

## Health Information Technology: State and Regional Demonstration Projects

The mission of AHRQ is to improve the quality, safety, efficiency, and effectiveness of health care by:

- Using evidence to improve health care.
- Improving health care outcomes through research.
- Transforming research into practice.

### Introduction

In 2004, the Agency for Healthcare Research and Quality (AHRQ) awarded “State and Regional Demonstrations (SRDs) of Health Information Exchange (HIE)” contracts to Colorado, Indiana, Rhode Island, Tennessee, and Utah. Delaware was added in 2005. The 5-year project supports statewide data sharing and interoperability activities on a State or regional level aimed at improving the quality, safety, efficiency, and effectiveness of health care for patients and populations. It is expected that measurable improvements in the quality, safety, efficiency, and/or effectiveness of care will result from the proposed data sharing and interoperability measures.

The six States are developing a variety of approaches with different technical, business, and governance models. In addition to requirements specific to their individual contracts, each is required to develop a novel exchange of lab and prescription drug data among unrelated entities; conduct an analysis of

the role of the Medicaid program; provide for an evaluation of their project; and develop a sustainability model.

### State and Regional HIE Projects

**The Colorado Health Information Exchange (COHIE).** COHIE includes four University of Colorado Health Sciences Center-affiliated institutions and works with various institutions and county-based initiatives in health information technology (health IT) to create a cohesive health IT strategy for the State as a whole. In 2006, COHIE became part of the larger Colorado Regional Health Information Organization (CORHIO), a non-profit organization with a similar mission. COHIE’s planned services include the following kinds of information exchange: point of care (for patient and provider); clinical messaging (provider to provider); administrative (provider and payor); and population health/public health (provider, payer, and public health).





**Delaware Health Information Network (DHIN).** In 2005, DHIN was awarded an SRD contract to facilitate their mission of developing a statewide health information and electronic data exchange. DHIN plans to build a computerized network through which a patient can consent to have hospitals, labs, diagnostic facilities, and insurers share access to their personal health information. The data will “live” at its point of origin, as the model does not include a repository or database. Other services will include a patient portal, a disease management/decision support module, audit trail and billing functions, claims retrieval and processing, and secure messaging/e-mail to facilitate improved provider-to-provider and patient-to-provider communication.

**Indiana Health Information Exchange (IHIE).** Building on the Indiana Network for Patient Care created by the Regenstrief Institute, the IHIE is a non-profit organization that was created in 2004. IHIE defines its vision for use of information technology as: (1) improve the quality of health care in the State of Indiana; (2) generate new research topics for the health research community; and (3) be a model for other communities seeking to develop an HIE. To attain this vision, IHIE will concentrate its effort on creating an electronic infrastructure in central Indiana and then slowly develop the infrastructure across the entire State. IHIE is creating a rich, large-scale health information exchange built on clinical information standards, adding additional data sources including hospitals, laboratories, radiology centers, payors, and others. IHIE services include a clinical messaging system. Physicians have access from a single source to laboratory, pathology, radiology, and electrocardiogram reports, transcriptions, and emergency

department (ED) and hospital encounter information from all participating central Indiana hospitals.

**The Rhode Island Health IT Project.** Rhode Island Quality Institute (RIQI) was designated by the Rhode Island Department of Health to carry out the SRD contract funded by AHRQ. RIQI is a non-profit organization that was founded in 2001 as a collaborative effort among members of the health care community to improve health care quality, safety, and value in Rhode Island. The long-term goal of the project is to provide an integrated statewide personal health record for patients. The AHRQ-funded initial phase of the HIE project will focus on making electronic laboratory and medication information available to providers through the HIE. Initial sharing priorities include providing authorized clinical users access to current and historical laboratory information from three major laboratories in the State (an integrated delivery network, the State public health laboratory, and a local private laboratory chain) and medication histories from a major pharmacy transaction network and other medication information data sharing providers as they are identified.

**Tennessee: MidSouth eHealth Alliance.** To facilitate the development of a community-wide information system, the MidSouth eHealth Alliance (MSeHA) was selected to receive funding from AHRQ. MSeHA is a non-profit organization that seeks to improve the health care system of Tennessee by focusing on health care quality, safety, and efficiency. The goal of this initiative is to implement health information exchange in the counties surrounding and including Memphis (Shelby County) and to determine how this exchange affects the health care system in the region. After some preliminary analysis, the project group targeted hospitals and emergency departments in

its first phase. Tennessee has focused on urban hospitals and large clinics and has been operational in emergency departments for 7 months. They have focused on exchanges between clinics, prescription data, and sustainability. The types of data exchanges include patient demographic data; HL7 message types; radiology results; respiratory care treatment/results; pharmacy orders and administration records; diagnosis codes; institutional codes; and professional billing codes.

**Utah Health Information Network (UHIN).** A broad collection of health care providers, insurers, and other interested stakeholders make up the UHIN. To accomplish the goals of minimizing the costs of consumer health care and improving overall health care quality, UHIN functions as a secure network through which health care transactions pass. The goal of UHIN is to create an easy, low-cost system to send lab results from hospitals, physicians, and other health care providers through an evolutionary electronic data interchange (EDI) path that allows paper but encourages users to migrate to formatted files. These exchanges can be used for both clinical and administrative purposes. UHIN is working to create provider-to-provider, provider-to-public health, and provider-to-payor messaging through a hub model with a central server.

## The National Resource Center for Health IT

AHRQ shares findings, tools, and technical support through its National Resource Center for Health IT (NRC). The NRC provides direct technical assistance and consulting services to AHRQ projects involved in developing, testing, and using health IT applications, with a particular focus on addressing challenges to health IT implementation in rural and small community settings. In addition, the NRC serves as the link between the health care community at large and the researchers and experts who are on the front lines of health IT. As the central repository for lessons learned from AHRQ's health IT initiative, the NRC encourages adoption of health IT by disseminating the latest tools, best practices, and research results from this unique real-world laboratory.

### For More Information

For additional information on AHRQ projects on health information technology, please visit [www.healthit.ahrq.gov](http://www.healthit.ahrq.gov) or contact the health IT staff at [NRC-healthit@ahrq.gov](mailto:NRC-healthit@ahrq.gov).



