



Planning for PHIN Certification: A Small State's Experience

New Hampshire DHHS
HLN Consulting, LLC®

PHIN Conference 2008
Perspectives on Assessments: Health Indicators in PHIN Certification

August 26, 2008

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Agenda

- Background
- Project Scope
- Approach
- Narrative
- System Inventory Database
- Findings and Roadmap

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Background

- In the spring of 2008, the State of New Hampshire Department of Health and Human Services (DHHS) partnered with HLN Consulting, LLC (HLN) to study the current level of compliance with PHIN 2.0 requirements.
- The primary objective of this project was to deliver a gap analysis for PHIN compliance, and a roadmap for the State to begin to close that gap.

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Project Scope

- Goal: Develop a gap analysis for PHIN compliance and a roadmap to begin closing the gap
 - Strategic approach: High-level principles and security strategies
- and*
- Tactical approach: Specific systems recommendations
 - Challenge: PHIN requirements represent a "moving target"

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Remember PHIN "1.0"?

- Six Functional Areas
 - Early Event Detection
 - Outbreak Management
 - Connecting Laboratory Systems
 - Countermeasure and Response Administration
 - Partner Communication and Alerting
 - Cross-Functional Components
 - Message construction, routing, transport, parsing; Directory; OID; vocabulary, data model, security

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PHIN 2.0

- Reorganize – simplify – consolidate
- Focus on messaging, directory, security
- Expand scope beyond preparedness
- 5 PHIN Requirements
 1. Message Composition
 2. Message Send
 3. Message Receive
 4. Directory Services
 5. Security
- PHIN Certifications – work in progress
 - Notification messages to CDC, Alerting, Directory


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PHIN & Project Scope – Approach

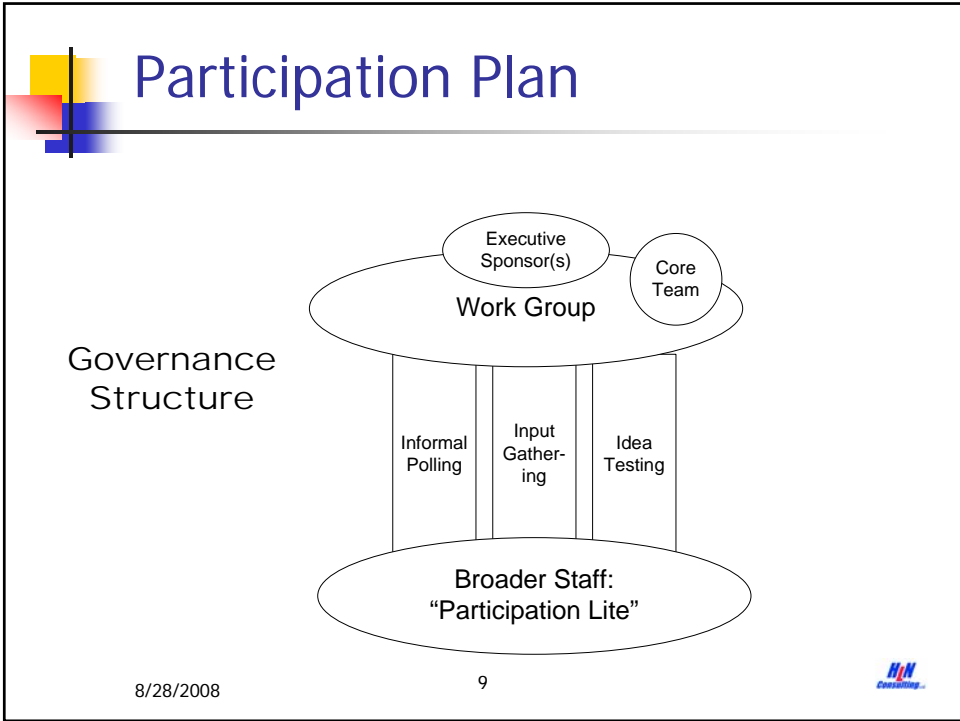
- Project is “Not *just* about PHIN”
 - Develop cross-functional architecture principles and priorities – shared services; person matching, reporting, AAA, vocabulary, messaging, etc.
- Not all requirements receive same focus
 - For example – #5 Security – leverage OIT strengths
- PHIN Certifications are “moving target” – develop guidelines/standards to anticipate

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High-level Approach

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graph LR; A[Project Kickoff] --> B[Refine Methodology and Tools]; B --> C[Conduct Gap Analysis]; C --> D[Develop Systems Options]; C --> E[Develop Infrastructure Recomm.]; D --> F[Present Findings]; E --> F; F --> G[Final Report];
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Project Phases

