



MONO COUNTY BEHAVIORAL HEALTH
MENTAL HEALTH SERVICES ACT (MHSA)

FY 2017-2020 INNOVATION PLAN:

INCREASING ACCESS TO MENTAL HEALTH SERVICES
AND SUPPORTS UTILIZING A SUITE OF
TECHNOLOGY-BASED MENTAL HEALTH SOLUTIONS



WELLNESS • RECOVERY • RESILIENCE

INN SECTION 1: PROJECT OVERVIEW

Innovation Defined

INN projects are novel, creative and/or ingenious mental health practices/approaches that contribute to learning and that are developed within communities through a process that is inclusive and representative, especially of unserved, underserved, and inappropriately served individuals....An Innovation project is defined, for purposes of these guidelines, as one that contributes to learning rather than a primary focus on providing a service. By providing the opportunity to “try out” new approaches that can inform current and future mental health practices/approaches in communities. To clarify, a practice/approach that has been successful in one community mental health setting cannot be funded as an INN project in a different community even if the practice/approach is new to that community, unless it is changed in a way that contributes to the learning process. Merely addressing an unmet need is not sufficient to receive funding.

Primary Problem

What primary problem or challenge are you trying to address? Please provide a brief narrative summary of the challenge or problem that you have identified and why it is important to solve for your community. Describe what led to the development of the idea for your INN project and the reasons that you have prioritized this project over alternative challenges identified in your county.

Mono County is a remote, rural county with a population of only 14,000. This population is spread over 3,000 square miles. Given the department’s limited resources and wide geographic spread, staff are challenged to provide consistent, high-quality services in all of Mono County’s outlying areas. Moreover, in the department’s 2017 Community Program Planning process, community members identified isolation and lack of social support/engagement as one of the county’s top three mental health needs, along with lack of access to services.

Additionally, Mono County Behavioral Health (MCBH) has identified a need for identification of onset of mental illness among transition age youth in the County. Local Cerro Coso Community College officials recently approached MCBH asking for greater engagement around mental health services.

In discussing the results of the needs assessment and community college discussions with the Mono County Behavioral Health Advisory Board (BHAB), Director Robin Roberts proposed joining other California counties in a technology-based Innovation project. The BHAB was excited about the prospect and offered its express support to pursue the project to help reduce isolation, increase access to services, and identify onset of mental illness sooner.

MCBH and its Advisory Board propose targeting two specific populations with this Innovation plan: 1) individuals in remote, isolated areas of the county who have less access to social support and mental health services; 2) students attending Cerro Coso Community College in Mammoth Lakes. MCBH estimates that the number of individuals served by this Innovation project will be approximately 350.

As LA County writes in its Innovation Plan:

“This project seeks to test out novel approaches to mental illness preemption and prevention, early relapse detection, outreach and engagement as well as the delivery of manualized therapeutic interventions and supportive services through technology-based mental health solutions, delivered by trained peers.

One of the primary objectives of the Mental Health Services Act is to identify and engage individuals with mental illness who are either un-served or under-served by the mental health system. The Los Angeles County Department of Mental Health, through the Mental Health Services Act, has funded outreach and engagement staff, Service Area Navigators, Promotores to outreach and engage individuals with mental health needs into mental health care. While these approaches have been effective, in order to make a greater impact in reducing the duration of untreated mental illness and disparities in mental health treatment, early detection, outreach and engagement strategies must evolve. This project seeks to test out the use of a set of technology tools to identify individuals who may need mental health care and to reach these individuals for whom we have not been successful in identifying or engaging through methods that have become increasingly relevant to specific populations.”

Proposed Project

Describe the Innovative Project you are proposing. Note that the “project” might consist of a process (e.g. figuring out how to bring stakeholders together; or adaptation of an administrative/management strategy from outside of the Mental Health field), the development of a new or adapted intervention or approach, or the implementation and/or outcomes evaluation of a new or adapted intervention. See CCR, Title 9, Sect. 3910(d).

