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Title:	Innovative ICT solutions in telemedicine to support clinical practice and research in hospitals
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Abstract:	<p>The scope of this study was to examine ICT telemedicine innovations and potentialities in web-portals, intranet services and tele-radiology topics respectively, in order to design, develop and, possibly, realize apposite telemedicine systems and solutions for healthcare and in particular for the hospitals. ICT techniques and technologies are nowadays applied in every area of our common living from work places to our homes, our free-time, schools, universities and so on. The healthcare services offered by hospitals are heavily supported by technologies and, behind them, by a wide research both in ICT and biomedical sciences. Thanks to these advances telemedicine is now becoming a fundamental part of services offered by hospitals and healthcare structures. The healthcare management, the doctors and the common people are now experimenting how telemedicine is an added value to all the services offered in terms of the quality of care, the patient follow up, the early diagnose and treatment of pathologies and diseases. In this research is presented an all-inclusive approach to telemedicine problems and challenges in particular studying, developing and proposing ICT methods and technologies in the above mentioned three areas of interest:</p> <ul style="list-style-type: none"> •innovative healthcare and telemedicine-ready hospital website or portal design and development; •analysis and study of models for the realization of intranet healthcare services to enhance both quality of care and the management of healthcare personnel evaluation; •tele-radiology and some of its actual new perspectives as the study and the evaluation of the “mobile” tele-radiology approach using commercial tablets (and what it could mean).For the first topic the results may be summarized in the development of a more interactive and “social” hospital web-portal offering original solutions and services to all the categories of users (audience, professionals, researchers), allowing them – through the use of advanced tools - to configure and select their own pages and interests. The originality of this approach consists in a good cost/effective result in the respect of the last and worldwide accepted Internet regulations and policies too. <p>A similar approach regarded the intranet services and the design of web interfaces for the clinical practice and the executive evaluation. These kind of innovative systems regard a limited and selected number of more skilled users, typically belonging to a corporation or to specific offices. As above the approach is important: interactive services, innovative tools and affordable instruments are the keywords of the systems designed or proposed to solve specific problems or needs.</p> <p>The last research topic concerned the proposal of a protocol for the assessment of medical images on commercial displays, interesting the stakeholders and the groups involved in medical images treatment, visualization and communication. The potentialities of the mobile tablet devices improve day after day and new devices are marketed every week and the innovation is round the corner. These potentialities must encounter the medical diagnostics world and meet the standards and the regulations the international community established. It will be difficult for a commercial tablet to obtain the medical device CE mark not only for commercial reasons, but the technical limits may be reached and even surpassed adopting objective measures and evaluations. This study demonstrates that commercial tablets may be used in clinical practice for the correct visualization and diagnose of medical images. The measures of some display characteristics may be considered acceptable for mobile interpretation (even report?) of medical images, but if and only if the ambient lighting conditions are under objective control and integrated automated systems in tablets warns physicians about bad or borderline technical and ambient restrictions or bonds.</p>
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Information & Communication Technology offers various ways to improve the Healthcare system. The healthcare field has to use ICT more intelligently to bring in more changes and elevate the healthcare to a much higher level which is important for the country's development. Previous. How to market my practice? – An Overview on Healthcare Marketing. Next. What is practice marketing? RELATED POSTS. What Do You Need to Know Before Starting a Healthcare Business? Telemedicine practice can prevent the transmission of infectious diseases reducing the risks to both health care workers and patients. Unnecessary and avoidable exposure of the people involved in delivery of healthcare can to be avoided using telemedicine and patients can be screened remotely. It can provide rapid access to medical practitioners who may not be immediately available in person. Hence, mainstreaming telemedicine in health systems will minimize inequity and barriers to access. In general, telemedicine is used to denote clinical service delivered by a Registered medical practitioner while telehealth is a broader term of use of technology for health and health related services including telemedicine. 1.1.3. Telemedicine uses telecommunication systems to deliver health care at a distance. We found some evidence for a decrease in LDL cholesterol, which is considered the 'bad' cholesterol, in participants allocated to telemedicine as compared to those allocated to usual care (MD -12.45 mg/dL). We also found a greater decrease in blood pressure in those allocated to telemedicine compared to those that were allocated to usual care. Seven studies that recruited participants with different mental health and substance abuse problems reported no differences in the effect of therapy delivered over video-conferencing, as compared to face-to-face delivery. IT technologies in medicine. According to Gartner's analysts, in less than ten years Virtual Personal Health Assistants (VPHA) will be ready to replace humans in the field of primary medical assistance. By 2025, more than half of the population will make use of VPHA's, which will be thought to work faster and more precise than human specialists. Even now, surgeons rely on Da Vinci robots, and computer simulators are replacing the once commonly used anatomical tables. Yet, in order to create a common comprehensive digital medicine system, several issues need to be solved. This summer, President Vladimir Putin signed the Telemedicine Act that stipulates the issuance of electronic prescriptions and rendering of remote healthcare services. TELEMEDICINE can be broadly defined as the use of telecommunications technologies to provide medical information and services. Although this definition includes medical uses of the telephone, facsimile, and distance education, telemedicine is increasingly being used as shorthand for remote electronic clinical consultation. Interest in the field has increased dramatically in the 1990s. cial investment in telemedicine is now. being accompanied by major marketing. campaigns directed at hospitals, physi- cians, the military, and, more recently, the general public. The clinical problems that are most. amenable to telemedicine solutions are. largely cognitive in nature, ie, problems. 486 JAMA, February 8, 1995-Vol 273, No 6.