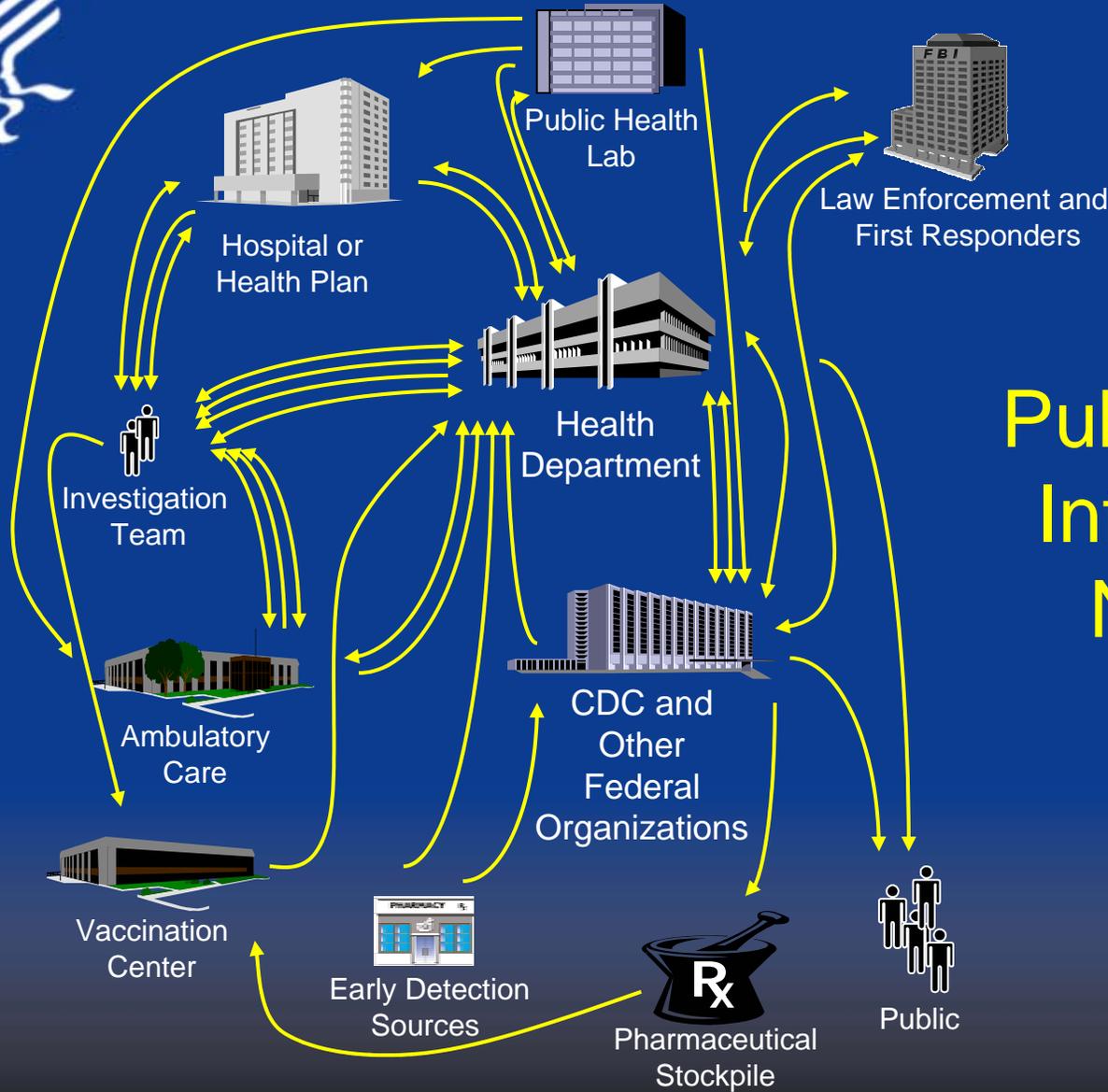




Public Health Information Network Stakeholders Conference

Atlanta, Georgia
May 24-27, 2004

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Public Health Information Network

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PHIN Coordinated Functions



- **Detection and monitoring** – support of disease and threat surveillance, national health status indicators
- **Analysis** – facilitating real-time evaluation of live data feeds, turning data into information for people at all levels of public health and clinical care
- **Information resources and knowledge management** - reference information, distance learning, decision support
- **Alerting and communications** – transmission of emergency alerts, routine professional discussions, collaborative activities
- **Response** – management support of recommendations, prophylaxis, vaccination, etc.

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Moving from conceptual to real



- Each health care delivery setting will have different electronic records status
- Each state/jurisdiction will have specific plans
 - ◆ Which systems to integrate
 - ◆ What funding streams available
- Central concept of PHIN is implementation of standards based interoperable systems so all
 - ◆ Facilitate real time data exchange
 - ◆ Maximize reuse of data exchange infra-structure
 - ◆ Plan for extensibility

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Adding Newborn Blood Screening test results to an integrated child health system



Laboratory information system (LIS) generates HL7 message with test results	PHIN compliant LIS include capacity to create standard HL7 messages
HL7 result message uses standard codes	PHIN Vocabulary Services provides needed codes
Message sent encrypted, to integrated system	PHIN Messaging System provides secure transport (ebXML)
Only authorized system users have access	PHIN Public Health Directory identifies roles



PHIN – since May 2003



- First year of PHIN funding – FY2004
- > 4,700 PKI digital certificates installed nationally
- > 55,000 HL7 standard public health lab results from 18 Laboratory Response Network (LRN) labs
- > 40 million patient records sent in HL7 format from DoD to public health, > 30 million HL7 format records from VA to public health (BioSense)
- Nebraska disease reporting reduced from ~30 days to 1-2 days; tripling of cases reported to public health (NEDSS Base System)

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Public Health Information Network Messaging System (PHIN-MS)



Software for industry standards based inter-institutional message transport available from CDC

- ◆ **ebXML “handshake”, PKI encryption and security**
- ◆ **Payload agnostic (HL-7, text file, etc)**
- ◆ **Bi-directional data exchange**

PHIN-MS in use by state and local partners for point to point messaging (ED and lab to state; state to CDC)

Several commercial systems incorporating PHIN MS

- laboratory information management system**
- integration broker**

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Current Status of Public Health Information Network



Public Health and Social Services Emergency Fund-2002

- ◆ \$1 billion for state and local public health preparedness capacity
- ◆ **CDC and HRSA stipulate in guidance** use of standards for IT investments—www.cdc.gov

September 2003 : second round Preparedness funding;
HRSA grants \$498 million ; CDC \$870 million

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Health Information progress since May 2003



- eGov Consolidated Health Informatics project adopts government wide interoperability standards:
 - ◆ HL7 messaging standards
 - ◆ LOINC—lab test identifiers
 - ◆ SNOMED—lab result content
 - ◆ EPA's Substance Registry System
- Government license for SNOMED made available 4/2004
- Proposed HL7 standard for Electronic Health Record
- Medicare Modernization Act of 2004 includes e-prescribing
- HHS appoints David Brailer, M. D. as National Health Information Technology Coordinator

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How can PHIN accelerate an interoperable Electronic Health Record?



- Public health intrinsically must exchange information with all clinical partners in a population
- Evident public value—outbreak detection, preparedness
- Concrete solutions for probable EHR needs e.g.
 - ◆ bidirectional secure messages (PHIN-MS)
 - ◆ HL7 V2.x, V 3 messages; implementation guides
 - ◆ use of controlled vocabulary (PHIN VS)
- ROI for decreased reporting burden
- Development of data use agreements

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