



MHSA Innovative Collaboration Project – Increasing Access to Mental Health Services and Supports Utilizing a Suite of Technology-Based Mental Health Solutions

Primary Problem

During the Community Planning Process 2016 and through a series of stakeholder meetings held in the Spring of 2017, stakeholders voiced that there is a need for greater access to services, especially in the rural areas outside of Metropolitan Bakersfield. Throughout Kern County, and especially in smaller outlying areas, there exists stigma and self-stigma regarding receiving mental health care. As many towns are small and populations are well acquainted, some choose to come to Bakersfield to avoid neighbors and friends knowing about their mental health care needs. Additionally, there are many who do not feel comfortable receiving services and supports in a traditional clinical setting, which can sometimes lead to avoidance of care and increase in symptoms.

What Has Been Done Elsewhere to Address Your Primary Problem

Technology-based mental health support and services has been increasing access to services for those who do not seek traditional means of treatment. Private-industry technology-based services have been utilized with universities and public health institutions previously – however, a project utilizing a technology-based services and supports to increase access and linkage has never-before been tested by multiple counties, which this project intends to do.

The Proposed Project

Kern and its collaborative county partners intend to utilize a suite of technology-based mental health services and solutions which collect passive data that identifies early signs and signals of mental health symptoms and will then provide access and linkage to intervention. Technology-based services would be assessible to clients and public users through devices like computers, tablets and smartphones. The project will identify those in need of mental health care services through active online engagement, automated screening and assessment. Services are focused on prevention, early intervention, family and social support intended to decrease the need for psychiatric hospital and emergency care service.

This approach has not previously been used in a public mental health care setting. Given the popularity of technology-based services, it has been determined that engagement focused in this way can provide a method of access and linkage to care never previously achieved in the public mental health system.

Goals of the project include:

1. Utilization of technology-based behavioral health solutions which engage, educate and provide intervention to individuals experiencing symptoms of mental illness. Services will include:
 - a. Virtual peer chatting with trained and certified peers with lived experience.
 - b. Virtual support communities for populations including those experiencing behavioral health-related symptoms and family members of those with mental illness.
 - c. Virtual chat options for parents of children and adults receiving behavioral health care.





- d. Virtual interventions including mindfulness exercises and Dialectical Behavior Therapy (DBT) skills delivered simply.
 - e. Referral process for those requiring additional services through the Kern Behavioral Health and Recovery Services System of Care.
2. Use passive sensory data to engage, educate and suggest behavioral health activation strategies to users, including:
 - a. Incorporation of passive data from smart phones or mobile devices into an interactive approach to digital phenotyping where the technology analyzes factors associated with cell phone usage (passive data) and interacts with the user through a pop-up chat function which allows for increased user understanding of thought and feeling states. Web-based analytics then inform targeted communications and recommend interventions.
 - b. Incorporation of emerging research in mental health early detection to target individuals who may be at risk of or experiencing early symptoms of mental illness and use passive data collection to identify risk/symptoms or potential for relapse.
 3. Create a strategic approach to access points to expose individuals to technology-based mental health solutions, including:
 - a. Engaging school systems, including colleges and universities, to promote use of services and supports
 - b. Utilizing social media, public website and other media to promote use of technology-based services
 - c. Working with mental health organizations, including the local National Alliance for Mental Illness (NAMI), peer-based community learning centers and local support groups to promote use of technology-based services
 - d. Collaborate with those providing services to older adults at risk for social isolation, including working with senior apartment complexes, senior centers, Kern County Aging and Adult Services and faith-based organizations who outreach to seniors
 - e. Work with local public locations, including agencies, libraries and other resources to promote technology-based service use.
 4. Develop method and conduct outcome evaluation of all elements of the project, including:
 - a. Increased wellbeing of those utilizing services.
 - b. Reduced duration of untreated/undertreated mental illness.
 - c. Increase in the ability for users to identify cognitive, emotional and behavioral changes and actively address them.
 - d. Increased quality of life, measured objectively and subjectively by both the user and by indicators such as activity level, employment, school involvement, etc.

Innovative Component

The project introduces a new approach or approaches to the overall mental health system including, but not limited to, prevention and early intervention. This project will utilize technology-based services and





supports to engage populations not previously engaged through outreach and education efforts. Through the use of technology as a means of reaching and engaging those with mental illness, Kern and its partners intend to provide access for unserved and underserved populations which were previously unidentified through culturally relevant platforms.

