WRITE-UP ON EMERGING TECHNOLOGIES IN HEALTHCARE

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1 INTRODUCTION

Medical technology has come a long way since invention of syringe and glasses.With the expansion and availability of internet the expansion in medical field has been like never before which requires people to reskill in the field in by the decade.Covid 19 was the driving force to test the massive projects in medical which leads its usage post paandemic to ensure efficiency in lot of things.

- ARTIFICIAL INTELLIGENCE-The primary trend for AI in healthcare will be utilising machine learning to evaluate large amount of patients data and other information.By creating tailored algorithms, programmers can mimic human thought and write programs that can seemingly think,learn and make decision.Overall by analysing healthcare data in this robust and comprehensive way,healthcare leaders will be able to use the findings to improve patients outcomes,reduces costs and boost staff job satisfaction.

- DIGITAL THERAPEUTICS-Patients with chronic illness requires continuous treatment and care from doctors which involve symptom monitoring, medicinal requirements, changes in behaviour in order to ensure proper treatment of patients, but this process is time consuming and costly often not affordable.Digital therapeutics bridges the gap between the twoby providing a software programs that can be accessed using the phones.As patients use the app thi information is reported back to doctors.

- 5G-ENABLED DEVICES-This is revolutionisng the way people across the globe are connected.This is onee of the biggest contributors for the expansion of telemedicine as they ensure reliable and lightning fast internet connection.With next-to-zero latency, 5g connected sensors medical devices can capture and transmit data nearly instantaneously.

- AUGMENTED REALITY- With AR, we take a real-world image and superimpose it with a computer-generated recreation, and in doing so we gain an enhanced understanding of it.Augmented reality opens new doors for surgery by improving education for young doctors and providing surgeons with a more functional platform to zero in on their micro-movements.Medical imaging — AR enhances visualization of CT or MRI data by superimposing stereoscopic projections during a surgical procedure. This information is vital in surgeries requiring precise navigation to a particular organ. For example, AR can be used for pre-operative planning enhances accurate localization of tumors and surrounding structures for performing procedures such as minimally invasive partial nephrectomy or radical prostatectomy where the challenging anatomy of the vascular or nervous system could complicate the tumor removal.EyeDecide — Uses a smartphone camera to simulate the impact of various disorders on a person's vision to educate patients with cataracts and age-related macular degeneration.

- BLOCKCHAIN-Blockchains in healthcare can be envisaged in five primary areas:

  1)Managing electronic medical record (EMR) data
  2)Protection of healthcare data
  3)Personal health record data management
  4)Point-of-care genomics management
  5)Electronics health records data management
  Its the best way to solve the problem of data breaches.Moreover, hacking would be limited by the need to attack each user individually to obtain private information. Thus, blockchains can provide an immutable audit trail of health information.