

INFM600

# TELEHEALTH AS A RESPONSE TO COVID-19

## Final Report

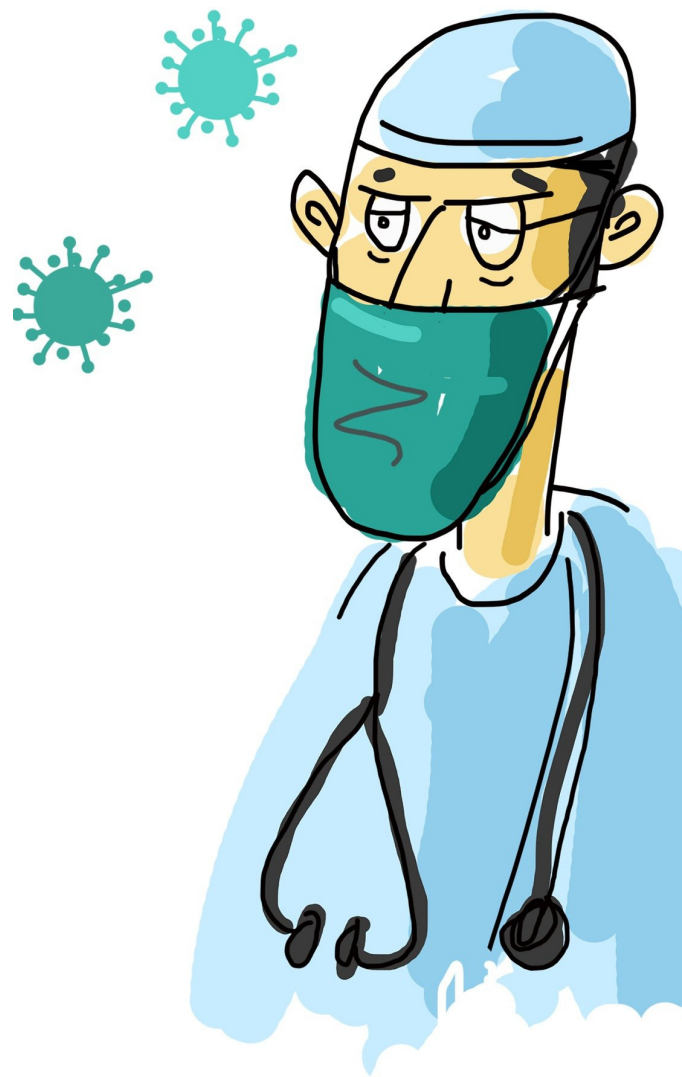
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# 1. INTRODUCTION

Title V of the Affordable Care Act 2010 defines health literacy as an individual's ability to "obtain, communicate, process, and understand basic health information and services" so that they may make prudent decisions regarding their health and well being (CDC 2020)\*. Health literacy has a direct influence on the actions an individual takes for their own health, from eating healthy to smoking tobacco to partaking in exercise. An individual's understanding of health and well-being promotes healthy behaviors, one of which includes visiting medical professionals as necessary. With the recent lifestyle change as a result of the COVID-19 pandemic, many Americans are making the decision to not seek medical care, for a variety of reasons. Some of these reasons may include a lack of transportation, fear of contracting or spreading infection, or financial burden. Telehealth, medical care provided through technological means such as video chat or phone call, emerged as a result of the global health emergency. This allows for the safety of both doctor and patient by completely preventing physical contact unless medically necessary. However, many individuals are not using this service and neglecting all medical attention, be it preventative or necessary.

## 2. BACKGROUND AND INVESTIGATION

Since the beginning of 2020, the Centers for Disease Control and Prevention (CDC) reported that an average of 40% of Americans admit to delaying medical care as a result of the Coronavirus pandemic (CDC 2020)\*. In a CDC national survey, the state averages for percent of individuals delaying medical care ranged from 24.9-45.8%, with New Mexico holding top place for the average highest percentage (Reduced Access to Care, CDC 2020). In order to further understand the personal impact of COVID-19 on medical care, interviews were conducted with colleagues, friends, and family members to determine the extent to which care was delayed and any potential reasons for doing so. It was found that many individuals reported canceling annual physical check-ups and biannual dental cleanings, only seeking medical care in case of an emergency. The main reasons were fear of exposure to the Coronavirus and reduced income as a result of the pandemic.