Include sufficient details so that a reader without prior knowledge of the model or approach you are proposing can understand the relationship between the primary problem you identified and the potential solution you seek to test. You may wish to identify how you plan to implement the project, the relevant participants/roles, what participants will typically experience, and any other key activities associated with development and implementation.

A) Provide a brief narrative overview description of the proposed project

This project, implemented in multiple counties across California, will bring interactive technology tools into the public mental health system through a highly innovative set or “suite” of

applications designed to educate users on the signs and symptoms of mental illness, improve early identification of emotional/behavioral destabilization, connect individuals seeking help in real time, and increase user access to mental health services when needed. Counties will pool their resources through the Joint Powers Authority, CalMHSA, to jointly manage and direct the use of selected technology products.

Innovation serves as the vehicle and technology serves as the driver, promoting cross-county collaboration, innovative and creative solutions to increasing access and promoting early detection of mental illness and signs of decompensation, stopping the progression of mental illness and preventing mental illness all together.

In Mono County specifically, MCBH envisions accessing the components of the technology suite that meet the needs of the two target populations described above. The MCBH Director and MHSA Coordinator will be engaged in the development of the project and technology products to ensure that the applications created will improve social support/engagement, improve access to care, and identify early onset of mental illness among users in small rural communities. Additionally, the Mono County Director of Information Technology will be consulted on the project.

Following the development of the applications, MCBH plans to work with case managers and community partners at Cerro Coso to implement the products locally. In addition to participating in the broader multi-county evaluation, the department intends to add some locally specific learning goals and evaluation questions (outlined below). Finally, the MCBH Director has strong relationships with the leaders of this project and has been a partner in this project since its inception. When MCBH has concerns or questions, she will utilize these relationships and her role in the project to ensure that clarity is obtained.

B) Identify which of the three approaches specified in CCR, Title 9, Sect. 3910(a) the project will implement (introduces a practice or approach that is new to the overall mental health system; makes a change to an existing practice in the field of mental health; or applies to the mental health system a promising community-driven practice approach that has been successful in non-mental health contexts or settings).

This project introduces a practice or approach that is new to the overall mental health system.

C) Briefly explain how you have determined that your selected approach is appropriate. For example, if you intend to apply to mental health a practice from outside of mental health, briefly describe how the practice has been applied previously.

MCBH has determined that this approach is appropriate because it directly addresses the need for decreased isolation, increased social engagement, and increased access to services in remote,

rural Mono County. It also directly addressed the need for identification of early onset of mental illness.

Innovative Component

What are you doing that distinguishes your project from similar projects that other counties and/or providers have already tested or implemented?

Components of the Technology Suite

Accessible from a computer, cell phone or tablet utilizing customized applications for:

1. Digital detection of emotional, thought and behavioral disturbances through passively collected data and sophisticated analyses that sense changes in the user interface known to correlate with social isolation, depression, mania, the early psychotic (prodromal) syndrome, and other indicators of either the onset of new mental illness or the recurrence of a chronic condition. As concerning signals are detected, communication to the user is generated through texts, emails, peers or clinician outreach to prompt care.
2. A web-based network of trained and certified peers available to chat 24/7 with individuals (or their family members/caregivers) experiencing symptoms of mental illness. A link to the chatroom will be available through the LACDMH web and social media will be used to promote the service across Los Angeles County. Branding will stress the resource is as both a support and triage tool for anyone experiencing problems at any time, especially those unfamiliar with self-management techniques, confused or unclear about the available resources, or reluctant to visit a mental health clinic.
3. Virtual, evidence-based on-line treatment protocols using treatment algorithm-based avatars to deliver clinical care. By their nature as virtual tools, this client-provider interface is available 24/7 and can be accessed in the home, clinical settings, and mobile devices.

