

Translating Research into Practice: Highlighting Health Disparities Among Older Adults

Symposium Coordinator: Gail E. Bond, Ph.D.

Symposium Abstract:

This symposium will provide the research experience and results of presenters from a variety of disciplines (academic, public, and industry), who will discuss their interdisciplinary innovative approaches for reducing barriers and health disparities for specific populations of elderly.

Recent advances in science and technology, such as robotics, the Internet and nanotechnology, have created the potential for development of innovative medical products and that can provide new hope and better quality of life for many Americans. However, the potential of technology to assist in translating research findings into clinical practice has long been recognized, but its use for this purpose is underdeveloped and has not been carefully assessed. External demands for improved health care through translation of research into practice have stimulated important but isolated examples of changes in organization and practice. There is interdisciplinary agreement among purchasers, researchers, health plans and quality improvement organizations about an urgent need to accelerate the uptake of evidence-based findings and tools into practice, but there is considerable uncertainty about the most effective mechanisms for doing so. In addition, there is collective concern among all stakeholders that examples of success in translating research into practice are difficult to replicate or sustain over time. More importantly, how can technology be used to sustain improvements in health outcomes, quality, cost reductions and patient satisfaction. Also, how can we foster the innovation and applied research needed to bring new technologies and treatments forward.

Speaker 1: Gail E. Bond, Ph.D., University of Washington, Seattle, WA

Title: Preliminary Outcomes of a Web-Based Intervention for Enhancing Diabetes Self-Management Among Older Adults (NIH Funded)

Preliminary analysis from a web-based intervention study for the 1st phase treatment group (n=15) showed improvements in self-reported data entries over a 5 month period. The average decrease in blood sugar readings was 32 points. All subjects reported increases in their exercise (minutes per week) over the 5-month period, with changes ranging from 30 to 210 minutes (average was 118 minutes). Average weight loss was 3.5 lbs. Daily calorie and fat intake showed a mean decrease in calories and fat of 686 calories (range of 115 to 1,200) and 20 grams of fat (range of 4 to 80 grams). Blood pressure showed a mean drop in systolic and diastolic blood pressure of 11 and 6 points respectively. Subjects are entering their self-care activities data an average of 4.5 times a week demonstrating a high adherence and that older adults are willing to use the Internet for monitoring their self-care activities.

Speaker 2: Marge D. Sebern, Ph.D., University of Wisconsin-Milwaukee, Milwaukee, WI

Title: Heart Care: Custom Computer Support for Home Care

The purpose of this study was to design a Technology Enhanced Practice (TEP) for patients with heart failure receiving home health care services, and to close the gap among consumer health informatics tools, best practice, and home health nursing. We report here a work analysis and design activities for the

technology intervention. We used a Human Factors approach to design the TEP. Through an in-depth work analysis, we developed a model of the core functions of nursing practice, we conducted focus groups to solicit nurses input, and developed the functional requirements for a computer system to support best practice of heart failure patients in home health care. For example, core nursing functions are assess, detect changes, and enable patients to self-monitor a chronic disease. Technology-based interventions supporting these functions included nurse and patient information support, and tools for active self-monitoring of symptoms and decision support, delivered via the Internet.

Speaker 3: Brenda L. Hage, M.S., College Misericordia, Dallas, PA

Title: Creative Technology Training Strategies for Certified Nurse Aides in Long-Term Care

The purpose of this case is to discuss an innovative training strategy for teaching certified nurse aides (CNAs) how to use technology. Using adult learning principles, CNAs are taken on a field trip for hands-on experiences with everyday technology applications. The field trip culminates in a practice opportunity where CNAs order a take-out lunch using touch screen technology and then participants return to the facility with their take-out lunches for discussion and further training. These experiences have been effective at building confidence and enthusiasm in CNAs receiving training on the use of electronic documentation programs. Creative training methodologies can assist in successful adoption of technology use by CNAs in long-term care settings.