

Special Telehealth Session

9:00 AM, February 22nd
Hilton Classroom 3

In-Home Telemonitoring: A Case Study in Successful Implementation

William C Mann, PhD; Mr. Craig L Smith, MAI; Mr. David Stearn; Janet Warwick, JD

With its significant aging population, the United States faces a three-fold challenge: maintaining and even enhancing the quality of life of its seniors; ensuring their safety and well-being; and accomplishing this within significant budgetary constraints. The ever growing cost of Medicare and Medicaid for seniors and other at-risk individuals is stretching the nation's fiscal resources. One key approach to addressing this issue has been to seek to reduce reliance on institutional care, e.g. nursing homes, and promote community-based alternatives. This approach is responsive to the desires of the vast majority of seniors to age in place.

However, if such individuals are to be afforded, in their homes, the safety and security of an institutional setting we must be able to provide them with round the clock monitoring and responsiveness. The challenge of providing this care while ensuring the well-being of the recipients, can be met, in part, through the judicious use of cost-effective technology solutions. Such approaches are essential if we are to mitigate the burdens that community based care may place on family and professional caregivers. They must also provide for adequate accountability in the delivery of services in the home. Ideally such systems will:

1. Help caregivers provide cost-effective care that permit individuals to remain in their own homes and to avoid costly emergencies, hospitalizations and rehabilitation.
2. Provide home care on an efficient as-needed basis rather than a less efficient scheduled basis.
3. Track home worker activity to ensure compliance and prevent system abuse.
4. Provide 24/7 health and safety monitoring while decreasing home care costs.

Behavioral telemonitoring systems (the monitoring of daily routines and activities), like QuietCare® are responsive to these issues and will help enhance the well-being and safety of seniors living at home, reduce its Medicaid expenses, reduce caregiver burdens, and improve the timeliness and efficiency of care.

In this panel, we will tell the story of one successful system. We will cover all phases from concepts, design, testing, and validation, through market introduction and implementation. Although QuietCare has been commercially available for less than three years, it is already being used in health systems, assisted and independently living facilities, homecare agencies, hospices, NORCS, and government and private care management agencies in 15 states and three foreign countries.

Livable Homes and Communities

co-sponsored by American Association of Retired Persons

Product Design

1:45 PM, February 22nd
Hilton Classroom 3

Perspectives Of Elders On Product Usability In The Home

Dr. David J. Feathers; Dr. James A Lenker; Mahiyar Nasarwanji; Dr. Victor Paquet

Data from multiple focus groups will be presented in which elders were asked to discuss the usability of products in kitchen, bathroom, and home office environments.

A Multi-method Approach To The Usability Evaluation Of Assistive Technology Devices

Dr. James A Lenker; Mahiyar Nasarwanji; Dr. Victor Paquet

Assistive technology researchers often evaluate product usability using a single evaluation method, e.g., self-report, real-time observation. This presentation will discuss a usability evaluation approach involving multiple methods: user response to closed-form and open-ended items; video analysis of user performance; and observer-measured time to complete tasks. This presentation will discuss results on data collected from 18 participants using a wheelchair van lift. The trade-offs of each measurement approach will be discussed.

Incorporation Of Universal Design Into Mainstream Consumer Product Design Processes

Dr. James A Lenker; Dr. Victor Paquet

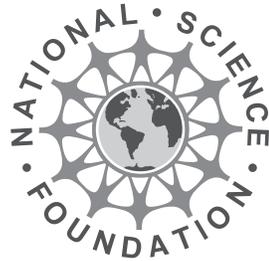
In-depth interviews were conducted with 13 usability engineers and designers of products including home appliances, office products and electronics. Results indicate that there is a need to incorporate universal design during requirements gathering, product conceptualization, user testing and detailed design stages of the design process. We propose that this can be achieved by further educating designers, applying product-specific universal design guidelines and use of more comprehensive usability testing protocols.

Kwik-change Cabinets: From Problem To Prototype To Production

Dr. Mary H Yearns

Kwik-change Cabinets have the potential to revolutionize accessibility requirements to make kitchens and bathrooms more convenient and affordable for both consumers and providers. The new cabinets are modular and can be easily adapted from standard height to accessible height and back again with the use of a screwdriver. You will learn about the long journey involved from selecting the research problem, to designing cabinet prototypes, and to finally getting the cabinets into commercial production.

Gold I



Gold II



Silver



Friends

- AAA Auto Club South
- AAA Foundation for Traffic Safety
- American Network of Community Options and Resources
- American Public Transportation Association
- Beverly Foundation

- Department of Physical Therapy University of Florida
- Genworth Financial
- IBM
- IOS Press
- Vision Council of America



Changes to the Plenary and Keynote sessions listed by page number below.

Page 26

James Graham will not provide an introduction at the Opening Session.
Margaret Campbell, as listed, will provide the introduction.

Pages 10, 23, 27

Geoff Fernie will not deliver the Assistive Technology Track Keynote.
Jeff Jutai will provide the Assistive Technology Track Keynote on Thursday February 21 at 11:30 am.

Pages 23, 26

Alan Walker will not deliver the luncheon presentation on Thursday, February 21.
Geoff Fernie will provide the luncheon presentation on Thursday, February 21.