COVID Wellness Nurse – Digital Symptom Tracking Assistant (2021-015)

Digital health assistant software that collects patient data on COVID-19 testing, symptoms and quarantine information.

Market Overview

In the United States alone, more than 11.1 million people have contracted COVID-19. Managing the infection rate relies on symptom tracking of populations. However, most healthcare facilities, which are comprised of multiple providers serving diverse patient populations, do not have the capability to simultaneously monitor individuals and the population at large. This situation makes it difficult to formulate and initiate informed decisions about the safety measures needed to keep the infection rate low. To address this issue, Clemson University researchers have developed software that allows for collective symptom tracking of populations, giving healthcare practitioners both individual and population-level health data. As COVID-19 affects increasingly more populations, the relationship between symptoms and results will become more complex and difficult to analyze, making this software even more critical.

Technical Summary

This technology features an engaging patient interview in a conversational format that allows for individual and collective symptom tracking of populations. It provides a way for healthcare providers and administrators to quickly identify at-risk patients and advise them on appropriate precautions and treatment, while at the same time streamlining the monitoring and analysis process for patient populations. The modular format of the software gives administrators and supervising healthcare providers the ability to select the patient data and analytics profiles most relevant for their organizational needs.

Application
COVID-19, Symptom Tracking, Software, Precision Health

Development Stage
Prototype

Advantages

- Provides a tool for healthcare practitioners to quickly identify at-risk individuals

- Can be utilized by electronic health record companies looking for applications to add to their current systems

- Allows for tracking on a multi-organizational level, a key distinction from other applications currently being developed

App Type	Country	Serial No.	Patent No.	CURF Ref. No.	Inventors
N/A	United States	N/A	N/A	2021-015	Jordon Gilmore Nancy Meehan Jerome McClendon Caitlin Kickham (Moore) Brandon Shumin Ayahnna Herbert

About the Inventors

Dr. Jordon Gilmore
Assistant Professor of Bioengineering at Clemson University

Dr. Jordon Gilmore received his PhD in Bioengineering from Clemson University in 2015. Before returning to Clemson in his current position, Gilmore worked at the Multiscale Manufacturing Lab. His research interests include orthopedic tissue engineering, biomedical textiles, bioinstrumentation and control engineering.

Dr. Nancy Meehan
Associate Professor of Behavioral, Social and Health Sciences at Clemson University

Dr. Nancy Meehan received her PhD in Nursing Research from the University of Texas in 1985. She has a significant record of nursing informatics publications and of internal funding. Dr. Meehan has received external funding from the AHRQ to assist in developing a pediatric virtual patient system. Her research interests include nursing informatics, electronic health records, Fitbit and app development.

Dr. Jerome L. McClendon
Research Assistant Professor of Automotive Engineering at Clemson University

Dr. Jerome L. McClendon received his PhD in Computer Science from Clemson University, he was formally a research assistant professor in the Department of Computing. Dr. McClendon's research interests are focused on the design, implementation and evaluation of intelligent computing systems that mimic human behavior.

For more information on this technology contact:

A. Chris Gesswein
Director of Licensing for Technology Transfer

E: agesswe@clemson.edu
P: (864) 656-0797

CLEMSON UNIVERSITY
RESEARCH FOUNDATION