

ISRAELI TECH VS. CORONA

A Guide for Healthcare Providers

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With the eruption of the COVID-19 pandemic, Start-Up Nation Central focused its efforts on identifying Israeli “CoronaTech” innovation and making it accessible to decision-makers in Israel and around the world.



Mapping and tagging relevant Israeli technologies on the Finder Innovation Discovery Platform [👉](#)



Introducing Israeli entrepreneurs and technologies to organizations seeking COVID-19 solutions



Launching the CoronaTech Israel Information Hub, promoting knowledge-sharing and rapid collaboration [👉](#)

For additional information, introductions, or large-scale customization, please contact Jeremie Kletzkine, VP Business Development:

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Challenge 1: Real-time tracking of how the virus is moving and spreading



Geographic information systems and methods have proven indispensable for timely and effective epidemic monitoring and response. These include, among other applications: efficient testing, online real-time mapping of disease cases and of social reactions to disease spread; predictive risk mapping using population travel data; and tracing and mapping super-spreader trajectories and contacts.



The [Diagnostic Robotics](#) triage system assesses and monitors individuals at risk for COVID-19. The platform can allow governments to remotely monitor virus progression at scale and predict spread of the disease.

Deployment stage: [🏠 Market ready](#)



The [EDAS Healthcare](#) product, in alpha-stage, will potentially enable governments and healthcare systems to screen large groups for respiratory infections, including COVID-19. The company's solution detects the patient's specific infecting pathogen, using only anonymous patient demographics and without any physical tests or equipment. The solution allows for instant and remote detection of infection with over 90% accuracy (~10% false positives) and with ~98% elimination accuracy (~2% false negatives).

Deployment stage: [🚀 Pilot](#)



With the outbreak of COVID-19, [GYNISUS](#) leveraged its expertise and technology to develop the Infectious Disease Monitor, providing in-depth and precise epidemiological analysis aimed at slowing the spread of COVID-19 in hospitals and medical centers, reducing the need for tests. These real-time reports minimize direct and indirect hospital exposure and assist managers in making clinical decisions.

Deployment stage: [🏠 Market ready](#)



Launched by the Israeli Ministry of Health, [HaMagen](#) predicts possible user exposure to confirmed COVID-19 patients with a high degree of accuracy by cross-referencing information about the location of confirmed patients with the location of the app user. Users are notified upon the detection of such an event, (including time and location) so that they can be tested and quarantined if necessary.

Deployment stage: [🏠 Market ready](#)



The [MAISHA Labs](#) AI-driven COVID-19 decision support system helps identify and stratify at-risk populations to prevent exposure; engage patients and monitor clinical outcomes; forecast trends and patient volume in the emergency department; predict ventilator and intensive-care unit utilization as well as inventory management; and provide situational awareness at the hospital and ward level to streamline, coordinate, and monitor patients with COVID-19.

Deployment stage: **Market ready**



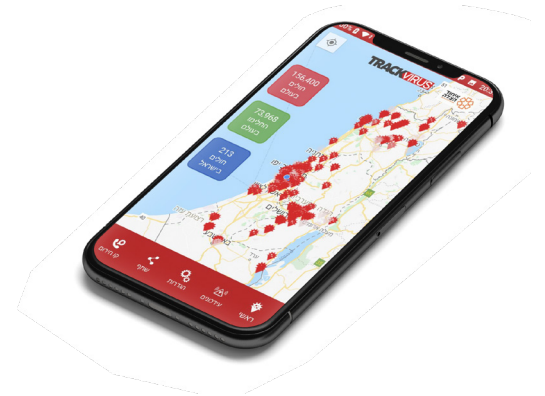
[Track Virus](#) is a global digital solution developed to track and slow the spread of infectious diseases such as COVID-19. The mobile app provides personalized notifications based on data from smartphone sensors and from questionnaires; its services help organizations and health authorities to detect, analyze, and monitor areas of high risk. Data collection and processing are conducted with the utmost respect for user privacy.

