Assessing the computer uses in medicine medical essay

Computer uses in medicine

There is no doubt that ICT is one of the latest mastered human brain does not stop this development at a certain point or area of life without the other has had this technology a significant impact and contribution of the actors in the health field, particularly in the provision of medical service and high level .. Has significant efforts to employ technology in the field of health through the integration of data, digital photos and X-ray and Telemedicine Tele Medicine.

In the Kingdom of Saudi Arabia state is keen to achieve the principle of equality in the provision of health services and there are significant efforts in the use of technology in the health field to provide health services to residents in remote areas to take advantage of advanced services in some major hospitals Kalmschwy Specialist, but frankly it is not employment information and communication technology in the health field is still this sector needs to be a tremendous effort and well thought out plans to provide health services using high-level information and communications technology to reach the required limit, which had hoped the citizen.

Many of the health services, high-end is only available in a number of major hospitals Kalmschwy Specialist and a few people who may have the opportunity to obtain such services due to the expansion of the Kingdom and the increase in population and the lack of people who specialize in some medical fields, in addition to the lack of qualified persons in computer applications in the health field, which led to non-use of medical technology to provide health services to residents in remote areas and other reasons.

I was honored by His Royal Highness Prince Sultan bin Abdulaziz, may God protect him create a " Sultan charitable" contribution he has for the advancement of health care solution for some of the mentioned constraints through the provision of medical care and high level to achieve the principle of equality in the provision of excellent health care services to citizens regardless of their location geographical location.

This is a charity providing social and health services through the methods of modern communications, and is known as the IFC has a number of programs and that the most important program Medunet where the aim of this program is to provide solutions to advanced technology such as treatment for post-b Tele Medicine and Altaim Distance Distance Learning Through this program will be health care and continuing education available through the Internet not only to those who are inside Saudi Arabia but will include the services of some Arab countries. Through telemedicine, or what is sometimes called the medicine will be able to communication in the institution of any physician contact centers of research and treatment of patients in remote locations and he can also contact doctors and experts in advanced medical institutions around the world for consultation, diagnosis and treatment.

Through telemedicine can transfer and exchange of medical information between radiology and other specialists in a few seconds.

In terms of distance education it provides to employees in the health field the possibility of holding seminars and conferences, regardless of their whereabouts.

Telemedicine technology that enables doctors, nurses and technicians to present their research and exchange of experiences with others and reduce their sense of professional isolation.

We have the specialist hospital Bmjhodat large in the area of Tal communication and distance education through the establishment of a robust system to provide medical care and providing equal opportunity in access to medical care is distinguished as the hospital by linking a number of areas in the Kingdom of the head office to give access to treatment equal to citizens, but we still need more.

Overall, we need a large and urgent to establish a number of other charities that seek to achieve health equity between citizens and the support of Sultan Charity This charity As received from the material and moral support of His Highness Prince Sultan, but it will need to Alton with other parties in the exchange of experiences and knowledge and the development of cadres specialized medical and train Saudis in the field of medicine and health care and the conclusion a word of thanks and appreciation to His Highness Prince Sultan to establish such an institution of excellence in purpose and meaning and discrete service. And prayers for their employees success and our fellow health and wellness.

This is the second

The information of disciplines vital and important in today's world, despite being a modern shape in the world of medicine and technology. This includes several specialty areas such as telemedicine, medical decision support systems, genetic mapping techniques, electronic medical records. Began

early attention to this aspect of the Kingdom through the convening of conferences and international scientific seminars held in the Kingdom or abroad, and the holding of workshops and intensive courses for doctors in this area. To shed light on this side, and explore the territory they had mined a series of questions put forward to His Excellency Dr. Nabil Ali Bin correct (Ph. D. in medical informatics), who responded by thoroughly and accurately scientific.

