World Academy of Science, Engineering and Technology International Journal of Biomedical and Biological Engineering Vol:10, No:01, 2016

Application of Medical Information System for Image-Based Second Opinion Consultations-Georgian Experience

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Abstract: Introduction - Medical information system (MIS) is at the heart of information technology (IT) implementation policies in healthcare systems around the world. Different architecture and application models of MIS are developed. Despite of obvious advantages and benefits, application of MIS in everyday practice is slow. Objective - On the background of analysis of the existing models of MIS in Georgia has been created a multi-user web-based approach. This presentation will present the architecture of the system and its application for image based second opinion consultations. Methods - The MIS has been created with .Net technology and SQL database architecture. It realizes local (intranet) and remote (internet) access to the system and management of databases. The MIS is fully operational approach, which is successfully used for medical data registration and management as well as for creation, editing and maintenance of the electronic medical records (EMR). Five hundred Georgian language electronic medical records from the cervical screening activity illustrated by images were selected for second opinion consultations. Results - The primary goal of the MIS is patient management. However, the system can be successfully applied for image based second opinion consultations. Discussion - The ideal of healthcare in the information age must be to create a situation where healthcare professionals spend more time creating knowledge from medical information and less time managing medical information. The applications of easily available and adaptable technology and improvement of the infrastructure conditions is the basis for eHealth applications. Conclusion - The MIS is perspective and actual technology solution. It can be successfully and effectively used for image based second opinion consultations.

Keywords: digital images, medical information system, second opinion consultations, electronic medical record

Conference Title: ICP 2016: International Conference on Pathology

Conference Location : London, United Kingdom

Conference Dates: January 18-19, 2016