

Utilization of Computer and Information Technology by Physicians

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Abstract

The paper covers the utilization of computers and IT services by physicians. Physicians utilize these services of information technology for efficient work and diagnosis of diseases. Utilization of computer helps physicians to store data of their patients and to easily check the reports or mentioned problems of the patient. Physicians improved their work through services of IT and also save their time. There are numerous applications for the treatment of patients which are used by the physicians to give proper assistance to patients. These services have various benefits but these services are not utilized by the older physicians which cause big problems regarding the utilization of computer and applications. Physicians increased their efficiency and work quality by utilizing these services of information technology.

Keywords: Computer Utilization, Information Technology, Physicians

Introduction

Information technology is used by many professionals for their efficient work and creativity. Information technology is the application of computer that deals with the transmission and storage of data. Different healthcare sectors use information technology (IT) for saving and utilizing the data or information of patients or staff (Cresswell & Sheikh, 2013). Physicians that work in different healthcare sectors or private clinics must have the knowledge of utilizing the computer application of information technology (Aziz, Bearden & Elmi, 2015). In recent times, there is a large amount of development of computers and information technology that helps physicians in reducing the work problems and tensions.

Information technology made the work of physicians and other professionals concise and efficient. It also saves their time in providing the quality assistance to the patients. Information technology is widely used by physicians as it has the positive impact on hospitals or health care delivery systems. The main area which is impacted by the information technology in different hospitals includes; management of the patient, teaching, diagnosis, and control of severe diseases. There are different software packages that distribute data to different professionals of healthcare sectors. There are many hospitals which still do not have the access to information technology which shows physicians or healthcare workers face the large disturbance in sharing and collecting of data related to the hospitals (Cook, Sorensen, Nishimura, Ommen & Lloyd, 2015). Health organizations have the competition of managing the quality and cost-effectiveness of care. There is a large discussion on the utilization of information technology by physicians in health organizations. This utilization helps to create the better understanding between patients and physicians and it also helps in diagnosing the certain disease as well.

Discussion

There are various problems in health organizations related to data and treatment of patients. Information technology provides the good understanding among patient, staff, and physicians. It also helps in collecting and sharing of data which enables physicians to make proper understanding of patient records and diseases. Document productivity, measurement of performance, quality of care and cost has the better utilization through information technology. The cost of information technology and its application are reduced with time which enables the large increment in the utilization of information technology by physicians and health organizations (Aziz, Bearden & Elmi, 2015). Physicians usually utilize this technology for getting the good look at patient's report, disease and other issues related to hospitals. Information technology is known as the computer software which is used for the transportation, communication, and storage of information.

Impact on Work Quality

The quality of care and its cost is improved by most of the health organizations and it also became the reason of their success in recent times. Most of the clinics and hospitals shares and utilize data in a paper format which takes time and is less efficient for the diagnosis (Bardhan & Thouin, 2013). Information technology improves the quality and provides efficient and accurate data that can be utilized for the diagnosis of diseases (McClellan, Casalino, Shortell & Rittenhouse, 2013). There is a different recommendation for the physicians for utilizing information technology such as; movement of data in the electronic format and get in touch with the patient so that physician can recommend the precautions according to the patient's disease (Waterson, 2014). Sometimes, data or any report of the patient can be lost and if it in paper format it is difficult to recover. Therefore, with the help of information technology, data can be stored on different web servers or web pages that helps the physicians to easily access the data which is already stored on server or web pages through internet and can also easily recover the data in case of any loss (Button, Harrington & Belan, 2014). Following is the diagram that shows the amount of physicians who provides the optimal care to their patients in chronic conditions.

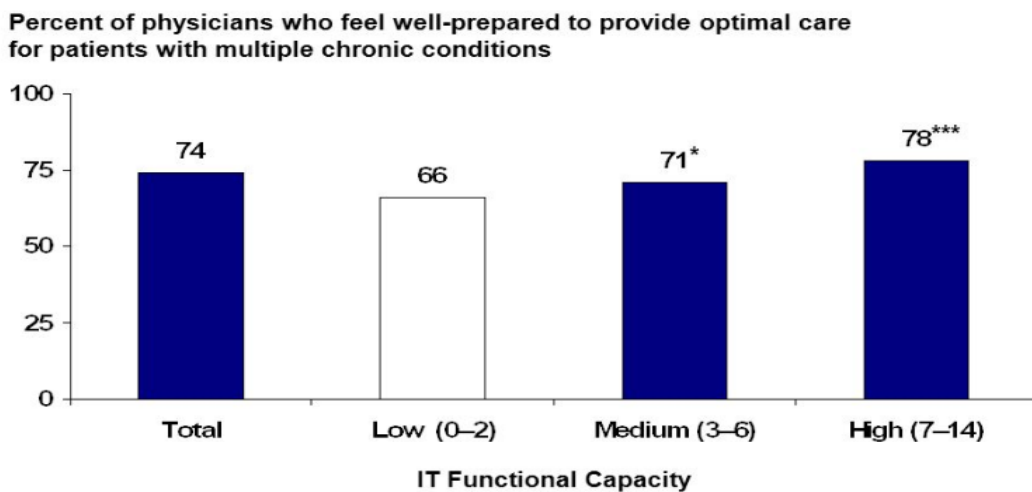


Figure 1 Capacity of IT functions

Retrieved from Survey of patient and physician influences and decision-making regarding CT utilization for minor head injury by Quas et al., 2014, from Injury 45(9) pp. 1503-1508.