Dr. Nabil is the first to obtain this certificate in the Kingdom, has worked in a number of scientific and educational institutions, including his work as a researcher in the Department of Medical Informatics at the Medical Center at Vanderbilt University of America, as well as e-learning in the Department of the university itself. It is also a member of several associations and scientific centers in various parts of the world. He is currently an assistant professor of Medical Informatics at the Faculty of Applied Medical Sciences King Saud University in Riyadh.

It also provides a number of training courses at the global level. The happiness only Arab member of the Supervisory Committee to the World Conference on remote sensing instruments, which will be held in Malaysia this year. We raised by our questions, and was with him the following dialogue:

(Riyadh Net): At the outset you could give us the definition of the area of your specialty?
The medical informatics by the modern concepts at the global level, and so was the emergence of specialized courses in medical informatics during the past fifteen years only. Deals with this Specialization all computer

applications in the medical field, including: techniques, practice of telemedicine, systems and electronic medical records, and the development of medical education and training-mail, and processing systems and storage of medical images, and administrative and financial systems, medical systems and decision support, medical applications of informatics in medical technology (as maps of genes), and development of medical research, and patient education programs, and programming of medical devices, standards and regulations in medical informatics.

(Riyadh Net): What are the areas of teaching this aspect at the University?
I taught the material relevant to specialize in the faculties of numerous university, college of Applied Medical Sciences, Faculty of Computer and Information Sciences, Faculty of Applied Studies and Community Service, King Saud University, and I hope to put the stuff of Medical Informatics, Faculty of Medicine, because the doctor is the biggest beneficiaries of this material and even more beneficiaries of the applications of this specialization. With regard to the subject of this material has been the subject of coverage of the key aspects of medical informatics and the development of practical projects enable students to practice and specialty applications. For example, we divide the students of the Faculty of Computer article to several groups, each group choose a section of the hospital, then contact the hospital and take the basic information and then design special programs for each section.

The aim of this step the student to experience the atmosphere and environment of hospitals and to identify the basic requirements and the needs of hospitals to medical informatics systems. Among these projects: the

radiology department, laboratory, pharmacy, nutrition, medical unit renal failure, Department of Medical Research, System expert (Expert System), appointments and reception, electronic medical records, clinic, physiotherapy clinic, Dermatology, Dental Department, orthopedics, and other . As database consolidation between these projects and so is integration, including Integration)) to be a microcosm of the hospital mail. Then been developed to operate through the Internet (web-based).

Has been host to many of the companies related to medical informatics systems to display the latest hospital medical systems (HIS), and the opportunity for students to see live demonstrations of those programs and discuss the guests around. The students interact well with this step, which aims to show what is available in the Saudi market of advanced programs in this area, in addition to helping students in their projects and by reading the most famous medical systems. It is obvious to everyone that all the work needed to develop more and more effort, hoping that these materials are a useful addition to specialists in the computer and the staff in the health sector.

(Riyadh Net): What is the extent of interest in what is called e-health in the world? In the UK?

Started in many states to provide services of Telemedicine (Telemedicine) as a first stage in the eighties and early nineties of the twentieth century, then the evolution of this concept in the late nineties to health connectivity (Telehealth), then followed by providing more comprehensive as we have until the evolution of the concept of Telemedicine is clearly at the beginning of this century to become the e-Health (E-Health). As a result of the evolution

of this concept and the need for urgent applications in health care, was formed (the International Society for e-health), a scientific organization international non-profit organization, aimed primarily to activate the applications of informatics in the health field and involving members from around the world and has a Board of Trustees also have the Assembly public with more than " 70" personal universal. With regard to e-health in the Kingdom, are sufficient to refer to the President of the International Society for e-health is a personal girl of the people of this blessed country, and that the first world conference on e-health held in Jeddah in 2001 and is the first conference of its kind in this large size in the region where attended by about a thousand people. Also do not forget to note the significant and pioneering role played by m

Focused e-health at King Faisal Specialist Hospital and Research Center in the dissemination of this concept through workshops and scientific conferences but also provide many services for the health sector in the Kingdom as a service of Telemedicine even culminating in the recognition by the World Health Organization at the hospital as a center supported by the Organization of Medicine communication in the Middle East.

