

Project Title:	Health Information Exchange: A Frontier Model
Principal Investigator:	Shank, Nancy, M.B.A.
Organization:	Chadron Community Hospital
Mechanism:	RFA: HS05-013: Limited Competition for AHRQ Transforming Healthcare Quality through Information Technology (THQIT)
Grant Number:	UC1 HS 016143
Project Period:	09/05 – 09/09, Including No-Cost Extension
AHRQ Funding Amount:	\$1,498,623
Summary Status as of:	December 2008

Strategic Goal: 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 Health Information Exchange: A Frontier Model project is in the process of implementing a regional health information organization (RHIO) in Nebraska within an established collaborative of rural hospitals, clinics, public health providers, behavioral health providers, and others across a 14,000 square mile, remote area. The project will demonstrate phased health information exchange (HIE) mechanisms among partners who have committed over \$1 million annually. The exchange will accommodate partners with substantial, standards-compliant existing assets and will equip partners with little or no assets to develop capacities, with an emphasis on economies that are achievable through collaborative purchasing, training, and support.

Upon completion of the project: 1) electronic medical records (EMR) will be established and integrated with other functional systems (decision support systems, computerized physician order entry (CPOE)/e-Prescribing, results management, laboratory) in all critical access hospitals and rural health clinics through a common process and shared resources in order to enhance local and regional capacity development toward HIE; 2) HIE systems will be established that will provide current information, from all hospitals and rural health clinics, at the point of care; and 3) an operational entity and incorporated RHIO will provide the sustainable infrastructure necessary to support regional HIE and common developments in the electronic health records.

The plan will model a solution applicable to small hospitals across the Nation because the plan will accommodate the wide variability in technological capacity and readiness represented by the partnering organizations. Project partners include all the area's hospitals, the public health entity, a membership organization of nearly all health and human services providers, and the University of Nebraska.

Specific Aims

- Develop business plan. **(Ongoing)**
- Provide standardized education, training, and user capacity. **(Achieved)**
- Select products for organizations with an electronic health record. **(Ongoing)**
- Operationalize the RHIO. **(Ongoing)**

2008 Activities: In 2008, development of the business plan continued in order to ensure that there is long-term sustainability of the HIE. Education and training was also completed, which consisted of Project Mapping Webinars, Project Management and Microsoft Project trainings, and a Managing and

Maintaining Computers course (A+ Certification) for appropriate users. Different participating health care organizations implemented EMRs and other necessary software throughout this past year, and the product selection for local organizations without electronic health records will continue into 2009. Provider satisfaction surveys, which measure the level of satisfaction among health care providers regarding the implementation of health information technology (IT), are currently being analyzed and a report on the findings will be available in the first quarter of 2009. Individualized Inpatient Summary Reports were also distributed to each hospital using information gathered from inpatient satisfaction surveys. An Acceptance and Use of Technology Survey was also administered and analyzed.

In 2008, the RHIO has been primarily focused on vendor selection for a regional sharing solution to operate the HIE and shared decisions regarding instituting the administrative product in a collaborative fashion. Although the selected vendor provided the desired project, concerns were raised that it is no longer within the financial range of this project. As a result, discussions were started regarding balancing functionality of the HIE given the limitation of funding available. Concerns with scaling back the project are primarily associated with the value the scaled back project would have to the regional providers if they are only able to see partial information, such as lab and radiology reports.

Preliminary Impact and Findings: Results of the Acceptance and Use of Technology Survey revealed that the providers reacted favorably to the implementation of the Regional West Medical Center (RWMC) Portal in late 2006 and early 2007. In general, the providers indicated interest in using the RWMC Portal and said it would be useful for their work. Approximately 97 percent of the providers who responded to the survey indicated that they planned to use the RWMC Portal within the next 6 months. A preliminary analysis of the portal data indicates that relatively few providers actually used the RWMC portal during the initial period. However, at the end of 2008, portal use appears to have maintained a fairly steady pattern of use.

Selected Outputs

Carrell B. Panhandle Collaborative Exchange. ACCESS, Newsletter of the Nebraska Office of Rural Health Association. May 2008; 51:5.

Woods K. Western Nebraska Health Information Exchange Closer to Reality. ACCESS, Newsletter of the Nebraska Office of Rural Health Association. October 2007; 49:3.

Grantee's Most Recent Self-Reported Quarterly Status: The project was granted a no-cost extension to allow additional time to complete its work to execute all needed aspects of the health IT implementation.

Milestones: Progress is mostly on track.

Budget: Somewhat under spent, approximately 5 to 20 percent.