Phase	Key Tasks										
<ul style="list-style-type: none"> Initial Information Gathering Develop Gap Analysis Methodology and Tools Conduct Review/Gap Analysis Develop Options and Recommendations <ul style="list-style-type: none"> Infrastructure/Architecture Systems 	<p>NH PHIN Project Website</p> <p>Welcome!</p> <p>HLN has been engaged to help DHS become PHIN compliant. PHIN compliance is a CDC requirement, but just compliance with a lot of regulations. It is about developing a department-wide strategy to deploy IT resources in a more interoperable way.</p> <p>This website is intended to serve as a shared resource for the Core Team of the project. We will post documents, links, project ground-related documents -- so that the team can "stay on the same page" with respect to data collection and project deliverables.</p> <p>Initial Interviews and Data Collection at-a-glance</p> <table border="1"> <thead> <tr> <th>Thursday April 10th</th> <th>Friday April 11th</th> </tr> </thead> <tbody> <tr> <td>8:45 - 9:30 Dr. Montero's Office Dr. Ariz & Mike Berry w/ Brook Dupree and Jerry Bardsley</td> <td>8:30 - 10:30 - Room 112 IT discussion facilitated by HLN staff</td> </tr> <tr> <td>9:30 - 10:45 Dr. Montero's Office Dr. Ariz & Mike Berry & Ken Larsen and Nancy Spuhler w/ Brook Dupree and Jerry Bardsley & Core Team</td> <td>10:45 - 11:15 Room 112 DES GIS</td> </tr> <tr> <td>11:00 - 11:30 Dr. Montero's Office HLN staff 4.1 with Dr. Montero Executive Sponsor Meeting</td> <td>11:30 - 12:30 Room 310 DHS Management Team Lunch with HLN staff</td> </tr> <tr> <td>11:30 - 12:30 Room 312 All Disease Control (Montero's Group)</td> <td>12:30 - 1:30 Room 112 or Room 310 HLN staff with Lab staff (could schedule a concurrent session if 3 HLN staff are too many for the lab)</td> </tr> </tbody> </table>	Thursday April 10th	Friday April 11th	8:45 - 9:30 Dr. Montero's Office Dr. Ariz & Mike Berry w/ Brook Dupree and Jerry Bardsley	8:30 - 10:30 - Room 112 IT discussion facilitated by HLN staff	9:30 - 10:45 Dr. Montero's Office Dr. Ariz & Mike Berry & Ken Larsen and Nancy Spuhler w/ Brook Dupree and Jerry Bardsley & Core Team	10:45 - 11:15 Room 112 DES GIS	11:00 - 11:30 Dr. Montero's Office HLN staff 4.1 with Dr. Montero Executive Sponsor Meeting	11:30 - 12:30 Room 310 DHS Management Team Lunch with HLN staff	11:30 - 12:30 Room 312 All Disease Control (Montero's Group)	12:30 - 1:30 Room 112 or Room 310 HLN staff with Lab staff (could schedule a concurrent session if 3 HLN staff are too many for the lab)
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Project Phases

Phase	Key Tasks
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System Inventory Database

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System Inventory Database

- Web-based system inventory application developed and customized for this project
 - Interview tracking
 - System list
 - Gap Analysis tool
- Collaborative use
 - Initial population by HLN team
 - Access to NH Core Team
 - File repository
- Scope
 - This project only, or ongoing use

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[Future and Enhancements](#) | [Low Architecture](#) | [Low Interoperability](#) | [PHIN Functional Areas](#)
[Potential Opportunity Areas](#) | [Systems by Bureau](#) | [Systems By Hosting Model](#)

Facts and Findings at-a-glance

- 83 total systems documented
 - 16 future, 4 current enhancements, 1 retired
 - 46 in PHIN 1.0 functional areas
- 27 systems in-house with low architecture compatibility
 - “Fairly typical proliferation of standalone systems”
- 22 systems identified as “opportunity areas”
 - 15 are in PHIN 1.0 functional areas
 - 5 are ASP systems
- Hosting model: 18 ASP systems

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Inventory Database: Systems at-a-glance


 Division of Public Health Services **System Inventory Database**

[Main Menu](#) | [System Inventory Report](#) | [Inventory Charts and Graphs](#) | [Interviews](#) | [Full](#)

