# **ASSIGNMENT**

on

Two page write-up on "Evolution of Modern Health Care System"

Submitted by

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#### **INTRODUCTION**

Between the years 1750 and 2000, healthcare evolved from a simple system of home remedies and itinerant doctors with little training to a complex, scientific, technological, and bureaucratic system often called the "medical-industrial complex." The complex is built on medical science and technology and the authority of medical professionals. The evolution of this complex includes the acceptance of the "germ theory" as the cause of disease, the professionalization of doctors, technological advancements in treating disease, the rise of great institutions of medical training and healing. and the advent of medical insurance. Governmental institutions, controls, health care programs, drug regulations, and medical insurance also evolved during this period. Most recently, the healthcare system has seen the growth of corporations whose business is making a profit from healthcare.

### **Engineering in modern medicine**

Prominent biomedical engineering applications include the development of biocompatible prostheses, various diagnostic and therapeutic medical devices ranging from clinical equipment to micro-implants, common imaging equipment such as MRIs and EKG/ECGs, regenerative tissue growth, etc...

### **Role of Biomedical Engineering**

Department of Biomedical Engineering provides safe, calibrated, and operational equipment for delivery of the best health care possible reducing the inconvenience and frustration caused by malfunctioning equipment and the time lost because of the non-availability of equipment

#### **Roles played by Biomedical Engineers**

Biomedical engineers typically do the following: Design biomedical equipment and devices, such as artificial internal organs, replacements for body parts, and machines for diagnosing medical problems. Install, adjust, maintain, repair, or provide technical support for biomedical equipment.

Modern medicine and healthcare rely heavily on engineering to deliver improved prevention, diagnosis, and treatment of illness. These technologies are vital to the delivery of efficient health services. However, in the health sector, the contribution of engineering is often hidden.

#### How has healthcare changed in the last 10 years

Healthcare has changed dramatically over the last ten years, primarily due to emerging technologies and the digitization of the patient experience. Among the biggest changes to the patient experience are electronic records, telemedicine, remote monitoring, wearable technology, wireless communication, etc.

#### **Conclusions**

Health care organizations are constantly changing as a result of technological advancements, aging populations, changing disease patterns, new discoveries for the treatment of diseases, and political reforms and policy initiatives. Changes can be challenging because they contradict humans' basic need for a stable environment. Organizational changes in health care are more likely to succeed when health care professionals have the opportunity to influence the change, feel prepared for the change, and recognize the value of the change, including perceiving the benefit of the change for patients.