My Wellness Portal Enhances Patient-Centered Preventive Care

Preventive care plays a key role in improving health and well-being, yet Americans receive only approximately half of all recommended preventive services. Primary care providers are responsible for delivering comprehensive preventive care services to patients, but often do not have the time after addressing the immediate needs of their patients. Therefore, new mechanisms for effective delivery of recommended preventive care are needed. Promising new health information technology (IT) applications may support the delivery of appropriate, individualized preventive health services that integrate into clinical care practices and engage and activate patients.

This project, funded by the AHRQ Health IT Portfolio through its Enabling Patient-Centered Care through Health IT initiative, developed and tested the My Wellness Portal, a comprehensive patient-centered, prevention-oriented, Web-based personal health record (PHR). The PHR supports the delivery of preventive health services by primary care providers and involves patients in the process. This 'personal health management solution,' as described by its lead developers, Drs. James Mold and Zsolt Nagykaldi at the University of Oklahoma Health Sciences Center, available in English and with some modules available in Spanish, is one piece of a larger care delivery process that takes the concept of patient-centered care to a level beyond convenience or satisfaction.

My Wellness Portal contains several tools and resources so patients can access their health information, manage their health care, and work toward achieving individualized health goals. Using the PHR, patients can easily maintain a personal profile that documents their history of preventive care, personal risk factors, care preferences, vital signs, symptoms, and medical encounters. The PHR includes patient education materials, a 3-year patient wellness plan, and an application that reminds patients about recommended preventive services. Patients can also use it to obtain goal-directed, personalized, and prioritized recommendations and communicate securely with their primary care provider. The PHR interfaces with the Preventive Services Reminder System, a clinical information system previously developed and used by practices within the Oklahoma Physicians Resource/Research Network (OKPRN), a practice-based research network.

A video highlighting the development and implementation of My Wellness Portal is available at http://healthit.ahrq.gov/AHRQHealthITSuccessStoriesMoldVideo.

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Project Title: Impact of a Wellness Portal on the Delivery of Patient-Centered Care
AHRQ Publication No. 12-0070-3-EF
Developing and Refining *My Wellness Portal*

To enhance the functionality and usability of the PHR, an advisory committee composed of three clinicians, two OKPRN office staff, and six patients provided input to conceptualize and develop a prototype PHR. The committee recommended functions that would be appealing to patient users, such as applications to monitor personal risk factors and develop and manage an individualized wellness plan. *My Wellness Portal* was pilot tested in a sample of 30 patients. Patients were satisfied with the PHR, finding it easy to use, offering a valuable resource, and, in many cases, helping to improve their health.

**Key Findings**

Following completion of the pilot testing, the investigators conducted a randomized controlled trial (RCT), which included 422 adults and the parents of 116 children across eight OKPRN primary care practices. They found that the PHR: 1) improved patient-centered care, 2) increased the delivery of individualized recommended preventive services, and 3) increased clinician knowledge of patients’ medical histories.

During the trial, patients with access to the PHR demonstrated greater receipt of recommended preventive services than the control group, while also having significantly fewer office visits:

- More My Wellness Portal users received all recommended preventive services (84 percent compared to 67 percent in the control group, p < 0.0001).
- More users with chronic health conditions received pneumonia prophylaxis (83 percent compared to 54 percent in the control group, p < 0.0001).

**My Wellness Portal users were more likely to receive recommended preventive services than non-users.**

- More users at risk for developing pneumonia based on their age received pneumonia prophylaxis (86 percent compared to 45 percent in the control group, p < 0.0001).
- Children whose parents had access to *My Wellness Portal* were more likely to receive all recommended immunizations (96 percent compared to 87 percent in the control group, p = 0.044).
- More users took low-dose aspirin as recommended (79 percent compared to 52 percent in the control group, p < 0.0001).

*My Wellness Portal* use also significantly increased patients’ perception that they received patient-centered care and that their physicians had greater knowledge of their health histories.

**A Promising Preventive Care Tool**

*My Wellness Portal* demonstrates promise in leveraging health IT to promote the delivery of preventive care services and patient-centered care. It promotes sharing of patient information between patients and providers, and engages patients to actively participate in their health care. It offers providers a tool to facilitate the delivery of personalized preventive services based on individual patient profiles, histories, and risk factors, and it offers patients an interactive resource to help in managing their health and health care.