And emphasizes the establishment of the Center for Health e-King Faisal Specialist Hospital and organizing the international conference of this size and the Presidency of the World Health Organization attention and leadership of the Kingdom in general and the hospital, especially for e-health in the Middle East and the consolidation of the pillars of the health care industry based on modern technologies in the region.

The hospital has developed a unique location on the Internet (Gulf Health) through which to provide medical information as comprehensive as, and allows the citizens of the Gulf States all consulting specialists in the disciplines of a variety of medical online, and participate in the site more than ten thousand doctors offering their services free to all. In this year's Systems Specialist Hospital in collaboration with WHO and the UAE Ministry of Health held a conference entitled International Conference on the health of Arab 2003 in the city of Dubai, focusing on six themes important health at the level of the Arab region, namely: e-health, and robotic surgery, and common diseases, infectious diseases, and diagnosis radiation and hosted the conference 50 speakers worldwide, while the number of participants more than twenty-two thousand, representing a specialist about a hundred countries from different regions of the world. The Foundation Prince Sultan bin Abdul Aziz Charity has established a program of Prince Sultan bin Abdul Aziz Medical Connections, which provides excellent services to the health sector in the Kingdom. Of that, Telemedicine services for military hospitals and other services and continuing medical education program through the site, and linking the health sectors in high-speed network, and provide organized

Or e-Me to the hospitals. These efforts will contribute significantly to the development of the concept of e-health in the Kingdom to become the shining center of the e-health applications in the Middle East, God willing.

(Riyadh Net): In your assessment, what the interest of doctors in the Kingdom of the Internet and computer in general?

The number of doctors in the UK approximately 30 000 doctors (400 distributors government hospital and private) of whom 10 000 have a doctor to participate in the Gulf of Health site (above). In the sense that one third of doctors in the UK at least have an interest in the Internet and its applications medical contrast, we find that 78% of doctors in the United States use the Internet an average of 7 hours per day in 2001, and it should be noted that quite a few doctors have participate in the location of the Prince Sultan bin Abdul Aziz Communication medical, which includes participation in international medical encyclopedias and the new in many medical specialties, and training courses for doctors in the medical uses of the computer. In addition to Internet services available to doctors in medical libraries in hospitals and military hospitals in the National Guard and some private hospitals. There are also workshops on computer applications in the medical field in many medical conferences and have specialized in high demand from doctors. But we must pay more attention to providing materials in the computer and its applications to medical students of the Faculty of Medicine, because they are the future doctors who will use the computers in medical practice, as they Bha

Facial to the computer during their medical. Here it is worth mentioning that there are more than 22 faculty of medicine in the United States and Canada require the ownership of a computer laptop to enter the Faculty of Medicine.

(Riyadh Net): To what extent are to take advantage of Telemedicine now?

The objective of Telemedicine is the link between hospitals and specialized clinics and health centers in remote locations or locations where there is no specialized doctors nor patients can be moved from these sites to another site available where advanced medical service. Such as duty in remote areas, and areas of natural disasters, flights, cruises, and remote military areas, prisons, and critical situations in the home, and ambulatory cases away from medical centers. This is done by the transfer of data, voice, image and signal through the medical and telecommunications satellites. This helps to manage limited resources for medical care more effectively and reduce the cost and health risks for the transfer of patients.

This gives real hope for the regions do not have enough real health care for economic reasons or geographical. And Telemedicine is used in many applications, including: service diagnosis and treatment, consulting service, medical service and medical education and training, and service management meetings between the medical departments. This does not mean that all these services available to us, for example, service diagnostic and treatment services less frequently used not only in the region but globally.

(Riyadh Net): Do you consider reliable medical sites on the Internet in some cases, treatment and prescribing?