Delayed Medical Care, Last 4 Weeks

Quartile range ● 24.9-29.9 ● 30.0-31.8 ● 31.9-34.0 ● 34.1-45.8

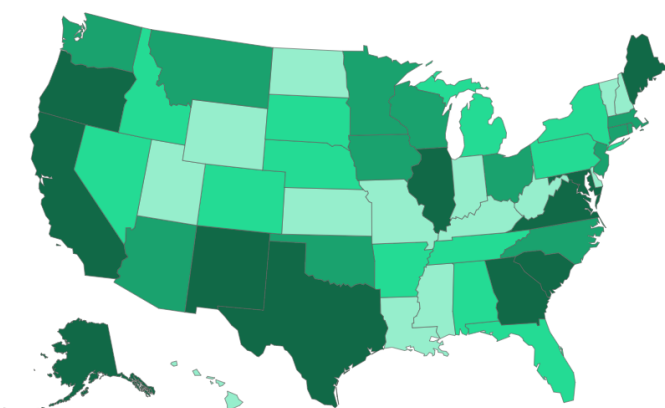


Figure 1. Delayed Access to Care by State (CDC 2020)

### 3. POTENTIAL SOLUTION

A potentially effective way to alleviate the pandemic's burden on seeking healthcare is to build an educational and interactive website for the purpose of informing individuals of the importance of continuing healthcare while maintaining their safety, as well as linking them to professionals within their insurance network.

Increasing health literacy regarding well being in a pandemic will promote health-positive behaviors, encouraging healthy living, and promoting health. This could be effective in preventing health complications, maintaining mental health, and identifying health actions to take.

### 4. WIREFRAME

A wireframe of this website has been created (see figure 2) to visualize the ideas in place. The website would educate individuals on the importance of being proactive about their health and well-being, as well as connect them to medical professionals in their network or area. The website would filter medical personnel by profession, distance, insurance network, and type of virtual visits provided (e.g. Zoom, Skype, phone call). Additionally, the website would provide information and resources on daily ways to maintain a healthy lifestyle from quarantine, in order to encourage healthy behaviors in the pandemic.

This would be an effective means of promoting health through small, daily actions, as many individuals have forgotten to prioritize their eating habits, sleep, mental health, etc. in the chaos of the pandemic. Motivating and reminding individuals to care for themselves on a daily basis will increase their concern for their well-being, and their likelihood to seek medical care. Although there are a number of telehealth applications in existence, there are two notable features that make the platform unique:



## 4. 1. TELEHEALTH ACCESSIBILITY TAILORED TO THE INDIVIDUAL'S TECHNOLOGY USE

Access to telehealth has been particularly challenging for elderly people and low-income families who either have challenges navigating latest technology or do not own the necessary technological equipment like tablets and computers needed for telehealth services. Therefore, this platform filters telehealth options based on the technologies a patient has access to and their proficiency level in using those technologies.

For instance, the application asks whether the patient has a smartphone, tablet or computer, and uses that information to filter options that are more convenient for the user. Those with access to a camera can choose video appointments and someone with no access to a good quality camera can opt for a phone consultation instead. By tailoring the platform to the individual, it is hoped to reduce some of the disparities in healthcare in general, and in telehealth in particular.

**People who do not have access to advanced technology can have their telehealth experience tailored to their circumstances.**

