

## Human Factors in Home Health Care

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<b>Organization:</b>	National Research Council
<b>Contract Number:</b>	AHR7128
<b>Project Period:</b>	September 2009 – October 2011, Including No-Cost Extension
<b>AHRQ Funding Amount:</b>	\$750,000
<b>Summary Status as of:</b>	December 2010

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### Target Population: General

**Summary:** The National Research Council Committee on Human-Systems Integration has formed the Committee on the Role of Human Factors in Home Health Care, a multidisciplinary consensus panel of recognized experts. The goal of the panel is to examine a range of behavioral and human-factors issues that have arisen due to the increasing migration of medical devices, technologies, and care practices from formal health care facilities into private homes. Although relatively little has been established empirically about these challenges, it is recognized that homes are not designed for the delivery of health care, that considerable variation exists as to what constitutes a ‘home’, and that patients and their caregivers—whether professional or lay providers—are at risk for harm when it comes to administering care in a safe and reliable manner outside formal care facilities. It is the intent of this project to gain a better and fuller understanding of:

- The human-factors challenges that take into account the relevant sensory, behavioral, and cognitive capabilities of patients and caregivers.
- The nature of the care processes, procedures, and therapies occurring in the home.
- The steady migration and use of medical equipment and technologies to the home environment.
- How the design of the physical home environment can facilitate or impede the delivery of care.
- The impact of social and community environments on healthy lifestyles.

This project is being conducted in two phases. Phase One includes a workshop with the authors of nine invited papers on various human-factors aspects of home health care, from which the committee published a [Workshop Summary Report](#) in October 2010. In Phase Two, the committee continues its work using the workshop papers, along with other inputs and research, to produce a consensus report identifying and discussing major human-factors issues in home health care, with findings and recommendations for action and future research programs. The committee will also produce a brief companion designer’s guide for home health care information technology (IT), intended to help IT designers incorporate human-factors principles, methods, and knowledge as they design products and systems for use outside the formal health care environment. These publications are expected to be released in summer 2011.

### Project Objectives:

- Produce a consensus report identifying and discussing major human-factor issues in home health care. **(Ongoing)**
- Produce a brief companion designer’s guide for home-based consumer health IT. **(Ongoing)**

**2010 Activities:** The committee held its fourth meeting on March 9-10, 2010, and its final meeting on June 10-11, 2010. A draft of the consensus report was written and submitted for external review in late September 2010. Comments on the draft report were received and appropriate revisions are being considered. The project team also began coordinating dissemination activities with the Agency for Healthcare Research and Quality (AHRQ) and coordinating internal publishing activities. In addition, the project team hired a consultant to develop the designer's guide and an outline was drafted and reviewed by the project team and AHRQ. The project changed leadership twice in 2010; Mary Ellen O'Connell and Barbara Wanchisen, Deputy Director and Director of the Board on Human-Systems Integration (The Committee on Human-Systems Integration was reestablished as the Board on Human-Systems Integration in December 2010), respectively, will assume leadership of the project until the report is released. Because of the unexpected transitions in project leadership, the project was slightly delayed and has been extended through October 2011.

**Preliminary Impact and Findings:** The project has no findings to date.

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**Strategic Goal:** Develop and disseminate health IT evidence and evidence-based tools to support patient-centered care, the coordination of care across transitions, and the electronic exchange of health information to improve quality of care.

**Business Goal:** Synthesis and Dissemination