Overall Goals

1. Detect mental illness earlier, including depression, psychosis, and bipolar disorder.
 - In Mono County, detect mental illness earlier particularly among Mammoth Lakes Cerro Coso Community College students.
2. Intervene earlier to prevent mental illness and improve client outcomes.
 - In Mono County, intervene earlier particularly among Mammoth Lakes Cerro Coso Community College students.
3. Provide alternate modes of engagement, support and intervention.
 - In Mono County, provide alternate modes of engagement, support, and intervention among individuals living in remote, isolated areas.

Learning Goals/Project Aims

The broad objective of the Innovative Component of the MHSa is to incentivize learning that contributes to the spread of effective practices in the mental health system. Describe your learning goals/specific aims and how you hope to contribute to the spread of effective practices.

A) What is it that you want to learn or better understand over the course of the INN Project?

Overarching Learning Questions

Please note: the following list of learning questions has been adapted from the list of learning questions proposed by other partners participating in this multi-county Innovation plan. MCBH has added verbiage to make these learning questions more specific to its own local climate. This verbiage is noted in [brackets].

1. Will [community college students and] individuals [living in remote, isolated areas] either at risk of or who are experiencing symptoms of mental illness use virtual peer chatting accessed through a website or through a phone application?
2. Will [community college students and] individuals [living in remote, isolated areas] who have accessed virtual peer chatting services be compelled to engage in manualized virtual therapeutic interventions?
3. Will the use of virtual peer chatting and peer-based interventions result in users [from both target populations] reporting greater social connectedness, reduced symptoms and increases in well-being?
4. What virtual strategies contribute most significantly to increasing an individual's capability and willingness to seek support [among both target populations]?
5. Can passive data from mobile devices accurately detect changes in mental status and effectively prompt behavioral change in users [among community college students]?
6. How can digital data inform the need for mental health intervention and coordination of care [among community college students]?
7. What are effective strategies to reduce time from detection of a mental health problem to linkage to treatment [among both target populations, but especially among community college students]?
8. Can we learn the most effective engagement and treatment strategies for patients from passive mobile device data to improve outcomes and reduce readmissions?
9. Can mental health clinics effectively use early indicators of mental illness risk or of relapse to enhance clinical assessment and treatment [especially among community college students]?
 - a. [Can MCBH effectively use data from the community college population to design and implement PEI programs for college instructors and staff?]
10. Is early intervention effective in reducing relapse, reducing resource utilization and improving outcomes and does it vary by demographic, ethnographic, condition, intervention strategy and delays in receiving intervention [especially among community college students]?
11. Can online social engagement effectively mitigate the severity of mental health symptoms [especially among individuals living in remote, isolated areas]?
12. What are the most effective strategies or approaches in promoting the use of virtual care and support applications and for which populations?

Evaluation or Learning Plan

For each of your learning goals or specific aims, describe the approach you will take to determine whether the goal or objective was met.

Overall Approach to Evaluation

This project will be evaluated by tracking and analyzing passive data, reach of users, level of user engagement, changes in access to care and clinical outcomes. Furthermore, data from mobile devices would be analyzed to detect changes in mental status and responses to online peer support, digital therapeutics and virtual care. Continuous assessment and feedback would drive the interventions. Specific outcomes are listed below.

Please note that as with the learning questions, the following list of evaluation outcomes has been adapted from the list of evaluation outcomes proposed by other partners participating in this multi-county Innovation plan. MCBH has added verbiage to make these evaluation outcomes more specific to its own local climate. This verbiage is noted in [brackets].