Learning Goals/Project Aims

1. Whether those at risk of or experiencing mental symptoms of mental illness use peer chatting accessed through technological platforms.
2. Whether those accessing technology-based supports and services including virtual peer chat will engage in manualized therapeutic interventions.
3. Whether virtual chatting and peer-based interventions will result in greater social connectedness, reduction of symptoms related to mental illness and increase wellbeing.
4. Which virtual-based strategies are most helpful in compelling individuals to feel willing and capable of seeking necessary behavioral health care or services.
5. Whether passive data collected from smart phones or other mobile devices can accurately detect changes in mental health status and prompt behavioral change effectively.
6. How digital data informs the need for mental health interventions and coordination of care.
7. Determine effective strategies to reduce the duration of untreated mental illness.
8. Whether online social engagement is successful in mitigating the severity of mental health symptoms.
9. Determining the most effective strategies and approaches in promoting virtual care and support for the most appropriate populations.

Evaluation or Learning Plan

Evaluation will consist of tracking and analysis of passive data, users reached, level of user engagement, access and timeliness of care and clinical outcomes. Passive data from smart phones and mobile devices will be analyzed to determine changes in mental status and response to online peer-based supports, digital therapeutic and virtual behavioral health care services. Interventions would be driven by continuous assessment and feedback.

Outcomes to be collected:

1. Determination of whether users experience increased purpose, belonging and social connectedness
2. Reduction of duration of untreated or undertreated mental illness and increase in timely access to mental health care for unserved and underserved populations
3. Whether users experience increase in the ability to identify cognitive, emotional and behavioral changes and actively address them
4. Determination of whether users experience increases in quality of life, as measured objectively and subjectively by the user and by indicators including activity level, employment, school involvement, etc.





Contracting

Kern Behavioral Health and Recovery Services will research potential contractors known to provide the subject services. Research methods may include internet searches, conversations with subject experts and telephone inquiries. Agencies that express the interest and ability to provide the services may be asked to submit a proposal detailing their scope of work and anticipated cost for the services to be performed. Services exceeding \$30,000 are subject to a competitive bid process such as a Request for Proposal unless there is compelling evidence to convince the County's Purchasing Manager to concur with a sole source justification for an agency. Once the agency is selected, an Agreement for Professional Services will be negotiated and prepared. It will include the specific services to be provided during the term of the agreement. The County will maintain an ongoing relationship with the contractor(s) through telephonic, electronic and face-to-face meetings. KernBHRS Information Technology staff may provide onsite technical support to provider sites; Sites will be encouraged to contact the Department staff for program guidance whenever needed. The contractor will be required to submit monthly, quarterly and annual program progress reports to substantiate payments for service. To ensure quality and regulatory compliance, Kern Behavioral Health and Recovery Services conducts both financial and program monitoring of contracted entities. Cost reimbursable contracts are subject to the cost reconciliation process after the close of each fiscal year, at which time the financial records are reviewed and a determination is made regarding cost settlement with the contracted agency. In some instances, it is determined that the agency owes the County money, and other times it is determined that the County owes the contracted agency.

Contracted agencies will be expected to abide by the Department's policies and procedures regarding client confidentiality, securing Protected Health Information/Personal Information/Personally Identifiable Information and appropriate business conduct. They will be expected to adhere to all state and federal regulations throughout the performance of this project.

Certifications

1. County Board of Supervisors Approval will be sought on October 24, 2017 (Document and Board Letter due to Cindy by Oct. 11, 2017)
2. MHSA Certification Document – In progress
3. MHSA Fiscal Accountability Document – In progress

Community Program Planning

Stakeholder feedback collected in FY 2016/2017 resulted in twenty percent of the Fall 2016 Community Planning Process respondents identifying the need for increased services in the outlying areas. Fifty-two percent of stakeholder feedback collected during the Prevention and Early Intervention stakeholder series presentations in Spring 2017 identified access and linkage to care as a necessary program need. Additional feedback was sought in September 2017 regarding the Increasing Access to Mental Health Services and Supports Utilizing a Suite of Technology-Based Mental Health Solutions project, at which time it received feedback in support of the program. Older Adults in Wasco added that this type of program could help them with support because they are homebound and have little access to transportation. Resource providers and agencies working with local families indicated that the project would work well in reaching youth who are technology savvy, but may not be ready to seek help with mental health issues.





The project will continue to be presented throughout the 2017 Community Planning Process, which began September 14, 2017 with trainings scheduled through November 19, 2017. Additionally, the program proposal is slated to be posted on Oct. 22, 2017 to allow for the 30-day public review period before presentation to the Behavioral Health Board on Oct. 23, 2017 and Kern County Board of Supervisors on Oct. 24, 2017. The counties collaborating in the project intend to seek Mental Health Services Oversight and Accountability Commission approval of the program on Oct. 26, 2017.

