SAN MATEO COUNTY HEALTH

BEHAVIORAL HEALTH & RECOVERY SERVICES

Mental Health Service Act (MHSA) Help@Hand Evaluation

Innovation Annual Report, Fiscal Year 2020-21

Prepared by:

Resource Development Associates

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RDA

San Mateo County Mental Health Services Act

Help@Hand Evaluation

Innovation Annual Report, Fiscal Year 2020-21

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About Resource Development Associates

Resource Development Associates (RDA) is a consulting firm based in Oakland, California, that serves government and nonprofit organizations throughout California as well as other states. Our mission is to strengthen public and non-profit efforts to promote social and economic justice for vulnerable populations. RDA supports its clients through an integrated approach to planning, grant writing, organizational development, and evaluation.

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Introduction

Help@Hand is a statewide Mental Health Services Act (MHSA) Innovation (INN) project that aims to bring technology-based solutions to county and city behavioral health systems. The project is administered by the California Mental Health Services Authority (CalMHSA) and funded and directed by local jurisdictions. San Mateo County Behavioral Health and Recovery Services (BHRS) identified technology as part of the fiscal year (FY) 2017-20 MHSA Three-Year Plan. In April and May of 2018, San Mateo conducted a Community Planning Process aimed to (1) inform community members about the proposed MHSA INN plan and (2) seek input and feedback from stakeholders to incorporate into the final plan. Stakeholders received background information about MHSA INN to ensure their ability to meaningfully participate.

In San Mateo County, this INN project is an opportunity for BHRS and its collaborative county partners to leverage technology, specifically behavioral health applications (apps), to reach and engage two priority populations, (1) transition age youth (TAY) and (2) older adults. Through the Help@Hand INN project, BHRS aims to:

Provide access and linkages to behavioral health services

Provide social connectivity through the use of virtual avatars and/or peers

Support self-directed mental wellness and recovery goals

This project also serves to reduce the stigma associated with mental health treatment by using virtual engagement strategies and provide alternative methods for engaging in behavioral health recovery and wellness activities. In order to assess these outcomes, the County originally identified the following locally defined Learning Goals:

Learning Goal 1

Does the availability and implementation of technology-based mental health apps **connect** transition age youth in crisis and older adults experiencing isolation to **in-person services**?

Learning Goal 2

Does engaging with the apps **promote access to mental health services and supports?**
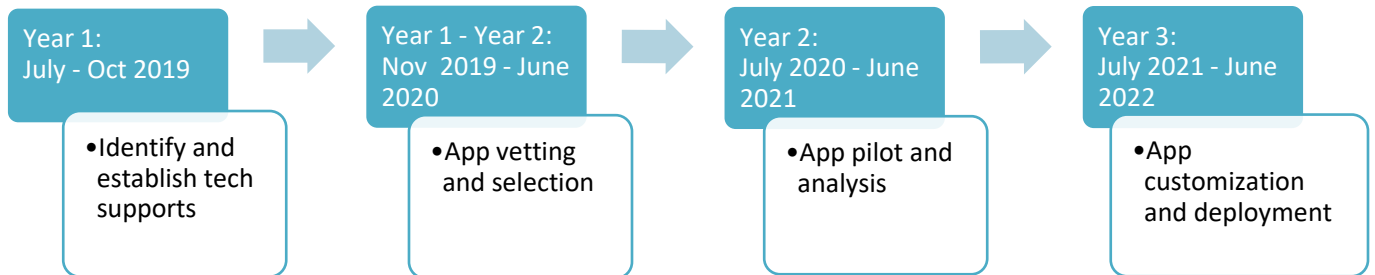
Learning Goal 3

Does engaging with the apps **promote wellness and recovery**?

The Learning Goals have since been modified to better align with the Help@Hand implementation learnings, these modifications are presented under the Evaluation and Program Findings section of this report.

Implementation Timeline

Figure 1. Timeline and Phase of the San Mateo Help@Hand INN Project

Year 1: July - Oct 2019	Year 1 - Year 2: Nov 2019 - June 2020	Year 2: July 2020 - June 2021	Year 3: July 2021 - June 2022
•Identify and establish tech supports	•App vetting and selection	•App pilot and analysis	•App customization and deployment

The implementation of the San Mateo Help@Hand project development includes four key phases of work as depicted in timeline above. Year 1 began with exploring what would need to be established to support the use of technology solutions in a behavioral health setting. Some of the needs identified and services established included: 1) Digital Mental Health Literacy (DMHL) train-the-trainer for peer staff that covered topics related to security and privacy measures and managing digital identity; 2) Get App-y Workshops for older adults to receive supports with basic 101 technology education and DMHL topics; 3) a Youth Advisory Group to guide priorities for Transition Age Youth; and 4) expanding the local crisis hotline and support resources to include text-based supports in preparation for the app. Additionally, as a result of phase 1 activities, Help@Hand Stakeholder and contractors identified a need to review additional tech

solutions beyond those provided by CALMHSA in the first round RFSQ processes. It is also important to note that the process to identify needs and establish supports began in Year 1 but has been an ongoing process throughout the entire two-year timeline and has included technology device distribution for behavioral health clients and Help@Hand participants that do not have the resources to purchase technology, technology 101 trainings for peer staff that would be distributing devices and Tech Cafés or workshops for clients and the community at large to receive basic technology supports, DMHL education and advanced Zoom topics.

In Phase 2, Help@Hand stakeholders and contractors reviewed available technologies—which were approved through a Request for Statement of Qualifications (RFSQ) process led by CalMHSA—and participated in various app vetting, testing, and selection activities to identify the app they would like to pilot with the target populations. Ultimately BHRS selected Wysa as an app to move forward with community piloting in Year 2.

During Year 2, from July 2020 to June 2021, San Mateo County implemented a pilot to define and measure success with the selected app and inform a deployment plan. After a successful app pilot, the product was included in the Help@Hand technology portfolio, thereby allowing other jurisdictions to more easily integrate the apps into their behavioral health systems. For Phase 3 BHRS begins working with the app developers to customize and refine the apps to fit the needs and priorities of the local population. In the second part of the year, the County launched the apps to the broader target populations while simultaneously evaluating app utilization and continued success. Simultaneously, in BHRS stakeholders and contracted reviewed the results of the pilot stage and further tests the app with behavioral health clients to determine if they want to integrate the app into their system of care.

The table below provides a comprehensive timeline of activities and major events that occurred over the two-year project timeline.

