

# EHR | HIE Interoperability WORKGROUP

## Accelerating Information Exchange for Providers

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# Agenda

- **New York's HIE Strategy**
- Bulk Provisioning of Interfaces
- EHR/HIE Interoperability Workgroup
- Exemplar HIE Governance Program

## **Our Vision**

**HIT tools enable collaboration between patients, providers, public health agencies and payers. They improve quality of care, efficiency, and patient satisfaction.**

**No single entity can deliver this set of tools alone.**

**It will take an ecosystem working together to make a real difference.**



## **New York eHealth Collaborative**

NYeC is a not-for-profit organization, working to improve healthcare for all New Yorkers through health information technology.

**Promote the adoption and use of electronic health records**

**Build the SHIN-NY (State Health Information Network – New York): A secure network for sharing electronic medical records across the state**

**Create an ecosystem fostering innovation by leveraging the massively valuable clinical data stored in the SHIN-NY**

# SHIN-NY: the Network of Major Healthcare Providers within NY

- Through the HEAL grant program, the NY State Department of Health helped create 11 RHIOs in New York.
- The total investment since 2006 is \$943 million (public and private sources)
- Each RHIO has built a local network of stakeholders including hospitals, practices, long term care and payers and is actively connecting participants in its region to enable sharing of data
- All the RHIOs together form the SHIN-NY

## CUSTOMERS & USERS (NY)

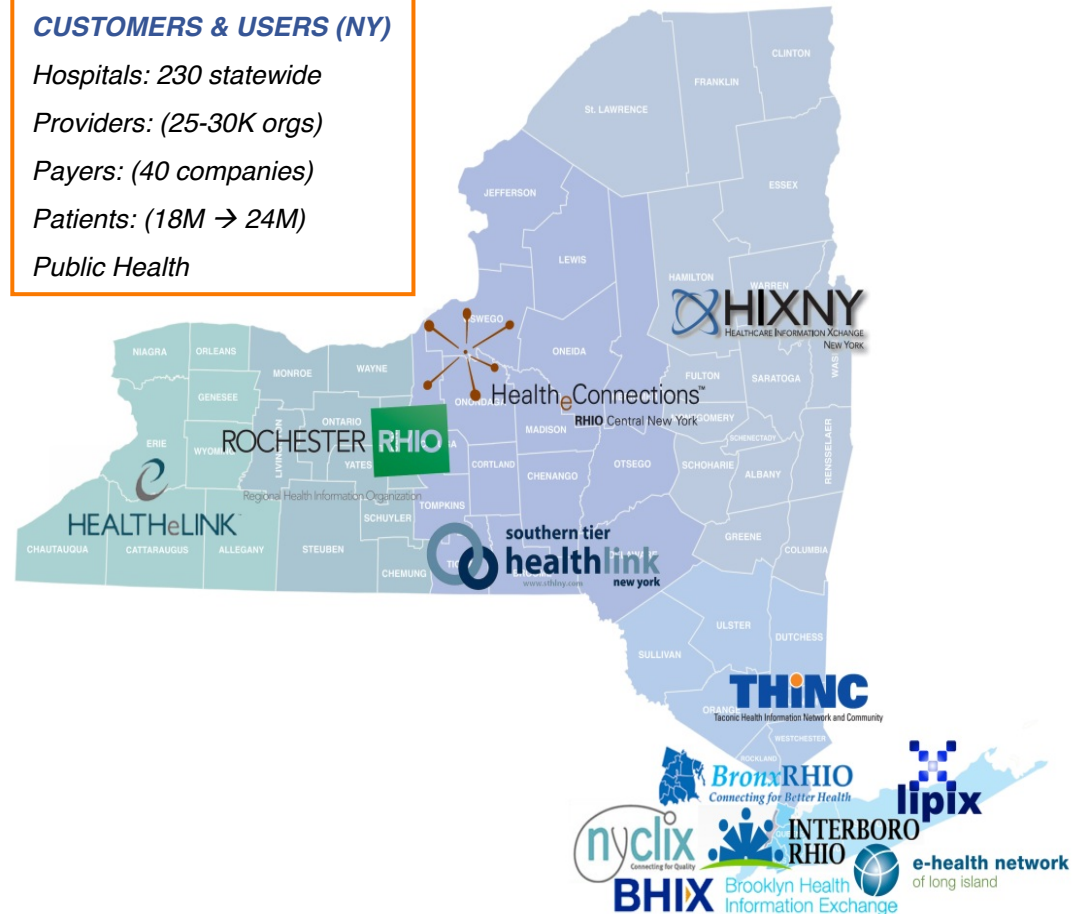
Hospitals: 230 statewide

Providers: (25-30K orgs)

