



# TECHNOLOGY TO EMPOWER FRONTLINE PANDEMIC RESPONDERS

## MONITORING & PREVENTING THE SPREAD OF COVID-19 THROUGH MOBILE TECHNOLOGY

### PROBLEM

With the COVID-19 outbreak threatening our global health, frontline responders are called to act now more than ever, joining together to fight the spread of this disease. Limiting the spread requires intensive procedures to ensure those infected are contained and first responders are protected from exposure.

Now, through the correlation of patient data, approved responders can collect pertinent information to help streamline the screening process, retain patient records of those in a testing hold and alert first responders of those who have tested positive and left their area of quarantine.

Limiting the face-to-face interactions and respecting social distancing between responders and those possibly exposed is critical for containing COVID-19. Technology has an essential role to play in acting as an aid to first responders, allowing them to focus on what matters most - keeping the community safe - while not putting themselves at more risk.

### THE IMPORTANCE OF DATA PRIVACY

At Motorola Solutions, we are proud of our more than 90 year history of developing innovative technologies and being a responsible, trusted

partner to federal, state and local governments. We build secure technology solutions that meet mission-critical and government standards. Our commitment is to the delivery of accurate, reliable and relevant data that can benefit responders, as well as society, during moments that matter, while ensuring that data is captured and processed in a responsible and secure manner. Motorola Solutions' products and solutions safeguard the privacy rights of patients.

### AGENCY CONSIDERATIONS

Motorola Solutions is a trusted advisor when considering new technologies to implement during the COVID-19 response. Ultimately, we look to agencies to work with their public and private health providers to develop strong policies that address their individual circumstances. Agencies are responsible for reviewing, customizing and adopting any new policies during the COVID-19 pandemic. Motorola Solutions is here to partner with you on your technology needs and provide industry insight on what solutions may best fit based on your operational needs.



# SOLUTIONS TAILORED FOR PANDEMIC RESPONDERS & PATIENTS

## FIELD REGISTRATION APPLICATION

Correlated records technology that enables responders to enter protected health information (PHI) into a secure mobile application. Patient's license plate, driver's license, image and PHI is captured and logged to increase the throughput of those exposed. By collecting such important data, a secure database allows for efficient communication and outreach for those who test positive.



### DRIVE THRU TESTING APPOINTMENT CREATED

Patient initiates an appointment to visit their nearest drive-up screening site. Appointments are logged in the application based on time selected. plate with facial recognition.



### IDENTITY INFORMATION LINKED TO PROFILE

First responders leverage either their personal or employee mobile device to access the app. Once patient arrives at drive-up screening site, the first responder finds associated reservation based on the name and time entered. First responder will capture the license plate number, driver's license information, and take a picture of the patient's face within a safe distance for the record. This information creates a unique record within LEARN/ClientPortal that associates the license plate with facial recognition.



### PATIENT IS TESTED, PROCEDURES INITIATED

Once a patient is tested, their captured face, license plate, driver's license details, and added information from the testing is included in the record with metadata (geo location, time stamp, etc.) After the 3-5 day test holding period, results come back either positive or negative. Based on the test results, the healthcare professional will then input the results, selecting an area within the app that allows them to select if the patient was determined infected or not. Once a determination is made, a set of pre-identified standard operating procedures takes place. An Individual's records are not retained unless the patient tests positive for the virus.

## FIELD REGISTRATION APPLICATION

FIRST RESPONDER COLLECTS PATIENTS INFORMATION

- Learn records and monitoring system
- Self quarantine mobile application
- Field registration mobile applications

## SELF QUARANTINE APPLICATION

An application for those who have tested positive and are required to check-in on their health status weekly. This technology allows those who test positive to stay within their quarantine location by logging in and performing a set list of check-in requirements, such as moving their head back and forth to show presence and awareness. The application captures patient's GPS coordinates and timestamp of login, to verify whether or not the patient is at their quarantine location.



### SELF QUARANTINE PROCEDURES BEGIN

Once a patient has been quarantined, it is recommended the patient remain compliant with quarantine procedures. With advice from the patient's healthcare professional, the individual will determine their method of checking in during quarantine. If the patient chooses the application method, they will log into the application to check-in their status via the app eliminating the need for face-to-face interaction with the healthcare professional in order for check-in. Several tasks are logged by the patient such as liveness detection and registered GPS information of their quarantined location