Table 1. San Mateo Help@Hand Timeline of Activities

Dates	Activities
YEAR 1	Identifying needs and establish targeted supports
July 2019	o PFS & YLI fully on boarded and begin developing focus groups with target populations to identify needs and outreach strategies; o Contracted StarVista to develop texting supports for youth in crisis to expand resources for wellness app user o CalMHSA facilitated focus groups in San Mateo to develop digital health literacy curriculum
August 2019	o Get App-y Workshops launch to support older adults in basic technology 101 and the development of the H@H Youth Advisory Group.
Sept. – Oct. 2019	o Identified need to research additional tech solutions o CalMHSA facilitated a second RFSQ process to broaden the pool of possible tech solutions; this resulted in 93 solutions to choose from
YEAR 1	App demonstrations vetting and selection

Nov. 2019 – Jan. 2020	o Completed first round of App demos, vetting and selection process included local focus groups with TAY and OA
Jan. 2020	o App exploration training to identify customization needs and inform app deployment needs. We selected Happify for older adults and Remente for TAY for the pilot phase
Feb. – April 2020	o COVID-19 led to Happify vendor backing out of the project and TAY stakeholders recognized that the needs of the population had changed. Both groups returned to the app vetting, selection and exploration process
May 2020	o Device procurement and deployment pilot begins with California Clubhouse and Heart & Soul
YEAR 2	**App demonstrations vetting and selection**
July – Oct. 2020	o Second round of App demos, vetting and selection process included local focus groups with TAY and older adults; Wysa app selected, began pilot proposal development
Sept. 2020	o Purchased 10,000 Headspace app licenses and distributed them rapidly to support SMC community mental health wellness during COVID-19
Oct. 2020	o Contracted with Painted Brain to provide tech 101 trainings for peer staff that would be distributing devices and Tech Cafés for clients and the community at large
Nov. – Dec. 2020	o Launched distribution of 250 tablets to network of providers, 50 tablets to Board and Cares and clinic sites, funding for 700+ devices for BHRS clients plus device accessories needed for engagement (headphones, covers, styluses, hotspots, etc.)
YEAR 2	**App pilot implementation, and analysis**
April – June 2021	o Launched Pilot with TAY and older adults to further test the selected app Wysa
May 2021	o Began exploration of needs for integration into BHRS system of care o Decided to wait until after the local customizations are completed and broad deployment of the app begins.
June 2021	o Added advanced Zoom topics to Painted Brain's contract. Held first training to address equitable practices while facilitating Zoom meetings

Evaluation Overview

In July 2019, BHRS contracted Resource Development Associates (RDA) to conduct a three-year evaluation of the local Help@Hand INN project. The purpose of the evaluation is to determine if technology-based wellness apps can:

1. Improve access to mental health services and supports for TAY and older adults
2. Improve wellness and reduce feelings of isolation for TAY and older adults
3. Improve wellness and recovery outcomes for individuals living with mental health challenges

RDA will assess the goals defined above to help San Mateo County BHRS understand the implementation of the apps and the outcomes of their utilization in the local context. The University of California Irvine (UCI) is also conducting a statewide evaluation of the County Behavioral Health Technology Collaborative

to explore app usage trends, linkages to care, and recovery outcomes across all jurisdictions participating in the Help@Hand project.

Evaluation Timeline

San Mateo County completed the first three stages outlined in Figure 1 above during FY 19-20 and FY 20-21. After various app vetting, testing, and selection activities, including much group discussion within the Help@Hand Advisory Committee—comprised of individuals from the older adult and TAY community as well as community-based partners Peninsula Family Service and Youth Leadership Institute—a consensus was reached on selecting the app Wysa to formally pilot with a group of older adults and TAY and collect further data about the app's impact, customization needs, and broad deployment considerations. Accordingly, the project is now in the app customization stage and preparing for a broad app deployment in partnership with the Wysa app developers and marketing consultants.

Given the project implementation timeline, this report focuses on the following activities undertaken by BHRS and local stakeholders throughout FY 20-21: (a) activities related to a second round of app vetting, testing, and selection, (b) a two-month pilot process with older adults and TAY (b) app exploration groups to identify customization needs, further testing among behavioral health consumers and broad deployment of the app to the target communities, (c) data collected and findings from the pilot, and (d) lessons learned, recommendations, and next steps for app customizations and deployment.

Evaluation Methods

Data Collection

RDA used both quantitative and qualitative evaluation methods in order to assess the influence of the app on pilot participants' well-being, feelings of isolation, mental health stigma and potential connections to further mental health supports if needed. Qualitative app exploration was also conducted to identify considerations for further testing with San Mateo County behavioral health consumers and broad deployment to the target populations.

Additionally, qualitative and quantitative data were collected from the perspectives of different stakeholders involved in implementation and decision-making processes. RDA collected data through interviews, surveys, and four focus groups with the following stakeholders:

Table 2. Qualitative Data Collection Activities and Participants

Method	Stakeholders
Interviews	Doris Estremera, MHSA Manager[1]
	Adam Wilson, Assistant Program Manager, Youth Leadership Institute (YLI)[2]

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[1] As the MHSA Manager and the Help@Hand project manager, Doris Estremera oversees all project activities.
[2] YLI is the contracted organization to conduct peer-led outreach to the TAY population for the Help@Hand project.

	Rubi Salazar, Peer Program Coordinator, YLI
	Susan Houston, Vice President of Older Adult Services, Peninsula Family Service (PFS)[3]
	Arlene Aquino, Peer Support Specialist, PFS
	Andrea Sobel, Peer Support Worker, PFS
Process Focus Group	Help@Hand Advisory Committee[4]
App Vetting and Selection Focus Groups	TAY app testers (5)
	Older adult app testers (7)
Pilot Participant Focus Groups	TAY app pilot participants (16)
	Older adult pilot participants (37)
App Exploration Groups	TAY participants (8)
	Older Adult participants (12)

Interviews with Help@Hand staff and contractors explored key activities, lessons learned about the app pilot process and stakeholder engagement, participation in the statewide collaborative, and the potential impacts of behavioral health technology on the TAY and older adult populations. The focus group with the Help@Hand Advisory Committee offered an opportunity to discuss the role of the committee, what has worked well and areas for improvement in the Help@Hand project activities, experiences working with different stakeholders, and changes in expectations of how technology can help meet the behavioral health and wellness needs of TAY and older adults in the county. RDA also attended monthly Help@Hand Advisory Committee meetings and documented the project's progress throughout the evaluation period.

RDA's role adapted as the needs of the project changed over time. When BHRS recognized the county would need to undergo an in-depth app pilot process, RDA worked with YLI and Peninsula Family Service to design and implement four focus groups with pilot participants. RDA, with the support of Peninsula Family Service, conducted one focus group with older adults, and YLI conducted a series of focus groups with TAY. Pilot participant focus groups were used to collect feedback on usage experiences with the Wysa app and the perceptions of each app's ability to meet the local Help@Hand learning goals and needs of the TAY and older adult populations. RDA also conducted two exploration groups, one with TAY and one with older adults to further explore specific app features of interest and inform the customization and app deployment phases of the Help@Hand project.

In addition, CalMHSA requires INN project evaluations to report on participant characteristics. San Mateo County defines participants of the Help@Hand project as pilot users of the Wysa app—individuals who participated in the pilot stage by downloading and using the Wysa app. Accordingly, demographic data were collected in the form of surveys that were completed by both TAY and older adult participants prior to downloading and using the selected apps for a total of two weeks.

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[3] Peninsula Family Service is the contracted organization to conduct peer-led outreach to the older adult population for the Help@Hand project.

[4] The Help@Hand Advisory Committee is made up of behavioral health clients and family members, peers, BHRS staff, stakeholders from different county departments (e.g., Information Technology, Aging and Adult Services), community organizations, and behavioral health providers and peer-run organizations across the county.

