North Carolina Health Information Exchange

The Future of HIE is NOW!

NC Council of Community Programs
Annual Conference
December 06, 2016
Today’s Session

- Our Presenters
  - Cansler Collaborative Resources, Inc.
  - Vaya Health (formerly Smoky Mountain MCO)
  - HealthCare Perspective, LLC
  - NC Health Information Exchange Authority, NC Department of Information Technology
Let’s Set the Tone

- Over the last several years there have been presentations about being a data driven organization which include:
  - Integration of Primary Care and Behavioral Health
  - Population health analytics,
  - Moving to outcome driven decisions
  - Pay for performance contracting
  - Conducting readiness reviews on your agency to be a data driven organization

- The physical health side of the Medicaid space accessed federal meaningful use funding. Funding that was not available to “straight” behavioral health providers.

- Some behavioral health agencies began to move toward purchasing EHRs and also looking at the use of analytics
Let’s Set the Tone

- Some agencies even leveraged purchasing arrangements to jointly purchase or buy the analytics capacity.
- So the time is here...no more of the maybe or let’s wait and see.
- Some of you are probably overwhelmed - more CHANGE in a system of change.
- This is not just a NC challenge - this is the movement of health care.
Objectives - There are Answers

- Identify what encompasses HIE and why it is critical to the future of health care.
- Review the requirements for HIE as outlined in the legislation
- Explain the role of the State HIE versus regional or health system HIE
- Discuss State requirements of HIE and what will be required of each agency
- Review how your organization can comply with federal and state regulations on HIE and the role of the Electronic Health Records (HER) in meeting these requirements
- Identify barriers to proper implementation of HIE
- Describe how to meaningfully use data in your organization.
Meaningful Use (MU) and Behavioral Health

- Prior to Meaningful Use there was the Certification Commission for Health Information Technology or CCHIT.
- Founded in 2004 and first Certifications in 2006
- Healthcare Information Management and Systems Society (HIMSS) started HIE Steering Committee 2006
- CCHIT eventually became Meaningful Use in 2009 when ARRA-HITECH was created
- Focus of HITECH was to fund EHR development around the concept of MU to mature provider systems so that HIE could become a reality
MU and Behavioral Health

- ARRA-HITECH also funded the development of State HIEs and the National HIE known as NHIN
- Grand plan was to develop HIEs within States that would link at the National Level via the NHIN
- Long Term focus has always been HIE development and implementation
- Initial concepts of Integrated Care date back to this period - this has been a long time coming
- What went wrong??


MU and Behavioral Health

- What happened to Behavioral Health and why were they excluded?
- Self inflicted wounds by the Behavioral Health industry
  - Provider community took position that BH was different than medical
  - BH Vendor community (not all) followed suit and lead major efforts to stay outside the MU discussions
- Finally the decision was made to leave the BH community out of the MU program
- Huge mistake that now comes back to haunt the entire industry
Barriers to HIE Implementation

- Most obvious barrier is the absolute lack of funding for BH providers (and others by the way including LTC and Home Health) to invest in EHRs

- Siloed funding for Medical and BH services - no incentive for efficiency in the current FFS system
  - Note: This is changing rapidly so pay attention

- 42 CFR Part 2 - the privacy elephant in the room
  - Some movement by SAMHSA and CMS, but not enough yet

- Lack of desire by many providers to share data - this is the real elephant in the room
Barriers to HIE Implementation

- Market driven health care is not conducive to sharing of patient clinical data
- Fundamental HIPAA concept = Patient owns their own data
  - Not the providers
  - Not the payers
  - The patient owns their data!!!
- HIEs were designed so that the data follows the patient
- Health systems have been sued over this issue because they refuse to share patient data between delivery systems
Barriers to HIE Implementation

- Lack of clear and concise data standards which cause technical problems with the exchange of data
- The road map is clear and there is NO good reason for non-compliance at this point
- Providers need to take the steps now to become compliant
  - Good news there are alternatives out there
  - Vendors are going to have to step up and produce
  - Clear and concise standards are critical
- HIEs must have a financially sustainable business model
  - Federal funding is just not going to be enough
MU and Behavioral Health

