GEORGIA
HEALTH
INFORMATION
NETWORK

GaHIN Technology Committee Meeting

December 16, 2013

CARE IS BETTER WHEN
WE'RE CONNECTED

Georgia Department of Community Health

CARE IS BETTER WHEN WE'RE CONNECTED

The Georgia Health Information Network

Agenda

- Welcome
- Introductions
- GaHIN Operations Update
- GaHIN Connectivity and Architecture Overview
- Health Information Service Provider (HISP) and services & GeorgiaDirect
- Georgia's Regional Health Information Exchanges and Strategies for Growing their Exchanges
  - ArchHIE
  - Chatham Healthlink
  - The Georgia Association for Primary Health Care, Inc.
  - GRAChIE
  - HealtheConnection
  - West Georgia Health
- Payer Perspective on The Value of Participating in Health Information Exchange Network – Blue Cross Blue Shield
- Other Committee Needs and Questions
- Wrap up and Close

GaHIN Operations Update

Denise Hines, GaHIN Executive Director

Georgia Health Information Network

Product Roadmap/Timeline

Connecting Georgia

Connecting Georgia

Active Members (Signed)

- Emory Healthcare (Cerner)
- Grady Health System (Epic)
- ArchHIE (Siemens)

Approved GaHIN Members

- Chatham HealthLink
- Georgia Partnership for TeleHealth
- GRAChIE
- Amerigroup (CMO)
- HealtheConnection
- Children's Healthcare of Atlanta

GaHIN Applications in Review

- West Georgia HIE
- GA-HITEC/ Liaison SAHIE

Connection Project Overview

Week 1	Kick-off	Complete Subscription Agreement
Week 2	Schedule weekly project meetings	Initiate Technical work
Week 3	Finalize connection design	Develop training plan
Weeks 4 – 10	Connectivity Work	Conduct Training & Support Process
Week 11	Production Readiness	
Week 12	Go Live	

Connecting Georgia

APPLICATIONS IN PROGRESS

- Blue Cross Blue Shield of GA
- GAPHC
- Georgia DBHDD
- Georgia DHS/DFCS
- Georgia DJJ
- Kaiser Permanente
- PeachState (CMO)
- Wellcare (CMO)

ENGAGED PARTIES

- Aetna/Coventry
- Athens Regional
- CIGNA
- Gwinnett Medical
- Piedmont
- Phoebe Putney
- Tenet
- UHS Pruitt
- United Health Care
- Wellstar

GaHIN Operations: Update

GaHIN Transition

- **Recent transition activities**
  - GaHIN offices located at Georgia Tech iPAT facilities
  - GaHIN/eHealth Services Group
    - Maintaining daily operations
    - Facilitating GaHIN Committee meetings and related activities
    - Managing GaHIN Member on-boarding activities
    - Continue to work with DCH on related tasks and deliverables
    - Beginning transition of legal activities
    - Take lead role in advancing the GaHIN network
- **Future transition – March/April 2014**
  - Contract reassignment for Medicity & Truven technology
  - Beginning contract transition discussions

GaHIN Marketing Update

- **Completed**
  - Released GaHIN Press Release
  - Launched GaHIN Exhibit at GA Medicaid Fair
  - Working on Events for 2014

- **Coming Soon**
  - **Updates to www.gahin.org**
    - Webinars explaining each area of GaHIN
      - General GaHIN, GRITS, technology, legal & privacy
    - News & Events related to GaHIN Board Members
  - **Update GaHIN product branding**

Questions????

