

# Operationalizing the Federal Health IT Strategic Plan for a Regional HIE



**COASTALCONNECT**  
HEALTH INFORMATION  
EXCHANGE

Anne Marie Robertson, Director of Operations

# Aligned Missions

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- Federal Health IT Mission

Improve the health and well-being of individuals and communities through the use of technology and health information that is accessible when and where it matters most

- CCHIE Mission

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

# Federal Health IT Strategic Plan 2015-2020 Goals

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✓ Collect

✓ Share

✓ Use

# Demo of Deployed Tools



Connect

Secure  
Messaging

Referral  
Management



Notify

Event  
Notifications



Exchange

Orders

Results  
Exchange



Organize

Community  
Health Record

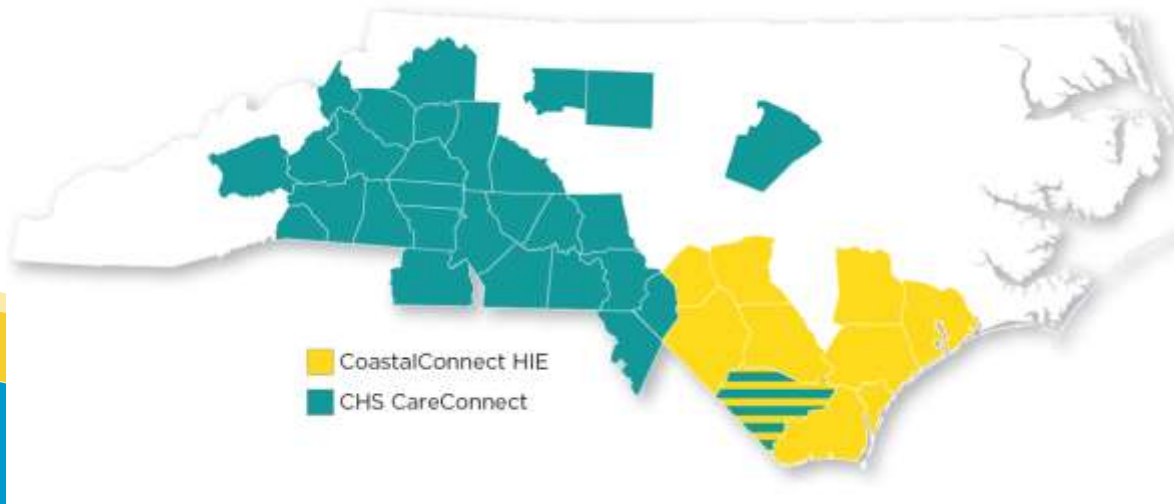
# Collect

## ➤ Goal 1: Expand Adoption of Health IT

- HIE to HIE Connection

*From the sea to the mountains footprint*

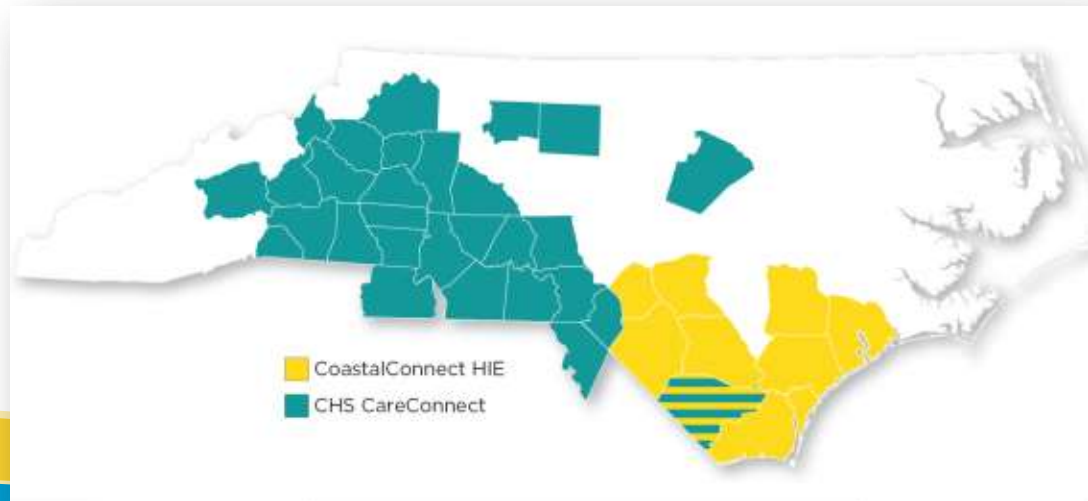
- Access to acute and ambulatory clinical documents



