

Registry Assessment Methodologies: Experience Across Three Projects

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Project Background

- Philadelphia Department of Public Health
 - KIDS
 - March 2002 – June 2002
- Rhode Island Department of Health
 - KIDSNET
 - March 2002 – July 2002
- Washington Department of Health
 - CHILD Profile
 - July 2002 – December 2002

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Project Background *(continued)*

	Philadelphia	Rhode Island	Washington
Size	275,000 kids 2.1 million IZ 27,000 births 350 sites	85,000 kids 850,000 IZ 13,000 births 175 sites	600,000 kids** 11 million IZ ** 80,000 births ±1,300 sites
Technology	Btrieve APL app. MS-DOS Dial-up	Oracle/Unix Oracle Forms Terminal-based Dial-up	Oracle/Unix Oracle Forms Terminal-based Dial-up

** of 3 million total records

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Presenting Issues

- Antiquated technology getting more difficult to enhance and maintain
- Terminal/DOS applications hard to use and not easily “marketable” to private providers
- Matching/de-duplication issues, especially with data from electronic sources
- *Ad hoc* query needs to support QA and policy

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Methodology

- Study current system, including its technical, political, organizational, financial environment (“immersion”)
- Technical Architecture Methodology
 - Functional/business requirements
 - Develop guiding information technology principles
 - Document current architecture
 - Technology research
- Conduct Needs Assessment to identify/clarify functional requirements
 - Engage as many different stakeholders as possible using a variety of techniques (interviews, focus groups, surveys)
- Develop strategic alternatives and recommendations

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Collaboration Tools

- Voracious use of email and email lists
- Project websites
- Project Tracking: Issue tracking tool
- Web File Repository: Document sharing
- “Low tech”: Conference calls

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Collaboration Tools *(continued)*

Project Website

The screenshot shows a Microsoft Internet Explorer browser window with the address bar displaying "HLN Consulting, LLC - Microsoft Internet Explorer". The page title is "Kentucky Needs and Feasibility Assessment". The main content area contains a "Table of Contents" with the following items:

- [Pre-Project Documents](#)
- [Status Reports](#)
- [Meetings Notes](#)
- [Stakeholder Focus Group and Interview Notes](#)
- [Stakeholder Survey \(Planning, Results, and Analysis\)](#)
- [Requirements Documents](#)
- [DPH Technical Evaluation](#)
- [Evaluation of Alternatives](#)
- [Implementation Plan and Budget](#)
- [Links to Resources](#)

Below the table of contents, there are sections for "Pre-Project Documents", "Status Reports", "Meetings (Agendas, Presentations, Notes)", and "Stakeholder Focus Group and Interview Notes", each with a list of links to specific documents or reports.

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Collaboration Tools *(continued)*

Issue Tracking Tool

NAVIGATION:
HLN Home
Project Tracking Home

LOGIN STATUS: Review all issues
[Expand with progress] [Expand with last progress note] [Expand with descriptions]
[Sortable report] [Across multiple clients]

MAIN MENU:
Submit an issue
Review issues
Review progress
My Profile
User management
Client Management
Help

QUICK LINKS:
My responsibility
My issues

Prio.	Date	No.	Issue name	Project	Classification	Status	Responsible
296/2002		450	Develop test plan	Lead	Problem	Submitted	Mike Suralik
291/2002		478	CR extractions to batch format identical record counts in data	Database integration	Request	Submitted	Martin Buechi
291/2002		477	CR data extraction counts	Database integration	Request	Submitted	Noam Azzi
291/2002		476	Classification Testing	Database integration	Request	Submitted	Noam Azzi
297/2001		168	Update to screen layout	Database integration	Enhancement	Submitted	
296/2002		425	Complete specifications document	Database integration	Request	Reviewed	Mike Berry
127/2001		8	Prepare database corruption	Database integration	Request	Pending	Noam Azzi

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Collaboration Tools *(continued)*

