Overview of NYS Health IT Strategy and Grant Opportunities for Health IT Systems

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Broad Goals for NY’s Health IT Strategy

• Build health information infrastructure to support state health reform goals
  – Support clinicians and consumers with information at point of care
  – Advance care coordination
  – Strengthen public health surveillance and response
  – Enhance quality and outcome measures

OVERALL STRATEGY IS ABOUT SYSTEMS CHANGE, NOT JUST HEALTH IT
NYS Office of Health Information Technology Transformation

Physicians' Offices and Clinics

Hospitals, Nursing Homes, IDNs, etc

Pharmacies and PBMs

Managed Care

Diagnostic Centers

Patients' Secure Personal Health Records

Public Health

CDC Biosurveillance and Public Health Investigation Project

Immunization and Child Health

Local Health Depts.

NYS DOH UPHN

Hunter Home Health Care and Telemedicine

Multiple RHIOs*

SHIN-NY**

Medicaid

CDC

NYS DOH Databases

NYC Health Dept.

Occupational Health

Other NYS DOH Databases

Immunization and Child Health

Local Health Depts.

SHIN-NY**

*NHIOs = Policy
**SHIN-NY = Technology

*SHIN-NY = Technology

NYS DOH UPHN

Managed Care

Public Health

CHITA projects
What will get us “there” in NYS?

- Policy alignment
- Support of increased adoption of certified and interoperable EHRs in all care settings
- Increased adoption of patient/consumer programs including secure PHRs
- Coordination of care, including medication management, across care settings
- Disease prevention, early detection and other public health initiatives
- Monitoring and ongoing support of implementation to ensure safety and success
- Sustainable reimbursement models to promote HIT
Framework for New York’s Health Information Infrastructure

“Cross-Sectional” Interoperability – People, Data, Systems

NYS Strategy

ACCESS
HEAL 5 Cat 3
- CHITAs = 8
HEAL 10 = 9 projects
ARRA RHITEC
MSSNY and others

AGGREGATE & ANALYZE
HEAL 5 Cat 2
- CIS = 3
ARRA MU incentives
MSSNY PPSO project

SHARE
HEAL 5 Cat 1
- RHIOs/SHIN-NY = 8
HEAL 10 NYeC funding
ARRA HIE

Clinician/EHR

Consumer/PHR

Community

Clinical Informatics Services

Aggregation - Measurement - Reporting

Statewide Health Information Network – NY (SHIN-NY)

Alignment with ARRA
“Meaningful Use” of EHR

Certified EHR with electronic prescribing

EHR that includes clinical decision support and also submits information on clinical quality measures and other measures as selected and in a form and manner specified by the Secretary

EHR that is “connected in a manner” that provides for the electronic exchange of health information to improve the quality of health care, such as promoting care coordination

NYS Office of Health Information Technology Transformation
Public and Private Health Care

Alignment to Advance Health IT

Coordinating Health IT within NYS DOH

• Integrated Child Health Record
• HIE for Public Health
• Vision and requirements for Enterprise-plus architecture

Department of Health

• Set Policy
  • Coordinate and align actions btw public and private health care sectors
  • Determine clinical priorities/ use cases to guide health IT adoption
  • Provide strategy for technical architecture and services to advance 21st Century health care

Public-Private Partnership: New York eHealth Collaborative (NYeC)

• Statewide governance & collaboration process
• Implementation
• Technical Assistance
Governance and Organizational Components: Policy Development and Implementation Framework

- **NYS Office of Health Information Technology Transformation**
  - Governance and Organizational Components: Policy Development and Implementation Framework
  - **NYS Dept of Health**
    - Fund health IT
    - Set Policies “big P”
    - Enforce regulations
  - **NYeC**
    - Statewide collaborative process
    - Deliberate & decide policies
    - Assist RHIOs/CHITAs
  - **HITEC**
    - Create evaluation tools
    - Assess sustainability
    - Measure progress
  - **Evaluation tools, other resources**
  - **Funding and contractual obligations**
  - **Implementation guides, tools, other resources**

**Statewide Health Information Network for NY (SHIN-NY)**

- **RHIO**
  - RHIO: A governance entity that oversees HIE in its region
  - RHIO: A collaboration supporting EHR adoption.
  - emphasis on primary care and Medicaid providers

