1. Outline of the specific problem being solved

Telehealth usage has increased to about 62 percent in 2020. However, due to the absence of traditional face-to-face visits the risk of medical errors has increased. Telehealth is often based on subjective assessments that can be affected by physicians' unfamiliarity with it and the ability of the patients to follow the instructions. There are issues in understanding content for example, 53 percent of Bronx citizens do not speak English. Greater than 2.7 billion people have a vision impairment/hearing loss and greater than 90% of internet content and apps are accessible.

1. Solution to the problem

Our solution is to create a plugin to enhance the user experience of existing telehealth platforms. The doctor and patient interact with a three-dimensional human body map that aids in illustrating patients’ symptoms. The map changes its appearance by highlighting areas of interest based on patient inputs. Real-time instructions are generated by analyzing patient data using Machine Learning and helps to assist physicians in making diagnoses. To address accessibility and bridge the communication gap, we utilize audio and visual communication to seamlessly improve the virtual experience. Additionally, the platform enables sharing of patients' records securely between doctors and institutions.

1. Novelty of the approach

Competitors have used video-conferencing and self-used health monitoring devices to provide virtual diagnoses. However, the issue here is inaccuracy. The use of a three-dimensional body map enables patients to better explain symptoms to physicians. This reduces language barriers by providing a purely visual aid. Our service supports individuals with disabilities, a feature not prominent in the industry. We use Machine Learning to provide doctors with insights on patients’ conditions. This enables early detection of diseases which reduces treatment costs and subsequently saves insurers money. Furthermore, insurers are able to reduce costs by out-patient based consultations that happen through our solution.

1. Impact of the invention at scale

Our service is integrated with existing doctor-patient platforms and as a result has a massive reach in a market which is expected to grow by 7.6 percent Compound Annual Growth Rate (CAGR) to around 3.8 billion USD by 2024. The graphical user interface improves accessibility and lessens the friction around language barriers, enabling global scalability with minimal modifications to existing products. About 90 percent of hospitals in the US are expected to use AI for rapid diagnosis. In this context, the patient data collected by our platform is critical to helping us create powerful universal solutions.

1. Support the team needs to bring the product or service to market

Our product integrates with existing telehealth conferencing services leveraging the ubiquity of internet technologies and the advent of 5G. As a result, we are able to scale the business while keeping our costs low. We need seed funding to hire engineers, designers, and product managers to augment our existing product team. Additionally, we require support from industry domain experts around integrating with the existing infrastructures and to help make inroads with medical institutions. Outside of payroll, we will use the investment for software costs such as server hosting, domain names, and SaaS products required to build our application.