Individuals who participated in the pilot stage also completed surveys about their experiences with the app; they were assessed both before and after the pilot period to determine whether engaging with the app was related to any increase in particular favorable outcomes, and/or whether unfavorable outcomes or risk factors decreased after engaging with the app.

RDA will also continue to conduct interviews and focus groups with behavioral health consumers as the County moves forward with app deployment and integration into BHRS system of care.

Data Analysis

To analyze the qualitative data, RDA transcribed interview and focus group participants' responses to capture their sentiments and perceptions. RDA then thematically assessed responses from all participants and identified recurring themes and key takeaways.

To analyze the quantitative data, RDA tabulated frequencies and percentages of app testers' demographic information (i.e., age group, assigned sex at birth, gender identity, race/ethnicity, sexual orientation, employment status, etc.) as well as app testers' responses to survey questions developed to elicit feedback about the overall usefulness of the app's functionality, feelings of isolation, and perceptions about mental health.

Evaluation and Program Findings

Through interviews and focus groups with key stakeholders, RDA explored the potential impacts of specific behavioral health apps on the target populations' mental health and well-being, as well as the potential of the Help@Hand project to meet the local learning goals. During 2020, there were a total of two rounds of app selections that took place. Table 2 presents a list of the apps that were explored during the reporting period of this evaluation and considered for the pilot phase of the project:

Table 3. Apps Under Consideration After 2nd Round of Selection: January 2020

Older Adults	Transition Age Youth
• MyStrength	• Headspace
• Wysa	• MyStrength
• Happify	• Wysa

Ultimately, Wysa was the app that both the older adult and TAY community members decided to move forward with, given that Wysa (a) demonstrated positive preliminary outcomes during the vetting process, which involved the Help@Hand Advisory Committee and focus groups with older adults and the Help@Hand Youth Advisory Group (b) met the community's needs in terms of app customization and functionality, and (c) was identified as the vendor who was willing to work with the county and community-based providers in making these customizations.

Outreach and engagement took place to recruit older adult and TAY participants willing to pilot the Wysa app further. Overall, 37 older adults and 16 TAY participated in the pilot and remained engaged in the feedback gathering process that spanned across a two-month period during FY 20-21.

The demographic characteristics of pilot participants by target population are presented in Table 4 below:

Table 4. Older Adult and TAY Wysa Pilot Participant Demographics

Older Adults	TAY
• Average 69 years old (range: 55 to 89 years) • 78% were female • Majority identified as White/Caucasian (83%) • 87% identified as straight/heterosexual • Most held a bachelor's or graduate degree (38%) • 52% reported no mental health challenges • 51% retired • 28% made under $30k per year	• Average 17 years old (range: 14 to 24 years) • 75% were female • Majority identified as Asian (50%), followed by Hispanic/Latino (38%) • 67% identified as straight/heterosexual • 81% were high school students • 43% reported no mental health challenges • 50% were students • Came from various households with a wide range of annual household incomes

Wysa Pilot's Learnings

A central objective of the Wysa pilot was to contribute to outcomes related to the local learning goals. The following sections provide an overview of how the pilot process contributed to each of San Mateo County BHRS Help@Hand learning goals.

Learning Goal 1: Can an app promote mental health wellness and reduce feelings of isolation?

It is important to note that the first learning goal was originally intended to assess whether the availability and implementation of technology-based mental health apps connect TAY in crisis and older adults experiencing isolation to **in-person** services. Early stakeholder input prioritized the importance of in-person support and raised concerns about the idea of a technology-based solution replacing in-person connections. During the first year of Help@Hand needs assessments that involved youth, San Mateo County youth crisis service providers and other stakeholders, it was determined that promoting an app to potentially support TAY in crisis was not the most effective way to provide the early intervention necessary when a youth is in crisis. The addition of peer-to-peer texting capacity and social media outreach to the county's 24-hour crisis intervention services for youth, was prioritized instead. Additionally, given the restriction on in-person activities after the onset of the COVID-19 pandemic, in-person services were not a feasible resource. During the pandemic, a greater concern arose regarding feelings of isolation among

both older adult and TAY populations. Therefore, the learning goals were modified accordingly to assess whether the Wysa app can promote mental health wellness and reduce feelings of isolation.

Based on findings gathered from the pilot focus groups and survey responses, there are promising initial results that suggest that apps such as Wysa promote mental health wellness for both the older adult and TAY populations. Participants from both target populations reported the benefits of the Wysa apps' ability to prompt the user to practice self-care habits.

Program staff reported that the Wysa app was useful for the older adult population to support and practice healthy self-care and sleeping habits. The older adult pilot participants particularly enjoyed the benefits of using the Sleep Stories feature of the Wysa app.

For TAY, the youths who participated in the Wysa pilot reported that they liked how the app gave them the opportunity to focus on their self-care practice, such as mindfulness. As one TAY pilot participant reported, "I really liked having the opportunity to use an app focused on mental health and mindfulness, since it was my first time." A large majority of both TAY (86%) and older adult (81%) participants found the self-care tools extremely or moderately useful. While users overall found the tool packs useful and enjoyed the content and variety of topics, some users found it challenging to locate the exact topics they were interested in and wanted more topics relevant to older adults and TAY. The Wysa app also has a journaling feature. The majority (93%) of the TAY participants reported using this feature and 57% found it extremely to moderately useful.

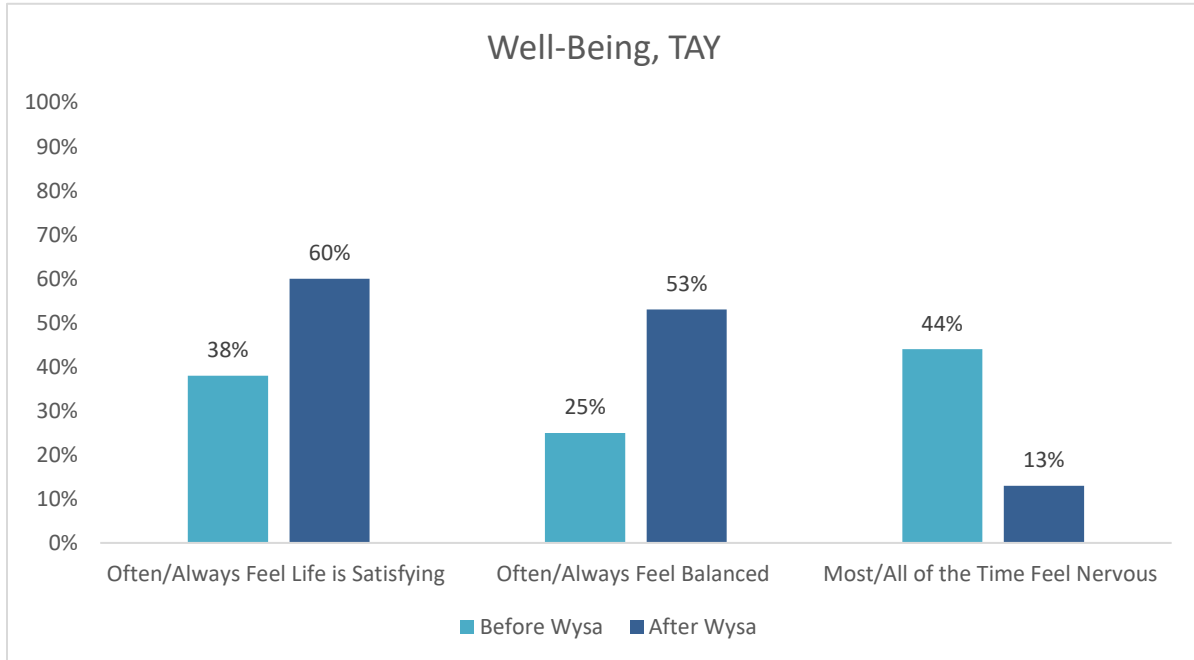## Impacts on Overall Mental Health Well-Being

