The Top Health Startups Fighting COVID-19
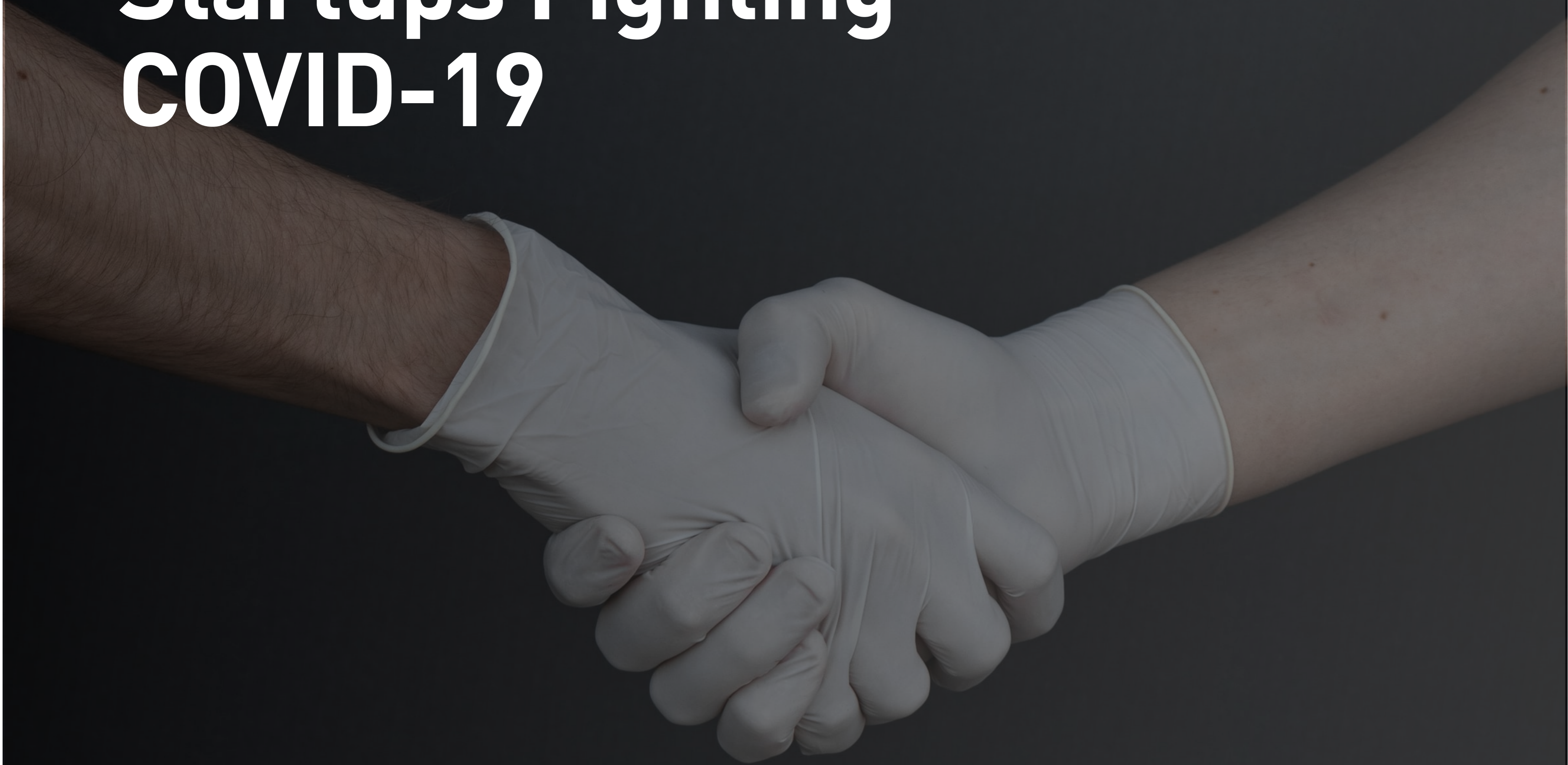
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Innovation in the Time of a Global Pandemic.

Speed is critical. As coronavirus (COVID-19) quickly spreads in the United States, officials face the daunting task of tracing case contacts and containing the pathogen. With quarantines increasing throughout the world, healthcare providers and governments must utilize solutions beyond their walls to monitor the coronavirus more than ever. Luckily, startups and researchers across the globe are already pivoting their technologies to help fight the spread of this deadly virus.

Using Technology to Fight COVID-19

Existing modern solutions in diagnostics, monitoring, and molecular development are being used as powerful tools to help fight the current pandemic. These technologies can help identify outbreak hotspots, prevent infections, reduce the need for physical contact in diagnostics, and even work towards developing a vaccine for COVID-19.

At Plug and Play, we have been monitoring new innovative startup solutions for several years. In this critical time, we are diving into the capabilities of these startups to help overcome this pandemic.

We've pulled together some of the most interesting startups in our health ecosystem that vary from solutions in remote patient monitoring, detecting pathogens, leveraging molecular diagnostics and point of care diagnostics, such as using vaccines, ventilators and respiratory protective devices, as well as ways to manage the population outbreak and leveraging clinical AI chatbots/symptom checkers.

"These technologies can help identify outbreak hotspots, prevent infections, reduce the need for physical contact in diagnostics, and even work towards developing a vaccine for COVID-19."

Remote Patient Monitoring

Remote patient monitoring solutions collect medical health data and vitals, including heartbeat, weight, blood pressure, and oxygen rate from the user's device. This data is then transmitted to providers, who can remotely monitor these patients and take action when necessary. Often in the form of apps and medical wearables, remote patient monitoring can allow physicians and hospitals to monitor patients outside of the conventional clinic setting. Remoteless monitoring can either be performed contactless or through medical devices.

Binah AI

binah.ai

Either remotely or on-premises, Binah.ai's video-based app removes the need for wearables and provides vital signs measurements such as: heart rate, heart rate variability, mental stress, oxygen saturation, respiration rate and more - all with medical-grade accuracy. Binah.ai's app countless use cases span over a wide range of fields such as telemedicine, remote patient monitoring, primary care, preventive medicine, nursing homes and life insurance. Binah.ai delivers these capabilities by applying a unique mix of technologies including signal processing and AI technologies such as machine vision, machine learning and deep learning, combined with a proprietary mathematical back-end built by their unique team of mathematicians, physicists and biotechnology PhDs. With their series of non-invasive, video-based health and wellness monitoring solutions, Binah.ai gives an unparalleled advantage in health analytics as its technology transforms any device equipped with a simple camera into a medical-grade healthcare gadget.

Their technology gives accurate, real-time insight into a wide range of health measurements by leveraging the power of AI and machine learning. Patients who are feeling ill can schedule an appointment with a doctor through video, allowing them the email at home while they may be contagious, instead of interacting with other patients and medical staff at a local facility. This is especially relevant in times of pandemic outbreaks such as COVID-19 that ask to avoid close personal contact.
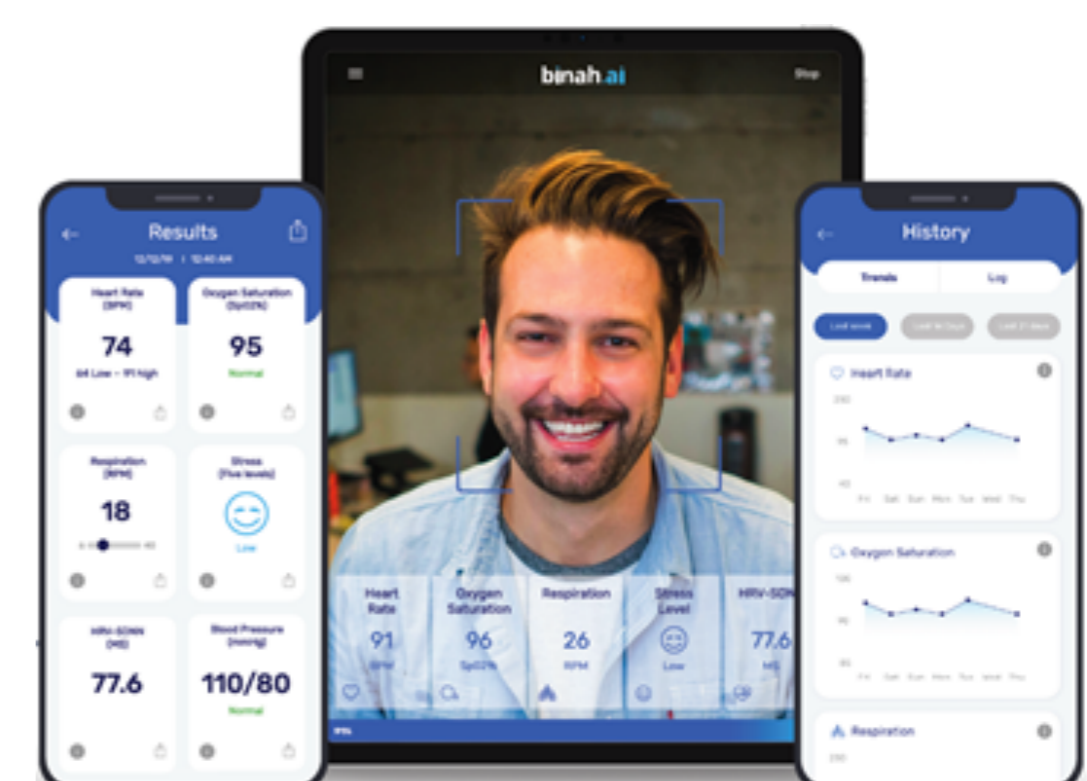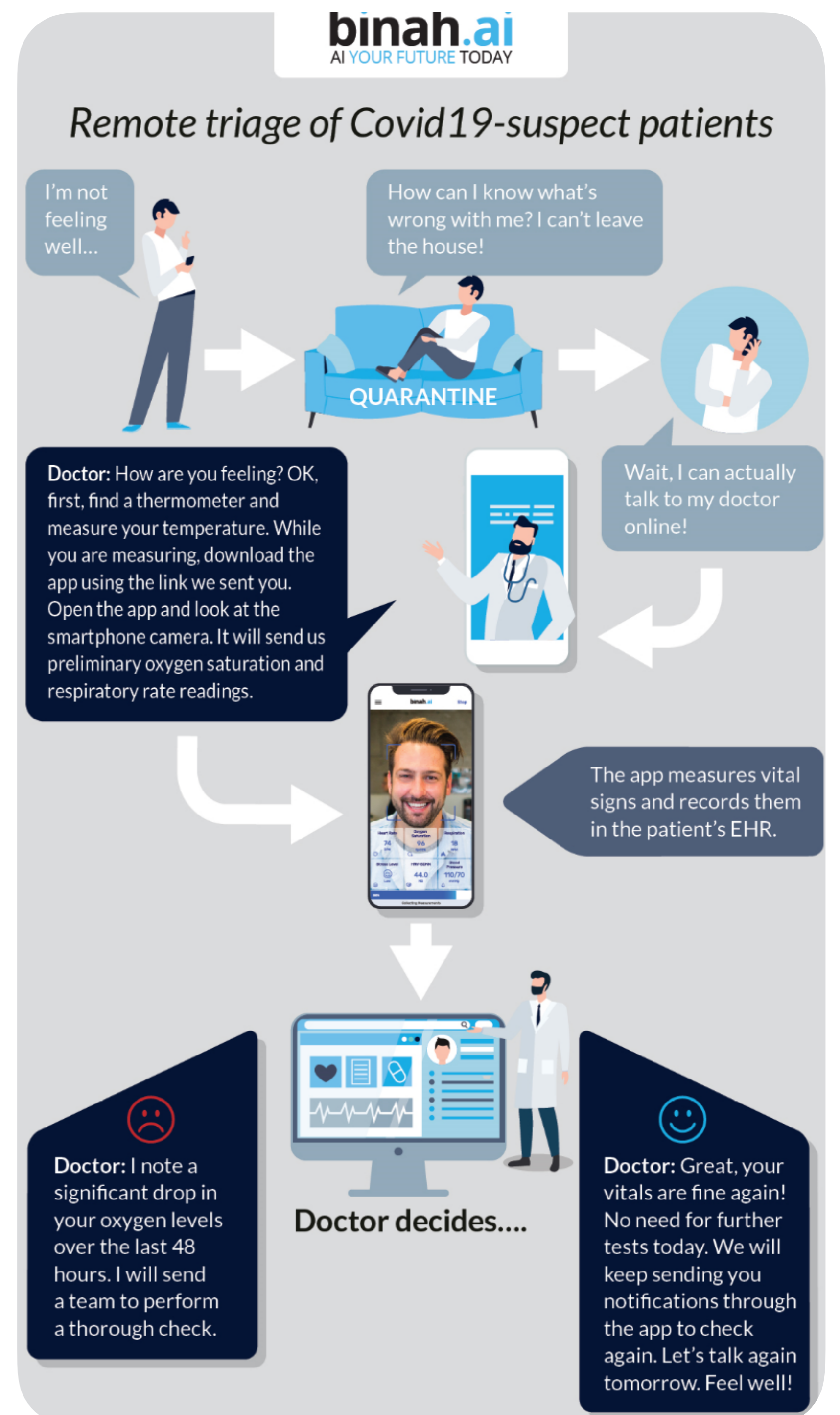
ContinUse Biometrics (Cu-Bx™)

