Turning Information into Action: Emergency Room Care Teams Leverage a Regional HIE

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Learning Objectives

• Define Use Cases for Emergency Room Access to a Regional HIE
  – Community Health Record (longitudinal patient record)
  – Notify (ED and inpatient admission/discharge alerting)
• Discuss Pre and Post Clinical Care Team Workflow
• Measure the Value
  – Patient Experience
  – Utilization
  – Care Transition
CCHIE Overview:
Needs Assessment

“All this talk about EMRs and EHRs is just a fad - like the Internet thing.”
Governance Structure

Multi-Disciplinary Board

Regional Hospitals
(3 seats)

Local Regional Extension Center
(1 seat)

Rural and Urban Physician Representation
(7 seats)

Community Care of NC
(1 seat)

Consumer Representative
(1 seat)

Clinical  Policy/ Legal  Business Planning  Consumer Advocacy
CCHIE Overview: 2015 Footprint

- HIE to HIE Connection
- 40 Counties
- 81 Data Contributors – acute, ambulatory and commercial lab
- Since January 1\textsuperscript{st}, Transition of Care supported for 27,652 patients
### CCHIE By the Numbers

<table>
<thead>
<tr>
<th></th>
<th>Dec 2013</th>
<th>Dec 2014</th>
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</thead>
<tbody>
<tr>
<td><strong>Unique Logins</strong></td>
<td>648</td>
<td>3,487</td>
</tr>
<tr>
<td><strong>Unique Patients Accessed</strong></td>
<td>988</td>
<td>3,818</td>
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<tr>
<td><strong>Delivered Messages</strong></td>
<td></td>
<td></td>
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<tr>
<td>✓ Lab Results</td>
<td>247,641</td>
<td>279,108</td>
</tr>
<tr>
<td>✓ Radiology &amp; Pathology</td>
<td>4,081</td>
<td>49,124</td>
</tr>
<tr>
<td>✓ Transcription</td>
<td>129,840</td>
<td>180,519</td>
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</tbody>
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**Total Patients Since Inception:** 4,047,430
CCHIE Suite of Products

Connect
- Secure Messaging
- Referral Management

Notify
- Event Notifications

Exchange
- Orders
- Results Exchange
- Clinical Summary Exchange
- Public Health Data Exchange

Organize
- Community Health Record
- CareEngine
Suite of Products:
iNexx Referrals / Connect

Acute to Ambulatory Transition of Care

- **Increased Utilization:**
  - from 2 floors and 2 physician practices to 7 floors and 37 physician practices
  - 98% utilization

- **Efficiency/Workflow Results:**
  - 80% reduction in call volume from the hospital to the practices. Reduction from 25 mins to 6 mins to schedule the referral appointment.
Suite of Products:
Results Delivery / Exchange

• EMR Integrations:
  ✓ Discrete Data delivered to Ambulatory EMR
    ➢ Inpatient Lab Results, Procedure Notes and Discharge Summaries
  ✓ 15 integrations complete, 3 in process

• Clinical Inbox:
  ✓ Results delivered from Community Health Record to User
  ✓ Provider mapping to appropriate practice staff
Recent Enhancements

- Direct Deployed December 2014
- CCHIE Staff Member became a Trusted Agent to support establishing DirectTrust accounts for participating community

Transition of Care and Referral Messages

- Certification Accepted August 2015
- Exchange Partner Testing September 2015
- Onboarding Roadmap:
  - Duke
  - Novant
  - VA
Turning Information into Action: Emergency Rooms Leverage a Regional HIE

- **Active Emergency Department Staff Users**
  - Dosher: 20%
  - Columbus: 19%
  - Southeastern: 13%
  - NHRMC: 19%
  - Scotland: 29%
  - Total: 388 Users

- **Community Health Record - Role-based query access to 81 data contributors**

- **NOTIFY ADT Alerting - Real-time or batched notification on inpatient and emergency room admission and discharge encounters**
81 Data Contributors across regional footprint
Turning Information into Action: Use Cases for Community Health Record

• Access to Information for Care Transition
  – Hospital to Hospital
  – Acute to Ambulatory
  – Longitudinal view of patient encounters from across the entire HIE footprint
  – Clinical Inbox

• Impacting high utilizers of non-emergency care in emergency room settings

While treating a patient from Columbus County, a Wilmington Health Physician used the HIE to access Columbus Hospital records and noticed the kidney function had a marked decline from the labs he ordered that day – resulting in an urgent hospital admission.
Turning Information into Action: **Notify**

providers of major health events

A system to monitor and report noteworthy events through various delivery options.