Deployment stage: **Market ready**



ConFINE by [NGSoft](#) is a smart mobile application that monitors and alerts the public to COVID-19 outbreaks and potential infection. The app enables users to receive personal notifications in case of continuous proximity to infection sources. The app support decision-maker assessment and has been deployed at Ben Gurion Airport.

Deployment stage: **Market ready**



Challenge 2: Screening employees/visitors before they get to the office or high-risk populations before they approach crowded places such as work, schools, and hospitals



Stopping the spread of the virus requires finding and testing all suspected cases so that confirmed cases are promptly isolated and receive appropriate care, while close contacts are rapidly identified so that they can be quarantined and medically monitored for the 14-day incubation period of the virus.



[Axonize](#) Smart Hospital Platform enables monitoring of patients in hospital quarantine without direct staff contact. Patients and hospital staff receive ID cards with sensors that identify infected patients, and those in their proximity and broadcast where these patients are located. Based on the distance, staff can identify exactly where sick persons are.

Deployment stage: **Market ready**



[MyndYou's](#) AI-based solutions use unique passive voice analytics and remote engagement tools to enable care providers to effectively screen for COVID-19 in their communities, combat the effects of social isolation in older adults, and ensure targeted care for individuals who need it most.

Deployment stage: **Pilot**



[GlobeKeeper](#) collects data gathered from monitoring and tracking team member position, status, and location. The emergency notifications can be very relevant when cross-referenced with data derived from applications tracing proximity to coronavirus patients. Or; data, gathered from monitoring and tracking team member position, status, and location, can be very relevant when cross referenced with emergency notifications and data derived from applications tracing proximity to coronavirus patients.

Deployment stage: **Market ready**



[Vocalis Health](#) is a state-of-the-art AI method for correlating specific voice behavior with COVID-19 symptoms, enabling identification and monitoring of early symptoms. Healthcare providers leverage remote voice interactions through a call center or smart device in order to passively monitor, index, and track millions of patients living with a range of voice-affecting diseases, such as chronic respiratory or cardiac conditions and depression.

Deployment stage: **Clinical trial**

Challenge 3: Supporting physicians in maintaining communication and follow-up with patients beyond patient support programs (especially oncology patients who have been advised to stay away from hospitals)



In times of restricted movement, remote patient monitoring can free up valuable healthcare personnel and equipment, so that the focus can be on fighting the pandemic. Medical staff can continue monitoring homebound chronic, high-risk patients, while ensuring they receive the quality care they need.



The [Beecardia](#) platform enables quarantine care including remote/mobile ICUs, connecting primary care teams to remote specialists; remote monitoring of coronavirus survivors with residual damage of lungs, heart and other organs including asthma; and COPD and cardiovascular chronic patients.

Deployment stage:  Market ready




[Cnoga Medical](#) develops and manufactures noninvasive, pain-free medical devices for personal use and remote medical care. The company's products are designed to enable users to measure, collect, and make sense of health-related data and to use that information to improve their health. Cnoga Medical received approval for its TensorTip, MTX, and VSM noninvasive multiple-bioparameter measurement devices from the China Food and Drug Administration (CFDA). MTX is being used in hospitals in Wuhan to monitor vital signs and follow and assess prognosis of COVID-19 patients. Following the dynamic changes of several bio-parameters may assist in triage and early detection of deterioration.

Deployment stage:  Market ready



The [CardiacSense](#) watch combines blood-flow technology for continuous 24/7 monitoring and instantaneous electrocardiogram readings focused on atrial fibrillation and cardiac arrest. Using a combination of optics, mechanics, and signal processing, the watch tracks coronavirus infection symptoms include high core temperature, heart rate, and respiratory rate, and will soon track oxygen saturation (SpO2).

