Project Title:	Improving Care Transitions for Complex Patients through Decision Support
Principal Investigator:	Lobach, David F., M.D., Ph.D., M.S.
Organization:	Duke University
Mechanism:	RFA: HS08-002: Ambulatory Safety and Quality Program: Improving Management of Individuals with Complex Healthcare Needs through Health IT (MCP)
Grant Number:	R18 HS 017795
Project Period:	09/08 – 09/11
AHRQ Funding Amount:	$1,198,254
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: Dr. Lobach and his team launched their project in late September 2008. This project proposes to improve outcomes, quality, and coordination of care for patients with complex health care needs by facilitating the availability of information following three types of care transitions into ambulatory care: hospital discharge, emergency department discharge, and specialty care evaluations. The project will provide key information to patients, primary care providers, and care managers. It builds upon an existing regional health information exchange (HIE) network, the Community-Oriented Approach to Coordinated Healthcare (COACH), that was created to connect providers serving Medicaid beneficiaries in rural and urban North Carolina. The HIE will facilitate communication between providers who are caring for patients in different settings. In addition, it will use a standards-based clinical decision support (CDS) application that is delivered over the Internet to client systems. This system will support traditional clinic-based models of care as well as models that incorporate population health management and cross-disciplinary teams. The intervention will be tested by randomizing patients with complex health care needs into one of three arms: patients and clinic-based caregivers receive information on care transitions; patients, clinic-based caregivers, and care managers receive this information; and no information is sent (i.e., usual care). The primary outcome measure is the overall rate of emergency department use. In addition, the economic impact of the intervention will be measured relative to usual care.

Specific Aims

- Enhance the existing HIE network and decision support tool. **(Ongoing)**
- Implement and evaluate the intervention. **(Upcoming)**
- Conduct the economic attractiveness assessment. **(Upcoming)**
- Disseminate the findings. **(Upcoming)**

2008 Activities: Dr. Lobach and his team worked at enhancing the existing HIE network, COACH, by beginning to establish relationships with new primary care clinics and hospitals to facilitate importing the scheduling and billing data. In addition, the team is investigating methods and data sources for identifying care transitions in order to code the SEBASTIAN CDS modules. SEBASTIAN is a standards-based Web service for clinical decisionmaking. They have already developed the tools to detect emergency department encounters through a previous AHRQ grant, and will extend these techniques in order to

capture specialty care encounters. However, preliminary investigations into hospital discharge practices have highlighted new challenges. The five hospitals included in the study have different procedures for documenting discharges, and there are even departmental differences in some hospitals. Thus, this task will require the development of sophisticated logic models. In terms of paving the way to implement the intervention, the team has selected a number of conditions to focus on in patient education materials, including hypertension, coronary artery disease, congestive heart failure, stroke, asthma, chronic obstructive pulmonary disease, diabetes, depression, chronic renal disease, end stage renal disease, and sickle cell disease. They are drafting preliminary versions of those materials and preparing drafts of materials for the clinician and patient focus groups. They have prepared patient consent forms, waiver requests, and other Institutional Review Board (IRB) documents. They are researching vendor options to translate Current Procedural Terminology (CPT) and International Classification of Diseases, 9th Revision (ICD-9) codes into patient-friendly descriptions of conditions and treatment to include in the letters for patients. Finally, they have established new relationships with care management teams that might benefit from receiving the intervention, including identifying a new group of care managers and health educators who serve patients with sickle cell disease and end-stage renal disease.

Preliminary Impact and Findings: There are no findings at this time, because they are still developing the intervention.

Selected Outputs

None Available.

Grantee's Most Recent Self-Reported Quarterly Status: Project spending is somewhat under spent by 5-20 percent, but the team anticipates utilizing the full budget over the course of the project.

Milestones: Progress is mostly on track.

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