GaHIN Connectivity and Architecture Overview

Christine Jenkins & Grant Hoffman - Truven

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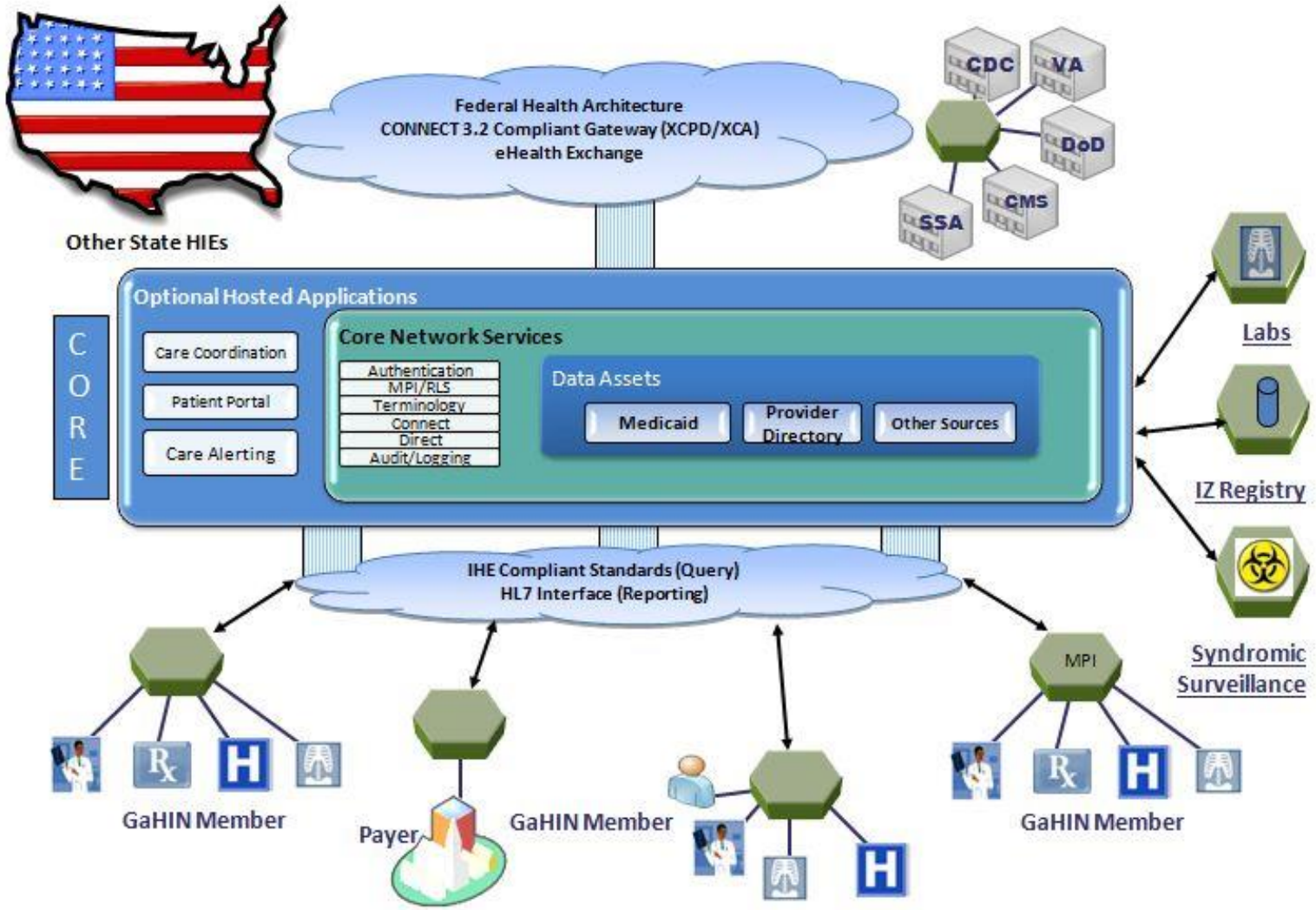
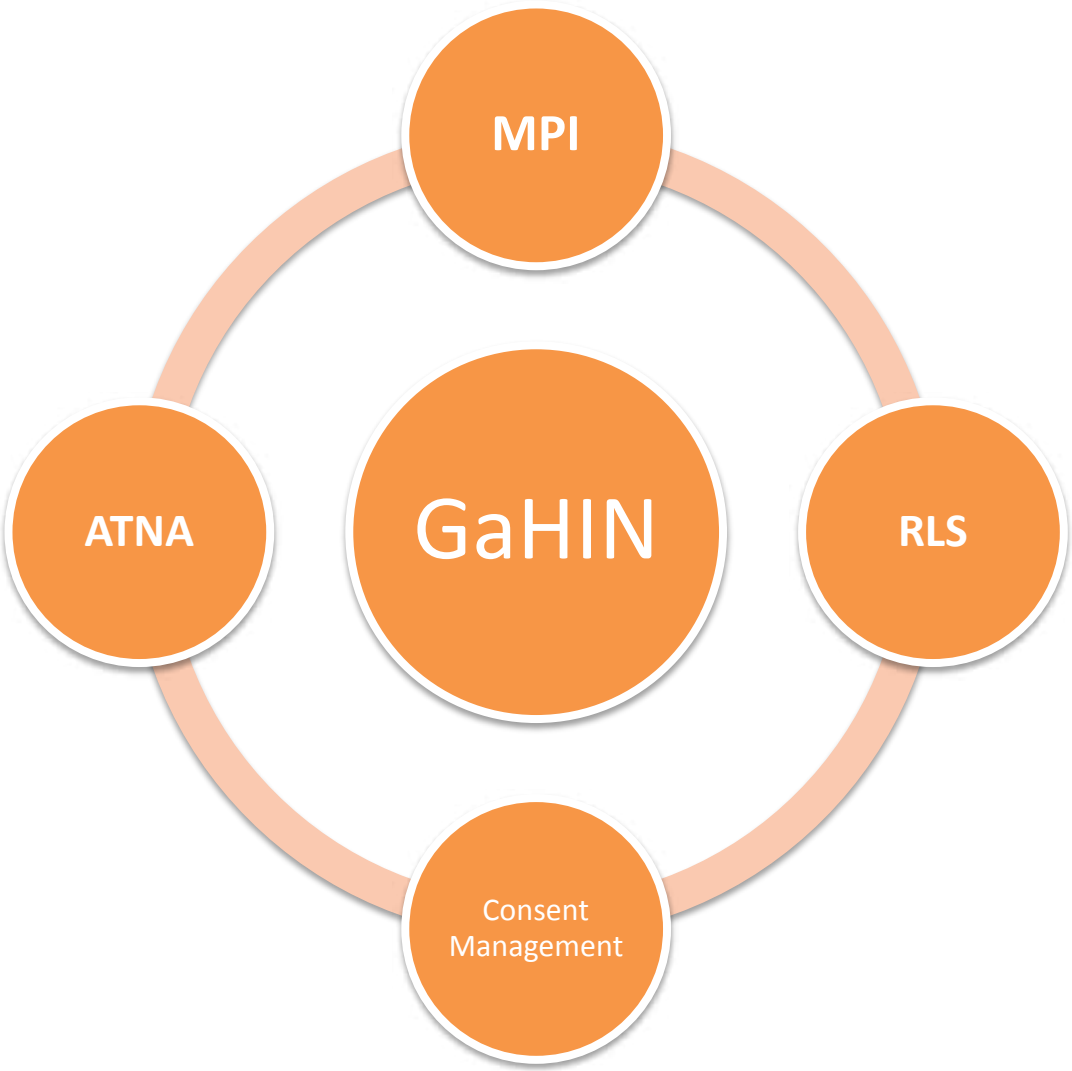
2. GaHIN Technical Architecture Overview

