

m-Health: Personalised Health Information Systems

A special topic within Track 11.7 Telemedicine, E-Medicine, and Home-Based Healthcare

Call for Papers

The IEEE 2006 International Conference of the Engineering in Medicine and Biology Society solicits papers on m-Health. The recent advances in wireless and network technologies have already made a significant impact on current e-health and telemedical systems services. m-Health can be defined as 'mobile computing, medical sensor, and communications technologies for healthcare'. The use of mobile information and communication devices to empower consumers to manage their health, and to deliver care to the individual.

The next evolution of m-health systems will be towards personalized Healthcare systems. The increased availability, miniaturization, performance, enhanced data rates and the expected convergence of future wireless communication and network technologies around mobile health systems will accelerate the deployment of m-Health systems and services within the next decade. These will have a powerful impact on some of the existing healthcare services and will reshape some of the mechanisms of existing healthcare delivery routes. For example, development of smart intelligent sensors and drug delivery devices, some of them implanted, will allow communication with a personal server in complete mobility. The personal server provides global connectivity to the telemedical server using a Wireless Personal Area Network (WPAN), Wireless Local Area Network (WLAN), or wireless Wide Area Network (WAN). Developments in these areas are mainly driven by the evolving mass markets for cell phones and portable computing devices and represent an evolution of the previous generation of telemedical systems.

Today with wireless technology, patient records could be accessed by healthcare professionals from any given location by connection to the institution's information system. Physicians' access to patient history, laboratory results, pharmaceutical data, insurance information, and medical resources would be enhanced by mobile technology, thereby improving the quality of patient care. For example, Handheld devices can also be used in home health care, for example, to fight diabetes through effective monitoring.

The convergence of information and telecommunication infrastructures around mobile health systems is enabling cost effective technologies, which will have a powerful impact on the way different healthcare organizations deliver healthcare to their patients. The integration of emerging mobile technologies into these applications needs to be evaluated in a systematic way. The new mobile and networking technologies such as 3G/4G cellular networks and the new generation of WLAN and Adhoc networks have extended the medical information coverage.

This session will address the recent development in these emerging and fast growing areas and present an academic and industrial platform for future directions in this important area of healthcare and global connectivity for healthcare. Speakers from Industry and academia will be invited to this session to address the recent developments in this emerging area of healthcare.

IMPORTANT special paper submission instructions: Submit your paper using the conference web site indicating the **primary keyword** as "**Telemedicine, E-Medicine, and Home-Based Healthcare.**" This is necessary to ensure the paper is reviewed properly.

Important Dates:

Four Page Paper Submission April 3, 2006: Notification of Acceptance June 15, 2006

Theme 11	Clinical Engineering and Healthcare Information Systems
Track 11.7	Telemedicine, E-Medicine, and Home-Based Healthcare
Sub track	m-Health: Personalised Health Information Systems

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