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About NC HIE
NC HIE’s Growing Network of Partners

Government, Regulatory, Advocacy:
- The Office of the National Coordinator for Health Information Technology
- North Carolina Department of Health and Human Services
- Social Security Administration
- American Medical Association
- North Carolina Medical Society
- Department of sidewalks
- NCCICA
- North Carolina AHEC

Vendor, Technology, Strategic:
- ORION Health
- DirectTrust
- Allscripts
- eClinicalWorks
- Covisint
- LabCorp
- Epic
- Patagonia Health
- Quest Diagnostics
- Solasta Lab Partners
- MEDITECH

Health System, Community:
- Halifax Regional Hospital
- Wilson Medical Center
- Wake Forest Baptist Health
- Appalachian Regional Healthcare Foundation
- CaroMont Health
- Ashe Memorial Hospital
- CommWell Health
- Piedmont Health
- Carteret General Hospital
- Morehead Memorial Hospital
- Lenoir Memorial Hospital
Currently, more than **600 sites** are participants of NC HIE. We build connected communities that include clinics, local health departments and long-term care and behavioral health providers. A complete list can be accessed on our website: [http://nchie.org/providers/our-providers/](http://nchie.org/providers/our-providers/)
NC HIE estimates that by July 2015, it will have reached “critical mass,” with 110 hospitals and over 1,500 ambulatory practices participating.
One connection to NC HIE means access to provider electronic health record systems, State systems, pharmacies, labs, behavioral health and long-term care entities, disease registries and other sources of patient data.
<table>
<thead>
<tr>
<th>Objective/Measure</th>
<th>Core or Menu Stage 1</th>
<th>Core or Menu Stage 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunization Registry Reporting</td>
<td>Menu for EPs and EHs</td>
<td>Core for EPs and EHs</td>
</tr>
<tr>
<td>Electronic Lab Reporting (ELR)</td>
<td>Menu for EHs</td>
<td>Core for EHs</td>
</tr>
<tr>
<td>Transitions of Care</td>
<td>-</td>
<td>Core for EPs and EHs</td>
</tr>
<tr>
<td>Electronic Clinical Quality Measures (CQMs)</td>
<td>-</td>
<td>Required for EPs and EHs</td>
</tr>
<tr>
<td>Specialized Registry Reporting</td>
<td>-</td>
<td>Menu for EPs</td>
</tr>
<tr>
<td>Cancer Registry Reporting</td>
<td>-</td>
<td>Menu for EPs</td>
</tr>
</tbody>
</table>

- **Immunization registry**
  - Submission of electronic data to an **immunization registry**
  - Core or Menu Stage 1: Menu for EPs and EHs
  - Core or Menu Stage 2: Core for EPs and EHs

- **Electronic Lab Reporting (ELR)**
  - Submission of electronic **reportable laboratory results** to the State public health agency
  - Core or Menu Stage 1: Menu for EHs
  - Core or Menu Stage 2: Core for EHs

- **Transitions of Care**
  - For 50% a Summary of Care document must be provided, **10% of which must be electronically provided**
  - Core or Menu Stage 1: -
  - Core or Menu Stage 2: Core for EPs and EHs

- **Electronic Clinical Quality Measures (CQMs)**
  - **Electronic Clinical Quality Measures (CQMs) reporting** (NC HIE enables for Medicaid Eligible Professionals)
  - Core or Menu Stage 1: -
  - Core or Menu Stage 2: Required for EPs and EHs

- **Specialized Registry Reporting**
  - Identify and report specific disease cases to a **specialized registry** (other than a cancer registry)
  - Core or Menu Stage 1: -
  - Core or Menu Stage 2: Menu for EPs

- **Cancer Registry Reporting**
  - Identify and report cancer cases to a public health **cancer registry**
  - Core or Menu Stage 1: -
  - Core or Menu Stage 2: Menu for EPs
NC HIE with its partner, Community Care of North Carolina (CCNC), is building value-added applications to enhance patient care. Current projects include:

**Complete Medication Management**

- PHARMACeHOME

**Population Health Analytics**

Incorporation of multi-sourced information, both clinical and claims data, into comprehensive view of evidence-based population health dashboards/utilities to facilitate systematic approaches to improve care.

