**General challenges in healthcare systems**

1. It is not affordable
2. Lack of proper diagnostic in most of the cases
3. Lack of tools to establish relationship between dietary habits, body type, lifestyle with any future ailment
4. Lack of personalized healthcare or human centered healthcare
5. Lack of research support to new drug design for critical diseases.
6. Fraud and subsequent stress on the healthcare systems or patient

**Objective**

I am a passionate technologist with lot of interest in the area of artificial intelligence, block chain, AR/VR and even traditional application development. My goal is to build a platform which can make healthcare more affordable, more reliable, more-patient-friendly and easily accessible. Though I want to focus on critical diseases like cancer, diabetics or alzheimer, my initial goal is to create a generalized platform and move to specialize one later.

**Illustration of a specific issue with plan**

Issue with doctor, patient interaction

I know patients recall less than even 30% to 40% of their earlier communications during doctor interaction. On top of it, in-experienced doctors may fail to ask critical questions related to any symptoms based on past history and may fail to provide suggestion on the best suitable next-course-of- action. This may frustrate, misguide the patients and increase the stress level.

Solution to issue: Combine data from various sources like X-ray images, photographs, sensors data if available, scanned copies of handwritten notes, videos to create a summarization of any disease. Combine that with the past data from medical history to create meaningful insight. Through AI we can help conversational bots which can interact with patients to guide them based on these. We can use natural language processing to allow computers to read clinical notes, analyze keywords and phrases, and extract meaning from them so that people can create and use actionable insights. NLP can be useful in extracting vital elements from patient-physician interactions and automating content population in electronic medical records. It can act as a guide to the patient. It may save lot of time for the doctors. In turn they can focus more on critical cases. It may help reduce physical interactions of patients and doctors a lot. This will help lot of people in India, where a lot pf people do not have access to good doctors at rural and even semi-urban places. Our system will help and guide them to a large extent on their diagnosis and connect to the appropriate doctors or hospitals at appropriate time.

**What Kind of Support I need**

In order to create an artificial intelligent system, we need lot of data with some domain experts. The data will help us build questions and domain experts (doctors or medical professionals) will help us infuse intelligence to the system by helping us answer the questions. I want to correlate medical records with disease patterns, subsequent doctors’ suggestions and the positive or negative impact on the diseases after adopting a course of action. If there is already established data platforms, it would be too helpful if I can get access to that. If it does not exist, I can even help build the data acquisition platform first so that I can think of building an intelligence system later. For that reason I want to work with doctors, hospitals or healthcare professionals, if required. To start with, I can start work with a single hospital (preferably from India or Odisha as I am staying here) or medical facility with few set of doctors and focus on a particular disease like diabetics or colon cancer or Lung cancer and then expand later.

Please note that my idea is at a very primitive stage. So, I do not have any business model or specific market in my mind. My idea is to be comfortable to build a system first. But, if I get right support, environment or data, I can create a good revenue model later. If I create any data platform, I do not have any plan to get the data used for any insurance or other purpose as the system has to be built in such a manner that the data and subsequent models will be hospitals and patients asset only. But, the usage of data for other purpose can’t be ruled out, of course by adhering to all legal compliances.