

ASSIGNMENT 2  
ON  
Evolution Of Modern Health Care System

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# 1 Modern Health Care System

Health care is the prevention, treatment, and management of illness and the preservation of mental and physical well being through the services offered by the medical, nursing, and allied health professions. According to the World Health Organisation, health care embraces all the goods and services designed to promote health, including “preventive, curative and palliative interventions, whether directed to individuals or to populations”. The organised provision of such services may constitute a health care system.

Modern healthcare has been transformed by advances in technology. The rise of a consumerization culture where people can easily shop around for suitable services also has an impact on modern healthcare. Medical practice managers need to respond to these changes by developing strategies to provide the best patient care while remaining profitable.

Here are common features of modern healthcare

- 1.Improved doctor-patient communication
- 2.Efficient recording of information in real-time
- 3.Better connectivity with Internet of Things (IoT)
- 4.The rise of wearable tracking devices

## 1.1 Improved doctor-patient communication

Improving patient satisfaction scores should be a top priority for medical practices. The drive towards patient-centered care is a key facet of modern healthcare and doctors need to find new ways of effectively communicating with their patients. Patient engagement should extend beyond the conventional office visits. Health practitioners can learn from other industries, like retail, and consider using apps like chatbots to communicate with patients about run-of-the-mill inquiries. These chatbots can be developed and monitored by healthcare professionals. Facilitating this type of communication can be in the form of an online triage system to point patients in the right direction.

## 1.2 Efficient recording of information in real-time

Modern healthcare is driven by data. However, this data will only be fit for purpose if it's accurate and delivered on time. Errors when recording symptoms have led to misdiagnosis and the wrong treatment being administered. The traditional way of recording information involved doctors writing information on paper charts. These charts would need to be circulated to the different doctors dealing with the patient's care. Moving paper around increased the likelihood that charts would be misplaced. For example, charts could be lost if a patient changed doctors or went to see a different doctor, such as a locum. Paper charts depended on the patients being able to remember details of their diagnosis and treatment to ensure that their records were up to date.

Modern healthcare has improved the information recording process. Results and patient information is entered into a system that can be accessed by different

healthcare professionals. Additionally, mobile devices are used to update the conversations with patients in real-time. This provides more accurate reporting since secretaries are no longer required to transcribe notes, which could lead to errors.

Electronic health record (EHR) systems, like Practice Fusion, include features such as centralized chart management to enable medical practitioners to access patient records anywhere, anytime and on any device. An EHR system is regarded as an essential element of modern healthcare because it ensures that communication with other healthcare professionals, like insurance companies and diagnostic centers, are kept in a central place. Test results are also returned quicker using an EHR system. Results are entered into the system, which removes the risks of them being misplaced. The patient can be informed about their test results as soon as they have been assessed by a doctor.

### **1.3 Better connectivity with Internet of Things (IoT)**

There are many applications of the IoT in modern healthcare. Remote monitoring and medical device integration are two such uses. The aim of utilizing the IoT in modern healthcare is to increase patient engagement and improve the ways that doctors deliver care. Healthcare providers, like Stanley Healthcare, are using the IoT to help hospitals with real-time location services to track staff, patients, and medical devices. Stanley Healthcare's IoT services can also provide environmental monitoring – for instance, checking the temperature of fridges where medication is stored.

Companies like Amazon and Google are already utilizing the IoT for their Amazon Echo and Google Home voice-controlled assistants. These devices use machine learning to respond to consumer queries. These smart speakers could be of benefit to your patients by reminding them about taking their medication or when they have appointments.

### **1.4 The rise of wearable tracking devices**

These devices can be used to track sleep, exercise, and heart rates. This aspect of modern healthcare sees consumers taking a proactive approach to their health by pairing up wearable devices with their smartphones to track and store data. Even though wearable technology is growing in popularity, there are some who believe that the adoption rate would be higher if doctors could use the information from the device to improve patient outcomes.

Wearable technology is now being developed for the specific use of patient care. For instance, Philips has introduced a medical-grade wearable biosensor that continuously measures at-risk patients as they move through different parts of the hospital. The device will measure signs, like the patient's respiratory rate, skin temperature, and heart rate. The biosensor will be linked to software that would notify the relevant caregiver in order to detect issues and intervene where necessary.