GaHIN


Federal Health Architecture
CONNECT 3.2 Compliant Gateway (XCPD/XCA)
eHealth Exchange
CDC
VA
DoD
CMS
SSA
Other State HIEs
Optional Hosted Applications
CORE
Care Coordination
Patient Portal
Care Alerting
Core Network Services
Authentication
MPI/RLS
Terminology
Connect
Direct
Audit/Logging
Data Assets
Medicaid
Provider Directory
Other Sources
Labs
IZ Registry
Syndromic Surveillance
IHE Compliant Standards (Query)
HL7 Interface (Reporting)
MPI
GaHIN Member
Payer
GaHIN Member
GaHIN Member

GaHIN Foundation



Security Components

Data Access & Protection	• Truven office/Facilities • Data Segregation • Data Access Controls
Identity Management	• Role Based access control • HIE Advantage complies with the CIPHER technologies called for by FIPS 140-2 • NIST requirements for securing data in flight and at rest
Incident Management	• Incident Response • Incident Response Plan/Business Continuity Plan/Disaster Recovery Plan
Tracking, Audit & Controls	• Audit Trails, Logs • Audit Reports
Security Assessments	• Personnel Security Assessment • Certification, Accreditation & Security Assessments

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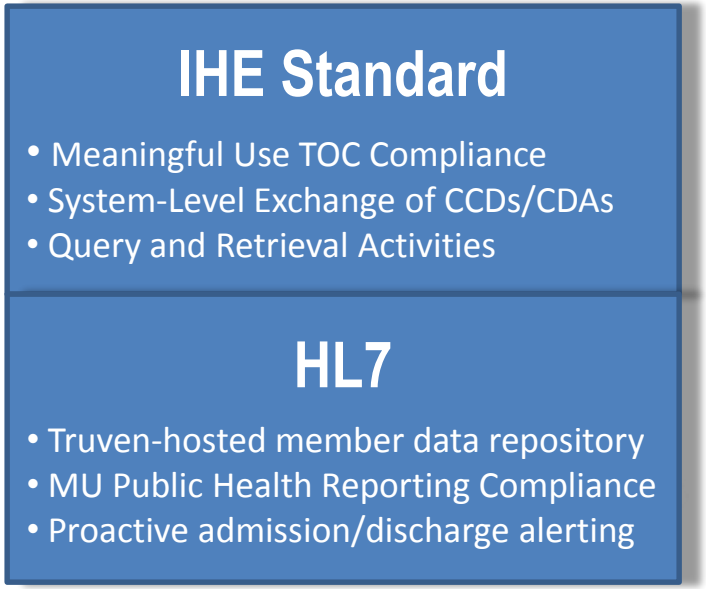
2. GaHIN Connectivity Requirements

Connecting to GaHIN



The full connection consisting of IHE query connectivity with an HL7-based Truven-hosted secure GaHIN Member data repository and public health reporting gateway. This connection provides GaHIN Members with the ability to:

- Exchange data
- Meet a range of meaningful use requirements, and
- Receive data delivery services such as cross-provider admission/discharge event alerting.

Connectivity Requirements - IHE

- Digital certificates exchanged between GaHIN and Member to ensure a secure connection
- Required to adhere to the following IHE profiles and related transactions:
  - PIX v2 or PIX v3 – Patient Identity
  - XDS - Document Registration and Retrieval
  - ATNA – Transaction Audit logging
  - CT – Time Synchronization
- Manage Sensitive Health Information – Tag appropriately or avoid registration of documents that contain senstitive health information

Connectivity Requirements – HL7

- Connection establish via VPN
- Provide the following HL7 data interfaces/streams:
  - Admission, Discharge & Transfer (ADT)
  - Laboratory results
  - Basic biometric observations (height, weight, and blood pressure)
  - Transcribed results (general transcription and diagnostic imaging results)
  - Medication orders

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4. GaHIN Connectivity Status

GaHIN Connectivity – Current Content

Medicaid

- Medicaid Member roster
- Medical Claims
  - Jan 2011 – current
  - Weekly
- Pharmacy Claims
  - Jan 2011 – current
  - Weekly
- *Dental claims*

Immunization Registry (GRITS)

- Complete GRITS registry available for query response
- GRITS reporting capability (optional service)
- *School form – under evaluation*

GaHIN Connectivity Status - Active

EMORY HEALTHCARE — Testing

Grady — Implementing

ArchHIE Health Information Exchange — Planning

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4. GaHIN Meaningful Use Stage 2 HIE requirements

Meaningful Use

GaHIN – Unify 2014 Certification

- As of August 2013, the Unify™ Data Management Platform has been certified as an EHR Module for both Inpatient and Ambulatory practices – GaHIN to upgrade in Q1 2014
- Key certification criteria:
  - **Transitions of care – create and transmit summary of care record**
  - Incorporate laboratory tests and values/results
  - View, download, and transmit to 3rd party
  - **Transmission to immunization registries**
  - Transmission of syndromic surveillance data to public health agencies
  - Transmission of reportable laboratory tests and values/results to public health agencies

HISP & GeorgiaDirect

Mindy Montgomery and Stacey Harris - DCH

“Meaningful Use”

- Under HITECH, eligible health care professionals (EPs) and hospitals (EHs) can qualify for Medicare and Medicaid incentive payments when they adopt certified EHR technology and use it to achieve specified objectives.
- Two regulations define “meaningful use” (aka MU):
  - Incentive Program for Electronic Health Records
    - Issued by CMS
    - Defines what eligible parties must do (objectives and measures) to get incentives
  - Standards and Certification Criteria for Electronic Health Records
    - Set by ONC
    - Standards for the EHR technology that eligible parties must use to get incentives
    - Technology that is certified to this criteria is called Certified EHR Technology (CEHRT)

MU2 Certified Technology HIE Capabilities

The certification criteria for Meaningful Use Stage 2 Certified Electronic Health Record Technology (MU2 CEHRT) emphasizes HIE.