# Current Data Contributors

Anson Community Hospital  
Anson Regional Medical Services  
Carolinas Medical Center (All Locations)  
Cleveland Regional Healthcare System  
Columbus Regional Healthcare  
Dosher Memorial Hospital  
Grace Hospital  
Jeff Gordon Children's Hospital  
King's Mountain Hospital  
Levine Children's Hospital  
New Hanover Regional Medical Center  
NHRMC Orthopedic Hospital (formerly Cape Fear Hospital)  
Pender Memorial Hospital  
Scotland Health  
Southeastern Health  
Stanly Regional Medical Center  
Valdese Hospital  
Aldersgate Continuing Care Retirement Community  
Blue Ridge Medical Group  
Blue Ridge Digestive Health  
Burke Primary Care  
Cabarrus Family Medicine  
Cape Fear Clinic  
CareOne Chiropractic  
Carolina Digestive Health Associates

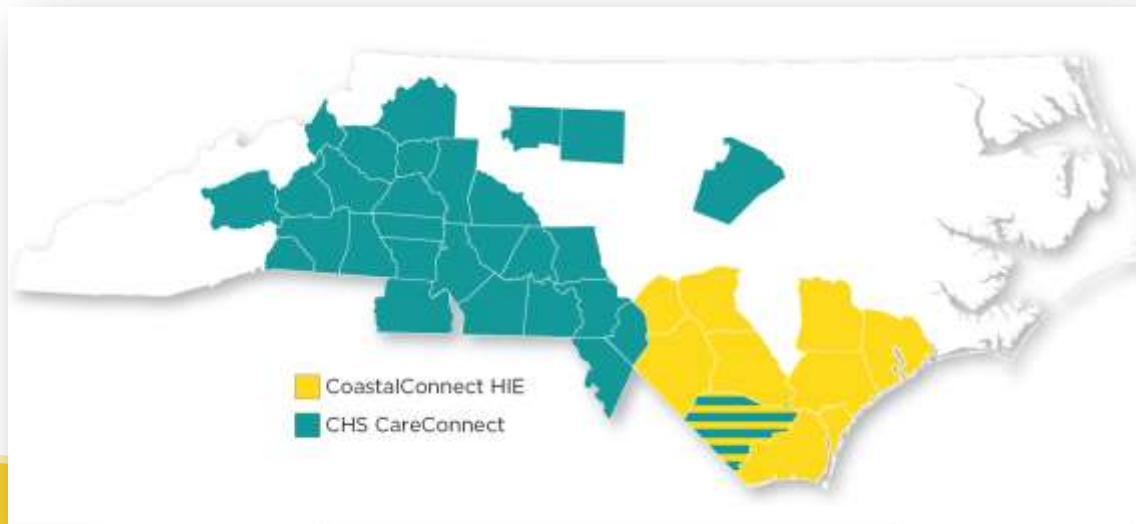
Carolinas Medical Center- Women's Institute  
Carolina Medical Center—Elizabeth Family Medicine  
Carolinas Rehabilitation  
Catawba Family Medicine (All Locations)  
Cleveland Gastroenterology Associates  
Cooperfield OB/GYN  
Criswell & Criswell  
David A. Nachamie, MD  
Dosher Medical— Bolivia  
Dosher Medical—General Surgery  
Dosher Medical—Long Beach Road  
Dosher Medical—N. Howe Street  
Dosher Medical--Oak Island  
Dosher Medical—Smithville Crossing  
Dosher Medical—Southport  
Dosher Medical—Women's Health  
Dosher Medical Urgent Care



