## LIFE SINGULARITY UTILIZES AI TO Singularity FOR SCALABLE COVID-19 SURVEILLANCE **IDENTIFY INFECTIOUS DISEASE PATTERNS**

Life Singularity is leveraging Al, community surveillance and comprehensive data analysis to identify relevant communicable disease patterns. These disease patterns will be used to inform COVID-19 readiness strategies throughout hospitals, health systems, and communities to ensure maximum evidence-based prevention.

Local, state, and federal agencies, payers and providers would be able to visualize communities via risk-stratified geo-spatial maps, perform early and real-time identification of outbreak hotspots, understand social distancing patterns generated from the AI platform to devise response strategies to COVID-19 complications and prepare emergency protocols for future disasters. Predictive analysis based on patient health records and vulnerability analysis of the States would provide insight for resource distribution and inventory stocks for current and future disease outbreaks. By understanding the epidemiology of COVID-19, community and government leaders can target response

strategies to mitigating all effects of COVID-19 while understanding how to adapt and plan for future epidemics. Examples include developing effective PPE protocols, public gathering regulations, and prevention tactics for post pandemic response. Governments would also be able to better understand equipment usage for treatment and preventative actions, ensuring effective resource allocation and manufacturing habits. Community health leaders would benefit from these tools by having access to community health check-up locations via health kiosks, and the ability to apply knowledge yielded from data analysis to protect communities during future epidemics.

As a leader in AI/VR-enabled prescriptive analytics, Life Singularity has analyzed data from a variety of sources to determine COVID-19 patterns. COVID-19 disease is communicable disease, transmitted through droplets in the air from infected individuals.

## US County - Real-time Insight into Potential COVID-19 Clusters of Respiratory Failures Risk Stratified by Underlying Vulnerabilities



It is of the utmost importance to identify patterns of spread to effectively create response protocols and future response strategies. With data from health symptoms from asymptomatic symptomatic individuals, and contact tracing, patterns have been identified by proprietary data analysis. These patterns will influence readiness strategies by helping communities at different levels understand how to best prepare for reducing and preventing the community spread of this disease.

Life Singularity has created multiple solutions for utilizing identified patterns and facilitating the creation of readiness strategies. Life Singularity's virtual Avatar has integrated learning and screening within the COVID-19 Autonomous Monitoring Platform and the health kiosks that can be used to triage or educate individuals. The kiosks will have the ability to collect real time data through sensor kits, which will allow for the identification of new disease patterns in different populations. They will also provide access to medical information and guidance, thus allowing individuals to avoid unnecessary trips to medical facilities and ultimately, reducing the burden on frontline workers. This will protect patients and encourage accessibility to medical information in areas with low accessibility to medical services.

The AI platform is unique in its ability to synthesize holistic data when making analyses and healthcare predictions. Life Singularity uses a wide range of data sources, taking into account additional environmental factors to ensure maximum accuracy and precision in predictions and identifications. These data sources include social determinants of health, emotional surveys, personal health, past medical history, facial analytics, and personal bio-metrics to ensure all areas and factors of health are included in the data analysis.

The AI platform will be able to consider patient outcomes based on millions of patient records in order to tailor predictions for individuals based on their own medical history. These unique predictions will be evidence-based and will address the effects of a COVID-19 treatment as early as possible to prevent permanent damage. Examples of this could include hospitalized patients with multiple chronic health conditions overcome indirect effects of treatment such as loss of muscle mass/tone, loss of basic brain functions, and breathing difficulties through tailored recovery predictions addressing each need. These predictions would be transmitted via specific alerts from the Elli Avatar. Ultimately, the AI platform combined with Elli Avatar is prepared to intimately prevent, predict, and address COVID-19 and additional traumas associated with the disease benefiting communities of every scale.