The above diagram shows the efficiency of physicians with an advanced capacity of information technology by providing the treatment to their patients. There is a large range of 74% physicians who used the advanced capabilities of information technology for providing the optimal care to patients with chronic conditions. Figure 1 shows the quality of care provided by the physicians in chronic conditions. There are different software and applications installed in the hospitals for data storage, for scheduling the appointments and for providing the services. These applications help the physicians to easily access the data or schedules of appointments by utilizing the IT. Physicians can communicate or retrieve the data through videoconferencing or through applications of IT (Quaas et al., 2014). Information technology completely changed the life of physician and provides them different facilities from which they can easily check or diagnose the disease of the patient. The utilization of computer helps the physicians in saving data, searching for latest methods for diagnosis of various diseases and to study the new methods or diseases by using computers or internet. The tools for support of networks need to randomize so that it can maintain the quality of care in the hospitals. Physicians have the basic need of a computer and IT services to store their records or important information related to their profession (Cook et al., 2015).

Importance of Information Technology

There is the large importance of information technology in healthcare sectors as physicians widely use this technology for providing the optimal care and assistance to their patients. Information technology provides large benefits as physicians can save patient's record, security of data and diagnosis of diseases. It is known to all that different diseases are taking birth with time so that physicians must remain updated and required to have the complete information about diseases. Physicians which research on new diseases or other medical terms also require the tools of IT for their research (Sobral, Rosenbaum, Figueiredo & Braga, 2015). Most of the hospitals provide these tools to physicians for the safety of records and good quality of care. There are many drawbacks when physicians do not have the access to computer or IT because physicians are not able to store the data or cannot research on medical terms. Technology overall influence the medical fields such that different applications are established for the health issues (McClellan et al., 2013). There are large benefits of information technology as it reduces the cost, saves time and provides the quality of care to patients and physicians. Figure: 2 shows the quality of the process, saving time in saving data and reduction of costs through tools. Physicians also use different applications of medical for a checkup as it saves time and provides authentic results. There are physicians who do not utilize the computer or service of IT as they do not find it appropriate and face difficulties in typing as well. Different hospitals arrange training for their physicians to utilize of computer and training services



Figure: 2 Information Technology; Source

Retrieved from Survey of patient and physician influences and decision-making regarding CT utilization for minor head injury by Quaas et al., 2014, from Injury 45(9) pp. 1503-1508.

According to Quaas et al., (2014) physicians have to completely check the reports and analyze the disease for treatment of the patient. If the physicians are taking more time going through the reports and analyzing of disease then it can create a negative impact on the patient as physicians do not get more time to interact because of checking the data. If the data is stored on servers or web pages then physicians can easily conclude the data and interact with a patient who sends the good impact on the patient (Weaver, Ball, Kim & Kiel, 2016). There are many software and data which help physicians to easily analyze the diseases (Sobral et al., 2015). Whereas, hospitals also installed different software to facilitate their physicians such as; physicians can check their appointments or can upload the data of patient for keeping the safety of records. There are many types of research which show that work of physicians became easier by the implementation of information technology. It also shows in many developing countries physicians do not have the knowledge regarding IT and still use the paper format for patient's information (Cresswell, Bates & Sheikh, 2013). Recent reports show that there is an increase of IT services with time and help physicians to diagnose the health issues. For the issue of lack of information about IT, many countries are trying to provide the information to new physicians and students of medical so that in future they do not face any problems regarding the utilization of computer and other services of Information Technology.

Conclusion

The world is completely influenced by the technologies and the field of medical has the good part in it. Every profession has the need of a computer and other IT services for efficient work and time-saving. Similarly, physicians also have the basic need of different services of information technology. Physicians improved their work standard and quality by utilizing the services of IT. Utilization of computer and different services of IT help the physicians to store the data of patient on web pages or web servers, to the research of new medical terms and diseases and to diagnose the disease completely. For authentic treatment physicians need to interact with the patient and IT services helps them in it. For storage of specified data and information, information technology and computer are best utilities because the important data in the paper format can be lost. Physicians or patients can access their data whenever they want through IT. There are still many hospitals in which utilization of IT services still not started which cause them different problems regarding data and performance. Old physicians do not use computers as they feel problem in typing and utilizing of IT services. There is a large scope of information technology in healthcare sectors as it provides the large benefits to physicians in taking care of their patients. The world is getting familiar with technologies so as physicians are also adopting the information technology to provide the optimal care to patients. Hence, it can be stated that information technology has the large scope in future in healthcare sectors where physicians can avail large facilities through it.

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