E-Health, Assistive Technologies and Applications for Assisted Living: Challenges and Solutions

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E-health technologies will play an increasingly important role in the coming years, as more and more older people will require medical care and support. Due to the prevalent demographic changes and the continuously decreasing number of nursing staff and caregivers, there is an increased need for intelligent medical technologies, which enable people to live independently at home.

E-Health, Assistive Technologies and Applications for Assisted Living: Challenges and Solutions reviews existing literature in assistive technologies and provides suggestions and solutions for improving the quality of assisted living facilities and residences through the use of e-health systems and services.

Topics Covered:

- Ambient assisted living research and development
- Assistive technologies for an aging population
- Changing healthcare delivery
- Participative personal health record system development
- Patient centered medical home
- Privacy and security in e-health applications
- Real-time teleconsultation in emergency medical services
- Role of online trust in e-health
- Security in e-health applications
- Wearable systems for monitoring mobility related activities

Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal forclassroom use.

Carsten Röcker is a senior researcher at the Human Technology Centre (HumTec) at RWTH Aachen University, working in the research program "eHealth - Enhancing Mobility with Aging." As part of an interdisciplinary team of researchers he is designing healthcare applications for supporting elderly people in ubiquitous computing environments. Previously, Carsten was a visiting PostDoc at the Media Computing Group, focusing on the evaluation of user requirements for smart work environments. Before joining RWTH Aachen University in 2008, he was a PostDoc at the Distributed Cognition and HCI Laboratory at the University of California in San Diego. From 2000 to 2006 he worked as a research associate at the Fraunhofer Integrated Publication and Information Systems Institute (IPSI) in Darmstadt. During this time he was involved in several projects designing novel information and communication technologies for intelligent home and office environments. He has an interdisciplinary background with academic degrees in the areas computer science (PhD), psychology (PhD), electrical engineering (Master) and management (Master).