Patient Readiness to Use Internet Health Resources

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Summary: As the burden of chronic disease increases in the United States and throughout the world, 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. However, Web-based resources for chronically ill patients are only valuable if patients have the computer skills and motivation to use them.

This 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. To help examine the question of patient readiness, the project team is developing a practical measure of the readiness of ambulatory patients with chronic conditions to use Web-based health resources. This examination of preferences for use of Web-based health resources among ambulatory patients with chronic disease will inform projects, 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. This measure will be called the Electronic Health Information Exchange Readiness Scale (E-HIERS). (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)

2011 Activities: Activities focused on study participant recruitment, data extraction from the patient portal (called IQ Health), factor analysis, and readiness scale development. Dr. Koopman began with an exploratory analysis on items and then looked at those items pre- and post-test. The feasibility testing for the scale included 50 items and the final scale included 28 items. Data extraction began and is informing the patient validation of the instrument because usage data can be correlated with scores from the final scale. Recruitment of participants was on target. The institutional review board has granted approval for the remaining study activities.
**Preliminary Impact and Findings:** Dr. Koopman developed a manuscript to be submitted based on the focus group findings from 2010, which 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.*