the control group declined significantly in both. Problems with the use of the technology were categorized in 4 areas: person, computer, X10 products, and home. Solutions were identified for each area. Participants benefitted from the smart home technology and 91 percent recommended its use to others.


Abstract: Three focus groups of older adults with various impairments were held at the University of Florida GatorTech smart home. A smart home is an environment constructed with various technological applications and devices to assist the residents in performing daily activities. A structured discussion followed the demonstration of each of the following technologies: (1) tracking system, (2) remote monitoring, (3) voice activation, (4) smart microwave, (5) smart mailbox, (6) smart front door, (7) cueing system, and (8) security. Content analysis was used to identify the participants’ perceptions of smart home technology. Overall, most participants responded more favorably to the smart door and voice activation than any other smart technology application. The findings are being used to modify current smart home applications and guide future designs.


Abstract: Interviews were conducted with 4 people aged 65 years and older living in rural areas of the United States to explore their perceptions of quality of life (QOL). Data were analyzed using a phenomenological method. Six themes emerged from the data: (1) autonomy, (2) altruism, (3) engagement in occupation, (4) responsibility for own life, (5) sense of community, and (6) changes in relationships. Each theme is described and supported with quotations from the participants. The findings may assist healthcare workers and community leaders in developing programs aimed at maintaining good QOL for seniors in rural areas.


Abstract: Article describes an ongoing project in Sweden aimed at delivering and installing new assistive technology in the homes of older adults with cognitive impairment caused by acquired brain injury. The project is client driven with the key objective being to help participants achieve quality of life and empowerment. The emphasis is on the processed involved and interagency cooperation. Preliminary finding are discussed and key issues for future research are identified.


Abstract: This book includes 25 of the papers submitted for the Third International Conference on Aging, Disability and Independence (ICADI), held in February 2006. The focus of ICADI is on maintaining independence and active participation in family and community activities for older adults through the use of technology. The papers are organized according to 5 of the 7 ICADI tracks: (1) smart homes, (2) robotics, (3) telehealth, (4) home modifications and universal design, and (5) assistive devices and workplace adaptations.

NIDRR Grantees on the Cutting Edge Rehabilitation Engineering Research Center for Successful Aging with Disability: Optimizing Participation Through Technology (OPTT-RERC) University of Southern California (H133E080024) led by Carolee J. Winston, PhD, PT (USC); Philip Requejo, PhD (Rancho Los Amigos). Margaret Campbell, PhD, Project Officer.

Abstract: The goal of this project is to enhance the lives of individuals aging with and into disability through: (1) development and delivery of cutting-edge technologies for identification, evaluation, and rehabilitation of motor processes that facilitate or impede functional performance, employment, and community participation for the intended beneficiaries; (2) employment of state-of-the-art data management, dissemination, and performance evaluation techniques to ensure that the knowledge and products emergent from the RERC are accessible for all intended beneficiaries; (3) assembly of a multidisciplinary team of experts in clinical rehabilitation, engineering, and gerontology, along with a select group of technology partners, and disability advocates to ensure that OPTT-RERC’s short- and long-term outcome goals are successfully implemented; and (4) alignment of the clinical and technological strengths of several area programs into an integrated infrastructure to provide training opportunities for future rehabilitation researchers. The Dexterous Manipulation with the Fingertips Project evaluates a clinically useful metric and rehabilitation strategy for dynamic multifinger dexterity (R1) and, in collaboration with the second project area, develops a home-use gaming system to promote retention and improvement of dexterous manipulation via immersion technologies (D1). The Virtual Reality (VR) and Gaming for Home-Based Motor Assessment and Training Project develops low cost, home-based VR toolskits (VRT) for motor assessment and rehabilitation (D2) and investigates the efficacy of the VRT games for use in both the clinic setting and the home for individuals aging with and into disability (R2). The Optimizing Mobility in the Home and Community for Manual Wheelchair Users
Rehabilitation Engineering Research Center on Workplace Accommodations
Georgia Institute of Technology; Center for Assistive Technology and Environmental Access (CATEA) (H133E070026) led by Karen Milchus. Shelley Reeves, Project Officer.

Abstract: The Workplace Rehabilitation Engineering and Research Center (RERC) identifies, develops, and promotes new assistive and universally designed technologies that maximize independence and participation of people with disabilities in the workplace. It focuses on the application of universal design (UD) concepts to improve the utility of workplace tools and devices for all workers through research, development, training, and dissemination. Research activities investigate five topics identified by current RERC research: user needs, longitudinal cost/benefits of accommodations, strategies used by aging workers, the impact of policy on access to and utilization of accommodations, and the effect of accommodations on employee participation in the workplace. Several development activities create and validate new workplace assessment tools for use by practitioners and employees. Other development activities design, prototype, and evaluate new workplace accommodations. Universally designed workstations and human-computer interfaces are being developed. In addition, the Work RERC develops technology for workers with identified and unmet accommodation needs, including prompting aids for employees with communication disabilities. Finally, Work RERC training activities include both instruction and development activities create and validate new workplace assessment tools for use by practitioners and employees. Other development activities design, prototype, and evaluate new workplace accommodations. Universally designed workstations and human-computer interfaces are being developed. In addition, the Work RERC develops technology for workers with identified and unmet accommodation needs, including prompting aids for employees with communication disabilities. Finally, Work RERC training activities include both instruction and evaluation of training outcomes and will target VR professionals, workers with disabilities, and students interested in design and engineering.