

## THE CONCEPT OF THE VIRTUAL HOSPITAL AS ICT-TOOL FOR E-HEALTH AND U-HEALTH

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Telemedicine aims at equal access to medical expertise irrespective of the geographical location of the person in need; it promises equally good healthcare for everyone, anytime, anywhere. New developments in Information and Communication Technologies (ICT) have enabled the transmission of medical images in sufficiently high quality to allow for telediagnosis. ICT supports the creation of ubiquitous organizations for healthcare (u-health) which are digital representations of the information and services of a physical organization. At the same time, however, ICT developments over the last decade bear the risk of creating a digital divide in the world, amplifying the disparity in quality of life in the various regions [Dario et al. 2005].

An analysis of how the objective needs of the heterogeneous partners can be joined has shown that there is a need for real integration of the various platforms and services. Therefore the creation of a Virtual Hospital (VH) has been recommended for a virtual combination of medical applications. The VH will provide a heterogeneous integrated platform combining satellite links and terrestrial links for a wide range of medical services.

Services offered by the VH are a Virtual Medical University to which the leading medical centers provide pedagogical material for e-learning. Real-time telemedicine will offer second opinion, telementoring and optimization of the learning curve. Medical assistance will improve the medical care of tourists and stimulate tourism. VH aims to facilitate the interconnection of the various services through real integration which must take into account the social, human and cultural dimensions and strive towards common approaches but open and respectful of cultural differences: multi-lateral cooperation instead of aid. The methodologies for the VH are medical-needs-driven instead of technology-driven. Through fellowship programmes VH will invest in a new generation of young physicians able to work with different needs and cultures.

Building on the best practice approaches developed in the EMISPHER project [Grasczew et al. 2005] the VH contributes to an improved healthcare, providing access to medical services in the required quality of service depending on the individual needs of each of the partners.

### References:

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