- National Council and Medicaid still continue to promote integrated care and several models have evolved nationally
  - Community Mental Health agencies co-located primary care services in their organizations
  - Community Health Centers including FQHCs co-located behavioral health services in their organizations
    - Salud Family Health Centers in Colorado was a successful FQHC who integrated in BH services
  - Several initiatives nationally for BH Medical Homes - very few were successful due to funding issues
  - These integrated care delivery models all required MU certified EHRs
MU and Behavioral Health

• Several attempts have been made nationally to use HIE to help with integrated care models

• Use of an HIE will allow CMHCs and other BH providers to share information with primarily Primary Care Providers

• Primary target of MU is the CCD - Continuity of Care Document

• HIEs with BH focus or included have been implemented
  • Colorado RHIO or CORHIO
  • eBHIN - Nebraska - regional HIE for BH providers
  • BHINAZ - Arizona integrated care for BH
  • OHIP - Ohio State HIE BH Workgroup
  • North Carolina HIE kicked off BH Workgroup in November
MU and Integrated Care & Care Coordination

- SAMHSA-HRSA (CIHS) Initiatives - IL, KY, ME, OK, RI
  - Center for Integrated Health Solutions

- Medicare and Medicaid are moving rapidly to implement integrated care - which means both BH and Medical

- VAYA Health has started a Pilot to implement a demonstration project in NC that uses a Care Coordination Platform to facilitate integrated care

- HIE will be a critical component long term for this project - specifically the CCD and ADT data
VAYA HEALTH
Role of HIE and Care Coordination Platform

- VAYA HEALTH is Implementing an Advanced Care Coordination Platform that Heavily Relies on Data
- Core Data Sources Currently Available to LME/MCOs for Medicaid and State Funded Services
- Additional Data will Come from Assessments that are done by Clinical Team – such as a comprehensive Health Risk Assessment
- HIE is Needed to Enhance the CCP and Make it More Valuable - Timely, Actionable and Cost Effective
SOURCES OF DATA: FEEDING THE BEAST

- Medicaid Medical Claims Data
- Medicaid Medication Claims Data
- MH/SA/DD Claims Data
- Medicaid/State Eligibility Data
  - Including Coordination of Benefits
- Medicaid Provider Data
  - MCO/NCTracks/NPPES/ …
  - NPIs for Facility, Site and Clinicians
Admission Discharge Transition (ADT)
- Types:
  - ED Admission / Discharge
  - Hospital Admission / Discharge
- Format - HL-7 V2 Messages

Consolidated Clinical Document Architecture (CCDA)
- Types:
  - Clinical Summary of Care
  - Care Transition
- Format - XML
• Health Risk Assessment
  • Comprehensive assessment
• SIS Assessment Data (In Development)
  • Incorporate into the clinical work flow
• Other Assessment Tools
  • PHQ-2
  • PHQ-9
  • ASAM
  • LOCAS
  • CALLOCAS
  • SBIRT
  • DIRE
  • Etc........
VAYA HEALTH
Role of HIE with Care Coordination

Coordinated Care Platform

Care Management System
- UM Queue
- Alerts
- Reminders
- Case Notes

Integrated Care Plan
- Integrated Care Team

Risk Stratification

Provider Network
- Primary & Specialty Care Coordinator
- Hospital & Facility Care Coordinator

Social & Community System Users
- Community Support Care Coordinator
- Social Services Care Coordinator
- Housing & Other Care Coordinator

DATA EXCHANGE
- Eligibility
- HRA
- Claims
- Rx
- Labs
- Provider

PORTAL
HIE
EHR
Future Vision for HIE and CCP
Future Vision for HIE and CCP
Monday July 11, 2016  Be Like Entrepreneurs

WE NEED TO DISRUPT OUR ENTIRE INDUSTRY, AND WE NEED TO MOVE QUICKLY.

BUT CHECK WITH ME BEFORE YOU DO ANYTHING.

I WANT YOU TO THINK LIKE ENTREPRENEURS, BUT NOT LIKE THE BRAVE ONES.

CAN DO.
So Where to Begin

- **THINK BIG** - know where you’re going
  “You can’t build a reputation on what you are going to do unless you actually do it”  Henry Ford
- **BUT START SMALL** with implementation steps
  - have in place a process for measurement of success and need of improvement
Develop a Healthcare Analytics Strategy

- The strategy must be effective which means
  - The right approach to gathering and organizing data
  - Getting the right data to the right people to drive improvements
  - How does HIE fit into the strategy?

