# help@ hand Evaluation

### Mental Health Services Act (MHSA) Innovation Technology Suite Evaluation

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#### **INTRODUCTION**

Help@Hand began its second year with several Counties/Cities actively planning efforts to initiate pilot programs designed to introduce various technologies in their communities. Of these, six Counties/Cities (Los Angeles, Marin, Riverside, Santa Barbara, San Mateo, and Tri-City Counties/Cities) continued to plan pilots to test potential technologies with members of their target audiences. Los Angeles County submitted three pilot proposals for Help@Hand Leadership's approval by the end of March. Riverside County prepared to launch its peer chat website, entitled 'TakemyHand.co'. Orange County continued to develop extensive plans to launch Mindstrong (a currently approved portfolio Help@Hand Technology Vendor) and Monterey County made strides with developing its own assessment tool. In preparation for initiating a pilot, San Francisco and Tehama Counties continued to explore potential technologies to meet their target group needs.

In addition, Peer involvement continued to be a source of innovation. CalMHSA and Kern County hosted a twoday Digital Mental Health Literacy (DMHL) Train-the-Trainer workshop with 30 Peers in Kern County on February 27-28. The workshop trained Peers on the Peer-led, Help@Hand-developed curriculum designed to improve digital mental health literacy in local communities. Curriculum topics included cyberbullying and managing digital presence. Peers at Kern, Los Angeles, and Santa Barbara Counties also developed App Brochures, which recommend mental health apps to their community members. A loss to the Help@Hand project was the resignation of Help@ Hand's Peer and Community Engagement Manager in March 2020. Plans are underway to hire a new manager.

Toward the end of the first quarter, Help@Hand prepared to pivot to respond to the emerging COVID-19 pandemic. At this time, project adjustments and business continuity plans are currently being made and revisited to best meet emerging needs.

#### KEY HELP@HAND EVALUATION ACTIVITIES AND LEARNINGS (JANUARY-MARCH 2020)

#### **System Evaluation**

It was identified during the last quarter that many Counties were interested in deploying meditation apps. As such, during this quarter, the Help@Hand system evaluation pivoted to focus the market surveillance on publicly available meditation apps. The market surveillance analyzed general trends and compared these apps with each other. It found:

- The meditation apps reviewed had limited features that would make them accessible and easy to use for all people, such as individuals with hearing or visual impairments.
- Users could access very few of the apps reviewed without internet connectivity. Users must have access to the internet for many of the apps (at least for initial set up and download of content).
- Certain target groups might find most of the apps reviewed as unsuitable. Most of the apps were only available in English and had little tailored content for those groups.
- Meditation apps do not integrate with clinical care, but may complement care provided.
- The meditation apps reviewed did not have crisis resources, referrals, or connections to healthcare professionals.
- Experts and consumers rated the apps with high user experience scores. This indicates that the apps have promising user experiences and can potentially engage users.
- Third-party app analytics platforms provide helpful information to understand trends in marketplace data. However, availability of data changes rapidly.

#### **County/City and Site-Level Implementation Evaluation**

CalMHSA, the Help@Hand evaluation team, and Counties/Cities worked together to plan for successful pilot implementations. Key learnings from the Collaborative pilot planning process include:

- Attention and interests may constantly shift. Nevertheless, maintaining focus on the County/City's established priorities for the pilot will help develop pilots that align with the County/City's fundamental needs.
- Awareness of a County/City's resource and time constraints can help develop feasible and realistic pilots.
- Pilot planning must be nimble and quickly adjust to target group needs, such as offering services in non-English languages for monolingual communities.
- Communication between Counties/Cities, CalMHSA, the evaluation team, and other stakeholders is critical. Regular and integrated communication has been crucial for keeping all parties apprised of updates. It is also necessary to ensure that proposed pilots will produce the necessary information needed for Counties/Cities to make actionable decisions.
- Counties/Cities are excited by potential of the pilots to address their learning objectives. Counties/Cities need implementation and evaluation support to create the necessary frameworks to translate ideas into testable processes. The creation of materials that translates concepts into actionable steps must be easy to understand and must underscore its value.
- Although resources available through the Collaborative can play an important role in helping to provide feedback and inform County/City decisions, decisions for a County/City are ultimately determined at the local level.

Interviews conducted with the former Peer and Community Engagement Manager and 9 Help@Hand Peer Leads revealed:

- Many of the intended users of Help@Hand technologies lack access to required infrastructure (i.e., smartphones and internet) and/or sufficient digital mental health literacy to enable them to take advantage of the technologies offered. Digital Mental Health Literacy instruction can contribute to the successful adoption of Help@Hand technologies by addressing these needs.
- Counties face challenges in maintaining a steady Peer workforce owing to a combination of factors, including restrictive hiring policies, workforce turnover related to either promotions or Peer relapse, and a dearth of qualified Peers.
- External forces, including a lack of an efficient cross-Collaborative information exchange process, as well as recent social distancing policies, hampered successful rollout of the Peer outreach component of Help@Hand.
- Peers have considerable potential to enhance program planning and implementation. Integrating Peers in all levels of the Help@Hand program can fully actualize this potential.

#### User Experience and Technology Evaluation

The Help@Hand evaluation team actively worked with the Help@Hand Collaborative to develop a framework to evaluate pilots from the user perspective.

Los Angeles and Orange Counties also partnered with the evaluation team and local community colleges to conduct surveys aimed at understanding unmet mental health needs of college students and how technology may address these needs.

Moreover, the team conducted a systematic literature review to understand factors that may influence adoption and use of Help@Hand technologies among target groups. Key learnings from the review indicated:

• A deep understanding of factors that affects how people engage with mental health technologies can help identify

appropriate strategies to address barriers. The literature identified 16 common factors affecting usage related to the following:

- o User (i.e., demographic variables; personality traits; mental health status; beliefs; experience and skills; integration into life);
- o Content of the program offered within the technology (i.e., type of content; perceived fit; perceived usefulness; level of guidance; social component; impact of technology);
- o Technology itself and the environment where the technology is used (i.e., technology factors; security and safety; social influence; implementation).

#### **Outcomes Evaluation and Data Dashboard**

A collaborative and Peer-participatory process was used to review and select the proposed instruments to measure changes in mental health stigma for the Help@Hand program. Three distinct areas were highlighted as being important for consideration: 1) internalized stigma (one's own stigma toward their mental health condition), 2) resilience (one's hope and positive attitude toward living with or recovering from their mental health condition), and 3) mental health treatment stigma (one's stigma toward seeking treatment for their mental health condition). Additional information describing the process and the proposed instruments will be made available in a forthcoming report.

#### **Recommendations**

Recommendations for the overall Help@Hand Collaborative and the individual Help@Hand Counties/Cities were developed based on evaluation learnings. These recommendations are provided on pages 47-48.

### INTRODUCTION



Help@Hand is a five-year<sup>1</sup> statewide collaborative demonstration project funded by Prop 63 (now known as the Mental Health Services Act) and has a total budget of approximately \$101 million. It is designed to bring interactive technology–based mental health solutions into the public mental health system through a highly innovative set (or "suite") of mobile technologies. The project intends to provide people across California with free access to mobile technologies designed to provide education on the signs and symptoms of mental illness, including emotional/ behavioral destabilization, connection to help in realtime; and access to mental health services when needed. In addition, Help@Hand leads innovation efforts by integrating peers<sup>2</sup> throughout the project.

Through these efforts, Help@Hand focuses on five shared learning objectives:



<sup>1</sup> The project was originally designated as a 3-year effort.

<sup>&</sup>lt;sup>2</sup> Help@Hand defines a Peer as a person who publicly self-identifies with having a personal lived experience of a mental health/co-occurring issue accompanied by the experience of recovery. A Peer has training to use that experience to support the people they serve.



#### **ABOUT THE EVALUATION**

The University of California, Irvine (UCI) in partnership with the University of California, San Diego (UCSD) is conducting a comprehensive formative evaluation of Help@Hand. The evaluation involves observing and evaluating the project as it happens in order to provide real-time feedback and learnings.

The following evaluation report presents activities and findings for Quarter 1 (January-March 2020) of Year 2 of the project. The report is organized as follows:

- Summary of Activities: Describes key activities and milestones accomplished during the period.
- Evaluation: Details evaluation activities and findings related to:
  - o System Evaluation
  - o County/City and Site-Level Implementation Evaluation
  - o User Experience and Technology Evaluation
  - o Outcomes Evaluation and Data Dashboard
- Recommendations: Presents recommendations based on findings.

<sup>&</sup>lt;sup>3</sup> Counties and Cities can join the collaboration by submitting a proposal to the Mental Health Services Oversight and Accountability Commission. Upon approval, Counties and Cities enter the collaboration by contracting with CalMHSA, which serves as the administrative and fiscal intermediary for the project. Inyo County joined the collaboration in 2018, but transitioned out due to insufficient internal resource capacity.

### SUMMARY OF ACTIVITIES

The following timeline reflects key Help@Hand project activities during the quarter. It is not intended to be a comprehensive accounting of all activities. Appendix A includes detailed County/City reported information, including key accomplishments during the quarter, lessons learned, and recommendations.

#### **JANUARY 2020**

#### **Oversight and Help@Hand Leadership**

- Published semi-annual report to the MHOAC
- Developed and shared new template for contracts with Vendors
- · Contracted with expert to provide clinical guidance for risk and liability
- Launched Help@Hand website (HelpAtHandCa.org)

#### **County Activities**

- Initiated pilot planning (Los Angeles, Riverside, San Mateo, Santa Barbara, and Tri-City)
- Continued planning for Mindstrong implementation (Orange County)
- Developed County-specific assessment tool (Monterey)
- Met with target groups to select appropriate technologies (San Mateo, Santa Barbara, and Tri-City)
- Delivered first product exploration training (San Mateo meets with 2 app Vendors); Prepared to launch its peer chat website, entitled 'TakemyHand. co' (Riverside)
- Presented 2nd edition of App Brochure to several stakeholders and worked on 3rd edition (Kern)

#### **Project Management**

- Held meeting to facilitate pilot implementation and evaluation
- Developed product matrix tool
- Provided guidance for short code messaging
- Developed digital mental health literacy video series

#### FEBRUARY 2020

#### **Oversight and Help@Hand Leadership**

- Presented Help@Hand update at OAC's February 27th Commission Meeting
- Help@Hand Leadership approved pilot evaluation plan
- · Convened Linguistic and Cultural Adaptation workgroup
- Convened Roadmap workgroup
- Received a Public Records Act request

#### **County Activities**

- Continued pilot planning (Los Angeles, Riverside, San Mateo, Santa Barbara, and Tri-City)
- Continued planning for Mindstrong implementation (Orange County)
- Continued development of County-specific assessment tool (Monterey)
- Convened Digital Mental Health Literacy Train-the-Trainer workshop (30 peers held in Kern County)
- Hired 3 Regional Leads (Santa Barbara)
- Partnered with Santiago Canyon College to conduct baseline assessment (Orange County) Held initial conversations with Vendor Technologies (Tri-City)
- Hosted an AppyHour with older adults (San Mateo)
- Trained Advisory Committee on the app exploration process (San Mateo)

In its second year, Help@Hand Counties/Cities made major strides to plan successful launches of technologies in their communities. The year began with the Help@Hand Collaborative publishing its semi-annual report to the Mental Health Oversight and Accountability Commission (MHO-AC), describing key activities and accomplishments between June-December 2019.

#### January 2020

In January 2020, the Collaborative finalized a new Technology Vendor contract template for Counties/Cities to use as they plan to embark on pilots for such technologies. The Collaborative also contracted with an expert to provide clinical guidance for risk and liability. CalMHSA developed various resources to support the Counties/Cities. One resource, the product matrix, is designed to help Counties/Cities review and compare Technology Vendors by allowing Counties/Cities to filter Vendors by MHOAC components (i.e., peer chat and digital therapeutics, virtual evidence-based therapy utilizing an avatar, and digital phenotyping using passive data) and feature type. An additional resource includes guidance for short code messaging - a special 5-or 6-digit telephone number, shorter than a standard phone number, to encourage awareness and accessibility of Help@Hand technologies by enhancing user experience. Additionally, the Collaborative launched the Help@Hand website (HelpAtHandCa.org) to increase brand awareness and enhance marketing. The website also includes a Help@ Hand-developed digital mental health literacy video series titled "Tips for Staying Safe Online" (HelpAtHandCa.org/ dmhl).

A flurry of activities occurred in January, associated with Counties/Cities planning various efforts. Orange County continued to develop plans to support the Mindstrong implementation. Monterey County continued to develop its own assessment tool. Five Counties/Cities (Los Angeles, Riverside, San Mateo, Santa Barbara, and Tri-City) began the pilot planning process – developing detailed implementation and evaluation plans. As an example, Riverside County prepared to launch its peer chat website, entitled 'TakemyHand.co'. San Mateo, Santa Barbara, and Tri-City partnered with community members who represented target audience stakeholders to review and select technologies for

#### **Project Management**

- Developed pilot process checklist and pilot decision tree
- Established guidelines to operationalize Help@Hand branding

#### Other

 Hosted webinar informing project stakeholders and general public of progress to date (106 registrants)

#### March 2020

#### Oversight and Help@Hand Leadership

- Created business continuity plans with Counties/Cities in response to COVID-19 crisis
- Examined feasibility of statewide rapid response to COVID-19 pandemic
- Presented Pilot Proposal Template to Help@Hand Leadership
- Reviewed three pilot proposals for Help@Hand Leadership vote (Los Angeles County)
- Presented Digital Behavioral Health Questionnaire (DBHQ) to the Collaborative as a risk assessment tool
- Announced resignation of Peer and Community Engagement Manager

#### **County Activities**

- Continued pilot planning (Los Angeles, Riverside, San Mateo, Santa Barbara, and Tri-City)
- Continued planning for Mindstrong implementation (Orange County)
- Continued development of County-specific assessment tool (Monterey)
- Held virtual Help@Hand Collaboration meeting (All Counties)
- Developed an additional module titled "Using Google Calendar" for the Digital Mental Health Literacy curriculum
- Conducted interviews with Peer Leads (Kern, Los Angeles, Modoc, Orange, San Mateo, Santa Barbara, and Tehama Counties)
- · Facilitated continued involvement of Peers in evaluation activities
- TV news stations broadcasted Kern County's App Brochure (Kern)
- Began planning remote app exploration sessions with older adults (Marin and Tri-City)
- · Began recruiting hire of a Peer for the project (Marin and San Mateo)

#### **Project Management**

- Created technology resource sheet of services to help communities during COVID-19 crisis
- Developed procurement process for County/City purchases
- Drafted grievance process guidelines
- Produced Peer Train-the-Trainer report
- Shared Help@Hand Annual Evaluation Report with Counties/Cities
- Created interactive project dashboard

consideration in a pilot. San Mateo met with two Technology Vendors to learn more about their services. Kern County presented its App Brochure to several key stakeholders and began planning its third edition of its App Brochure.

#### February 2020

Help@Hand held its first Leadership Meeting this year on February 13, 2020. The agenda included project updates and discussion about a Collaborative-level pilot evaluation framework. Leadership accepted the framework, which defined three primary goals for conducting a pilot (as shown in **Figure 1**) and included 9 evaluation metrics (as shown on page 31 and page 38).

#### Figure 1. Primary Goals of Pilot



Question #1 What information is needed to inform the decision to continue with the technology?

What information is needed to inform a successful scale-up?

**Ouestion #2** 

Question #3

What information can a piloting County collect that would be valuable to all other Help@Hand Counties?

In February 2020, the Help@Hand Leadership also convened two of its workgroups: 1) the Roadmap workgroup, which aims to identify and operationalize key strategic project priorities; and 2) the Linguistic and Cultural Adaptation workgroup, which aims to ensure linguistic and cultural sensitivity of Help@Hand technologies. At the end of February, the Collaborative presented a project update at OAC's Commission Meeting. In addition, Help@Hand received a Public Records Act request.

CalMHSA developed a pilot process checklist and pilot decision tree to help Counties/Cities navigate the pilot process, and also established guidelines to operationalize Help@Hand branding. On February 21, Help@Hand held its first webinar informing project stakeholders and the general public of the project and progress to date for 106 registrants. In addition, Help@Hand held a successful Digital Mental Health Literacy Train-the-Trainer workshop for 30 Peers in Kern County. The workshop included training on digital mental health literacy curriculum, coaching sessions, preventing and managing cyberbullying, and managing digital presence. Additionally, Counties/Cities continued to plan their various efforts in February 2020. Tri-City held initial conversations with Vendor Technologies to further plan its pilot. San Mateo hosted an AppyHour with older adults and trained its Advisory Committee on the app exploration process to collect in-depth input on selected apps. Los Angeles and Santa Barbara Counties worked on their pilot proposals. Santa Barbara also hired three regional leads. Orange County developed a process to integrate County-required informed consent into their implementation roadmap, specifically working with Mindstrong to create a seamless onboarding experience. Orange County also initiated work with Santiago Community College to understand students' mental health needs and the current strategies they use to manage mental health, leveraging parallel work currently conducted with Los Angeles County in partnership with El Camino College. This work will help identify appropriate digital tools and other resources to provide to students.

#### **March 2020**

The Help@Hand Leadership met twice in March 2020. CalMHSA finalized and presented the Pilot Proposal Template to Help@Hand Leadership at the beginning of March 2020. Counties/Cities who want to pilot a technology must complete the template before Help@ Hand Leadership can approve the pilot. Los Angeles County became the first County/City to submit a Pilot Proposal Template to Help@Hand Leadership for review for approval, submitting three templates for three technologies.

The Digital Behavioral Health Questionnaire (DBHQ) was presented to the Collaborative as a risk assessment tool. In addition, CalMHSA developed its procurement process to streamline County/City purchases and drafted grievance process guidelines to address grievances or issues from the public. Key reports were shared in March 2020 that included the Peer Train-the-Trainer report and the Help@Hand evaluation annual evaluation report. Lastly, CalMHSA generated an interactive project dashboard with metrics related to budget, stakeholder engagement, community listening sessions, and Help@Hand Peers.

