

Participants:

Heart Surgeons

Outcome:

- Readmission avoidance confirmed
  - ✓ *5 Alerts in first week*
  - ✓ *2 readmission avoided in the first 4 months*
- Improved workflow for care team
  - ✓ Surgeons appreciate the ability to intervene while the patient is in the Emergency Room

NOTIFY

Discharge Follow up Use Case

Participants: **Community Providers**

Outcomes:

- Improved care transition and patient care
  - ✓ *Appointments scheduled within 7 days*
- Increased reimbursement
  - ✓ *CPT 99495 and 99496 Transition Care Management Services*
- Resource Efficiency
  - ✓ *15 minutes given back to referral providers each day*

User Feedback:

"I did not realize how many of my patients were using the Emergency Department for care."

– Community Physician

NOTIFY

Behavior Health Use Case

Participant:

Outcomes:

- Timely identification of appropriate referrals
- Timely engagement of services
- Reduction in emergency department wait times

User Feedback:

"…allowing for us to confirm patient encounters."

– CSUC

NOTIFY

High Utilizers Use Case

Participant:

Outcomes:

- Process efficiencies gained
  - ✓ Emergency Department case managers timely identify appropriate services for high risk patients
- Improved patient experience

User Feedback:

"…using the HIE to provide real time services to our high risk patients upon arrival to the emergency department."

– NHRMC Case Manager

NOTIFY

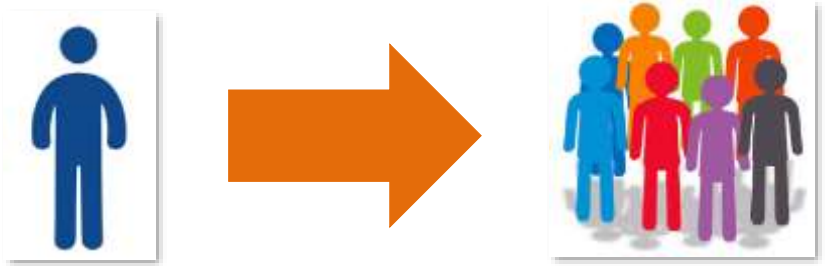
Interoperability 2.0 Roadmap

- Utilization and adoption for care transition

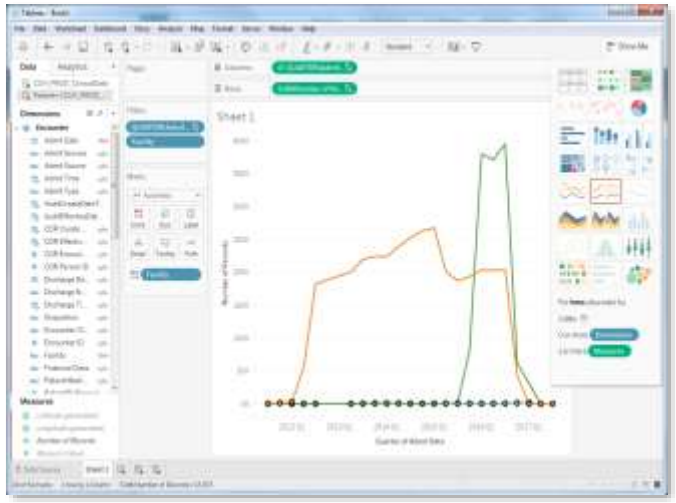
  - Labor and Delivery: one process for all referring providers
  - Opioid Action Plans: accessing data on the HIE for integrated care - physical and behavioral - identification of abusers during emergency room encounters and increased in site into other

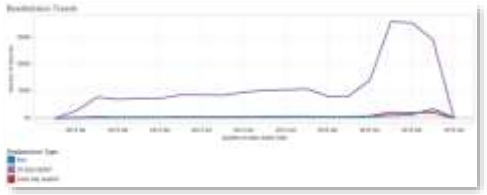
  - Post-Acute Care Network: SNF and HH
  - Hospice
  - Providers across the care continuum