To further assess whether the Wysa app is helpful in promoting mental health well-being, survey responses were also collected among TAY and older adult pilot participants. **Error! Reference source not found.** and **Error! Reference source not found.** below depict TAY and older adult responses to how they felt the app impacted them in terms of well-being, mental health stigma, and social connectedness.

Based on these survey results, the Wysa app seemed to promote mental health well-being after its use for both target populations. For TAY, a greater number of participants reported feelings of life satisfaction and balance after using the Wysa app. Additionally, a lower number of TAY reported feelings of nervousness most or all of the time after using the Wysa app. In the post survey, 93% of TAY users reported that the app made them feel like they have support when feeling down, anxious, or stressed. Further, 67% of TAY users reported that the app helped improve their mental health and wellness, and 60% reported that the app helped them with their daily life.

Among older adults, a greater number of participants reported that they often or always feel cheerful and hopeful after they used the Wysa app. A greater number of older adults also reported zero (0) days of feeling nervous, depressed, or stressed after they used the Wysa app. In the post survey, 56% of older adults reported that the Wysa app helped improve their mental health and wellness and that the app made them feel like they had support when feeling down, anxious, or stressed. Further, a little over half (53%) reported that the Wysa app helped them in their daily life.

Figure 2. Survey Responses from TAY Respondents about Well-Being (n = 16)

Well-Being, TAY

	Often/Always Feel Life is Satisfying	Often/Always Feel Balanced	Most/All of the Time Feel Nervous
Before Wysa	38%	25%	44%
After Wysa	60%	53%	13%

Figure 3. Survey Responses from Older Adult Respondents about Well-Being (n = 37)

Well-Being, Older Adults

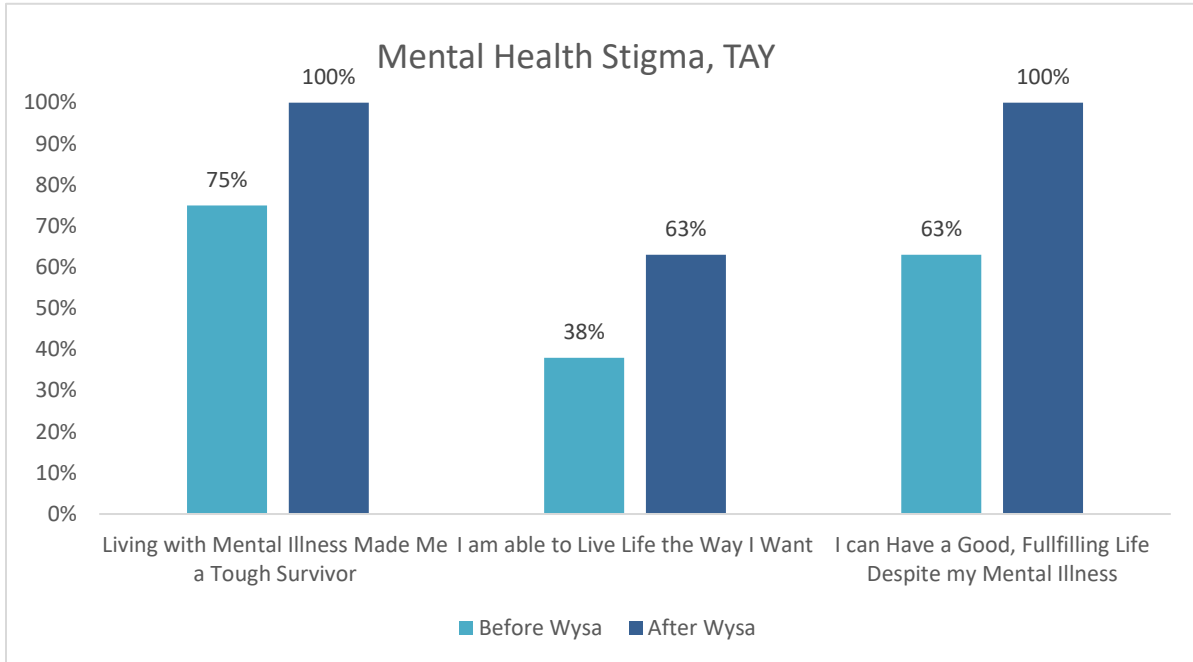|	Often/Always Feel Cheerful	Often/Always Feel Hopeful	0 Days Unable to Carryout Normal Activities Due to Feeling Nervous/Depressed/Stressed
Before Wysa	60%	62%	51%
After Wysa	79%	74%	77%
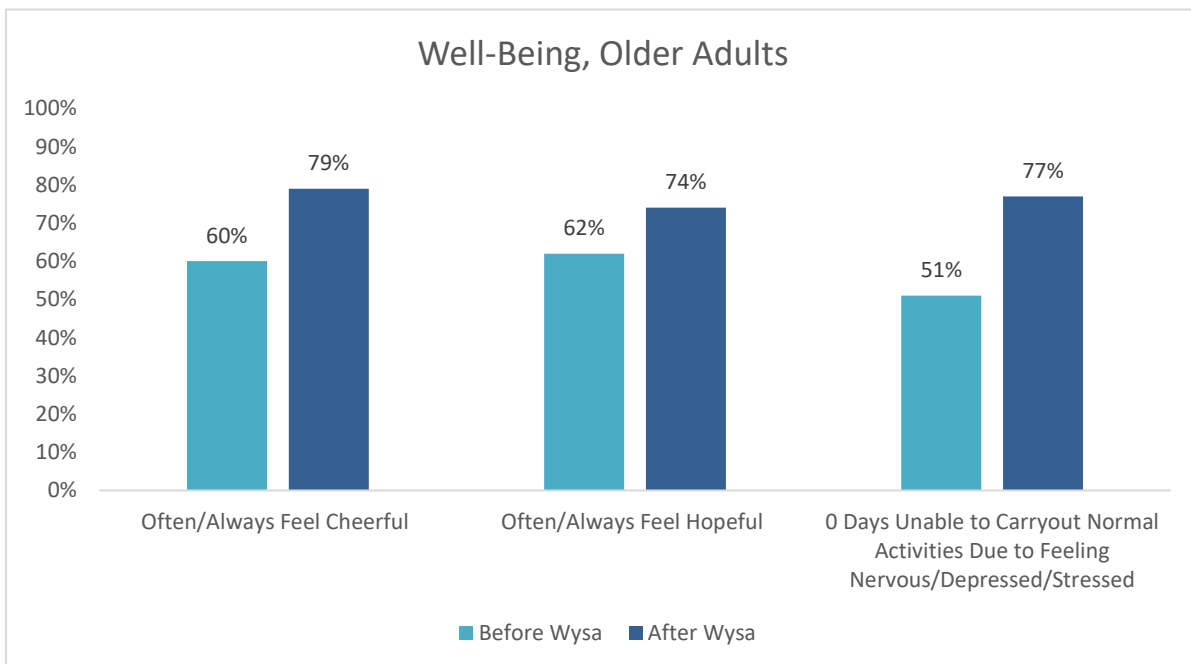
Mental Health Stigma