- Experienced Analytics expertise CAN be bought BUT be cautious about marketing

- Using a healthcare enterprise data warehouse that combines clinical and financial data is a good method for aggregating and optimizing data for analysis.

- The infrastructure must allow for the delivery of the linked clinical and financial data to clinicians on the frontlines of care.

- One approach is to create frontline teams of clinicians, analysts and QI personnel who analyze the data to identify quality problems and determine the right protocol for addressing the problem
Provider Management and Performance Reporting

- The MCO will use information to inform the frequency or to determine providers to monitor

- Can also use algorithms to analyze the data to determine outliers
  - Look at service mix to age and diagnosis
  - Cost outliers
  - Risk stratification
Identify Areas for Clinical Quality and Cost Improvement

- Identify the areas of greatest variation within the measures focused on
  - By service, specialty, staff/provider and other applicable groupings
- Use the data to identify opportunities for waste reduction such as determining which areas can benefit from increased standardization and evidence based protocols
- By the productivity of staff
- Identifying time for completion of workflows
Financial

- Think cost structure rather than revenue increases. In P4P, revenue increases will be small and will be dependent on quality measures.

- The shift is understanding how much it costs to deliver care and lowering those costs without sacrificing quality.
  - What is the payer buying and why?
  - Cost of delivery is the not rate one is paid for the service
  - Do you know the cost of care or cost of operating your agency?
How Will NC HealthConnex Close Gaps in Care?
What is Health Information Exchange (HIE)?

“Communication is the beginning of understanding.”

When it comes to health care nothing could be truer, whether it’s doctor-to-patient or system-to-system. The more a health care provider knows about his patients, the better he understands their problems, the better he can help.

A Health Information Exchange (HIE) is a secure, electronic network that gives authorized health care providers the ability to access and share health-related information across a statewide information highway.
Types of HIEs in North Carolina

**State-wide HIEs** – run by state governments or may be the state’s designated entity (i.e. the North Carolina Health Information Exchange Authority/ NC HealthConnex is the state-designated HIE)

**Private/Proprietary HIEs** – often concentrate on a single community or network (i.e. Mission Health Connect, CareConnect – HIEs developed by Mission Health and Carolinas HealthCare respectively)

**Regional/Community HIEs** – often not for profit (i.e. Coastal Connect in eastern North Carolina is a good example of this type of HIE)
What is NC HealthConnex?

• The North Carolina General Assembly created the North Carolina Health Information Exchange Authority (NC HIEA) in 2015 to facilitate the creation of a modernized HIE to better serve North Carolina’s health care providers and their patients. *(NCGS 90-414.7).*

• Housed within the Department of Information Technology’s Government Data Analytics Center (GDAC).

• Technology partners are SAS Institute and Orion Health.

• Advisory Board made up of various health care representatives will provide input.
Goals of NC HealthConnex

To link all providers across the state via a modernized HIE

To put patient care at the center of all decisions to help improve health care quality and outcomes

To support Medicaid Reform in the transition from fee for service to whole patient care
Goal 1:  
To link all providers across the state via a modernized HIE

What Does the Law Mandate?

Law mandates that by February 1, 2018, all Medicaid providers to be connected and submitting data to the HIE in order to continue to receive payments for Medicaid services provided.

By June 1, 2018, all other entities that receive state funds for the provision of health services (i.e. State Health Plan), including LME/MCOs, also must be connected.
Goal 1:  
To link all providers across the state via a modernized HIE

What Does Connected Mean?

To meet the state’s mandate, a Medicaid provider is “connected” when its clinical and demographic information pertaining to services paid for by Medicaid and other State-funded health care funds are being sent to the NC HealthConnex at least twice daily – either through a direct connection to NC HealthConnex or via a hub (i.e. a larger system with which it participates, another regional HIE with which it participates, or an EHR vendor). Participation agreements signed with the designated entity would need to list all affiliate connections.
How Does the Technology Work?

Query – “Do you know my patient?”
HIE responds with a list of patients.

Registry Stored Query - “What do you know about my patient?”
HIE responds with a list of documents. This list includes a Patient Summary CCD and any documents that the HIE is aware of.

Retrieve Document Set “May I have it?”
How Do I Know If My EHR Can Connect?
HL7 2.X | Supported Message Types

Electronic Health Records (EHR) play an important role in health information exchange.