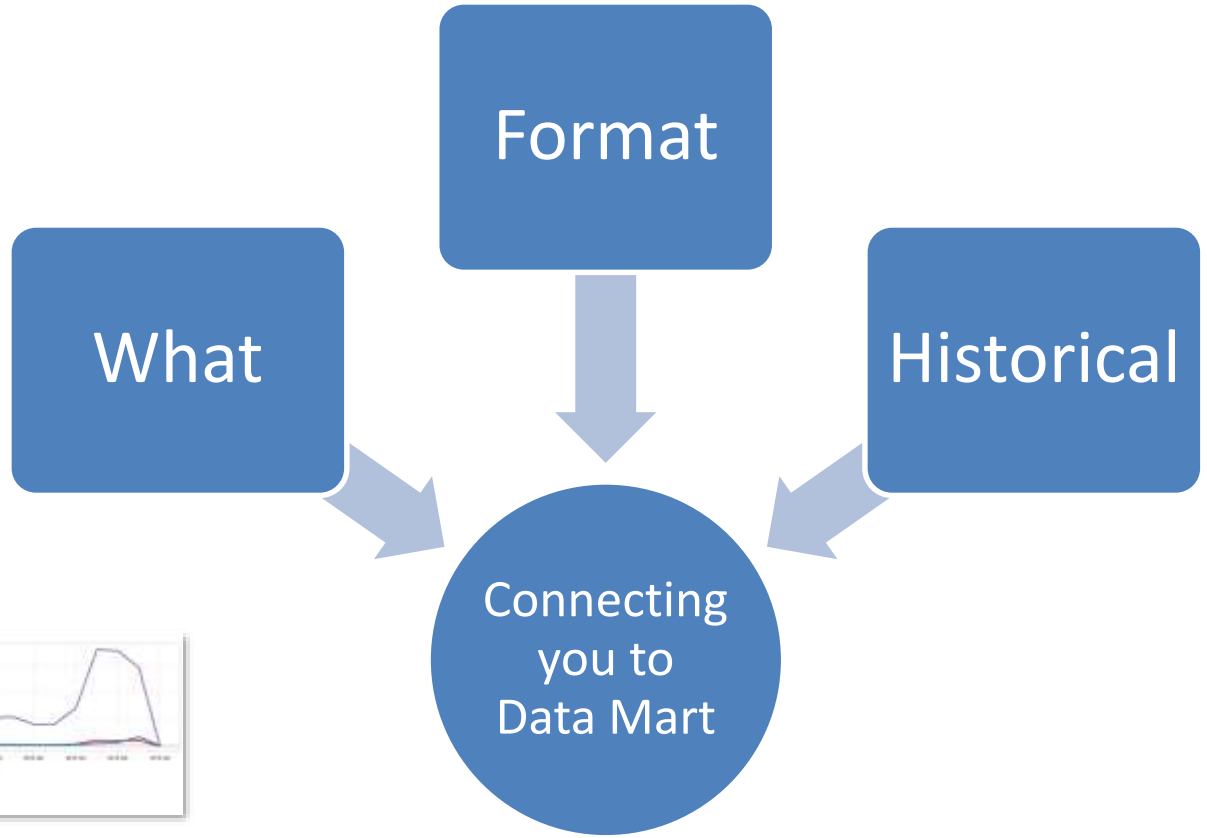
- Share data to improve a population's health