# Current Data Contributors (con't)

Dr. Arthur J. Robinson Medical Center  
Intracoastal Internal Medicine  
Lumberton Children's Clinic  
Lumberton Medical Clinic  
Lumberton Urology Clinic  
New Hope Clinic  
Northeast Physician Network  
Southeastern Arthritis  
Southeastern Center of Audiology  
Southeastern Digestive Health Center  
Southeastern Eye Clinic  
Southeastern Health Center Clarkton  
Southeastern Medical Clinic Fairmont  
Southeastern Medical Clinic Gray's Creek  
Southeastern Medical Clinic Maxton  
Southeastern Medical Clinic North Lumberton  
Southeastern Medical Clinic Red Springs  
Southeastern Medical Clinic Rowland  
Southeastern Medical Clinic St. Pauls  
Southeastern Medical Clinic White Lake  
Southeastern Medical Specialists  
Southeastern Neuromuscular Rehab  
Southeastern Occ. Health WORKS  
Southeastern Orthopedics  
Southeastern Pulmonary & Sleep Center

Southeastern Spine and Pain Clinic  
Southeastern Surgical Center  
Southeastern Urgent Care Lumberton  
Southeastern Urgent Care Pembroke  
Southeastern Weight Loss Center  
Southeastern Women's Healthcare  
Southeastern Wound Healing Center  
Teen Health Connection  
The Clinic at Walmart (Lumberton)  
Wilmington Health (All Locations)  
Wilmington Health Access for Teens  
Delaney Radiology  
Solstas Labs



## ➤ Goal 2: Advance Secure and Interoperable Health Information

- Community Health Record giving providers access to a longitudinal view of care documents
  - ✓ Clinical Inbox (physician/practice mapping)
- HIE - EMR Integrations
  - ✓ Results Delivery into a Patient Chart
  - ✓ Order-Results
  - ✓ Publishing CCD/C-CDA or Transcription to HIE
  - ✓ Query-retrieve from practice EMR to HIE
- ✓ Direct messaging



# Results Delivery into a Patient Chart

## Hospital Result Inside Allscripts



Encounter Explorer

Encounters: By Date, Newest to Oldest

- Less Than a Week Ago
  - 8/10/2012: HOSP-Discharge
  - 8/9/2012: HOSP - Consult
  - 8/9/2012: HOSP-Discharge
  - 8/9/2012: HOSP-Discharge
- One Week Ago
  - 7/30/2012: [Open Encounter]
- One Month Ago
  - 7/9/2012: Office Visit - Discharge
- Two Months Ago
  - 6/5/2012: Office Visit - CO
  - 5/21/2012: Office Visit - U
  - 5/19/2012: Office Visit - A
- Three Months Ago
  - 5/4/2012: Office Visit - (R
  - 4/25/2012: Erroneous Entr
- Less Than a Year Ago
  - 4/2/2012: [Open Encounter]
  - 3/14/2012: Office Visit - Pt
  - 3/14/2012: Office Visit - U
  - 2/13/2012: RAD - MRIMRA
  - 2/6/2012: Office Visit - Ur
  - 2/6/2012: Historical Summ
  - 2/1/2012: Office Visit - (S
  - 2/1/2012: Office Visit - (S
  - 1/25/2012: Office Visit-Not
  - 1/25/2012: Office Visit-Not
  - 1/25/2012: Office Visit-Not
  - 1/9/2012: PATH - Pap sme
  - 11/25/2011: RAD - MRIMR
  - 10/27/2011: Office Visit -
  - 10/10/2011: Office Visit -
  - 10/7/2011: Patient Message
  - 9/27/2011: Treatment Only
- More Than a Year Ago
  - 8/9/2011: Thyroid Biopsy F
  - 7/10/1990: HOSP-Discharge

Encounter Details

Send Message Outlook Email... Fullscreen

Pages

Image Details

Test: Adult (MR # 12200174) DOB: 11/08/1954 Page 1 of 2

Patient Demographics

|                     |                     |
|---------------------|---------------------|
| Address             | Phone               |
| 1234 July Pl        | 910-555-6545 (Home) |
| WILMINGTON NC 28412 |                     |

D/C Summaries signed by Monique Moons, MD at 08/09/12 1539

| Filed         | Note          | Time | Author            | Resident                              |
|---------------|---------------|------|-------------------|---------------------------------------|
| 08/09/12 1539 | 08/09/12 1538 |      | Monique Moons, MD | Paul F Kamitsuka, MD at 08/09/12 1550 |

Physician Discharge Summary

Patient ID:  
Adult Test  
12200174  
57 y.o.  
11/8/1954

Admit date: 7/20/2012

Discharge date and time: No discharge date for patient encounter.