This Tel Aviv-based startup is reimagining global health monitoring. CU-BX® has developed a contact-free sensing platform that provides highly accurate physiological measurements within a multitude of environments. Backed by extensive clinical data, CU-BX® proprietary optic-based sensors monitor key biometric parameters such as heart rate, respiratory rate, heart rate variability, and breathing patterns with medical grade accuracy. Proprietary sensors are embedded throughout the environment into electronic devices or vehicles, and seamlessly monitor vital signs of any known person who is in range. Cu-Bx™ requires no ongoing intervention, so a person's daily routines are unaffected and adherence issues are non-existent. Medical grade physiologic information is tracked and streamed to its digital health cloud, where machine learning models and AI techniques identify events and trends, and offer actionable insights that enable better health, safety and wellbeing. Since the sensors do not require physical touch to provide accurate measurement, CU-BX® sensing solutions are intrinsically hygienic, providing additional protection against the spread of infection and disease.

When confronting novel viral outbreaks, it is paramount that medical providers, institutions and organizations have the optimal tools to quickly and efficiently manage the situation. In the case of COVID-19, proximity to infected persons greatly amplifies the likelihood of contagion. Passive or contact-free means to flag symptomatic patients may thus allow greater control of viral spread.

A HIPPA and GDPR compliant health cloud maintains all records and enables meaningful analytics which further support the development of insights and potentially new preventative measures in the future.

HealthBeats

HealthBeats is a globally operating remote vitals monitoring platform designed to bring healthcare to home. HealthBeats provides users with medical devices to self-monitor themselves on a regular basis and to have their results transmitted in real-time to care providers for proactive care management. HealthBeats is the global distributor of iHealth Labs full range of regulatory approved medical devices.

Currently, HealthBeats is exploring how their platform can be made available for the broader population and support the further spread of COVID-19. Their hope is to streamline data collection and automate some of the processes to increase in speed and efficiency in response to the COVID-19 pandemic. For individuals with a quarantine order or those required to stay at home, HealthBeats allows immediate implementation of an automated vital signs tracking, such tracking   temperature and blood oxygen / heart rate twice a day with alerts sent out in real-time for any missed or threshold readings.

Given most patients with initial signs of fever and cough will visit their healthcare providers, a common behavior shown in COVID-19 is that patients revisit or visit multiple clinics when they do not recover from initial flu medication, causing further infections. With remote monitoring, patients that have increased temperatures or decreased blood oxygen levels can be advised to seek help from stipulated centres directly.
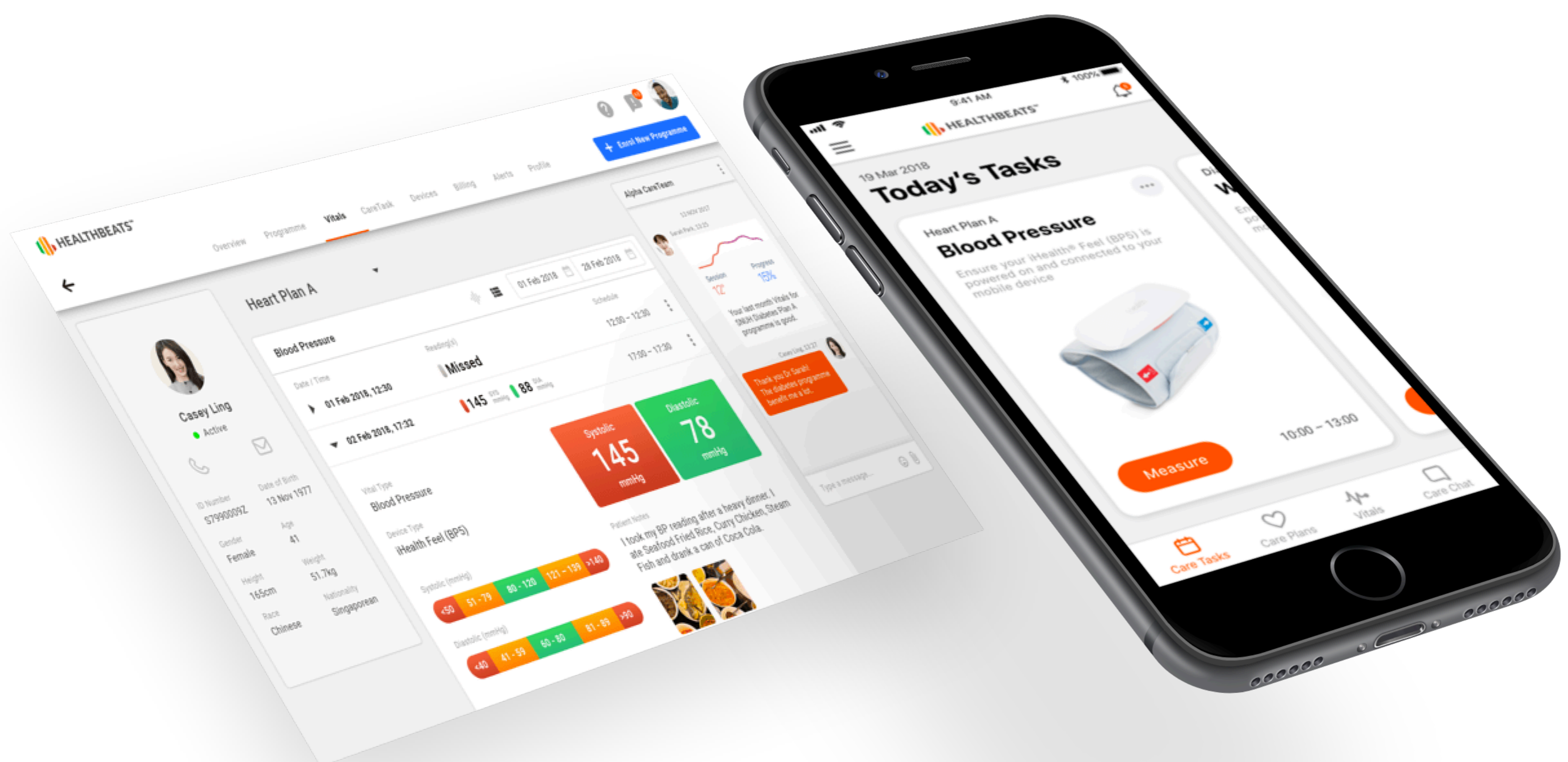
Detecting
Pathogens

