Emerging Technologies In Healthcare

Hari Om Mishra

23rd Feb 2022

1 INTROUCTION

Health technologies range from devices, systems, and procedures to vaccines and medications that help deliver high-quality care, reduce costs for hospitals and patients, and streamline operations. It can be any software or IT tool that improves administrative productivity, eases workflow, and enhances the quality of life.
There have been many emerging healthcare innovation that will be boon to the human civilisation in the near future.It will help in providing personilised care in the much cheaper way.
The some of the emerging technologies are as follows:

2 Internet of Medical Things (IoMT)

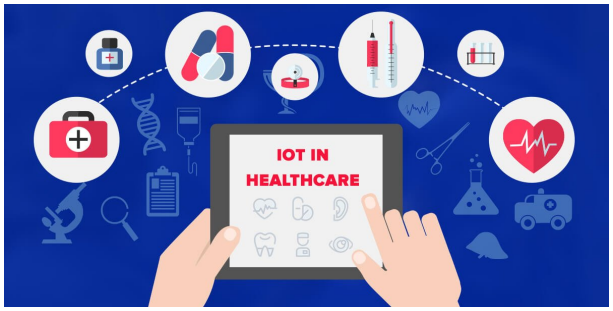

Figure 1: Internet of Medical Things

The internet of things refers to the invisible network formed by physical objects that are connected to the internet. For healthcare, this encompasses new technologies such as remote patient monitoring, 5g-enabled devices, and wearable sensors. The more than 500,000 web-enabled medical devices are increasingly interconnected to be able to provide the most accurate and up-to-date patient data.
Wearable provide the healthcare personnels the ability to monitor the essential parameters of a patient throughout the day remotely.This also helps the individual to monitor their own status which is incredibly valuable as it helps them to change there lifestyle accordingly.

3 Blockchain(Healthcare Privacy and Security)

Beyond the scope of efficiency and quality of care, privacy and security take critical priority in the healthcare industry.Blockchain is the answer to this problem.

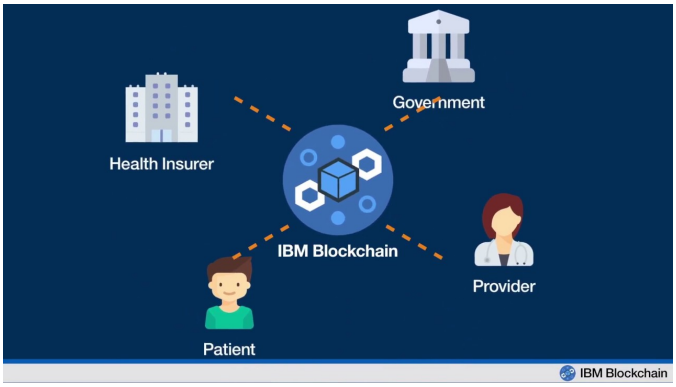

Figure 2: Blockchain In Healthcare

Blockchain in healthcare isn't just useful for the hype it's ramped up with bitcoin and other cryptocurrencies. Instead, what's exciting about blockchain is the digital record-keeping that creates the ledger of transactions that isn't only transparent, but impossible to tamper with.Thus blockchain provides additional safety to the data records of the patients and can resolve the privacy concerns.

4 3D Bioprinting

Many people around the world are in need of an organ transplant.But due to less organ available for transplantation there is a long waiting list of the recipient who are waiting for there turn to come.But during the course many lose the battle of life.
The answer to this problem is **3D Bioprinting**.This new field of 3D Bioprinting enables physicians to print artificial limbs, organs, joint replacement parts, and bio tissues. In addition, in the field of pharmacology, there are ongoing experiments for printing pills and other medications.

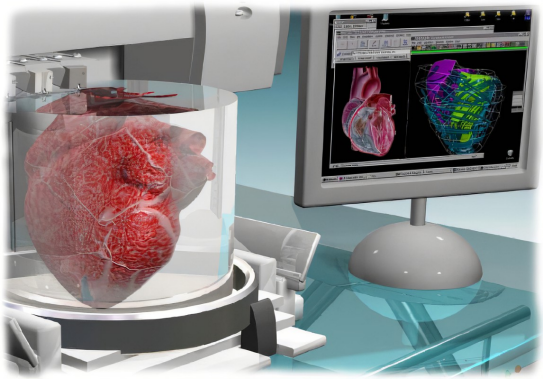

Figure 3: 3D Bioprinting Of Heart

5 Mixed Reality

This new form of interactive tech is actually a mixture of virtual reality and augmented reality to create a new way to interact with the world around us. Also known as “hybrid reality” and “extended reality”, MR has the potential to change just about every industry one can think of,healthcare is no exception.It provides instant diagonosis,medical training in mixed reality style and help surgeons perform enhanced surgery with more accuracy then ever.

Figure 4: Use of Mixed Reality In Healthcare

6 Conclusion

As 2022 rolls forward, healthcare technology will continue to improve in every area. Although security will improve across the industry, threats are always evolving that must be dealt with through prevention rather than response. Quality and efficiency of care will continue to improve due to groundbreaking and evolving technologies like artificial intelligence, machine learning, and extended reality.

****

THANK YOU!

****