Two significant challenges occurred in March 2020. First, CalMHSA's Peer and Community Engagement Manager resigned in mid-March. CalMHSA actively worked to transition the responsibilities of the Peer and Community Engagement Manager to other team members until a new Peer and Community Engagement Manager is hired. Second, the global COVID-19 pandemic fundamentally impacted every County/ City in California, with Governor Newsom initiating a stay-at-home order on March 19. In response, CalMHSA actively worked with Counties/Cities to create business continuity plans and examined feasibility of a statewide rapid response to the COVID-19 pandemic. CalMHSA also created a resource sheet of services provided by potential Help@Hand technologies to help communities during the COVID-19 crisis. A noteworthy achievement involved re-conceptualizing the planned two-day in person event Help@ Hand Collaboration Meeting to a single day virtual event, held on March 18. In addition to changing the event's format, CalMHSA adjusted the agenda to focus on discussing Counties'/Cities' needs during the COVID-19 crisis. The event also included organized office hour meetings where Counties/Cities received one-on-one support related to the product, implementation, organizational change management, Peers, or evaluation work-streams.

In the midst of this, Counties/Cities continued to proceed with their planning. Several Counties/Cities prepared pilot proposals so that they may quickly launch their technologies to help communities cope with COVID-19. Marin County and Tri-City began planning remote app exploration sessions with their target groups. Marin County also established a business advisory committee and began recruiting hire of a Peer for the project. San Mateo County was also in the process of hiring Peers, and television news stations broadcasted Kern County's App Brochure. Santa Barbara worked on its App Brochure.

Additionally, Peer Leads from Kern, Los Angeles, Modoc, Orange, San Mateo, Santa Barbara, and Tehama Counties were interviewed as part of the Help@Hand evaluation. Peer and academic experts also continued to develop survey questions measuring mental health stigma for the Help@Hand evaluation.

# SPOTLIGHT

A critical step in building a digital mental health system of care involves developing tools that can be used to facilitate a City or County's ability CalMHSA created a useful tool for assessing potential product risk: The Digital Behavioral Health Questionnaire (DBHQ)

to identify and mitigate potential risks associated with a technology product early in process. CalMHSA, in partnership with County feedback, developed the DBHQ – the final version was presented during the March 24, 2020 Tech Lead Collaboration Meeting. The DBHQ (previously the Risk and Liability Assessment) includes consideration of the following major areas: 1) General; 2) Malpractice/Negligence; 3) Danger to Self and Duty to Protect Others; 4) Mandated Reporting; and 5) User Misuse/Misrepresentation. Brittany Ganguly, MSW, MPH, Program Manager at CalMHSA, described the DBHQ as designed to "simply and clearly help a City or County identify risk and issues a product may present....well before implementation." The tool includes a series of yes/no

questions designed to assist Counties in assessing the potential risks and mitigation strategies when implementing digital health products within their health delivery systems. The DBHQ is not intended to replace legal advice and further expert legal and clinical consultation is recommended should serious concerns arise with the use of a product, but by identifying and mitigating potential risks and liabilities, this assessment has the potential to support the expanded use of digital health strategies to increase access to services and enhance County systems of care.

#### Digital Behavioral Health Questionnaire v2.4 (Risk Assessment Only)

|                                                         | Proposed Technology:<br>App Category: |                           | ]                  | Date:<br>Reviewer:      |            |
|---------------------------------------------------------|---------------------------------------|---------------------------|--------------------|-------------------------|------------|
| #                                                       | Issue                                 | Explanation               | Concern?<br>Y/N/NA | Illustration/Discussion | Mitigation |
| Sect                                                    | on I - General Considerations         |                           |                    |                         |            |
| Sect                                                    | on II - Malpractice/Negligence        |                           |                    |                         |            |
| Section III - Danger to Self and Duty to Protect Others |                                       |                           |                    |                         |            |
| Section IV - Mandated Reporting                         |                                       |                           |                    |                         |            |
| Section V - User Misuse/Misrepresentation               |                                       |                           |                    |                         |            |
|                                                         |                                       |                           |                    |                         |            |
| Sec                                                     | tion VI - Summary Reno                | rt and Recommendations fo | r Risk I           | Vitigation              |            |

General isssues:

Training Issues:

To be addressed in contracting process:

# **1** SYSTEM EVALUATION

### **Key Points**

- Meditation apps reviewed in the market surveillance have promising user experiences.
- Reviews of features on publicly available meditation apps showed that very few apps have sufficient features allow them to be accessible and usable for those with special needs.
- Meditation apps do not integrate with clinical care. Moreover, they generally do not have crisis resources, referrals, or connections to healthcare professionals.
- A collaborative process evaluation can play an important role in ensuring Help@Hand succeeds by making recommendations to address factors that facilitate or impede Help@Hand at the organizational level.

#### **OVERVIEW**

Multiple system-related factors can impact health and human services. These factors may influence the implementation, adoption, and use of Help@Hand technologies. This chapter focuses on evaluating system-related factors that may influence Help@ Hand. It presents evaluation activities and learnings as follows:

#### Market Surveillance

oFindings

- Feature Review (accessibility, content for selected target groups, support available in apps)
- User Experience Review
- Marketplace Data Review (download, retention, active users)
- oLearnings from the Market Surveillance
- Environmental Scan
- Collaborative Process Evaluation

#### MARKET SURVEILLANCE

The market surveillance conducted this quarter focused on meditation apps since many Counties/Cities expressed interest in using Headspace, a meditation app, for their pilots. In particular, the Help@Hand evaluation team reviewed meditation apps found on Google Play or iTunes app stores. The team analyzed general trends and compared these apps with each other.



Figure 2 depicts the four review stages used this quarter. The stages include:

- Stage 1 and Stage 2: The Help@Hand evaluation team compiled a broad list of meditation apps based on app store searches and the team's expertise in digital mental health. The team excluded apps that did not meet inclusion criteria, resulting in a final list of 23 apps.
- Stage 3: The team downloaded the 23 apps on an Android device and assessed the presence or absence of features related to accessibility<sup>4</sup>, content for selected target groups, and support available in the apps. They also gathered marketplace data and usage trends from a third-party analytics platform for those apps that had such data available.
- Stage 4: The Help@Hand evaluation team had experts and consumers review the user experience of apps using the Mobile App Rating Scale (MARS), a well-known, validated, and standardized tool that assesses the engagement, functionality, aesthetics, and information quality of health apps (Stoyanov et al, 2015).

#### **Findings**

This section describes key findings from the: 1) feature review of accessibility, content for selected target groups, and support available in apps; 2) user experience review; and 3) marketplace data review.

#### Table 1. Selected Feature and User Experience Reviews

| App name              | Screen Reader Capabilities             | Customizable Display Features | Offline Availability                       | Number of<br>Languages<br>Available in<br>App | Content for<br>Selected Target<br>Groups            | Peer<br>connection in-<br>app | User Ex<br>Sc<br>(Ma | perience<br>ore<br>ix: 5) |
|-----------------------|----------------------------------------|-------------------------------|--------------------------------------------|-----------------------------------------------|-----------------------------------------------------|-------------------------------|----------------------|---------------------------|
|                       | +++ All buttons spoken                 | A+ Text size                  | fractional Internet needed                 |                                               |                                                     |                               | Expert               | Consumer                  |
|                       | Most buttons or<br>++ features spoken, | T High contrast text          | Offline Access                             |                                               |                                                     |                               |                      |                           |
|                       | some exceptions                        | Color inversion               | Offline access, paid version only          | _                                             |                                                     |                               |                      |                           |
|                       | + Some buttons or features spoken,     | Animation reduction           | Downloadable content                       |                                               |                                                     |                               |                      |                           |
|                       | many exceptions                        |                               | Downloadable content, paid<br>version only |                                               |                                                     |                               |                      |                           |
| <u>10%</u><br>Happier | +                                      | A+ <b>1 (</b>                 | ↓                                          | 1                                             | None                                                | No                            | 4.57                 | 4.39                      |
| <u>Aura</u>           | +                                      | A+ <b>1 (</b>                 | .↓                                         | 1                                             | None                                                | Yes                           | 4.52                 | 4.65                      |
| <u>Black Lotus</u>    | ++                                     |                               | <b>↓</b>                                   | 2                                             | None                                                | Yes                           | 4.19                 | 3.82                      |
| <u>Breethe</u>        | +                                      | A+ <b>1 () ()</b>             | (((·                                       | 1                                             | "Dealing with injustice"<br>content in paid version | No                            | 4.76                 | 4.00                      |
| <u>Buddhify</u>       | +                                      |                               | ×,                                         | 1                                             | None                                                | Yes                           | 4.25                 | 2.99                      |
| <u>Calm</u>           | +++                                    | A+ T ) 🖻                      | <u>↓</u>                                   | 6                                             | None                                                | No                            | 4.69                 | 4.11                      |
| <u>Headspace</u>      | ++                                     | A+ <b>T</b> ) Ĕ               | $\checkmark$                               | 5                                             | None                                                | Yes                           | 4.95                 | 5.00                      |
| <u>HelloMind</u>      | +                                      | A+ <b>T</b> ) Ĕ               | (íŗ.                                       | 1                                             | None                                                | No                            | 3.67                 | 4.09                      |

<sup>4</sup> The current market surveillance reviewed accessibility features because Counties/Cities expressed interest in ensuring apps serve populations with various needs

| Humm.ly                                         | +   | A+ <b>(</b>   | (ír          | 1   | None                                                                           | No  | 4.11 | 3.80 |
|-------------------------------------------------|-----|---------------|--------------|-----|--------------------------------------------------------------------------------|-----|------|------|
| Insight<br>Timer                                | +   |               | ↓\$          | 35+ | None                                                                           | Yes | 4.38 | 4.39 |
| Liberate<br>Meditation                          | ++  | A+ <b>()</b>  | ((:          | 1   | Black, Indigenous, and<br>POC community                                        | No  | 3.23 | 3.21 |
| 21-Day<br>Meditation<br>Experience              | ++  | A+ <b>T</b>   | 淡            | 1   | None                                                                           | No  | 3.61 | 3.83 |
| <u>Meditopia</u>                                | ++  | T ()          | ↓\$          | 9   | None                                                                           | No  | 4.77 | 3.98 |
| <u>Mind the</u><br><u>Bump</u>                  | ++  | A+ <b>1 (</b> | (((-         | 1   | LGBTQ+ community,<br>single parents (app<br>designed for expectant<br>parents) | No  | 3.81 | 3.58 |
| <u>Omvana</u>                                   | ++  | A+ <b>T</b>   | ((r·         | 3   | None                                                                           | No  | 3.39 | 3.95 |
| <u>Preksha</u><br><u>Meditation</u>             | +++ | A+ <b>T (</b> | .↓           | 2   | None                                                                           | No  | 1.99 | 2.67 |
| <u>Relax</u><br>Melodies                        | +   | A+ 🔳 🛈 🖻      | .↓           | 2   | None                                                                           | No  | 4.65 | 3.73 |
| <u>Simple</u><br><u>Habit</u>                   | +   | A+ 🔳 🛈 🖻      | ↓\$          | 1   | None                                                                           | No  | 3.45 | 4.02 |
| <u>Simply</u><br>Being                          | ++  | A+ <b>1 (</b> | 淡            | 1   | None                                                                           | No  | 2.32 | 3.22 |
| <u>Smiling</u><br>Mind                          | ++  | A+ <b>1 (</b> | $\checkmark$ | 4   | None                                                                           | No  | 4.88 | 4.79 |
| <u>Take a</u><br>Break                          | ++  | A+ <b>T (</b> | (((·         | 1   | None                                                                           | No  | 1.84 | 3.17 |
| <u>The</u><br><u>Mindfulnes</u><br><u>s App</u> | ++  | A+ <b>1</b>   | ↓            | 13  | None                                                                           | No  | 3.94 | 3.96 |
| Waking Up                                       | +   | 0             |              | 1   | None                                                                           | Yes | 4.04 | 3.98 |

#### Feature Review: Accessibility

Mental health apps that do not consider accessibility may widen gaps in access to care by catering only to able-bodied and well-resourced people. Mobile accessibility refers to making websites and apps easy to use for a broad range of people. The Help@Hand evaluation team reviewed accessibility features based on the W3C Accessibility guidelines (World Wide Web Consortium, 2018). These features include: 1) technological adaptations (i.e., assistive technology that allow people with disabilities to use the technology), and 2) other factors such as cost and availability in languages other than English.<sup>5</sup>

#### Assistive Technologies (Screen Readers, Captions, Customizable Display Features, Offline Access)

**Screen readers** translate text and image content into audio output. This can help people who are blind or visually impaired, illiterate, or have a learning or cognitive disability. All apps reviewed used the screen reader function (i.e., TalkBack on Android) to varying degrees. The Help@Hand evaluation team rated each app as shown in **Table 1**. Only nine percent of apps reviewed (n=2) had the screen reader function for all the buttons or features. The remainder of the apps had the screen reader function for most or some of the buttons or features.

<sup>&</sup>lt;sup>5</sup> This review of accessibility was not intended to be an exhaustive. For example, it did not include accessibility considerations such as cognitive accessibility (i.e., content designed for those with cognitive disabilities). Instead, the review looked at compatibility of the app with accessibility features available at the device level. Device-level accessibility may vary. The Help@Hand evaluation team reviewed accessibility features in this report on a Galaxy S7 and Pixel 2 (released in 2016 and 2017, respectively). Older devices may not have the same capabilities.

**Captions** translate audio into text output. Captions can help people who are deaf and hearing-impaired use audio content. Meditation apps tend to be audio-based, but none of the apps reviewed had in-app captions available; therefore, they are not usable for those with hearing impairments. The Live Transcribe feature (Android's text-to-speech feature) help to access captions, but not all Android phones have the Live Transcribe feature. Some apps did not have captions for meditations, but did have captions for other content such as introductory and informational videos.

A number of options for customizing display can help users with visual impairments or other needs. **Table 2** explains these features and shows the number of apps containing each feature. Most apps had customizable text size, high contrast text, and color inversion features.

| Feature                | Explanation                                                                                                                                                                                                                                                                            | # of Apps with Feature (% of total) |  |  |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--|--|
| Customizable text size | Text size can be increased or decreased. This facilitates reading of text by people with mild visual disabilities, without requiring the use of a screen magnifier.                                                                                                                    | 20 (87%)                            |  |  |
| High contrast text     | Contrast between text and background can be adjusted to help readability for those with low vision impairment.                                                                                                                                                                         | 20 (87%)                            |  |  |
| Color inversion        | Color inversion swaps light colors for dark, which can help with<br>eye strain. Being able to change the hue and color of a screen can<br>help with readability for various visual challenges, though full color<br>customization is ideal.                                            | 23 (100%)                           |  |  |
| Animation reduction    | Reducing animations help those who have motion sensitivity and vestibular disorders. However, maintaining some animations can be useful for those with specific cognitive needs, as appropriate levels of animation may help to guide the user to content on the screen (Ayres, 2007). | 6 (26%)                             |  |  |

The evaluation team considered **offline access** (i.e., whether or not content was available when offline) of meditations within apps reviewed, because internet access and data plans may differ across and within Counties/Cities. As shown in **Table 1**, seven apps reviewed (30%) were not accessible without internet access and three (13%) were fully accessible without internet access. Many apps (57%) had downloadable content (i.e., meditations could be downloaded when connected to the internet and accessed later when offline). Availability of content offline sometimes differed between the free and paid versions.

#### Cost

Table 2 Customizable Display Feature

Most apps reviewed (91%) had a free version available. The content available in the free version varied greatly, from only one meditation (Humm.ly) to 25,000 meditations available (Insight Timer). Premium versions typically involved a subscription model, averaging about \$70 per year. Five of the 23 apps reviewed (22%) provided all content in the free version (Liberate Meditation, Mind the Bump, Black Lotus, Preksha Meditation, Smiling Mind).

#### Language

The majority of apps (57%) on Android were only available in English. Of the apps available in languages other than English, the average number of languages available was four and the median was one. Table 1 shows the number of languages available. Appendix B includes the full list of languages. Note that the availability of certain languages does not necessarily indicate that the app is culturally tailored, but that it has been translated.

#### Feature Review: Content for Selected Target Groups

Three out of the 23 apps (13%) contained tailored content for people of color and for the LGBTQ+ community. Liberate Meditation, an app specifically designed for people of color, had the most targeted content compared to the other apps reviewed. On the other hand, a number of apps did have content specifically for women.

#### Feature Review: Support Available in Apps

None of the apps reviewed were designed for use in conjunction with a healthcare provider. In addition, they did not provide: 1) crisis resources; or 2) a referral or connection to a therapist. Six out of the 23 apps reviewed (26%) allowed some connection with other peers within the app as shown in **Table 1**.

#### **User Experience Review**

Two experts and two consumers<sup>6</sup> examined the user experience of each of the 23 apps. Appendix C includes the Mobile App Rating Scale (MARS) tool used for the review.

**Table 1** displays the scores given by the experts and the consumers for each app. Generally, the apps reviewed received favorable user experience scores.<sup>7</sup> **Table 3** presents user experience scores in the current and the past market surveillance reviews. Apps in the current review received higher expert scores and comparable user scores.

| Table 3. Expert and Consumer User Experience Scores of Currentand Past Market Surveillances |         |                                |                             |  |  |
|---------------------------------------------------------------------------------------------|---------|--------------------------------|-----------------------------|--|--|
|                                                                                             |         | Current Review Year 2 (N = 23) | Past Review Year 1 (N = 22) |  |  |
| Expert                                                                                      | Average | 3.91                           | 3.54                        |  |  |
|                                                                                             | Median  | 4.15                           | 3.57                        |  |  |
| Consumer                                                                                    | Average | 3.88                           | 3.90                        |  |  |
|                                                                                             | Median  | 3.96                           | 3.83                        |  |  |

Both experts and consumers gave high ratings for Headspace and Smiling Mind. Experts also rated Meditopia, Breethe, and Calm highly. Consumers, on the other hand, also rated Aura and Insight Timer highly. Reviewers commented:

"The apps are amongst the highest quality apps I have ever seen in any sphere. You can really tell mindfulness is BIG and for a reason. I think a few of these apps have the capacity to hook you up immediately. All of us shared that some of these apps will remain on our phones."

*"Apps that offer classes, sessions, music, stories, reading, learning are simply going to have the capacity to change some people's lives. It is, however, true that they are mostly paid. Yet, worth it."* 

#### Marketplace Data Review

The inclusion criteria of apps reviewed in the feature review and the user experience review includes availability of marketplace data. Although marketplace data was available for all apps when applying the inclusion criteria in February 2020, it was no longer available on the third-party app analytics platform when reviewing the data at the end of March 2020. This reveals that some meditation apps dropped in their category between February and March 2020 since the third-party app analytics platform provides data only for top performing apps in each category.