The new coronavirus SARS-CoV-2 appears to be fairly easily spread. But the good news is that it's not among the most transmissible diseases out there.The new coronavirus spreads mostly through person-to-person contact within a 6-foot (1.8 meters) radius, according to the Centers for Disease Control and Prevention (CDC). People with COVID-19, which is the disease caused by the coronavirus, spread viral particles through coughing and sneezing. The particles can land in the mouths or noses of those nearby. Solutions that detect airborne pathogens may help us identify risk in social determinants.
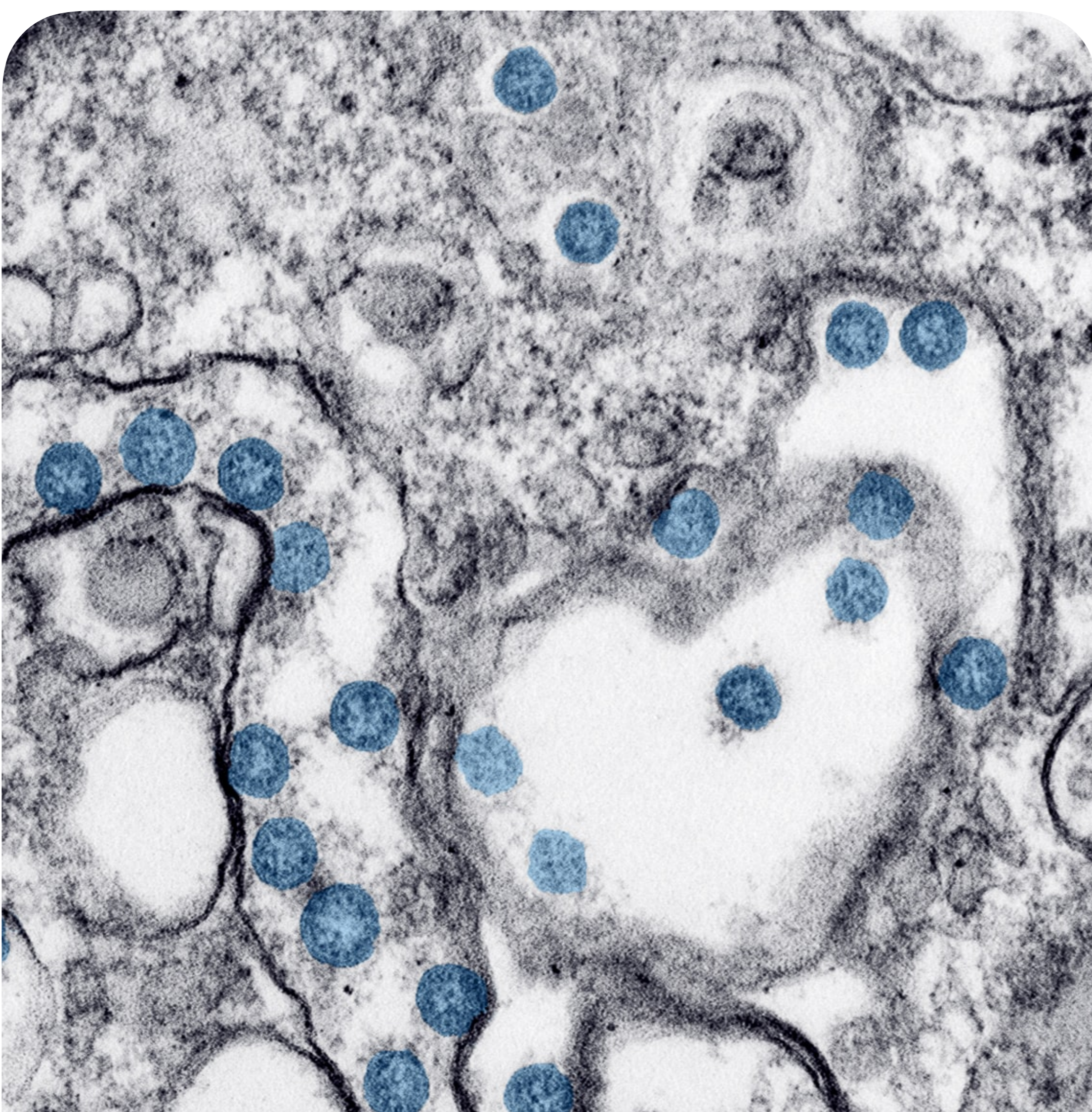
Koniku

Koniku claims that the most advanced piece of technology on the planet is wetware. Koniku merges biological neurons with silicon technology complete with odor sensing, classification and real biological learning. With its contacless odor surveillance system it has found applicability within airport security.

The company has been working with the Airbus Group to develop a technology capable of sniffing explosives in the air without the need to touch, or search passengers. That means the passenger can walk from the curbside to aircraft without any visible security.

Koniku demonstrated the detection of TATP in the air at two parts per billion or 0.1 nanograms in under 10 seconds, in lab conditions and on the field.

Koniku fuse living cells or brain cells with silicon to achieve this result and virtually achieve the same accuracy as a dog's nose.

Nuwave Sensors

NuWave Sensors develops a range of smart air quality sensors designed to continuously monitor airborne contaminants in industrial and commercial environments where the stability of air quality is essential and rapid diagnosis of contamination events are crucial.

Their clients include healthcare facilities, manufacturing, food processing and clean room environments as well as research and environmental monitoring.

Air Quality Sensor
Monitors air quality using VOC sensor

Temperature Sensor
Important measure for a controlled environment

Wireless
Enables you to connect multiple sensors

Alert
Get real-time alerts when the values go outside the set limits

Humidity Sensor
Measures the relative humidity and presents the data in %

Easy Set-up
Plug and Play Technology will have the sensor running in minutes

Molecular Diagnostics

As of March 20, 2019, the CDC has identified 15,219 confirmed cases of COVID-19 in the United States and 201 deaths. However, public health experts say the only reason why those numbers have not exploded is because the nation has far too few diagnostic test kits. Lagging inventory has slowed testing. That means people simply don't have them where and when they need them. The need for a scalable diagnostic solution is beyond doubt.

Here are a few startups taking on this challenge.

Biomeme

Biomeme's platform transforms your smartphone into a mobile lab for advanced DNA diagnostics and real-time disease surveillance. The system includes a docking station for real-time PCR (polymerase chain reaction), a mobile app to control the system and analyze results, and targeted test kits for preparing samples and identifying pathogens or diseases by their specific DNA or RNA signatures. The cutting edge platform performs to the gold standard used by the world's most advanced central labs but requires no lab equipment or special experience to use. The low-cost, user-friendly system enables mobile testing at the point-of-need for health care, such as in mobile clinics, for disease tracking and home use.

Biomeme allows pharma companies to quickly set up pop up labs all over the world by leveraging smartphone devices. From sample collection to data management, Biomeme's end-to-end mobile platform empowers them to take real-time PCR everywhere they need it.

Biomeme SARS-CoV-2 tests allow the detection of the RNA of the severe acute respiratory syndrome coronavirus 2 which causes the coronavirus disease 2019 (COVID-19), also known as "2019-nCoV" or "Wuhan coronavirus." The two novel coronavirus RNA targets are multiplexed together with Biomeme's RNA extraction and RT-PCR control (MS2). Each order contains your exogenous positive controls and everything is shelf-stable (15-30C).

Each reaction contains lyophilized master mix, multiplexed primers, and probes for the following triplex:

- SARS-CoV-2-Orf1ab gene
- SARS-CoV-2-S gene
- RNA Process Control (RNA extraction and RT-PCR control utilizing MS2 bacteriophage)

Genomtec

Genomtec develops smartphone-size genetic analyser for infection detection in doctor's office in less than 15 minutes, thanks to patent-pending optical, contactless heating technology.

Genomtec develops smartphone-sized genetic analyzer for infection detection, providing a solution that can detect any pathogen causing infection in less than 15 minutes at a doctor's office. Their technology combines optical heating and detection with microfluidics and reagents stable at room temperature.

Genomtec technology offers fast, inexpensive and reliable molecular diagnostic testing. The device works independently and automatically, it is enough to apply a drop of biological material to the reaction card and then place it in the analyzer. The test results can then get directly sent to an email address or fed into the medical records of the patient.

Thanks to its ease of use and its automated diagnostic approach, Genomtec is able to effectively fight complications that result from viral infections, such as COVID-19.

Genomtec is currently operating in the US and European market.

Point of Care Diagnostics

Point of Care Diagnostics becomes ever more important as the numbers of those diagnosed with COVID-19 increase everyday.

A pandemic outbreak leads to an exponential growth rate for as long as the uninfected and the infected continue to interact and there are still large numbers of uninfected people running the risk to get infected.

Mammoth Biosciences

Mammoth Biosciences offers a CRISPR platform for nucleid acid diagnostics. Mammoth Biosciences, in collaboration with Charles Chiu, MD, PhD, is developing a rapid diagnostic test that could more quickly and widely monitor for the disease. The new test is a color-changing test strip that uses CRISPR to detect viral RNA and can be run in 30 minutes to an hour. "We've been able to run this rapid test on both control samples and patient samples and it appears to be working," said Chiu. He hopes to optimize the test so that it can be run by anyone and deployed in low-resource areas.

BioMedomics

BioMedomics focuses on building fast and easy-to-use testing kits for various diseases at a patient's point of care. BioMedomics specialized in product offerings that help in the diagnosis of blood disorders and in the identification of microorganisms and pathogens which are of global concern.

