

# Ubiquitous Healthcare in Ageing Society

Heng-Shuen Chen, M.D., Ph.D.

As we enter the 21<sup>st</sup> century, the aging process in Taiwan has become more rapidly. In 2006, the elderly population (persons 65 years old and over) has reached 10%. The decrease of childbirth aggravates the situation. In 2005, the total fertility rate in Taiwan has fallen to anew low 1.12, which was much lower than the number 2.1 to balance the population replacement. Due to this sub-replacement fertility, it is estimated the elderly population will be double within 20 years. The aging process in Taiwan is much faster than most developed countries in the world, and the huge healthcare needs brought by the elderly have become an enormous burden for an aging society.

To solve the problem we can combine wireless telecommunication, sensor network and information technology to develop a ubiquitous healthcare(u-Health) system platform for the elderly. The u-Health system provides not only emergency medical service, home telecare and mobile healthcare, but also a health community network which can further integrate medical care and life care by emphasizing humanity and dignity for the elderly. In this way, a holistic U-Care including physiological, psychosocial, arts and recreational or even spiritual services could be implemented for the elderly in the community.

Such a u-Health system requires multidisciplinary collaboration. In the meantime, government policy endorsement, international exchanges, and promotion of Information Technology and Health Industries are the most important keys to success. In April of 2006, a consortium of six countries including Taiwan, Australia and France launched an International u-Health Initiative in Med-e-Tel 2006, Luxemburg. Later, Australia, Singapore and Taiwan are further jointly to fund an Asia-Pacific u-Health Research Center, which will be announced in February, 2007. A mega event u-Health Taiwan now has been scheduled on June 19-22, 2007, which is organized to combine IEEE Healthcom2007 international conference, HL7 Asia-Pacific Annual Meeting, APEC PACS meeting, and EXPO of u-Health industries.

In the future, we expect more international collaboration and u-Health industry could be fully developed and promoted to the world market especially for the Chinese elderly population.