

Using Health Information Technology to Improve Health Care Quality in Primary Care Practices and in Transitions Between Care Settings

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Organization:	Virginia Commonwealth University
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Target Population: Adults

Summary: There is a major discrepancy between the American public's perceived value of personal health records (PHRs) and the actual use of PHRs. Only 2.7 percent of Americans have an electronic PHR even as 79 percent report that they believe an online PHR would "provide major benefits to managing their health." Similarly, there are low rates of electronic medical record (EMR) use among clinicians. Only 17-to-24 percent of outpatient clinicians have an EMR, a mere four percent of which are considered fully functional. This low use of health information technology (IT) occurs at a time when the Nation is looking at health IT as an essential tool to reform health care, improve quality of care, coordinate care delivery, and reduce costs. For small- to medium-sized primary care practices implementing health IT, financial and technical resource limitations often require the adaptation of technology that is already available.

This project will assess methods of creating PHRs from existing EMR systems at small- to medium-sized primary care practices. For this project, a PHR is defined as a nonproprietary, prevention-focused record. When integrated with a clinician's EMR, it is termed an "interactive preventive health care record" (IPHR). The IPHR called MyPreventiveCare incorporates clinical decision support software, a reminder system, tailored educational materials, and decision aids into one package for patients and clinicians. A previous study showed IPHRs to enhance clinician-patient communication and increase the delivery of recommended preventive services by 3-to-12 percent. The proposed study builds on those findings to evaluate whether the IPHR can be applied in health care settings that use different EMRs.

The study is being conducted in six practices that use Certification Commission for Health Information Technology-certified products (Epic EMR or A4 EMR), and cover a range of service areas (rural, suburban, and urban), and size (from two to 10 clinicians). Through a series of learning collaboratives, study staff will guide practices in creating a shared vision for IPHR implementation. Separate learning collaboratives will be conducted at each practice before and after IPHR implementation. In order to engage practices and create change, the study team will work toward eight components: 1) securing leadership buy-in and support; 2) creating a culture that is conducive to change; 3) establishing a sense of priority; 4) forming a guiding coalition; 5) developing and communicating a shared vision; 6) empowering members to act on the vision; 7) planning for short-term wins; and 8) consolidating and institutionalizing improvements.

Project Objectives:

- Determine whether the study sites can begin implementing the IPHR. **(Ongoing)**

- Measure the utilization and effectiveness of the IPHR. **(Ongoing)**
- Determine the necessary steps and procedures that practices need to follow or avoid in order to implement the IPHR successfully. **(Ongoing)**

2010 Activities: The study team continued working with six study sites. MyPreventiveCare was integrated into the EMR of two sites in October 2010. These sites had all staff and providers establish MyPreventiveCare accounts for themselves and for test patients, and providers began offering MyPreventiveCare to all patients. Sites used a variety of advertising and outreach methods to encourage patient participation in MyPreventiveCare including business cards, brochures, wall posters, information on receipts, phone hold messages, Web postings, and direct encouragement from staff and providers.

The other three sites remain interested in fielding the system but were waiting to have MyPreventiveCare integrated into their EMR. As part of the programming process, the study team learned that they needed to integrate MyPreventiveCare directly into the EMR database rather than utilize the EMR's Web services, which were incomplete. Although this uses similar patient data, the health system's compliance office wanted to reassess the privacy and confidentiality risks associated with this revised integration. Once the health system approves this process, the project will be able to complete integration and the study sites will be able to offer MyPreventiveCare to their patients.

Project staff is preparing to collect the seven months of baseline preventive care delivery data from the study sites in order to calculate preimplementation data. This information will be used to: 1) understand the effect of the implementation process of MyPreventiveCare and 2) provide the practices further information about prevention delivery rates to help inform and motivate them during the MyPreventiveCare implementation process.

Preliminary Impact and Findings: The project has no 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, and the electronic exchange of health information to improve quality of care.

Business Goal: Knowledge Creation