

## **COVID-19 App Suite for Contact-Free Patient Screening**

## **Abstract - Team 13**

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## **Abstract**

As a result of the COVID-19 pandemic and the looming threat of viral exposure, many individuals in the United States are wary of gathering indoors and meeting others face-to-face, abiding by CDC guidelines to allow adequate social distancing. Unfortunately, even attending regular physician appointments and check-ups for pre-existing or nascent health issues poses an increased risk for contracting and spreading the virus. Therefore, the use of telehealth platforms has increased over the past few years and holds particular promise in this period for contact-free physician appointments and consulting. However, current issues with existing telehealth platforms include electrical transmission of private information, conducting and monitoring patients during specialized tests such as imaging and nasal swabbing, and increased chance of misdiagnosis without direct patient-physician interaction. Our pilot program, Cothecare, aims to resolve the current issues and downfalls of telehealth. Our mobile app suite, developed alongside guidance and approval from a physician and trauma center specialist, securely stores patient information and connects via private message or call to a physician with a working relationship established with the patient. The system allows for daily logging of coronavirus and asthma related symptoms and provides a diagnosis with suggestions for care based on these symptoms. We aim to improve outpatient care and increase access to health care professionals and physicians in order to diagnose and receive guidance on COVID-19 and asthma by developing a mobile app suite that acts as proof of concept for using telehealth as a method for treatment and patient connection for infectious diseases/chronic conditions.