Admitting Physician: Paul F Kamitsuka, MD

Discharge Physician: Me

Admission Diagnoses: No admission diagnoses for hospital encounter.

Discharge Diagnoses: Healthy

Admission Condition: poor

Discharged Condition: good

Indication for Admission: Chest Pain

Hospital Course: Inpatient

Consults: none

Significant Diagnostic Studies: labs: blood cultures

Treatments: IV hydration

Discharge Exam:  
There were no vitals taken for this visit.

General Appearance: Alert, cooperative, no distress, appears stated age

Head: Normocephalic, without obvious abnormality, atraumatic

Eyes: PERRL, conjunctiva/corneas clear, EOM's intact, fundi benign, both eyes

Ears: Normal TMs and external ear canals, both ears

Nose: Nares normal, septum midline, mucosa normal, no drainage

Test: Adult (MR # 12200174) Printed by Paul F Kamitsuka, MD [PAJ25585] at 8/9/12 3:50 PM Page 1 of 2

Page: 1/2 Zoom: Page Smooth Display Patient: ADULT M TEST

Start | Inbox - RLewis@wil... | RE: - Message (HT... | Clinical Module | Clinical Module | Attendance Enterpri... | CCHIE Examples - ... | Document1 - Micros... | Desktop >> | 9:45 PM

# Publishing CCD/C-CDA to HIE Ambulatory Provider CCDA



## Continuity of Care Document

October 15, 2015 - October 15, 2015

Created: October 15, 2015

|                       |            |                             |            |
|-----------------------|------------|-----------------------------|------------|
| <b>Patient:</b>       | [REDACTED] | <b>Patient ID:</b>          | [REDACTED] |
|                       |            | <b>Support:</b>             | [REDACTED] |
| <b>Date of Birth:</b> | [REDACTED] | <b>Author:</b>              | [REDACTED] |
| <b>Gender:</b>        | [REDACTED] | <b>Author Organization:</b> | [REDACTED] |
| <b>Race:</b>          | [REDACTED] | <b>Confidentiality:</b>     | [REDACTED] |
| <b>Ethnicity:</b>     | [REDACTED] |                             |            |
| <b>Religion:</b>      | [REDACTED] |                             |            |
| <b>Language:</b>      | [REDACTED] |                             |            |

### Table of Contents

- PROBLEMS
- MEDICATIONS
- ALLERGIES AND ADVERSE REACTIONS
- PAST MEDICAL HISTORY
- PROCEDURES
- IMMUNIZATION
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- SOCIAL HISTORY
- VITAL SIGNS
- RESULTS
- PLAN OF CARE
- ENCOUNTERS
- PROVIDERS
- PAYERS

# Query-retrieve from Practice to HIE



ePHI Import

Load from Community | Load from File

Community:  Purpose:

Patient:

| Institution       | Title                                 | Author | Type         | Status | Date v             |
|-------------------|---------------------------------------|--------|--------------|--------|--------------------|
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/16/2016 19:45:38 |
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/16/2016 19:11:53 |
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/16/2016 18:01:57 |
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/16/2016 16:50:52 |
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/16/2016 16:10:40 |
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/16/2016 15:32:36 |
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/16/2016 15:07:22 |
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/16/2016 14:40:31 |
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/16/2016 13:58:13 |
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/16/2016 13:19:19 |
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/16/2016 12:34:24 |
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/16/2016 11:53:40 |
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/16/2016 11:15:49 |
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/16/2016 10:54:17 |
| Wilmington Health | Continuity of Care Document (C-CDA... |        | CDAR2@HE 1.0 |        | 1/11/2016 21:15:22 |

# Use

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- Goal 3: Strengthen Health Care Delivery
- Goal 4: Advance the Health and Well-Being of Individuals and Communities
- Goal 5: Advance Research, Scientific Knowledge, and Innovations