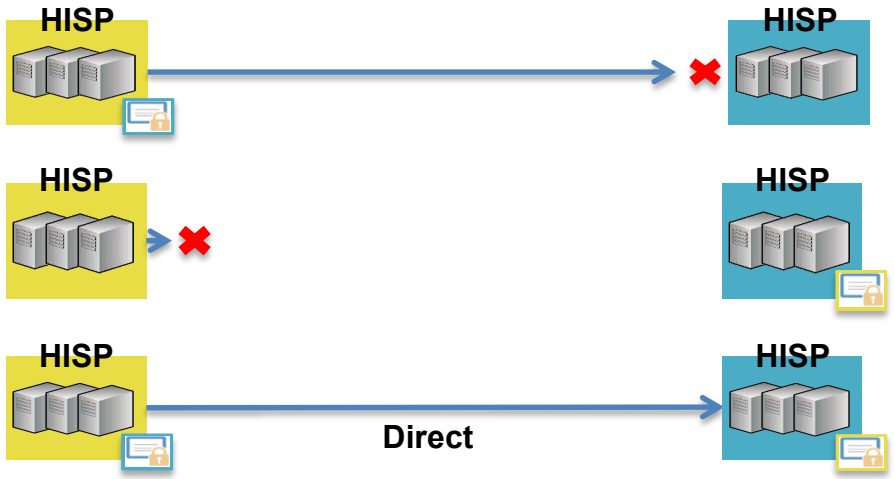
- Increases the interoperability of health information
- Adopts standardized data formats and vocabularies
- Requires support for specified transport mechanisms

MU2 objectives requiring MU2 CEHRT HIE capabilities include…

Core Set	Menu Set
• Generate and transmit e-prescriptions • Enable patients to view online, download, and transmit their health information – View/Download/Transmit (VDT) • Incorporate clinical lab test results • Provide a summary care record for each transition of care or referral – Transitions of Care (TOC) • Submit electronic data to immunization registries • Use secure electronic messaging to communicate with patients	• Submit electronic syndromic surveillance data to public health agencies • Make imaging results and any explanation or other accompanying information accessible • Identify and report cancer cases to a state cancer registry • Identify and report specific cases to a specialized registry (other than a cancer registry)

Trust

- Per the specifications, health information exchange using Direct can occur only between trusted parties
- Parties express trust relationships for Direct by exchanging digital certificates called **trust anchors**
  - Each party in a trust relationship must trust the anchor of the other in order for any transaction to proceed
  - Trust anchors can be trusted for bidirectional or unidirectional exchange (i.e., for sending information to or receiving information from)



Trust Communities & Trust Bundles

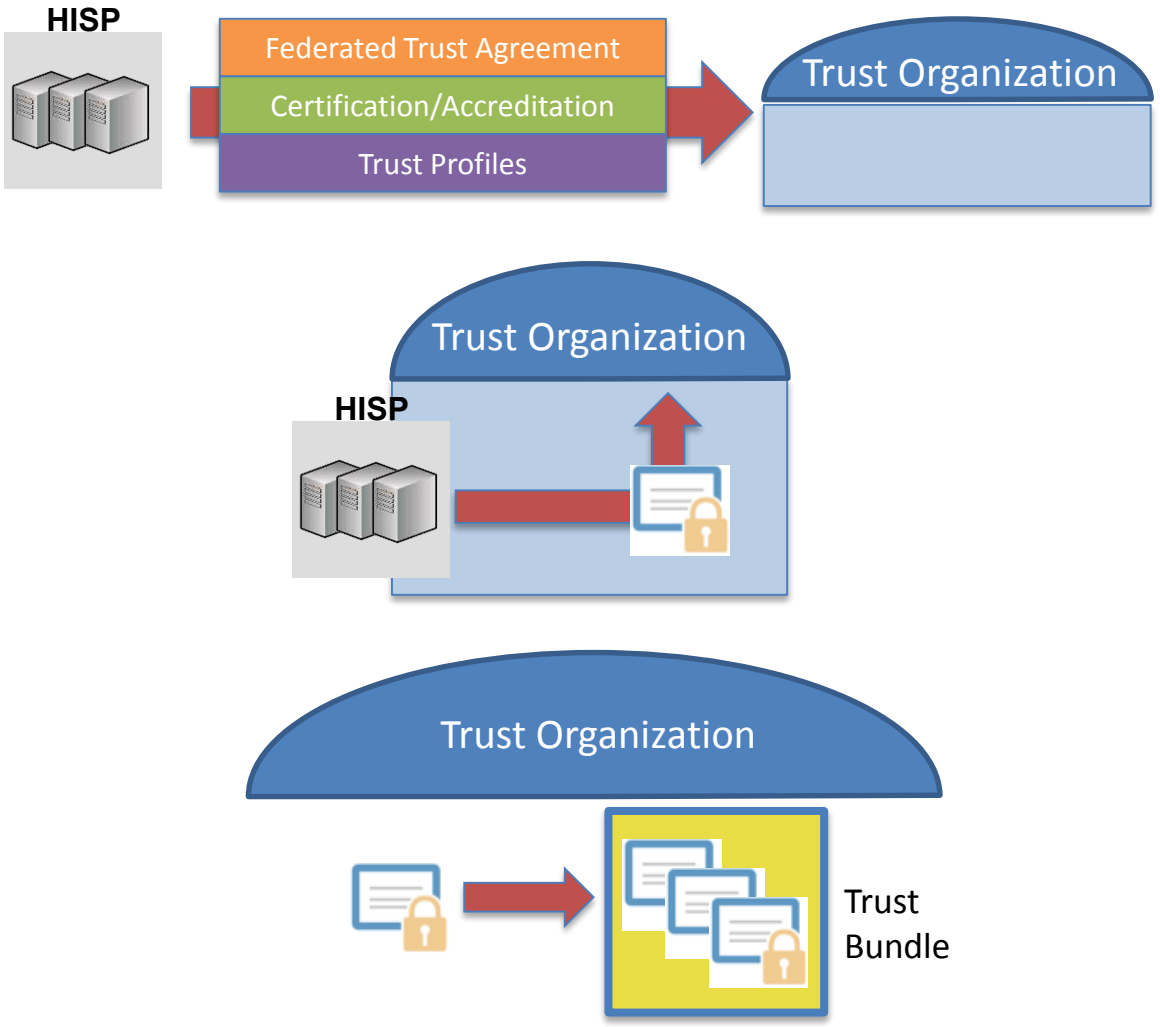
- A **Trust Community** is a group of entities electing to adhere to certain sets of requirements related to information exchange (called **Trust Profiles**)
  - NATE (National Organization for Trusted Exchange)
  - Blue Button
- A **Trust Organization** typically provides oversight and manages any supporting processes and infrastructure
  - NATE
  - DirectTrust
- A **Trust Bundle** is a collection of trust anchors from entities within a Trust Community that conform to a particular Trust Profile. Direct Project's *Implementation Guide for Direct Project Trust Bundle Distribution v1.0* specifies Bundle packaging and distribution
- A given Trust Bundle represents a set of "like" entities. Inclusion of a trust anchor within a Bundle indicates the anchor's entity shares similar characteristics and capabilities in certain areas with the other entities already represented within the Bundle
- A Trust Community may maintain multiple Trust Bundles, each with its own distinct set of requirements and processes for inclusion

