

Project Title: Taconic Health Information Network & Community (THINC)
Principal Investigator: Blair III, A. John, M.D.
Organization: Taconic Independent Practice Association (TIPA)
Mechanism: RFA: HS04-011: Transforming Health Care Quality through Information Technology (THQIT)
Grant Number: UC1 HS 015316
Project Period: 09/04 – 03/08, Including No-Cost Extension
AHRQ Funding Amount: \$1,500,000
Summary Status as of: March 2008, Conclusion of Grant

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: Knowledge Creation

Summary: The Taconic Independent Practice Association (TIPA), formed in 1989, is a not-for-profit health care corporation, and, at the inception of this grant, had a network representing over 3,000 physicians in 9 counties of southeastern New York State. TIPA physicians were located in over 600 offices ranging from solo practitioners in rural areas to large multi-specialty, multi-location practitioners in urban areas with an average of 3 practitioners per office. In 2001, TIPA completed the initial plan for the deployment of the Hudson Valley Health Information Exchange (HVHIE). The initial stakeholders were MVP Healthcare (MVP), Vassar Brothers Medical Center, Kingston Hospital, MDS Laboratories, and 50 TIPA physicians. The project was to leverage a 3-year effort to bring health information technology (IT) to the Hudson Valley of New York. Fifty providers from a large physician organization made up of independent practitioners, a regional health plan, three hospitals, and a reference lab were key stakeholders in a regional health information exchange (HIE). This grant project anticipated adding a longitudinal viewing capability to the then-existing community-wide data exchange (CWDE) portal. A uniform implementation of ambulatory electronic medical records (EMRs) was completed. Also, the project engaged multiple payers in addition to MVP for incentive payments for technology adoption. Finally, a formal research project was performed to evaluate the project.

Specific Aims

- 10 participating hospitals in the CWDE. **(Ongoing*)**
- 500 physicians using EMR. **(Achieved)**
- 500 physicians using clinical messaging application. **(Achieved)**
- Two participating laboratories in the CWDE. **(Achieved)**
- Five payers participating in pay-for-performance initiative. **(Achieved with THINC RHIO)**

** This aim was not completed prior to schedule conclusion of the grant March, 2008, yet, as other sources of funding have been secured, it is still targeted for completion.*

2008 Activities: Findings regarding use of EMR, particularly the lab result-viewing functionality, were published. Results of the study of electronic prescribing systems are currently being analyzed and prepared for publication.

Preliminary Impact and Findings: Interfaces that had been built over the 3 years prior to this grant were able to be used in introducing a new HIE system; this reduced the typical implementation time from

12 to 3 months. Once an HIE is built, good strategic planning will allow leveraging of existing infrastructure with savings of time and money when adding new functionality. End-user involvement is critical for the success of deploying new technology in the community and is necessary in the decisionmaking process of choosing new functionality. The current rate of adoption is 36 percent, with 37 percent in group practices with under 6 physicians. These figures represent a doubling of EMR penetration during the time of this project, with small practices in the region catching up with the rest of the region. The higher rate of EMR adoption by small physician practices in this project is believed to be attributable to the low up-front cost structure and implementation approach. The enhanced and ongoing combined implementation and support method is possible due to the concentration of users and support staff within the community. Although these results are preliminary, they raise questions about the traditional national EMR vendor implementation approach, and whether that approach may be a factor in the low EMR adoption rate for small physician practices. Survey results suggest that electronic laboratory result viewing was independently associated with higher ambulatory care quality; future longitudinal studies are needed to confirm this association. Stand-alone electronic prescribing with clinical decision support significantly reduced the rate of errors and is an important tool for reducing ambulatory medication error rates.

Selected Outputs

Kern L, Barron Y, Blair AJ 3rd, et al. Electronic result viewing and quality of care in small group practices. *J Gen Intern Med* 2008;23(4):405-10

Grantee's Most Recent Self-Reported Status: This grant has been completed. The major aims of project and supporting data collection are complete. Data from the e-prescribing system/prescription error study are still being analyzed and prepared for publication. The organization THINC Regional Health Information Organization (RHIO), which had arisen during the course of the project to promote multi-payer collaboration, continues to function independently of this grant, and it has begun work on a new project encouraging the development of National Committee for Quality Assurance-accredited medical home practices in the area.

Milestones: Progress is completely on track.

Budget: Spending is roughly on target.