El Dorado County Safety Net Technology Project/Access
El Dorado

Principal Investigator: Bergner, Gregory W., M.D., F.A.A.F.P.
Organization: Marshall Medical
Mechanism: RFA: HS05-013: Limited Competition for AHRQ Transforming Health Care Quality Through Information Technology (THQIT)
Grant Number: UC1 HS 016129
AHRQ Funding Amount: $1,491,985
Summary Status as of: September 2009, Conclusion of Grant

Target Population: Adults, Low SES/Low Income*, Medically Underserved, Uninsured, Mental Health/Depression, Safety Net, Pediatric*

Summary: The Access El Dorado (ACCEL) County Safety Net Technology Project evaluated the ability of health information technology (IT)-enabled health care coordination to improve access to care for low-income, minority, and uninsured or publicly insured residents. The goal of this project, which ended in September 2009, was to create a functional and sustainable health information exchange (HIE) connecting more than a dozen ACCEL partner facilities throughout El Dorado County, California. These included both private and public providers and represented a diversity of practices, including a community health center and a tribal-run clinic. The partnership worked to reach all patients, especially the underserved populations in this rural, northern California county. The project automated Care Pathways, the existing care coordination protocols, through iREACH, a shared Web-based application, and began planning an HIE that would allow participating organizations to share patient information electronically.

The project team envisioned that a confidential and secure HIE network would allow health care providers to access patient information regardless of location, and regardless of electronic health record system use or not. Aggregated and timely health data will be available to enhance public health surveillance, reporting, program management, and clinical/medical research. The long-term goal of the project is to enable El Dorado County to link to the California HIE when that exchange becomes functional.

The impact of the Care Pathways solution was measured using quantitative data from the program. Through a set of six Care Pathways measures (securing health care coverage, annual eligibility review, newborn screening health care coverage, pediatric mental health consult, newborn using a medical home, and obtaining a medical home), the project team assessed whether the implementation of Care Pathways was improving access to health care. The grant team compared the number of Care Pathways in operation, the number of clients served, and the share of successful cases annually over the grant’s 4 years. Evaluation of iREACH was performed through semi-structured interviews and focus groups with project participants.

Specific Aims:
• Develop the governance structure and privacy protections needed to operate an HIE. (Achieved)
• Implement Care Pathways-stepped workflows, coordinated through a county-wide shared software
application (iREACH), developed to help uninsured and underinsured residents locate resources and services to receive needed care for themselves and their families. (Achieved)

- Implement the enterprise master patient index (EMPI) for the county. (Achieved)
- Work with a vendor to develop and implement an HIE. (Partially Achieved)

2009 Activities: By the end of the grant period, ACCEL had accomplished its goal of designing and installing iREACH. Data accuracy is an evolving concern with Care Pathways since inconsistencies have been uncovered via ongoing quality assurance assessments. Many of these inconsistencies are on the user level and have been addressed individually. Other inconsistencies required some programming changes within iREACH.

While HIE development has been delayed due to funding requirements and prior commitments of partner hospitals, the project team has laid groundwork to support adoption. Private funding sources are being pursued, and the project received a 2-year California Endowment grant of $250,000 to support the purchase of the HIE. American Recovery and Reinvestment Act opportunities are being evaluated and State-level representatives have been engaged. A sustainable business plan is being developed.

They identified three potential vendors for the HIE, however, the cost estimates were beyond their financial means. For the interim, they elected to continue funding the shared iREACH coordination application. By the end of 2010, each of the hospitals in the county (both ACCEL Partners) are in the process of implementing and deploying electronic medical records (EMRs) and ACCEL is in the midst of trying to secure funding for interfacing these EMR’s, not only with each other, but also with UC Davis, one of their primary referral hospitals. Although not a robust HIE, the interfaces they plan to develop will allow them to exchange much of the data they originally wanted to be able to exchange. Their hope is that as they move forward, the County Mental and Public Health departments will be financially able to participate. Both Mental and Public Health remain engaged in their coalition, and are participating in their efforts as able.

Grantee’s Most Recent Self-Reported Quarterly Status (as of September 2009): HIE implementation was delayed due to funding requirements and pending commitments of partner hospitals.

Impact and Findings: El Dorado County’s progress in improving coordination of care, especially in pediatric mental health via Care Pathways, was cited in the National Initiative for Children’s Healthcare Quality. The report was funded through the California Endowment to highlight successful and innovative programs that can be adopted elsewhere. The shared Pathways were cited as having electronically connected the El Dorado County Mental Health Department with safety-net providers to access services for pediatric patients in need. At more than 60 percent, the success rate in this endeavor is double that of the current national statistic of success, which is 30 percent.

The Medical Home Care Pathway has seen a 40 percent decline in non-urgent pediatric patient use of the emergency department. Reduced time per community health workers’ client case occurred following implementation of Care Pathways. The Securing Health Coverage pathway has served more than 3,300 clients, helping 96 percent of those clients find health coverage for their children. Because of Care Pathways’ outcomes, the shared Care Pathways workflow processes are being expanded into more clinical areas.

Overall, data availability and accuracy are significantly better than what was available before the project. Studies have shown consistent improvement in favorable outcomes over time, which has led to the expansion of the shared workflow processes into the area of orthopedic care access and coordination.

More detail on the project findings is included in Dr. Bergner’s final report: Bergner 2009 Final Report.
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

* AHRQ Priority Population