<sup>&</sup>lt;sup>6</sup> The experts had extensive experience in user experience and mental health app reviews. The consumers were two non-white women between the ages of 21 and 24.

<sup>&</sup>lt;sup>7</sup> The developer of the MARS tool states that a score of 4.00 can indicate high-quality apps.

Marketplace data was gathered for apps available on both iOS and Android platforms. In particular, the following data points were reviewed: (1) downloads, (2) retention, and (3) active users.

#### Downloads

Downloads refer to the number of new users downloading the app for the first time. If a user gets a new phone or re-downloads the app, it still counts as one download.

**Table 4** shows overall downloads over a period of a year (combined across iOS and Android platforms) for both the current and the past market surveillance review. The apps reviewed in the current review had a wide range of downloads between the minimum and maximum numbers. As a result, this greatly distorts the average. Thus, the median (over 200,000) provides a better understanding of the number of users downloading the meditation apps reviewed over the past year.

Users downloaded the apps in the current market surveillance review more than in the past market surveillance review. The inclusion of apps with huge commercial success (i.e., Headspace and Calm) in the current market surveillance review may explain this trend. More widespread adoption of meditation apps compared to chatbot or other supportive apps considered in the past market surveillance review may also explain the trend.

| Table 4. Total Yearly Downloads of Current and Past Market Surveillances |                                |                             |  |  |
|--------------------------------------------------------------------------|--------------------------------|-----------------------------|--|--|
|                                                                          | Current Review Year 2 (N = 20) | Past Review Year 1 (N = 20) |  |  |
| Average                                                                  | 1,540,819                      | 211,537                     |  |  |
| Median                                                                   | 207,143                        | 49,982                      |  |  |
| Minimum                                                                  | 152                            | 144                         |  |  |
| Maximum                                                                  | 15,132,872                     | 916,116                     |  |  |

#### Retention

Retention describes sustained app use after the day of download (which is referred to as "Day 0").

Fourteen of the apps reviewed had retention data available on both iOS and Android at the end of March 2020. **Figure 3** presents the overall retention trends for these apps from Day 1 to Day 30. Retention dropped considerably between Day 1 and Day 7. This trend aligns with previous research (Baumel, Muench, Edan, & Kane, 2019) and with the past market surveillance review. Retention stabilized between Day 14 and Day 30, particularly for Android users.

#### Figure 3: Overall Retention Across 30 Days (N = 14)



#### Active Users

Active users refer to those who open the app at least once in a certain time frame.

**Table 5** shows the average number of daily and monthly active users over the past year.<sup>8</sup> Median numbers best capture the data since the minimum and maximum have a wide range. Similar to the download trend, the apps in the current market surveillance review had more active daily and monthly users than in the past market surveillance review.

| Table 5. Daily and Monthly Active Users Over a Year in the Current and Past Market Surveillances |                                |                             |  |  |  |  |
|--------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------|--|--|--|--|
|                                                                                                  | Current Review Year 2 (N = 23) | Past Review Year 1 (N = 20) |  |  |  |  |
|                                                                                                  | Daily Active Users             |                             |  |  |  |  |
| Average                                                                                          | 187,628                        | 16,069                      |  |  |  |  |
| Median                                                                                           | 16,393                         | 2,765                       |  |  |  |  |
| Minimum                                                                                          | 21                             | 32                          |  |  |  |  |
| Maximum                                                                                          | 1,848,034                      | 90,122                      |  |  |  |  |
|                                                                                                  | Monthly Active Users           |                             |  |  |  |  |
| Average                                                                                          | 187,628                        | 16,069                      |  |  |  |  |
| Median                                                                                           | 16,393                         | 2,765                       |  |  |  |  |
| Minimum                                                                                          | 21                             | 32                          |  |  |  |  |
| Maximum                                                                                          | 1,848,034                      | 90,122                      |  |  |  |  |

<sup>8</sup> Daily active users refers to those users who opened the app at least once a day. Monthly active users refers to those users who opened the app at least once in a 30-day time period.

#### Learnings from Market Surveillance

The evaluation team reviewed meditation apps and found the following:

- The meditation apps reviewed had limited features to make them accessible and easy to use for people such as individuals with hearing or visual impairments.
- Users could access very few of the apps reviewed without internet connectivity. Users must have access to the internet for many of the apps (at least for initial set up and download of content).
- Certain target groups might find most of the apps reviewed as unsuitable. Most of the apps were available only available in English and had little tailored content for other target groups.

- Meditation apps do not integrate with clinical care, but complement care provided.
- The meditation apps reviewed do not have crisis resources, referrals, or connections to healthcare professionals.
- Experts and consumers rated the apps with high user experience scores, indicating that the apps have promising user experiences and potential user engagement.
- Third-party app analytics platforms provide helpful information to understand trends in marketplace data. However, availability of data changes rapidly.

#### **ENVIRONMENTAL SCAN**

Other system-related factors that may affect Help@Hand are: (1) general attitudes toward mental health (i.e., mental health stigma within communities), and (2) key media events related to mental health and/or Help@Hand specifically. An environmental scan monitors public perceptions of mental health documented through key media events. It aims to understand how international and local events (i.e., a celebrity opening up about their mental health struggles or a traumatic world event) may impact Help@Hand.

News stories based on keywords related to Help@Hand continue to be monitored and collected. Analysis of these news stories has not started because of limited staffing to support the environmental scan.

#### **COLLABORATIVE PROCESS EVALUATION**

The success of Help@Hand also depends on how effectively Collaborative members work with each other and with Vendors. The collaborative process evaluation serves to understand the factors that facilitate or impede Help@Hand at the organizational level.

The evaluation team developed a collaborative process evaluation based on the Exploration, Preparation, Implementation, Sustainment Framework (EPIS) (Aarons, Hurlburt & Horwitz, 2011; Moullin, Dickson, Stadnick, Rabin & Aarons, 2019). The EPIS Framework highlights key phases of the implementation process and describes various factors within and between the outer context (system and policy levels) and the inner context (organizational, provider, and consumer levels). **Figure 4** shows the EPIS framework applied to Help@Hand. The primary focus of the collaborative process evaluation includes the outer context, bridging factors, and innovation factors. The implementation evaluation described in the next chapter explores the inner context.





The evaluation team developed interview guides and surveys for the collaborative process evaluation in Year 1. However, the Collaborative requested a pause on this evaluation as of October 2019. As such, there are no learn-ings/findings from the collaborative process evaluation this quarter.

# 2 COUNTY/CITY AND SITE-LEVEL IMPLEMENTATION EVALUATION

### **Key Points**

- Multiple members of the Collaborative, including representation from CalMHSA, the Help@Hand evaluation team, and Counties/Cities, worked together to develop successful pilot implementation and evaluation plans. In addition to creating materials and supports applicable across the Collaborative, each County/City also receives tailored recommendations to support its unique implementation plans.
- The Help@Hand Peer Program produced valuable products such as App Brochures and the Digital Mental Health Literacy (DMHL) curriculum. Peers played pivotal roles in vetting potential technologies, conducting outreach to assess need, delivering DMHL workshops in the community, and addressing mental health stigma among County/ City systems.
- DMHL instruction has the potential to enhance the success of Help@ Hand technologies in communities. It may also produce early and sustained wins among local stakeholders while Counties/Cities plan and implement their pilots.
- Major challenges of the Peer Program include: 1) hiring and retaining Peers, 2) integrating Peers and Peer input in Help@Hand, 3) addressing unique needs of specific target populations, 4) overcoming digital literacy, and 5) dealing with external factors.

#### **OVERVIEW**

Examining the facilitators of and barriers to implementing Help@Hand technologies within a County/City can provide insights into project successes and challenges. This chapter focuses on how site-level factors and Peers may influence the implementation of Help@Hand technologies within Counties/Cities.<sup>10</sup> It presents evaluation activities and learnings as follows:

- Site Visits with County Leadership, Clinicians, and Staff
- Peer Program Evaluation
  - oFindings
    - Major Accomplishments
    - Major Challenges
    - Future Plans for the Peer Program
  - o Learnings from the Peer Program Evaluation
- County/City and Site-Level Implementation Evaluation Pilot Metrics

#### SITE VISITS WITH COUNTY LEADERSHIP, CLINICIANS, AND STAFF

The Help@Hand evaluation team conducted site visits at Kern and Modoc Counties at the end of Year 1. Site visits involved interviews and surveys with County Leadership at both Counties, and surveys with clinicians at Modoc County. The Help@Hand Annual Evaluation Report includes key findings from these site visits.

During this quarter, the evaluation team developed and shared tailored **"Learning Updates"** with Modoc and Kern Counties. "Learning Updates" synthesize information from a site visit and offer recommendations about how the County/City can improve its implementation effort. **Figure 5** showcases an example of how Counties/Cities can apply the recommendations.

#### Figure 5. An Example of How to Apply Recommendations from the Help@Hand Evaluation Team

#### Sample Recommendation:

"It is recommended to track the uptake, use, and overall feedback from clinicians and other users of the Help@Hand technology."

#### Sample Way to Apply Recommendation within County/City:

- 1. Create a central database or document (i.e., Excel spreadsheet) that captures feedback sent to County/City about its Help@Hand technology and the changes made by the County/City based on the feedback. It may also include who received the Help@Hand technology and who might actually access the technology.
- 2. Create a short survey in Survey Monkey, Qualtrics, or other survey software and link it to a QR code so that anyone who accesses the Help@Hand technology can scan the code and fill out the brief survey.

#### Sample questions:

- What is your name?
- What is your job title?
- How did you hear about the Help@Hand technology?
- How do you intend to use it?

3. Identify one person as the "tracker" who can organize the feedback and short survey information on a regular basis (i.e., weekly or monthly based on the volume). The "tracker" should share the information with the rest of the team to help guide decisions on how to better provide Help@Hand technology to communities.







<sup>10</sup> Help@Hand defines a Peer as a person who publicly self-identifies with having a personal lived experience of a mental health/co-occurring issue accompanied by the experience of recovery. A Peer has training to use that experience to support the people they serve.

During this quarter, the Help@Hand evaluation team also worked closely with the Collaborative to develop successful pilot implementation and evaluation plans. In particular, the evaluation team presented information and answered questions about evaluating pilots during Collaborative meetings. Additionally, CalMHSA and the evaluation team provided input and resources tailored to Counties/Cities actively planning to pilot possible new Help@Hand technologies through regular meetings and communications.

#### Key learnings from the Collaborative pilot planning process include:

- Although attention and interests may constantly shift, maintaining focus on the County/ City's established priorities for the pilot will help develop pilots that align with the County/ City's fundamental needs.
- Awareness of a County/City's resource and time constraints can help develop feasible and realistic pilots.
- Pilot planning must be nimble and quickly adjust to target group needs, such as offering services in non-English languages for monolingual communities.
- Communication between Counties/Cities, CalMHSA, the evaluation team, and other stakeholders is critical. Regular and integrated communication has been critical for keeping all parties apprised of updates. It is also necessary to ensure that proposed pilots will produce the necessary information needed for Counties/Cities to make actionable decisions.
- Counties/Cities are excited by potential of the pilots to address their learning objectives. Counties/Cities need implementation and evaluation support to create the necessary frameworks to translate ideas into testable processes. The creation of materials that translate concepts into actionable steps must be easy to understand and must underscore its value.
- Although resources available through the Collaborative can play an important role in helping to provide feedback and inform County/City decisions, decisions for a County/City are ultimately determined at the local level.

#### PEER PROGRAM EVALUATION

The evaluation team interviewed by phone the now-former Peer and Community Engagement Manager and nine Help@Hand Peer Leads this quarter.<sup>11</sup> **Table 6** describes the number of interviews and when they occurred. The nine Peer Leads represented 8 Counties/Cities since the evaluation team interviewed two Peer Leads from the same County/City.<sup>12</sup>

| Table 6. Peer Program Evaluation Interviews     |                                         |                                          |  |  |
|-------------------------------------------------|-----------------------------------------|------------------------------------------|--|--|
|                                                 | Before COVID-19<br>(March 3 – March 13) | During COVID-19<br>(March 14 – March 27) |  |  |
| Former Peer and Community<br>Engagement Manager | -                                       | n = 1                                    |  |  |
| Cohort #1 Peer Leads                            | n = 4                                   | -                                        |  |  |
| Cohort #2 Peer Leads                            | n = 2                                   | n = 3                                    |  |  |

<sup>11</sup> Help@Hand evaluation team members transcribed interviews as they happened and provided the transcriptions to the interviewee for their review and approval. The Help@Hand evaluation team used Atlas.ti to qualitatively analyze transcripts and identify major themes.

12 The Help@Hand evaluation team scheduled interviews with two Peer Leads from two other Counties/Cities. However, these interviews did not occur due to workplace changes resulting from COVID-19.

# SPOTLIGHT

Digital health literacy is the ability to seek, find, understand, create, communicate, and appraise health information from electronic sources and apply the knowledge gained to addressing or solvHelp@Hand's Digital Mental Health Literacy Curriculum Helps to address gaps in knowledge and use of technology for those served by Community Mental Health in California

gained to addressing or solving a health problem. In the context of the Help@Hand program, digital mental health literacy is designed to support the development of these skills, specifically in the context of addressing mental health andwellbeing. People who are digitally health- and mental health-literate are able to take a more active role in achieving their health potential. The rise of digital health technology presents novel opportunities for promoting wellbeing, improving access to care, helping people to feel more comfortable, enhancing clinical services, and supporting individuals living with mental illness in their recovery.

For many people especially for those impacted by the digital divide such as those we serve in community mental health, those experiencing homelessness and others impacted by social economic barrier, however, this technology still remains inaccessible. Someone may own a smartphone or have access to digital tools, but may not have the technical skills to participate in the digital world. The prevailing notion of App developers and technology companies is... "if you build it, they will come". The general exclusion of people living with mental health conditions and particularly serious mental illnesses in the development of these products discounts the experience of individuals with limited tech competencies and limited access to digital learning opportunities. As a result, the very people that Counties/ Cities may be trying to reach with emerging innovative digital products may not be able to access and use the very tools that are being shared for their benefit.

In response, the Digital Mental Health Literacy Curriculum (see https://helpathandca.org/dmhl/) was developed under the lead of Kelechi Ubuzoh, Peer Manager, to help provide consumers with resources for gaining knowledge and skills for using technology. A number of interesting, short educational videos cover important topics such as: Important Terms, Safer Website Browsing, Phishing, Scam and Malware, Downloading Anti-Virus and Anti-Malware Software, Creating and Managing Passwords, and Using Public Wi-Fi. The curriculum also plans to cover the topic of the California Consumer Privacy Act (CCPA), which creates new consumer rights relating to the access to,

deletion of, and sharing of personal information that is collected by businesses.

The Digital Mental Health Literacy Curriculum is designed to be flexible and adapt to each Counties/Cities' stakeholder needs, and Counties/Cities are teaching Digital Mental Health Literacy in a variety of unique ways. For example, Riverside County is planning to incorporating Digital Mental Health Literacy as a billable service. Orange County is considering sharing these videos throughout the community. Los Angeles County is also training Peers to become Tech Peers using



DMHL Train-the-Trainer Workshop Attendees

digital health literacy curriculum such that Peer Supporters can help the people they serve in accessing and using technology including things like the LADMH Just4Me patient portal and telehealth platforms/apps.

Counties/Cities' efforts to build a digital mental health system of care, empowering California communities with the necessary skills and training to make informed decisions about how they engage with technology developed and led by Peers may turn out to be as important as the technologies themselves.

#### Findings

Interviews provided insights on: 1) major accomplishments, 2) major challenges, and 3) future plans for the Peer Program.

#### **Major Accomplishments**

#### Peer Activities

Peers Leads reported playing pivotal roles in:

- Vetting potential technologies to deploy;
- Conducting outreach to target communities to assess needs;
- Participating in Help@Hand Peer Leadership calls and the Digital Mental Health Literacy (DMHL) Train-the-Trainer workshop; and
- Delivering DMHL workshops in the community.

#### Peer Products

The Peer Program produced two concrete Help@Hand deliverables: 1) app Brochures; and 2) the DMHL curriculum.

- App brochures: Kern County Peers developed app brochures that recommend mental health apps to their community members. Kern County piloted the first edition of the brochure and made modifications to create a second edition. They plan to create a third edition with updated information. Kern also worked with Santa Barbara and Los Angeles Counties to help them develop their own brochures.
- DMHL Curriculum: Most of the Counties/Cities interviewed sent at least one representative to the DMHL Train-the-Trainer workshop held by CalMHSA in Kern County in February 2020. Interviewees affirmed the critical contribution of the DMHL curriculum to Help@Hand success by acknowledging the importance of addressing their communities' digital mental health literacy needs prior to launching any Help@Hand technology. Appendix D includes key observations from the DMHL Train-the-Trainer workshop by an evaluation team member who attended the event.

#### Peer Impact on Mental Health Stigma

Peer Leads had overwhelming enthusiasm and optimism for the potential engagement of Peers in Help@Hand. Some Peer Leads reported a belief that mental health stigma decreased among County/City staff as the Peers demonstrated their competency and value to the project. Some perceived that efforts to hire and integrate Peers into the County/City workforce drove adjustments in the hiring practices and policies of these Counties/Cities.

#### **Major Challenges**

#### Peer Employment

Difficulty hiring Peers stood out as a common challenge in different Counties/Cities. Much of the difficulty centers on the hiring practices and policies of County/City mental health systems. As a result, many Counties/Cities implemented "workarounds" to hire Peers (i.e., contracting with a community-based organization who directly hires the Peers or hiring Peers as "extra" workers). These "workarounds" led to issues, including delays in sharing information from CalMHSA to the Peer workforce via external community-based organizations and mandated breaks to meet the "extra work" restrictions.

Additionally, Help@Hand had challenges retaining Peers because those who excelled were likely to be promoted to other positions. On the other hand, those Peers not in stable recovery relapsed and had to leave their position. Thus, a number of Counties/Cities had vacancies in their Peer workforce, which delaying implementation planned Peer activities.

Many Peer Leads expressed a perception that these challenges and other external forces delaying ramp up of Peer employment prevented them from having enough Peer resources to achieve the magnitude of the Help@Hand objectives.