Interoperability 2.0: Turning Data into Insight

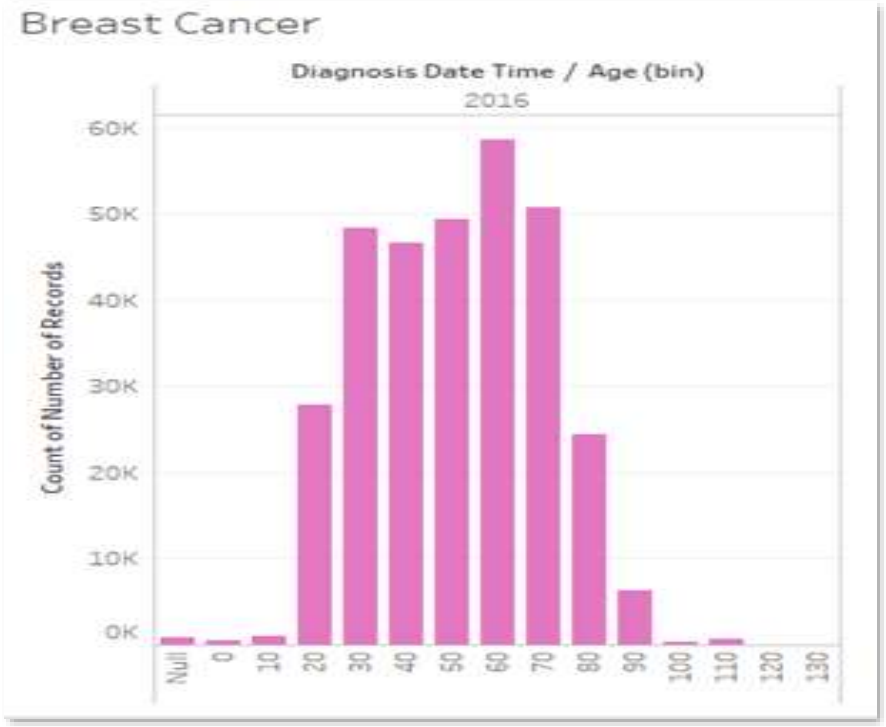






Organize data to share analytics at a population level

Interoperability 2.0: Turning Data into Insight



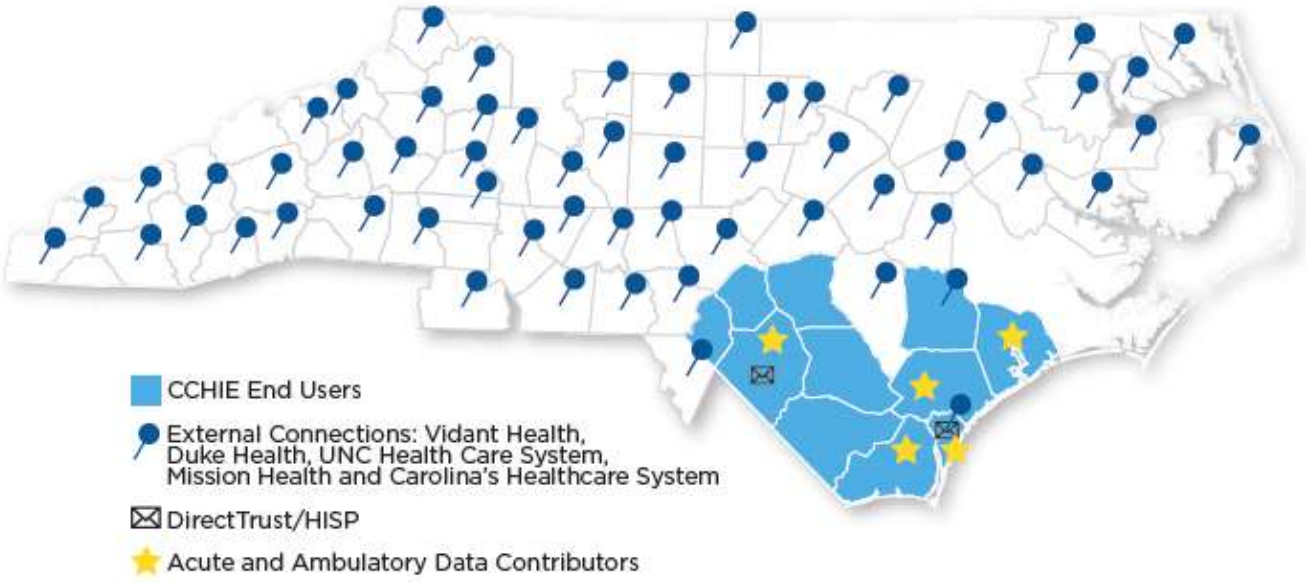
CMS125v5 – Breast Cancer Screening

% of women aged 50-74 who have had a mammogram to screen for breast cancer

CCHIE Network Today

CCHIE Stakeholders

DOSHER Memorial Hospital
Pender Memorial Hospital
WILMINGTON HEALTH
New Hanover Regional Medical Center
SOUTHEASTERN HEALTH
Better Health – Starting With You
Onslow Memorial Hospital



eHealth Exchange Connections

VIDANT HEALTH
DukeHealth
UNC HEALTH CARE

HIE to HIE Connections

Carolinas HealthCare System CARECONNECT
MISSION HEALTH

Ambulatory, Post-Acute Data and Lab/Diagnostic Contributors

EmergeOrtho
UNCPH
COASTAL HORIZONS CENTER, INC.
Intracoastal Internal Medicine
WILMINGTON GASTROENTEROLOGY
New Hope Clinic
SOLSTAS LAB PARTNERS
CHILDREN'S HEALTH OF CAROLINA
WHAT
Carolina Sports Medicine & Orthopaedic Specialists
Liberty Healthcare & Rehabilitation Services
BLACK RIVER
Liberty HomeCare & Hospice Services
Delaney Radiologists
Atlantic Neurosurgical & Spine Specialists

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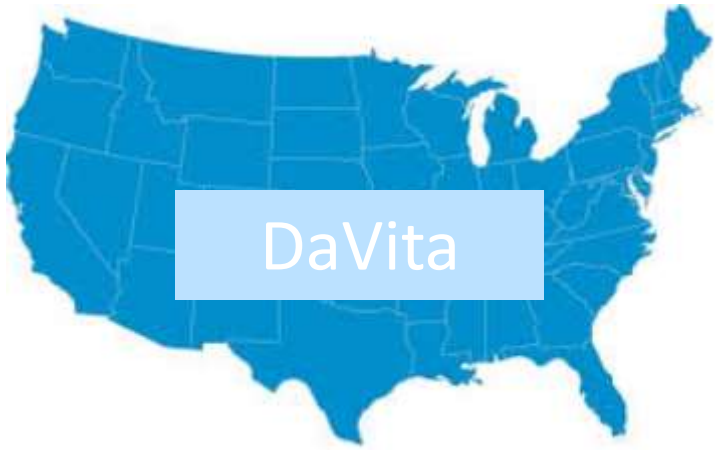
Framework for HIE 2.0