They recently developed a quick immunoassay diagnostic test for COVID-19 in two ways: antibody and PCR (polymerase chain reaction) testing. At the point of care, the BioMedomics solution can deliver results within 15 minutes using just a blood sample. This blood sample can be used for rapid screening for carriers of the virus that are symptomatic or asymptomatic. Recent studies around the new COVID-19 outbreak suggest that a high percentage of patients show no clinical symptoms of the virus, thus screening patients is key. This kind of testing is perfectly tailored for hospitals, clinics and test laboratories, but can also be effectively deployed in businesses, schools, airports, seaports and train stations giving it the potential to become a compelling force in the fight against this global threat.
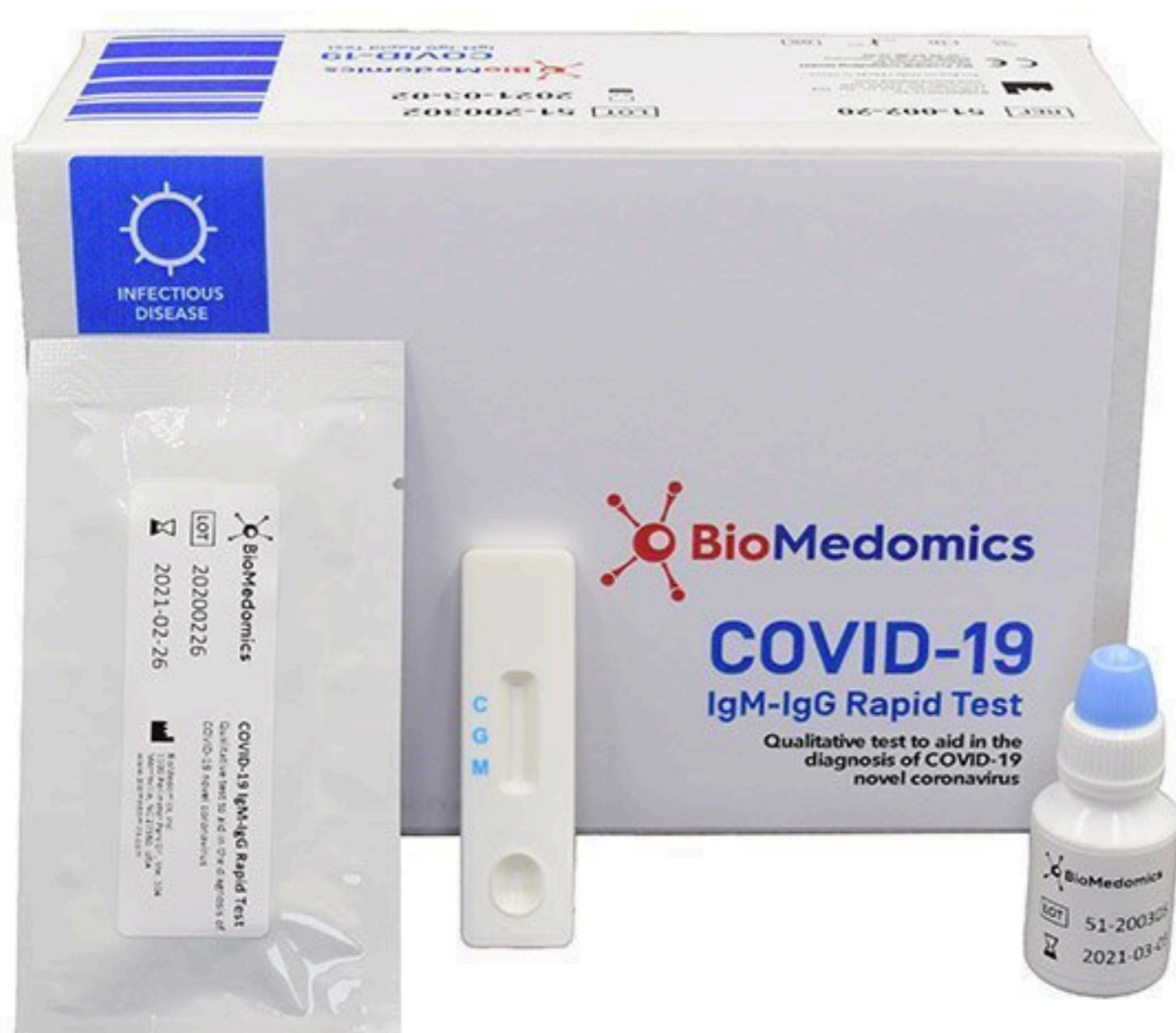
Health Gorilla

Health Gorilla's nationwide Clinical Network connects doctors, vendors, and patients within an interoperability platform. This California-based company automates clinical data aggregation, including hospital admissions, transfers, discharges, social and family history, plan of care, lab results, imaging and medications to compile entire patient chart into a universally interchangeable FHIR/CCDA format for physicians, medical facilities and patients, which improves health outcomes at the point of care.

They recently announced that COVID-19 test ordering is now available through its platform. Any healthcare provider who uses Health Gorilla's web application, a Health Gorilla-partnered developer, or a Health Gorilla-integrated EMR can place COVID-19 test orders and receive test results.
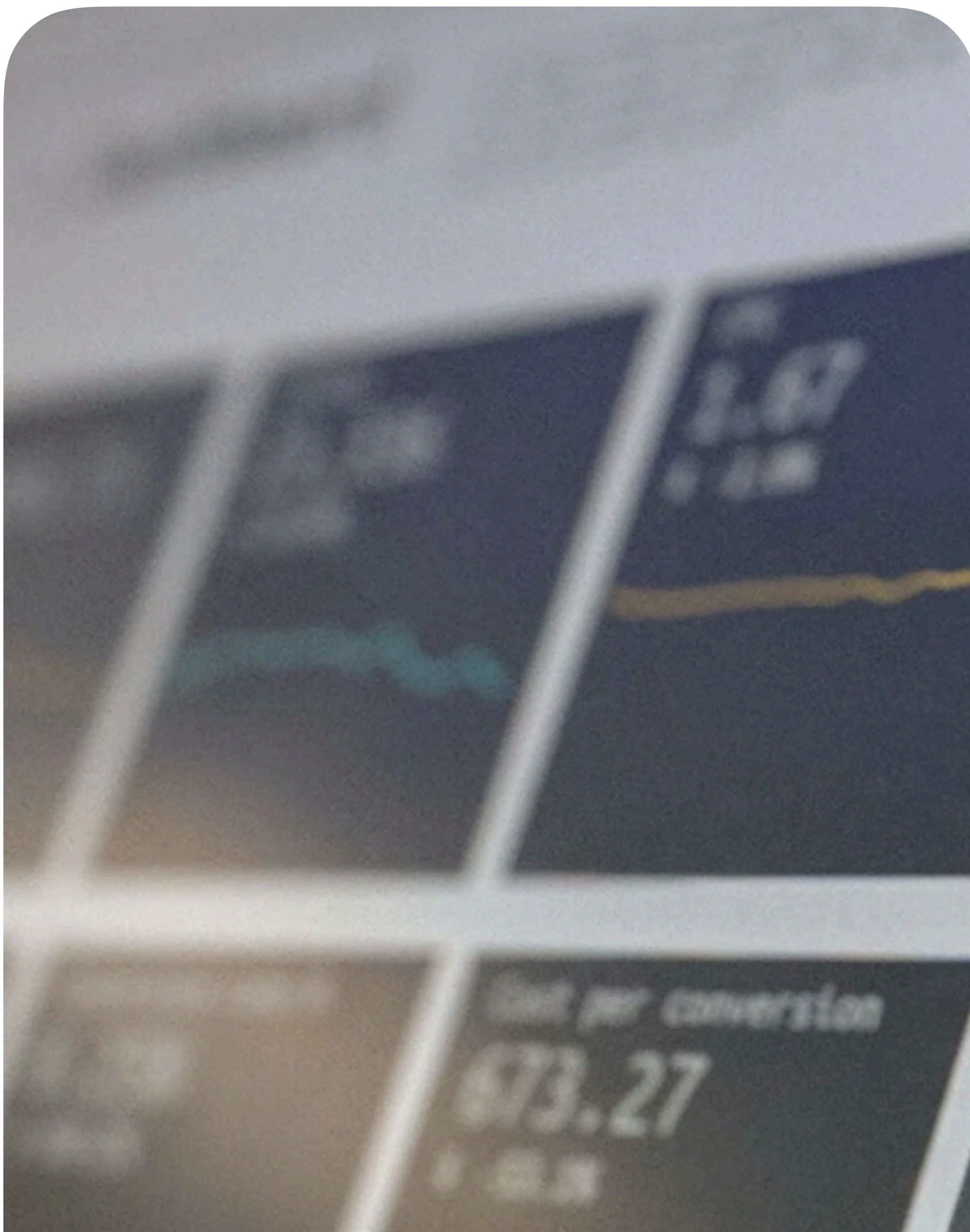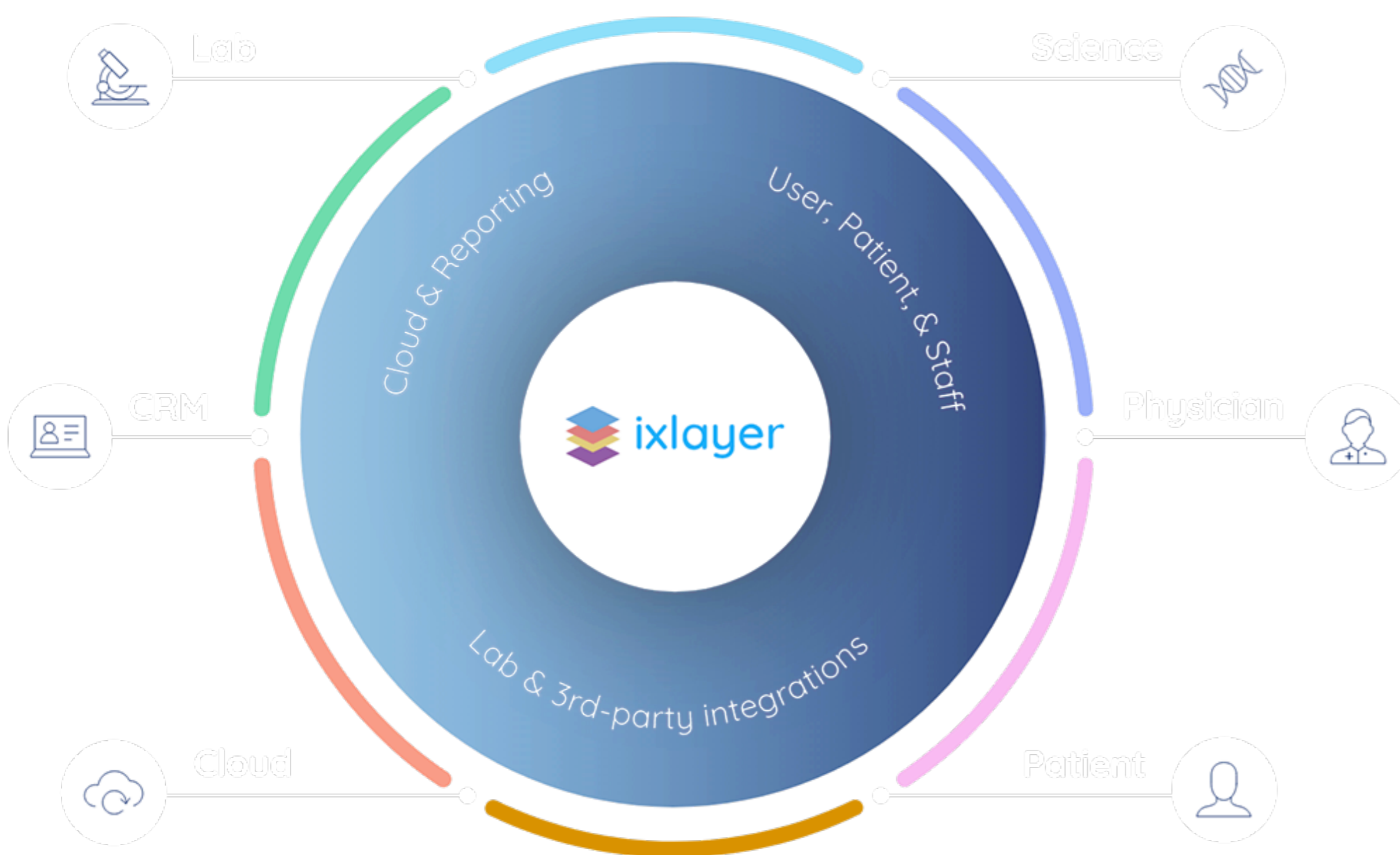
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ixLayer

ixlayer provides innovative solutions to power precision health testing to physicians, health systems, health-focused companies, and pharmaceutical partners. Their platform delivers end-to-end solutions for the technical, security, regulatory, and user experience components of complex health testing.

