Rhode Island Statewide Health Information Exchange—State and Regional Demonstration Project, currentcare

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<td>Organization:</td>
<td>Rhode Island Department of Health</td>
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<td>Contract Number:</td>
<td>290-04-0007</td>
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<td>Project Period:</td>
<td>September 2004 – June 2011</td>
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<td>AHRQ Funding Amount:</td>
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**Target Population:** General

**Summary:** The Rhode Island Department of Health is collaborating with the Rhode Island Quality Institute (RIQI) and stakeholders across the State to develop, implement, and evaluate an interconnected statewide health information system with a master patient index (MPI). The aim of the system is to provide information to clinicians and patients when and where it is needed. The Rhode Island health information exchange (HIE) system, known as currentcare, is intended to evolve into an interconnected statewide health information network that will improve the quality, safety, and value of health care services and support critical public health needs for the broader Rhode Island population. This project is one of six Agency for Healthcare Research and Quality (AHRQ)-sponsored State and Regional demonstration (SRD) projects begun in late 2004 and early 2005 to create a State or regional HIE.

The project is intended to design, develop, test, deploy, and evaluate the initial phase of a secure and reliable HIE system governed by RIQI, the State-designated health information organization (HIO). Initial types of data to be shared as part of the HIE during the project period include laboratory results and medication history. Initial end users will be long-term care facilities, community health centers, private providers, and hospital emergency departments. Other data-sharing partners, end users, and data types (including interfaces with electronic health record systems) will be added as quickly as possible.

Currentcare is being implemented in accordance with the Rhode Island HIE Act of 2008, which stipulates stricter privacy and confidentiality protections than other State and Federal health information privacy laws. The rationale, impact, and results of this law on HIE system implementation have been a major focus of the project evaluation. Currentcare is expected to go live in mid-2011.

**Project Objectives:**

- Improve the quality, safety, and value of health care in the State of Rhode Island through a sustainable statewide HIE system. *(Upcoming)*
- Incorporate a MPI into the HIE to locate longitudinal patient health information from numerous data-submitting partners statewide. Design the HIE so that consumers will be allowed to control access to their data. *(Achieved)*
- Implement the capability to present data from various sources in an integrated, patient-centric manner using a common user interface. *(Upcoming)*
- Transition all operating, management, and governance responsibility of the HIE to a community-based regional HIO. *(Achieved)*
2010 Activities: Project stakeholders worked with the technical vendor team to finalize the first version of currentcare for testing and a security audit. Technical development included addressing issues discovered during testing. In addition, a major effort was made to complete the transition of responsibility for implementing and operating the HIE system from the Department of Health to RIQI, as the State's designated entity, including system software, hardware, and the hosting environment. This work was done amidst recovery from unprecedented floods in Rhode Island which completely destroyed the data center that housed currentcare. Software recovery took longer than anticipated and contributed to major delays in user acceptance testing. Further, all hardware required replacement and a new data center and hosting contractor were identified. RIQI continued efforts to obtain consumer registration (enrollment) in currentcare using various strategies including community outreach and education, training and development among providers, and paper-based and electronic marketing strategies. Enrollment efforts initially targeted Medicaid beneficiaries and were expanded to include patients at the site of care and in long-term care facilities. By the end of the year, more than 100,000 patients had been enrolled in currentcare.

In early 2010, RIQI was awarded three grants from the Office of the National Coordinator for Health Information Technology that are expected to facilitate continued near term growth of the statewide HIE system. In May 2010, the project team participated in the final “Capstone” meeting with fellow AHRQ-sponsored SRD projects to share lessons learned and reflect on the future direction of the initiatives. While currentcare remained in the user acceptance testing phase in late 2010, it is anticipated to be completed, along with a security audit, and ready for go live in a pilot implementation in mid 2011. Efforts continued to finalize the data-sharing agreement, which will be signed once the system is ready to go live.

Preliminary Impact and Findings: The project’s Final Evaluation Report was submitted to AHRQ which included an evaluation of the benefits and challenges of the Rhode Island community governance and patient consent approaches. In the report, Rhode Island’s decisions relating to community involvement and privacy protections are studied and their impact on Rhode Island’s progress is analyzed. The outcome of focus group evaluation of policymaking processes and decisions confirmed an overall broad-based sense of community pride in the work carried out to date to build a statewide HIE system. The focus group evaluation also reflects stakeholders’ general agreement with the community collaboration approach and the consent policy direction that was undertaken.

In addition, a study of the currentcare enrollment strategies and results in long-term care facilities was included. For nursing homes, the value of and need for the HIE system is perceived to be high, however, the nursing home environment has both significant advantages and challenges for enrolling residents. The nursing home study describes how efforts to enroll nursing home residents in currentcare met with varying success and identifies key attributes for success in engaging long-term care facilities.

It is hoped that the project’s contribution to the HIE body of knowledge can be used to emphasize the need to understand and actively manage the complex relationship between the propensity for change in social and health systems and the conditions required for acceptance of technology as a tool for progress in a given community.

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