

Empowering the Warfighter: Resilience Through Innovation

544

REVOLUTIONARY DIAGNOSTICS – NONTRADITIONAL APPROACHES FOR DEVELOPING BREAKTHROUGH CAPABILITIES AGAINST EMERGING THREATS

Detectwise[™], An Automated, Integrated Biosurveillance Platform For Managing Health Security

Chris Myers Parsons

Sam Mandola Parsons

Mark Briggs Parsons

Kyle Braaten Parsons

Responding to the COVID-19 pandemic continues to present many logistical challenges to identifying, distancing, and treating those affected by the disease and preventing further spread to those still healthy. Issues with the supply chain, continuously evolving regulations and guidance, and effective communication make maintaining healthy warfighters, and a workforce to support them, very difficult. DetectWise™, an automated, integrated biosurveillance platform, provides solutions to many of these issues, not only for COVID-19, but for future infectious disease challenges that may emerge. A stand-alone, deployable, touch-free kiosk, DetectWise™ supports health screening and vaccination and testing compliance checks to help mitigate disease spread. This is especially important for mission critical work that cannot be done remotely, as well as work environments that require close proximity of staff. Enhanced with innovative technology, including medical-grade health sensors, subjects can be screened for vital sign and biometric measurements (e.g., temperature, heart rate, and respiration) shown to be indicative of active infection. Additionally, the integrated software solution provides an access management platform to permit facility entry to individuals who have their vaccination status or other health passport information stored in cloud applications or other web services. This versatility supports both health screening as well as health security and is compliant with the most recent CDC guidelines for COVID-19. The DetectWise™ solution supports standardized data collection and verification from health-attestations and clinical testing results from accredited laboratories, or at-home testing assays, in a secure HIPAA-compliant environment. This data collection allows health screening information to be verified and a QR code-based credential to be sent to the individuals smart device. The QR code credential is then authenticated at the point of entry by the DetectWise™ kiosk. All data can be securely transmitted in real time in a HIPAA-compliant manner to authorized recipients, who can provide next-step actions to the user. The DetectWise™ solution can be used as a biosurveillance monitoring tool for screening of health status from a variety of chemical, biological or environmental exposures. Data can be aggregated to provide analysis to look for disease signals or other health anomalies that may require a preventative countermeasure. Although currently designed to meet the challenges of COVID-19 pandemic, the DetectWise™ system is adaptable to meet newly emerging disease threats and incorporate data from detection assays, such as PCR or antigen assays, as well as characterization data such as variant typing or other sequence-based information. Designed with flexibility in mind, DetectWise™ capabilities are fully customizable to support the unique needs of customers across DOD, the federal government and commercial industry.

Parsons 5875 Trinity Parkway, Suite 300 Centreville, Virginia 20120