Project Title:	Barriers and Drivers of Health Information Technology Use for the Elderly, Chronically Ill and Underserved
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Organization:	Oregon Health and Science University
Contract Number:	290-02-0024-9
Project Period:	07/07 – 08/08
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Summary Status as of:	August 2008, Conclusion of Contract

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: Synthesis and Dissemination

Summary: Oregon Health and Science University reviewed and synthesized available literature on the barriers and drivers of health information technology (IT) use for the elderly, chronically ill, and underserved. The review focused on the following key issues as they relate to these populations: the current usage of specific forms of consumer health IT, whether consumer health IT is effective in improving outcomes, what barriers hinder the use of consumer health IT, and what drivers or facilitators may stimulate or enable the use of consumer health IT. The final report also identifies gaps in the literature, suggests how barriers for health IT use for these populations may be overcome, and outlines the areas that could benefit from future research endeavors in order to better assess the health information needs of these populations.

The project team searched the MEDLINE®, CINHAHL®, PsycINFO®, the Cochrane Controlled Trials Register and Database of Systematic Reviews, ERIC, and the American Association of Retired Persons (AARP) AgeLine® databases for literature published since 1990 on the barriers and drivers to the use of interactive consumer health IT by the target populations listed above. Overall, the project reviewed 563 full-text articles and included 129 articles for abstraction. Through the review process, the team found distinct technology types that needed to be assessed separately: in-home monitoring, disease management, and self-management systems; online forums on health topics; patient access to their electronic health records (EHRs) and patient/physician e-mail; single or sporadic use of an interactive educational system; interactive training systems that monitor patient signals and provide immediate feedback; and interactive and tailored reminding systems.

Specific Aims

- Survey types of health IT that require interaction from the patient. **(Achieved)**
- Identify key drivers of interactive health IT use among key populations. **(Achieved)**
- Identify barriers to the use of these technologies. **(Achieved)**

2008 Activities: The final report was prepared for publication.

Preliminary Impact and Findings: The team found that several types of interactive consumer health IT were usable and effective in many settings and with all of the study's populations of interest. Convenience and ease-of-use were important drivers of system use, especially if the interventions could be delivered on technologies that users already had and interacted with on a daily basis. It was critical that data entry not be cumbersome and that the intervention fit into the user's daily routine. Perceived benefit,

system trust, anonymity for sensitive health conditions, and rapid clinician feedback were also important factors influencing the successful use of interactive consumer health IT.

Selected Outputs

Jimison H, Gorman P, Woods S, et al. Barriers and Drivers of Health Information Technology Use for the Elderly, Chronically Ill, and Underserved. Evidence Report/Technology Assessment No. 175 (Prepared by the Oregon Evidence-based Practice Center under Contract No. 290-02-0024). AHRQ Publication No. 09-E004. Rockville, MD: Agency for Healthcare Research and Quality. November 2008. Available at: http://www.ahrq.gov/downloads/pub/evidence/pdf/hitbarriers/hitbar.pdf. Accessed August 2009.