Mental health stigma seemed to decrease after TAY used the Wysa app. After using the Wysa app, all TAY agreed with the statements "Living with a mental illness made me a tough survivor," and "I can have a good, fulfilling life despite my mental illness." In contrast, among older adult participants, there was a slight decrease in positive measures related to self-stigma associated with seeking mental health services after using the app. These findings suggests that the app may have had less of an influence in decreasing mental health stigma for older adults.

Additionally, after the testing period, a greater proportion of TAY (47%) compared to older adult (31%) participants reported that they would reach out for help with their mental health and wellness because of using the app. Another indicator of help seeking behavior includes a greater self-awareness of when help might be needed, such as when symptoms related to mental health and wellness arise. A higher percentage of TAY (47%) compared to older adult (22%) participants in the post survey reported that they were more likely to detect symptoms related to their mental health and wellness. These findings suggest that the app may have had less of an influence on help seeking behavior in older adults.
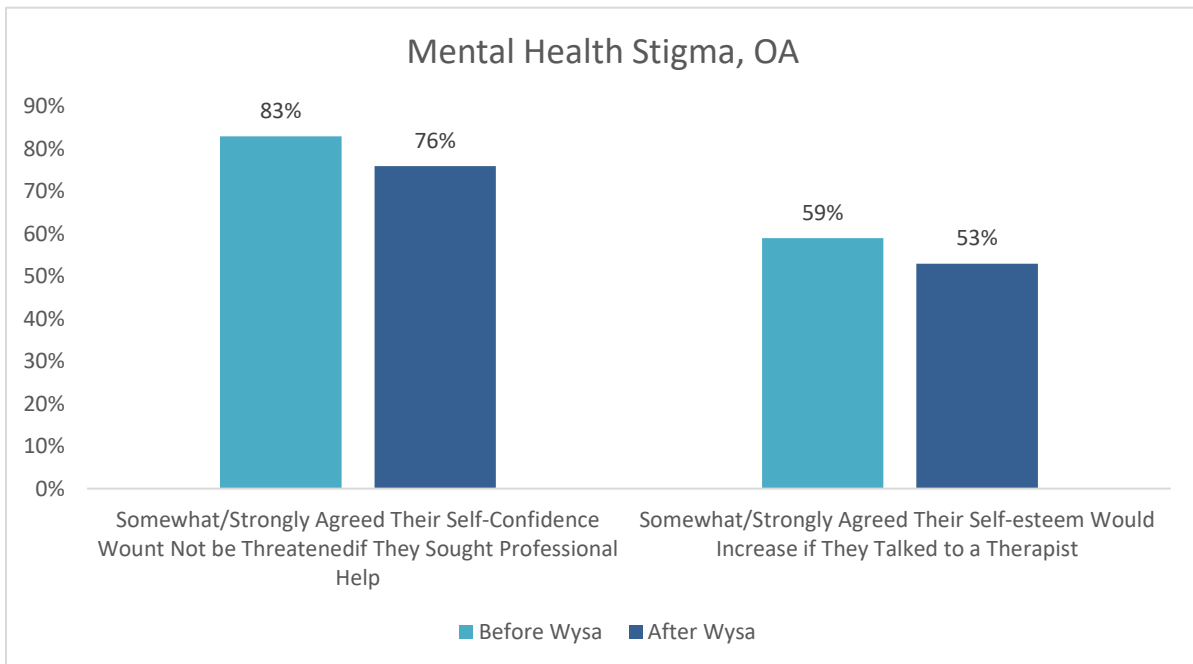
An important learning lesson in collecting data related to mental health stigma arose during the pilot period. An older adult participant expressed that the mental health stigma questions in the pre-survey were triggering and led to emotional distress for them. After consultation with CalMHSA and partner evaluators at University of California, Irvine, and our local Help@Hand Advisory Committee, all but one of the negatively framed questions were excluded from the post survey. Additionally, an introduction was included in the survey to alert users to the potential triggering questions and offer supports as needed. Peers across the Help@Hand statewide collaborative, local stakeholders, and the San Mateo County Help@Hand Advisory Committee recommended that it would be important to include indicators that we can compare county and state-wide given that the negatively framed questions have been collected and reported in local and statewide large studies. For the TAY pre/post surveys, given this lesson learned, additional positive framed questions related to internalized stigma and stigma resistance were included.

Figure 4. Survey Responses from TAY respondents about Mental Health Stigma (n = 16)

Mental Health Stigma, TAY

Living with Mental Illness Made Me a Tough Survivor: Before Wysa 75%, After Wysa 100%

I am able to Live Life the Way I Want: Before Wysa 38%, After Wysa 63%

I can Have a Good, Fullfilling Life Despite my Mental Illness: Before Wysa 63%, After Wysa 100%

■ Before Wysa ■ After Wysa

Figure 5. Survey Responses from Older Adult Respondents about Mental Health Stigma (n = 37)

Mental Health Stigma, OA

Somewhat/Strongly Agreed Their Self-Confidence Wount Not be Threatenedif They Sought Professional Help: Before Wysa 83%, After Wysa 76%

Somewhat/Strongly Agreed Their Self-esteem Would Increase if They Talked to a Therapist: Before Wysa 59%, After Wysa 53%

■ Before Wysa ■ After Wysa

Connectedness

Findings from the focus group and survey data show initial promise that using an app like Wysa can reduce feelings of isolation and promote social connectedness. For TAY, one of the first positive outcomes that

staff highlighted from the piloting process was that the level of social connectedness increased after TAY participants' use of the app. Other benefits reported by the older adult program staff included Wysa's chatbot feature, which provides suggestions to the user and prompts them to carry out a specific wellness-oriented activity (e.g., positive affirmations, physical activity) in response to an issue that the participant reports while interacting with the chatbot. Program staff also noted that youth reported that the Wysa app provided youth a safe space to express any current issues or challenges that they were facing that day. Further, based on TAY participant feedback, program staff also noted that the Wysa app's chatbot features proved to be a valuable asset that TAY participants found helpful, especially after the onset of the pandemic.