Primary Purpose

Increase access to mental health services to underserved groups

MHSA Innovative Project Category

Introduces a new mental health practice or approach

Population

Those utilizing technology-based mental health services and supports:

- Those with sub-clinical mental health symptom presentation, including those who may not recognize that they are in the early course of a mental health condition
- Those at risk for mental illness or relapse of mental illness
- Socially isolated individuals, including older adults
- Those experiencing high frequency of inpatient psychiatric care
- Current behavioral health clients in need of additional support
- Family members of children and adults with mental illness in need of additional support

MHSA General Standards

1. Community Collaboration
 - a. This project will seek to work with organizations serving children, transitional aged youth, adults and older adults who would benefit from technology-based mental health services and supports. This would include community centers providing social activities, inpatient and outpatient behavioral health care providers, schools, senior centers, peer-based services centers, law enforcement working with youth-based programs, etc.
2. Cultural Competency
 - a. Support communities built within the technology-based supports and services system will have the capability to address and engage with youth, adults, older adults, those with substance use or other addictions, LGBTQ individuals seeking support and communities specifically geared toward behavioral health symptoms.
3. Client-Driven
 - a. This project requires active initiation of the client or potential client seeking technology-based mental health support. Those utilizing online or application-based services initiate





their role in care and determine the frequency. The goal of the program is to engage those in need of care and reduce the duration of untreated mental illness.

4. Family-Driven
 - a. Family members of children and adults with mental illness can initiate technology-based mental health support through the online or application-based program at will.
5. Wellness, Recovery and Resilience-Focused
 - a. Using virtual peer chat and online support communities, users are connected to those with lived experience who can actively provide support and encouragement for those experience mental illness or family members of children or adults with mental illness.
6. Integrated Service Experience for Clients and Families
 - a. Though support group experiences may be different for clients than for family members, skills and supportive practices can be used by both family members and those with mental illness to work toward common recovery goals.

Continuity of Care for Individuals with Serious Mental Illness

This program promotes technology-based mental health solutions and analytics of passive data collection for those active in care with the System of Care and those previously unreachable. For those who require a higher level of care for severe mental health symptoms, a referral would be made through the contracting technology companies for services with Kern Behavioral Health and Recovery Services.

Innovative Project Evaluation Cultural Competence and Meaningful Stakeholder Involvement

This project addresses the needs associated with multiple age and cultural populations including youth and transitional aged youth, adults and older adults. Additionally, instant online access to support communities for parents of children with mental illness, LGBTQ individuals and those experiencing mental health symptoms or addiction are available.

As part of a multi-county collaborative innovative program, continued communication by participating partners regarding data and outcomes will continue throughout the duration of the three-year project. Through this collaboration, an opportunity for shared learning will continue as well as development of best practices in utilizing the technology suite. Kern Behavioral Health and Recovery Services will provide stakeholders throughout the county with regularly updated reports of outcomes during stakeholder presentations and through the MHSAs Three-Year and Annual Update Reports. Kern Behavioral Health and Recovery Services will also participate in cross-county learning opportunities supported by the Mental Health Services and Oversight Accountability Commission (MHSOAC).





Kern Behavioral Health and Recovery Services further anticipates the opportunity to provide information on shared learning with collaborative county partners in venues including conferences, meetings and potential publication of article submission to peer-reviewed journals.

Sustainability

Evaluation of the program by a contracted entity determining the success of the program based on the analytics of the technology-based suite of access and linkage services will determine the continued need of the program beyond the three-year innovative period. With favorable results and stakeholder support, a combination of Prevention and Early Intervention and other funds could be used to extend this project.

Timeline for Project Implementation

September 14 – October 19, 2017: Community Planning Process and targeted feedback collection regarding Increasing Access to Mental Health Services and Supports Utilizing a Suite of Technology-Based Mental Health Solutions project

September 22 – October 23, 2017: 30-Day Posting on public website and in Kern Behavioral Health and Recovery Service locations for public feedback

October 23, 2017: Public Hearing and presentation to Behavioral Health Board

October 24, 2017: Presentation and anticipated approval by Kern County Board of Supervisors

October 26, 2017: Presentation and anticipated approval from the Mental Health Services Oversight and Accountability Commission

October – December 2017: Review and approval of solicitation

December 2017 – February 2018: Selection and awarding of contract

March 2018: Creation of technology suite steering committee comprised of stakeholders including one or more clients (including transitional aged youth), family members, Kern Behavioral Health and Recovery Services Information Technology Services staff and other stakeholders who will provide feedback on implementation and guide use and scaling of the project, as well as shaping evaluation. This committee will also make recommendations on the use of the technology suite in clinical settings and the role of the services within the Kern Behavioral Health and Recovery Services System of Care.