eHealth Exchange

VIDANT HEALTH

DukeHealth

UNC HEALTH CARE

DaVita

SCHIEx

HIE to HIE Connections

Carolinas HealthCare System CARECONNECT

MISSION HEALTH

NC HealthConnex
Powering Health Care Outcomes

Public Health
Skilled Nursing Facilities

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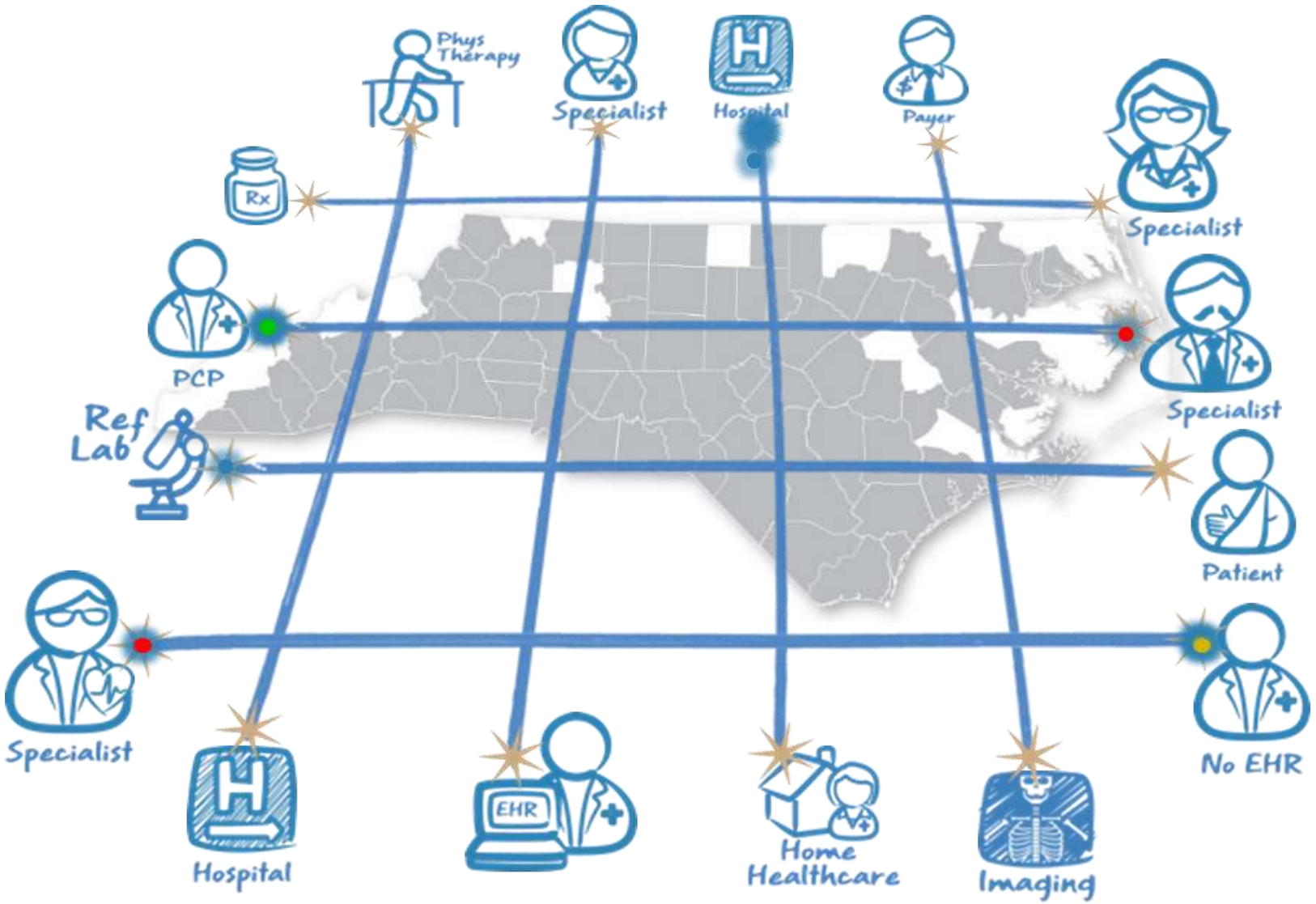
CCHIE 2.0

- ✓ Interstate and National Connections
- ✓ NCHIEA / NC HealthConnex
- ✓ Stakeholder Hospitals' Opioid Action Plans
- ✓ Advance Care Directives
- ✓ Disease specific care plans (asthma and diabetes)
- ✓ Registries
- ✓ Critical role of HIE's in Disaster Response
- ✓ Additional data contributors: continuing to build our post-acute network
- ✓ Data Analysis: regional analytics for population health, potentially social determinant data
- ✓ CMS QCDR for MIPS and MACRA reporting for our providers

Thank You!



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