Community-based Delivery of Health Care Services through Advanced Technologies

Symposium Chair: Binh Q. Tran, Ph.D., The Catholic University of America, Washington DC
GSA-TAG co-convener

Symposium Abstract: [Sponsored by GSA-Tech & Aging SIG]

Technology has great potential to impact both the *quality-of-life* as well as *quantity-of-life* of seniors. However, in-and-of-itself technology serves only as the tool for enabling access to health and wellness. Through interdisciplinary efforts, the speakers in this symposium will discuss several potential roles in facilitating community-centric models for aging-in-place. Several different technologies for health service delivery to seniors will be discussed spanning applications of health sensors, telecommunications technologies, and internet/broadband technologies will be discussed.

Speaker 1:

Asuman Kiyak, Ph.D. ,
Institute on Aging, University of Washington, Seattle, WA

Title: A Review of Technologies Being Applied by American Designers and Health Professionals to Assist Aging-in-Place

Abstract

A recent conference held in Seattle brought together experts in computer sciences, telemedicine, architecture and industrial design, from research universities, the VA, Microsoft and Intel, as well as private businesses and care providers. Speakers discussed innovative solutions that they had designed or implemented in their efforts to plan for an aging society. Examples were presented in the areas of spatial orientation, medication management, post-hospitalization care, and long-term care of frail elders in the community. This presentation will summarize the various technologies presented, as well as future needs for research and development efforts in this field.

Speaker 2:

George Demiris Ph.D., Debra Parker Oliver Ph.D., Karen L. Courtney MSN
Department of Health Management and Informatics, School of Medicine, University of Missouri-Columbia

Title: A Video-Mediated Intervention for Senior Caregivers

Abstract

Informal caregivers of patients at the end of life are essential to the provision of hospice services; however, this task is not without adverse effects on caregivers themselves. Senior caregivers often feel left alone, and stressed as they are providing care to a loved one at the end of life. The Missouri Telehospice Project utilizes portable, easy to use videophones with an embedded camera that can be easily installed in patients' homes, the hospice office and the home of on-call nursing staff. Senior caregivers can use the videophones to interact with care providers regularly and/or in cases of emergency and to facilitate a "visual assessment" of the patient over

the phone. Our aim is to investigate whether the use of videophones in hospice care can improve the sense of coherence of senior caregivers, reduce their anxiety and improve their quality of life. Findings indicate that this mode of care delivery can enhance hospice care.

Speaker 3:

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

Title: The Challenges Associated with Implementing a Web-Based Intervention For Older Adults.

Abstract

The emergence of the WWW in the last decade has introduced the belief that the Internet will, revolutionize healthcare delivery and empower consumers. Given the potential of technology, the health care community has begun to explore the feasibility of delivering interventions via the Web including personalized care with chronic disease management. The purpose of this presentation is to describe this researcher's experience with the development and implementation of a web-based intervention to enhance diabetes self-management for a group of older adults. This presentation will describe the process taken to plan, develop and implement a web-base intervention. In addition, the presentation will make recommendations on possible methods of improving the process. The challenges involved inadequate funding to cover technology related issues (programming, graphics design, hosting services), decisions on what environment/framework to use, and how to merge the practice and theory of a given discipline with the limitations of internet technology.

Speaker 4:

Binh Tran, Ph.D., Elizabeth Bertera, Ph.D., Kathleen M. Buckley, Ph.D.
The Catholic University of America, Washington DC
Title: The Clinical eStorefront: Community-Based Model for Access to Health Services for Seniors at Edgewood Terrace

Abstract:

The Clinical eStorefront project in Washington DC is a novel NTIA-funded project to explore innovative uses of telecommunications and information technologies for delivery of health care services to residents living at Edgewood Terrace, a unique living community with broadband, high-speed Internet access to all residential units. The presentation will discuss the interdisciplinary effort and core components of implementing a far-reaching program to provide "virtual" clinical access directly from the Edgewood campus and the efforts to identify, address, and alleviate key barriers to adoption of technologies for disease prevention and management by senior residents.

Discussant:

Michael J. Rosen, Ph.D.
University of Vermont, Burlington, VT