#### Integration of Peers and Peer Input in Help@Hand

Peer Leads had universal enthusiasm for the potential of Peers to improve Help@Hand efficacy by bringing their valuable lived experience perspective to all levels of the project. The absence of such integration may devalue Peer input at important decision-making stages.

In addition to full integration of Peers in all levels of the project, consistency in the size and structure of the Peer workforce may ensure that Peer perspectives inform programmatic decisions, learnings, and best practices across the Collaborative.

#### Addressing Unique Needs of Specific Target Populations

Counties/Cities plan to target different at-risk groups, which each have unique challenges. Some Peer Leads reported not having insufficient bilingual staff to reach non-English speaking community members; difficulty finding the right place and time to engage transition-age youth (TAY); and barriers to introducing technology to older adults and rural communities, often related to transportation and access to technology.

#### Digital Literacy

Peer Leads mentioned challenges addressing fear and distrust of technology in the community. For example, isolated individuals who could most benefit from technology may not have the digital literacy skills needed to engage in virtual social support tools after the COVID-19 restrictions on social gatherings. In addition, many Peer Leads noted that some of their Peers had limited digital skills and knowledge to protect privacy and confidentiality when engaging with technology.

#### **External Factors**

Peer Leads described several factors external to the County Peer workforce that pose challenges. Unclear lines of communication and governance throughout Help@Hand resulted in Counties/Cities implementing their

own idiosyncratic strategies for moving forward. These strategies did not benefit from standardized approaches disseminated by CalMHSA or lessons learned and shared by other Counties/Cities. In addition, social distancing required as a result of COVID-19 clearly impeded Peers' ability to engage directly with the community and resulted in indefinite holds on certain planned activities.

#### **Future Plans for the Peer Program**

Counties/Cities widely embraced the DMHL curriculum as an activity that Peers could lead until the launch of technologies in communities. However, the COVID-19 crisis has paused or modified plans to deploy Peers into the community. Prior to COVID-19, Counties/Cities planned to train their Peer workforce in the DMHL curriculum. They also shared intentions to hold "Appy Hours" (gatherings where community members can receive one-on-one assistance or small-group instruction in technology and digital literacy). After COVID-19, Counties/Cities modified planned events to virtually deliver DMHL instruction virtually. However, these Counties/Cities experienced challenges delivering DMHL instruction to less technologically savvy individuals in the community. Peer Leads identified barriers with community members' poor access to WiFi service; lack of knowledge about how to access WiFi when available, lack of trust in digital communications, and lack of fluency in English (preventing understanding of DMHL workshop materials that have not yet been translated).

Future plans also include Kern County updating their App Brochure and disseminating it to other Counties/Cities.

#### Learnings from the Peer Program Evaluation

The evaluation team interviewed the former Peer and Community Engagement Manager and 9 Help@Hand Peer Leads. Interview findings revealed:

- The Digital Mental Health Literacy curriculum developed by CalMHSA provides a valuable, and perhaps critical, interim product that can be delivered community-wide while Counties are engaged in pilots.
- Many of the intended users of Help@Hand technologies lack access to required infrastructure (i.e., smartphones and internet) and/or sufficient digital mental health literacy to enable them to take advantage of the technologies offered. DMHL instruction can contribute to the successful adoption of Help@Hand technologies by addressing these needs.
- Counties face challenges in maintaining a steady Peer workforce owing to a combination of factors,

including restrictive hiring policies, workforce turnover related to either promotions or Peer relapse, and a dearth of qualified Peers.

- External forces, including a lack of an efficient cross-Collaborative information exchange process and recent social distancing policies, hampered successful rollout of the Peer outreach component of Help@Hand.
- Peers have considerable potential to enhance program planning and implementation. Integrating Peers in all levels of the Help@Hand hierarchy can fully actualize this potential.

#### **COUNTY/CITY AND SITE-LEVEL IMPLEMENTATION EVALUATION – PILOT METRICS**

Evaluation efforts this quarter included working closely with the Help@Hand Collaborative to plan implementation evaluations for upcoming pilots.

The Help@Hand evaluation team developed a framework to evaluate the influence of contextual factors likely to influence the County/City's ability to scale-up the chosen technology. This involved identifying **standard con-structs**<sup>13</sup> **across all pilots and additional constructs that Counties/Cities should consider**. The standard and additional constructs reflected the pilot evaluation plan approved by the Help@Hand Leadership in February 2020. The constructs for the user pilot evaluation fall into five primary categories:

- Contextual factors that shape implementation, including the following:
- o Factors that influence the target population experience, adoption, and/or maintenance
- o Factors that influence provider(s) or site(s) experiences, adoption, and/or maintenance
- o Barriers and facilitators of the implementation process
- Peer engagement
- Ease of working with the technology vendor
- Marketing
- Unanticipated events

Development of surveys and other instruments to measure these constructs also began. The Collaborative may expect to receive the finalized instruments in the next quarter. Proposed data sources include the following:

# Figure 6. Proposed Data Sources for Pilot Evaluation



13 A construct refers to a broad idea, theme, or topic that one can measure directly or indirectly.

# **3** USER EXPERIENCE AND TECHNOLOGY EVALUATION

#### **Key Points**

- A systematic literature review of mental health technologies revealed that factors related to the user, content/program offered by the technology, and the technology itself and environment in which it is used can affect user engagement. These factors can help identify effective strategies to address engagement and use of Help@Hand technologies.
- Los Angeles and Orange Counties partnered with the Help@Hand evaluation team and local community colleges to conduct baseline assessments aimed at understanding unmet mental health needs of college students and how technology may address these needs.
- The Help@Hand evaluation team actively worked with the Help@ Hand Collaborative to develop a framework to evaluate pilots from the user perspective.

#### **OVERVIEW**

The user experience and technology evaluation examines the user<sup>14</sup> and non-user<sup>15</sup> experiences with technologies. This chapter focuses on factors associated with adoption and continued use of Help@Hand technologies among the target populations. It presents evaluation activities and learnings as follows:



# SYSTEMATIC REVIEW OF FACTORS INFLUENCING TECHNOLOGY ADOPTION AND USE

Despite the potential benefits of mental health technologies, their real-world uptake can vary due to a variety of factors, which may apply to adoption and use of Help@Hand technologies. The Help@Hand evaluation team conducted a systematic literature review to identify factors that may influence uptake of mental health technologies.<sup>16</sup>

The review included only original empirical studies<sup>17</sup> written in English. Studies had to report on:

- Technologies aimed to improve mental health, psychological wellbeing, anxiety, depression, stress, and/or mood;
- At least one aspect of user engagement (i.e., retention rate, usage, user satisfaction, user experience); and
- Factors affecting user engagement

The search yielded 6,069 articles, of which 208 articles met the above inclusion criteria. For each article, the Help@Hand evaluation team analyzed identified facilitators and barriers that predicted and/or influenced user engagement (Braun and Clarke, 2006).

<sup>&</sup>lt;sup>14</sup> A user is defined as an individual who uses a computer technology or network, such as apps.

<sup>&</sup>lt;sup>15</sup> A non-user is defined as an individual who is aware of the app but chooses one of the following: (1) not to download the app (these individuals are "never triers"); (2) download the app but not register (these individuals are "non-registers"); or (3) download the app and register but do not have any activity with the app (these individuals are "non-adopters").

<sup>16</sup> The Help@Hand evaluation team used five electronic databases (SCOPUS, PubMed, PsycINFO, Web of Science, and the Cochrane Library) to search for relevant articles.

<sup>17</sup> The review excluded literature reviews, columns, and opinion pieces.

#### **Characteristics of Studies in Review**

The 208 articles examined included 71 needs assessments<sup>18</sup> and 134 evaluation studies.<sup>19</sup> Three articles included both a needs assessment and evaluation.

Fifty-one articles explored study participants' attitudes on mental health technologies without focusing on a specific technology, while 157 studies focused on a specific technology as shown in **Table 7**. For the latter, a study participant's exposure to a mental health technology ranged from one year of use to a short demonstration before a focus group or survey.

| Table 7. Type of Technology Used for Technology-Focused Studies |                   |  |  |  |
|-----------------------------------------------------------------|-------------------|--|--|--|
| Type of Technology                                              | Number of Studies |  |  |  |
| Web-based                                                       | 67                |  |  |  |
| Smartphone-based                                                | 49                |  |  |  |
| Computer-based, but not web-based                               | 16                |  |  |  |
| Mobile phone (but not a smartphone)                             | 3                 |  |  |  |
| Wearable technologies                                           | 2                 |  |  |  |
| Tablet-based                                                    | 2                 |  |  |  |
| Combination of technologies                                     | 18                |  |  |  |

Six studies analyzed usage data of an existing technology or health database. These six studies had relatively large sample sizes (i.e., 3,158 to 2,171,325 users). Other studies had six to 1,558 participants.

#### Findings

The Help@Hand evaluation team grouped factors influencing uptake into 16 common themes as shown in **Figure 7**. Each theme corresponded to one of the following categories: 1) user factors, 2) program factors, and 3) technology and environmental factors. This section describes these categories and themes.



<sup>18</sup> Needs assessments aimed to understand user needs and attitudes towards mental health technologies.

<sup>19</sup> Evaluation studies assessed users' experiences with a specific intervention.

#### **User-Related Factors**

User factors include: 1) demographic variables, 2) personality traits, 3) mental health status, 4) belief, 5) experience and skills, and 6) integration into life.

#### Demographic Variables

Demographic variables (i.e., age, gender, and education) influenced willingness and interest in using mental health technologies.

#### Personality Traits

Those who rated high on neuroticism and agreeableness had more interest in using stress apps (Ervasti et al., 2019). Extraversion (March et al., 2018) and resistance to change (Mikolasek et al., 2018) predicted lower likelihood of preferring online services over in-person services.

#### Mental Health Status

Some mental health symptoms, such as depression and stress, could inhibit one's ability to engage with a technology. Three needs assessment studies found a higher willingness among participants to use a technology if they had more severe symptoms (Crosier et al., 2016; Arjadi, Nauta & Bockting, 2018; Toscos et al., 2018). However, seven evaluation studies showed that more severe symptoms could hamper actual engagement with apps (i.e., Heiniger et al., 2017; Forchuck et al., 2016).

#### **Beliefs**

Pre-existing beliefs about help-seeking, mental health, and technology influenced willingness to use mental health technologies. Participants' prior experience with technology, mental health services and mental health technology also influenced their willingness.

#### **Experience and Skills**

Despite willingness to use such technologies, study participants' mental health literacy, computer literacy, and digital health literacy skills influenced the extent to which they could use and engage with technologies.

#### Integration into Life

Difficulty to integrate use of a technology into daily life formed a barrier to engagement. This difficulty could result from one's inability to find a routine, invest time to use a technology, remember how to use it, or access the technology in a private space (Similä et al., 2018).

#### **Program Factors**

Program factors include: 1) type of content, 2) perceived fit, 3) perceived usefulness, 4) level of guidance, 5) social component, and 6) impact of technology.

#### Type of Content

Satisfaction with the type of content offered affected user engagement. Uncertainty about the credibility of the information served as a barrier for engagement (Lal, Nguyen & Theriault, 2018; Pretorius et al., 2019; Wallin et al., 2016; Watson et al., 2017; Burchert et al., 2019).

#### Perceived Fit

Perceived fit referred to how well the participants felt the technology was tailored to them, rather than a one-size-fitsall solution. The language used in the technology, the relevance of information to their current situation, and the ability to customize or personalize the technology influenced perceived fit (Bucci et al., 2019).

#### Perceived Usefulness

A technology's ability to present understandable content and convey a clear advantage over regular care influenced perception of usefulness among study participants.

#### Level of Guidance

Level of guidance referred to the extent to which the technology supported users. Examples included reminders or an online mentor that held users accountable to regularly engage with the content.

#### Social Component

Effects on social connectedness affected user engagement. Connection to peers or regular contact with a personal therapist through an app facilitated engagement in 20 studies (Frost et al., 2016). Nine studies found social avoidance acted as a barrier if participants used self-guided apps in lieu of coming into a clinic and engaging in in-person therapy or group sessions (Bucci et al., 2019).

#### Impact of Technology

The impact of participants' mental health as a result of using an app influenced further engagement. Perceived improvement of symptoms facilitated further engagement (Edbrooke-Childs et al., 2019), while exacerbation of symptoms negatively impacted engagement (Almeida et al., 2019).

#### **Technology and Environmental Factors**

Technology and environmental factors include: 1) technology issues, 2) security and safety, 3) social influence, and 4) implementation.

#### Technology Issues

There were also factors related to the technology itself that affected engagement. Participants experienced technical issues or did not have the resources required to use the technology in 13 studies (Feijt et al., 2018).

#### Security and Safety

Security and safety related to the storage and sharing of data. It also related to whether participants trusted the app enough to disclose confidential information.

#### Social Influence

Endorsement of the technology by their social environment, which included peers, family, and their current health care provider, further influenced participant engagement.

#### Implementation

One example of how implementation affects technology uptake included whether participants received training on how to use the technology. Introduction of technologies early versus later in ongoing therapy also influenced uptake.

#### Learnings from the Systematic Review of Factors Influencing Technology Adoption and Use

The Help@Hand evaluation team conducted a systematic literature review to understand factors that may influence adoption and use of Help@Hand technologies among target groups. Key learnings from the review indicate:

- Sixteen common factors related to the user, content/program offered by the technologies, as well as the technology itself can all affect how people engage with mental health technologies.
- The sixteen identified factors can help understand and explain use of Help@Hand technologies among target groups.
- A deep understanding of factors affecting usage can help identify appropriate strategies to impact addressable barriers. For example, providing technical support can easily address low usage as a result of people experiencing technical issues. However, strategies addressing people having difficulty finding time to integrate health technologies into their lives may be more difficult to address.

#### **COLLEGE STUDENT SURVEY**

Help@Hand Counties/Cities identified college-aged students as an important target population. As such, the Help@Hand evaluation team developed standard procedures for a survey of college students on mental health.

This survey can generally provide Counties/Cities access to timely data and feedback that identify the most important needs and desires of a community, which in turn may inform implementation planning and decision making. In particular, this survey might identify: 1) factors likely to influence the adoption of Help@Hand apps, 2) current apps and other technologies used in the community, 3) current mental health needs and beliefs of the target population, 4) baselines for outcome and mental health literacy measures, and 5) insights for recruitment strategies.

#### Los Angeles County and El Camino College

Los Angeles County expressed interest in understanding unmet mental health needs among community college students, how apps may address these unmet needs, and how to engage community college students, including those not currently using such technology. Los Angeles County partnered with El Camino College and the Help@ Hand evaluation team to plan and conduct a survey with students at El Camino College.

During this quarter, Los Angeles County, El Camino College, and the Help@Hand evaluation team continued to develop and test the survey and materials. The University of California, Irvine and El Camino College's Institutional Review Boards (IRBs) reviewed and approved the updated survey and materials in March and April 2020, respectively. The Help@Hand evaluation team also collaborated with El Camino College to plan recruitment. The survey will begin in April 2020.

#### **Orange County and Santiago Canyon College**

Orange County partnered with Santiago Canyon College and the Help@Hand evaluation team to develop and field a survey that would understand the unmet mental health needs of community college students and how apps may meet these needs. Orange County and the Help@Hand evaluation team began to develop a survey for students to complete during an event at Santiago Canyon College in May 2020. However, the event may no longer occur due to COVID-19.

#### **USER EXPERIENCE AND TECHNOLOGY EVALUATION – PILOT METRICS**

User evaluation efforts this quarter included working closely with the Help@Hand Collaborative to plan user evaluations for upcoming pilots.

User Pilot Evaluation

The Help@Hand evaluation team developed a framework to evaluate pilots from the user perspective, which involved identifying **standard constructs**<sup>20</sup> **across all pilots and additional constructs that Counties/Cities should consider**. The standard and additional constructs reflected the pilot evaluation plan approved by the Help@Hand Leadership in February 2020. The constructs for the user pilot evaluation fall into three categories:

- Target audience experience (i.e., usability, acceptability, and appropriateness)
- User behavior (i.e., adoption, and engagement)
- Client outcomes related to the technology (i.e., mental wellness and social connection)

**Development of surveys and other instruments** to measure these constructs also began. The Collaborative may expect to receive the finalized instruments in the next quarter. In addition, the Help@Hand evaluation team began to identify what data Vendors can collect.

#### Figure 8. Pilot Evaluation Constructs



<sup>20</sup> A construct refers to a broad idea, theme, or topic that one can measure directly or indirectly.

# SPOTLIGHT

From the inception of Help@Hand, Los Angeles County Department of Mental Health (LACDMH) recognized that there were many The collaboration between Los Angeles County Department of Mental Health and Painted Brain to develop The Guide to Wellbeing Apps Brochure advances the pathway for continued integration of Peers into the Help@Hand program.

great digital products that might benefit people. The goal was to create a "suite" or repository of apps. LACDMH did a broad general scan and researched existing apps, and noticed that the LA County library had created their own suite of apps. With lead LACDMH Peer and Allied Heath Professions Chief, Keris Myrick, as subject matter expert on the project, Los Angeles partnered with the Painted Brain (PaintedBrain.org), a community-based organization whose mission is to create "lasting community-based solutions to mental health challenges and the impact of social injustice through arts, advocacy, and enterprise," to support the development of a community and Peer-engaged approach for creating their own unique brochure.

The process gained momentum in 2019, with Painted Brain holding workshops and conducting a survey of over 500

people to get a better sense of people's interests and needs. Alex Elliott, MSW, in the Quality, Outcomes, and Training Divison of LACDMH, commented on the significance of this process for learning about "the importance of having free resources to support wellbeing, generally, not just clinical or mental health. People wanted resources to support the physical, emotional, intellectual, and financial areas of their lives."

From here, a Peer Learning Collaborative was created in which 12-15 Peers, consumers and other stakeholders researched, tested, and evaluated over 30 different wellness apps. Rayshell Chambers, Co-founder of Painted Brain and COO, described how the Peers used a systematic



approach, informed by Dr. John Torous, MD MBI, Director of the digital psychiatry division in the Department of Psychiatry at Beth Israel Deaconess Medical Center, the Help@Hand evaluation teams feedback on Kern County's App Brochure, and App guides, like Psyberguide (Psyberguide. org), to develop "a 12-point App Evaluation Matrix that highlighted the important threshold that each researched app needed to meet – things like, Is the app in English and other LA County Threshold languages? Is there a privacy statement? Is the App free to download? What is the Apple Store/Google Play Rating? Which of the 8 Dimensions of Wellness did the app address?"