- Development of chronic disease registries:
  - Diabetes
  - Asthma
  - Chronic Heart Disease
  - Hypertension

- Reporting of Clinical Quality Measures

- Development of aggregated reports, currently exploring:
  - PQRS*
  - HEDIS*
  - UDS*
  - Ad-hoc to allow user to generate and save frequently used reports*

*At an additional cost
NC HIE and Hospitals: Status and Lessons Learned
Current Hospital Participation

- Ashe Memorial Hospital
- Blowing Rock Rehabilitation & Davant Extended Care Center
- Cannon Memorial Hospital
- CaroMont Medical Center
- Carteret General Hospital
- Hugh Chatham Hospital
- Davie Medical Center
- Granville Medical Center
- Halifax Regional Medical Center
- High Point Regional Medical Center
- Hugh Chatham Memorial Hospital
- Johnston Medical Center
- Lenoir Memorial Hospital
- Lexington Medical Center
- Maria Parham Medical Center
- Morehead Memorial Hospital
- Nash General Hospital
- Our Community Hospital
- Person Memorial Hospital
- Rex Hospital
- UNC Caldwell
- UNC Chatham
- UNC Hospitals
- UNC Pardee
- UNC Wakebrook
- Wake Forest Baptist Medical Center
- Watauga Medical Center
- Wilson Medical Center
1. Demand for a more integrated solution than historical core services offering (web portal to access clinical data or web portal visually integrated into EMR).
   ✓ **Solution:** Leverage ITI transactions to quickly or automatically pull relevant data back into native EMR. Currently implementing for five hospitals.

2. Top priority is integrated HISP capability to allow for provider and patient messaging.
   ✓ **Solution:** Upgraded to Orion Health’s Direct Secure Messaging 2.0. Implemented for five hospitals to date.

3. “Value-added applications” look different for each hospital.
   ✓ **Solutions:** PharmaceHome, lab orders, PQRS...
NC HIE and Ambulatory: Status and Lessons Learned
NC HIE ambulatory participation includes **662 sites** encompassing a variety of provider types:

- Primary Care Practices
- Specialist Practices
- FQHCs
- Free Clinics
- Long-Term Care
- Home Health
Integration Options for Ambulatory Connectivity

Connectivity Method 1: Vendor Collaboration

Established Agreements:
- Covisint
- AllScripts
- eClinical Works
- Aprima
- CompuGroup
- Patagonia

Ongoing Conversations:
- Greenway
- NextGen
- SuiteMed
- Athena
- Care 360
- NetSmart
- Cure MD

Costs for EMR Vendors with Established Agreements

- Integration = $0-$5,000
- Maintenance = EMR Vendor Cost + $150/clinical user/year

Connectivity Method 2: Covisint

- Third-party data aggregator service that establishes a unidirectional feed of information from the EHR to NC HIE
- Allows practices to meet measures for Meaningful Use Stages 1 and 2 (NCIR, CCR, CQMs, Disease Registries, TOC)
- Users will access NC HIE through the Provider Portal online and be able to download or e-mail (via Direct) information contained within the network

Costs for Subsidy Eligible Practice

- Integration = $0
- Maintenance = $600/year + $150/clinical user/year
Ambulatory Onboarding: Lessons Learned

1. Important to have a NC HIE “champion” within the practice who promotes use within the organization.
   ✓ **Solution**: Development of workgroups, focused projects (WNC) and community building.

2. Need support for EMR vendor conversations.
   ✓ **Solution**: NC HIE has established agreements directly with EMR vendors and participates with practice as needed.

3. Use cases for practices include referrals via DIRECT, immunization reporting, and clinical events notifications.
   ✓ **Solutions**: Building connected communities for referrals and alerts.
NC HIE and State Reporting: Status and Lessons Learned
NC HIE and State Reporting

Wake Forest Baptist Health System is piloting the connection to submit immunization data to NCIR. Expected pilot completion is Q2 2014.

CaroMont Health is piloting the connection to submit reportable lab results to NC EDSS and NC LEAD. Other hospitals have begun the onboarding process.

NC HIE and NC Medicaid are building connectivity to enable electronic clinical quality measure reporting directly to NC Medicaid. Service availability is scheduled for Spring 2014.

In 2014, to comply with the NC Health Care Cost Reduction and Transparency Act, hospitals will begin reporting Medicaid demographic and clinical data to NC Health and Human Services via NC HIE.
House Bill 834 Update

- The NC General Assembly's Health Care Cost Reduction and Transparency Act (House Bill 834) requires hospitals in North Carolina to connect to NC HIE.

- The legislation aims to provide the State with timely access to clinical information to evaluate medical expense trends and control health care costs of the Medicaid program.

- Discussions between NC HIE and NC DHHS since September 2013, and multiple presentations to the Joint Legislative Oversight Committee on Health and Human Services.