In order to adapt to the coronavirus pandemic, they have adapted its platform to address the need to rapidly launch and scale COVID-19 clinical testing. The ixlayer platform, already encompassing the security components that are complex and time-consuming to deliver, has been adapted for COVID-19 specific content and user flows, allowing physicians/health systems, organizations, and university groups to quickly connect with partnering labs to deliver COVID-19 clinical testing.

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Bat-Call

Bat-Call is a startup that focuses on resportpriary and cardiovascular diagnosis through chest sound and machine learning classification. They developed a wide range of devices to use in different settings.

Their latest invention is a vest that patients can wear to collect sound samples from various angles and which get wirelessly communicate to doctors for accurate diagnosis. Another device they developed is called CompuSteth, which is a digital Stethoscope that enables doctors to use them at patient's bedside, the device is able to detect inaudible sounds, analyze them and visually present them to doctors, thus making the diagnosis faster and more precise.

To combat COVID-19, constant monitoring and quick diagnosis are key. Chest CT is widely used in China to rapidly diagnose and screen for people who got infected and has proven to be as accurate for testing as a testing kit which may not be accessible in some areas.

Bat-call can offer a more accessible and faster scan that could significantly help in triaging patients and thus in relieving the limited capacities of healthcare providers.

Breathresearch

BreathResearch's mission is to revolutionize respiratory monitoring and management by enabling early detection and treatment of respiratory attacks and exacerbations. Over $130 billion is spent on asthma and COPD in the U.S. annually. Currently, over 27 million people with asthma and COPD in the U.S. have had at least one hospitalization. Others with chronic heart disease, kidney disease and diabetes are at risk for respiratory attacks due to respiratory flu viruses such as COVID-19.

Leveraging machine learning and artificial intelligence, their dual sensor spirometer can measure and track lung flow volumes and lung sounds to provide screening and monitoring at a clinic or at home via Telehealth. Breathsearch converts airwaves generated from a person's breathing into sound waves, thereby allowing to analyze one's breath with acoustic analytics and artificial intelligence, Their predictive analytics can be deployed either standalone or integrated into other respiratory devices and equipment and be applied individually as well as tracked nationally and globally to identify people and areas in need of attention and treatment. Breathsearch have applied their technology to asthma and COPD severity in a small pilot at Mayo. For COVID-19, Breathsearch learned about a three 3 week window where the disease may be 1) non-symptomatic, 2) upper respiratory mild flu like symptoms, or 3) develop into severe acute respiratory syndrome (unique to COVID-19).

Enabling Breathsearch's technology, allows to track lung flow volumes and lung sounds to do early detection on an individual and national/global basis. Specifically for COVID-19 Breathsearch could predict in week one or two after infection which patient might need aggressive treatment earlier, what hospital resources would be needed in a weeks time and in what locations.

Vaccines

Vaccines are an effective tool to quickly gain immunity against infectious diseases. A vaccine typically contains an agent that resembles a disease-causing microorganism and is often made from weakened or killed forms of the microbe, its toxins, or one of its surface proteins. Vaccination is a key contributor to population's health, but underlies a very expensive and time consuming development process.

However, innovative technologies like machine learning and computer simulations are gradually changing how scientists develop vaccines.

Codagenix

Codagenix Inc. utilizes a breakthrough platform technology called SAVE to construct live-attenuated viral vaccines against multiple targets. All live-attenuated vaccines that are currently used in clinics were developed using a trial-and-error based testing developed in the 1880s, pre-dating the discovery of the DNA double helix.

The SAVE platform relies on synthetic biology and the "re-designing" of a target virus's entire genome to yield a vaccine strain. This customization process uses software-based algorithms to 're-code' the genome of a target virus.

Codagenix is currently developing a live-attenuated vaccine that will carry all proteins from a natural virus. They will be targeting the spike protein, along with all other structural and non-structural proteins of SARS-CoV-2. A coronavirus vaccine is now a part of the pipeline.

Codagenix is working on bringing the vaccine into Phase I trials within the next 4 months. After that, through a partnership with the Serum Institute, they will manufacture and distribute the vaccine under a US EUA.

Our breakthrough approach to live-attenuated virus design

1. Recode   2. Synthesize   3. Transfect   4. Recover

Meissa Vaccines

Meissa Vaccines is a pharmaceutical development startup focused on the in-licensing and advancement of vaccines for respiratory syncytial virus (RSV, the largest unmet respiratory medical need in pediatrics) and rhinovirus (leading cause of infectious disease worldwide).

Meissa Vaccines is applying synthetic biology and genetic engineering to respiratory viruses for the rational design of vaccine strains that solve challenging obstacles in modern vaccinology such as suboptimal immune responses, vaccine stability, and manufacturing.

Initially developed at Emory University, proprietary technologies of reverse genetics, codon deoptimization, and stabilization of key antigenic conformations allow for rapid generation of best-in-class vaccine formulations.

Ventilators

Ventilators are key in cases of severe treatment of coronavirus infections. Coronavirus attacks people's lungs and can cause especially people with pre-existing respiratory conditions severe shortness of breath, that require them to be put on a ventilator. Ventilator machines mechanically move air in and out of a patient's lung, keeping them alive when the patient's body can no longer do it on its own. Since the ventilators first usage in the 1950s, it has become a key medical device for hospitals, and also startups continue to tackle this opportunity to come up with smaller and easier to use devices.

The coronavirus attacks people's lungs, in some cases compromising their ability to breathe. Ventilators, which deliver air to the lungs through a tube placed in the windpipe, are a crucial tool to keep these patients alive. The computerized, bedside machines can cost as much as $50,000. Ventilators are crucial to fight the COVID 19, but they are in a huge shortage in the US. The ventilator to critical patient ratio is estimated to 1:10.
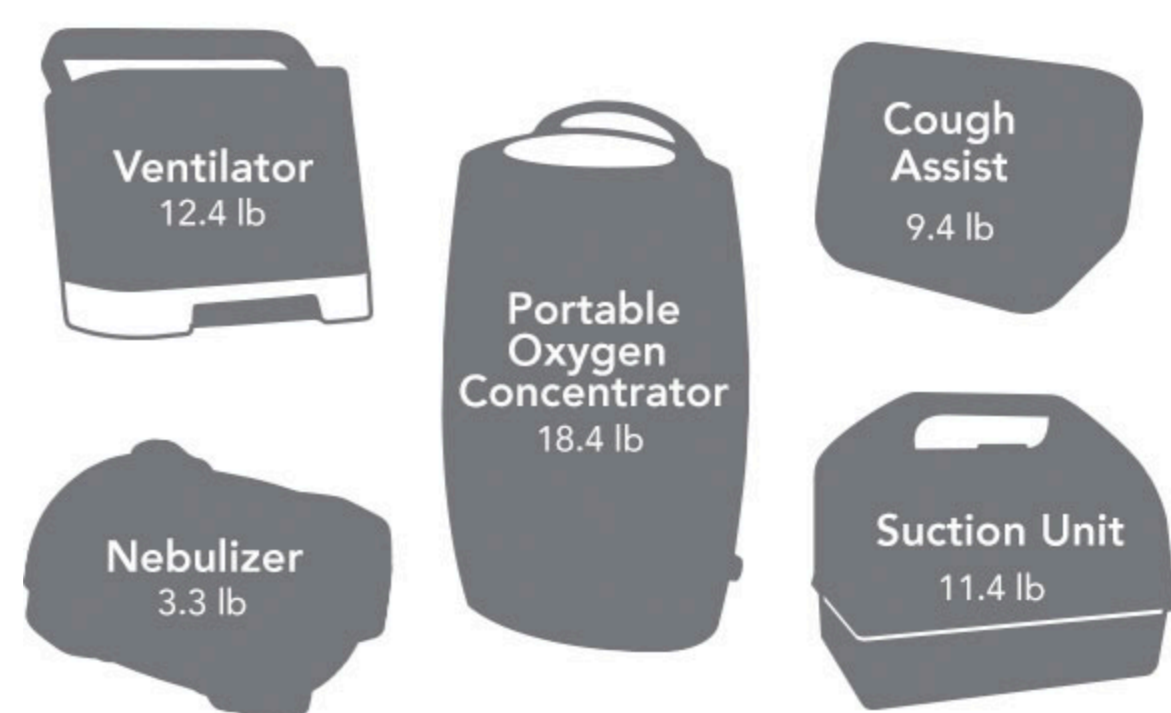
Ventec Life

Ventec Life's mission is to redefine respiratory care, by improving patient outcomes and helping caregivers to provide effective treatments. Ventec's product VOCSN integrates five different medical devices (a ventilator, oxygen concentrator, cough assist, suction and nebulizer) into one integrated respiratory system.

Their portable device runs on batteries and thus gives patient's freedom of movement. Its advanced operating system and customizable tool sets it apart from traditional ventilators currently deployed hospitals. Its small size is another advantage that allows hospitals and care facilities to store and place the machines at the point of use, storing them more effectively.

For COVID-19, ventilators are key and are deployed to prolong a patient's life expectancy, supporting them through the worst time. Most of the hospitals in the US do not have enough respiratory devices at the moment to supply the increasing demand of patients diagnosed with COVID-19.Ventec provides a 5-in-1 solution to help hospitals and communities fighting the virus.

General Motor is working with Ventec to ramp up the production of ventilators to alleviate the shortage in the US.

Ventilator 12.4 lb
Cough Assist 9.4 lb
Portable Oxygen Concentrator 18.4 lb
Nebulizer 3.3 lb
Suction Unit 11.4 lb

VS

VOCSN

55 lb
5 machines | Multiple circuits

18 lb
1 machine | 1 circuit

Onebreath Ventilators

OneBreath is a new business addressing one of the most difficult problems in critical care medicine: Delivering high precision, high reliability mechanical ventilation at an affordable cost.

