

Improving Communications Between Health Care Providers via a Statewide Infrastructure: Utah Health Information Network Clinical State and Regional Demonstration Project

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Organization:	Utah Health Information Network
Contract Number:	290-04-0002
Project Period:	September 2004 – September 2011
AHRQ Funding Amount:	\$5,000,000

Summary: The Utah Health Information Network (UHIN) is one of six Agency for Healthcare Research and Quality (AHRQ)-sponsored State and Regional demonstration projects begun in late 2004 and early 2005 to create a State or regional health information exchange (HIE). UHIN is a coalition of health care insurers, physicians, hospitals, laboratories, local health departments, health centers, State agencies, and other interested parties that have come together to reduce health care costs and improve the quality of care through the use of electronic data interchange.

UHIN's goal was to implement statewide information and communication technologies to facilitate the exchange of clinical data among its members. The first 4 years of the UHIN project were dedicated to building coalitions, developing infrastructure, identifying and engaging in dialogue amongst disparate UHIN partners, developing self-governance policies and procedures, and determining technological and administrative requirements needed to support the HIE. The enhanced infrastructure, which allows initial exchange of clinical information through UHIN, is a utility for direct entry of claims, eligibility inquiries, and other health care transactions. In 2009, UHIN contracted with the Axolotl Corporation to develop a comprehensive solution for clinical information exchange to form the technical infrastructure for the clinical health information exchange (cHIE). This change in direction led to delays in the overall implementation of the HIE and evaluation plans, though the primary objectives remained intact. UHIN eventually adopted a formative evaluation format in order to inform and track the development of the HIE.

This project has played a significant role to update the UHIN system infrastructure to be able to exchange clinical data. With the pilot complete, the ultimate goal will be to enable UHIN to become the statewide Veteran's Affairs (VA) exchange in 2012.

Project Objectives:

- Develop a novel exchange of laboratory and prescription drug data among unrelated entities. **(Achieved)**
- Conduct analyses of the role of the Medicaid program. **(Achieved)**
- Provide an evaluation of the project. **(Achieved)**
- Implement a sustainability model. **(Achieved)**
- Community implementation of clinical data exchange utilizing the expanded cHIE infrastructure that includes an "Electronic Medical Record Lite," a master patient index, and virtual health records-query functionality. **(Achieved)**

2011 Activities: The focus of activity was on continuing to work with the VA to exchange continuity of care

documentation between the VA and rural hospitals in Utah by connecting UHIN to the Nationwide Health Information Network. Completion of the pilot and evaluation helped to inform the impact that cHIE can have on workflow and adoption. Most of the evaluation participants had completed an initial baseline workflow analysis prior to their participation in the cHIE, however, the contract was extended by 12 months to allow UHIN to complete the evaluation. This project was completed September 2011.

Impact and Findings: Utah has relatively high electronic health record (EHR) penetration, especially in larger clinics. Many providers have already interfaced their EHRs with hospitals and laboratories, or are in the process of doing so. UHIN used a portion of the project funding to launch a successful grant program for connecting EHRs to the cHIE. Given Utah's high-EHR-penetration environment, this proved to be an effective strategy to increase connectivity rates.

At the completion of the project's funding period, 13 facilities, including 11 hospitals, one large clinic group, and one independent laboratory, had sent more than 8 million clinical messages to the HIE. While the impact of the use of cHIE by clinicians on patient safety and quality of care could not be measured due to its early stages, interviews completed with both clinics and hospitals indicated that despite initial delays in implementation, enthusiasm and expectations for the cHIE remain high.

One of the important lessons learned in the course of the project is that evaluation of outcomes should not wait until HIE is fully mature and functioning and widely used. Rather, outcomes should be measured on an ongoing basis, to the extent possible, while recognizing and acknowledging the potential limitations of such an approach.

Target Population: General

Strategic Goal: To develop and disseminate health IT evidence and evidence-based tools to support patient-centered care, the coordination of care across transitions in care settings, and the use of electronic exchange of health information to improve quality of care.

Business Goal: Implementation and Use
