## **ASSIGNMENT**

February 7, 2022

On

# "Future of Health care"

Submitted by: Priyanka Harde

Roll No.:21111039



#### NATIONAL INSTITUTE OF TECHNOLOGY

Under the supervision of : SAURABH GUPTA

## Contents

1	ACKNOWLEDGEMENT	3
2	INTRODUCTION	3
3	Technologies which can change our Future	3

## 1 ACKNOWLEDGEMENT

I would like to express my sincere thanks and gratitude to Saurabh Sir for letting me work on this project. I am very grateful to him for his support and guidance in completing this project.

I am thankful to my parents as well. I was able to successfully complete this project with the help of their guidance and support. Finally, I want to thank all my dear friends as well..

## 2 INTRODUCTION

The transformation of the healthcare industry will not only bring us better health outcomes, but also future-proof not just the sector but society at large. Delivering wellness, a connected health ecosystem will use technology platforms underpinned by Business 4.0 drivers: AI, agility, automation and cloud

#### 3 Technologies which can change our Future

• Artificial intelligence

Using patient data and other information, AI can help doctors and medical providers deliver more accurate diagnoses and treatment plans.



• Virtual reality- For the person in the VR simulation,



the experience is much more impactful than just thinking or learning about it. In a method known as therapeutic VR, users wear a VR headset and experience a simulation designed to calm their mind.

• Augmented reality-



Augmented reality is the enhancement of the real-world environment in a way (just think of Google

Glass). It gives an image of the real world, projecting digital information onto the existing surroundings.

• Healthcare trackers, wearables and sensors In



healthcare, the Wearable IoT (WIoT) is a network of patient-worn smart devices (e.g., electronic skin patches, ECG monitors, etc.), with sensors, actuators and software connected to the cloud that enable collection, analysis and transmitting of personal health data in real time.

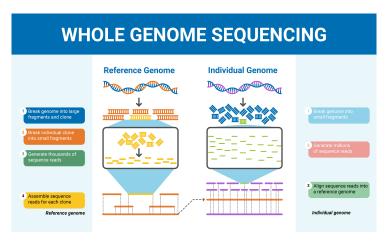
• Medical tricorder



A medical tricorder is a handheld portable scanning

device to be used by consumers to self-diagnose medical conditions within seconds and take basic vital measurements.

• Genome sequencing When an individual undergoes



whole genome sequencing, they reveal information about not only their own DNA sequences, but also about probable DNA sequences of their close genetic relatives. This information can further reveal useful predictive information about relatives' present and future health risks.

• Revolutionizing drug development-



The traditional linear process of drug discovery and

development will be replaced by an integrated and heuristic approach. In addition, patient care will be revolutionized through the use of novel molecular predisposition, screening, diagnostic, prognostic, pharmacogenomic and monitoring markers.

• Nanotechnology 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.

Robotics- Medical robots assist with surgery,



streamline hospital logistics, and enable providers to give more direct attention to patients. Robots in the medical field are transforming how surgeries are performed, streamlining supply delivery and disinfection, and freeing up time for providers to engage with patients.

#### • 3D-printing-



3D printing is used for the development of new surgical cutting and drill guides, prosthetics as well as the creation of patient-specific replicas of bones, organs, and blood vessels.

## 4 Conclusion

Digital revolution undoubtedly modifies the way we develop, practice, and provide medicine. This paradigm shift will directly influence the evolution of health-care systems. Technology allows a more and more precise and personalized medicine. Technologies that long term benefit to the patient will be accepted.

#### References -

 $health.economic times.indiatimes.com, www.arm.com,\\ www.scnsoft.com, wikipedia, www.nano.gov\\, www.intel.com, tractus 3d.com$