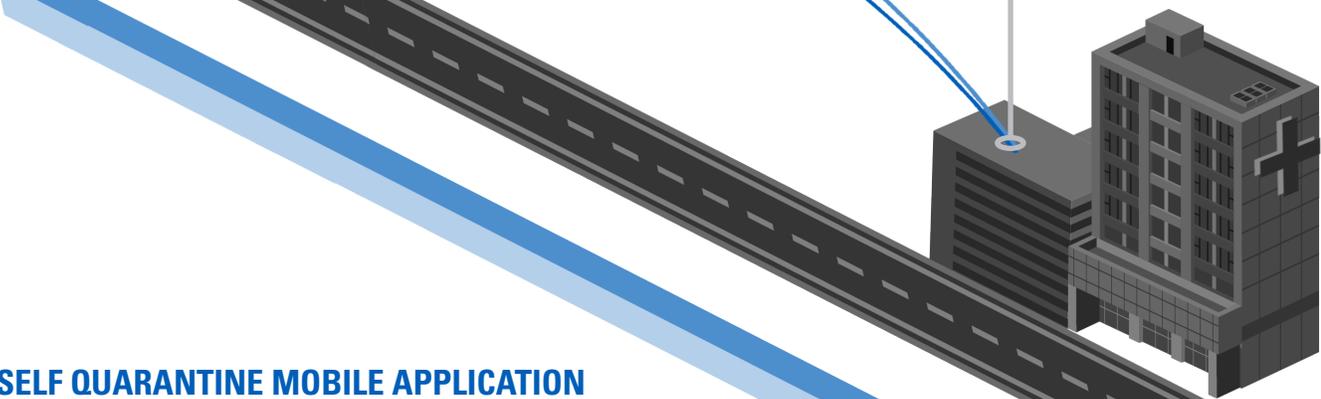
### SCHEDULED VIRTUAL CHECK-INS

Patient will be asked to take their picture within the app, moving their head to the left or right to verify they are the correct quarantined individual. The phone's GPS and timestamp information will be used to verify whether the patient is where they are required to be.



### PROFESSIONAL VERIFICATION

Healthcare professional determines if requirements have been met based on the information provided at check-in.



## SELF QUARANTINE MOBILE APPLICATION

SELF QUARANTINE CHECK-IN APPLICATION

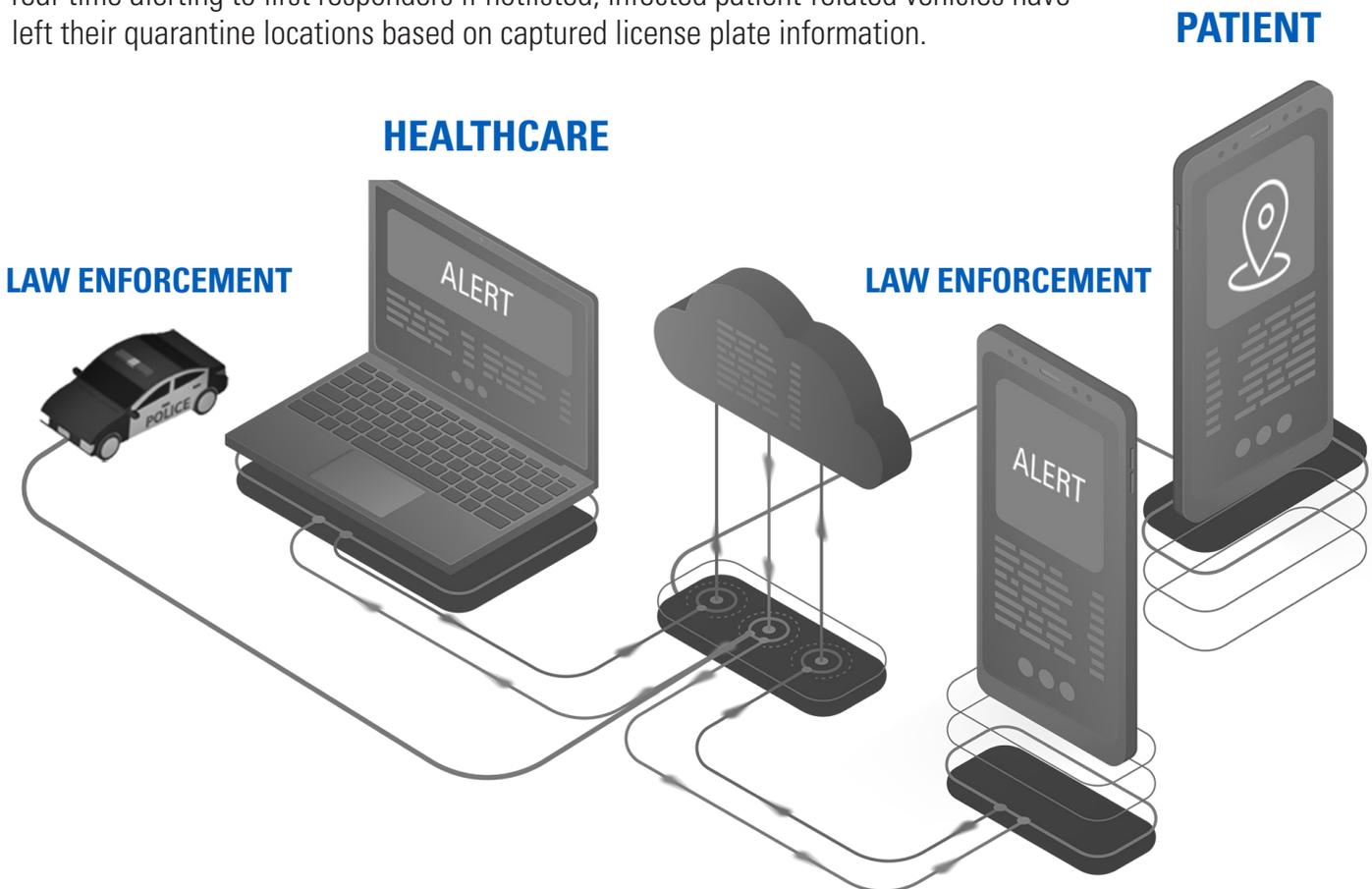
- Self quarantine mobile application
- Field registration mobile applications

