

**Project Title:** Improving Communications Between Health Care Providers via a Statewide Infrastructure: Utah Health Information Network (UHIN) Clinical State and Regional Demonstration Project (currently known as UHIN)

**Principal Investigator:** Root, Jan, Ph.D.

**Organization:** Utah Health Information Network

**Contract Number:** 290-04-0002

**Project Period:** 09/04 – 09/09

**ARHQ Funding Amount:** \$5,000,000

**Summary Status as of:** December 2008

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**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

**Summary:** The Utah Health Information Network (UHIN) is one of six AHRQ-sponsored State and regional demonstration (SRD) projects begun in late 2004 or early 2005 to create a non-profit health information exchange (HIE). Each of the SRDs is developed using a variety of approaches (e.g., technical, business, and governance models) in order to support data sharing and interoperability on a State or regional level. Like the other SRDs, UHIN is tasked with the development of clinical (e.g., laboratory results and prescriptions) data sharing and interoperability capacity, the analysis of the role of the Medicaid program vis-à-vis electronic exchange of information, the evaluation of the SRD, and the development of a sustainability model. UHIN seeks to create and provide statewide capacity for administrative and clinical information to be exchanged between disparate health care information systems, physicians, hospitals, laboratories, payers, local health departments, and health care centers without compromising the integrity of the information exchanged. UHIN leveraged existing administrative exchange infrastructure and contracts to build the infrastructure of a statewide easy-to-use, low-cost HIE of clinical and administrative data whereby information is exchanged through an evolutionary electronic data interchange (EDI) path that allows paper but encourages users to migrate to electronic files. UHIN is supporting the use of a modest electronic medical record (EMR), commonly referred to as “EMR lite,” a Master Patient Index (MPI), and virtual health records query functionality. UHIN seeks to create provider-to-provider, provider-to-public health agencies, and provider-to-payer messaging through a hub model with a central server. Given the breadth of institutions, types of data, personnel, and health IT systems involved, the first 4 years of UHIN were dedicated to the challenging and exciting tasks of coalition building, infrastructure development, identifying and engaging in dialogue amongst disparate statewide partners including physicians, hospitals, laboratories, payers, local health departments, and health centers; development of UHIN self-governance policies and procedures; and determination of technological and administrative requirement to support the UHIN.

### Specific Aims

- Develop a novel exchange of laboratory and prescription drug data among unrelated entities. **(Achieved)**
- Conduct analyses of the role of the Medicaid program. **(Ongoing)**
- Provide for an evaluation of the project. **(Ongoing)**
- Develop a sustainability model. **(Upcoming)**

**2008 Activities:** UHIN’s Clinical Health Information Exchange (cHIE) task force (a subcommittee of the UHIN Board of Directors) conducted a formal and extensive search for an appropriate strategic partner to provide the technical infrastructure for new clinical data exchange and virtual health records query functionalities. A decision was made in December 2008 to partner with Axolotl. UHIN is in the process of updating its electronic commerce agreement (ECA) and creating a cHIE Addendum so that the responsibility will be on members to comply with liability requirements and use clinical data properly. UHIN has selected the initial roll out site and is enrolling the key data sources and building support among health care providers for participation in the cHIE. In 2007, Utah passed a law giving the Utah Department of Health the authority to adopt standards to exchange clinical data. The Utah Department of Health will leverage UHIN’s experience developing and adopting administrative data exchange standards to determine which standards to develop and adopt to exchange clinical data. UHIN also made progress creating a connection with the Utah Department of Health to exchange electronic death certificate data. UHIN continues to work with the Department of Health to connect to the Child Health Advanced Records Management (CHARM) database to permit user query of this database through the UHIN exchange.

In late 2008 and onward, UHIN contributed to the forthcoming (Summer 2009) AHRQ-sponsored manuscript entitled, *Liability for Regional Health Information Organizations: Lessons from the AHRQ-Funded State and Regional Demonstration Projects and Other Community Efforts*, which will be available at [www.healthIT.ahrq.gov](http://www.healthIT.ahrq.gov).

**Preliminary Impact and Findings:** In a State with relatively high (30 to 50 percent) EMR penetration, cost—in the form of connection fees EMR vendors want to charge—is a significant challenge. EMR vendors are seeking \$10,000 to \$50,000 to create these connections, even though UHIN uses a standard secure Web-services interface.

In addition, EMR systems are not currently designed to handle information exchange. They do not have the functionality to: 1) query for a virtual health record, 2) identify and resolve multiple identities efficiently, 3) manage the HIE patient consent parameters, 4) maintain the metadata on imported HIE data to record data origins, or 5) indicate which HIE data have been validated. In short, UHIN anticipates that most clinicians, whether they have an EMR or not, will be forced to use some or all of the cHIE tools—EMR-lite, virtual health records, and the registry and report tool—in parallel with their existing EMRs.

Other emerging legal issues that the community will need to address include the following:

- 1) Consent: How is consent handled across the State? How is it integrated with the consent gathered that is internal to an organization? What if the HIE consent conflicts with an existing internal consent?
- 2) Identification and Authentication: How will user identification and authentication be accomplished efficiently? UHIN hopes to piggy-back on existing user identification and authentication practices used by payers, hospitals, and State licensing efforts.
- 3) Auditing: How will UHIN assist members in complying with HIPAA privacy use and disclosure requirements—in particular, the more stringent rules included in the American Recovery and Reinvestment Act (ARRA) legislation?

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## Selected Outputs

In January and July 2008, UHIN participated in two in-person meetings with fellow AHRQ-sponsored SRDs to share lessons learned, share general information, and plan for upcoming project-specific deliverables such as plans for evaluation and developing a sustainability plan.

Developed plan for sustainability of the clinical and administrative data exchange.

Developed plan for evaluation of the HIE.