

INTR@MED: Medical Network in international cooperation of Italy

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Abstract:

Intr@med is a project on ICT application to medicine developed in the frame of scientific and technological cooperation between Italy and Egypt. It is based on web portal in order to improve the dissemination of information among hospitals and to support teleconsulting concerning difficult clinical cases and the telediagnosis process at specialist level (2nd opinion).

The heart of the virtual network is a multifunctional medical/health web portal, which enables physicians, health operators and others researchers in biomedicine to access the whole network and share clinical information and knowledge.

At moment Intr@med network links the Italian hospital "Umberto I" in Cairo (Egypt) and the General Hospital in Palermo (Sicily). The ICT applications regard telecardiology (telecardiosurgery in paediatrics) and telepathology. Using the web portal the clinicians transmit and access patient medical records, data, biomedical images (radiological images, digital slides) and signal (ECG), in order to support processes of second opinion of telediagnosis and teleconsulting in real time (conference display) or in deferred time (send of clinical and next referral of information and diagnosis). The telepathology consulting activity besides the two hospitals involves also the University Hospital of Pittsburgh.

This network model has been applied to another web based project in the frame of another bilateral scientific cooperation between Italy and Romania.

In particular the telemedicine systems are located in the hospital of Florence and Brescia (Italy) and in the Regional Hospital of Timisoara (Romania).

The aim of this project is to increase the quality of medical services, provided by the Emergency Clinical Hospital Timisoara, Romania, in collaboration with some departments (cardiology, radiology, pathology) of the Italian hospitals involved.

In this new context the project opens new perspectives regarding the development of the existing local infrastructures and support for telemedicine activities in Euro-regions. The software that is the core of this system is Clinical Image Integra, and in which is possible to generate a huge database, recording images and video files; a software key protects the software and runs on commercial PCs and laptops.