Motorola Solutions proudly manufactures and deploys the sophisticated, cutting-edge communications, software, video security and analytics technologies that keep communities and nations safe. We have been on the frontlines with federal, state and local governments, including in times of crisis, for over 90 years. Today, our 17,000 innovators, engineers and manufacturing specialists are eager to help address critical gaps in the availability of medical and health management technology needed to fight the COVID-19 pandemic. We are pleased to offer hundreds of thousands of feet of secure, U.S.-based manufacturing, unrivaled operational agility and the capacity for rapid deployment.

**MOTOROLA SOLUTIONS STANDS READY TO SERVE OUR COUNTRY IN THIS MOMENT THAT MATTERS.**

## **RECORDS AND MONITORING SYSTEM**

The Field Registration and Self Quarantine applications are driven by a robust and secure backend storage system. All data is captured, correlated, managed and stored in a secure database, giving professionals the ability to search and provide swift actions in support of infected patients. Additionally, backend analytics are capable of providing real-time alerting to first responders if hotlisted, infected patient-related vehicles have left their quarantine locations based on captured license plate information.



## ADVANCED CAMERA ANALYTICS & ALERTING

Leverage NDAA Compliant Avigilon camera infrastructure at entry points of approved facilities, applying scalable and advanced analytics to streamline your operations. With facial recognition technology enabled cameras, professionals can accurately identify infected individuals at a distance well before face-to-face interaction occurs. By leveraging this technology, your responders are limiting their exposure to the virus. Facial information is then compared to the records information logged within the Field Registration Application alerting teams of those in the building who are infected.



### ALL PERSONS SCANNED

Avigilon fixed cameras kit placed at entry points of authorized healthcare and public safety agencies or appropriate doorways. All patients (individuals) are scanned as they gain entrance into facility, ensuring professionals a gallery of people entering so that they might later identify potential at-risk individuals.



Captured video is leveraged only by Healthcare and First Responders to limit Face To Face interactions of those infected.



### PATIENT VERIFICATION VIA QUARANTINE DATABASE

A searchable database of individual (faces, geo- and time- stamps) information is provided to health agency or hospital authorities to identify specific people who have tested positive or those that might be associated with those individuals (individuals that were in close proximity to individuals who have tested positive.) The infected individual record comes from a general repository (e.g., partially populated via Field Registration application) and is processed as a watchlist item. The record system and approved professionals can identify that infected individual. If an individual's face is scanned and not infected, the individual is not identified and all data associated with this scan is expunged after the interval of contact-based exposure risk elapses.



### NEWLY INFECTED AND PROBABLES ARE IDENTIFIED

For larger facilities, Avigilon cameras are installed with Appearance Search to enable contact tracing, determining if the person was in close proximity to others who entered. Avigilon advanced analytics are applied to fixed cameras and scan faces of patients who enter the facility looking for treatment. Individuals that are determined to be at risk of exposure by contact with an infected individual can be identified in a privacy respecting manner so that they may be contacted. Specifics establishing identity are to be determined collaboratively.\*

Trace proximity and path of infected individuals and manage other individuals.

## ACTIVE ASSISTANCE VIDEO SECURITY

ADVANCED CAMERA ANALYTICS & ALERTING

- Avigilon advanced analytics
- Avigilon fixed cameras



### PATIENTS ARE PROCESSED

Once an infected patient or person at risk of exposure due to contact is identified, healthcare professionals can determine the best route of action to assist patient and gain entrance into facility



## BENEFITS

- Identification of individuals at a safe distance, minimizing face-to-face interactions and protecting healthcare professionals and first responders
- Easily searchable and manageable reporting for first responders and health agency authorities
- Accurate patient information for effective COVID-19 patient data management
- Secure data ownership by those agencies/institutions scanning within their facilities; all PII data remains within the control of the managing agency
- Streamlined information sharing across jurisdictions; having the ability to share or not with other healthcare professionals
- Ability to more easily locate, quarantine and/or manage the infected
- Provide a searchable database of infected patients to authorized healthcare and public safety agencies, as well as the ability to search other image databases to identify at risk individuals

## CONTACT

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