Payers: (40 companies)

Patients: (18M → 24M)

Public Health



# The SHIN-NY Ecosystem

**CUSTOMERS & USERS**

Providers  
 Payers  
 Public Health officials  
 Patients

**INNOVATORS & BUILDERS**

Entrepreneurs & VCs  
 Software Developers  
 EHR Vendors

**MARKET PLACE of TOOLS**

Full integration with EHR using Apps

INNOVATION

**SHIN-NY API**  
 INNOVATE WITH CLINICAL DATA

STANDARDIZED APPLICATION PROGRAMMING INTERFACES (APIs)

**THE SHIN-NY  
 "THE PLATFORM"**

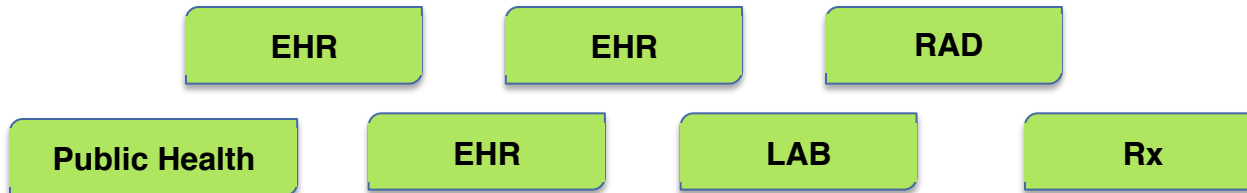
**HIE CAPABILITIES**

Identity Management  
 Data Access Control  
 Patient Records  
 Secure Messaging &  
 Alerts

COMMODITIZATION



INTERFACES



# Building the Marketplace of Tools through Innovation



- **New York Digital Health Accelerator:** Largest funded Health IT Accelerator. 9-month program incubation program for early and growth stage health tech companies. Up to \$500k funding per company
- Unique differentiator: Access to 23 large providers in NY to pilot and provide feedback on products



- The **Patient Portal for New Yorkers** allows patients to access their health care records from the SHIN-NY. Platform allows consumer-facing apps to be developed
- Blue Button + Compliant by end of 2013. To be broadly available to patients and developers in early 2014



- **SHIN-NY Developer Program** – Events planned to engage with entrepreneurs on API best practices, new uses, and to showcase innovation
- **Hackathons** – Short challenges to hack on a challenge, shakeout API, and find new ideas of how to develop against APIs



# NY Digital Health Accelerator



The Inaugural Class graduated on May 8th



Stay tuned for the next Accelerator Program in the Fall...



# Barriers to Meaningful Health Information Exchange

## Barriers\*

**Lack of exchange standards**

**Slow EHR Adoption rates**

**Cost and capital investment**

**Each interface requires custom development**

**Active exchange of information is not a mandate**

## Strategies to Drive Change

- **EHR/HIE Interoperability Workgroup**
- **Bulk Provisioning of Interfaces**
- **Exemplar HIE Governance Program**
- **Strategic Marketing Campaign**
- **Policy Levers**

<http://searchhealthit.techtarget.com/healthitexchange/meaningfulhealthcareinformaticsblog/what-is-stopping-us-from-getting-hospitalists-and-others-from-receiving-patient%E2%80%99s-records-electronically/>

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# Interface BULK Provisioning Program

**Objective:** Incentivize the EHR vendor community to connect current clients to statewide network

## What does NYeC Cover in this Program:

- Cost of the interface for the NYS practice/provider using the required standards
- National advocacy for standard implementation across states, HIEs, HISPs, and EHR vendors
- Continued alignment of HIE requirements with ONC and other critical stakeholders