1. Increased purpose, belonging and social connectedness for users [especially for individuals living in remote, isolated areas].
2. Increased ability for users to identify cognitive, emotional and behavioral changes and act to address them [among both target populations].
3. Increases in quality of life, as measured objectively and subjectively (by user and by indicators such as activity level, employment, school involvement, etc.) [among both target populations].
4. For high utilizers of inpatient or emergency services, decreases in utilization for those services.
5. Reduced stigma of mental illness as reported by user [among both target populations].
6. Comparative analyses of population level utilization data [in Mono County] over the life of the project to determine impact on various types of service utilization.
 - a. [Reach of technology products (number of users, demographics of users) in Mono County.]
7. For clients with particular sorts of biomarkers (characteristics identified either through history or digital phenotyping analysis), how many clients respond well to treatment options identified through this project?
8. What is the role of this technology as a source of information that can help guide the interventions provided by mental health clinicians [at MCBH]?
9. Examine penetration or other unmet need metrics to understand how the technology suite has impacted [MCBH's] ability to serve those in need.

User outcomes will be measured by analyzing retrospective and prospective utilization of hospital resources from claims data and medical records data. The analysis will incorporate disease risk stratification, digital phenotype and digital biomarker measurement, type of intervention and delay in receiving care. Quality of life impact will include school grades, graduation rates, job retention, absenteeism and presenteeism.

MCBH will participate in the Innovation plan evaluation primarily by contributing data to the evaluation experts who will be leading this evaluation. The MCBH MHSA Coordinator will ensure that Mono County's evaluation needs are articulated in the multi-county evaluation plan that is developed, and that the department is able to access County-level data on the target populations served.

INN SECTION 2: ADDITIONAL INFORMATION FOR REGULATORY REQUIREMENTS

Contracting

If you expect to contract out the INN project and/or project evaluation, what project resources will be applied to managing the County's relationship to the contractor(s)? How will the County ensure quality as well as regulatory compliance in these contracted relationships.

Counties will pool their resources through the Joint Powers Authority, CalMHSA, to jointly manage and direct the use of selected technology products. Specifically in Mono County, MCBH's MHSA Coordinator and Fiscal Services Officer will coordinate with CalMHSA to ensure regulatory compliance. The MCBH Director and MCBH MHSA Coordinator will participate as a partner in selecting technology companies and steering the development of the applications.

Certifications

A) Adoption by County Board of Supervisors. Please present evidence to demonstrate that your County Board of Supervisors has approved the proposed project.

Evidence may include explicit approval as a stand-alone proposal or as part of a Three-Year Plan or Annual Update; or inclusion of funding authority in your departmental budget.

To be added following BOS meeting.

B) Certification by the County mental health director that the County has complied with all pertinent regulations, laws, and statutes of the Mental Health Services Act (MHSA).

Welfare and Institutions Code (WIC) 5847(b)(8) specifies that each Three-Year Plan and Annual Update must include "Certification by the county behavioral health director, which ensures that the county has complied with all pertinent regulations, laws, and statutes of the Mental Health Services Act, including stakeholder participation and nonsupplantation requirements."

To be added following public comment period.

C) Certification by the County mental health director and by the County auditor-controller if necessary that the County has complied with any fiscal accountability

requirements, and that all expenditures are consistent with the requirements of the MHSA.

WIC 5847(b)(9) specifies that each Three-Year Plan and Annual Update must include “Certification by the county behavioral health director and by the county auditor-controller that the county has complied with any fiscal accountability requirements as directed by the State Department of Health Care Services, and that all expenditures are consistent with the requirements of the Mental Health Services Act.”

To be added following public comment period.

Additionally, Mono County has submitted all required ARERs to the MHSOAC.

Community Program Planning

Please describe the County’s Community Program Planning process for the Innovative Project, encompassing inclusion of stakeholders, representatives of unserved or under-served populations, and individuals who reflect the cultural, ethnic and racial diversity of the County’s community.

MCBH combined its Community Program Planning (CPP) process for its Innovation Plan with the CPP for its 2017-2020 MHSA Three-Year Plan. Please see the [Community Program Planning](#) section of the Three-Year Plan for a complete summary of the CPP process used and community members who participated. Through this process, many critical needs were identified and potential community solutions proposed. In the Community Survey, for example, participants were invited to share innovative program ideas (see [MHSA Community Survey Results](#)). MCBH is still assessing the feasibility of some of these ideas for future Innovation projects. Many other needs that arose through the CPP process could be met through smaller scale interventions based upon proven practices that fall into other MHSA funding categories

For this Innovation Plan, MCBH decided to join counties across California in implementing technology-based strategies that will meet the needs identified by community members (isolation, social engagement, access to services).

