Health Information Exchange

A Key Component of Biosurveillance
HIE - Our Major Activity

- A five-year, thirty-eight million dollar effort in three areas – WA/ID, IN, NY
- Initiated in February 08
- Coordinators
  - WA/ID – SAIC
  - IN – Regenstrief Institute
  - NY
    - Health Research Inc.
    - NYSDOH
    - NYCDOHMH
Superb Attributes for **Team Success**

- **WA/ID**
  - *Technical expertise*
  - *Government experience – CDC and NHIN*

- **IN**
  - *Thirty years of HIE experience*
  - *Internationally renowned research center*

- **NY**
  - *Significant state funding for statewide HIE*
  - *State and local HD’s with superb IT capabilities*
Key Deliverables – Year 1

• Develop, test, evaluate and implement the biosurveillance use case (BUC) and Minimum Biosurveillance Data Set (MBDS)
• Demonstrate successful data exchange using NHIN specifications for the BUC
• Begin developing infrastructure for bidirectional communication
**RHIO Partners – Year 2**

**County Population:**
- < 50,000
- 50,000 – 100,000
- 100,000 – 500,000
- > 500,000

**Source:** Population Division, U.S. Census Bureau. Release Date: March 20, 2008

**Greater Rochester**

**Western NY HealtheLink (WNYCIE)**

**New York Clinical Information Exchange (NYCLIX)**

*Shares common technology with WNYCIE and has stated intent to exchange data with WNYCIE*

**THINC RHIO, Inc.**

**Long Island Patient Information eXchange (LIPIX)**
NW-PHIE Multi-State Process
Indiana Coalition Situational Awareness Work

- Enhancing standards-based clinical data flows to support public health practice
- Evolving automated public health case detection using natural language processing (NLP) methods
- Delivering routine medical information and public health broadcast messages to the clinical community
- Enabling bi-directional communication with case reporting forms
Our Future

• Further MBDS implementation
  – *Increased data elements*
  – *Utility and feasibility*
  – *Expanded geographic coverage*

• Translation
  – *Business cases*
  – *Technology*
  – *Partnership strategies*
Our Future

• Bidirectional communication (ISD)
  – Case reporting
  – Lab results

• Case reporting (ISD)
  – Natural language processor for ELR
  – Automated case detection

• Summarized/aggregated data (ISD)
Our Future

• Collaboration with federal partners
  – Initial idea – Northwest Initiative
    • CMS, FCC pilot sites, IHS, SAMHSA, local and state HD’s, medical community
    • DOD, VA, SSA
  – FCC pilot sites – AZ, NM and TX

• Open source software
• Decision support systems
• New sites
Data Exchange – Year 2 and Beyond

Center for Disease Control and Prevention (CDC)

Local Health Departments

Data Visualization

Data Exchange

NYS Syndromic Surveillance System

Direct Data Reporting

New York State Department of Health

New York City Department of Health and Mental Hygiene

Universal Public Health Node (UPHN)

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

NYCLIX

Consumer PHR

Pharmacy

Health Plan

Physicians

Labs

Hospital EHR

WNYCIE

Consumer PHR

Pharmacy

Health Plan

Physicians

Labs

Hospital EHR
HIE Coverage in New York

Approximate Number of People Covered in the Population Currently Served

The estimated total population served is 19,235,300; 98.54% of the New York State population including 100% of New York City Metropolitan population.
Possible Collaboration Opportunities

• Establish communication between CDC HIE sites (IN, WA/ID, NY) and FCC-funded organizations in these regions

• Identify other HIE’s that operate in areas with FCC-funded collaboratives and explore areas of joint interest that could be facilitated by CDC and FCC
Possible Collaboration Opportunities (2)

• Elucidate areas where FCC-funded sites are directed to collaborate with HHS/CDC and determine how HHS/CDC can assist in meeting these directives

• Examine ways that FCC-funded sites can enhance HIE activities and preparedness efforts
Regional Health Information Organization (RHIO) Data Exchange Partners, Year 1

Western NY HealthLink (WNYCIE)

New York Clinical Information Exchange (NYCLIX)

Health Information Exchange

A Key Concept for Biosurveillance
NW-PHIE Multi-State Process

- Cross state nature presents unique challenges
  - Coordinating reporting to multiple states with different laws & regulations

- Cross state nature also offers unique opportunities
  - Public health collaboration across states
  - Sharing of tools and processes
NW-PHIE Bi-State Process

- North West Public Health HIE (NW-PHIE) is unique in that it covers populations that span portions of 2 states - Western Washington State and Northern Idaho
- Population is contiguous across the state boundaries and seeks medical services irrespective of their state of residence
  - INHS HIE is aligned to cover the contiguous population
- Cross state nature presents unique challenges
  - Coordinating reporting to multiple states with different laws & regulations
- Cross state nature also offers unique opportunities
  - Public health collaboration across states
  - Sharing of tools and processes