

LITERATURE SURVEY

Information System & Information Technology in Healthcare Sectors

The healthcare sector is widely considered as one of the most important industries in information technology (Wager 2005). More and more, information technology has been considered as a practice that facilitates healthcare performance through using data and information efficiently within the healthcare sectors. Therefore, Wager et al (2005) said that in order to understand the relation between information technologies and healthcare, we first need to understand what are the technologies used in healthcare.

Information technology functions have developed over the last few years not only as a technology services provider, but also as a strategic provider that develops and integrates industries' infrastructures to facilitate and ensure quality of service (LeRouge et al 2007).

In the mid-80,'s information technology changed the healthcare industry and brought many benefits when they used microcomputers, which were a small in shape, fast and very powerful for that time. Moreover, this allowed hospitals to develop clinical applications for various medical care settings. As a result, hospitals started to purchase and adopt information systems in the healthcare industries, and after that, challenges began to emerge when professionals tried to integrate data among these systems(Wager et al 2005).

However, Bhattacharjee and Hikmet (2007) and Castro (2007), granted that information technology has improved healthcare industries, but they also highlighted some of the difficulties related to the use of information technology in healthcare sectors, as they noticed that it is hard to implement information technology in small clinics and organizations, with high costs due to reduced efficiencies of scale. Therefore, IT implementation requires long term training and retention of skilled professionals.

On the other side of the debate, (Abbott and Coenen 2008) believe that information systems and information technology occupy a high position in improving healthcare industries in general, and in electronic healthcare record (HER) in specific; for the reason that implementing such technologies can save costs and

times associated with daily hospital data records, such as patients schedules and billing. This is in addition to improving healthcare performance and efficiency by eliminating manual data records and paper work, and alongside smooth and flexible tracking of patient details.