ASSIGNMENT

on

Two page write-up on Disruptive Innovations in Healthcare

Submitted by

MD URUJ AKBAR RAHMAN

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Submitted to

Dr. Saurabh Gupta

Assistant Professor

Department of BIO MEDICAL ENGINEERING
National Institute of Technology Raipur
G.E. Road, Raipur Chhattisgarh-492010, India

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1 Introduction

There has never been a moment in medical field where innovation has not been associated to it. New procedures, biomedical equipments, and healthcare management practices are often seen to be in adaptation. What is disruptive innovation, and what impact does this have on today's healthcare system? Disruptive innovations are those that cause radical change and often result in new leaders in the field. They overturn the usual way of doing things to such an extent that they have a ripple effect throughout the industry. In view of corporate world, these innovations creates a new value and name in the market or enter the market with a fresh brand and then eventually displaces market leading firms.

2 Examples

Technology is the biggest factor responsible for many disruptive innovations in today's world. Nowadays almost every aspect of healthcare is dependent on some form of tech. From wearables and mobile phone apps to big data and artificial intelligence (AI) use in diagnosis, all these tech and innovations are huge contenders of revolutionizing the healthcare industry. Here are the top hot shot trends that are basically responsible for disruption in health care industry.

2.1 Block chain:-

Block chain is a database technology that uses encryption and other security measures to store data and link it in a way that enhances security and usability. This innovation facilitates many aspects of healthcare, including patient records, supply and distribution, and research. Tech startups have entered the healthcare sector with blockchain applications that have changed how providers use medical data.

2.2 Internet Of Things:-

• What if public health managers could gather data from wearable devices, thermometers, smartwatches, and various other consumer devices — and then use that data to discover disease clusters and provide care to patients more effectively? That's the vision of the internet of things (IoT). The IoT era can also be beneficial in the remote treatment of the patient's specially focused out during the covid pandemic.

Some of the complex issues surrounding IoT includes *Weak password protection *Insecure interfaces *Insufficient data protection *Poor IoT device and data managemnet IoT also dwells us to ponder upon the questions related to tech products as — are they consumer products or medical devices that require Food and Drug Administration (FDA) approval?

2.3 Tele Medicine:-

COVID-19 has undoubtedly accelerated the delivery of telemedicine, and experts predict that it might be here to stay. Telemedicine, also referred to as telehealth or e-medicine, is the remote delivery of healthcare services, including exams and consultations, through the framework built for the purpose. Telemedicine allows healthcare providers to evaluate, diagnose and treat patients without the need for an in-person visit.

THE patients enjoy less travel time and expenses, privacy related stuffs and also avoid exposure to potentially contagious patients. WHEREAS the providers enjoy added revenue due to time saved ,more efficiency,rise above the cutting edge environment of retail health clinics and also the chances to miss their appointments due to lack of time is also decreased.

3 Disadvantages

Well all the above stated points might get you enlightened about the pros of the topic but here some of the cons

3.1 CYBER SECURITY:-

With the advent of IoT the dependence on cloud space has increased exponentially. All of this has increased our dependence on online data which stands at potential risks to be accessed by third party organisations or some might trick the patients to lend over their data in wrong hands. The risk isn't just limited to breach of private data but also ransomewares. All the professionals would be somewhere related on the data for important treatment and diagnosis. If data is altered then it can lead to adverse events. Also the tech world of IoT also brings up the risks of altered functions which might be fatal in severe cases

3.2 SIGNS OF MISCOMMUNICATION:-

The user interface of most of the medical devices and softwares are incompatible with lot of users. It also creates a lack of empathy between patients and profesionals. Specially the elder population and the vulnerable patients are the ones getting frustrated and confused due to lack of compliance . Also too much dependence on a particular A.I can also show poor implementation techniques as the algorithm used by the software in the end designed by the humans.

4 Conclusion

Hence we can altogether see that all these disruptive innovations are required in the healthcare and medical field to make the implementations cheap and affordable . But altogether we be diligent to use all these techniques . As science can be in the end prove as a bane if not used properly.