

## Mental Health Technology Solutions Project

| Mental Health Technology Solutions | FY 17/18*          | FY 18/19           | FY 19/20           | FY 20/21           | FY 21/22**         |
|------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| <b>Annual Budgeted Funds in</b>    | <b>\$2,000,000</b> | <b>\$6,000,000</b> | <b>\$6,000,000</b> | <b>\$6,000,000</b> | <b>\$4,000,000</b> |

\*March 23, 2018 through June 30, 2018

\*\*July 1, 2018 through March 22, 2019

### Program Description and Background

Based on recent statistics from the National Institute of Mental Health (2016), one in six adults experiences mental illness and one in 25 adults lives with a serious mental illness. Prevention and early intervention are critical, with half of all lifetime cases of mental illness identified by age 14 and 75% by age 24. Furthermore, engagement into mental health services for those who develop a mental health condition is equally imperative, as recent outcomes revealed 60% of adults and 50% of children did not receive needed mental health treatment. Research indicates that individuals living with mental illness wait an average of 8 to 10 years before seeking treatment, resulting in years of suffering and an increased risk of developing a serious and persistent mental illness. Factors that impact engagement in mental health treatment, particularly among multicultural communities, include limited access to services, stigma associated with mental illness and language barriers. As the rate of mental illness continues to rise and barriers to treatment continue to exist, the current health care system has been unable to meet the increasing need for services. A large scale approach to outreach, engagement and service delivery is necessary to address this public health issue.

Technology has been identified as an innovative approach to mental health through its large scale impact, unlimited access to services and support, anonymity that can alleviate fear or stigma of accessing services, and ability to detect and prevent serious mental illness.

In 2017, Los Angeles and Kern Counties proposed the Mental Health Technology Solutions project, a suite of mental health focused applications designed to increase access to mental health services. The Mental Health Services Oversight and Accountability Commission (MHSOAC) provided an opportunity for other counties to join in this cross county collaboration, under the conditions that each county conducts a community planning process that involves its stakeholders, proposes a budget for its participation in the project and seeks approval from the MHSOAC to join the project. Orange County is proposing to join this project, which consists of five components:

- 24/7 AI-Assisted Peer Chat

- Therapy Avatar
- Customized Wellness Coach
- Marketing
- Evaluation

The peer chat component will offer support delivered by a trained peer mentor, who will be assisted by AI (Artificial Intelligence) during the chat session. The chat option will also include group chat rooms facilitated by the peer mentors, specifically for family members and/or parents of children living with mental illness. The peer chat component will be accessible on the County website, as well as mobile phones or tablets. This component of the Technology Solutions suite of apps will offer large scale access to support at any time during the day or night, increasing the options available for an individual seeking help.

The Therapy Avatar component will offer scripted mindfulness exercises and Cognitive Behavioral Therapy interventions delivered through an Avatar. Exercises will be customized through AI and based on a person's responses, allowing for an interactive process between the person and the Avatar. The interaction with an Avatar can offer a sense of safety and security for individuals who experience stigma or shame associated with mental illness. This process will encourage engagement in mental health support and provide an access point for individuals who prefer anonymity.

The Customized Wellness Coach is a unique component to the Technology Solutions suite of applications in that it will not require any input or information from the individual. This component will rely on the information that is already gathered by a person's mobile device, using it to automatically tailor wellness strategies to the person's needs. Through this process, this component has the potential to detect early warning signs or prevent the development of mental illness.

In order to ensure this project makes a large scale impact, an effective marketing and advertising campaign is crucial. Efforts will be made to promote the Technology Solutions suite of apps within school systems, social media, mental health organizations (i.e., behavioral health clinics, hospitals, etc.), and public locations (i.e., parks, libraries, etc.).

Lastly, the evaluation component is essential to this innovation project, as it will identify the lessons learned and effectiveness of the Technology Solutions suite of apps. Orange County will evaluate several key learning questions:

- Can online social engagement effectively mitigate the severity of mental health symptoms?
- Does this customized engagement and treatment approach translate into improved participant outcomes and reduced hospital readmissions?
- Do the effects, if any, vary by demographic, ethnographic, condition, intervention, strategy and/or delays in receiving interventions?

The budget for this project was developed through an extensive community planning process and stakeholder input held between December 11, 2018 and January 19, 2018, and approval from the Orange County MHSA Steering Committee on January 22, 2018. The technology costs for this project are minimal, as these applications currently exist in the marketplace. Orange County will be paying for its portion in the maintenance and customization of these apps. However, a significant portion of the budget is dedicated to the staffing of these components, such as peer mentors, data scientists, programmers, developers, researchers, statisticians, etc. Also included in the budget are marketing (i.e., promotional materials, advertising), evaluation (i.e., internal, external, and process evaluation) and administration costs (CalMHSA and HCA indirect and direct costs).

On January 22, 2018, the MHSA Steering Committee approved HCA's proposal to use reverted Innovation dollars on existing and/or newly approved projects in a manner that maximally protects reverted and existing funds. Thus, if approved, this project will be funded, all or in part, by Innovation dollars reverted as of July 1, 2017 per Assembly Bill (AB) 114.

## Personal Care Assistant App (Orange County's Additional Component to the Mental Health Technology Solutions Project)

| Personal Care Assistant App* | FY 18/19    | FY 19/20    | FY 20/21    | FY 21/22    | FY 22/23    |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| Annual Budgeted Funds in**   | \$2,000,000 | \$2,000,000 | \$2,000,000 | \$2,000,000 | \$2,000,000 |

\*App features and elements are subject to change based on stakeholder input

\*\*The estimated budget for this project is in development and subject to change based on stakeholder feedback

### Program Description

The Personal Care Assistant app\* is an additional component that Orange County proposes to add to the Mental Health Technology Solutions suite of applications. The Person Care Assistant app is designed to assist an individual with housing (i.e., matching individuals to real-time available housing and providing therapeutic supports to promote housing stability), transportation (e.g., step-by-step guide to appointments), coordinated care (i.e., automated reminders/alerts), education/resources (i.e., customized to Orange County resources; tailored for families, healthcare providers, first responders, and peers); and/or crisis management (i.e., pre-crisis/crisis/post-crisis management). General features of this multi-component app will include:

- Different user levels (i.e., family, peer, healthcare ~~or~~ ideas providers, first responders)
- Interface and synchronization with Personal Care Assistant apps and Technology Solutions suite of apps
- Face-to-face peer support and case management to assist with system navigation and technical assistance with the Personal Care Assistant app features

This app is currently in development through an extensive, ongoing community planning process that began in December 2018. The app name, features, elements and budget may be modified based on stakeholder input during future planning meetings, which are open to all Orange County stakeholders. HCA will seek MHSOAC approval for this project after it seeks approval to join the Mental Health Solutions Technology project.

On January 22, 2018, the MHSA Steering Committee approved HCA's proposal to use reverted Innovation dollars on existing and/or newly approved projects in a manner that maximally protects reverted and existing funds. Thus, if approved, this project will be

funded, all or in part, by Innovation dollars reverted as of July 1, 2017 per Assembly Bill (AB) 114.