

## Biosurveillance Briefing Document

Office of the National Coordinator for Health Information Technology

January 30, 2006

In the following paragraphs and pages you will find the broad and specific charges to this workgroup, some definitions to assure consistent communications, and some background information. We have also included some questions that may be useful starting points for your discussion and ask that, working with ONC, you endorse final highly specified recommendations regarding what is to be accomplished by year's end, the specific populations which will derive benefit, and the critical actions that must be taken for successful implementation. Your presentation of these recommendations at the March 7<sup>th</sup> Community meeting will shape the intent of the Community in this area.

### Charges for the Biosurveillance Workgroup

- **Broad Charge for the Workgroup:** Make recommendations to the Community to implement the informational tools and business operation to support real-time nationwide public health event monitoring and rapid response management across public health and care delivery communities and other authorized government agencies.
- **Specific Charge for the Workgroup:** Make recommendations to the Community so that within one year, essential ambulatory care and emergency department visit, utilization, and lab result data from electronically enabled health care delivery and public health systems can be transmitted in standardized and anonymized format to authorized public health agencies within 24 hours.

### Who is involved in making this happen?

- **Patients** - Members of the public who require healthcare services from ambulatory and emergency room environments.
- **Clinicians** - In ambulatory and emergency room settings, the healthcare providers with direct patient interface in the delivery of care, including physicians, nurses, clinical supervisors.
- **Healthcare Delivery Organizations** - Organizations such as hospitals and physician practices, which manage the delivery of care and capture data from patient encounters / episodes in electronic form.
- **Laboratory Organizations** - Medical laboratories, both in-hospital and independent, where tests are performed on biological specimens to get information about the health of a patient.
- **RHIOs** - An organization that provides clinical data access services to authorized users across a defined population (usually a geographic region).

- **Public Health Agencies (local/state/federal)** - Local, state, and federal government organizations and personnel that exist to help protect and improve the health of their respective constituents. A critical effort under this charge is collecting health information to monitor for the existence of emerging health threats appearing in the population and manage these threats once manifested.
- **Resource Suppliers** - Private and government organizations and personnel, other than Public Health Agencies, who have a stake in public health by supporting public health processes (e.g., USDA food inspectors, American Red Cross, pharmacies, Department of Homeland Security) and help address public health events.
- **Public** - Consumers of health care services and information; stakeholders in the overall health care system.

### What is already being done?

#### Related Federal and State Efforts/Resources:

- Centers for Disease Control and Prevention (CDC/DHHS)
  - Public Health Information Network
  - Architecture for public health IT
  - BioSense goals: Support the connection of clinical care to public health and support situational awareness at a national level
- Department of Homeland Security (DHS)
- State health organizations
  - Primary responsibility for PH surveillance and outbreak response
  - Have relationships with clinical providers and a wide range of public health informatics capacities
  - Many have begun implementing electronic clinical laboratory reporting, linkages to clinical information systems, involvement in RHIO's
- North Carolina – NCHES
  - Statewide hospital-based, clinical data monitoring
  - Monitors real-time inpatient, outpatient and ED data to detect and manage health threats and disease outbreak
  - Public-private partnership (NC Division of Public Health and NC Hospital Association)
- New York City
  - Ambulance dispatches, emergency dept visits, pharmaceutical purchases, outpatient visits
  - 50 hospitals, 90% of all ED visits in NYC
  - Used daily, demonstrated utility and flexibility; early detection, estimate disease burden, impact, reassure in non-outbreak, expand case findings

### **Modeling the Project**

1. Which biosurveillance functions can be supported with enhanced transmission of electronic health care data: initial event detection, situational awareness, outbreak management, and/or response management support?
2. What are the minimal lab, ambulatory care, and ER data elements needed by public health?
3. What are the sources of these data?
4. What time delay can be tolerated between clinical events and their reporting?

### **Defining the Populations**

1. How should developing a broader net of sentinel sites be balanced against broad coverage in major metropolitan areas?

### **Other**

1. How will patient privacy be protected while still supporting appropriate public health investigations?
2. How do we address varying state specific privacy and security issues?
3. How can clinical sites be encouraged to provide standardized data?
4. How will data be provided so as to meet biosurveillance needs at multiple levels: local, state, and national?
5. How will data be shared so as to support both routine and emergency situations?