A series of meetings between Painted Brain and LACDMH led to the development of a prototype of the App Brochure. for both college students and LACDMH stakeholders. Based on feedback of Version 1.0 of the brochure from Santa Monica College and to a small group of LACDMH stakeholders, LACDMH quickly learned that the information provided on the brochure was too crowded and needed more art. Feedback on Version 2.0 was then garnered through a co-facilitated Learning Collaborative with LACDMH and local consumers, family, and Peer staff to discuss the App Brochure and record feedback. The feedback was extensive. Some of the feedback is noted in **Figure 10**.

The Guide to Wellbeing Apps Brochure is now available in both Spanish and English and has been shared widely, including over 370,000 visitors per month that alone come from the Painted Brain website and their social media channels, along with on LACDMH'S COVID-19 Webpage, social media, and communications in various emails to LACDMH staff members and stakeholders groups (Underserved Cultural Communities, Service Area Leadership Teams).

This is just the start. As David (Eli) Israelian, Co-founder and CTO of Painted Brain, shared, "Who better to lead vetting wellness apps than a Peer [person with lived experience of a mental health condition]? Rather than accepting the status quo of what tech companies have to offer, we're directing the bar of excellence through a trauma-informed Peer lens. We're leading language use and cultural competency; keeping diverse populations in mind as we redefine digital wellness."

#### Figure 10. Sample Feedback from Co-Facilitated Learning Collaborative

| What Stands Out?                                                                                                                                                                                                                                                                                                                                                                                                                | What do you not like?                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Like the idea that it is simple and clean<br>Broken into categories is helpful, good for helping people find resources<br>Helps that it has the App picture<br>Might be a challenge since the app logo may update over time, not reflected in<br>printed brochure<br>Would help to have a website people can visit to help people find these apps<br>OR code would be helpful to only a DMH website page, where undates to apps | Needs art! Needs an icon, image. Text only is too plain<br>Looks like a Chase bank flyer<br>Not catchy! Maybe a different color.<br>Cover image needs a border<br>Likes the term "On Your Terms" |
| can be added<br>Concern about waste of paper                                                                                                                                                                                                                                                                                                                                                                                    | How likely would you be<br>to try one of these apps?                                                                                                                                             |
| What about people with older phones? Updating your phone can change everything in your phone                                                                                                                                                                                                                                                                                                                                    | Need an art app or creativity app, novelty or fun apps<br>"Just for fun" (coloring, slime, guitar, music)                                                                                        |
| It does work on Lifeline Assistance Obama phones – but is there education<br>needed in this area?<br>Need to teach people about using free WiFi                                                                                                                                                                                                                                                                                 | Might need a social app too<br>App that has a calendar of free social events, meet ups<br>Emphasize – this is vetted by peers, peers like these apps                                             |
| Apple App store will potentially charge for downloads even for 'free' apps<br>Should offer only things that are free – no 'freemiums'<br>Free means – no charge, no trial                                                                                                                                                                                                                                                       |                                                                                                                                                                                                  |

# 4 OUTCOMES EVALUATION AND DATA DASHBOARD

#### **Key Points**

- The Help@Hand evaluation team completed work to adapt a stigma measure tailored to the Hand@Hand project. This work, begun in the previous quarter with an intensive two-day workshop, continued through this quarter using the Delphi process to obtain consensus among the panel of academic and Peer experts convened for this project.
- To support the stigma survey development, Help@Hand is assessing individuals' response to mental to health stigma survey questions depending on the label used in the questions. This information will guide the final tool to be used in stigma evaluation.
- The evaluation team worked with the Help@Hand Collaborative, Technology Vendors, and other Vendors on build necessary infrastructure and the infrastructure in preparation for data sharing and data collection, such as agreement on survey questions to be included in Vendor surveys and negotiations of Data Use Agreements (DUAs).

#### **OVERVIEW**

The outcomes evaluation examines Help@Hand's overall impact in the state of California. Along with measuring outcomes, the evaluation includes a data repository.<sup>21</sup> Additionally, Orange County is interested in serving as a pilot site for developing a decision support dashboard to help Counties/Cities with program planning activities and monitoring. This chapter presents evaluation activities and learnings as follows:

#### Outcomes Evaluation

o Measuring Mental Health Stigma

- Selecting Appropriate Measures
- Identifying Appropriate Labels

o Accessing and Collecting Data from Different Sources

- California Health Interview Survey (CHIS)
- California Health and Human Services (CHHS)
- Data from County/City Systems and Technology Vendors

o Learnings from the Outcome Evaluation

• Data Repository and Data Dashboards

#### **OUTCOMES EVALUATION**

The outcomes evaluation assesses Help@Hand's statewide effect on achieving its five shared learning objectives:

- Faster detection and acknowledgement of mental health symptoms;
- Reduction of stigma associated with mental illness by promoting mental wellness;
- Increased access to the appropriate level of support and care;
- Increased purpose, belonging, and social connectedness of individuals served; and
- Collection and analysis and collect data to improve mental health needs assessment and service delivery.

#### **Measuring Mental Health Stigma**

#### **Selecting Appropriate Measures**

Addressing Help@Hand's second shared learning objectives (i.e., reduction of stigma associated with mental illness by promoting mental wellness) requires Counties/Cities to measure mental health stigma prior to implementation of the mental health apps at prescribed times following implementation. Changes in the stigma measures, analyzed in conjunction with other events and changes happening at the counties at the same time, will indicate the impact of the Help@Hand initiative on stigma.

<sup>21</sup> A data repository refers to a large database infrastructure that allows for the collection, storage and management of datasets for data analysis, sharing and reporting.

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In Year 1, the Help@Hand evaluation team performed a literature search of stigma measures and identified a very large number of measures (over 400), many of which were validated psychometrically. To ensure that the measures adopted for this project are: 1) sensitive to the type of impact expected of Help@Hand apps to be implemented, 2) meeting the stigma dimensions of interest to the participating countie, and 3) scientifically valid, it was agreed to adopt a community participatory approach. A panel of five community Peers and individuals with learned experience, as well as six academics with expertise in developing stigma measures was convened. In October 2019, the panel spent two intensive days in a workshop "Conceptualizing and Measuring Mental Health Stigma for Evaluation." The product of this intensive workshop was a consensus on the dimensions of the stigma measure: 1) internalized stigma (one's own stigma toward their mental health condition), 2) resilience (one's hope and positive attitude toward living with or recovering from one's mental health condition).

The tasks remaining after the workshop involved choosing the scales and sub-scales, as well as specific questions from existing validating stigma measures. Between November 2019 and March 2020, the panel participated a modified Delphi process. The Delphi has been developed by the RAND corporation in the 1950s as a process to lead a group of experts to a consensus in a way that personalities do not dominate. We conducted the Delphi via email, asking panel members to rank the stigma measures questions that they viewed as most appropriate for each stigma domain, and offered them the opportunity to explain their reasoning. The results were summarized and sent back to the group anonymously. The panel reviewed the results and ranked the stigma questions again. Typically, this process leads to consensus after several rounds as people consider the responses of their peers. The advantage of this approach is that individuals with strong personalities do not get to dominate to conversation. All arguments are made anonymously.

Due to scheduling difficulties and some communication difficulties, we had to adapt our process and our last meeting was a telephone meeting rather than an email meeting, but it did lead to a consensus.

**Figure 11** depicts the process used and **Figure 12** depicts all the measures and questions considered. Those in the boxes in red are the ones chosen for the final survey measure by consensus.



The task force's recommended measures included:

- Internalized Stigma of Mental Illness (ISMI) which measures internalized stigma via 12 questions related to alienation and social withdrawal;
- Recovery Assessment Scale (RAS-R) which explores several aspects of an individual's resilience. The task force recommended using only the questions on willingness to ask for help and questions about not allowing symptoms to dominate; and
- Self-Stigma of Seeking Help (SSOSH), a 10-question survey looks at mental health treatment stigma.

The evaluation team will incorporate the task force's recommendations in upcoming surveys.

A full report that describes the process is forthcoming.

Figure 12. Mental Health Stigma Measures Considered and Selected for the Help@Hand Evaluation



#### **Identifying Appropriate Labels**

A concern was raised at the "Conceptualizing and Measuring Mental Illness Stigma for Evaluation" workshop was how different individuals refer to mental health disorders differently, and that the language that we will be using in the stigma survey might influence the responses. As a result, it was agreed that it would be important to understand the implications of using different labels and the possible bias each might have. The terms under consideration included the following: mental illness, mental health problem, psychological disorder, and emotional distress. To address this issue, we are currently fielding a survey in which we include all these terms. The current plan is that each survey respondent will receive a single, randomly assigned term. The respondent will be asked to complete survey questions about mental health stigma that using the randomly assigned label. A subset of individuals also will be allowed to use a term of their own choosing.

The information obtained from this survey will inform the stigma measuremen by quantifying any bias that might exist when individuals respond to the stigma questions when any of these terms is used. Our hope is that the use of any of the terms does not introduce a bias, but if it does, we will be in a position to account for that influence.

#### Accessing and Collecting Data from Different Sources

The Help@Hand evaluation team continued to work on developing infrastructure and processes for data collection.

#### California Health Interview Survey (CHIS)

CHIS (the largest state health survey in the nation asks questions on a wide range of health topics to a random sample of teens and adults throughout the state of California. In addition to collecting data from CHIS' routinely asked survey, the Help@Hand evaluation team and CalMHSA worked with CHIS to include additional questions related to Help@Hand. CHIS fielded their survey with the additional questions from September 2019-December 2019 for adult surveys and from September 2019-January 2020 for teen surveys. The Help@Hand evaluation team anticipates receiving the survey data in October 2020.

#### California Health and Human Services (CHHS)

CHHS and its Institutional Review Board (IRB) approved the Help@Hand evaluation team request for data: 1) Office of Statewide Health Planning and Development (OSHPD) inpatient and emergency department data and 2) vital statistics data. Analysis of inpatient, and emergency department, and vital statistics will allow us to compare access to care, access to appropriate levels of care, and outcomes across Help@Hand Counties/Cities, as well as similar Counties/Cities not participating in Help@Hand which will serve as controls.

#### Data from County/City Systems and Technology Vendors

County/City and Technology Vendor systems (i.e., apps) provide important data needed to understand the full impact of Help@Hand in communities and in the state. As mentioned earlier in the report, the Help@Hand evaluation team worked closely with the Collaborative to plan pilots. Discussions included how to access data from County/City systems, particularly from those Counties/Cities planning to a launch a pilot soon.

In addition, Orange County facilitated conversations on how to partner with Mindstrong to share necessary data to allow Orange County to answer their learning objectives. Parallel conversations were led by Los Angeles County with Headspace, and with Riverside County about how to access data from its app, TakemyHand.

#### Learnings from the Outcomes Evaluation

A Peer and Academic-partnered approach was facilitated to select appropriate instruments to measure mental health stigma in the Help@Hand evaluation. Learnings from these efforts include:

- Identifying the Delphi process as an effective process for gaining multiple persepctives, encouraging individual choice, and supporting consensus building.
  - o Use of the Delphi process to select mental health stigma measures allowed all academic and peer experts to voice their opinions freely.
  - o Obtaining consensus can take time and multiple rounds of voting. Keeping experts' interest and enthusiasm plays a vital role in ensuring all continue to participate and contribute in the process.
  - o The in-person workshop helped form strong working relationships based on trust and shared decision-making among the experts. These relationships contributed to successful facilitation of the Delphi process.

- Accessing CHHS data is time consuming and requires substantial efforts. As a result, those requesting such data should constantly assess the benefit and necessity of collecting this data.
- Collaboratively working with multiple stakeholders provides an opportunity to effectively access data from Counties/Cities and Technology Vendors. It also allows for the collection of data that may answer questions posed by the different stakeholder perspectives. (i.e., Technology Vendors may request data to understand how to enhance their products, whereas County/City staff may request data to improve their programs.)

#### DATA REPOSITORY AND DATA DASHBOARDS

The Help@Hand evaluation team worked with Orange County to pilot the decision support dashboards before disseminating this work to other Counties/Cities. Discussions with Orange County continue to assist Help@Hand in understand their dashboard-related needs and requirements.

#### RECOMMENDATIONS

Based on evaluation learnings presented in this report, the Help@Hand evaluation team makes the following recommendations for the overall Help@Hand Collaborative and the individual Help@Hand Counties/Cities.

#### **RECOMMENDATIONS TO THE HELP@HAND COLLABORATIVE**

- Continue to develop processes and tools for regular and integrated communication between Counties/Cities, CalMHSA, Help@Hand evaluation, and other stakeholders for updates and collaborative planning.
- Offer implementation and evaluation support that is concrete, actionable, understandable, and reinforces value to Counties/Cities.
- Consider a strategy to expand the use of the Digital Mental Health Literacy (DMHL) curriculum across the Collaborative. Delivering the DMHL curriculum in communities has the opportunity to provide an early win among local stakeholders.
- Assess how the language and content of potential technologies fits the needs of diverse target audience members. Making a technology available to diverse ethnic, language, or cultural groups involves more than just translation. Include the Technology Vendors early in discussion to develop tailored products.
- The Collaborative should be aware that not all apps have sufficient assistive technologies. Speak with members of the target group to understand what assistive technologies are most relevant across the Collaborative. Discuss as a Collaborative how to vet potential technologies to meet such criteria and discuss with chosen Vendors their accessibility capabilities.
- The Collaborative should incorporate data collection and sharing plans when contracting with Technology Vendors. Because the availability of marketplace data via a third-party analytics platform changes over a relatively short period of time, it is crucial for vendors to directly provide these metrics. Detailed data provided directly from the app developer will yield more consistently available data points to help understand product performance. This data will also allow Counties/Cities to determine the real-world engagement and effectiveness of the apps and help achieve learning objectives.
- Facilitate efficient cross-Collaborative information exchange to help Counties/Cities learn from each other about successful practices and lessons learned.
- The use of the Delphi method is a good way to encourage all participants in a decision to have a voice. The Collaborative could consider utilizing this method for decisions that need to be made where a consensus must be reached.

#### **RECOMMENDATIONS TO THE HELP@HAND COUNTIES/CITIES**

- Focus on established priorities for the pilot, particularly when attention and interests change, to ensure pilots align with fundamental needs.
- Be aware of resource and time constraints in order to develop feasible and realistic pilots.
- Consider including data beyond app usage. Counties/Cities should consider reflecting on contextual factors that are likely to affect usage among their target groups. This understanding can help identify facilitators and barriers to engagement, and help decide whether barriers can be addressed before moving forward with a technology, or whether its success faces barriers that are not easily fixed.
- Consider using the Digital Health Mental Health Literacy (DMHL) curriculum to support the needs of target audience members, such as understanding connectivity to WiFi and Internet Data.

- Many meditation apps have excellent user experience. Some consumers might already be users of meditation apps and might not change. Specific target populations might have unique experiences with meditation apps; therefore, Counties/Cities should focus on understanding user experience in their identified target populations.
- Counties/Cities are encouraged to pilot the apps with target audiences and gather feedback on language and content fit. Counties/Cities may also consider integrating these apps into a broader treatment program with additional content on specific needs, taking cultural context into consideration.
- As many of these app products do not provide connections to professional or crisis resources, Counties/Cities should consider developing a crisis response plan outside of the app. Ensure that clients understand that these apps do not track or monitor symptoms, do not provide crisis response, and that clients understand who they should contact if they are in crisis.
- If the chosen app is not available offline, work with County/City informational technology to explore potential options, consider workflow integration, and discuss client's internet access to find suitable workarounds. For example, if an app only has downloadable content, where can the client can go to download the content?
- Address employment and turnover issues related to Peer employment.
- Local County/City evaluators should consider adopting the stigma measures identified during the Delphi process.