## Complimentary NYeC NY Activities Planned for 2013-14 :

- Statewide provider education campaign on health information exchange
- Marketing of data availability and value of HIE connectivity
- Strategic alignment of NY RHIO community to support the required standards

# BULK Provisioning Proposal Initial Findings – by the numbers

7

EHR Vendors  
Responded to  
RFP

<\$2k - \$12k  
Proposed costs  
per standards-  
based interface

45%

avg. discount  
per interface

200

Practice  
connections to  
SHIN-NY  
(2013 & 2014)

\$100 -  
\$2,100

Operational costs  
per year per  
provider/practice

1,500

New providers  
connected to  
SHIN-NY  
(2013 & 2014)

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# HIE Connections are a Major Barrier to the Adoption of HIE Services

- The State HIE programs have been given significant dollars around creating statewide networks for the building of Statewide Networks; but the adoption has been limited
- Existing standards such as Direct Project, IHE and other federal and statewide standards have been developed but have not been consistently implemented.
- Each regional HIE does not have enough leveraging power with the vendor community to drive towards a common implementation of the standards, resulting in high cost of connection.
- The industry is asking for more uniform and scalable interoperability capabilities, but this is not proceeding with enough urgency or consistency for the State HIE Program goals

**Common Goal: Define “plug and play” connections that eliminate the barrier of interface development between EHRs and HIEs.**

# EHR/HIE Interoperability Workgroup: Win-Win-Win Strategy

## Vendors

- Differentiate product in highly fragmented market by developing a product that offers “plug and play” to HIE across multiple states (superior interoperability)
- Build interface once, use for many different HIEs and EHRs
- Better utilize limited resources to focus on product functionality improvements and customer adoption

## State and Regional HIE

- Ability to rapidly deploy interconnection of systems by having standard interfaces and interface approaches
- Minimize costs associated with connection fees by individual EHRs each time a new connection is made

## Providers

- Increase value proposition of individual EHRs
- Eliminate HIE connection cost as prohibitive barrier for adoption

# Workgroup Membership

States	EHRs		HIEs	
Arkansas	Alere Wellogic	Nortec Software	1MEDiX	OmniXchange
California	Allscripts	Siemens	Alere Wellogic	Optum
Florida	CareVoyant	Vitera Health	ApeniMED	Orion Health
Georgia	Cerner		DataMotion	RelayHealth
Illinois	CureMD		dbMotion	
Kansas	Data Strategies		GE	
Kentucky	DeFran Systems		GSI Health	
Maryland	Dr. First		Harris	
Michigan	eClinicalWorks		HealthUnity	
Missouri	eMDs		ICA	
Nebraska	EMR Direct		InterSystems	
New Jersey	Epic		Med3000	
New York	GE		MedAllies	
Oregon	Greenway		MedFx	
Rhode Island	McKesson		Medicity	
Utah	MDClick		Mirth	
Vermont	MTBC		Misys Open Source	
Virginia	NextGen		NextGate	
West Virginia	Prosocial Applications		OmniMD	

- **19 States**  
*representing 52% of the population*
- **45 Leading Vendors**
  - **22 EHR Vendors**
  - **23 HIE Vendors**



# Terms of Participation

## State Responsibilities

- Actively participate and obtain buy-in with state policy groups
- Agree to develop compliance process for interfaces within state
- Ensure that specifications developed are utilized in their state.
- Market to the healthcare provider community the value of using EHRs and HIEs that pass the “plug and play” compliance testing

## Vendor Responsibilities

- Actively participate in workgroup
- Work collaboratively with potential competitors
- Utilize off the shelf standards
- Commit that upon final approval of the specifications to develop product that meets such specifications within 1-2 major product releases

# Key Components of Specifications

## Statewide Consumable Continuity of Care Document

### CCD based on C32/C83

- Tighter data element requirements based on C32 semantics and syntax. (Additional R/R2 items from C154 per states and Beacons as they relate to C32 based documents).