- Developing data use agreement to facilitate exchange of Medicaid clinical data from NC HIE to DHHS.
State Reporting: Lessons Learned

- **Kicking Off Public Health Reporting**: Provider organizations must register their intent to report to the State systems independent of NC HIE. To register intent, visit: [https://ncdphmeaningfuluse.org/](https://ncdphmeaningfuluse.org/). The NC Division of Public Health then directs NC HIE’s pilot and onboarding efforts.

- **Immunization Registry Reporting**: Upon pilot completion, onboarding efforts will be facility-by-facility and will require each site to adapt to NC specifications to be published at the end of the pilot.

- **Electronic Laboratory Reporting**: Initial reportable identification and code mapping on the part of the hospital is time consuming taking up to several months to complete even with a dedicated staff. This has been an obstacle to efficient project schedules.

- **eCQMs**: NC HIE’s vendor is certified to aggregate and report on all 66 eCQMS and may be able to supplement a provider’s EMR vendor offerings, in some cases.

- **Cancer Registry Reporting**: This reporting is only an option for providers with a certified cancer reporting EMR module.

- **Other Disease Registry Reporting**: Impetus for creating registries was to satisfy Meaningful Use requirements but the reality is much more about care improvement than meeting a requirement.
Participating with NC HIE
A unique feature of NC HIE is its **strict patient privacy, security and data use policies** built on existing federal regulations, and a statewide consent management process allowing for **maximum patient choice** with regard to the sharing of their health data.

**Components of the framework include:**

- **Guiding Principles:** Established by the NC HIE Legal and Policy Workgroup in 2010. The Workgroup’s guiding principles for developing the framework are:
  - Implement Core Privacy Principles
  - Adopt Trusted Network Design Principles
  - Establish Oversight and Accountability Principles

- **NC HIE Participation Agreement:** In compliance with HIPAA.

- **User Access and Authentication:** Only authorized users who provide health care services to patients may access a patient’s health information.

- **Audit Logs:** User access and all user activity is logged and audited.

- **Data Security:** NC HIE’s system is protected by intrusion prevention devices. NC HIE utilizes Orion Health’s Direct Secure Messaging (DSM) solution for sending sensitive information in a secure, encrypted manner between participants and other entities.

- **Patient’s Consent and Right to Opt Out:** In compliance with the NC Health Information Exchange Act.
Patient Consent Management

NC HIE manages the patient consent process from start to finish. Patients contact NC HIE, who adjusts data permissions accordingly.

**Opt-Out**

NC HIE allows several options for patients in regard to the sharing of their health data:

- Full Opt-Out
- Opt-Out by Organization
- Opt-Out by Provider

**Resources**

Participating organizations are provided patient education materials, including an educational brochure (English and Spanish) that is required to be made available in patient common areas. NC HIE’s opt-out form is also available in English and Spanish. For more resources, visit [http://nchie.org/providers/communication-materials/](http://nchie.org/providers/communication-materials/)
Onboarding New Participants/Facilities – STANDARD FLOW

1. Contractual Agreements and Business Requirements Form (BRF)
2. Implementation Planning Questionnaire (IPQ)
3. Virtual Private Network (VPN) Connectivity Form
4. Implementation
5. Integration
6. System Testing
7. Validation
8. Training
9. Production Rollout

IPQ – Implementation Planning Questionnaire
BRF – Business Requirements Form
TECCA – Technology Enabled Care Coordination Agreement
## Cost to Participate

Cost of participation with NC HIE varies according to provider type and service offering. NC HIE Participants pay one-time integration fees and annual subscription fees.

<table>
<thead>
<tr>
<th>Participant Category</th>
<th>CORE Services Subscription Fee (Annual Fee)</th>
<th>Integration Fees (One-time Charge)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals/IDNs</td>
<td>$250 per licensed bed (includes hospital-based providers)</td>
<td></td>
</tr>
<tr>
<td>Hospital/IDN Owned or Managed Physician Practices</td>
<td>$150 per clinical user (clinic-based providers), capped at 20% of total bed fees at standard list price</td>
<td>Various/dependent upon Participant EHR</td>
</tr>
<tr>
<td>Physician Practices</td>
<td>$150 per clinical user</td>
<td></td>
</tr>
<tr>
<td>Skilled Nursing/Long-Term Care</td>
<td>$50 per licensed bed</td>
<td></td>
</tr>
<tr>
<td>Pharmacies</td>
<td>$550 per pharmacy</td>
<td></td>
</tr>
<tr>
<td>Direct Secure Messaging</td>
<td>Can be purchased on a stand-alone basis for $100 per mailbox per year</td>
<td></td>
</tr>
</tbody>
</table>
Questions?

Contact:

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