- **CHITA**
  - Clinician EHRs
Statewide Collaborative Process Goals

1. Establish a framework and principles for the adoption of interoperable health IT

2. Create consistent, standardized policies that are implementable and flexible

3. Create a foundation for adoption of health IT that encompasses:
   - Reaching agreement on privacy and security guidelines and policies
   - Educating and engaging patients, families, legislators and other stakeholders and decision-makers in the health care system
   - Specifying technology infrastructure standards
   - Developing options for business models and on-going financing options
   - Addressing legal and regulatory requirements
Statewide Collaboration Process

DOH          NYeC Board

Policy & Operations Council

Collaborative Work Groups
- Clinical Priorities
- Privacy & Security
- EHR Collaborative
- Protocols & Services

Implementation
- HEAL Projects
- NHIN Project
- CDC Project
- MSSNY Projects

Governance/Oversight

Policy/Standards

Cross-Cutting Activities

Education & Communication Committee
Financial Sustainability Work Group
Consumer Advocacy Council
HITEC
NYeC: Collaboration and Governance

**Dec 06**
- Formation of NYeC announced at health IT conference co-sponsored by United Hospital Fund and DOH, involving exhibits by new HEAL 1 awardees

**July 07**
- NYeC convenes RHIOs for a successful collaborative proposal to ONC for NHIN Trial Implementations program

**July 07**
- “RHIO Committee” and “HSP Consortium” (precursors to POC) formed; Consumer Advisory Council launched

**Jan 08**
- NYeC awarded a contract by DOH to facilitate Statewide Collaboration Process (SCP) as part of HEAL 5 program

**Apr-May 08**
- SCP governance structure and work groups launched; RHIO Committee becomes the POC with introduction of CHITAs

**Nov 08**
- POC approves v1.0 policy and technical requirements emerging from SCP

**Sep-Nov 09**
- Collaborative proposals for federal RHITEC and State HIE programs

**Key Accomplishments:**
- Developed successful public-private governance model to oversee development and implementation of statewide health IT policies
- Founded Statewide Collaboration Process and work groups to forge multi-stakeholder consensus on statewide policies and technical approaches, and collaborate on regional and state-level implementations
Statewide Policy Guidance - Version 1.0

- The New York eHealth Collaborative, under contract with and in partnership with DOH, is overseeing the Statewide Collaboration Process (SCP) as part of the HEAL grant program, through which common policies, standards, and technical approaches for New York's health information infrastructure are being developed.

- A comprehensive set of health information policies has been developed and released as part of New York's Version 1.0 Statewide Policy Guidance. All state funded health IT initiatives are required to comply with the statewide policy guidance.
Statewide Policy Guidance

• Privacy and Consent
• Security
  – Authorization
  – Authentication
  – Access controls
  – Audit
• Vendor contract language
Statewide Policy Guidance

- EHR functional requirements
- SHIN-NY technical requirements
Technical Infrastructure

- **Statewide Health Information Network for New York (SHIN-NY) Technical Architecture Overview**
  - The SHIN-NY architecture has an overarching principle to be compliant with the national standards for healthcare interoperability recognized by the Secretary of the Department of Health & Human Services (HHS).
  - Describes the basic technical approach to implementing the common service-oriented architecture (SOA) implemented through web services operating through an enterprise service bus (ESB), with a four-tier protocol stack for the Statewide Health Information network of New York (SHINNY).
  - The protocol stack, called the Common Health Information eXchange Protocol (CHIxp), divides the protocols into categories, with the lower two corresponding to system architecture patterns, and the upper two dealing with healthcare architecture patterns.

- **Statewide Health Information Network for New York (SHIN-NY) Core Services V1.0, March 13, 2009**
Statewide Policy Guidance Updates

• Available at:
  – NYeC – www.nyehealth.org
Funding Opportunities for Health IT in NYS
Funding Opportunities for Health IT in NYS

- **ARRA**
  - RHITEC
  - HIE
  - other

- **HEAL**
  - Competitive grants
  - NYeC

- **Other**
  - MSSNY
  - Medicaid
    - Medical home
    - Enhanced reimbursement for telemedicine devices
    - eRx incentive program
  - Federal grants and Health plan programs
ARRA Federal Stimulus Health IT funding

The stimulus package included $36B in expected health IT funding from the federal government through Appropriations and Incentives