Affordable mechanical ventilation is a critical unmet need globally, particularly in severely under-resourced developing markets, presenting a massive opportunity.

Respiratory Protective Devices

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Respiratory protective equipment like masks or filters are not something that people use very often. But it is a very important measure for protection to a person, especially during a pandemic outbreak or when a city suffers from severe pollution in oder to prevent the transmission of infectious diseases.

Like SARS, COVID-19 as well as the flu are both contagious respiratory diseases that have a significant effect on society.

Accordingly,COVID-19 has increased the usage of masks and caused a global shortage of supply.

However, and there are alternatives to masks that could protect people from deadly airborne pathogens that are worth considering.

Ao-Air

Ao-Air's patented PositivAir™ technology utilizes fans to create a positive pressure that creates a clean air environment and allows a personto breathe freely, requiring no seal around the mouth and nose.

This system allows clean, cool air to comfortably escape the mask around the face creating a continuous, one way outflow that keeps outside air out.

This means unparalleled protection, which is up to 50x better than current market leading solutions and a more human experience.

NasoFilters

Developed by a team from IIT Delhi, Nasofilters offer a respiratory nasal filter that sticks to your nose and prevents entry of harmful air pollutants (PM2.5).

Nasofilters are easier to use than traditional anti pollution masks.

The product is small and stealth; it offers protection when wearing masks is not possible, such as in business meetings

Sonovia

Sonovia's special chemical formulations give textiles the ability to destroy pathogens, providing protection for doctors and patients alike against potentially harmful bacteria and infections.

Patients in hospitals are exposed to millions of bacteria causing post-treatment infections, which can result in medical complications, longer hospital stays, and death. 30% of patients in ICU are affected by health care-associated infections. 130k Deaths every year are attributed to Hospital Acquired infections in the USA and Europe.

COVID-19 is transmitting with droplets or by touch, general protection is necessary to lower the chance of being infected.
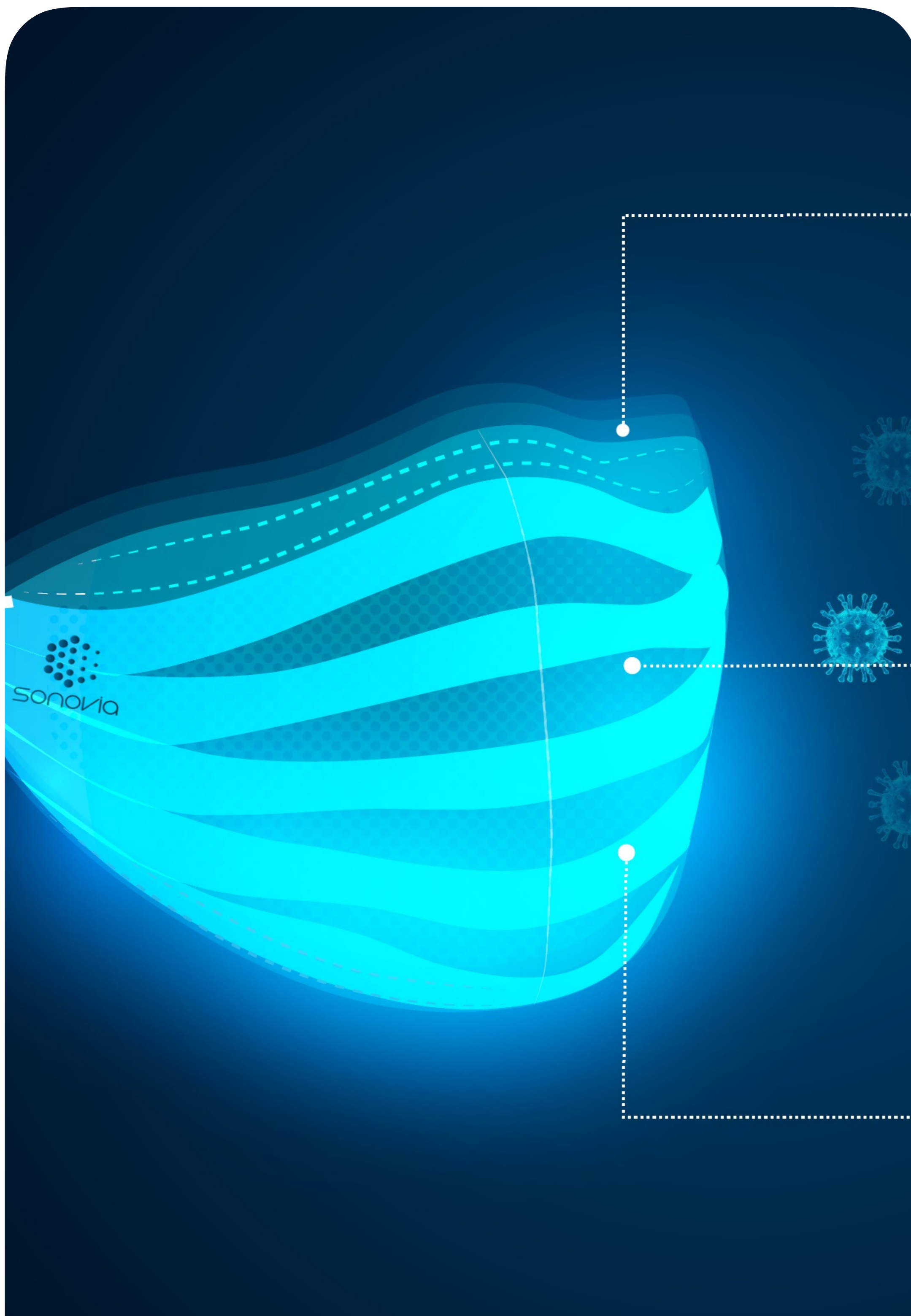
Population Outbreak Management

Outbreak management systems offer software solutions that help detecting an imminent outbreak of infectious diseases.

Powerful AI and algorithms run on the backend of those management systems and build predictive models to alert people of the danger.

BlueDot

BlueDot protects people around the world from infectious diseases, leveraging human and artificial intelligence. The startup has developed a patented global early warning system to track and predict the spread of dangerous infectious diseases.

BlueDot benefits from a strong track record and reputation built off of repeated success stories, including predicting the spread of Zika into the Miami area Florida 6 months before the first case got detected. BlueDot. can help governments to protect their citizens, hospitals to protect their staff and patients, and businesses to protect their employees and customers.
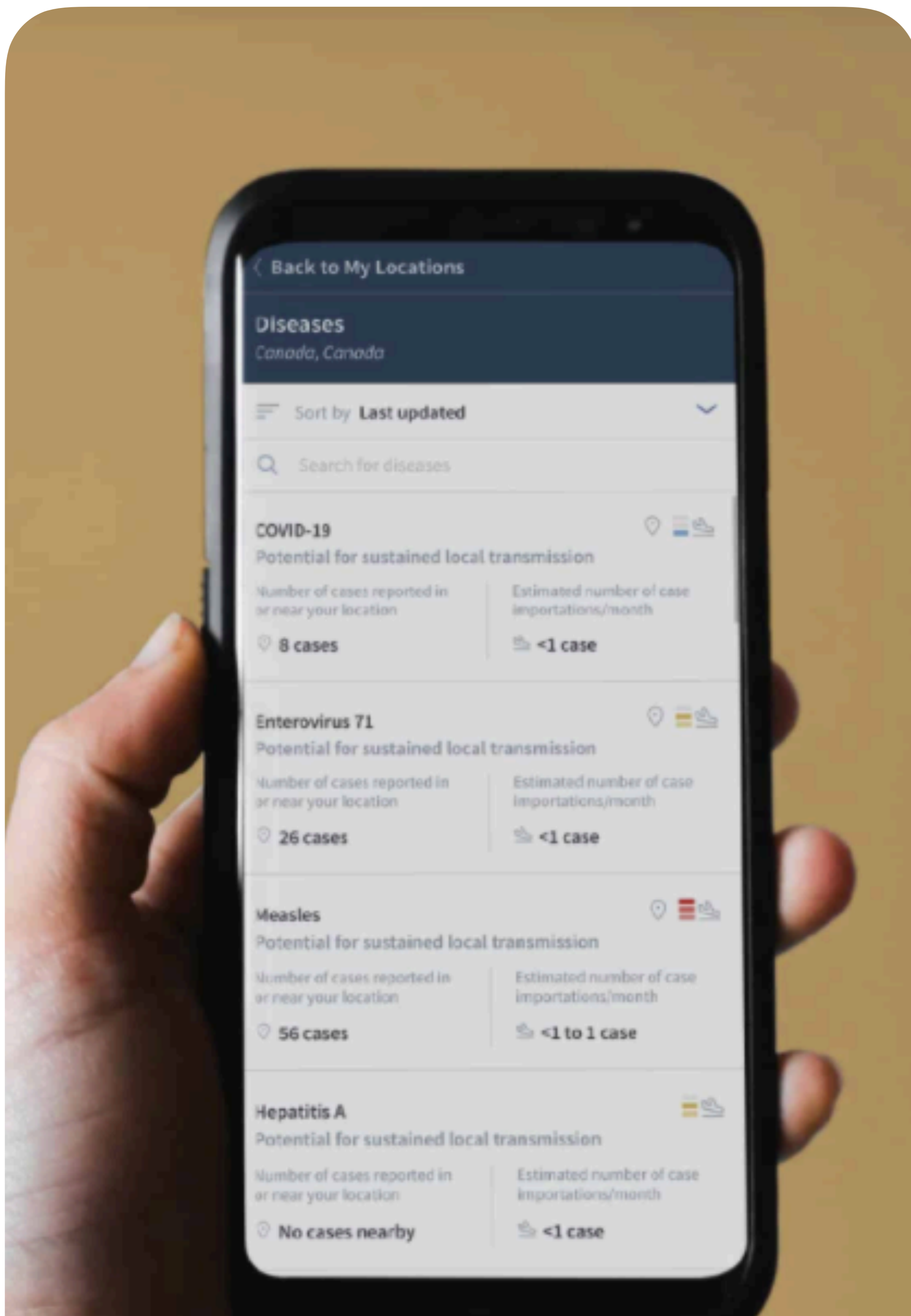
Sickweather

The Sickweather app is the world's first real-time map of human health. It uses social listening to track reported illnesses and symptoms, and delivers an overview of all illnesses that are going around in your community – like the flu.