Rows: All

Working Report: | [Future and Enhancements](#) | [Low Architecture](#) | [Low Interoperability](#) | [PHN Functional Areas](#) | [Potential Opportunity Areas](#) | [Systems by Bureau](#) | [Systems By Hosting Model](#)

Saved Report = "Potential Opportunity Areas"

Architecture matches regular expression "(Medium)|(High)"

Interoperability matches regular expression "(Medium)|(High)"

Bureau


Functional Area not like "Other"

Bureau : Community Health Services

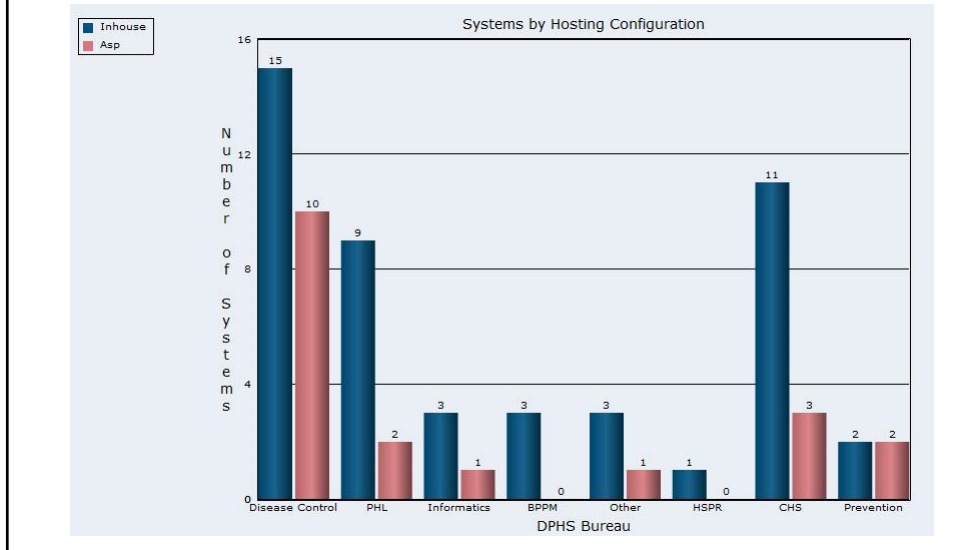
Name	Contact	Short Name	Hosting	Interoperability	Architecture	Status	Functional Area
CAREWare HIV Client Data	Chris Culnan	Careware	-	Medium	Medium	Future	Other
Web Infrastructure for Treatment Services	John Sweeney	WITS	-	Medium	Medium	Future	Other
MCH Datanet	David LaFlamme	Datanet	In-house	Medium	High	Future	Cross Functional

Bureau : Disease Control & Health Statistics

Name	Contact	Short Name	Hosting	Interoperability	Architecture	Status	Functional Area
Vital Records	Unknown	VR2005	N/A	Medium	Medium	In use	Other
Web-based Reporting and Query System	Matthew Cahillane, Karla Arment	WRQS	In-house	Medium	Medium	In-use - Enhancements	Cross Functional
Rhapsody	Jerry Bardsley	Rhapsody	In-house	High	High	In-use - Enhancements	Cross Functional
HIV/AIDS Reporting System (2nd generation)	Heather Berts	ersMS	In-house	Medium	High	Future	Other

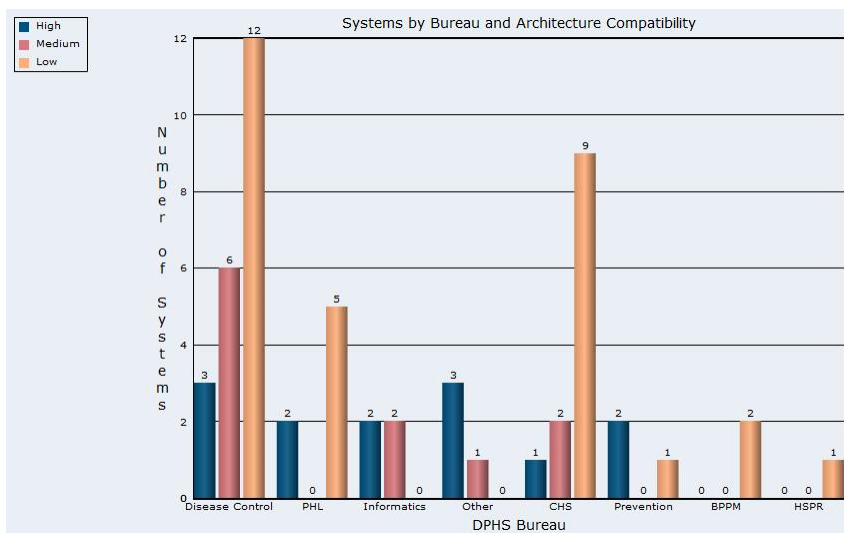
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Hosting Configuration