Trust Communities & Trust Bundles

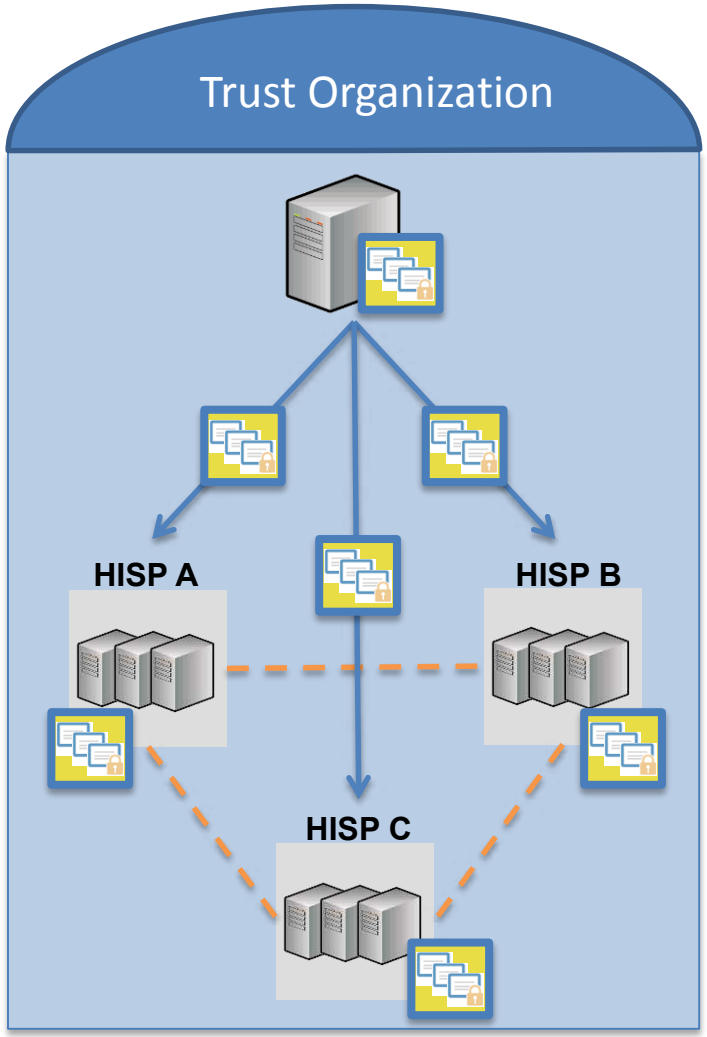
1) Prospective members such as HISPs and PHRs must fulfill Trust Community requirements to join

2) As new members are approved by the Community, they supply their trust anchors to the Trust Organization

3) Based on new members' conformance to the Community's Trust Profiles, the Trust Organization adds their trust anchors to one or more Trust Bundles



Trust Communities & Trust Bundles



4) Trust Organization publishes Trust Bundles to Community web server

5) Community members pull down Trust Bundles periodically at regular intervals

6) A particular Trust Bundle contains the trust anchors of all the members of the Community that conform to a specific Trust Profile. By configuring their Direct Security/Trust Agents (STAs) to trust the anchors in a Bundle, Community members can successfully communicate with all other members within that Bundle

Direct Trusted Agent Accreditation Program (DTAAP)

- DirectTrust and EHNAC collaborative agreement for accreditation
- Recognizes excellence in health data transactions; ensures compliance with industry-established standards, HIPAA regulations and the Direct Project
- Evaluated areas of privacy, security, confidentiality, technical performance, business practices, and organizational resources, processes for managing/transferring PHI
- Direct Trust Community Value- Common set of policy requirements, trust bundle certificates avoid one off agreements and support scalable federated trust