- The Behavioral Health Advisory Board first discussed this plan on October 30, 2017 and approved the plan on January 22, 2018.
- The public comment period for this Innovation plan took place from January 20, 2018 to February 18, 2018.
- The plan will be taken before the Mono County Board of Supervisors on February 20, 2018.

Primary Purpose

Select one of the following as the primary purpose of your project.

- a) Increase access to mental health services to underserved groups**

- b) Increase the quality of mental health services, including measurable outcomes**
- c) Promote interagency collaboration related to mental health services, supports, or outcomes
- d) Increase access to mental health services

MHSA Innovative Project Category

Which MHSA Innovation definition best applies to your new INN Project (select one):

- a) Introduces a new mental health practice or approach.**
- b) Makes a change to an existing mental health practice that has not yet been demonstrated to be effective, including, but not limited to, adaptation for a new setting, population or community.
- c) Introduces a new application to the mental health system of a promising community-driven practice or an approach that has been successful in a non-mental health context or setting.

MHSA General Standards

Using specific examples, briefly describe how your INN Project reflects and is consistent with all potentially applicable MHSA General Standards set forth in Title 9 California Code of Regulations, Section 3320. (Please refer to the MHSOAC Innovation Review Tool for definitions of and references for each of the General Standards.) If one or more general standard could not apply to your INN Project, please explain why.

The services that will result from this Innovation project will reflect and be consistent with all the MHSA General Standards. All services will be culturally and linguistically competent. We will advocate for all tools in the suite to include Spanish (our only threshold language). In addition, we will advocate for the tools to provide culturally-sensitive services to all clients in an effort to support optimal outcomes. Services will be client and family driven, and follow the principles of recovery, wellness, and resilience. These concepts and principles of recovery incorporate hope, empowerment, self-responsibility, and an identified meaningful purpose in life. Services will be recovery oriented and promote consumer choice, self-determination, flexibility, and community integration, to support wellness and recovery. Evaluation activities will collect information on these demographics to identify if services are effective across these diverse cultural and ethnic populations.

Continuity of Care for Individuals with Serious Mental Illness

Will individuals with serious mental illness receive services from the proposed project? If yes, describe how you plan to protect and provide continuity of care for these individuals when the project ends.

It is MCBH's hypothesis that individuals with serious mental illness (SMI) will receive enhanced services as a direct result of the proposed project. At the end of this Innovation project, MCBH will ensure that if the project is successful in the county that individuals will have continued access to the applications developed through this project. MCBH foresees funding the program through a combination of CSS and PEI dollars.

Cultural Competence and Stakeholder Involvement in Evaluation

Explain how you plan to ensure that the Project evaluation is culturally competent and includes meaningful stakeholder participation.

MCBH will be working with evaluation experts from much larger counties to ensure that the project evaluation is culturally competent and includes meaningful stakeholder participation. In Mono County, the process of involving stakeholders will start with the BHAB and move out into wider circles from that point.

Innovation Project Sustainability

Briefly describe how the County will decide whether and how to continue the INN Project, or elements of the Project, without INN Funds following project completion.

Analytics associated with the suite of technology services, coupled with a comprehensive evaluation, will inform actions taken by the Department at the conclusion the project. Factors to be taken into account will include user satisfaction and outcomes, the state of technology at the conclusion of the project and the overall effectiveness of these tools for specific populations. As mentioned above, MCBH plans to transition the program to CSS and PEI funding sources.

Communication and Dissemination Plan

Describe how you plan to communicate results, newly demonstrated successful practices, and lessons learned from your INN Project.