Deployment stage:  Market ready



[Datos Health](#) integrates with wearable medical devices to deliver a stream of clean, validated, and relevant patient data, combining sensor-generated vitals and indicators with patients' electronic medical record data. Datos applies advanced algorithms to continuously analyze the aggregated data to detect and predict anomalies and to issue and incorporate complex clinical insights into personalized and adaptable care pathways.

Deployment stage:  Market ready



[ContinUse Biometrics \(CU-BX\)](#) provides contact-free sensing solutions for patient screening and monitoring, detecting key parameters such as heart rate, respiratory rate, respiratory rhythm, blood pressure, and cardiac acoustics. Data is streamed to a GDPR- and HIPAA-compliant health cloud, where machine-learning models and AI techniques identify trends, alerts, anomalies, and biomarkers, providing actionable insights. Healthcare practitioners can remotely receive consistent patient vital-sign measurements and trends and conduct immediate patient screening. Contact-free patient screening solutions enable detection of physiological parameters and biomarkers associated with different cardiac and respiratory conditions, including pneumonia-like symptoms such as those demonstrated in persons infected with COVID-19.

Deployment stage:  Pilot



The [Glucome](#) platform includes a wireless blood glucose monitor, that operates with patented audio connectivity; a mobile app compatible with iOS and Android devices; a Digital Diabetes Clinic (cloud-based diabetes monitoring and control management software for healthcare organizations and professionals); and a Control Tower. The Tower enables patient and population data-driven prioritization and management.

Deployment stage:  Market ready



[Oxitone Medical](#) enables medical staff to remotely care for COVID-19 patients in quarantine from the safety of their office. Specifically, it helps to indicate dangerous factors and prevent COVID-19 mortality caused by "Silent Hypoxia," coronavirus patients with oxygen saturations in the low 80s who look fairly comfortable. The product aims to be instrumental specifically in the prevention of hospital readmission, associated with poor survival; and deaths in nursing homes.

Deployment stage: Market ready



The [Medorion](#) behavioral AI solution identifies the highest impact clinical factors effecting a member's behavior and uses these insights, with embedded behavioral science theories, to create highly personalized engagement and communication plans targeted at individuals at highest risk of developing serious COVID-19 conditions.

Deployment stage: Market ready



The [SURE Universal](#) medical portal, health IOT gateway and universal smartphone app empowers medical professionals to remotely control patient devices and monitor health and wellness readings. Powered by artificial intelligence, the platform automatically detects abnormal events and sends emergency alerts to care teams, who through integrated video and voice telemedicine, contact and respond to the situation.

Deployment stage: Pilot



[Sweetch](#) is a clinically validated platform that utilizes artificial intelligence to significantly increase highly personalized adherence to essential health promotion, disease prevention, and disease management recommendations.

Deployment stage: Market ready



[Telesofia Medical](#) has created a platform that automatically generates personalized educational videos for patients and medical staff. The videos help to clarify medical information and increase patient and medical staff engagement, satisfaction, understanding, and compliance.

Deployment stage: Market ready



[XRHealth](#) offers a Virtual Reality (VR) telehealth support group for people in isolation due to the coronavirus. Patients with similar ailments can gain support from each other and from doctors associated with XRHealth telehealth clinics.

Deployment stage: Market ready



The hand-held [Tyto Care](#) exam kit enables remote medical exams of, among other organs, the lungs, heart, throat and ears, allowing healthcare organizations to protect providers and avoid exposure. It also enables families to receive care-on-demand medical exams, diagnosis, prescriptions--without entering medical facilities, preventing the spread of the virus.

Deployment stage: Market ready

About Start-Up Nation Central

Start-Up Nation Central (SNC) is an Israel-based nonprofit organization that works to ensure the strength and vitality of the Israeli tech ecosystem and enhance its positive global impact. SNC leverages its in-depth knowledge of the country's innovation sector to connect multinational corporations, governments, and NGOs to those people and technologies in Israel most relevant to their needs. The organization has become a respected authority on policies relating to Israeli innovation and the go-to source for navigating the innovation ecosystem.

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