HISP – also referred to as a Security Trust Agent (STA) – manages Direct addresses and certificates on behalf of its constituents

CA – Certificate Authority – provisions digital certificates for the HISPs constituents

RA – Registration Authority – verifies the identity of the HISP's constituents

DirectTrust Accredited Organizations

DirectTrust EHNAC ACCREDITED DTAAP CA

DirectTrust EHNAC ACCREDITED DTAAP RA

DirectTrust EHNAC ACCREDITED DTAAP HISP

DirectTrust Candidate Organizations

Georgia's Regional Health Information Exchange

Strategies for Growing Their Exchanges

Regional HIE sponsored by Archbold Medical Center

Hosted By MobileMD

Engaged 18 hospital owned practices, 3 community practices that include Internal Medicine, Women's Health and Family Practice

Offering to South Georgia area hospitals and providers and connecting to GaHIN

ArchHIE
Health Information Exchange

ARCHBOLD

CHATHAM HEALTHLINK

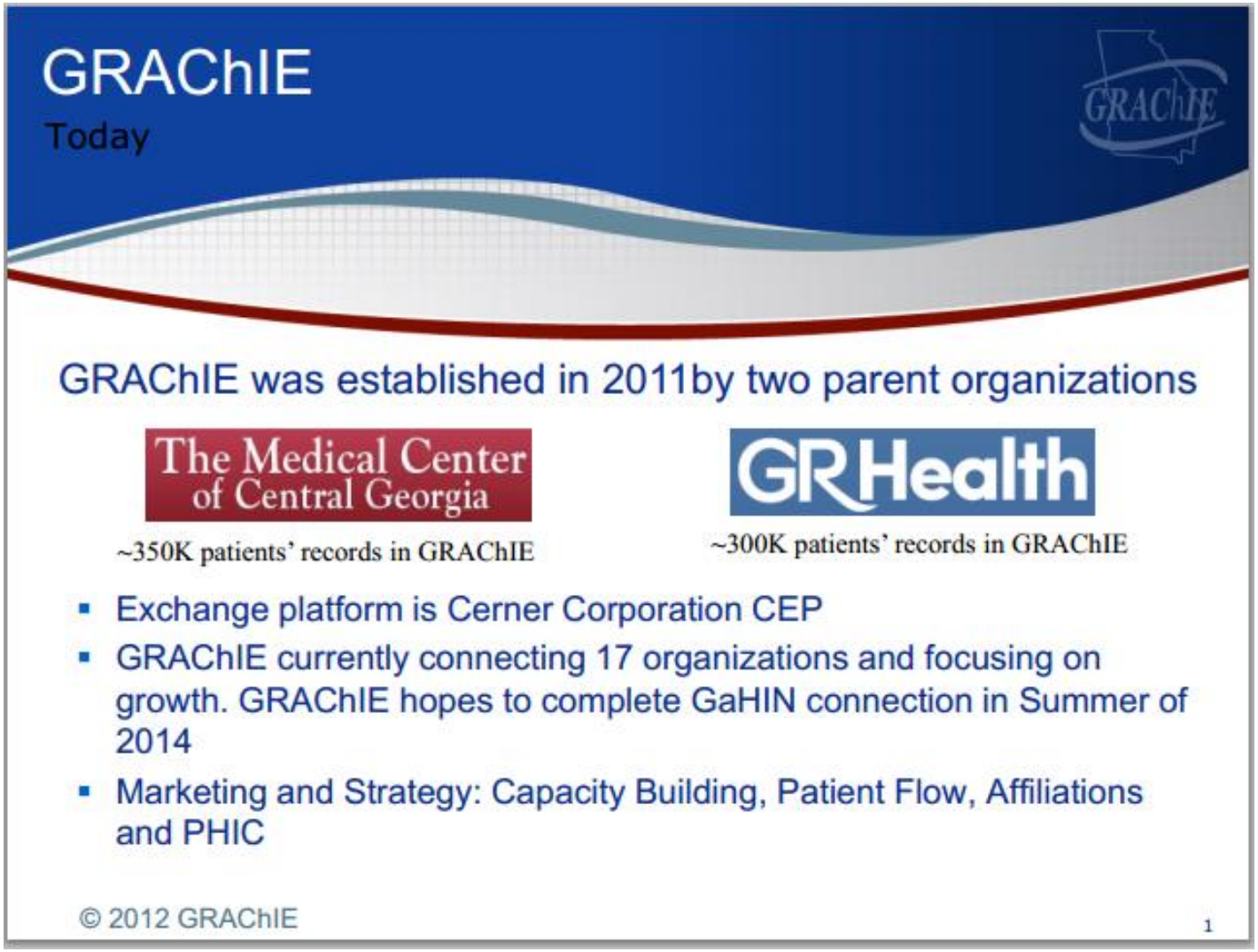
- Overview of HIE Organization
  - ChathamHealthLink, organizational arm of Chatham County Safety Net Planning Council, focused on gaining access to healthcare for uninsured population. Coverage area = Chatham County with referral patterns to Liberty, Bryan, Effingham Counties.

- Overview of Technology
  - Mirth Connect Integration Engine and Mirth Result Central Data Repository and Clinical Portal. NextGate MatchMetrix Enterprise Master Patient Index. Mirth XDS.b repository to facilitate our connection to GaHIN. Servers hosted at GNAX in Atlanta.

