

## Chronic Mental Health: Improving Outcomes Through Ambulatory Care Coordination

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<b>Principal Investigator:</b>	Baker, Wende, M.Ed.
<b>Organization:</b>	Southeast Nebraska Behavioral Health Information Network, Inc.
<b>Mechanism:</b>	RFA: HS08-002: Ambulatory Safety and Quality Program: Improving Management of Individuals with Complex Healthcare Needs Through Health Information Technology (MCP)
<b>Grant Number:</b>	R18 HS 017838
<b>Project Period:</b>	September 2008 – September 2011
<b>AHRQ Funding Amount:</b>	\$1,199,871
<b>Summary Status as of:</b>	December 2010

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**Target Population:** Adults, Chronic Care\*, Mental Health/Depression

**Summary:** Providing care for people with mental health illness poses unique and difficult challenges. Without electronic communication, behavioral health providers cannot follow the full treatment path of patients as they move among various providers in urban and rural outpatient settings, mental health hospitals, protective custody, and crisis mental health facilities. This project explores how the exchange of health information between rural and urban providers in the behavioral health field can improve ambulatory patient care coordination and safety across treatment settings. Specifically, the project examines provider barriers to technology acceptance in the behavioral health setting, behavioral health care technology acceptance and adoption, and the effects of health information exchange (HIE) on clinical outcomes.

The development and implementation of a regional HIE in southeast Nebraska will decrease the time it takes for providers to access comprehensive and accurate information, thus creating better access to patient information between and among the provider care team serving an individual with mental illness. This, in turn, will improve continuity of care by providing an electronic link between the multiple service settings that serve Nebraska residents. The provision of basic electronic information to coordinate patient care between behavioral health providers, rural hospitals, and the emergency behavioral health system, will improve the long-term health outcomes of individuals with serious, persistent mental illness.

During the first phase of the project, a committee issued a request for proposals, researched vendor qualifications, and ultimately selected products from NextGen Healthcare, certified by the Certification Commission for Health Information Technology. At the same time, the team began to design the HIE and also conducted a behavioral health provider survey focused on technology acceptance. In the second phase of the project, currently underway, the team will develop the HIE infrastructure, equip provider offices with new or updated technology, and provide training to participating providers. In phase three, the team will implement the HIE in three provider facilities. Once the environment is established, data will be collected to evaluate how timely access to accurate information might improve the quality of care for those experiencing a behavioral health crisis and who have an immediate need for entrance into the emergency behavioral health care system.

**Specific Aims:**

- Identify provider barriers to technology acceptance. **(Ongoing)**
- Implement an HIE among three major behavioral health provider facilities. **(Ongoing)**
- Collect data on how timely access to accurate information relates to quality of care. **(Upcoming)**

**2010 Activities:** System design activities continued to focus on organizational development of the Southeast Nebraska Behavioral Health Information Network's Regional Health Information Organization and on system implementation. The State's Operational Plan for statewide HIE was approved by the Office of the National Coordinator for Health Information Technology. Early in the year, the electronic Behavioral Information Network (eBHIN) encountered system design challenges as well as problems in recruiting appropriate project management personnel, delaying system implementation by 6 months. However, a new project manager, working with an information technology consultant and NextGen, has been able to adapt the project plan and a new "Go-live" date has been established for June 2011.

In collaboration with the University of Nebraska, Dr. Baker sponsored an "HIE Kick-Off Celebration." The President of NextGen Healthcare Information Systems joined a group of approximately 100 stakeholders for a presentation highlighting system capabilities and outlining plans for implementation. A data center hosting timeline was developed to facilitate a production environment available in preparation for go-live. An HIE implementation team has been established representing all of the organizations that will be participating in the network. The project manager has been working with this team and NextGen on finalizing the record design and functionality. The referral management and waitlist management functionality has been defined.

Working with a core group of providers identified "super users," the application has been built with provider-specific information. The eBHIN team continues to work with NextGen and the Magellan Behavioral Healthcare system to design the file transfer protocol for the upload of registration and authorization information to the State of Nebraska. The file transfer structure has been designed and preliminary testing has begun.

Research activities focused on dissemination, data collection, data analysis, and interpretation of a statewide survey, and on completing analysis and interpretation on a provider survey conducted in 2009. The statewide survey focused on the benefits and barriers to electronic sharing of client information. This survey was sent to all practicing behavioral health providers in Nebraska. A total of 2,010 surveys were sent out with 667 respondents. The grant team was pleased with the response rate given the population. Highlights of these findings were presented at the HIE Kick-Off Celebration. A manuscript is being developed to disseminate the findings from the statewide survey. A manuscript summarizing findings from the 2009 provider survey has been published.

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**Grantee's Most Recent Self-Reported Quarterly Status (as of December 2010):** The project was significantly underspent during this calendar year due to pending acquisition of the Data Center equipment, but project progress is close to schedule with some deviations. Dr. Baker is now moving ahead at a very rapid pace. A go-live date has been set for March 2011, a Data Center hosting timeline is in place, and the application has been built with provider-specific information.

**Preliminary Impact and Findings:** Most providers reported feeling positively disposed to adopting electronic health records. Many expressed the belief that the decisionmaking about electronic health

records is different in behavioral health than other sectors of the medical community. For instance, most providers believed that information in behavioral health records is more sensitive and the client more vulnerable. Also, some were concerned that the subjectivity of behavioral health information can make electronic sharing a complicated process. Benefits and barriers to technology acceptance, as articulated by providers, were grouped into six theme areas: security and privacy; delivery of behavioral health care; quality of care; adoption and implementation; financial impacts; and business operations.

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**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

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\* *AHRQ Priority Population*