PROBLEM
The COVID-19 pandemic is overwhelming traditional hospital infrastructure, requiring that temporary, improvised, mobile or expeditionary medical centers be established. These facilities will need to access outside health information exchanges (HIE), electronic medical records (EMR), imaging and other artifacts containing protected health information (PHI). Not addressing secure access to this information degrades patient outcomes by limiting information available to medical staff or compromises patient privacy by allowing unsecured access to systems containing PHI. Temporary facilities may also not have the communications capabilities to support secure telehealth, requiring more frequent in-person patient exposure for staff.

SOLUTION
Access to HIEs, EMR systems and telehealth can be secured using Commercial Solutions for Classified Program (CSfC) devices. CSfC was designed to handle U.S. Government classified material rather than healthcare information, exceeding HIPAA security requirements. A secure mobile environment can provide unified communications (voice, SMS, paging, email) for first responder teams, access to HIEs and other systems and telehealth capabilities, as well as flexible interoperability with other first responder organizations - optimizing patient outcomes while maintaining privacy. This CSfC solution does not require building out extensive infrastructure, instead relying on available networks/communications paths (e.g. commercial carriers or WiFi networks).

Today, there are smart portable devices, with IP67 ruggedness, push-to-talk and dedicated emergency buttons, that are CSfC certified for secure/encrypted data at rest and in transit. The capabilities of these devices, in the hands of a healthcare professional, could enable short-term diagnostic and treatment facilities to limit the number of costly, semi-permanent, single purpose solutions transported, installed and maintained at these facilities. Medical staff would be able to access the same applications and systems they are already familiar with, requiring no retraining.

This solution would consist of equipping medical and first-responder personnel with CSfC certified and enabled Android-based devices configured with the required applications and capabilities to support each user’s role. A secure connection is established between the device and one or more gateways into existing systems; all data-in-transit between the device and gateway is fully secured to CSfC standards.

This CSfC solution is currently fielded to multiple U.S. Government groups, who use it to provide secure voice and data communications (e.g. DOD users securely running ATAK over a commercial carrier network). Interoperability with outside agencies, whether county, state or federal, is easily accomplished through interoperability gateways and various push-to-talk applications, such as WAVE.
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.

**FIELDING TIMELINE**

This solution is ready now and can be deployed to a given facility in a matter of 1-2 weeks. The underlying LEX L11 device is currently available at Technology Readiness Level-9, secure software has been tested and fielded and multiple such systems are currently in use by the U.S. Government. Authority to Operate (ATO) has already been granted.

A rough order of magnitude estimate is $1,000 per user and $750,000 to interface to multiple HIEs.