Some surveys have shown that 55% (ie 52 million browser) of the total Internet users in the United States of America in 2001, online sites health in search of information and data relating to health and disease, and this means that half of Internet users have become closer to deal with the

Internet as a reference important for good health, medicine and treatment. This is because in my opinion to several reasons including that the Internet allows the user does not need to disclose his identity when you search for medical advice, adding that many patients do not find the doctor enough time to discuss his health, because the doctor takes 15 minutes on average with the patient for diagnosis and treatment because of certain medical procedures and medical insurance systems, the time is not enough to educate the patient and his education. Therefore, many patients turn to Internet to search for new information about their illnesses, and methods of healthy nutrition, and new drugs and medical drugs, and the search for other options to help them in decision-making. Studies have shown that 70% of patients affected by their decisions, including treatment they had received information over the Internet, and 50% of patients while, returned to the physician have under the guidance of a doctor new questions, and they discussed the diagnosis, and treatment methods

, And 28% affected by their decisions to go to the doctor or not to go after informing them of the information on the situation from which they suffer through the Internet.

All agreed that the medical information from the Internet had improved the way their interest in health care. However, the problem in my view, is the credibility of the medical sites, there is no way of knowing whether these sites are managed by specialists in their fields, and they have licenses to practice this profession, but there is no way to prosecution in the event of a medical error. One study revealed that 58% of searchers for health checking of companies, institutions or organizations that stand behind these sites in

order to verify the accuracy of the information, despite the fact that 82% of Internet users in general are afraid of getting inaccurate information from the Internet. Here must be based medical and specialty hospitals to adopt reliable medical websites are providing excellent health information documented and accurate medical advice to meet the needs of patients, and that the bodies concerned are blocked medical sites that are not certified by the medical official. So take advantage of the technical and underestimate the risks.

It was the third

With the accelerating use of electronic pharmacy computer .. Near the target of the health service

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At the outset I want to stress that the concept Sotrha in this article are easy to be implemented, as it is not impossible or seven of the paranormal, but applied in a scientific and accurate leads to the impressive results to health care in various facets.

For the technical development impact substantial and concrete to improve the level of health care in general, and to provide the means and the high pace of work and efficiency, in particular, have emerged from the use of computers in all aspects of life since the middle of the last century, and the window to say that health is still one of the pilot areas of interest with new technology and permanently connected, and in the profession of pharmacy was still the computer active role in providing a superior service to patients,

Valhacb is currently being used to view the file patient's health and disqualified for treatment, and printed instructions accompanying document history management of the patient, as used in medical stores to make sure to maintain acceptable levels of inventory of medicines or medical supplies and other during the period of the future and limited.

Accelerate the pace of developments in computer applications in the context of over time quickly, and the requirements and business needs is increasing is the other dramatically, so has developed many medical technology firms a number of programs and useful applications in the pharmaceutical field, depending on the expertise of programmers computers as well as to consult with expertise of pharmacists.

A new system ..

Has developed a technology company in Chicago, USA system of exchange of the prescriptions by means of a Computer Forums (Plam-held computer) which allows the physician liberally medical panel device is then sent via Internet to the hospital pharmacy or to a pharmacy civil joint program, which chosen by the patient, and receives the prescription in the form of a specific message to the scientific names, quantities and duration of treatment, all under the cover of full confidentiality and privacy. The pharmacist will prepare the prescription before the patient arrives to the pharmacy on time.

Delivery of homes, but

Many of these pharmacies joint delivery of drugs to the home of the patient, during a short period, and which is calculated for this program accuracy in dispensing, and the low level of error in identifying the medication, because the doctor does not take a single name of the medicine in his hand, but

writes the initials of the drug and ensures the program loader to search him and his focus and quantities required, and after approval sends the doctor, after attaching his signature mail, and it is known that the Saudi Ministry of Commerce is currently seeking a resolution to the electronic signature and that of its adoption in commercial transactions and the like.