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Each Help@Hand County/City completed the following tables that describe their program information, accomplishments, lessons learned, and recommendations.

| City of Berkeley                                                                              | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                 |
|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Tech Lead(s)                                                                                  | Andrea Bates                                                                       |
| Implementation Champion Clinic(s)                                                             | Not applicable                                                                     |
| Team Composition                                                                              | Tech Lead, Behavioral Health Director, MHSA Coordinator, Peer, Project Coordinator |
| Target Audience(s)                                                                            | • TBD                                                                              |
| Products In Use/ Planned                                                                      | • TBD                                                                              |
| Implementation Approach                                                                       | • TBD                                                                              |
| Other Unique Qualities<br>(about implementation, target audience,<br>or other program aspect) | • TBD                                                                              |
| Milestone(s)                                                                                  | Not applicable                                                                     |
| Lessons Learned                                                                               | Not applicable                                                                     |
| Recommendations                                                                               | None at this time                                                                  |

| Kern County                                                                                   | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tech Lead(s)                                                                                  | Lamar K. Brandysky, LMFT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Implementation Champion Clinic(s)                                                             | Self-Empowerment Team                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Team Composition                                                                              | Project Lead, Peer Lead, 2 Peers, PIO, Marketing Associate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Target Audience(s)                                                                            | <ul><li>Clients with serious mental illness</li><li>Kern County Residents</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Products In Use/ Planned                                                                      | <ul> <li>App Brochure, 2nd Edition – English and Spanish versions</li> <li>App Brochure, 3rd Edition (planned)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Implementation Approach                                                                       | Wide distribution of the App Brochure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Other Unique Qualities<br>(about implementation, target audience,<br>or other program aspect) | <ul> <li>Offer clinician education on App Guide (planned)</li> <li>Support other Help@Hand Counties/Cities (Mono, Modoc, and Santa Barbara) develop their own tailored App Guide</li> <li>Adapt App Brochure for Nevada, Fresno, San Bernardino, and Inyo Counties to publish their own App Guide</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Milestone(s)                                                                                  | <ul> <li>Published the 2nd Edition of "The Peers' Guide to Behavioral Health Apps" App Guide in English and Spanish</li> <li>Created a version of the app guide for Modoc, Mono, and Santa Barbara Counties that included content modifications and printing set-up</li> <li>Prepared and Implemented a four-hour Peer Workshop on empowerment training for Kern BHRS and contracted Peers</li> <li>Empowered Peers though the app guide development and dissemination</li> <li>Prepared and hosted two-day Digital mental health literacy training for Help@Hand Peers</li> <li>Presented App Brochure to County Board of Supervisors in January</li> <li>Presented to the Kern BHRS Management and to the Kern BHRS contract CEOs</li> <li>Started systemic distribution to other Kern County agencies</li> </ul> |
| Lessons Learned                                                                               | <ul> <li>The proposed apps need to be thoroughly vetted prior to piloting with clients. A prime role of County mental health is to assure the provision of safe products to their vulnerable population.</li> <li>Digital literacy takes one-on-one coaching which is time consuming and labor intensive.</li> <li>Consumers benefit from basic digital literacy training.</li> <li>Collaborating with fellow counties is fruitful and productive.</li> </ul>                                                                                                                                                                                                                                                                                                                                                       |

Continued on next page

| Kern County     | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lessons Learned | <ul> <li>Working with County agencies requires an abundance of patience and perseverance.</li> <li>It is vital that the peer employees not only have lived experience, but that they will have progressed sufficiently in their recovery that they feel free to share details of their journey. This sharing of surviving and thriving in their recovery is a prime issue to benefit our consumers and members.</li> </ul> |
| Recommendations | • Focus on producing a product. Time and energy can be spent on process and procedures with no resulting product                                                                                                                                                                                                                                                                                                           |

| Los Angeles County                                                                            | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tech Lead(s)                                                                                  | <ul> <li>Katherine Steinberg, MPP, MBA</li> <li>Alex Elliott, MSW</li> <li>Ivy Levin, LCSW</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Implementation Champion Clinic(s)                                                             | <ul> <li>Harbor UCLA DBT program</li> <li>Peer Resource Center (planned)</li> <li>Geriatric Evaluation Networks Encompassing Services Intervention Services (GENESIS) outpatient program for older adults (projected for pilot)</li> <li>Telecare Los Angeles Older Adults (LAOA) Full Service Partnership (FSP) program (projected for pilot)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Team Composition                                                                              | <ul> <li>Program Lead/Project Manager, Chief Medical Officer (Executive Sponsor), Behavioral Health Director, 2 Tech Leads, Chief<br/>Information Officer, IT Project POC, Chief of Peer Services, Evaluation Lead, Privacy SME, IT Security SME, Harbor UCLA Clinical<br/>Champion, Public Information Officer</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Target Audience(s)                                                                            | <ul> <li>Transitional age youth and college students</li> <li>County employees</li> <li>Complex needs individuals (i.e., those with multiple and repeated hospitalizations)</li> <li>Individuals and family members uncomfortable accessing community mental health services seeking de-stigmatized care and supports for well-being</li> <li>Existing mental health clients seeking additional support or seeking care/support in a non-traditional mental health setting</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Products In Use/ Planned                                                                      | <ul> <li>Headspace (planned)</li> <li>Modified Mindstrong Health App</li> <li>CredibleMind (projected for pilot)</li> <li>Uniper (projected for pilot)</li> <li>MindLAMP (projected for pilot)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Implementation Approach                                                                       | <ul> <li>Headspace for current DBT clients (possible COVID-19 response)</li> <li>Headspace for individuals visiting the DMH Peer Resource Center</li> <li>CredibleMind for isolated populations at higher risk for more serious complications from COVID-19</li> <li>Uniper for current DMH clients in the GENESIS outpatient program for older adults</li> <li>Uniper for current older adult clients with internet access enrolled in the Telecare Los Angeles Older Adults (LAOA) Full Service Partnership (FSP) program</li> <li>MindLAMP for clients in Harbor UCLA DBT program</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Other Unique Qualities<br>(about implementation, target audience,<br>or other program aspect) | <ul> <li>LAC DMH is exploring how to use apps and platforms that have already gone through internal review to meet the increased<br/>needs of those impacted by COVID-19 (COVID-19 response)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Milestone(s)                                                                                  | <ul> <li>Continued development and refinement of pilot proposal documents</li> <li>Coordinated calls between vendors, LAC IT security, LAC program leads, and CalMHSA to get questions answered</li> <li>Began evaluation planning and proposal refinement with UCI and CalMHSA</li> <li>Learning collaborative at PRC: Discussion for the Development of a Guide to Wellbeing Apps Brochure</li> <li>Development of Painted Brain App Evaluation Matrix</li> <li>Finalized Guide to Wellbeing Apps Brochure and shared with the Help@Hand Collaborative</li> <li>Gathered free resources offered in response to COVID-19 and shared with the Help@Hand Collaborative</li> <li>Created a dynamic QR code for App Brochure</li> <li>Presented pilot plans to Help@Hand leadership group (all pilots approved by Collaborative)</li> <li>Development of Digital Health Literacy Modules by Painted Brain and associated DMH review</li> <li>Headspace presentation at Countywide Supervisors Forum</li> <li>Headspace on-site meeting: Getting started with Headspace with Tom Freeman, Engagement Manager</li> <li>Development of request for information (RFI) Screening Tool w/ Monterey County</li> <li>Participated in Help@Hand Language/Monolingual Working Group</li> <li>Clinical Peer Review Presentation for the Quality, Outcomes and Training Division: Resources to help Deaf, Hard of Hearing, Blind and Physically Disabled Populations access and use Assistive Technology</li> <li>Updated Help@Hand LA Charter and committee structure</li> <li>Collaborated with UCI to develop the Community College students digital mental health baseline needs assessment</li> </ul> |

| Los Angeles County | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lessons Learned    | <ul> <li>Establish a central point-person as the lead project manager and leadership representative to triage and delegate tasks to team members and govern implementation and contracting</li> <li>Refocus technology selection from customization and development to employment of technologies currently in use in health and academic settings</li> <li>Even more due diligence is required around product functionalities and offerings to confirm they meet county expectations and needs prior to contracting</li> <li>Ensure digital health curriculum for clients is also given to providers in a condensed form</li> <li>Local learning collaborative approach allows for regular feedback from key stakeholders and supports development of organizational culture of digital health readiness</li> <li>Plan for significant training and monitoring for implementation sites to allow for greater iteration and engagement opportunities among staff</li> <li>Continue to collect understanding of unmet needs for target audience to help inform technology selection, piloting, and scaling</li> <li>Articulate success metrics and plan for collection ahead of pilot implementation (identify the quantitative and qualitative metrics to measure effectiveness with digital mental health and wellness applications)</li> <li>Utilize hands-on demos, videos, and visualizations to engage stakeholders in learning about the features of Tech Suite technologies</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Recommendations    | <ul> <li>Be flexible and adaptable to adjust pilots to evolving needs and priorities</li> <li>Allow for differences in approach across Collaborative while sharing learnings and experiences broadly</li> <li>Stakeholders are looking for SME to curate resources on their behalf to make selection of digital health resources easier</li> <li>Work closely with internal DMH if department starting early in process, particularly as it relates to privacy and security reviews</li> <li>Create a process for internal SME reviews of technologies and approach to communicating updates across SMEs</li> <li>Facilitate more open sharing, communication and learning across counties and among counties and vendors (include tech, evaluation, marketing vendors and CaMHSA)</li> <li>Work closely across admin, program leads, vendors, and evaluators on the aligned pilot plans</li> <li>Regular learning collaborative opportunities supports readiness for digital health implementations</li> <li>Increased communication between counties and CaMHSA about process requirements is helpful</li> <li>Utilize local marketing/design resources to develop tools and communication materiatis quickly and allow for easy iteration</li> <li>Maintain realistic goals about timeframe for internal IT review of vendors under consideration and CaIMHSA contracting timeline</li> <li>Consider piloting technologies that require only minimal customization to the public mental health space, rather than product development. Wait on customization efforts until after initial usability is demonstrated</li> <li>Plane arity which success metrics will be met for advancing to spread of technology, with clear success metrics</li> <li>Execute vendro contract linked to clear milestones of project success</li> <li>Iterate on project budget to ensure it reflects the vision for a suite (or menu) of technologies to increase access to mental health and wellbeing and ensure transparency to counties about budget and costs of deliverabies equested</li> <li>Stay up to date on the Tech Suite bench</li></ul> |

| Marin County                                                                                  | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tech Lead(s)                                                                                  | Chandrika Zager     Lorraine Wilson, MSW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Implementation Champion Clinic(s)                                                             | Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Team Composition                                                                              | Behavioral Health Director, Peer, MHSA Coordinator, Tech Lead                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Target Audience(s)                                                                            | Older Adults (particularly those who are isolated)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Products In Use/ Planned                                                                      | <ul> <li>Uniper (Testing)</li> <li>myStrength (Testing)</li> <li>Happify (Testing)</li> <li>Wysa (Testing)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Implementation Approach                                                                       | • TBD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Other Unique Qualities<br>(about implementation, target audience,<br>or other program aspect) | <ul> <li>Builds an intergenerational component (planned)</li> <li>Obtain stakeholder feedback through online venues (COVID-19 response); will require both group and individual coaching and a much more drawn out process</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Milestone(s)                                                                                  | <ul> <li>Business Advisory Committee established and will hold first meeting 4/16</li> <li>Identified two groups of stakeholder testers (congregation of older adults and peers)</li> <li>Request for proposal issued to identify a trainer experienced with older adults to assist with digital literacy training</li> <li>Recruitment is underway to hire a Peer for the project</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Lessons Learned                                                                               | <ul> <li>Selection of an app is a slow process and having a shared understanding of the limits of language capacity among the apps in the pilots needs to be communicated broadly</li> <li>The redirect of the project to online stakeholder feedback sessions for older adults, who are not necessarily highly technologically literate, will require skill in communication and the use of many more digital tools (i.e., Survey Monkey, Zoom, email). This method of gathering feedback and engagement will require more small group and one-on-one coaching; it is unclear how well this will work for older adults</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Recommendations                                                                               | <ul> <li>Establish shared guiding principles at the leadership level on how pilots will address language capacity collectively rather than project-by-project. For example, develop shared agreements that the overall project would identify at least x% that respond to Spanish language needs, y% Mandarin, etc. This might prevent some voting against local pilots because one app is not addressing language and approving another because it does address language</li> <li>View the apps through a lens of language capacity being the top priority; will yield different results than looking at it through the lens of: Does the technology work for the population selected?</li> <li>Establishing shared agreements and viewing apps through language capacity might better support community buy-in for the project in all communities because it would clarify that Help@Hand is focused first on the technology, but with a commitment to test the language with targeted stakeholder groups where it is most appropriate. It acknowledges the huge language limits existing in current digital behavioral health apps</li> </ul> |

| Modoc County                                                                                  | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tech Lead(s)                                                                                  | Rhonda Bandy, PhD                                                                                                                                                                                                                                                                                      |
| Implementation Champion Clinic(s)                                                             | Modoc County Behavioral Health                                                                                                                                                                                                                                                                         |
| Team Composition                                                                              | Modoc County Behavioral Health (MCBH) Branch Director, MCBH MHSA Coordinator, Behavioral Health Specialist                                                                                                                                                                                             |
| Target Audience(s)                                                                            | <ul><li>Current clients</li><li>County residents</li></ul>                                                                                                                                                                                                                                             |
| Products In Use/ Planned                                                                      | <ul> <li>DBT Diary Cards from Mindstrong (tentative)</li> <li>Apps vetted by other Counties that Modoc chooses off the bench (planned)</li> </ul>                                                                                                                                                      |
| Implementation Approach                                                                       | <ul> <li>None until apps available on bench</li> <li>Starting up Appy Hours for Digital Literacy Training in preparation for app implementation</li> </ul>                                                                                                                                             |
| Other Unique Qualities<br>(about implementation, target audience,<br>or other program aspect) | Phones not offered until apps are implemented                                                                                                                                                                                                                                                          |
| Milestone(s)                                                                                  | Developed Appy Hours                                                                                                                                                                                                                                                                                   |
| Lessons Learned                                                                               | <ul> <li>Patience – waiting for CalMHSA to finalize contracts, provide budget, get time extension with OAC, and Help@Hand leadership to establish future strategic direction.</li> <li>Should not have moved into phone contracts; paying every month for phones that are sitting in boxes.</li> </ul> |
| Recommendations                                                                               | Make specific effort to keep the Help@Hand collaborative culture between Counties to capture shared learnings                                                                                                                                                                                          |

| Mono County                                                                                   | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tech Lead(s)                                                                                  | <ul> <li>Amanda Greenberg, MPH</li> <li>Stephany Valadez</li> </ul>                                                                                                                                                 |
| Implementation Champion Clinic(s)                                                             | Not applicable                                                                                                                                                                                                      |
| Team Composition                                                                              | Behavioral Health Program Manager, Behavioral Health Services Coordinator                                                                                                                                           |
| Target Audience(s)                                                                            | <ul> <li>Individuals in remote, isolated areas of the County who have less access to social support and mental health services</li> <li>Students attending Cerro Coso Community College in Mammoth Lakes</li> </ul> |
| Products In Use/ Planned                                                                      | TBD (awaiting larger County pilots to be completed)                                                                                                                                                                 |
| Implementation Approach                                                                       | TBD (awaiting larger County pilots to be completed)                                                                                                                                                                 |
| Other Unique Qualities<br>(about implementation, target audience,<br>or other program aspect) | Mono County is very small, remote and rural, so we will have some challenges around implementation in our outlying areas                                                                                            |
| Milestone(s)                                                                                  | Awaiting pilots                                                                                                                                                                                                     |
| Lessons Learned                                                                               | • TBD                                                                                                                                                                                                               |
| Recommendations                                                                               | • TBD                                                                                                                                                                                                               |

| Orange County                                                                                 | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tech Lead(s)                                                                                  | <ul> <li>Sharon Ishikawa, PhD</li> <li>Flor Yousefian Tehrani, PsyD, LMFT</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Implementation Champion Clinic(s)                                                             | <ul> <li>UCI Medical Center</li> <li>OC Community Colleges (initial communications begun to explore interest and feasibility of being implementation sites)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Team Composition                                                                              | Peer Lead, 2 Peers, Compliance, PIO, AQIS, Cambria (3.5 FTE) to support Mindstrong Launch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Target Audience(s)                                                                            | <ul> <li>Mindstrong</li> <li>Adults 18+</li> <li>English fluency</li> <li>Resident of Orange County</li> <li>Diagnosis of Major Depressive Disorder, Bipolar Disorder, Schizophrenia, or Schizoaffective Disorder</li> <li>Anxiety disorders, substance use disorders or other co-occurring diagnoses are ok</li> <li>May have a history of psychiatric hospitalization and/or 1+ crisis evaluations within last 12 months</li> <li>Device eligibility: owns a smartphone with unlimited data, talk and text</li> <li>May be expanded depending on research on Lifeline phones and Mindstrong data usage</li> </ul>                                                                                                                                                                                                                                               |
| Products In Use/ Planned                                                                      | Mindstrong Crisis Prevention Services (Planned)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Implementation Approach                                                                       | Mindstrong (Not in use yet)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Other Unique Qualities<br>(about implementation, target audience,<br>or other program aspect) | <ul> <li>Serving individuals regardless of insurance type/status</li> <li>Creating plan to pilot/test Lifeline phones</li> <li>Extensive conversations and iterative refinement around informed consent process involving project team, compliance, Peers, UCI Medical, Mindstrong and video production company; including digitization of consent form and creating companion video/audio</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Milestone(s)                                                                                  | <ul> <li>Mindstrong:</li> <li>Tentative pilot launch at UCI Medical Center in Spring 2020 (depending on impact of COVID-19 public health emergency response)</li> <li>Implementation planning for Community Colleges, with preliminary soft pilot launch in Fall 2020 (possibly sooner in response to increased need for telehealth support due to impact of COVID-19 on school closures)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Lessons Learned                                                                               | <ul> <li>Shared vision and support from executive leadership</li> <li>Prioritize system prep, program prep and implementation planning over launching</li> <li>Involve tech experts in the planning, development and management at the overall collaborative and local level</li> <li>Communication with vendors, checking in to ensure information, messaging, and shared vision is accurate</li> <li>Tech vendors should be held to equitable standards</li> <li>Create a checklist of pre-launch activities (i.e., coordinate meetings w/Compliance, IT, County Counsel, QI)</li> <li>Ability to course correct, shift/change when needed</li> <li>Frequently define terms, especially in the beginning, to ensure shared understanding</li> <li>Collaborate/communicate with the program managers and staff in programs where app will be launched</li> </ul> |

