# THE PUBLIC HEALTH COMMUNITY PUBLIC HEALTH COMMUNITY

A solution for a modern public health enterprise

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#### **Problem Statement**

- Hundreds of disparate, siloed, non-standards based surveillance systems in public health that can't exchange data
- Limited ability to effectively and efficiently exchange data with clinical care
- Old, duplicative infrastructure in place across the public health enterprise – including hardware, software and staff
- Current IT infrastructure, and related laws and policies, limits the ability of the PH enterprise to integrate with the transforming health care sector
- Challenges to innovation

# THE PUBLIC HEALTH COMMUNITY PLATFORM

#### **Solutions?**

- Standards need to be adopted across public health to support how data is defined, transported and used across the public health enterprise
- Shared technical solutions to reduce costs:
  - server space, software development/purchase and maintenance costs, technical support, etc.
- Improve collection of timely, accurate and actionable data of public health interest that isn't siloed into one system
- Share information back with clinical providers to support clinical decision-making for individual patient and populations
- Standardize data exchange agreements across jurisdictions







#### VALUE PROPOSITION

- Workflow efficiencies in PH
  - Decrease time for data collection and analysis
  - Increase capacity for non-technical staff to implement solutions
- Workflow efficiencies in Clinical Health
  - Increase data completeness of reports
  - Decrease amount of back and forth with public health
- Infrastructure efficiencies
  - Decrease needs for local systems to host and deploy solutions
  - Share developed solutions across jurisdictions
- Economies of scale
  - Pool resources to develop solutions on the common platform
  - Take advantage of enterprise-wide improvements and service offerings
  - Host innovative solutions and generalize to public health enterprise







#### DRAFT SCHEMATIC OVERVIEW



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#### Vision:

Universal access to modernized shared resources that efficiently, securely, and collaboratively transform data into action for a healthier nation.

#### **Mission**:

Provide an accessible, flexible, and secure public health information technology platform of interoperable shared solutions governed by and responsive to the public health community that enables user-driven development, implementation, collaboration, and effective use of resources to address public health priorities.

#### **Steering Committee**



























APH

**Special Advisors** 







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#### **STEERING COMMITTEE GUIDING PRINCIPLES**

- Plan Broadly, Implement Incrementally
- Maintain Community Ownership
- Provide a Positive Public Health Impact

1/1/2014 7	7/1/2014	1/2015
Year 1-Assessments	Year 2- Pilots, Governance, Communication	Year 3- Technical Build and Service Rollout
6/3	6/30	0/2015 6/30/2016
<ul> <li>Year 1</li> <li>Key Informant Interviews and Needs</li> <li>Technical Assessments</li> <li>Use Cases</li> <li>Governance</li> <li>Communication</li> </ul>	<ul> <li>Year 2</li> <li>Governance Structure</li> <li>Committee Work</li> <li>Socialization -Funding Diversification</li> <li>Technical Design Development</li> </ul>	<ul> <li>Year 3</li> <li>Technical Implementation</li> <li>Pilots</li> <li>Participation Requirements</li> <li>Sustainability Plan</li> </ul>
		THE PUBLIC HEALTH COMMUNITY PLATFORM



- Cross-domain work within ASTHO, AIRA, and ONC
- Prioritizing immunization service for the PHCP
  - Various options of a centralized CDSi
  - Generalization of cross-jurisdictional data sharing
- Addressing
  - How can this service be offered by the PHCP?
  - What are the technical/legal/business requirements to generalize the model?
  - How do the service-specific decision-making needs influence the overall entity governance?

## THE PUBLIC HEALTH COMMUNITY PLATFORM

#### CDSI ARCHITECTURE DIAGRAM (EHR OR OTHER SYSTEMS ACCESS THE PCHP CDSI SERVICE THROUGH AN IIS)



Supports individual record calls and batch calls



#### CDS- IMMUNIZATION USE CASE

The design goals of shared CDSi:

- 1. The ability to support multiple immunization schedules
- 2. The ability to simultaneously process multiple requests for CDSi
- 3. The implementation of a fully automated testing process
- GUI tools that empower SMEs to update and maintain the immunization schedule without any involvement from programmers
- That it be a self-contained module that could be deployed in diverse technical environments and accessed by other systems through a standards-based Web Service interface.



#### **TYPES OF SHARING**

- 1. Shared service:
  - Support multiple schedules
  - Distribute configuration management to the end user
  - Efficiencies in maintaining the system and allow for scalability during peak demand
- 2. Shared data (not patient data, but rules data):
  - Share rules for decision support across jurisdictions
  - Allow flexibility for jurisdictions to define their own rules
- 3. Shared application:
  - Allow for rules and configuration to be deployed to CDSi applications hosted locally







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