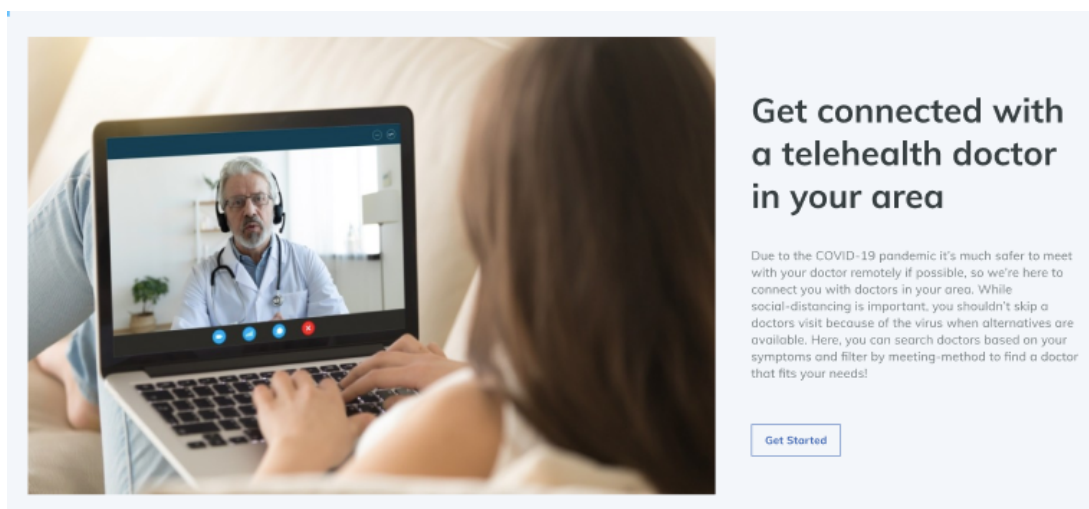


Figure 2. Wireframe of Recommended Website as a Telehealth Solution

## 4. 2. ON-BOARDING

**The on-boarding process is conducted with the aim of minimizing challenges on the day of the appointment.**

In addition to the technological access feature, the application also invites the user to indicate what teleconferencing platforms they are familiar with. The platform will then present the user with a list of potential doctors in the area whose teleconferencing software matches the patient's teleconferencing software preferences.

Furthermore, the platform makes available a short on-boarding video for various teleconferencing platforms used in telehealth. Once, the patient has selected a provider and the technology they will use, they will be prompted to watch a short on-boarding video, training them on how to download and/or navigate the specific software they anticipate using during their telehealth appointment. This process is conducted with the aim of minimizing challenges on the day of the appointment.



## 5. FINAL RESULT

The wireframe has been created in hope to outline the final result of a fully functioning and responsive website that is accessible by all, starting with the PG county area. In order to fully create this resource it is necessary to obtain information from doctors in the area in order to create a categorized database. However, because this knowledge was limited, a functional wireframe was created as a prototype.

The wireframe was created by taking into consideration what would commonly confuse individuals who are looking to schedule a medical appointment and how the process could be simplified. If an individual requires a visit with a specific kind of doctor, a dermatologist for example, in a pre-COVID world they would normally get this information from their general physician or another medical professional as a referral. With this new platform, the user would be able to search by medical speciality or by entering symptoms to locate doctors to appoint with, as well as which telehealth options they provide.

Telehealth does not require that a doctor be in close proximity to the patient since they are meeting remotely. However, providing the option of nearby doctors could lead to lasting relationships for patients with medical professionals in case of emergency or for after quarantine. The website could also open opportunities with doctors in an individual's neighborhood that they were unaware of.



## 6. CONCLUSION

COVID-19 has forced most healthcare providers to adjust to a virtual health care environment in a short time. While access to telehealth services has grown exponentially during this time, the reality is that not all people have the equipment, internet connectivity, ability, and comfort to use the technology for healthcare.

Moreover, many seem unaware of telehealth alternatives or the process of meeting with professionals outside of in-person appointments. Due to the nature of the pandemic, there are legitimate concerns and other economic barriers preventing many from accessing reliable healthcare during this very crucial time.





As such, the need to improve and expand access to telehealth has never been greater. Healthcare providers, government officials, and technology experts should continue their efforts to improve access to medical services and quality care. Telehealth platforms are a convenient way to increase health literacy, informing the public on how to stay safe, exercise and stay healthy during these cold winter months.

This platform is a model that attempts to respond to the very need of the hour. It is important to note that the process of developing this platform will involve ample research and information collection from various doctors and healthcare providers in the PG county area.

**This platform is a model that attempts to respond to the need of the hour, and reduce disparities in access to healthcare.**

## **7. REFERENCES**

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