



## Basic Biomedical Assignment-IV Disruptive Innovations in Healthcare

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# Disruptive Innovations in Healthcare:

Every part of healthcare is dependent on some type of technology, which is the most powerful driver of many disruptive breakthroughs in healthcare. Any new technology, from wearables, mobile phone apps, big data, artificial intelligence (AI) and machine learning in diagnostics, has the potential to disrupt healthcare.

Disruptive innovation of healthcare is most valuable technique or device in medical field which contribute day by day in various field . Disruptive innovation are those that cause radical change and often result in new leaders in the field. disruptive technology is an innovation that significantly alters the way any industry operates. Disruptive technology is gradually changing the face of healthcare and technology as we know it – as it evolves technology that reduce many pain points for patients and healthcare system.

Innovations are happening day by day in the world of science. With new innovations, the use of old machines is decreasing. In the modern world, better technologies and better machines are being discovered and leading to advances in the medical field.

Few Disruptive Innovations in Healthcare are:

## 1. Remote Care:

Many challenges in healthcare are being solved by remote patient care. Remote care relies on the IoT's convenience in moving data across devices to provide convenience while preserving high-quality treatment for patients. Video conferencing technology, big data, and wearable technology enable remote patient monitoring and telehealth. Physicians may watch and diagnose patients from afar, speaking with them about symptoms and even seeing medical issues in order to make an informed decision on medication or surgery without even being there in the room or state. Physicians can reach out to more people who don't like going to the doctor or can't afford it. Finally, by reducing hospital visits and freeing up hospital rooms for people who need them, as well as healthcare personnel' schedules, remote care can save money for everyone. Remote care will only improve in the future, disrupting healthcare with its promise of real-time communication, improved quality of life, more accessible health care, and cost savings.

## 2.AI and machine learning:

AI applications can manage patient intake and scheduling as well as billing. Chatbots answer patient questions. With natural language processing capabilities, AI can collate and analyze survey responses. AI will probably increase in use as a way to bring down healthcare costs and let doctors and staff focus.

## 3.Blockchain:

Blockchain 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.

## 4.Lasic Lasers:

Advances in laser technology have made it simple for doctors and more economical for individuals to forego eyeglasses and contacts in favour of a more permanent vision correction procedure. Another treatment where technology is assisting in cost reduction is vision correction, which is a key pain area in the healthcare business. "Surgery is performed with specialised lasers that change the eye," according to today's most advanced LASIK lasers. A surgeon utilises these lasers to gently reshape the cornea during the surgery, correcting common vision abnormalities such as nearsightedness (myopia), farsightedness (hyperopia), and astigmatism." Because of the efficiency and safety of this elective treatment, surgeons may now provide services to a wider range of patients, making vision without corrective lenses more accessible and cheap.

## 5.Nanotechnology:

The science of the extremely small — holds enormous potential for healthcare, from delivering drugs more effectively, diagnosing diseases more rapidly and sensitively, and delivering vaccines via aerosols and patches. Nanotechnology is the science of materials at the molecular or subatomic level.

Nanotechnology is the understanding and control of matter at the nanoscale, at dimensions between approximately 1 and 100 nanometers, where unique phenomena enable novel applications.

When we are looking for the future we should be very determined to serve humanity and have to work hard to fulfil its need. we have to assure the best technology should reach to grassroot level. It is said that the technology will never replalce doctors but the doctors using modern technology will replace those who are not, so the health sector should be modernise to all corner so that professionals could use new tech and the patients could get benifit of modern and effective technologies.