Among survey respondents, a greater number of older adults compared to TAY pilot participants reported that they have two or more people they are close with and can depend on, hardly ever feel isolated and hardly feel left out. For both TAY and older adults, after using the app, a greater number reported they have two or more people they are close with and can depend on and that they hardly ever feel isolated. In the post survey results, only 20% of TAY and 29% of older adults agreed that the Wysa app made them feel connected to other people. TAY did see a modest decrease from 13% to 7% in the number of participants that hardly ever felt left out. It is also important to note that these numbers are already a small sample of TAY respondents.
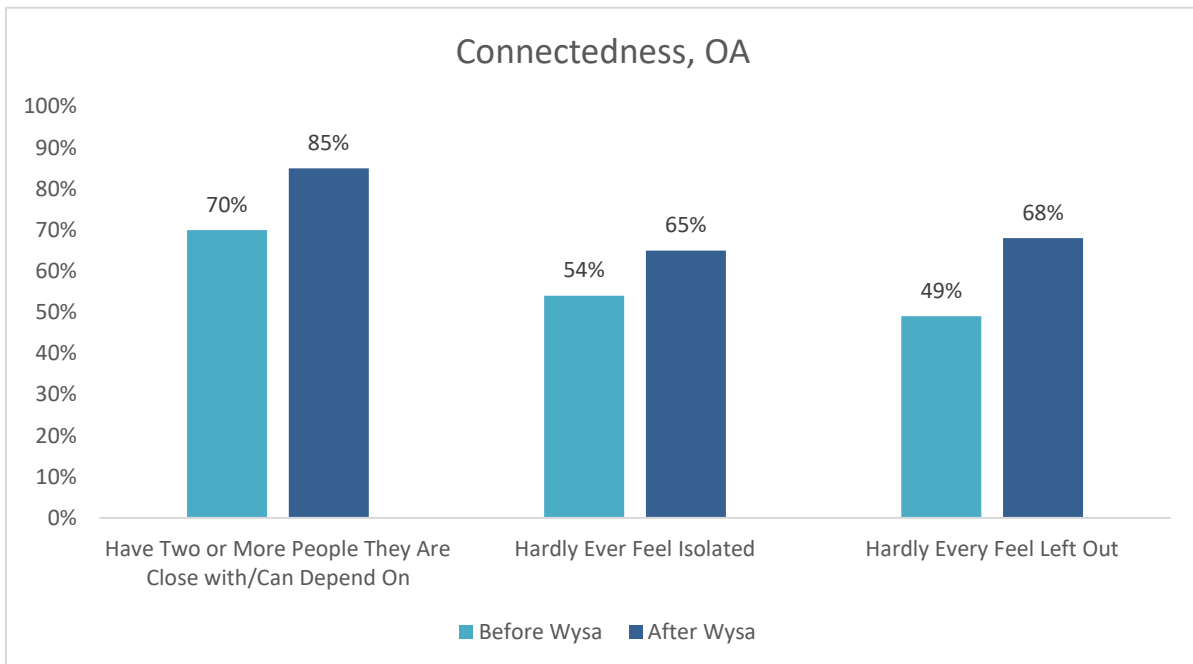
Figure 6. Survey Responses from TAY Respondents about Connectedness (n = 16)
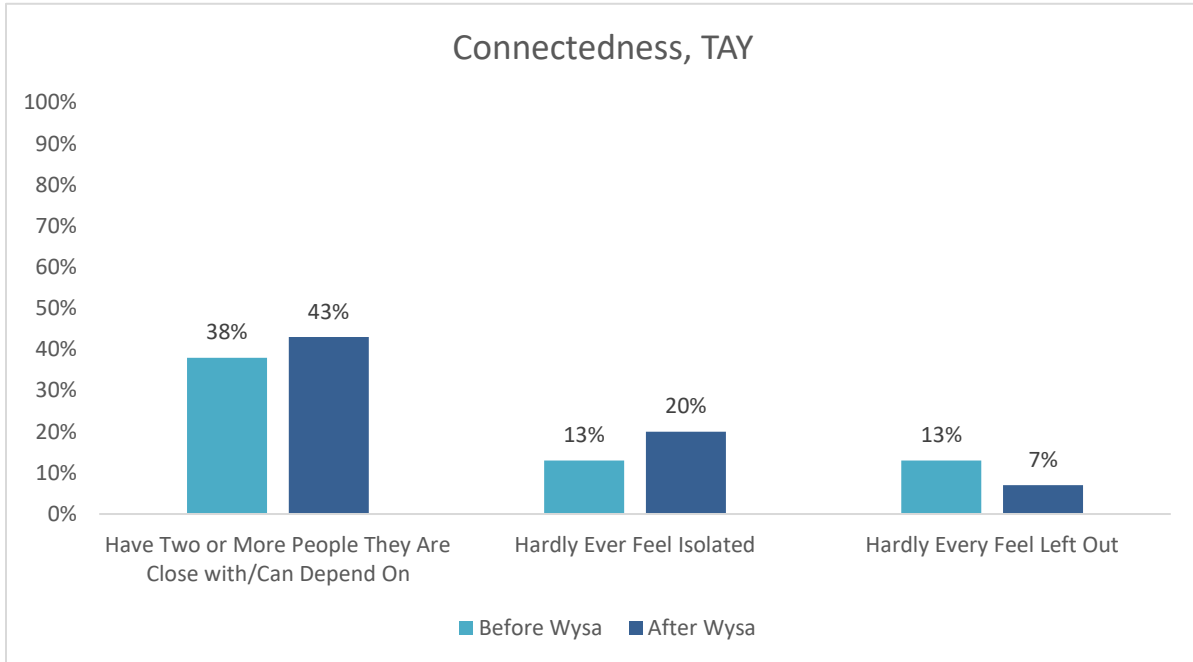
Connectedness, TAY

Figure 7. Survey Responses from Older Adult Respondents about Connectedness (n = 37)

Connectedness, OA

The Wysa app's secure and private chat functionality were also noted to enhance greater participation among TAY who may not otherwise engage in an in-person setting due to factors such as social anxiety or fear of being judged by peers. In Wysa, users can chat with an AI robot (i.e., chatbot), which then responds

and recommends several self-care practices, such as mindfulness or physical movement activities or other resources in response to the user's issues or challenges mentioned in the chat. These chat functionalities were noted to reduce feelings of isolation and enhance social connection. Program staff also noted that the TAY pilot participants seemed to value having access to chat-like features when using apps such as Wysa. In fact, 80% of TAY and 53% of older adult users found the chatbot to be extremely or moderately useful. Older adult users generally found the chatbot feature to be useful and enjoyed having a place to talk and share their feelings at any time of the day. They appreciated that the chatbot summarized what they wrote and referenced previous discussions.

Some users noted that the chatbot's responses felt generic, unhelpful, and redundant, particularly when they used more complex language. Some also found it challenging to type everything they were feeling. Recommendations to improve the chatbot function from both the older adult and TAY population include: expand the keywords to which the chatbot responds, offer more pre-populated responses to chatbot questions, improve the depth and variety of chatbot responses, offer users the option to save or discard their chat history, ask users during the chat if the information is helpful and direct them to other features or resources as needed, and offer customization options such as personalities, voices, characters, and chat colors.

Learning Goal 1: Does the availability and implementation of technology-based mental health apps connect transition age youth in crisis and older adults experiencing isolation to in-person services?