# Putting Data to Use



| Solution                | Use Case  |
|-------------------------|---|
| COMMUNITY HEALTH RECORD | <p><b>Provider access to data outside your own network:</b> Community view, reducing duplicate testing and allowing for more timely diagnosis and completion of care plan.</p>  |
| COMMUNITY HEALTH RECORD | <p><b>Continuity of Care by having access to Acute Care Setting Documents – including ED:</b> Community Practices have a full picture of acute setting care to provide appropriate follow up</p> <ul style="list-style-type: none"> <li>• Reduction in requests for documents to hospital HIM departments</li> </ul>  |
| NOTIFY                  | <p><b>Alerting Unaffiliated Providers:</b> notifications are sent for emergency room and inpatient admissions and discharges for their patient population</p> <ul style="list-style-type: none"> <li>• Allowing for appropriate/timely follow up and in some cases intervention during ED encounter (MU 3)</li> <li>• Alerts send to case managers and practices</li> </ul> |
| NOTIFY                  | <p><b>Alerting Hospital Care Team Members (non-provider):</b> Notifications about High Utilizers of emergency services to case managers</p>   |
| REFFERALS               | <p><b>Care Coordination Acute to Ambulatory:</b> Electronic scheduling of ambulatory follow up appointment prior to discharge</p> <ul style="list-style-type: none"> <li>• Discreet data integration into ambulatory EMRs (48 practices, eCW, AllScripts, Centricity, SuiteMed, gMed, and NextGen. Athena and Greenway time-lined for FY16)</li> </ul>                      |

# Putting Data to Use



| Solution                                 | Use Case  |
|--|---|
| COMMUNITY HEALTH RECORD                  | <p><b>Results Delivery through Clinical Inbox.</b> Mapping providers to allow results to push to practice staff user account in this tool.</p>  |
| EMR-HIE Integration for Results Delivery | <p><b>Results Delivery into Practice EMR:</b> Allows user to remain in one system and indexes documents to patients.</p>  |
| Orders-Results                           | <p><b>Solicited Results:</b> practice staff orders test through their EMR, results returns and is matched to order. A connected hospital noted their lab revenue increased \$250,000 per month with this added functionality.</p> <ul style="list-style-type: none"> <li>• Currently completed with CPSI to eCW practices through the HIE and McKesson to Allscripts practice through the HIE.</li> </ul> |
| EMR Integration for CCD Contribution     | <p><b>Community Ambulatory Practices Contributing Data:</b> value of having access to patient care documents from unaffiliated providers across the community.</p>  |
| Sequoia Project / National Connection    | <p><b>Care Documents from Outside Entities:</b></p> <ul style="list-style-type: none"> <li>• Currently establishing connections with Vidant (March PROD deployment) and Duke.</li> </ul>  |

# Use Provider's Perspective

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- Cardiology Practice uses the HIE to prep charts by pulling Cath reports, Op notes, lab results and discharge summaries – *“allows for a full picture of our patient’s medical record.”*
- Family Medicine uses the HIE to eliminate having to call the hospital medical record department. *“The HIE helps so we don’t re-order labs or test that the patient recently had.”*
- Gastroenterology – the HIE
  - *“..is helpful when our physicians are taking unassigned call.”*
  - *“allows us to see when our patients have been to the ER.”*
  - *“allows our physicians to provide a quicker diagnosis and treatment plan as the pathology reports are available timely.”*

# Health IT Priorities

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Goal 1: Advance Person-Centered and Self-Management Health

Goal 2: Transform Health Care Delivery and Community Health

Goal 3: Foster Research, Scientific Knowledge, and Innovation

Goal 4: Enhance Nation's Health IT Infrastructure



# What's Next

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USE CASE: Supports transition of care documents for all non-CCHIE entities, i.e. Dept. of Defense, Social Security Administration, Veterans Administration, hospitals, ambulatory sites and IDNs.