**ADT**
- Required Segments - MSH, EVN, PID
- Optional – PD1, NK1, PV1, PV2 (preferred), AL1 (preferred), DG1 (preferred), PR1 (preferred)

**ORU**
- Required Segments – MSH, EVN, PID, OBR
- Optional – PV1, ORC, OBR NTE, OBX (preferred), OBX NTE (preferred)

**Medication**
- OMP-O09 – Pharmacy / Treatment Order
- RDE-O11 - Pharmacy / Treatment Encoded Order
- RDS-O13 - Pharmacy / Treatment Dispense
- RAS-O17 – Pharmacy / Treatment Administration
How Do I Know If My EHR Can Connect?
NC HealthConnex | “NWHIN Conversation”

Electronic Health Records (EHR) play an important role in health information exchange.

Inbound Feed to NC HealthConnex
ADT Feed - Establish identity with NC HealthConnex
   Format can be most any ADT message with a PID segment and may vary with each approved participant
ITI-41 - Provide and register document set
   CCDA is the preferred method, but SAS will allow CCD c32 as an alternative

Query Interface from NC HealthConnex
ITI-9  –  PIX Query
ITI-18 – Registry Stored Query
ITI-43 – Retrieve Document Set
Types of Data Shared

Person Information
Information Source
Allergies
Medications
Problem List
Procedures (surgeries and history of procedures)
Diagnostic Results (lab and diagnostic)
Encounters
Immunizations
Plan of Care
Social History
Vital Signs
Goal 2: To put patient care at the center of all decisions to help improve health care quality and outcomes

Vision: Link all health care providers across North Carolina enabling participants to access information to support improved health care quality and outcomes.

Mission: 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.
NC HealthConnex Current Functionality

- **Secure Messaging Between Providers** – NC HealthConnex offers providers a DSM (direct secure messaging) solution that is certified by DirectTrust and allows participants to send secure, encrypted messages between health care providers.

  - Use cases for DSM include care coordination between health care providers who share patients, but more and more this form of secure communication is being used to replace fax, phone, and/or mail in the workflows of healthcare-related organizations whose professionals don't necessarily use EHRs and don't directly benefit from the MU incentive bonuses.
Clinical Notifications - Participants can now utilize the Notifications feature in the NC HealthConnex Clinical Portal to follow a patient’s care across the continuum. The NC HealthConnex portal offers notifications for time sensitive events like emergency room visits, critical lab results or hospital discharges.

When notified of these events in near real-time, care managers and others following a patient’s care can intervene early to ensure the patient gets the right care and follow up in a timely manner. This is especially important for provider organizations participating in Accountable Care Organizations or other risk-based payment arrangements.
NC HealthConnex Current Functionality

**Provider Directory** – NC HealthConnex has created a directory of the secure email addresses of NC HealthConnex participants and North Carolina providers participating in DirectTrust. The current number of HISP addresses is just over 5,000, and we expect that to grow as NC HealthConnex grows. The directory will be made available to NC HealthConnex participants in a .csv file.

**Public Health Reporting** – NC HealthConnex is working with Division of Public Health to define projects to include immunization registry, electronic lab reporting, and other disease registries.
Goal 3: To support Medicaid Reform in the transition from fee for service to whole patient care

The analytics toolset may be used by:

- Legislators and Medicaid management to understand the impact of program level decisions on health and quality of care
- HIE Participants and Providers to gain visibility into quality of care, outcomes and risk for their patients
- Public Health to react quickly to abnormal trends in disease and syndromic surveillance
Security - The NC HIEA takes its role as a steward of patient data very seriously and abides by the highest security standards as set by federal and state law. Built with security safeguards and protocols in place, including disclosure limitations, data encryption, user authentication and more. The NC HIEA will perform regular audits to ensure compliance.

Privacy - Federal regulations protect sharing of substance abuse data and psychotherapy notes from the normal electronic sharing of PHI. The NC HIEA is working with its partners to determine responsible business rules as we move forward with connecting behavioral health providers.
Addressing Gaps through a Collaborative Approach

- Educate providers how to connect, recognizing not all currently have technology in place
- Complement current HIE initiatives in the state
- Continue to evaluate needs for future value-added services
Questions?

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Panel Discussion
Questions