Learning Goal 1 Recommendations
1. Identify specific methods to engage TAY in ways that make them feel socially connected, as this app is promoted amongst youth for individual wellness.
2. Identify specific methods to reduce stigma amongst older adults related to mental illness and seeking help for mental health challenges.

Although these findings indicate that apps such as Wysa can promote mental well-being and may reduce some feelings of isolation, the Wysa app helps individuals promote these positive outcomes at an individual level. From the pilot evaluation, two considerations emerged related to this learning goal:

First, **continue to find ways to engage TAY in more group and social settings**. This is informed by the TAY survey findings where the connectedness survey item "Hardly Ever Feel Left Out" did not seem to improve after the use of the Wysa app and only 20% of TAY agreed that the Wysa app made them feel connected to other people. On the other hand, initial findings suggest an improvement in reducing mental health stigma and well-being. Given both the small sample of TAY participants surveyed and the mixed results, it

is important that program staff continues to focus efforts on engaging TAY in virtual settings, despite concerns that TAY may be less willing to engage in virtual social settings due to social anxiety. Some solutions include encouragement of using the chat functions in lieu of feeling pressure to verbally interact with a group in a Zoom meeting.

Second, **efforts should be made to address internalized stigma of mental illness and seeking mental health services among the older adult population to supplement the use of a wellness app such as Wysa.** Based on the mental health stigma survey responses after the use of the Wysa app, a fewer number of older adults somewhat or strongly agreed with seeking professional help and speaking with a therapist that wouldn't put their self-esteem or confidence in jeopardy. Further, only 31% agreed that they were likely to seek help for their mental health and wellness because of using the Wysa app.

Learning Goal 2: Does engaging with the app promote access to mental health services and supports?

Learning Goal 2 Recommendations

1. Capitalize on TAY's willingness to seek additional help for their mental health and wellness, as well as their desire to connect with other youth. Ensure that the local resources are included in the Wysa app so that they can stay connected.
2. Continue to focus efforts on normalizing seeking mental health services and supports in the community, as well as the use of wellness apps among the Older Adult population by featuring other Older Adults modeling this behavior in media and other marketing materials and peer support networks to promote the app. Realistic and accurate portrayals to represent Older Adult community members is important, especially when destigmatizing the pursuit of mental health resources and services among this population.

Although there is more evidence to suggest that the Wysa app promotes access to mental health services and supports, it is important to note that this evaluation is a study of a small sample of participants and most participants did not use app feature to seek additional resources if needed. Further evaluation will be needed to fully assess whether the Wysa app promotes greater access to mental health services and supports.

The Wysa app does offer users a high level of accessibility to its services and resources. Participants noted that the Wysa app provides access that is uniquely available 24 hours per day, and that virtual access, while not a replacement for in-person services, is particularly important at this time given the challenges of social isolation due to COVID-19. The Wysa app offers an "SOS" feature where users can seek out additional resources if needed. During the pilot process, almost two-thirds of the TAY and older adult participants did not use the SOS feature over concerns that this feature would contact emergency services

immediately. Among the users that did use this feature, only 34% of TAY and 9% of older adult users found this feature to be extremely to moderately helpful.

One primary recommendation that came out of this process is to ensure that the Wysa app will include local county resources that users can access if additional services are needed. BHRS is working with the Wysa app developers to include local resources to facilitate connections to mental health supports for those who do engage with the apps, should they be interested in exploring services beyond the app itself. The ability to customize a local resource option aside from the SOS feature will continue to be a priority of BHRS to ensure the apps promote access to further supports.

From a usability standpoint, the Wysa app appears to be easy and intuitive to use and navigate. All of the TAY and 88% of older adults agreed that the app's language was easy to understand. Further, 93% of TAY and 88% of older adults agreed that the app was easy to use. Lastly, 87% of TAY and 69% of older adults reported that they would recommend using the app to others. The availability of the app's content in various languages continues to be a concern among stakeholders. Stakeholders noted that BHRS did not identify a minimum viable product language requirement,[5] and that they are concerned about moving forward with an app that has limited, or no, features for monolingual Spanish or Chinese speakers given the strong presence of these communities in San Mateo County. BHRS had initially hoped to include monolingual Spanish and Chinese speakers as target populations; however, they realized early in the Help@Hand project that they did not have the capacity to have priority populations in addition to older adults and TAY. However, reaching these two subgroups within the older adult and TAY populations continues to be an expressed interest of a number of stakeholders involved in San Mateo County's Help@Hand project. To address concerns, the Wysa app developers are currently working on a Spanish version of the app for future testing.

TAY Population

Given the results from the survey that was completed by the TAY pilot participants, there is some evidence to suggest that TAY users would be more willing to seek help for their mental health and wellness because of using the Wysa app, and that seeking help would not negatively impact their confidence and self-esteem. Therefore, one of the critical components of developing the Wysa app for this population should ensure that local resources within San Mateo County are included as part of the app for TAY, should users from this target population have a desire to seek additional help. This is also crucial for TAY users, given that using the app itself did not seem to decrease their feelings of being left out after its use.

Older Adult Population

While older adults slightly increased in their feelings of social connection and reduced their feelings of isolation after using the app, this population did not seem to increase in their willingness to seek additional

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[5] A minimum viable product is the most basic version of a product that will still satisfy users. In this case, the minimum viable language requirements are the languages that the apps must offer to meet the fundamental linguistic needs of the target populations.

help for their mental health and wellness, based on survey findings. Therefore, it is important that the Wysa app continues to also be developed in ways that incorporate older-adult-specific topics that are relevant for this population. Further, it is important that marketing and promotion efforts of this app help to destigmatize and normalize the use of this app in terms of seeking additional mental health and wellness resources among this population. Strategies to normalize the app using and help-seeking behavior among the Older Adult population is through app demonstrations and modeling these behaviors in marketing and promotion materials and among other Older Adult peers in peer support networks.

Learning Goal 3: Does engaging with the apps effectively promote wellness and recovery for individuals living with mental health challenges?

Learning Goal 3 Recommendation
1. Ensure future consumer engagement activities include representation from older adults of diverse age ranges, to understand the different wellness and recovery needs of this population.

Given what was learned for Learning Goals 1 and 2 during FY 20-21, this learning goal will be of particular focus as the project moves into a testing stage for San Mateo County BHRS clients. In previous focus groups, stakeholders noted that behavioral health apps are one of many supports for individuals in their wellness and recovery. One member of the Advisory Committee commented that apps are "a tool in the toolbox, not the only solution." Stakeholders generally felt that it is helpful to have more options for individuals to address and support their mental health, and that the Wysa app should provide additional resources local to the community.

Key Program Implementation and Operational Learnings

From the evaluation activities, the three key program implementation and operational learnings were identified. Key learnings are described in detail in the sections that follow

Key Learnings

1. **Ensure local resources are included in the Wysa app and social inclusion efforts are enhanced for** TAY as a supplement to using the Wysa app for wellness supports.
2. **Ensure that the Wysa app includes mental health and wellness topics that are relevant** to older adults, TAY, and for specific target populations throughout the county.
3. **Continue to focus on** accurate and realistic portrayals of Older Adult consumers to promote seeking mental health and wellness services among this population.

