AI in Healthcare

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The most hyped and most popular topic in the present time for all engineers is A.I. and when it come to healthcare, we can see the a potantial revolution in healthcare with the help of AI, we can see a huge gap is cleared in between the accuracy and time diagnoses for medical reports. Now lets see it in a bried manner to know more about the Topic-

1) **List exhaustively the various department involved & the expertise there in.**

Here listed various departments which is involved in the healthcare with there expertise -

a) **Pathology:-** Mostly used to deal with the cause and effect of the diseases, and with the help of the AI we can devlope and implement all the new tools to classifie the disease.

b) **Radiology:-** With the medical imaging(X-ray and all) diagnosing and treating the diseases and with the help of AI we can we can develop new tools with high accuracy comparing to the previous one.

c) **Cardiology:-** This is the specilasation of the heart and respiratory system to check the disorderness on the blood presure to prevent the heart attacks. And with the help of AI we can devlope new gadgets for the treatment of all heart related disease.

d) **Neurology:-** The sector which take care of the all brain related and spinal cord and nerves system related disease. And with the help of the AI devlope new technology which give treatment of neurological disorderness.

e) **Pharmacology:-** To get more related informationand understanding of the sources of the medicines and medications with there chemical properties. And with the help of AI, we can develop new medicines with effective and accurate quantity of chemical products.

There are much more departments which are involved in the sector here i gave brief about some of them.

2) **What intelligence is required to perform those acts and responsibilities?**

To perform the acts and responsibilities involved in the development healthcare, basically we need to have a combination of the following types of intelligence:

a) It needed the knowledge of the medical field like pathology, physiology and cardiology etc. needed some clinical expertiese also.

b) With the medical field it need the most comman area which can devlope the tools, machine learning with the help of cs and maths. We can say technical intelligence.

c) The power of communication is the most important act, of we dont have enough for this we cant have a look on the disease of the patient.

d) Sometimes we need extra activated mind of presence to get the pattern of the disease.

Other than this we can say we need common human knowledge for the understanding of the terminology in the medical sectors. And to devlope some new tools and get the baisc idea of the medical reports to analyze the disease at low level which can help in the crucial time.

3) How are these being/likely to be/ in the future replaced by AI?

All the menioted intelligence can be replaced by the AI, will see all the aspects which can be lead to a AI word-

a) All the basic diagnosis can be done by the help of the chatbots which can give us all the idea about the medical help needed.

b) To get the more accurate results for the diseases we can use some AI powered system.

c) Some needed therapy session can be run by the help the trained robots.

d) For the communication aspects also we can use the chatbots where we can reach out or can get the possible reports of the patient without getting the physical appreance with the best knowledge of the patient.

Here we need AI in the healthcare but human cant be replaced by the AI because we cant totally depend on the AI systems for out being.

4) How much of human and artificial intelligence would prevail in these systems?

In the upcoming future , artificial intelligence will be a very big part of the healthcare system. Even nowadays we can see doctors performing surgery using

robotic methods and robots assisting in therapies. AI is also helping in faster and efficient diagnosis. So in the upcoming time , we can expect AI robots performing minor surgeries or even home equipped robots which can help in the first aid if something bad happens also alerting the nearest hospital in case of emergency.But still we will need the humans to take on the spot decisions in case of emergencies or to perform major surgeries. Humans are also needed to make sure the algorithms or the robots are working correctly. So in conclusion, we'll have majorly AI based healthcare system coexisting with humans and depending on each other.

5) Where do you find yourself in any one of them?

For making more accurate and faster algorithms they will need the software engineers alongwith the people who are researching on the AI field.To fix the bugs and occurring issues Software engineers are needed.for making robots and improving it to be a human-like machine we'll need mechanical and electrical engineers. So in this AI-dominated future healthcare the engineers will be needed and they will play a huge and important role in shifting this current system to a new one.