CHATHAM HEALTHLINK

- Overview of Connected Members and Projected Connections including GaHIN
  - Focusing on Continuity of Care Documents with all Electronic Health Record versions. Community Health Mission, Curtis V Cooper FQHC, The Memorial Health University Medical Center Emergency, JC Lewis Health Center FQHC connecting between now and Q2 2014. Candler/St Joseph's Health System connects in Q3 2014. ChathamHealthLink will complete GaHIN connection testing in January 2014 and plan on a live production GaHIN connection in mid 2014.
- Strategies for Marketing & Growth to support GaHIN
  - Expansion once the partner connections are complete will continue using referral patterns. Next target is ACO in Savannah, labs, radiology, pharmacy, and physicians will follow. GAHIN will enable us to add value through GRITS, Syndromic Surveillance, Electronic Lab Reporting, and National eHealth Exchange to avoid partners establishing duplicate connections.

GRAChIE


GRAChIE
Today
GRAChIE
GRAChIE was established in 2011by two parent organizations
The Medical Center of Central Georgia
~350K patients' records in GRAChIE
GRHealth
~300K patients' records in GRAChIE
Exchange platform is Cerner Corporation CEP
GRAChIE currently connecting 17 organizations and focusing on growth. GRAChIE hopes to complete GaHIN connection in Summer of 2014
Marketing and Strategy: Capacity Building, Patient Flow, Affiliations and PHIC
© 2012 GRAChIE
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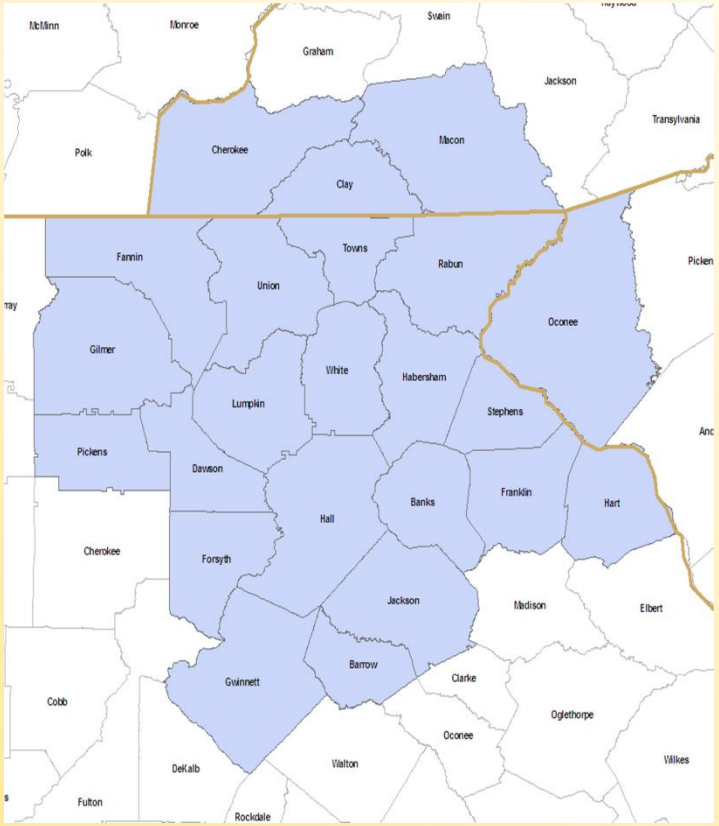
HealtheConnection

Overview:

- Regional health information exchange for Northeast Georgia.
- Mission is to improve the health of our community by connecting patients, providers, and others involved in health care operations through a secure community Health Information Exchange
- Coverage area is a 23 county region - 19 counties in Northeast Georgia, three counties in North Carolina and one county in South Carolina.
- Vision was established by the Community Health Alliance of Hall County in 2011.
- Health*e*Connection is supported by Northeast Georgia Health System.



HealtheConnection

Technology:

- Siemens MobileMD 4D Health Information Exchange (currently on version 4.2)
- Functionalities: EMR Lite, Clinical Portal, Patient Query, Secure Messaging, Patient Portal
- Data being contributed: ADT, lab results, microbiology results, blood bank results, pathology reports, radiology reports, images, Continuity of Care Documents, clinical summaries, visit summaries, discharge summaries, other transcription reports.

Connected Members and Projected Connections:

- Pilot group members: Northeast Georgia Medical Center, Northeast Georgia Physicians Group, The Longstreet Clinic, Good News Clinic.
- Connections in Progress: Union General Hospital, Chatuge Regional Medical Center, Habersham Medical Center, Stephens County Hospital, & Toccoa Clinic.
- Plan to connect to GaHIN in early 2014.

Marketing and Growth Strategies:

- Initially targeting hospitals and large physician groups – leverage existing relationships with Northeast Georgia Health System.
- Use local hospitals' to drive connections with physicians.

GaHIN Value to Payers

Blue Cross Blue Shield – Robert Bunch & Soyai Momin

Closing the patient information gap

Improved Collaboration in Care Management

- Provider and payer organizations need patient information to provide timely care coordination to manage risk, control costs and achieve better outcomes for patients
  - Specific data elements are needed in a real-time or near real-time fashion to support key care management functions and identify care intervention opportunities for patients.
- Improved care coordination creates administrative efficiencies
- Examples of data exchange for improvement in care management
  1. ADT (Admission, Discharge, Transfer) Notifications
  2. Labs and Care Summaries