March 2018: Launch of virtual services on Kern Behavioral Health and Recovery Services public website

March – April 2018: Identification of analytics to be collected and reported on, including developing reporting framework.

March – June 2018: Launch of virtual services through identified strategic access points, including: community centers providing social activities, inpatient and outpatient behavioral health care providers, schools, senior centers, peer-based services centers, law enforcement working with youth-based programs, social media, etc. focused on mobile devices including smart phones as well as laptop and desktop computers.





March – August 2018: Development, testing and implement testing of digital phenotyping and introduction of technology-based mental health services and supports solutions to users at strategic access points, including: community centers providing social activities, inpatient and outpatient behavioral health care providers, schools, senior centers, peer-based services centers, law enforcement led youth-based programs and other key community organizations.

FY 2018-2019: Development, testing and implementation of the incorporation of research in the field of mental health early detection targeting individuals at risk of or experiencing early symptoms of mental illness through use of passive data collection to identify risk/symptoms or potential for mental health relapse.

Budget Narrative

Kern Behavioral Health and Recovery Services anticipates their portion of the estimated cost of project expenditures for three fiscal years shall not exceed \$2,000,000, with final budget determination prior to solicitation of the project. All funding utilized will be Innovative component funds and will be included as part of the Joint Powers Agreement with CalMHSA (California Mental Health Services Authority), who will act as the fiscal agent for counties involved in the collaborative program. Budget elements are an approximation and proportion of funds allocated to each element may change as finalization of contracts for services and evaluation are determined.

Administrative costs are determined to be approximately \$100,000 over three years. These costs will include:

- Public Relations
- Marketing
- Human Resources
- Legal
- Fiscal Accounting
- Clerical

Leadership costs will be required for this multi-county effort. Kern anticipates its portion to be approximately \$200,000 over three years. These costs will include funding a:

- Regional Director
- Assistant Director
- Director of Research
- Director of Outreach
- Clinical Director
- Director of Community
- Objectives and Key Results Coordinator

Direct Service costs will be approximately \$466,666 over the three-year period, and will fund positions including:

- Hospital Liaisons
- Peer Specialists
- Family Support Specialists





Bill Walker, LMFT, Director

- Trainers
- Behavioral Health Coordinators

Technology Development services including technology and digital phenotyping is anticipated to cost \$266,667 over the three-year period and will fund items including:

- Developers
- Growth Engineers
- Machine Learning
- User Experience
- Quality Assurance
- Product Management

Community Engagement and Outreach is expected to cost approximately \$466,667 over the three-year period and will include outreach to:

- Family Support
- School Support including institutions of higher education
- Community Coordinators
- Outreach Coordinators
- Advertising

Program evaluation is anticipated to cost \$133,333 over the three-year period and will fund the cost of services provided by:

- Researchers
- Data Scientists
- External Consultants

Operational and fixed costs will be approximately \$366,667 over the three-year period and will include:

- Supplies for Users
- Office Space and Furnishings
- Machines and technology infrastructure
- Travel and conference costs
- Benefits and Insurance

Budget Template					
Categories	Description	FY 2017-2018	FY 2018/2019	FY 2019/2020	3-Year Total
Staffing:					
Administrative	<ul style="list-style-type: none"> • Public Relations • Marketing • Human Resources • Legal • Accountant • Office Assistant 	\$33,333	\$33,333	\$33,333	\$100,000





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Leadership	<ul style="list-style-type: none"> Regional Director Assistant Director Director of Research Director of Outreach Clinical Director Director of Community Objectives and Key Results Coordinator 	\$66,666	\$66,667	\$66,667	\$200,000
Direct Service	<ul style="list-style-type: none"> Hospital Liaison Peer Specialists Family Support Specialists Trainers Behavioral Health Coordinators 	\$155,555	\$155,555	\$155,556	\$466,666
Technology Development:					
Technology and Digital Phenotyping	<ul style="list-style-type: none"> Developers Growth Engineers Machine Learning User Experience Quality Assurance Product Management 	\$88,889	\$88,889	\$88,889	\$266,667
Community Engagement and Outreach:					
Community Engagement and Development	<ul style="list-style-type: none"> Family Support School Support Community Coordinators Outreach Coordinators Advertising 	\$155,555	\$155,555	\$155,556	\$466,667
Evaluation:					
Evaluation	<ul style="list-style-type: none"> Researchers Data Scientists External Consultants 	\$44,444	\$44,444	\$44,444	\$133,333
Operational and Fixed Costs:					
Operational and Fixed Costs	<ul style="list-style-type: none"> Supplies for Users Office Space and Furnishings Machines and Technology Infrastructure Travel and conferences Benefits and Insurance 	\$122,222	\$122,222,	\$122,222	\$366,667

