

Advances in Medical Technology in Relation to Information Technology

Recently, there is a wide improvement in information technology that contributes to all industries (Masys, 1998). In the medical sector, electronic medical records, online health services, and mobile technologies bring out several positive impacts on the quality of medical service. For example, using these modern tools in hospitals and clinics can connect clinicians and patients through online platforms saving a lot of effort and time.

Many applications are available now on smartphones and tablets providing medical consultations from specialized doctors either by chatting or video conferences. Moreover, through the recent revolution of information technology, physicians can easily access all types of data related to their patients, follow the most recent medical updates and latest result of medical research. Several applications aid clinical staff to interpret medical reports, digital imaging such as x-rays and CT scans, and to be always updated with recent treatment plans and drug information. All of this contributes to the quality of medical services provided to the patients, in addition to improving the clinical knowledge and skills of medical practitioners (Masys, 1998).

Furthermore, Information technology has a remarkable role in enhancing medical education. Medical students and researchers have online access to new updates on medical topics and wide varieties of social networks to share their thoughts and queries. Other modern techniques such as virtual reality (VR), simulators, and computer-assisted learning (CAL) are now involved in medical teaching materials. These methods allow medical students and researchers to communicate easily and get the maximum benefit of modern updates in medicine. Moreover, CAL is an interesting way of teaching numerous hard topics by simplifying information through methods such as 3D diagrams, video tutorials, and interactive teaching applications ("Role of Information Technology in Medical Science", n.d.).

From a medicolegal aspect, IT is important to ensure the patient's right to give his feedback about the received medical service. In addition, health authorities can evaluate the performance of medical staff and monitor their clinical decisions to ensure that they are following the general health guidelines. Strict rules and regulations are also put by these authorities to ensure the privacy of the patient's confidential information. IT allows proper organization of digitally stored data of the patients and creates strict security systems to keep them always safe ("Medical Technology", n.d.).

Unfortunately, many patients are still suffering from outdated medical systems as they may wait for long hours to receive their care, in addition to improper clinical follow up due to rushed medical appointments ("REDESIGNING CARE DELIVERY: IMPROVING THE PATIENT EXPERIENCE AND SYSTEM EFFICIENCY", n.d.). This can negatively affect the quality of medical care and waste more money and time. Thus, recent innovations and the introduction of information technology to replace outdated systems are necessary to overcome these kinds of problems. A good network of health providers with easily accessed patient's health records are basics of a well-established health system.

Many medical technology agencies are now available creating full digitized medical system easy for the patients to fill out their requests and write medical problems with direct connection to their electronic health records. As a result, this can allow them to book their medical services online and save providers precious time. Furthermore, this modern medical

system may contain simple educative guides for the patients to give them the primary health knowledge they need to understand their diseases and know the following steps in their treatment plans.

References:

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