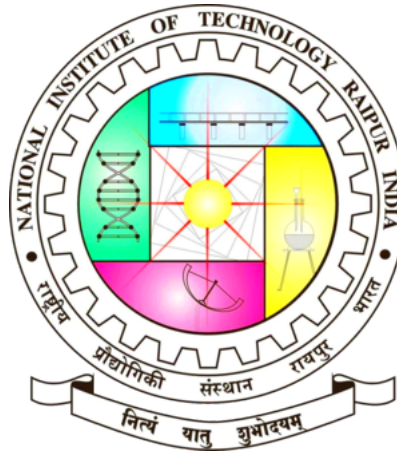# National Institute of Technology, Raipur

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Biomedical Engineering Assignment 5

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Emerging Technologies in Health Care

Health care technologies are not only focused on devices, but also include systems and even procedures that could help to vaccinate and medications that would deliver high quality care. They can also reduce costs for hospitals and patients saving them from the trouble from multiple diagnoses and figuring out what the problem exactly is. These tools may also improve administrative productivity, help to make work more efficient and enhance the quality of life.

Here are some of the promising emerging technologies as of now:-

1. Virtual Concierge :-

A virtual concierge may act as a mediator or the middle man in helping faster and better communication between multiple number of patients and the hospital at any given point of time. This could range from answering emails, phone calls and scheduling appointment (avoiding any clashes), taking feedback (complaints or requests) and even enabling faster payments and billings accurately. Some of the perks of having virtual concierge are better real-time communication, offering transparency, improving the patient experience and reducing the complexity of the operations via upgrading the digital infrastructure.

2.Artificial Intelligence :-

AI has the potential to radically transform the health care system. It can organize and analyze data in such a way that when a patient enters with similar symptoms it can start suggesting the appropriate diagnosis and treatment and can also make professionals judgments' better reducing the factor of human error. On

combining with machine learning, the more amounts of data it gathers the more accurate it becomes. This type of technology could really prove to be useful when it comes to life-threatening diseases like cancer.

3. Voice Search :-

Voice search is gaining popularity exponentially. Voice search offers better interaction and with machine learning capabilities will improve accuracy the more it is used. Voice search can be used to inquire about symptoms, ask about medical information, locate urgent nearby care, hospital and research treatment options so a patient could get an idea of what he/she might have to go through. Other applications include buying medications, scheduling an appointment, inquiring about insurance coverage and using a health tracker or device.

4. Virtual Reality :-

VR appears to be a very promising field with a lot of potential. It could be used to communicate and develop social skills for children with autism, could also help in engaging patients with activities and games for rehabilitation purposes. This can be extremely useful for patients who are bed ridden or have been staying in hospitals for too long. It can give them a pleasant experience and also help them mentally enabling better response from the patients.

5. Mobile Apps :-

Wherever we go, we always have our mobile with us. The fact that we carry it with us everywhere makes it an excellent medical device. Mobile applications can upload patients' medical records, help in quick communication and consultation. It also acts as the

output screen for many new portable medical devices such as the portable ultrasound. Nowadays, it has become very common for people to use mobile fitness apps that also keeps a track of vitals. Mobiles can also help with pill and appointment reminders.

References :-

$https://gyant.com/5 - emerging - technology - trends - for - healthcare - for - 2021/$