WFR: File Sharing

HLN Consulting, LLC
home
about us
contacts
products
services

technology planning for public health and higher education

User: **Welcome, Noam Azzi**

User: Noam Azzi

My Files

Upload Folder/Filename Browse To Upload

Folder/Filename	Size	Timestamp
Main Folder		
wwwy_priv.pdf	152 KB	07/26/2002 11:56 AM

Group Files

New Folder: Name Upload Folder/Filename Browse To Upload

To: CHOP Documents

Access: CHOP-Read Only Documents

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How We Completed the Projects

	Phila	RI	WA
“Immersion” Visit(s)	√	√	√
Tech Arch Methodology			
• Principles	√	√	
• Current Diagram		√	√
• Technology Research	√	√	

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Functional Evaluation: CDC Standards

CAIR Functional Evaluation - Microsoft Internet Explorer

CAIR Functional Evaluation: [CDC Attributes](#)

Summary:   

CDC Attribute	Rating	Comments
1. Electronically store data on all NVAC-approved core data elements .		Product complies, though the data model is weak. Only one address and one set of parent/guardian information can be stored per record (mother, father, one other guardian). In addition, the following mandatory data elements are missing: mother's middle name, father's middle name. The following optional fields are also missing: birth order, birthing facility, mother's SSN, father's SSN. There are plans to redesign the SQL database in Winter 2002 to, among other things, add the missing data elements.
2. Establish a registry record within 6 weeks of birth for each newborn child born in the catchment area.		Product is capable of absorbing electronic birth/death records via ASCII import. No user functionality currently exists for importing VS data, however adding this feature is a core deliverable of the '02-'03 CAIR workplan.

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Functional Evaluation: Gartner Group Standards

Project Attribute	Rating	Comments
Technology	A	The product is built on a solid architecture: SQL Server 2000, Win2000/IS for the application server, COM+ middle tier, and supports Internet access.
Functionality	B+	Product offers a clean look and feel, and meets almost all CDC functional attributes well, with strong support of office work flow in provider sites. Additional reminder/recall and coverage report capabilities will be added this year.
Cost	A	Product is available to public health agencies without cost upon negotiation with the CA Department of Health Services. Customization and support services are available from the support vendor.
Service/Support	A	HLN provides support on a contract basis.
Vision	A	HLN has been developing and supporting registries for a number of years, and this represents its core business.
Ability to Execute	A-	This product will be deployed this summer in five regions in California including Los Angeles. HLN will provide support to all these sites. HLN currently provides registry development and support to several other jurisdictions, including New York City, and is capable of supporting others.

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How We Completed the Projects (continued)

	Phila	RI	WA
Needs Assessment			
• Stakeholder focus groups	√	DoH Only	√
• Provider survey		√	Limited
• Interviews	√	√	√
• Summary Document	√	√	√

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Needs Assessment: Stakeholders

- Public health clinic physicians and staff
- Private health care provider physicians and staff
- Health plan/Managed Care Organization representatives
- State representatives (Immunization Program, Communicable Disease Program, Bio-terrorism preparedness, WIC, Medicaid, information technology)
- Local health department representatives
- Professional society representatives (*e.g.*, local AAP and AAFP chapters and medical societies)
- Head Start, child care facilities, schools
- Coalitions and community organizations

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How We Completed the Projects

(continued)

	Phila	RI	WA
Strategic Options			
• Market product review	√		√
• Strategic options document	√	√	√
• Formal recommendation document		√	√
• Meeting to discuss recommendations	√	√	

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Strategic Technology Options

Four options:

#1: Stay the Course

#2: Series of Marginal Improvements [RI]

#3: Commercial Off-the-shelf Replacement
[Phila, WA]

#4: Complete System Re-write

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Lessons Learned

- Methodology must be flexible enough to be adaptive, rigorous enough to be thorough.
- Large body of standards is building from CDC, AIRA, CIRSET and others that has helped provide a strong, common foundation for project evaluation.
- Assessments can be well informed by experience from other projects.

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Lessons Learned *(continued)*

- A good assessment with strong stakeholder input allows a project to “think the unthinkable”: possible replacement of its current product

