Example of technological advances in healthcare essay

Technology, Internet



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Abstract

With the advancement of technology, there is the adoption of this in all sectors. The medical field is not left behinds in this enhancement. There is the use of technology in virtually every sector of the medical field.

Technology has enhanced the delivery of services. technology has also helped in data access as nurses who work in the field now have the chance to access information that is stored in the office without having to physically walk to the office. Diagnosis has also been automated and the use of technology is evident in this medicinal process too. With the use of machines, these processes are improved as computers never become tired or are inaccurate. This paper will look at eth impact that technological advancement has had on medicine. It will look at the extent in which technology has been employed in medicine. It will also look at two sectors where technology has been applied. These include data access and medicinal processes.

Technological advances in healthcare

Technological advances have affected the growth of health care in the United States. There are special areas of the medicine industry where technology has affected the way healthcare is administered. There is no place where technology is not taking place. There are various sub-fields in the medical area where technology has been felt. The history of technology in the US can be traced back to the 1970s when the treatment of heart attack was traditional. In those years, cardiac care units were introduced to the domain so that lidocaine was used in the management of heart beats which were irregular. On the other hand, beta locks were used to reduce the blood pressure in the first three hours of a heart attack. After this, there was then the use of clot buster drugs and after this, coronary artery bypass surgery was widely used. After this, there was then the introduction of agents of blood thinning when there was an experience of a heart attack so that the heart attack could be prevented from occurring once again. The beta-blocker therapy was enhanced further so that it did not only last for a short period to being used for long time until the patient was stable enough. It was in the 1990s where effective drugs were introduced to inhibit the disease. Other areas in the medical field where technology has taken place data access by patients. This has been enhanced by use of electronic health records.

Before the advent of the internet, there was the use of files and traditional cabinet system to manage the data. This became hard especially in managing pandemic diseases like HIV/AIDS. This led to use medical records in the 1980s to record patient data. The problem with this is that of access to

the data. Nurses had to travel to the working places to access the data. There was then the need to have a data access model that would enable the nurses to access the data from their offices. This led to the use of local area networks. These networks enabled nurses to access the data store in their offices. Those nurses who were working in the field did not have the privilege to get access to the data in the offices. This was then solved with the development of virtual private networks. Doctors and nurses need to communicate with each other at all times. Patient files and data need to be shared for effective treatment and service delivery. Virtual private network implemented in the US has solved this problem greatly leading to a more effective system. The issue of loss of connection is no longer experienced as VPN offer a dedicated path for use by users of common purpose. Data need not to roam to other networks due to the fact that the dedicated path would direct data to the desired destination. The reliability of the VPN connection ensures that there is consistent network connection. Such problems as connection problems have therefore been eliminated considerably. Since the implementation of the information system, there has been some considerable benefit would go as high as 90 in a month. Initially, the problems were encountered frequently and the tickets for problems were many. After the system was implemented, there was an increase in nurse productivity by an index of 50%. Also noted above, there was an increase in patient enrolment in the hospital by an index of 50%. This is one of the major advantages that were realized as a result of the system. It is for this reason that efficiency is recognized as one of the most important aspects of an information system that is used in a hospital.

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One of the important factors that all medical systems should ensure its availability is the access to health care medical records of all patients at all times irrespective of location or type of system user. One of the main reasons for bringing in information systems is that efficiency is achieved with the use of these systems. In hospitals, nurses will need to look at patient data look at their history and be able to enter diagnoses for them. This task was previously hard and difficult to achieve effectively and with great satisfaction due to the many problems that were experienced. All the nurses visiting patient's homes experienced connection issues and pertinent loss of data as a result of roaming from one network to another. Accessing electronic medical records was a problem. Virtual private network implemented in hospitals has solved this problem greatly leading to a more effective system. The issue of loss of connection is no longer experienced as VPN offer a dedicated path for use by users of common purpose. Data need not to roam to other networks due to the fact that the dedicated path would direct data to the desired destination. The reliability of the VPN connection ensures that there is consistent network connection. Such problems as connection problems have therefore been eliminated considerably.

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