Impact of a Wellness Portal on the Delivery of Patient-Centered Prospective Care

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Organization: University of Oklahoma Health Sciences Center
Mechanism: RFA: HS07-007: Ambulatory Safety and Quality Program: Enabling Patient-Centered Care (PCC) Through Health Information Technology
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Project Period: October 2007 – December 2010, Including No-Cost Extension
AHRQ Funding Amount: $902,411
Summary Status as of: December 2010, Completion of Grant

Target Population: Adults, Pediatric

Summary: As the number of recommended preventive services continues to increase, clinicians struggle to maintain a balance between immediate patient concerns and the time required to address prevention. If effective and timely clinical decision support is not integrated into a comprehensive care delivery approach (e.g., the Chronic Care Model), and patient-centered tailoring of recommendations is not incorporated, primary care clinicians’ performance in this area will not improve from the current suboptimal levels—40 to 60 percent rates of delivery of well-accepted preventive services. Optimal delivery of primary, secondary, and tertiary preventive services will increasingly require sophisticated information processing and much greater patient involvement.

This project develops and tests an Internet-based patient-centered Wellness Portal to allow patient access to the Preventive Services Reminder System (PSRS), a pre-existing, internally-developed clinical tool for improving the delivery of patient-centered preventive services. Practices within the Oklahoma Physicians Resource/Research Network (OKPRN) use the PSRS. The PSRS contains a patient registry, preventive service reminders according to evidence-based guidelines, an electronic chart-auditing and patient recall tool for clinical decision support, patient education materials, and a 3-year prospective wellness plan. The project team members have enhanced functionality of the PSRS by allowing patient access via the Wellness Portal, which patients can access through their home computer or provider office kiosks. The Wellness Portal allows patients to securely input personal information on their health behaviors and wellness status in order to personalize their wellness plan through the risk assessment algorithm. In addition, the Portal would allow patients to securely contact their provider and schedule visits, transfer their wellness record to other providers using the Continuity of Care Record interface, and review educational materials.

The Wellness Portal project enrolled guardians of children (6 years old and younger) and adult patients (50 years or older) at four clinician practices within a primary care practice-based research network in Oklahoma. The research team conducted a 12-month randomized controlled trial with four intervention and four control OKPRN practices to elucidate whether the Wellness Portal improves the delivery of appropriate preventive services at the right time; increases patient experience with patient-centered care; enhances patient activation; and improves delivery of preventive services controlled for the level of utilization, patient demographics, and health status.
Specific Aims:

- Develop, field test, and refine an Internet-based patient Wellness Portal linked to PSRS to facilitate patient-centered, preventive care in primary care practices. (Achieved)
- Determine the impact of the Wellness Portal on the process of patient-centered preventive care by examining the behavior and experiences of both patients and providers, and the degree to which recommended services are individualized. (Achieved)
- Develop model Wellness Portal practices, and disseminate the Wellness Portal technology and knowledge derived from findings from the first two aims. (Achieved)

2010 Activities: The participating practices were visited to provide assistance, as required, to make the Wellness Portal available to patients at the practice site and through home computers.

The team continued development of presentation materials and work on articles for publication in peer-reviewed journals. Dissemination activities have resulted in the development of several brochures to encourage patients and practices to make the Wellness Portal a part of routine patient care. In addition to these dissemination activities, the project contracted with a public relations firm to provide additional brochures for patients and clinicians, posters for clinicians’ offices, and a Web page design to facilitate electronic distribution.

During 2010, the project’s primary focus has been on continuing the intervention and collecting data. Post intervention data was collected at each of the eight sites through chart audits. Data has been cleaned and most analyses completed. Each of the providers in the intervention practices was interviewed to understand his or her perspective regarding the project impact. These interviews were digitally recorded and transcribed, and will be analyzed using coding procedures supported by NVivo software.

Grantee’s Most Recent Self-Reported Quarterly Status (as of December 2010): Project progress was on track, with all aims were completed. The team completed data collection and analysis and when the grant ended, the team was in the final stages of writing up final results, including submission of manuscripts to peer reviewed journals.

Impact and Findings: Preliminary data with a sub-set of the final data showed significant improvement in preventive services in the intervention practices compared with control practices. An article describing the preliminary data analysis has been produced and is now in press. Additional findings will be presented in forthcoming manuscripts.

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