LIFE SINGULARITY'S INDUSTRY LEADING AI ADDRESSES SOCIAL DETERMINANTS OF HEALTH

Using proprietary AI and social determinants of health, Life Singularity has identified socioeconomic disparities that impact COVID-19 patient outcomes. These disparities can be tracked to identify vulnerable populations and AI analysis can aid in determining effective treatment options. Life Singularity is committed to providing predictions using holistic data sources, which translates to highly accurate and precise health predictions to allow for early detection and prevention strategies in vulnerable populations. Social determinants of health are an often overlooked component in healthcare outcomes, however they can contribute important information in addressing barriers to care, including revealing conditions due to socioeconomic, environmental, and occupational sources.
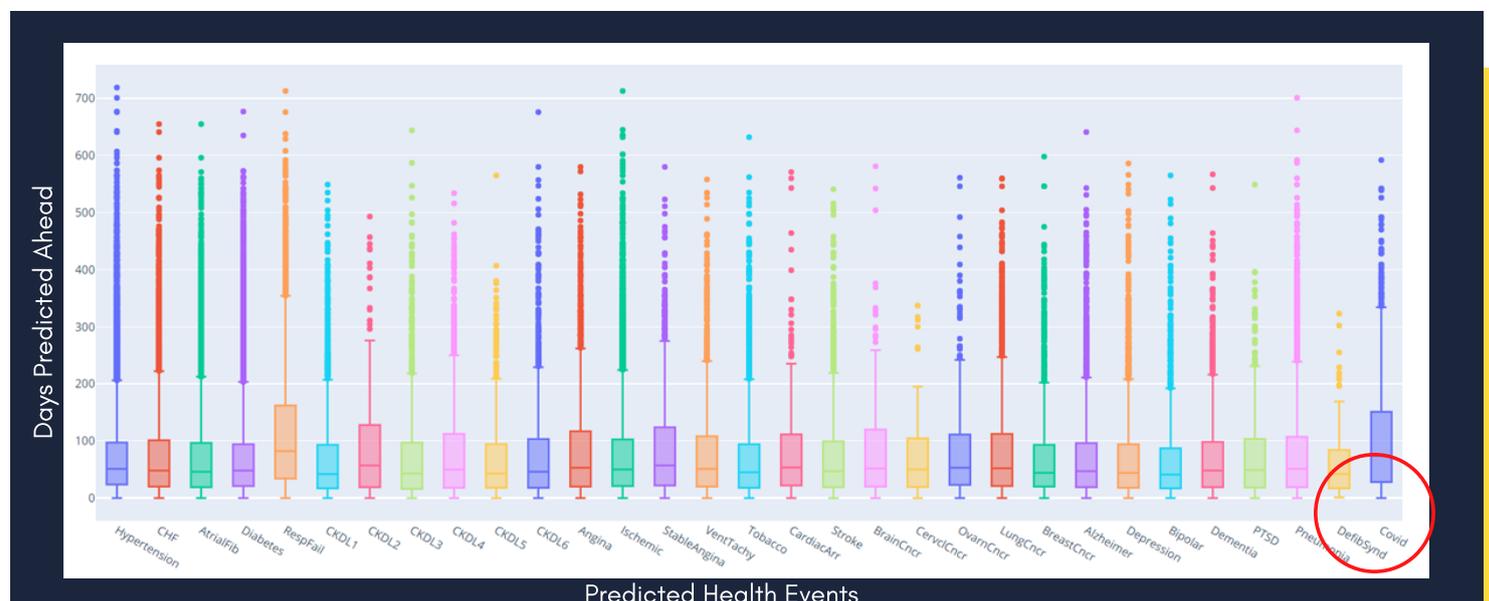
Life Singularity is unique in its approach to ensuring access to high quality preventative care with AI platforms to protect vulnerable populations.

Early detection can prevent severe complications resulting in lengthy hospital stays, in turn reducing healthcare costs and the risk of further injuries. It will also reduce the risk of disease transmission by identifying infected individuals and providing insight to prevent contact with others. Additionally, continual AI analysis will allow for comprehensive community surveillance, while Vulnerability Indices will guide community leaders at all levels in creating protocol and response policies to ensure equal access to healthcare for all populations.

In order to mitigate the effects of COVID-19 on vulnerable populations, early detection is key. Using information gathered from patient surveys, health records, and past medical history, Life Singularity can use AI to create predictive models that can understand the effects of preventative treatment and community interventions.

AI-Driven Prescriptive Modeling of COVID-19 Underlying Risks to Individual Patients

*each dot in the diagram below represents a unique patient

These interventions include county-based efforts such as social distancing and self-isolation, particularly in areas deemed highly vulnerable. The results yielded provide a baseline summary of the effectiveness of each intervention and the potential effect it could have on an individual in similar circumstances. In this way, vulnerable populations can be extensively examined and long-term effects of barriers to care can be identified and improved upon.

Life Singularity has created prescriptive models which identify populations with increased risk of vulnerabilities that could potentially hinder their return to work and future health. This information is easily accessible via geo-spatial maps and interactive displays. The vulnerability index takes into account several location-driven social determinants of health and socioeconomic statuses of different populations. Social determinants of health can include one's access to healthcare in the local area, proximity to healthcare services, ability to pay/insurance coverage, preexisting conditions, and environmental health, lifestyle behaviors, among others.

Socioeconomic status reflects the social, economic, and educational factors that play a role in an individual's ability to seek effective healthcare treatment. Combined, they are instrumental in improving patient outcomes, particularly in instances where one's socioeconomic status inhibits one from following preventative measures or accessing follow-up care. The vulnerability index accounts for these factors and analyzes relevant data to precisely

show the effects on patient outcomes, and allows for highly personalized predictions.

With barriers to care in mind, AI analysis can create predictive models to lower costs by prioritizing preventative actions. Cost-analysis has shown that preventative measures lower the overall cost of healthcare services for vulnerable populations. This includes preventing transmission and contraction of the infection as well as emphasizing social distancing and PPE precautions in response models. In this way, socioeconomic barriers to care will be addressed and eliminated, while social determinants of health will be actively considered to create comprehensive response plans with equal care in mind for all populations.

Personal Choices

Socioeconomic Factors

Genetics

Environment

Healthcare

Life Singularity

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