- **A04** – Registration
- **A01** - Admission (inpatient or emergency department)
- **A03** - Discharge
Turning Information into Action: Notify Tool Customization

- **WHAT**
  - Admit or Discharge
  - Emergency Department Encounter
  - Inpatient Encounter
- **Where**
  - Text
  - Email
- **When**
  - Real-time
  - Batch
Turning Information into Action: Notify Tool Customization

Who
- Case Managers
- Consulting Physicians
- Primary Care
- Admitting

Criteria
- Provider Number
- Patient List
- DRG
- Payor Class
Turning Information into Action: Care Manager / High Risk Patients

- ED Case Managers and EMS Readmission Team receiving alerts on top 30 utilizers
- Orthopedic practice tracking 250+ Medicare patients with total hips/knees/ankles for 90 days post surgery readmissions
Turning Information into Action: Physician practice notification

- Primary Care Physician realized patients were not calling after every hospital encounter
- Pediatric practice was able to intervene during the ED visit and redirect the patient to their after hour clinic
Turning Information into Action: Notify User Comments

- Real-time alert to a pediatric practice of emergency room admission for a mental health patient.
  
  *Nurse was amazed, and appreciated how she was able to involve the patient’s physician in the encounter immediately.*

- **Physician User Feedback**
  
  “I can find out when my patients have been in the ER, read the discharge summary, and **it makes for good patient care** because we can call the patient(s) and tell them we got the report from the ER. They are happy to know we are interested in their welfare and ongoing care........getting notified about hospital discharges we can call the patient to make a follow up appointment.” - Dr. Raja Bhat, Internal Medicine
Access to Information for Care Transition: A Community Practice Perspective
Access to Information for Care Transition: Community Practices

• Wilmington Health
  – Multi-Specialty Clinic with integrated Primary Care Providers
  – Driven to become a High Performance Health System (HPHS)
  – 2013 Acclaim Award honoree – American medical Group Association

• Physicians Healthcare Collaborative
  – First insurer-provider ACO agreement in the region (BCBS)
  – Year Three Medicare Shared Savings Program (MSSP)
  – Focused on Population Health, reducing costs and enhancing the patient experience
Access to Information for Care Transition: Community Practices

• Founding Members in Coastal Connect HIE
  – WH Leadership recognized the benefits HIE technology would bring to the communities we serve
  – WH Investing in the HIE Technology & Integration in our EMR

• CCHIE Current Value
  – Vehicle for reducing duplicate, costly procedures
  – Comprehensive patient medical record (Care Transitions)
  – Quicker diagnoses with access to pathology reports
Access to Information for Care Transition: Wilmington Health Notify Examples

Contact all Primary Care Patients that present in ER

- Schedule timely follow up
- Educate Patients about extended office hours (avoid the ER)
- Compassionate intervention at the time of care vs at the next appointment

WH Outreach Care Coordination

- Receives real-time admission and discharge (ADT) messages
- Aids in Chronic Care Management

Coastal Connect HIE directly supports our vision to continually develop collaborative and innovative solutions that demonstrate quality, reduce the cost of care and improve the patient experience.
Access to Information for Care Transition: Measuring the Value

Gastroenterology

- “Having access to Coastal Connect has been a god send over past couple of the years.” RNs use the HIE every day to gather relevant information for our patients care – labs, Op notes, Pathology reports, biopsy report.
- Helpful for physicians taking unassigned call. We can see when our patients have been to the ER and do our jobs more effectively because it gives us the ability to have the pathology report timely.
-- The HIE allows our physicians to provide a quicker diagnosis and treatment plan for our patients – a tremendous value for patients concerned about liver cancer or are waiting to be staged.

OB GYN

- Administratively, the HIE is a great tool for assisting with the coordination of care.
- Ability to see when a patient has delivered early: providing for timely follow up and allows scheduling other patients that may need an induction.
- Ability to pull all the relevant clinical information from the ER the physician may need to make better clinical decisions.
- I use it to know when patients have missed an appointment and to assist in the referral process. It is a great resource to gather information on our patients when they’ve been seen at areas other than Wilmington Health. I love it.
Access to Information for Care Transition: Measuring the Value

**Cardiology**
- We pull: Cath reports, Op notes, lab results, and discharge summaries to prep charts for our providers.
- It is an integral part of our daily process.
- Allows providers to have a full picture of our patients medical record.
- Follow up for recently discharged patients includes a review of the hospital discharge summary to ensure the patient understood the doctor’s instructions and how to carry them out at home.

**Family Medicine**
- 90% of what we use Coastal Connect for is to have an accurate picture to follow up with a patient following discharge.
- Easy to access the HIE when we are missing a radiology report or a Hep B vaccine for our peds patients.
- Proven efficiency by not having to call another hospital’s medical record department to request records.
- We use the discharge summary, Labs, and any radiology test results to help in the coordination of care. This helps so that we don’t re-order labs or tests that the patient recently had.
- “I’m in the HIE at least 4 or 5 times a day. We love the HIE in our office.”
Access to Information for Care Transition: Measuring the Value

- Future Value
  - WH Will be a data contributor November 16, 2015
  - HIE tool integrated into our EMR
Questions?