The Opportunity

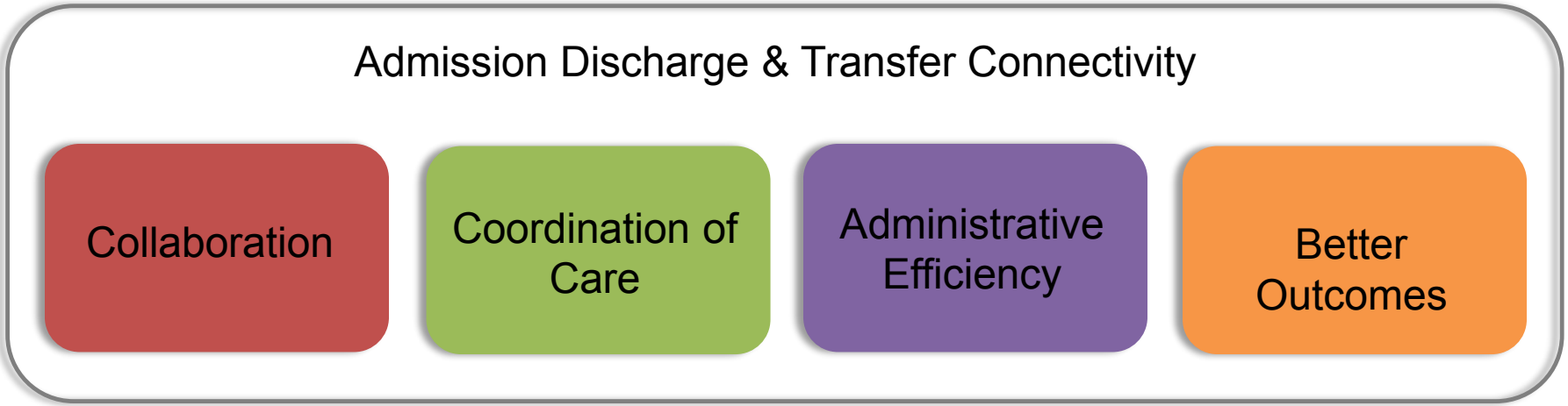
- The growing acceptance and adoption of EMR/EHR systems and use of industry standard HL7 messaging has great potential for increased efficiency
  - Allows for quicker rollout and adoption of electronic notification programs among facilities

- The Admission, Discharge, Transfer (ADT) message is a specific type of HL7 message which communicates patient demographics as well as visit information

- ADT data can be used by medical management staff to better coordinate care and *streamline administrative processes*
  - Admission notification to trigger UM case review
  - Discharge and Transfer information for coordination of care with PCPs

The Opportunity

- The first phase of the ADT project could include:
  - Deploying a near real time exchange of HL7/ADT feeds between payer and providers
  - Routing ADT feeds to payer medical management systems to:
    - Streamline administrative processes
    - Use in UM concurrent review to help monitor patients, coordinate care and potentially impact readmission rates



Benefits to Providers & Payers

Provider	Payer

▪ Streamlines the administrative processes associated with notification
  ▪ Eliminates initial, manual (telephonic and fax) notification of admission*
▪ Opportunity for Improved claims payment
  ▪ Timeliness of ADT data facilitates faster UM concurrent review.
  ▪ Faster UM concurrent review facilitates faster payment of claim
  ▪ Reduction of denial rate
  ▪ Reduction of unreported days and retrospective review
▪ Provides a Confirmation Report to validate receipt of cases
▪ Reduces facilities' risk for ACO provider groups through notification and tracking of inpatient admissions
	▪ Improved timeliness of notification of inpatient admission
	▪ Streamlines administrative processes for setting up new cases in the UM system
	▪ Auto-notification of stays that exceed authorized days improve UM concurrent review work flow
	▪ Improved in-patient monitoring
	▪ Improved care coordination through case management and notification of inpatient admissions for ACO provider groups

Proactive and Coordinated Discharge Planning

***** This process does not eliminate the need to provide clinical information to support cases.

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Notifications and Data Exchange

ADT Notification System

A service offered GaHIN

ADT messages are emerging as the go-to data source for care coordination efforts.

- GaHIN understands the value of simple hospital utilization information as it can have a major impact on patient coordinated care.
- GaHIN can provide a real-time service that allows PCPs and specialists to better track their patients and payer care coordinators to better serve their members – resulting in healthier people and a reduced rate of costly hospital readmissions.
- Current Point- to-Point interfaces for ADT notifications do not scale.

ADT Notification System

ADT Notification High-Level Use Case

- Assumptions
  - Georgia hospitals create and send ADT messages
  - GaHIN enables exchange of ADT messages to the patient's relevant providers and health care organizations

- Sample data flow
  - Patient goes to the hospital
  - Hospital sends a registration message to GaHIN
  - GaHIN checks eligibility files (for payer), patient list (for providers)
  - Notification is routed

Labs & Care Summaries

Reason for payer access to their members' data

- Data supports key Care Management Systems needed to identify opportunities for payer members.
- Although payers may receive lab data from Lab Quest and Lab Corp, there is considerable lag.
- A real advantage exists in improving payer member's health by getting lab and care summary data from the GaHIN.
- For BCBSGa, member lab data and transcribed summaries are pulled and reconciled against the Care Opportunity report, validating a gap exists

Labs

- Support care coordination & quality improvement efforts.
- Many of HEDIS, NQF, AQA, AMA-PCPI quality of care metrics are based on lab results and payers are not able to address such quality of care improvement opportunities comprehensively for their Georgia members.
- Payers do receive lab results from our lab vendors but it is limited to membership which is going through such vendors.

Care Summaries

- Care summaries support payer care coordination as they provide comprehensive clinical information at the patient level – data often missing in claims

- One of the most important aspects of CCD is medication history
  - Payers have claims (filled view) but do not have prescribed view (in a CCD)
  - Both views aid payers in identifying non-compliant members – allowing them to intervene to promote compliance and care coordination.
  - Research suggests, medication non-compliance has been one of the primary determinants of avoidable cost and utilization (ER and Inpatient stay).