

Patient Readiness to Use Internet Health Resources

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Summary: As the burden of chronic disease increases, new approaches are needed to adequately care for people with chronic conditions. The Chronic Care Model suggests processes and systems that can help optimize the care of patients with chronic disease. It emphasizes patient self-activation because activated patients are prepared to take a collaborative, if not central, role in managing their own health. Online health resources could potentially provide a sustainable and patient-centered format for delivering the education, communication, and self-management resources needed to optimize patient activation.

This project is funded as a Career and Dissertation Award (K08), a funding mechanism used by AHRQ's Health IT Portfolio to support the next generation of health-IT focused researchers. This particular project examines patient readiness, in terms of both aptitude and desire, to use Web-based health resources such as patient education, self-management tools, online prescription refills, requests, medication reconciliation, and secure messaging. The study looks at the relationship between motivation for behavioral change and the use of online health resources and interactive online communication between the patient and the health care team. The project team developed the Patient Readiness to Engage in Health Information Technology Scale (PRE-HIT), which it is using to examine the preferences for use of Web-based health resources among ambulatory patients with chronic disease. In doing so, this project will inform systems and policies that seek to use the online environment as part of a comprehensive disease- management strategy.

Specific Aims:

- Develop a measure of the readiness (aptitude and desire) of patients with chronic conditions attending primary care clinics to use Web-based health resources for health information exchange. (PRE-HIT). **(Achieved)**
- Determine how the frequency and type of use of Web-based health resources are associated with improvements in clinical measures for patients with type 2 diabetes. **(Ongoing)**

2012 Activities: The focus of activity was on finalizing PRE-HIT, which included 28 items clustered into eight factors, and completing the data extraction from a patient portal to compare usage data with the readiness scale. Data extraction is informing the patient validation of the instrument because usage data can be correlated with scores from the final scale.

Throughout the year, the study team encountered some technical glitches with the patient portal and heard from patients that the system was not working properly. As a result, Dr. Koopman suspended further large-scale recruitment to the study until the technical issues could be addressed. Meanwhile, the study team focused on writing a development paper that included a literature review, factor analysis, and qualitative

research conducted to date. The paper has been submitted for publication. A focus of 2013 will be looking for new validation settings so that the study team can demonstrate predictive validity across different settings.

Preliminary Impact and Findings: Focus group findings indicated that promoters of online health resource use included speed, convenience, and the ability to look up information before a visit with a physician. Primary barriers to online health resource use included Internet security and privacy concerns. Some general conclusions drawn from the results are that the use of online information among patients with chronic conditions is an accessory to their relationship with their physician; that patients with less-established relationships may rely on the Internet more heavily; and that patients are using the Internet to enhance care by becoming more informed consumers, confirming the Chronic Care Model. These results were used to inform development of the scale to measure patient readiness to use Internet health resources.

Target Population: Adults, Chronic Care*, Diabetes

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: Knowledge Creation

** This target population is one of AHRQ's priority populations.*