Thanks to its patented algorithm, Sickweather can analyze social sentiment data to generate a flu forecast and deliver daily SickScore. The app can minimize stock-outs, supporting the effective distribution of vaccines, over-the-counter medication and disinfectants, serving different geographic areas at the right time.

Clinical AI Chatbots/ Symptom Checkers

Symptom checkers offer an easy way for people to quickly learn if they are sick or not. Normally symptom checkers come in the form of a questionnaire. But more and more startup solutions shift to a format of a chatbot solution, whichhelp to feel more relaxed and mimic a real interaction with a doctor. In the case of COVID-19, the symptoms appear to be very similar to suffering from either the flu or undergoing a cold. Symptom checkers can help people to distinguish the difference and provide care triaging to guide patients to the right provider and diagnostic centers.
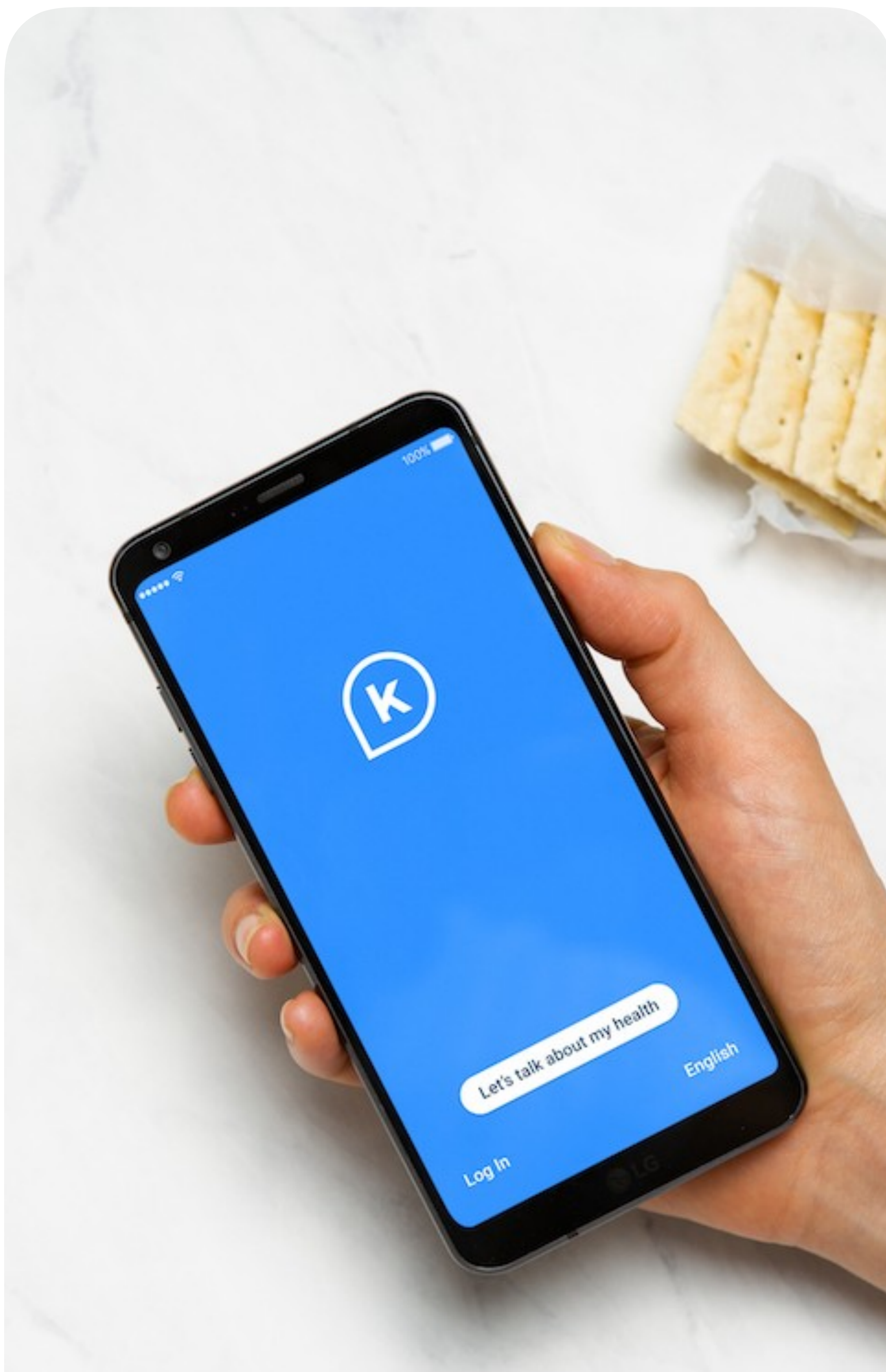
K Health

K Health is a free primary care app with which millions of users get healthcare at 90% lower costs than usual. Digital tools, such as K Health's app, can help in preventing major strains on health care systems. K Health offers free virtual primary care, addressing the key questions to analyze symptoms that would speak for an infection with

COVID-19Their app allows patients to directly connect withU.S. doctors and to discuss potential risks as well as to create a treatment plan. Since the virus outbreak last fall, K Health has recorded an increasing number of searches for "cough" as a chief complaint symptom through their app.

Gyant

Leveraging its customizable, artificial intelligence-enabled platform, which integrates into any Electronic Health Record (EHR) system, GYANT creates easy to navigate and enjoyable experiences for patients that equate to cost and time savings, whilst improving the patient conversion rates for health systems. GYANT's unique combination of deep intelligence, physician oversight and a human-driven, empathetic approach allows health systems to solve traditional complex care issues, ensuring that patients receive the right care – anytime and anywhere, increasing engagement, trust and loyalty along their entire healthcare journey.

In these last weeks, GYANT has developed clinical protocols which can be incorporated into company's software and that can serve as an initial check for Coronavirus infections. At the moment they are finalizing these protocols and will be sharing them with clients in the near future. GYANT'S goal is to deploy this protocol as an additional feature through their software solution, e.g. on their websites. GYANT will continue to update these protocols as there are more and more insights from the CDC and other global sources about the COVID virus.As a B2B healthcare company, it is important for GYANT to consider the needs of their clients and their end-users (patients).

Such protocols were not on their product development roadmap, nor were they scoped with any client; but as a leading source of health information for patients and consumers, GYANT considers it as critical to incorporate Coronavirus into their medical protocols.

G GYANT

www. gyant.com
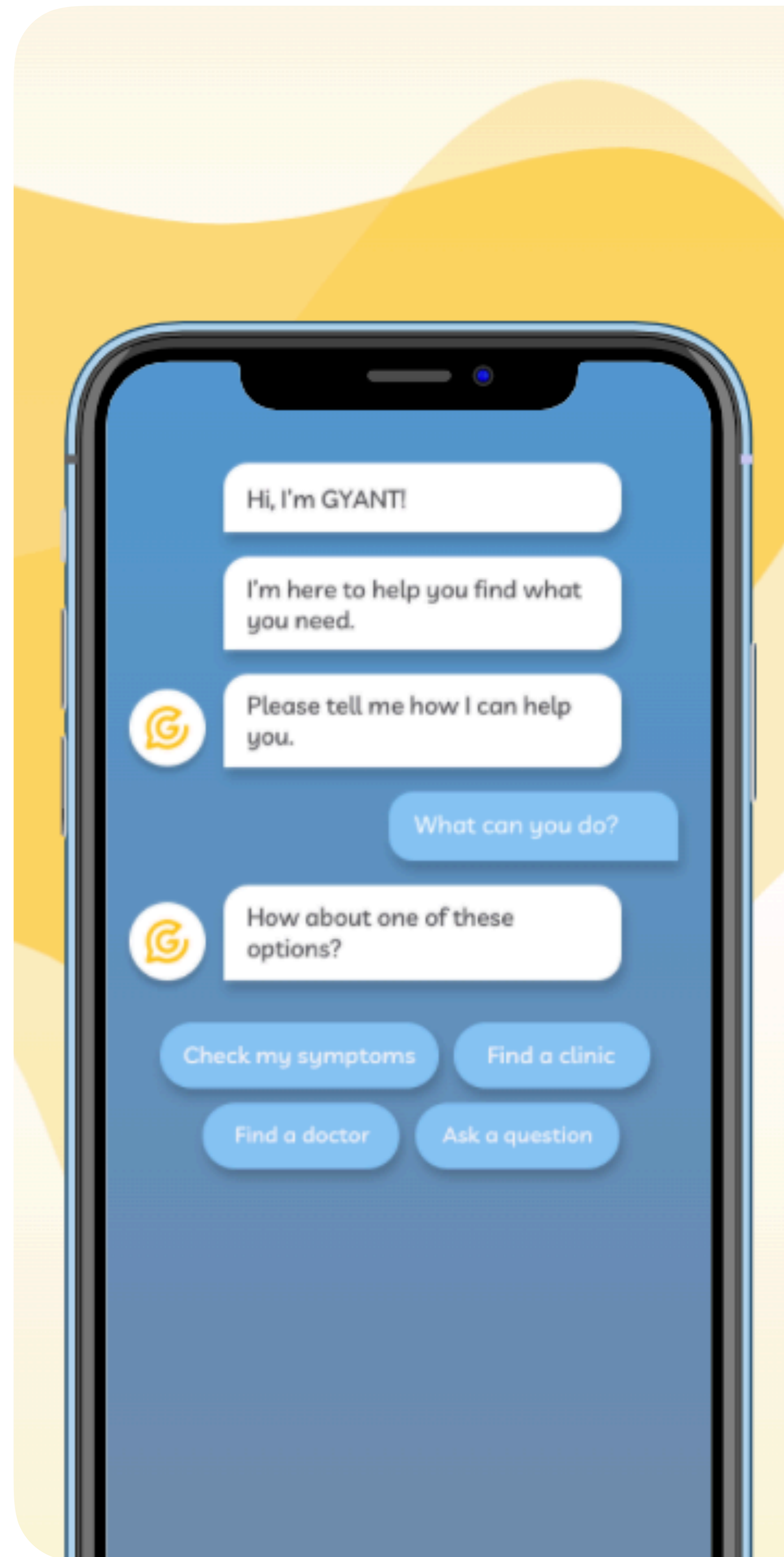
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# Infermedica

nfermedica is a health AI company that improves the diagnostic process, using the most advanced reasoning technology for medical diagnosis. Their goal is to increase healthcare accessibility, minimize the rate of misdiagnosis and streamline costs of providing quality care. Their core product is a triage platform that uses AI to perform a preliminary diagnostic interview on patients.