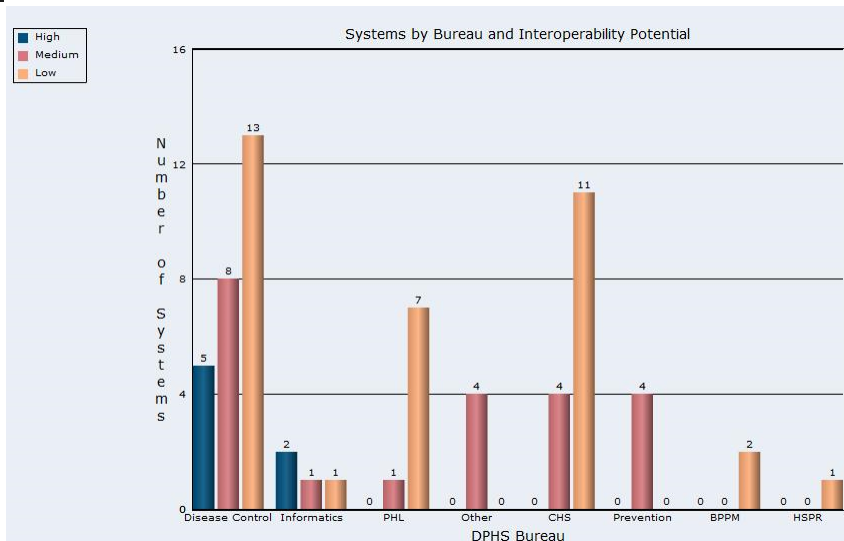





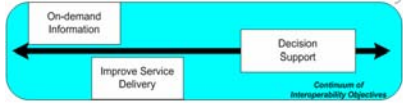
Architecture Compatibility




Interoperability Potential




Project Phases

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Functional Priorities



 Division of Public Health Services **DPHS** *System Inventory Database*

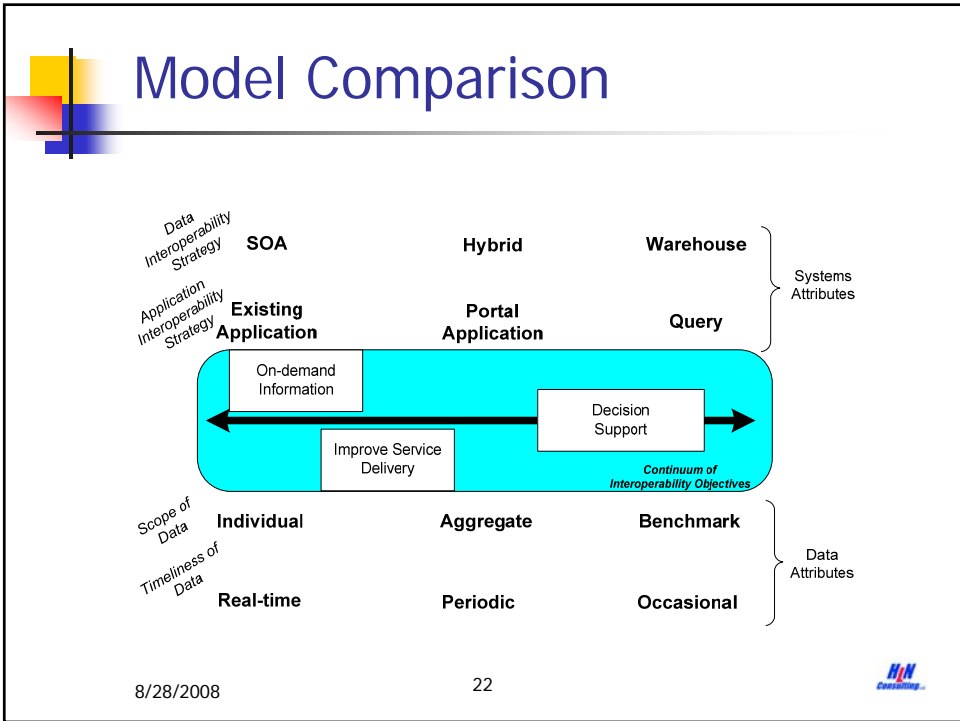
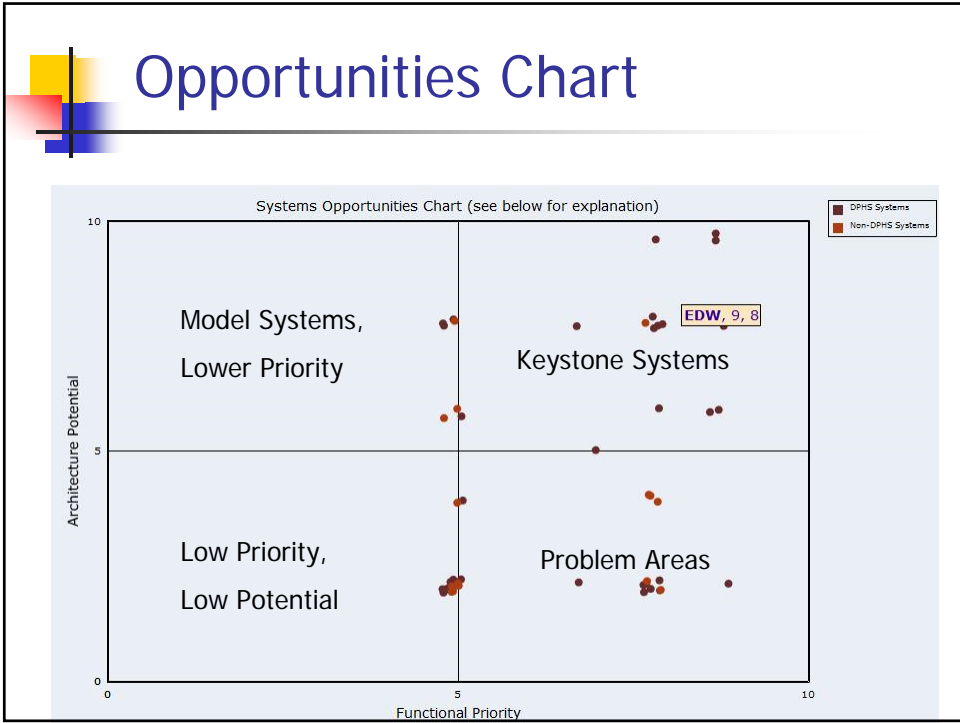
[Main Menu](#) | [System Inventory](#) | [Interviews](#) | [Functional Areas](#) | [Enhancements at-a-glance](#) | [Architecture Chart](#) | [Hosting Chart](#) | [Interoperability Chart](#) | [Opportunities Chart](#)

Modify Functional Areas [Cancel and Return to Main Menu](#) [Apply Changes](#)

Functional Area	Priority Level	Functional Type	Description
Early Event Detect	10	PHIN 1.0	PHIN 1.0: Early Event Detection
Outbreak Manager	10	PHIN 1.0	PHIN 1.0: Outbreak Management
Cross Functional	10	PHIN 1.0	PHIN 1.0: Cross Functional Systems provide services in messag
Laboratory	10	PHIN 1.0	PHIN 1.0: Connecting Laboratory Systems
CRA	8	PHIN 1.0	PHIN 1.0: Countermeasure Response Administration
Partner Communic	10	PHIN 1.0	PHIN 1.0: Partner Communications & Alerting
Certification	10	Custom Defined	PHIN 2.0 Certification Candidate
Other	5	Other	Other Functional Areas

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[Add New Functional Area](#)

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Architecture for Interoperability

- Address needs across the interoperability spectrum
- *Integration engine* as hub for standards-based messages
- Single pathway for data in/out of the department
- Service Oriented Architecture (SOA): long-term goal
- Warehouse and portal for short-term needs
- Core requirements (messaging, vocabulary, security)
- Web-based collaboration tools and content management
- Systems Inventory Database

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Building NH PHIN

- Roadmap:
 1. Enhance systems to enable PHIN messaging for Lead, TB, and Varicella. Practical, achievable set of initial projects on the road towards the recommended architecture
 2. PHIN Directory
 3. Incremental improvements to HAN
- Incremental progress towards overarching goals
 - Unified messaging
 - Enterprise-class systems
- Continued investment in Data Warehouse, LIMS migration, AHEDD
- Systems Inventory

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Action Steps

- Execute roadmap
- Apply the core requirements to new acquisitions
- Leverage existing assets where possible
- Periodically re-assess
- Remain flexible and prepared for new opportunities
- Use the System Inventory Database to its full potential
- Participate in Health Information Exchange and Health Data Standards efforts

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Questions?



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