### Appropriations for Health IT & HIE

- $2 billion for loans, grants & technical assistance:
  - HIE Planning & Implementation Grants
  - EHR State Loan Fund
  - National Health IT Research Center & Regional Extension Centers
  - Workforce Training
  - New Technology R&D

### New Incentives for Adoption

New Medicare and Medicaid payment incentives to providers for EHR adoption

- $20 billion in expected payments through Medicare
- $14 billion in expected payments through Medicaid
- ~$34 billion in gross expected outlays, 2011-2016

### Broadband and Telehealth

- $4.3 billion for broadband & $2.5 billion for distance learning/telehealth grants

  - Directs ONC to invest in telehealth infrastructure and tools
  - Directs the new FACA Policy Committee to consider telehealth recommendations

### Comparative Effectiveness

- $1.1 billion to HHS for CER
  - Establishes Federal Coordinating Council to assist offices and agencies of the federal government to coordinate the conduct or support of CER and related health services
Overview – ARRA/HITECH

Funding

Entitlement Funds
Roughly $34B in gross outlays

Appropriated Funds
$2B

Program

Medicare Payment Incentives

Medicaid Payment Incentives

HIE Planning and Development

EHR Adoption Loan Program

Health IT Extension Program

Workforce Training Grants

New Technology Research and Development Grants

Distribution Agency

CMS

CMS & States

ONC

ONC

HHS, NSF

NIST, NSF

Use of Funds

Incentives through Carriers

Incentives through States

Planning Grants

Implementation Grants

Loan Funds for States

Loan Funds for Indian Tribes

Health IT Research Center

Regional Extension Centers

Medical Health Informatics

EHR in Med School Curricula

Health Care Information Enterprise Integration Research Centers

Fund Recipients / Beneficiaries

Acute care hospital

Children’s hospitals

Physicians/Dentists

Nurse Practitioner

Midwife

FQHC

CMS

States

ONC

HHS, NSF

NIST, NSF

HC Providers

State Designated Entity

Indian Tribes

Non-profit

Least Advantaged Providers

Higher Education

Medical School

Graduate schools

Federal Gov’t Labs

Requires “Meaningful” use of EHR

NYS Office of Health Information Technology Transformation
ARRA Timeline

**State grant monies** begin flowing from HHS to develop technical, privacy, governance and financing frameworks necessary for HIE to take shape...likely 09/10

**Setting of standards** enables the building of HIE infrastructure to practically and usefully implement standards to achieve interoperability to comply with Medicare and Medicaid incentive payment requirements for HIE interoperability

**Medicare and Medicaid incentive** payments begin, presuming HIEs have come online

**Medicare and Medicaid incentive** payments give way to penalties on providers for failing to adopt HIT

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<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>2009</td>
<td>HHS to establish interoperability standards by the end of 2009 to guide HIE development</td>
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<tr>
<td>2010</td>
<td>Setting of standards</td>
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<tr>
<td>2011</td>
<td>Medicare and Medicaid incentive payments begin, presuming HIEs have come online</td>
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<tr>
<td>2012</td>
<td>Medicare and Medicaid incentive payments give way to penalties on providers for failing to adopt HIT</td>
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<tr>
<td>2013</td>
<td>NYS HEAL 5 and HEAL 10</td>
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<tr>
<td>2014</td>
<td>Medicare and Medicaid incentive payments begin, presuming HIEs have come online</td>
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<tr>
<td>2015</td>
<td>Medicare and Medicaid incentive payments give way to penalties on providers for failing to adopt HIT</td>
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<tr>
<td>2016</td>
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Bending the Curve Towards Transformed Health
Achieving Meaningful Use of Health Data

2009  2011  2013  2015

- Data capture and sharing
- Advanced clinical processes
- Improved outcomes
ARRA in NYS

• RHITEC
  – Upstate NY program through NYeC
  – Downstate program through PCIP

• State HIE
  – Program managed through NYeC as state designated entity
  – Development of state wide strategic plan
  – Development and implementation of UPHN
Universal Public Health Node (UPHN) Operational Model

UPHN Data Integration Engine

NYSDOH Program & Systems

UPHN

Statewide Health Information Network for New York (SHIN-NY)

SHIN-NY Public Health ESB (Big Bus)