Vidant – April 2016

Duke – May 2016

# What's Next

## CCD / C-CDA Standardization



## Continuity of Care Document

October 15, 2015 - October 15, 2015

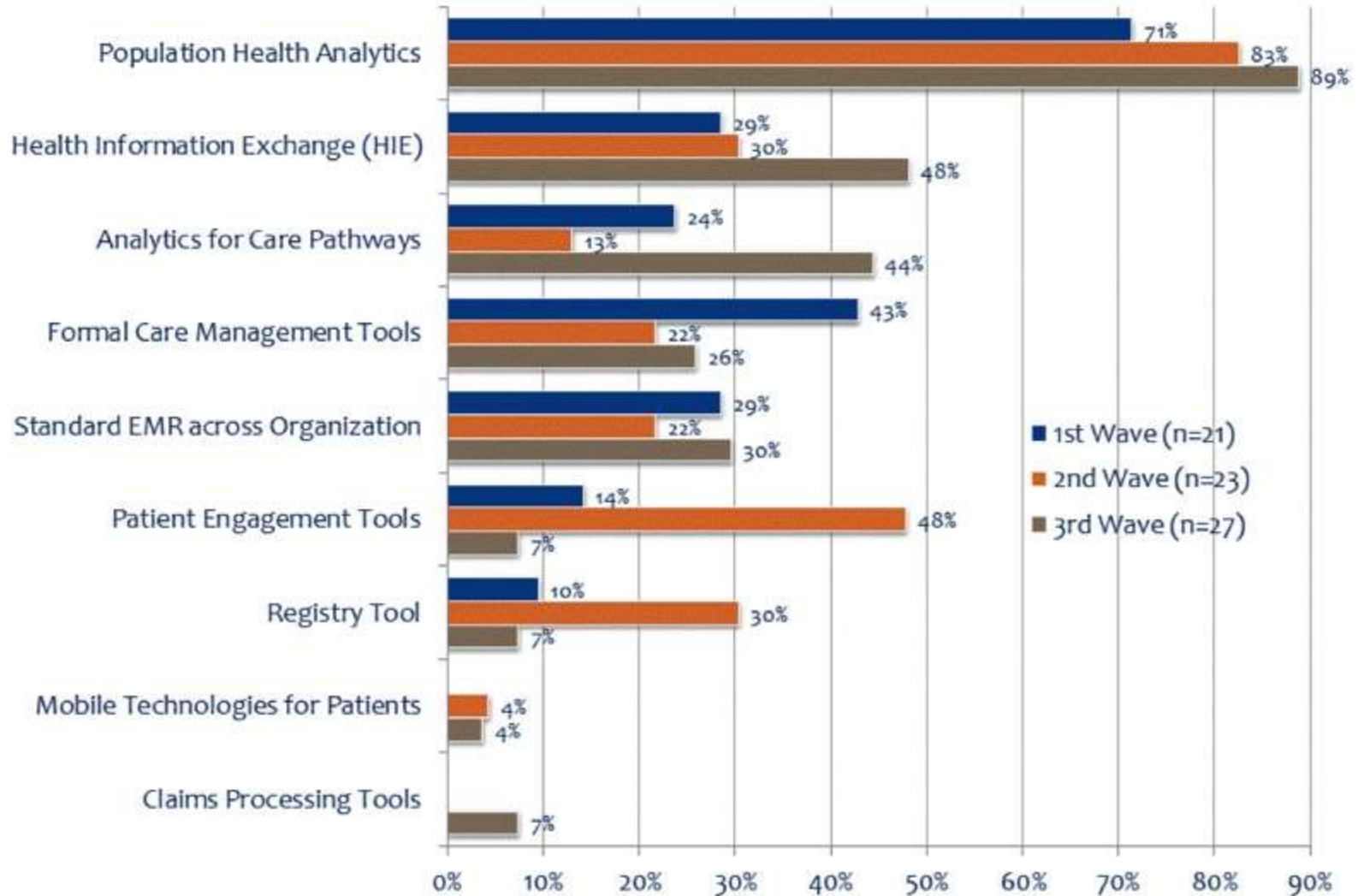
Created: October 15, 2015

|                       |            |                             |            |
|-----------------------|------------|-----------------------------|------------|
| <b>Patient:</b>       | [REDACTED] | <b>Patient ID:</b>          | [REDACTED] |
|                       |            | <b>Support:</b>             | [REDACTED] |
| <b>Date of Birth:</b> | [REDACTED] |                             |            |
| <b>Gender:</b>        | [REDACTED] |                             |            |
| <b>Race:</b>          | [REDACTED] | <b>Author:</b>              | [REDACTED] |
| <b>Ethnicity:</b>     | [REDACTED] | <b>Author Organization:</b> | [REDACTED] |
| <b>Religion:</b>      | [REDACTED] | <b>Confidentiality:</b>     | [REDACTED] |
| <b>Language:</b>      | [REDACTED] |                             |            |