A) How do you plan to disseminate information to stakeholders within your county and (if applicable) to other counties? How will program participants or other stakeholders be involved in communication efforts?

The Department, as part of a multi-county effort, will share learning as it is occurring internally within the Department and County and externally throughout California. The Department will also participate in cross-county learning opportunities supported by the Mental Health Services Oversight and Accountability Commission or its partner organizations.

Impact, reach, implementation status and outcomes will be documented in Annual Updates and MHSA 3 Year Program and Expenditure Plans. In addition, MCBH and its partner counties will seek to present the project and its outcomes throughout the project at statewide conferences,

meetings and perhaps at relevant national conferences. Finally, there may be opportunity to partner on articles submitted to peer-reviewed journals.

Timeline

The projected timeframe is as follows but, due to the innovative nature of this project, actual implementation steps may deviate in terms of sequence and/or timeframes.

Please note that as with the learning questions and evaluation outcomes, this timeline was created by the partner counties collaborating on this project. Additions to this timeline that are specific to Mono County are in orange font.

October – December 2017	Review and selection of technology company(s)
December, 2017	Selection and awarding of contract
January, 2018	Creation of a technology suite steering committee comprised of family members, clients (including a transition age youth client), Department Information Technology staff and other stakeholders that provide feedback on implementation and guide use and scaling of project, as well as shaping the 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 county’s mental health system of care.
February, 2018	Launch of virtual services on the Department’s website. Mono County officially joins project with an approved Innovation plan.
March – April 2018	Identify analytics to be collected and reported on, including developing reporting framework.
March 2018 – June 2018	Launch of virtual services through identified strategic access points, including schools, libraries, NAMI, client run organizations, social media, senior centers, etc. focused on tablet, smart phone or desktop/laptop computer. In Mono County, virtual services are launched specifically at Cerro Coso Community College in Mammoth Lakes and case managers start working with clients in remote areas to build buy-in around and implement applications.

March 2018–August 2018 Development, testing and implementation of digital phenotyping (deliverable #2) and introduction of technology-based mental health solutions to users via schools, social media, and other key community organizations.

FY 2018-2019 Development, testing and implementation of deliverable 2, including identifying key access points.

Mono County continues implementation and participates in evaluation.

INN SECTION 3: INN PROJECT BUDGET AND SOURCE OF EXPENDITURES

Budget Narrative:

Mono County will contribute a total of \$85,000 to this multi-county Innovation Project over the course of 17 months. Should Mono County need an extension or should this amount change, MCBH will follow all Innovation rules and regulations to update the plan and receive approval. These funds will be drawn from FY 2009-2010 and FY 2010-2011. As described in the budget table below, the funds will be divided between personnel costs, travel, technology, and administrative costs.

- Personnel costs include planning and implementation by the MCBH Director, MCBH MHSA Coordinator, Mono County Director of Information Technology, and MCBH case managers implementing the technology at the client level.
- Travel costs include travel for the MCBH Director and MHSA Coordinator for planning and implementation meetings.
- Technology costs constitute MCBH's contribution to the development of the technology suite. The department anticipates purchasing access to the products that meet the needs of the target population identified in this plan (individuals in remote/isolated areas and college age students).
- Administrative costs include the fee paid to CalMHSA (five percent of the total for each fiscal year) to oversee the multi-county administrative and financial components of the project.

Budget by Fiscal Year and Category:

Expenditures	FY 17/18 (5 months)	FY 18/19 (12 months)	Total (17 months)
<i>Personnel Costs: Salaries</i>	\$5,600	\$11,400	\$17,000
<i>Operating Costs: Travel</i>	\$2,800	\$5,700	\$8,500
<i>Non-Recurring Costs: Technology</i>	\$18,200	\$37,050	\$55,250
<i>Administrative Costs: CalMHSA</i>	\$1,400	\$2,850	\$4,250
Total Innovation Budget	\$28,000	\$57,000	\$85,000