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| Orange County   | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lessons Learned | <ul> <li>Obtain feedback from clinicians/Peers early on to assess interest/readiness to use the app services</li> <li>Continually manage expectations at all levels (i.e., community, programs, vendors)</li> <li>Risk and Liability workgroup, legal counsel, and crisis response protocols are critical elements to the project</li> <li>Acknowledge challenges such as managing details with a small team and creating an environment where counties and vendors can openly discuss challenges, concerns and issues</li> <li>Shared messaging that the Help@Hand project is not about implementing apps, it's about developing a sustainable digital mental health system of care for CA (i.e., infrastructure building)</li> <li>Apps that involve clinical integration require implementation support staff with clinical experience</li> <li>With an ever expanding team, needed to identify strategies for effective communication and decision-making process</li> <li>Consumers need easy access to County-specific and Help@Hand project information (i.e., website, short codes)</li> <li>Project needs a grievance process that outlines protocols for the Collaborative's response to complaints/issues</li> <li>Apps mostly target English-speaking population – cultural adaptations, beyond simple translations of content, are needed to reach and serve diverse communities in a meaningful way</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Recommendations | <ul> <li>Flow of communication (i.e., within/between/among CalMHSA, counties, vendors)</li> <li>Plans and frequency of coordinated calls between counties</li> <li>Status update following the Cambria meetings</li> <li>Systematic process for testing/vetting apps, including user safety</li> <li>Process for procuring and demonstrating new apps/vendors, as well as for adding new components to the Suite</li> <li>Planning, development and implementation process be streamlined and sustainable in the future (i.e., security vetting, compliance, etc.)</li> <li>Meaning for Counties/Cities to collaborate</li> <li>Consider risk and liability as part of County planning and readiness</li> <li>Clinical integration should be the primary focus when planning launch of mental health treatment-focused apps and should include implementation patters, prepare an effective work plan that prioritizes necessary/required preconditions to have in place prior to launch (i.e., roadmap of involved parties and logical order/priorities for IT, data sharing, compliance, clinical integration, etc.)</li> <li>Consider use of DARCI model as a strategy for effective and expedited communication and decision-making</li> <li>Existing Tech is not necessarily geared with the County mental health plan consumer in mind so when exploring and procuring technology, be very clear in including the type of tech the target population will likely have access to, as well as language capabilities (should be include in RFA language, criteria)</li> <li>OAC updates and reports should provide more information about project and respond directly to request for more information about process and specific apps, more emphasis on initially proposed components, lessons learned and steps toward developing a digital mental health system of care)</li> <li>Develop a P&amp;P for managing grievance at the collaborative level</li> <li>Collaborative website and include short codes to provide consumers an easy access to project information</li> <li>Develop a P&amp;P for managing grievance at the</li></ul> |

| Riverside County                                                                              | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tech Lead(s)                                                                                  | Maria Martha Moreno, MS CIS                                                                                                                                                                                                                                                                                                                                                                                                 |
| Implementation Champion Clinic(s)                                                             | Transitional Age Youth Drop-In Centers (in Mid-County, Desert and Western Regions)                                                                                                                                                                                                                                                                                                                                          |
| Team Composition                                                                              | Peer Manager, Senior Peer, Peers, Clinical Supervisor, CODIE Representative, crisis intervention Clinicians, Application Developer,<br>Technology Lead.                                                                                                                                                                                                                                                                     |
| Target Audience(s)                                                                            | <ul> <li>Higher Risk Populations (i.e., first onset, re-entry, FSP consumers, eating disorders, suicide prevention)</li> <li>Traditionally Underserved Communities (i.e., Hispanic/Latino, American Indian, African American, Asian-Pacific Islander, LGBTQ, deaf and hard of hearing)</li> <li>Geographic service barriers to rural and frontier communities</li> <li>Hearing and visually impaired communities</li> </ul> |
| Products In Use/ Planned                                                                      | Take My Hand Peer Chat                                                                                                                                                                                                                                                                                                                                                                                                      |
| Implementation Approach                                                                       | • The Take My Hand site will be live during set hours and managed by trained/certified Peer Operators (COVID-19 response)                                                                                                                                                                                                                                                                                                   |
| Other Unique Qualities<br>(about implementation, target audience,<br>or other program aspect) | <ul> <li>Piloting own in-house product</li> <li>Make Peers available on the app 24/7 (Planned)</li> <li>The peer chat is based on the peer model and people will communicate with a real person; not Artificial Intelligence</li> <li>Chat is anonymous and does not collect and/or store PII or PHI</li> </ul>                                                                                                             |
| Milestone(s)                                                                                  | <ul> <li>Compliance:</li> <li>Terms of Service – Approved by Riverside Help@Hand team (Technical lead, Clinical lead, Peer lead, Senior Peer, Evaluation Supervisor), HIPAA Compliance Officer and County Counsel</li> <li>Chat engine software (LiveChatInc) approved by County IT, Department IT, HIPAA Compliance Officer, and Executive Team</li> </ul>                                                                 |

| Riverside County | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Milestone(s)     | <ul> <li>Technical: <ul> <li>Completed chat platform</li> </ul> </li> <li>Accomplished user testing for prototype on two different occasions and feedback was provided</li> <li>Developed app to be able to identify a crisis situation and transfer chat to CT (a professional with specialized training)</li> <li>Defined and set useful chat tags for reporting purposes (in various operators groups)</li> <li>Made site searchable by Google</li> <li>Made Live Chat Security HIPAA-compliant by disabiling the ability to email a chat transcript, the ability to send files (Peer Operator/Visitors), inding chat history from visitors, inactify time outs, etc.</li> <li>Made objectator passworks are managed by Take my Hand site administrators</li> <li>Made authentication via LiveChat (no IP restriction)</li> <li>Chat routing manual (visitors are picked from the queue)</li> <li>Useful Links on Take my Hand website (i.e., Resources, Terms of Service)</li> <li>Website content is 90 percent complete in English</li> <li>Website loads testing reports (test 3 response times TakeMyHand.com, test 3 transaction throughout TakeMyHand.com)</li> <li>Creating website content in Spanish (in process)</li> <li>Cookie Policy (in process)</li> <li>Training:</li> <li>Developed training materials for Peer Operators (Peer Operator training checklist, training for COVID-19, facilitator's manual for Peer Operator. Training PPT script only, print-up manual for Peer Operator.covID-19, This includes a module on strategies to deal with "trols", inappropriate language and situational challenges from malicious participants.</li> <li>Scenario role-plays and a trainstorming solution session is included</li> <li>Provided protocols for tagsing "trols", inappropriate language chat users, and ability to ban users via the Ban User button</li> <li>Consumer resources; Riverside Free App Brochures (English/Spanish), County Resources (Resources Quick Link on Take my Hand vebsite).</li> <li>Quick list of crisis phone numbers, MS Teams, email, phone, etc. for internal commu</li></ul> |
| Lessons Learned  | Test, fix and repeat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Recommendations  | Test, adjust, test and introduce product in phases                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                  | Quarter 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

| San Francisco County                                                                          | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tech Lead(s)                                                                                  | Teresa Yu, LMFT                                                                                                                                                                                                          |
| Implementation Champion Clinic(s)                                                             | • TBD                                                                                                                                                                                                                    |
| Team Composition                                                                              | MHSA Director, Peer, MHSA Coordinator, Tech Lead, 2 Finance                                                                                                                                                              |
| Target Audience(s)                                                                            | • TBD                                                                                                                                                                                                                    |
| Products In Use/ Planned                                                                      | <ul> <li>TBD (waiting on approved apps by the Collaborative)</li> <li>Headspace (the City/County of SF is exploring to possibly pilot for staff. This would add to the populations included in this project.)</li> </ul> |
| Implementation Approach                                                                       | • TBD                                                                                                                                                                                                                    |
| Other Unique Qualities<br>(about implementation, target audience,<br>or other program aspect) | Interested in Peer Chat apps available to all, but with a focus on the Transgender and Transitional Age Youth communities                                                                                                |
| Milestone(s)                                                                                  | Started the City/County's collaboration with Mental Health Association of San Francisco                                                                                                                                  |
| Lessons Learned                                                                               | Contracting with a CBO created challenges as the project is constantly developing. We needed to have a flexible scope of work from the beginning                                                                         |
| Recommendations                                                                               | Keep lines of communication open                                                                                                                                                                                         |

| San Mateo County                                                                              | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Tech Lead(s)                                                                                  | Doris Estremera, MPH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
| Implementation Champion Clinic(s)                                                             | <ul> <li>Peninsula Family Service (PFS)</li> <li>Youth Leadership Institute (YLI)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |
| Team Composition                                                                              | <ul> <li>MHSA Coordinator, Peer Specialist/Peer Support, Contracted Agencies: 1)Youth Leadership Institute (TAY Contractor): Peer Lead/<br/>Program Coordinator, Bilingual-bicultural TAY Peer Lead (Spanish), 2) Peninsula Family Services (PFS): Peer Lead/Program Coordi-<br/>nator, bilingual-bicultural Peer (Spanish/Chinese)</li> </ul>                                                                                                                                                                                                                                                                              |  |  |  |
| Target Audience(s)                                                                            | <ul><li>Transitional age youth</li><li>Older adults</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |
| Products In Use/ Planned                                                                      | <ul><li>Happify with older adults (planned)</li><li>Remente with transitional age youth (planned)</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |
| Implementation Approach                                                                       | <ul> <li>Remente for transitional age youth, YLI Peer Leads and youth ambassadors plan, promote and support the use of the app</li> <li>Happify for older adults, PFS Peer Leads and older adult ambassadors plan, promote and support use of the app</li> </ul>                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| Other Unique Qualities<br>(about implementation, target audience,<br>or other program aspect) | <ul> <li>Help@Hand Advisory Committee of local stakeholders meet monthly since inception (provides feedback on technology features,<br/>enhancements and customization to meet the needs of older adults and transition age youth, consults on the strategies for<br/>outreach and engagement, informs project evaluation questions and outcomes)</li> </ul>                                                                                                                                                                                                                                                                |  |  |  |
| Milestone(s)                                                                                  | <ul> <li>Conducted focus groups with older adults and youth to learn needs and select the most appropriate apps</li> <li>Focus groups to support development of digital mental health literacy curriculum</li> <li>Hosted NorCal Peer Summit</li> <li>PFS hosting AppyHours, engaging older adults in using technology</li> <li>YLI developed a Help@Hand specific Youth Advisory Group</li> <li>Advisory Committee received training on app exploration process to provide more in-depth input on selected apps</li> <li>Ambassadors and peers participated in Digital Mental Health Literacy Train-the-trainer</li> </ul> |  |  |  |
| Lessons Learned                                                                               | <ul> <li>Identifying the primary purpose for the use of the app as 1) a support service for clients within the system of care and/or 2) a prevention, linkage and wellness approach for communities is key; the implementation approach for each is completely different</li> <li>Engage communities early to address digital literacy and support adoption of products later on</li> <li>Having explicit communication of "non-negotiables" should be part of the selection of an app</li> <li>Cultural and language vetting should be part of the early focus groups to inform selection of an app</li> </ul>             |  |  |  |
| Recommendations                                                                               | <ul> <li>Implement an advisory committee of stakeholders early in the process to vet, consult with, create buy-in and provide direction</li> <li>Include evaluation lens as part of project planning and process development for all aspects of the project including procurement, selection, piloting and implementation</li> </ul>                                                                                                                                                                                                                                                                                        |  |  |  |

| Santa Barbara County                                                                          | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tech Lead(s)                                                                                  | <ul> <li>Lindsay Walter, JD</li> <li>Maria Arteaga, JD</li> <li>Vanessa Ramos</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Implementation Champion Clinic(s)                                                             | • TBD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Team Composition                                                                              | MHSA Chief, Department Peer and Equity Services Manager, Assistant Director, County IT staff, Project Manager, Division Chief of IT, MHSA Coordinator, Regional Tech Ambassadors, Tech-Testers                                                                                                                                                                                                                                                                                                                                                                                   |
| Target Audience(s)                                                                            | <ul> <li>Individuals age 16 and over living in geographically isolated communities of diverse backgrounds</li> <li>Transitional aged youth who are students at colleges and universities</li> <li>Adults discharged from psychiatric hospitals and/or recipients of crisis services</li> </ul>                                                                                                                                                                                                                                                                                   |
| Products In Use/ Planned                                                                      | <ul> <li>Headspace (planned)</li> <li>Digital Literacy - Needs and Responses from Stakeholder Sessions (planned)</li> <li>Digital Mental Health Literacy Course from CalMHSA (planned)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                |
| Implementation Approach                                                                       | <ul> <li>Headspace with up to 45 people which will include Dept. Clinical Staff/IT Staff/Peer Staff/Tech Testers within each target population/CB0 that work with target populations/ MHSA Chief/Peer and Equity Manager/Help@Hand Project Manager/if hired by then Help@Hand Project Outreach Coordinator</li> </ul>                                                                                                                                                                                                                                                            |
| Other Unique Qualities<br>(about implementation, target audience,<br>or other program aspect) | <ul> <li>Foster diversity within target populations including Spanish/Mixteco speakers and individuals from communities marginalized including LGBTQ+</li> <li>Goals for the pilot include adoption of digital wellness tools within the target populations, reduce isolation and loneliness within target populations, reduce negative life events among members of each target population, implementation of digital literacy and mental health literacy facilitated through peer employment opportunities and measuring the success of wellness through employment</li> </ul> |

| Santa Barbara County | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Milestone(s)         | <ul> <li>Employment of peers</li> <li>Engagement with peer agencies</li> <li>Development of strategies for upcoming pilot</li> <li>Solidified the need for Digital Literacy and Digital Mental Health Literacy throughout the community</li> <li>Explored digital wellness tools within the Psychiatric Health Facility connecting to the ongoing Wellness and Recovery Peer-run groups</li> <li>Identified the need for target population of baseline data</li> </ul>                                                                                                                                                                                                                                                          |
| Lessons Learned      | <ul> <li>Target populations need access to digital mental health applications to support their recovery</li> <li>Awareness of the lack of accessibility of Digital Literacy and Digital Mental Health Literacy throughout the community</li> <li>Target populations need technological devices linkage (i.e., smartphone, tablets, etc.)</li> <li>Target populations need culturally- and linguistically-oriented digital literacy workshops to help merge the learning gaps within technology (Digital Equity)</li> <li>Creation of outreach materials within the Spanish speaking community, especially in isolated communities (Guadalupe and Cuyama area) are needed to increase digital mental health awareness</li> </ul> |
| Recommendations      | <ul> <li>Begin technology adaptation with low risk app</li> <li>Increase programming on Digital Literacy throughout community and clinics</li> <li>Increase programming with peer organizations surrounding technology use as requested by stakeholders</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| Tehama County                                                                                 | <b>Quarter 1</b><br>(Jan–Mar 2020)                                    |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Tech Lead(s)                                                                                  | <ul><li>Michelle Brousseau</li><li>Avery Vilche</li></ul>             |
| Implementation Champion Clinic(s)                                                             | Not applicable                                                        |
| Team Composition                                                                              | MHSA Coordinator, Tech Leads, Peer, Behavioral Health Director, Staff |
| Target Audience(s)                                                                            | • TBD                                                                 |
| Products In Use/ Planned                                                                      | • TBD                                                                 |
| Implementation Approach                                                                       | • TBD                                                                 |
| Other Unique Qualities<br>(about implementation, target audience,<br>or other program aspect) | • TBD                                                                 |
| Milestone(s)                                                                                  | Not applicable                                                        |
| Lessons Learned                                                                               | Not applicable                                                        |
| Recommendations                                                                               | None at this time                                                     |

| Tri-City County                                                                         | <b>Quarter 1</b><br>(Jan–Mar 2020)                                                                                             |  |  |  |
|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Tech Lead(s)                                                                            | <ul><li>Toni Robinson</li><li>Dana Barford</li></ul>                                                                           |  |  |  |
| Implementation Champion Clinic(s)                                                       | Transitional Age Youth Wellness Center                                                                                         |  |  |  |
| Team Composition                                                                        | MHSA Coordinator, MHSA Manager, Peer Lead, MHSA Director                                                                       |  |  |  |
| Target Audience(s)                                                                      | <ul><li>Transitional age youth</li><li>Older adults</li><li>Monolingual Spanish speakers</li></ul>                             |  |  |  |
| Products In Use/ Planned                                                                | Wysa with transitional age youth                                                                                               |  |  |  |
| Implementation Approach                                                                 | Have a small focus group for pilot to obtain valuable feedback on a biweekly basis                                             |  |  |  |
| Other Unique Qualities (about implementation, target audience, or other program aspect) | Having input from a focus group of peers to select the app to be piloted                                                       |  |  |  |
| Milestone(s)                                                                            | Focus group selected the app for pilot                                                                                         |  |  |  |
| Lessons Learned                                                                         | • Do not look for one app that covers all of the target population, this is a suite of technology (one app will not cover all) |  |  |  |
| Recommendations                                                                         | None at this time                                                                                                              |  |  |  |

Table 8 presents the languages available in the apps reviewed for the market surveillance.

| Table 8. Languages Available in Apps Reviewed for Market Surveillance |                                                                                                                                                                                                                                                                                                                                  |  |  |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| App Name                                                              | Languages                                                                                                                                                                                                                                                                                                                        |  |  |
| 10% Happier                                                           | English                                                                                                                                                                                                                                                                                                                          |  |  |
| Aura                                                                  | English                                                                                                                                                                                                                                                                                                                          |  |  |
| Black Lotus                                                           | English, Hindi                                                                                                                                                                                                                                                                                                                   |  |  |
| Breethe                                                               | English                                                                                                                                                                                                                                                                                                                          |  |  |
| Buddhify                                                              | English                                                                                                                                                                                                                                                                                                                          |  |  |
| Calm                                                                  | English, German, Spanish, French, Korean, Portuguese                                                                                                                                                                                                                                                                             |  |  |
| Headspace                                                             | English, German, Spanish, French, Portuguese                                                                                                                                                                                                                                                                                     |  |  |
| HelloMind                                                             | English                                                                                                                                                                                                                                                                                                                          |  |  |
| Humm.ly                                                               | English                                                                                                                                                                                                                                                                                                                          |  |  |
| Insight Timer                                                         | English, Dutch, Italian, French, Chinese, Spanish, Swedish, Portuguese, Brazilian Portuguese,<br>Indonesian, Norwegian, Finnish, Dutch, Japanese, Malaysian, Russian, Croatian, Polish, Greek,<br>Hindi, Arabic, Hebrew, Romanian, Korean, Hungarian, Catalan, Turkish, Icelandic, Farsi, Vietnamese,<br>plus at least 5 others. |  |  |
| Liberate Meditation                                                   | English                                                                                                                                                                                                                                                                                                                          |  |  |
| Meditation Experience                                                 | English                                                                                                                                                                                                                                                                                                                          |  |  |
| Meditopia                                                             | English, German, Spanish, French, Japanese, Korean, Portuguese, Russian, Turkish                                                                                                                                                                                                                                                 |  |  |
| Mind the Bump                                                         | English                                                                                                                                                                                                                                                                                                                          |  |  |
| Omvana                                                                | English, Russian, Italian                                                                                                                                                                                                                                                                                                        |  |  |
| Preksha Meditation                                                    | English, Hindi                                                                                                                                                                                                                                                                                                                   |  |  |
| Relax Melodies                                                        | English, French                                                                                                                                                                                                                                                                                                                  |  |  |
| Simple Habit                                                          | English                                                                                                                                                                                                                                                                                                                          |  |  |
| Simply Being                                                          | English                                                                                                                                                                                                                                                                                                                          |  |  |
| Smiling Mind                                                          | English. Some sessions available in Kriol, Ngaanyatjarra, Pitjantjatjara                                                                                                                                                                                                                                                         |  |  |
| Take a Break!                                                         | English                                                                                                                                                                                                                                                                                                                          |  |  |
| The Mindfulness App                                                   | English, Swedish, Danish, Norwegian, German, Dutch, French, Spanish, Italian, Finnish, Simplified                                                                                                                                                                                                                                |  |  |
|                                                                       | Chinese, Traditional Chinese, Portuguese                                                                                                                                                                                                                                                                                         |  |  |
| Waking Up                                                             | English                                                                                                                                                                                                                                                                                                                          |  |  |

# Mobile Application Rating Scale (MARS)

### **App Classification**

The Classification section is used to collect descriptive and technical information about the app. Please review the app description in iTunes / Google Play to access this information.

| App Name:                                                            |                                               |  |  |  |
|----------------------------------------------------------------------|-----------------------------------------------|--|--|--|
| Rating this version:                                                 | Rating all versions:                          |  |  |  |
| Developer:                                                           |                                               |  |  |  |
| N ratings this version:                                              | N ratings all versions:                       |  |  |  |
| Version:                                                             | Last update:                                  |  |  |  |
| Cost - basic version:                                                | Cost - upgrade version:                       |  |  |  |
| Platform: DDiPhone DDiPad                                            |                                               |  |  |  |
| Brief description:                                                   |                                               |  |  |  |
|                                                                      |                                               |  |  |  |
| Focus: What the app targets                                          | Theoretical background/Strategies             |  |  |  |
| (select all that apply)                                              | (all that apply)                              |  |  |  |
| □□ Increase Happiness/Well-being                                     |                                               |  |  |  |
| □□ Mindfulness/Meditation/Relaxation                                 |                                               |  |  |  |
| □□ Reduce negative emotions                                          | □□ Information/Education                      |  |  |  |
|                                                                      |                                               |  |  |  |
| □□ Anxiety/Stress                                                    | □□ Goal setting                               |  |  |  |
|                                                                      | □□ Advice /Tips /Strategies /Skills training  |  |  |  |
| Behaviour Change                                                     | CBT - Behavioural (positive events)           |  |  |  |
|                                                                      |                                               |  |  |  |
|                                                                      |                                               |  |  |  |
|                                                                      | Mindfulness/Meditation                        |  |  |  |
|                                                                      |                                               |  |  |  |
|                                                                      |                                               |  |  |  |
|                                                                      |                                               |  |  |  |
|                                                                      |                                               |  |  |  |
| Amiliations:                                                         |                                               |  |  |  |
| Unknown     Commercial                                               | Government     D     NGO     D     University |  |  |  |
| Age group (all that apply) Technical aspects of app (all that apply) |                                               |  |  |  |
| □□Children (under 12)                                                | □□ Allows sharing (Facebook, Twitter, etc.)   |  |  |  |
| □□ Adolescents (13-17)                                               | □□ Has an app community                       |  |  |  |
| □□ Young Adults (18-25)                                              | □□ Allows password-protection                 |  |  |  |
| □□ Adults                                                            | □□ Requires login                             |  |  |  |
| DD General                                                           | □□ Sends reminders                            |  |  |  |
| QUE Oueensland University<br>of Technology                           | YOUNGANDWELL                                  |  |  |  |

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Cooperative Research Centre

# **App Quality Ratings**

The rating scale assesses app quality on four dimensions. All items are rated on a 5-point scale from "1 = Inadequate" to "5 = Excellent". Circle the number that most accurately represents the quality of the app component you are rating. Please use the descriptors provided for each response category.