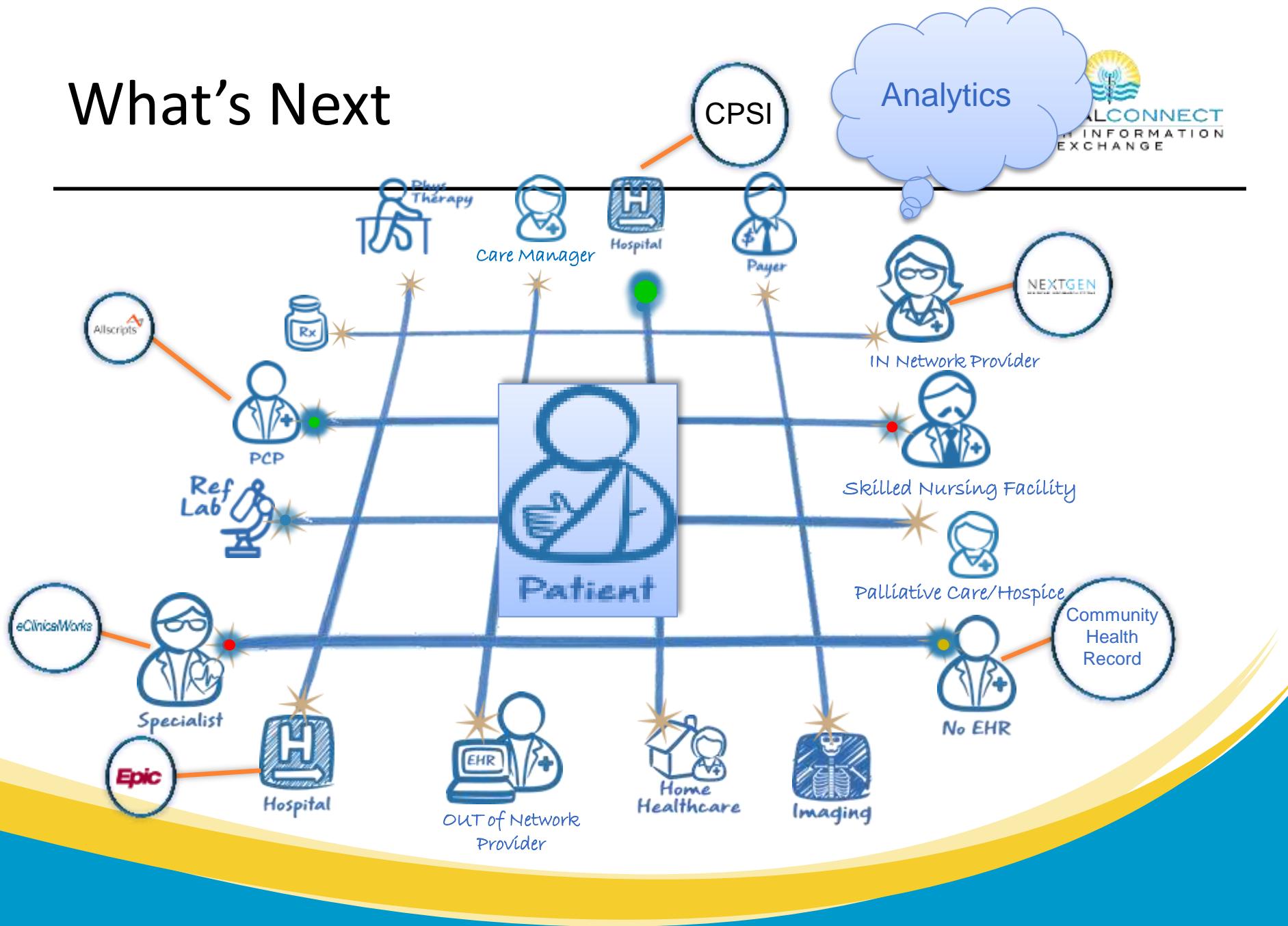
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# HIE Remains the Critical Foundation for PHM



# What's Next



Thank you!