Finding 1: Ensure local resources are included in the Wysa app and social inclusion efforts are enhanced as a supplement to using the Wysa app for wellness supports.

Based on survey findings, TAY were less likely to report feeling socially included after using the Wysa app. Coupled with the finding that TAY users were more likely to seek additional help for their mental health and wellness, it is important that the Wysa app includes local resources to mental health and wellness services for TAY to feel more connected. In addition, it is important for stakeholders to identify additional ways to socially engage TAY consumers in activities that supplement the app's use. Recommendations from focus groups included the suggestion that holding virtual social events such as Bingo or raffles to incentivize users to continue using the app while also socially engaging users could be impactful.

Finding 2: Ensure that the Wysa app includes mental health and wellness topics that are relevant to older adults, TAY, and for specific target populations throughout the county.

As the Wysa app continues to be developed and customized to fit the needs of the County's target populations, it is important that topics and resources relevant to specific target populations are included to enhance accessibility and representation, as well as to reduce the stigma of seeking mental health services and supports. While both older adults and TAY do report that the Wysa app was helpful with increasing self-care habits, such as meditation and sleeping, both groups reported that they would like to see more

> "It was a really good experience overall and I learned a lot of things. It was also rewarding to see and hear other people's experiences reviewing the app."
> - TAY Pilot Participant

topics included in the app that are relevant to their specific population. For example, TAY participants reported that they would like to learn more about how to handle procrastination. Other recommendations included improvements related to being more culturally relevant, such as including topics that focus on wellness, self-care, and resiliency within minority communities Making the app more culturally relevant and accessible to Spanish speakers, which is another target population in San Mateo County. Wysa's developers are currently working on a Spanish version of the app.

Finding 3: Continue to promote the app in peer networks and promotional materials by featuring accurate and realistic portrayals of Older Adults modeling app-usage and help-seeking behaviors.

> "The Wysa app was useful for the older adult population to support participants to practice healthy self-care and sleeping habits."
> - Program Staff

Based on post-pilot survey findings, older adults were less likely to seek additional help for their mental health and wellness because of using the app, despite feeling a little more socially connected and supported in their mental health and wellness after using the app. These findings suggest that stigma remains a major factor among the Older Adult population when it comes to using an app related to mental health and wellness. However, in the interest of targeting our efforts in promoting the app, we must first identify the many underlying reasons why this stigma remains within the Older Adult population, such as: not having the knowledge and skills of using mobile devices and app technology, not being connected with others who can help them use this technology, the app's content focusing on mental health and wellness, reluctance to seek mental health and wellness resources, or any of these reasons combined. This is reflected in the finding discovered from an Older Adult program staff focus group, where it was noted that the participants who engaged in the app's piloting process may have been more relatively technologically savvy than other Older Adults representative of the community. Additionally, staff indicated that there are other Older Adults who may be at even greater risk of social disengagement and social isolation, remain reluctant to seek mental health and wellness resources, and may be even more reluctant if they are not digitally connected and have negative perceptions of mental illness. One future challenge that Older Adult program staff foresee is the ability to conduct outreach and engagement around using the Wysa app among the vast number of Older Adults who are currently not connected digitally at all. Therefore, the next steps for the Older Adult program as the county adopts the Wysa app for implementation is to continue to outreach and engage Older Adults who are unfamiliar with the use of mobile devices and app technology, who may be at significant risk of social disengagement and isolation, and who do not normally seek mental health services and supports. For this Older Adult population, there may be an even greater reluctance to use a mental health and wellness app for multiple reasons based on perceived or real barriers related to technology use and/or seeking help. Therefore, it is possible that this population continues to experience an even greater stigma when it comes to seeking mental health and wellness services, as well as possibly feeling as though using technology such as an app to achieve this goal might be irrelevant to them. To address these concerns, the plan for Older Adult programs moving forward is to collaborate with community partners to promote the app in places where Older Adults seek other types

of services that address other Social Determinants of Health (e.g., food bank, housing, employment, education, etc.). Another recommendation that arose from an Older Adult Focus Group that can help break down the barrier of reluctance to use the app was to develop a Wysa Ambassador Program, in which Older Adults can assist their fellow peers by conducting Wysa app trainings, either in person or developing videos featuring an Older Adult demonstrating the use of the Wysa app. The benefit of featuring other Older Adults model app-using behavior can destigmatize and normalize using the app, despite one's age. Additionally, de-stigmatizing and normalizing help-seeking behavior among Older Adults is important and should also be demonstrated in both peer networks and in marketing and promotional materials for the app. Marketing and promotion efforts should also feature Older Adults using the section of the app that contains the county's local resources for mental health and wellness and should feature Older Adults reaching out to one of those local resources to seek help. Therefore, it is important that efforts to engage older adults in using the Wysa app to support their mental health and wellness continue, as well as efforts to reduce stigma associated with seeking mental health services. These efforts may enhance older adults' willingness to download and use the app and have a greater connection to the local resources and supports that San Mateo County has to offer among this harder to reach population.

Future Directions

San Mateo County is purchasing 7,000 Wysa app licenses for older adults and TAY who live, work, or go to school within San Mateo County. San Mateo County has also hired a marketing consultant to promote the app's usage to its target audiences. Over the next fiscal year, San Mateo County will continue to work with the Wysa app developers to tailor the app based on stakeholder feedback gathered during the pilot process. From there, San Mateo County plans to test the Wysa app with consumers who are currently receiving services throughout the county. This will allow us to further assess whether the Wysa app is effective in achieving our learning goals and to obtain feedback from a much larger group representative of the consumer population. RDA will support this process by developing an evaluation framework that ensures data collection activities gather information to continue to build a deeper understanding towards San Mateo County BHRS's local learning goals.

Based on current findings, future efforts and research are needed to identify other best practices to increase social engagement among the TAY population in ways that are safe, adhere to social distancing guidelines, enhance their mental health and wellness, and enact strategies to mitigate any other barriers or stigmas to achieve this goal. For Older Adults, more research is needed to focus on the various stigmas experienced within this population in order to tease apart the possible reasons as to why older adults, especially those between the ages 75 to 90,might be reluctant to seek mental health and wellness resources, and whether using an app in the first place might be associated with this reluctance. For instance, is the stigma experienced within the Older Adult population associated with the use of the app itself, the use of the app because of its content related to mental health and wellness, seeking help related to mental health and wellness in general, or any of these reasons combined?

The considerations and key learnings provided in this report are positioned to help guide project activities over the next fiscal year. San Mateo County will continue to lean on the identified strengths, including the

robust advisory committee, opportunities for collaboration with local and statewide stakeholders, and the strong internal peer network they have developed. BHRS can also identify opportunities to address the emerging barriers, including establishing an ongoing shared understanding of the project goals and requirements amongst all key stakeholders; recruiting a diverse consumer sample to participate in further testing of the Wysa app and qualitative data collection activities; and ensuring the behavioral health technology can effectively meet the current needs of the target populations. With these considerations in mind, San Mateo County is strongly positioned to move into the deployment stage of the Help@Hand project and to continue to employ a BHRS integration process that is thoughtful, responsive, and consumer centered.