Public Health Interoperability

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Brief Introduction to Public Health and Public Health Surveillance
Public Health Surveillance . . .

- Timely, high-quality, actionable
  - Collection, analysis, and interpretation of health data
  - Essential to planning, implementation, and evaluation
  - Dissemination to those who need to know
  - Linked to prevention and control

A Foundational Data Activity

Public Health Surveillance Ecosystem (Abridged)

- Health Care
  - Healthcare providers
  - Laboratories

- Health Data Networks
  - Health Information Exchange
  - Accountable Care Organization
  - Registries
  - Research Networks
  - Claims Databases
  - Other Data Sources

- Surveys (Policy, Behavioral)

- Public Health Partners
  - State, Territorial, Local, and Tribal Public Health Agencies

- Public

- CDC
  - Public Health Program Systems
Underlying Currents Shaping Public Health Surveillance
Ubiquity of Electronic Health Records

Possession of Certified EHR Among Office-Based Physicians and Hospitals in 2015

Calls for Enhancements to CDC Surveillance Systems

- **Congressional FY 2015 budget language** requires CDC to “develop a timeline for a cloud-based and flexible IT public health data reporting platform for CDC programs”

- **Council of State and Territorial Epidemiologists and other partners** have asked CDC to evaluate which data elements are truly needed for surveillance and to coordinate across CDC programs to harmonize and standardize data elements

- **CDC Director and Advisory Committee to Director** charged Office of Public Health Scientific Services to lead the CDC surveillance strategy
CDC Surveillance Strategy Goals

- Improve availability and timeliness
- Effective use of emerging information technology
- Retire redundant surveillance systems
- Maximize performance

Accomplish three practical objectives

– Reduce burden on states
– Improve performance inside CDC
– Improve value back to states
Moving from Single Purpose Systems to Shared Services

(single purpose system)  (shared services)
Enhanced Public Health Surveillance (Abridged)

Health Data Networks

- Health Information Exchange
- Registries
- Claims Databases
- Accountable Care Organization
- Research Networks
- Other Data Sources

Public Health Partners

- Electronic Lab Reports
- Syndromic Surveillance
- Mortality Reporting
- Electronic Case Reports
- Surveys (Policy, Behavioral)

Public, Special Interest Groups

- Laboratories
- Healthcare providers

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- Syndromic Surveillance
- Mortality Reporting
- Nationally Notifiable Diseases

CDC’s Surveillance Data Platform

Public Health Program Systems
The Road Ahead
Challenges in Bridging the Gap Between Healthcare and Public Health

- **Workforce**
  - Foundational capabilities to collect and analyze data

- **Technology**
  - National scalability v. value at local level

- **Interoperability**
  - Capacity to work within modernized & legacy HIT systems
Example Collaboration: Bidirectional Exchange of Electronic Case Reporting Data

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<th>Public Health</th>
<th>Vendors &amp; Healthcare Delivery</th>
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<tr>
<td>• Define Trigger Codes</td>
<td>• Define &amp; Implement Standards</td>
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<td>• Agree to Standards</td>
<td>• Proof of Concepts</td>
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<td>• Policy and Regulatory Changes</td>
<td>• Enable Data Transmission</td>
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Thank you

For more information, contact CDC
1-800-CDC-INFO (232-4636)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.