

Randomized Control Trial Embedded in an Electronic Health Record

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Organization:	University of California San Francisco (UCSF)
Mechanism:	RFA: HS08-002: Ambulatory Safety and Quality Program: Improving Management of Individuals with Complex Healthcare Needs through Health Information Technology (MCP)
Grant Number:	R18 HS 017784
Project Period:	September 2008 – August 2011
AHRQ Funding Amount:	\$1,199,928
Summary Status as of:	December 2010

Target Population: Adults, Chronic Care*, HIV/AIDS

Summary: HIV/AIDS is now considered a chronic illness. Therefore, the application of the chronic care model (CCM) to this disease may lead to improved outpatient care and easier, safer clinical transitions for HIV-infected patients. Clinical information systems (CISs) are a key element in the CCM. While most CISs have focused on the provider as the recipient of critical data, CISs that target patients might also improve health care. The electronic personal health record (ePHR) is a recent, increasingly common patient-oriented information system that allows patients to view data necessary to guide practical outpatient decisions and provide portability of clinical data between health care venues.

This project is expanding an existing secure ePHR, known as myHERO (Healthcare Evaluation Record Organizer), to provide information, Web-based tools, and reminders to promote self-management, increase safer clinical transitions, and improve outcomes among patients with HIV/AIDS in a public health setting. myHERO is integrated with HERO, the electronic health record system used by the University of California at San Francisco's Positive Health Program, a primary care clinic that specializes in care for patients with HIV/AIDS. The enhancements included adding established tools to assess tobacco use, depression, anxiety, and medication adherence, and to translate responses into numeric scores that trigger decision-support for patients and direct them to resources or Web-based interventions.

A 12-month randomized controlled trial is evaluating the impact of the ePHR on clinical outcomes including: quality of the patient-clinician interaction such as trust, communication, and health promotion; changes in patient behaviors such as adherence to antiretroviral medications and tobacco use; clinical outcomes such as CD4+ T-lymphocytes, detectable plasma HIV RNA, depression, anxiety, and quality of life; safety, such as documentation of drug allergies, adverse events, and medication reconciliation; and utilization, such as office visits. In addition, the project team will evaluate patient and clinician experiences in engaging with the PHR tools including patient access and use of support for tobacco cessation, depression abatement, anxiety reduction, adherence improvement, and patient and clinician satisfaction with the ePHR.

This study builds on existing resources, experience, and expertise to provide a detailed evaluation of ePHR usage and its impact on health care outcomes in a public health setting. The ePHR could be a cost-effective approach to reducing health disparities and bridging the digital divide for underserved patients.

The results of this study could have wide application and a potentially large impact on public health.

Specific Aims:

- Build the infrastructure and content of the ePHR to provide patient decision support, information retrieval, and communication tools. **(Achieved)**
- Evaluate patient and provider experiences using the ePHR, including patient access and use of health education materials and patient-provider satisfaction with the ePHR. **(Ongoing)**
- Assess outcomes, including quality of patient-provider interactions, changes in patient behaviors, clinical outcomes, safety, and health services utilization. **(Ongoing)**

2010 Activities: Grantee did not report 2010 activities.

Grantee's Most Recent Self-Reported Quarterly Status (as of December 2010): Grantee did not provide self assessment.

Preliminary Impact and Findings: This project does not have any reported findings to date.

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*