## Send and Receive Patient Record Exchange (Push)

### NwHIN Direct

- Main expansion beyond Direct is locating the provider through querying Provider Directory and finding digital cert per S&I (**HPD +**)
- Provides implementation examples on how data model can be backed by relational database, and how to search for Direct addresses in various ways. Provides i
- Tighter, testable transactions between edge systems and full service HISP (SMTP & XDR transaction)

## Statewide Patient Data Inquiry Service (Pull)

- **Register and Query patient Identity, Provide and Register/Query and Retrieve Patient Documents** MPI search through PIX/PDQ and XCPD, Access management (XUA), provide and register document (XDS), and query and retrieve document (XCA/XDS); Consent management (ACP) discussed

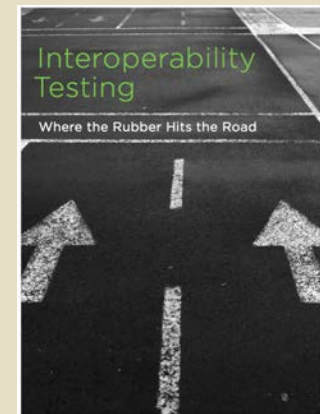
# An Emerging Industry Coalition Will Certify HIT for Interoperability

*A coalition of states, health organizations and HIT vendors has developed specifications to address the major use cases of health data exchange*

- EHR/HIE Interoperability Workgroup
- HealtheWay
- CCHIT selected to test and certify HIT products and HIE participants

Interoperability Testing Paper:

<https://hiecertified.cchit.org/documents/255969/86df4671-0e39-494f-af59-1dcc9e4a09f2>