Other Services

Hospital Resources

Other Use Cases i.e. Medicaid, Hospital Resources Utilization, Emergency Preparedness & Long Term Care

Child Health Information Integration

Chronic Disease & Environmental Health Integration

Infectious Disease Data Integration

Analytic Query

Linelist Query

Hospital Resources

Patient Query

Public Health Knowledgebase

Provider Directory

Public Health Notification

Terminology Service

Re-identification

Lab

Pharmacy

Physician Office

Hospital

Nursing Home

Lab

Pharmacy

Physician Office

Hospital

Nursing Home

NYS Office of Health Information Technology Transformation
HEAL funding for HIT
HEAL funding for HIT

• **HEAL I** – formation of regional health information organizations (~ 20 projects = ~$50 million)

• **HEAL V** – ($106 million = 19 projects)
  – Development of statewide network infrastructure, support of: quality and reporting projects, connecting NYers to clinicians, connectivity to NYS DOH and implementation of EHRs in physician practices
  – Development of collaborative process through NYeC
  – Development of evaluation process through HITEC

• **HEAL VI** – support of expansion of primary care services including related HIT

• **HEAL X** –
  – EHR implementation to achieve improved care coordination through support of the patient centered medical home ($60 million)
  – Continuation of support of the NYeC collaborative process
  – Expansion of the SHIN-NY infrastructure (total $35 million)
  – Continuation of evaluation process by HITEC ($5 million)

• **HEAL 2.0** – support of other areas in need of further HIT development including long term care services etc.
HEAL 10

Goals:

- Continue to advance New York’s health information infrastructure based on clinical and programmatic priorities and specific goals for improving quality, affordability and outcomes.
- Aligning health information infrastructure as an underpinning to improved coordination of patient care leveraging new care delivery and reimbursement models -- the Patient Centered Medical Home (PCMH).
- Build upon HEAL 5 from a health information infrastructure perspective and go much further with respect to aligning key health reforms included in the PCMH model to improve care.
- Advance health IT as a key component to payment and broad health care reform.

- $60 million for competitive grants
- $35 million to further develop the NYS HIE infrastructure (SHN-NY) and statewide shared services by NYeC
- $5 million to support evaluation of the PCMH projects as well as the SHIN-NY by HITEC
HEAL 10 Contract with NYeC

• Continued development of the state wide collaborative process to include HEAL 10 and other state and federal initiatives.
• Development of the SHIN-NY core services
• Development of state wide services including further development of the medication management service and other new services.
• Continued expansion of education and communication services
• Coordination with Medicaid and other state agencies and programs
• Coordination with federal ARRA funding for state HIE development
• Coordination with federal ARRA funding for electronic health record implementation
HEAL 10 Competitive Grants

- Utilize health information technology to improve care coordination utilizing the Patient Centered Medical Home (PCMH) model.
- Projects must identify a specific patient population and chronic condition diagnosis,
- Projects must include participation by the full range of providers who are involved in care of that specific patient population described by a care coordination zone.
- PCMH requirements are coordinated with Medicaid policies for PCMH incentive payments and federal programs such as AHRQ.
- Projects were encouraged to include new payment strategies in partnership with health plans to support implementation.
- The total amount available for these grants is $60 million that is allocated based on the existing six HEAL regions - each region could receive up to two awards, and the individual grants could not exceed $7 million.
HEAL 10 Projects

- **Nine projects** ranging from $5.2M - $7M representing all regions in NYS
  - Western NY = 2 (HealtheLink and UB Associates)
  - Central NY = 1 (Fort Drum Regional Health Planning Organization)
  - Northern NY = 1 (HHHN)
  - Hudson Valley = 1 (Hudson River Healthcare)
  - NYC and Long Island = 4 (NYC PCIP, Maimonides, IPRO, North Shore University Hospital)

- Diagnoses = chronic diabetes, obstructive pulmonary disease, schizophrenia, end stage renal disease, high risk pregnancy

- Patients = ~500,000
- Providers = over 3000
- Primary care = over 1500
- Health plans = 25
Central Region

Fort Drum Regional Health Planning Organization

- North Country Health Information Partnership (N-CHIP)
- Adult patients with COPD in a referral zone with unusually high rates of hospitalizations
  - 13,247 COPD patients
  - 94 clinicians in 23 practices in 40 locations, 5 hospitals, home health, 3 urgent care (70%), 3 pulmonologist specialty practices (100%) and 4 health plans
- Connect to the Statewide Health Information Network for New York (SHIN-NY) through the Southern Tier Health Link RHIO.
Hudson Valley

Hudson River Healthcare, Inc.