Helping patients to quickly assess their risk of suffering from coronavirus, then providing recommendations on the next steps is how Infermedica can help. Medical personnel are rapidly being overburdened. Doctors are already busy taking care of sick people and are at high risk of becoming infected themselves. The demand for health services is escalating and patient triage is, more than ever, an important tool in guiding patients on what to do when they're feeling unwell.

Infermedica's teams have now begun working on COVID-19 triage-oriented screening protocol ,including it in all their platforms. The basis for the protocol will be the official guidelines established by WHO, CDC and other key sources. The COVID-19 screening protocol will first be deployed to Symptomate, then to the other platforms including Symptom Checker, Call Center Triage and Infermedica API. Infermedica is also considering a standalone HTML widget that can easily be embedded into existing websites or apps. These products will be offered for free to their existing clients as well as to the general public.
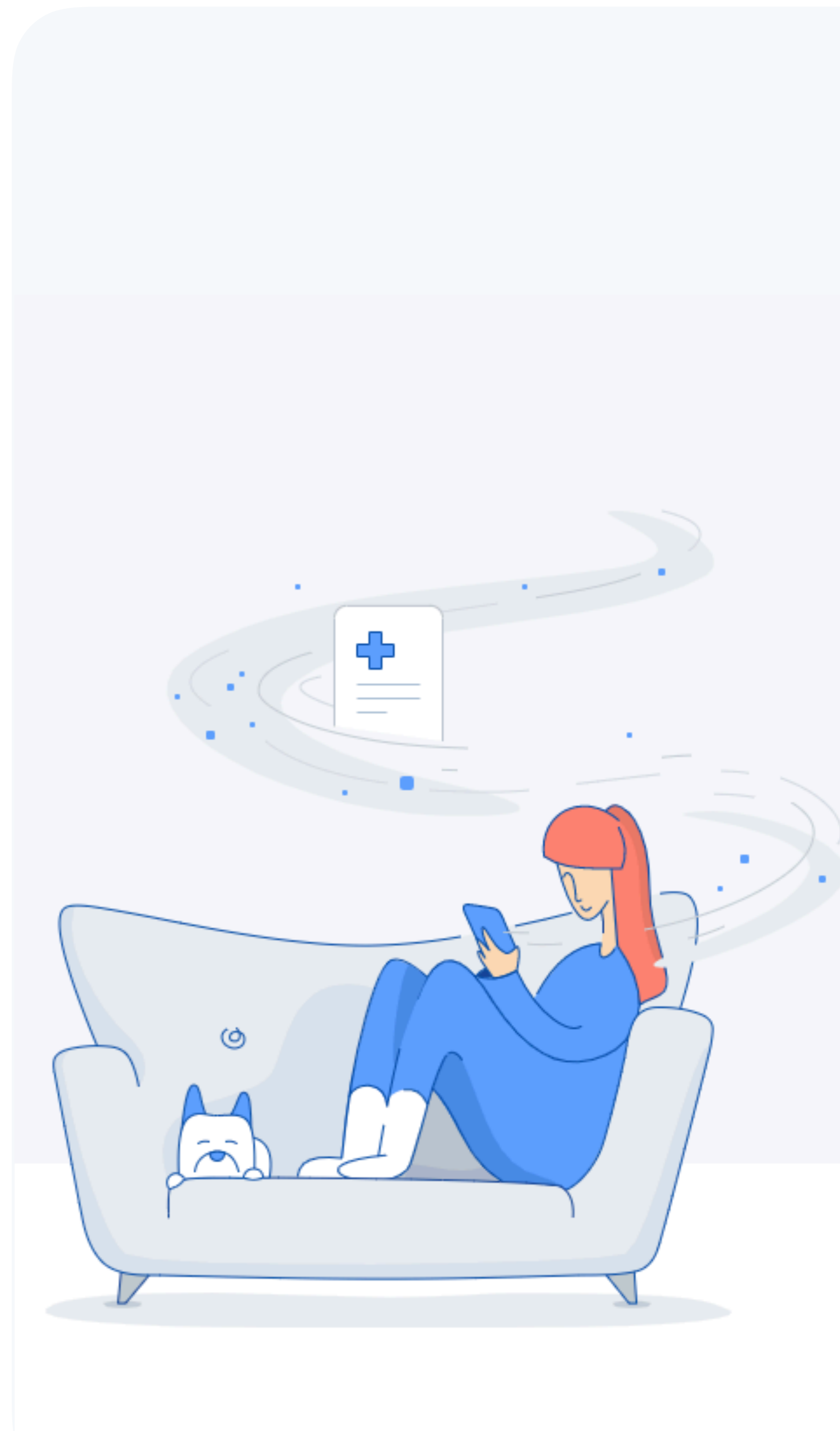
Buoy Health

Buoy builds a free digital health tool that helps people from the moment they get sick to start their health care on the right foot. Started by a team of doctors and computer scientists working at the Harvard Innovation Laboratory in Boston MA, Buoy was developed in direct response to the downward spiral we've all faced when we attempt to self-diagnose our symptoms online.

Buoy leverages artificial intelligence – powered by advanced machine learning and proprietary granular data - to resemble an exchange you would have with your favorite doctor – to provide consumers with a real-time, accurate analysis of their symptoms and help them easily and quickly embark on the right path to getting better.

Buoy Health started collecting information about COVID-19 after January 25, 2020 when there were only two confirmed cases in the United States. Hoping to ease growing fears over a pandemic, Buoy updated its algorithm to screen for symptoms and risk factors related to COVID-19.

To customers, they provide advice for next steps and methods for self-triage. They recently partnered with HealthMap, an outbreak tracking system, to help identify hotspots of disease based on Buoy's own data.

Describe your symptoms in detail.
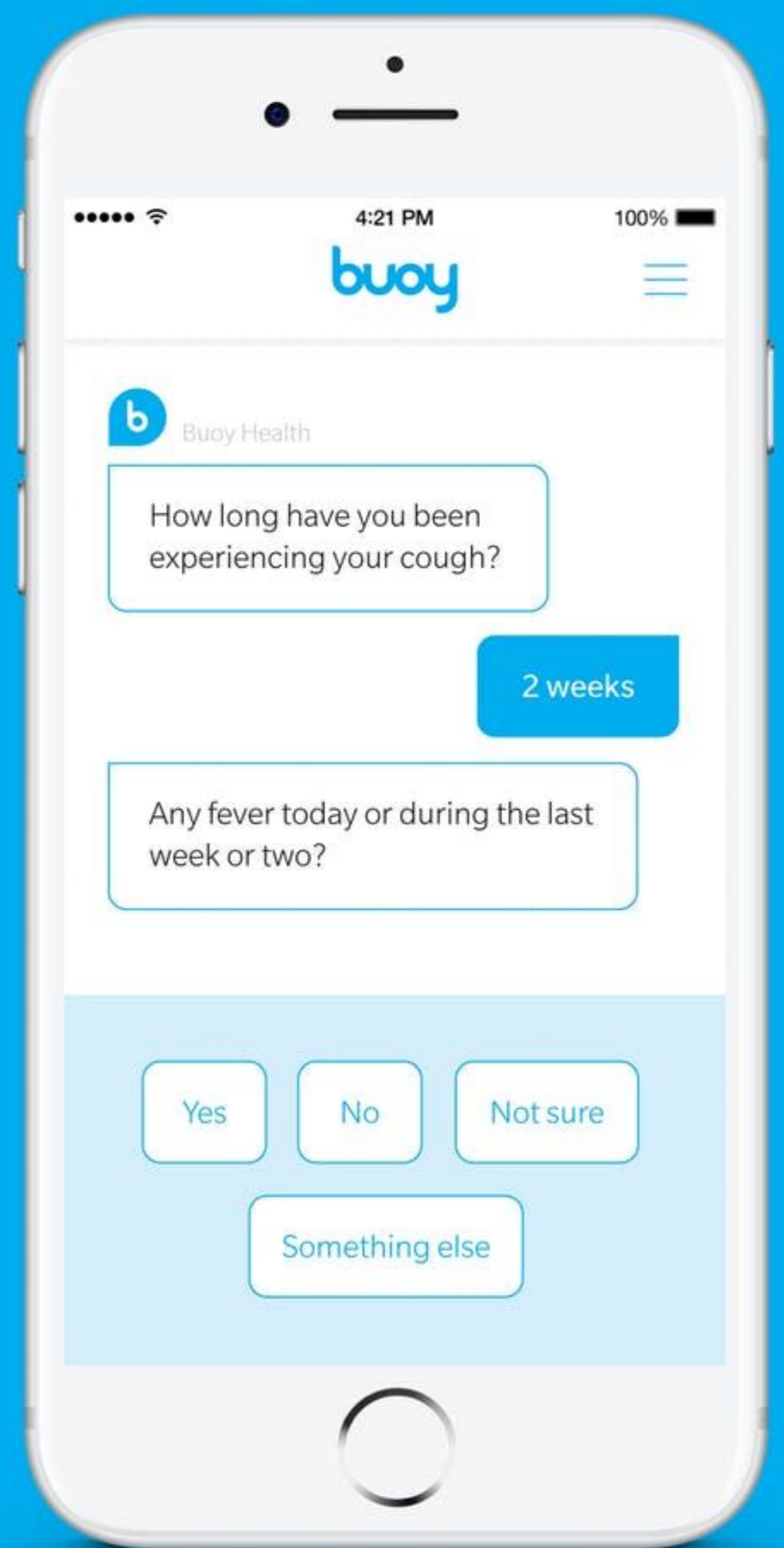
Intelligent Virtual Assistant

In the time of global health crisis, COVID -19 virus has significantly interfered with normal business operations. Co-browsing solutions such as **Recursive labs, Unblu and Techsee**, can continue to support representatives to engage with their clients through a low friction high fidelity platform with no download required.

For example, insurance agents can start a meeting by sending a text to their clients with the meeting url. There is no downloading or any preparation required from the client side. It helps both the insurance company and clients to continue to have high quality interaction regarding quoting a policy, managing claims at a time when we have to exercise social distancing and quarantines.

To stay up to date on the latest health technology startups, join the Plug and Play Platform. Our Health accelerator program runs twice a year boosting our startups through corporate business development, networking and pitch events, world-class mentorship, and the potential for investment.

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