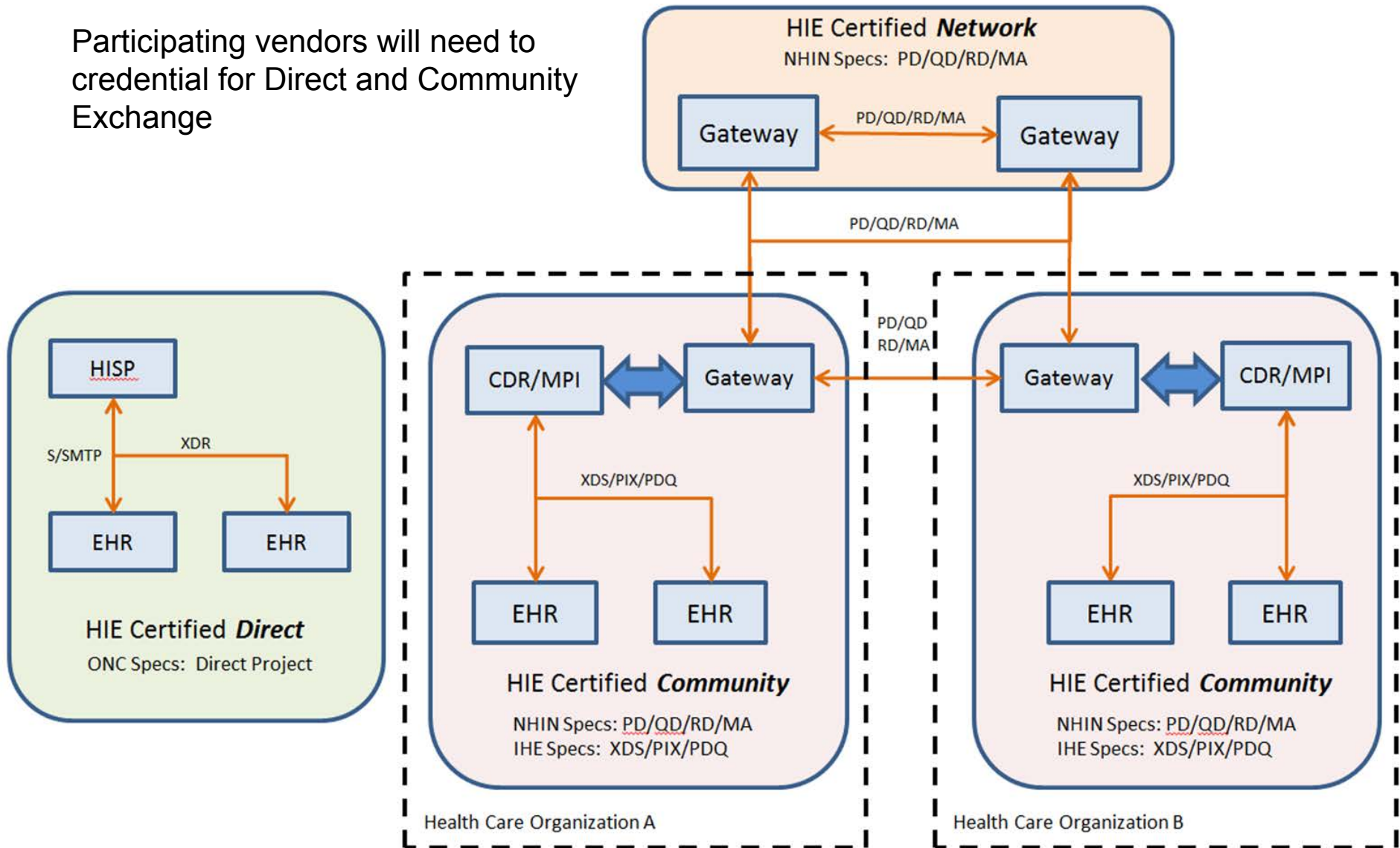
# HIE Certified Seals



*Providers can now look for certification seals for **proof** of “plug and play” interoperability compliance of EHRs and other HIT systems*

# Proposed Testing Bundles

Participating vendors will need to credential for Direct and Community Exchange



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# Exemplar HIE Governance Entities Grant Project

- ONC awarded the Exemplar HIE Governance Entities Program Grant to NYeC on behalf of the EHR/HIE Interoperability Workgroup (IWG)
- The cooperative agreement will allow the IWG to continue its efforts in developing robust implementation specifications for ‘plug and play’ interoperability
- The IWG will address the implementation challenges facing the exchange of health information specific to querying provider directories between Health Information Services Providers (HISPs)

# Goals of Provider Directory Pilots

- Test **various models** for **querying** provider directories to support EHR-HISP and HISP-to-HISP exchange of Direct messages.
- Test **HPD+ directory standards and data model** developed by the S&I Framework.
  - Approximately 5-7 pilot participants (states and vendors) will be selected
  - Pilots to test the HPD+ directory standards and data model developed by the S&I framework and incorporated into the IWG Direct Exchange specifications
  - Collaborate with S&I Framework and ONC Modular Specifications Workgroup to test new models
  - Results of pilots will be incorporated into IWG's Direct Implementation Guide by February 2014 & into HIE Certified testing program



# Call for Participation in Pilots

- Call for participation went out to states and vendors; >20 states responded as interested in participation
- Early findings: while many states are focused on implementation of DIRECT, there wide variability in technical readiness of the vendors for ONC's and IWG's original goals of testing HPD+ standards as part of these provider directory HISP-to-HISP federation pilots
- Many vendors plan to roll out HPD+ into their product in the Q4 2013 and early 2014

# Initial Pilots Identified, Others still forming

State/HIE	Vendor Partners
California Office of Health Information Integrity (Cal OHII) to manage pilots between: University of California, Davis Campus Santa Cruz Health Information Exchange Orange County Partnership RHIO Regional Alliance for Information Networking (RAIN) CareAccord (Oregon HISP)	Mirth
Kansas, Missouri, Illinois	ICA, Inpriva
NYeC / HEALTHeLINK	MedAllies, Mirth
Iowa	ICA and Genesis Health System
Michigan and Florida	MIHIN directory platform, Harris
Georgia and South Carolina	Medicity, CareEvolution

# Project Milestones

- ✓ Recruitment of participants (May/June 2013)
- ✓ Kick-off (June 28, 2013)
- Monthly calls with the whole group (July-December 2013)
- Regular web meetings with pilot teams (July-December 2013)
- Incorporate results of pilots into IWG's Direct Implementation Guide & Share with broader community (December 2013 – February 2014)