• PCMH Care Coordination Project
• Patient with diabetes
  – 5000 patients with diabetes in Hudson Valley from Ulster, Orange, Dutchess and Westchester counties
  – 3 Federally Qualified Health Centers and 12 practices including HRHCare, Open Door Family med Centers, The Institute for Family health,
  – 6 health plans and CHCANYS
• Connecting to SHIN-NY through THINC (Taconic Health Information Network and Community)
Long Island Region

Island Peer Review Organization (IPRO)
- Improving Care Coordination and Management Through PCMH Model
- Two care coordination zones (CCZs) for adult patients with diabetes
  - 30,000 patients
- Connecting to the SHIN-NY through the Long Island Patient Information Exchange (LIPIX).

North Shore University Hospital
- HeR EMR: A PCMH Model for High Risk Obstetrics Using Electronic Medical Records:
- Improve the coordination and management of high risk pregnancy
  - 1200 patients
- Connect to the SHIN-NY through LIPIX.
New York City Region

Maimonides Medical Center
- Southwest Brooklyn Patient Centered Medical and Mental Health Home Project:
  - Outpatient primary care and mental health clinics at Maimonides Medical Center (“Maimonides”), Lutheran Medical Center (“Lutheran”), South Beach Psychiatric Center (“SBPC”), and the Institute for Community Living (“ICL”) to provide patient centered medical and mental health home services to schizophrenic patients.
    - 1300 patients
    - 300 physicians and 200 care givers
- Connect to the SHIN-NY through Brooklyn Health Information Exchange (“BHIX”)

New York City Department of Health and Mental Hygiene
- Primary Care Information Project Patient Centered Medical Home (PCIP PCMH):
  - Improve the diabetes care
    - 300,000 patients
    - Over 2,000 providers
- Connect to the SHIN-NY through the following RHIOs: the Bronx Regional Health Information Organization, Brooklyn Health Information Exchange (BHIX), Interboro Regional Health Information Organization and the New York Clinical Information Exchange (NYCLIX).
Northern Region

Hudson Headwaters Health Network
• Adirondack Health Institute Care Improvement Initiative:
  • Improve coordination of care for patients with diabetes
    – 14000 patients with diabetes
    – 186 physicians, 123 primary care (75% with 31-32 physicians in 17 small group or solo practices) and 63 specialists with 24 physicians in 11 practices (endo, neph, ophth, podiatry, cardiology), 6 hospitals (Adirondack medical Center, Champlain Valley, Alice Hyde, Elizabethtown, Inter-Lakes Health Moses-Ludington, Glens Falls) covering Clinton, Franklin, Essex, and Hamilton counties.
    – 60% of primary care are FQHC or small or solo practice, 40% of specialists are in small practices
    – 7 health plans
• Connecting to the SHIN-NY through the Health Information eXchange of New York (HIXNY).
Western Region

HealtheLink
  • Improving Patient Care Coordination and Management through PCMH:
  • Improve diabetes care
    – 61,040 patients representing 81% of patients with diabetes
    – 71% of providers, 626 physicians in 278 practice sites including 82% primary care and 90 (97%) specialists, 278 PCMH organizations
  • Connecting to the SHIN-NY through Western New York HealtheLink.

UB Associates, Inc.
  • Improving ESRD Outcomes in Patients with Progressive Diabetic Nephropathy by Interoperable Health Information Management in a PCMH:
  • Improve care, provide efficiency, and reduce costs in diabetic patients with End State Renal Disease (ESRD)
    – 1,000 patients in Erie and Niagara Counties
    – 450 practitioners – 85 primary care physicians
  • Connecting to the SHIN-NY through Western New York HealtheLink.
MSSNY PPSO Project

• Physician Practice Service Organization Project
  – Development of a governance structure “tool kit” for independent physician practices to align together to share quality data for clinical improvement programs
  – Adirondack HIT project as pilot leveraging other programs in that region including HEAL 1,5,10, and Medical Home multipayor initiative pilot
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Questions

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