#### **SECTION A**

Engagement – fun, interesting, customisable, interactive (e.g. sends alerts, messages, reminders, feedback, enables sharing), well-targeted to audience

- 1. Entertainment: Is the app fun/entertaining to use? Does it use any strategies to increase engagement through entertainment (e.g. through gamification)?
  - 1 Dull, not fun or entertaining at all
  - 2 Mostly boring
  - 3 OK, fun enough to entertain user for a brief time (< 5 minutes)
  - 4 Moderately fun and entertaining, would entertain user for some time (5-10 minutes total)
  - 5 Highly entertaining and fun, would stimulate repeat use
- 2. Interest: Is the app interesting to use? Does it use any strategies to increase engagement by presenting its content in an interesting way?
  - 1 Not interesting at all
  - 2 Mostly uninteresting
  - 3 OK, neither interesting nor uninteresting; would engage user for a brief time (< 5 minutes)
  - 4 Moderately interesting; would engage user for some time (5-10 minutes total)
  - 5 Very interesting, would engage user in repeat use
- 3. Customisation: Does it provide/retain all necessary settings/preferences for apps features (e.g. sound, content, notifications, etc.)?
  - 1 Does not allow any customisation or requires setting to be input every time
  - 2 Allows insufficient customisation limiting functions
  - 3 Allows basic customisation to function adequately
  - 4 Allows numerous options for customisation
  - 5 Allows complete tailoring to the individual's characteristics/preferences, retains all settings
- 4. Interactivity: Does it allow user input, provide feedback, contain prompts (reminders, sharing options, notifications, etc.)? Note: these functions need to be customisable and not overwhelming in order to be perfect.
  - 1 No interactive features and/or no response to user interaction
  - 2 Insufficient interactivity, or feedback, or user input options, limiting functions
  - 3 Basic interactive features to function adequately
  - 4 Offers a variety of interactive features/feedback/user input options
  - 5 Very high level of responsiveness through interactive features/feedback/user input options
- 5. Target group: Is the app content (visual information, language, design) appropriate for your target audience?
  - 1 Completely inappropriate/unclear/confusing
  - 2 Mostly inappropriate/unclear/confusing
  - 3 Acceptable but not targeted. May be inappropriate/unclear/confusing
  - 4 Well-targeted, with negligible issues
  - 5 Perfectly targeted, no issues found

#### A. Engagement mean score = \_\_\_\_





# Functionality – app functioning, easy to learn, navigation, flow logic, and gestural design of app

- 6. Performance: How accurately/fast do the app features (functions) and components (buttons/menus) work?
  - 1 App is broken; no/insufficient/inaccurate response (e.g., crashes/bugs/broken features, etc.)
  - 2 Some functions work, but lagging or contains major technical problems
  - 3 App works overall. Some technical problems need fixing/Slow at times
  - 4 Mostly functional with minor/negligible problems
  - 5 Perfect/timely response; no technical bugs found/contains a 'loading time left' indicator
- 7. Ease of use: How easy is it to learn how to use the app; how clear are the menu labels/icons and instructions?
  - 1 No/limited instructions; menu labels/icons are confusing; complicated
  - 2 Useable after a lot of time/effort
  - 3 Useable after some time/effort
  - 4 Easy to learn how to use the app (or has clear instructions)
  - 5 Able to use app immediately; intuitive; simple
- 8. Navigation: Is moving between screens logical/accurate/appropriate/ uninterrupted; are all necessary screen links present?
  - 1 Different sections within the app seem logically disconnected and random/confusing/navigation is difficult
  - 2 Usable after a lot of time/effort
  - 3 Usable after some time/effort
  - 4 Easy to use or missing a negligible link
  - 5 Perfectly logical, easy, clear and intuitive screen flow throughout, or offers shortcuts
- 9. Gestural design: Are interactions (taps/swipes/pinches/scrolls) consistent and intuitive across all components/screens?
  - 1 Completely inconsistent/confusing
  - 2 Often inconsistent/confusing
  - 3 OK with some inconsistencies/confusing elements
  - 4 Mostly consistent/intuitive with negligible problems
  - 5 Perfectly consistent and intuitive

#### B. Functionality mean score = \_

#### SECTION C

#### Aesthetics - graphic design, overall visual appeal, colour scheme, and stylistic consistency

- 10. Layout: Is arrangement and size of buttons/icons/menus/content on the screen appropriate or zoomable if needed?
  - 1 Very bad design, cluttered, some options impossible to select/locate/see/read device display not optimised
  - 2 Bad design, random, unclear, some options difficult to select/locate/see/read
  - 3 Satisfactory, few problems with selecting/locating/seeing/reading items or with minor screensize problems
  - 4 Mostly clear, able to select/locate/see/read items
  - 5 Professional, simple, clear, orderly, logically organised, device display optimised. Every design component has a purpose





#### 11. Graphics: How high is the quality/resolution of graphics used for buttons/icons/menus/content?

- 1 Graphics appear amateur, very poor visual design disproportionate, completely stylistically inconsistent
- 2 Low quality/low resolution graphics; low quality visual design disproportionate, stylistically inconsistent
- 3 Moderate quality graphics and visual design (generally consistent in style)
- 4 High quality/resolution graphics and visual design mostly proportionate, stylistically consistent
- 5 Very high quality/resolution graphics and visual design proportionate, stylistically consistent throughout

#### 12. Visual appeal: How good does the app look?

- 1 No visual appeal, unpleasant to look at, poorly designed, clashing/mismatched colours
- 2 Little visual appeal poorly designed, bad use of colour, visually boring
- 3 Some visual appeal average, neither pleasant, nor unpleasant
- 4 High level of visual appeal seamless graphics consistent and professionally designed
- 5 As above + very attractive, memorable, stands out; use of colour enhances app features/menus

#### C. Aesthetics mean score = \_\_\_\_\_

#### SECTION D

Information – Contains high quality information (e.g. text, feedback, measures, references) from a credible source. Select N/A if the app component is irrelevant.

#### 13. Accuracy of app description (in app store): Does app contain what is described?

- 1 Misleading. App does not contain the described components/functions. Or has no description
- 2 Inaccurate. App contains very few of the described components/functions
- 3 OK. App contains some of the described components/functions
- 4 Accurate. App contains most of the described components/functions
- 5 Highly accurate description of the app components/functions

## 14. Goals: Does app have specific, measurable and achievable goals (specified in app store description or within the app itself)?

N/A Description does not list goals, or app goals are irrelevant to research goal (e.g. using a game for educational purposes)

- 1 App has no chance of achieving its stated goals
- 2 Description lists some goals, but app has very little chance of achieving them
- 3 OK. App has clear goals, which may be achievable.
- 4 App has clearly specified goals, which are measurable and achievable
- 5 App has specific and measurable goals, which are highly likely to be achieved

# 15. Quality of information: Is app content correct, well written, and relevant to the goal/topic of the app?

N/A There is no information within the app

- 1 Irrelevant/inappropriate/incoherent/incorrect
- 2 Poor. Barely relevant/appropriate/coherent/may be incorrect
- 3 Moderately relevant/appropriate/coherent/and appears correct
- 4 Relevant/appropriate/coherent/correct
- 5 Highly relevant, appropriate, coherent, and correct





# 16. Quantity of information: Is the extent coverage within the scope of the app; and comprehensive but concise?

N/A There is no information within the app

- 1 Minimal or overwhelming
- 2 Insufficient or possibly overwhelming
- 3 OK but not comprehensive or concise
- 4 Offers a broad range of information, has some gaps or unnecessary detail; or has no links to more information and resources
- 5 Comprehensive and concise; contains links to more information and resources

# 17. Visual information: Is visual explanation of concepts – through charts/graphs/images/videos, etc. – clear, logical, correct?

- N/A There is no visual information within the app (e.g. it only contains audio, or text)
- 1 Completely unclear/confusing/wrong or necessary but missing
- 2 Mostly unclear/confusing/wrong
- 3 OK but often unclear/confusing/wrong
- 4 Mostly clear/logical/correct with negligible issues
- 5 Perfectly clear/logical/correct

# 18. Credibility: Does the app come from a legitimate source (specified in app store description or within the app itself)?

- 1 Source identified but legitimacy/trustworthiness of source is questionable (e.g. commercial business with vested interest)
- 2 Appears to come from a legitimate source, but it cannot be verified (e.g. has no webpage)
- 3 Developed by small NGO/institution (hospital/centre, etc.) /specialised commercial business, funding body
- 4 Developed by government, university or as above but larger in scale
- 5 Developed using nationally competitive government or research funding (e.g. Australian Research Council, NHMRC)

# 19. Evidence base: Has the app been trialled/tested; must be verified by evidence (in published scientific literature)?

N/A The app has not been trialled/tested

- 1 The evidence suggests the app does not work
- 2 App has been trialled (e.g., acceptability, usability, satisfaction ratings) and has partially positive outcomes in studies that are not randomised controlled trials (RCTs), or there is little or no contradictory evidence.
- 3 App has been trialled (e.g., acceptability, usability, satisfaction ratings) and has positive outcomes in studies that are not RCTs, and there is no contradictory evidence.
- 4 App has been trialled and outcome tested in 1-2 RCTs indicating positive results
- 5 App has been trialled and outcome tested in  $\geq$  3 high quality RCTs indicating positive results

#### D. Information mean score =

\* Exclude questions rated as "N/A" from the mean score calculation.





# App subjective quality

#### SECTION E

#### 20. Would you recommend this app to people who might benefit from it?

| 1 | Not at all | I would not recommend this app to anyone                |
|---|------------|---------------------------------------------------------|
| 2 |            | There are very few people I would recommend this app to |
| 3 | Maybe      | There are several people whom I would recommend it to   |
| 4 |            | There are many people I would recommend this app to     |
| 5 | Definitely | I would recommend this app to everyone                  |

- 21. How many times do you think you would use this app in the next 12 months if it was relevant to you?
  - 1 None
  - 2 1-2
  - 3 3-10
  - 4 10-50
  - 5 >50

#### 22. Would you pay for this app?

- 1 No
- 3 Maybe
- 5 Yes

#### 23. What is your overall star rating of the app?

| 1 | **     | One of the worst apps I've used |
|---|--------|---------------------------------|
| 2 | ****   |                                 |
| 3 | *****  | Average                         |
| 4 | ****** |                                 |
| 5 | ****** | One of the best apps I've used  |

### Scoring

#### App quality scores for

#### SECTION

| App quality mean Score =      |  |
|-------------------------------|--|
| D: Information Mean Score = _ |  |
| C: Aesthetics Mean Score =    |  |
| B: Functionality Mean Score = |  |
| A: Engagement Mean Score =    |  |
|                               |  |

App subjective quality Score = \_\_\_\_\_



# App-specific

These added items can be adjusted and used to assess the perceived impact of the app on the user's knowledge, attitudes, intentions to change as well as the likelihood of actual change in the target health behaviour.

| SECT | 101                                                                                                                             | N F                                                                                                                               |                 |                           |                 |                      |  |
|------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------------|-----------------|----------------------|--|
|      | 1.                                                                                                                              | Awareness: This app is likely to increase awareness of the importance of addressing [insert target health behaviour]              |                 |                           |                 |                      |  |
|      |                                                                                                                                 | Strongly disagree                                                                                                                 |                 |                           |                 | Strongly Agree       |  |
|      |                                                                                                                                 | 1                                                                                                                                 | 2               | 3                         | 4               | 5                    |  |
| :    | 2.                                                                                                                              | Knowledge: This app is likely to increase knowledge/understanding of [insert target health behaviour]                             |                 |                           |                 |                      |  |
|      |                                                                                                                                 | Strongly disagree                                                                                                                 |                 |                           |                 | Strongly Agree       |  |
|      |                                                                                                                                 | 1                                                                                                                                 | 2               | 3                         | 4               | 5                    |  |
| :    | 3. Attitudes: This app is likely to change attitudes toward improving [insert behaviour]                                        |                                                                                                                                   |                 |                           | arget health    |                      |  |
|      |                                                                                                                                 | Strongly disagree                                                                                                                 |                 |                           |                 | Strongly Agree       |  |
|      |                                                                                                                                 | 1                                                                                                                                 | 2               | 3                         | 4               | 5                    |  |
|      | <ol> <li>Intention to change: This app is likely to increase intentions/motivation to a<br/>target health behaviour]</li> </ol> |                                                                                                                                   |                 |                           | address [insert |                      |  |
|      |                                                                                                                                 | Strongly disagree                                                                                                                 |                 |                           |                 | Strongly Agree       |  |
|      |                                                                                                                                 | 1                                                                                                                                 | 2               | 3                         | 4               | 5                    |  |
| !    | 5.                                                                                                                              | Help seeking: Use of this app is likely to encourage further help seeking for [insert target health behaviour] (if it's required) |                 |                           |                 |                      |  |
|      |                                                                                                                                 | Strongly disagree                                                                                                                 |                 |                           |                 | Strongly Agree       |  |
|      |                                                                                                                                 | 1                                                                                                                                 | 2               | 3                         | 4               | 5                    |  |
| (    | 6.                                                                                                                              | Behaviour change:                                                                                                                 | Use of this app | is likely increase/decrea | se [insert targ | et health behaviour] |  |
|      |                                                                                                                                 | Strongly disagree                                                                                                                 |                 |                           |                 | Strongly Agree       |  |
|      |                                                                                                                                 | 1                                                                                                                                 | 2               | 3                         | 4               | 5                    |  |
|      |                                                                                                                                 |                                                                                                                                   |                 |                           |                 |                      |  |



A member of the Help@Hand evaluation team attended and observed CalMHSA's Digital Mental Health Literacy (DMHL) Train-The-Trainer Workshop held over two days at the end of February 2020 in Kern County. Observations include:

#### Objective

• Train Help@Hand Peers to lead future Digital Mental Health Literacy workshops

#### Workshop Attendees

• 25 Help@Hand Peers from: Kern, Los Angeles, Modoc, Orange, San Francisco, San Mateo, Santa Barbara, Riverside, and Tri-City Counties/Cities

#### Facilitators Observed by Help@Hand Evaluation Team

- Peers expressed enthusiasm that the curriculum could help their target groups.
- Peers had an opportunity to provide feedback on the DMHL curriculum and help ensure relevancy of content with community members.

#### Challenges Observed by Help@Hand Evaluation Team

- Peers expressed concern for holding DMHL workshops if not many people currently attend group meetings.
- Peers were unsure they could not cover the entire curriculum with their target groups. The curriculum included content that might overwhelm their target groups.
- Peers felt they did not fully understand the content on the first day of the workshop.
- Discussing the topics of digital footprints and cyberbullying brought up negative feelings for many Peers.

#### **Results from Pre/Post Surveys**

CalMHSA developed and collected pre- and post-surveys. All 25 Peers completed pre-surveys at the beginning of the training on the first day of the workshop. All but one of the 25 Peers completed post-surveys at the end of the training on the second day. **Figure 13** shows the survey used.

#### Figure 13. Pre/Post Survey



Survey results revealed a 71% improvement of post-survey scores compared to pre-survey scores. This indicates that Peers learned more about managing their digital presence and cyberbullying as a result of the workshop. **Figure 14** shows that Peers scored almost 100% on the surveys after the workshop.



Figure 14. Pre/Post Survey Scores



This report was prepared as an account of work sponsored by the California Mental Health Services Authority (CalMHSA), but does not represent the views of CalMHSA or its staff except to the extent, if any, that it has been accepted by CalMHSA as work product of the Help@Hand evaluation team. For information regarding any such action, communicate directly with CalMHSA's Executive Director. Neither CalMHSA, nor any officer or staff thereof, or any of its contractors or subcontractors makes any warranty, express or implied, or assumes any legal liability whatsoever for the contents of this document. Nor does any party represent that use of the data contained herein, would not infringe upon privately owned rights without obtaining permission or authorization from any party who has any rights in connection with the data.

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