

Developing and Evaluating Online Education to Improve Older Adults' Health Information

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Organization:	Langley Research Institute
Mechanism:	PAR: HS08-268: Small Research Grant to Improve Health Care Quality Through Health Information Technology (IT) (R03)
Grant Number:	R03 HS 019745
Project Period:	September 2010 – September 2012
AHRQ Funding Amount:	\$52,119

Summary: Although an increasing number of Americans, including seniors, are turning to the Internet for information about health care, it can be difficult to identify accurate, high-quality health Web sites. There is little data about older consumers' awareness of the varying quality of health care information on the Internet, and whether or not seniors are able to distinguish between high- and low-quality Web-based health information.

The goal of this project was to develop and evaluate “Your health online: Guiding eSearches,” the first theory-based online health education program for people aged 55 and older. The program aimed to improve older adults' ability to identify high-quality health Web sites and to promote self-efficacy for communicating with physicians.

The project team conducted focus groups to identify older adults' preferences for online learning about health topics to inform the design of an interactive online educational program. The use of “Your health online” was compared to a program of educational materials developed by the National Library of Medicine (NLM) that are not interactive or intended for older adults specifically. Interviews with users of each of the two programs documented differences in participants' knowledge of and ability to identify trustworthy health Web sites and communicate with physicians. The project resulted in a theory-based educational program developed with cooperation and advice from older health consumers.

Specific Aims:

- Convene focus groups to identify older adults' preferences for online learning about health. **(Achieved)**
- Develop an interactive online educational program to teach older adults to improve their knowledge and skills in identifying high-quality health Web sites and enhance their ability to efficaciously communicate with their physicians. **(Achieved)**
- Pilot test the feasibility of the program. **(Achieved)**
- Evaluate the outcomes of the new program compared to an alternative. **(Achieved)**

2012 Activities: The team finalized the Your health online: Guiding eSearches educational program. Informed by the focus groups, the goal of the Your health online Web site was to present interactive, high-quality information without over-simplifying or over-complicating the material. Sixty-five participants were recruited for a randomized controlled trial to evaluate the program. Patients were randomized to the Your health online arm (intervention) or the education NLM PowerPoint arm (control). Participants were

asked to complete a survey about their experience with the intervention Web site or the NLM PowerPoint slides. The survey contained questions specific to the study arm assignment as well as general shared questions about user experience, knowledge, and confidence level.

As last reported in the AHRQ Research Reporting System, project progress was completely on track and budget spending was on target. This project was completed in September 2012.

Impact and Findings: The focus group questions focused on Web sites used for health searches, topics of interest, ways to inform older people about the proposed program, the role of friends and families in guiding health-information Web searches, and how to evaluate the accuracy of Web-based health information. The findings indicated that most of the 18 participants use Google as an initial portal for health information. Several participants, upon recommendations from their providers, used sites associated with well-known medical institutions. There was general agreement that aside from cross-checking multiple Web sites, participants had no systematic method or criteria for evaluating health information. Participants agreed that a list of high-quality sites and criteria for evaluating information would be useful. The overwhelming amount of information on the Web was reported to be a major barrier to effective use. There was near-uniform agreement that an education tool with exercises to test one's skills would be beneficial. The project team compared the findings from patients 55 to 65 years old with findings from patients 65 to 75 years old. The younger group of patients was more interested in a multimedia approach to disseminate health information, an evaluation or feedback component, and supplemental information such as links from the Web site to other resources. Many participants from the younger age group noted that current Web sites are static and therefore not very engaging. Participants from both groups, regardless of age or education level, were not good at identifying high-quality health information on the Web.

The surveys about Your health online were first piloted with four people, all of whom reported that the Web site was important and that they would be likely to use it in the future. Next, the surveys were distributed to 65 participants: 36 in the intervention arm, and 29 in the control arm. Participants in the intervention and control groups demonstrated ample knowledge about seeking health information using the Internet. Seventy-eight percent of the intervention group and 70 percent of the control group were confident about their ability to identify valid health information, but improvements were not observed between the intervention and control groups for any other measures. Participants in both groups reported that involvement in the study will improve their Internet searches for health information in the future. Overall, the study demonstrated the feasibility and acceptability of developing and implementing an interactive online education program.

Target Population: Adults, Elderly*

Strategic Goal: Develop and disseminate health IT evidence and evidence-based tools to improve health care decisionmaking through the use of integrated data and knowledge management.

Business Goal: Knowledge Creation.

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