



## STAFF ANALYSIS— MONO COUNTY

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| <b>Name of Innovative (INN) Project:</b> | <b>Increasing Access to Mental Health Services and Supports Utilizing a Suite of Technology-Based Mental Health Solutions</b> |
| <b>Total INN Funding Requested:</b>      | <b>\$85,000</b>   |
| <b>Duration of Innovative Project:</b>   | <b>Seventeen (17) Months</b>  |

### **Review History:**

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| Approved by the County Board of Supervisors: | February 20, 2018 |
| County submitted Innovation (INN Project):   | January 18, 2018  |
| MHSOAC consideration of INN Project:         | February 22, 2018 |

### **Project Introduction:**

Mono County is proposing to join Los Angeles County and Kern County in a multi-county collaboration project to implement a group of technology-based mental health solutions that utilize a web-based network of trained, on-call, peers to chat 24/7 with individuals experiencing symptoms of mental illness; digital detection of emotional, thought and behavioral disturbances through passively collected data; and virtual, evidence-based on-line treatment protocols that use avatars to deliver clinical care.

The multi-county collaborative will utilize the Joint Powers Authority, California Mental Health Services Authority, and (CalMHSA), to act as the fiscal agent for all participating counties. CalMHSA will contract out with one or more technology vendors to implement the suite. It is anticipated that several other counties will be joining the collaborative. Los Angeles County and Kern County plans were approved by the MHSOAC on October 26, 2017.

In the balance of this brief we address specific criteria that the MHSOAC looks for when evaluating Innovation Plans, including:

- What is the unmet need that the county is trying to address?
- Does the proposed project address the need?
- Are there clear learning objectives that link to the need?
- Will the proposed evaluation allow the county to make any conclusions regarding their learning objectives?

In addition, the MHSOAC checks to see that the Innovation meets regulatory requirements, that the proposed project aligns with the core MHSA principles, promotes learning, funds exploration of a new and/or locally adapted mental health approach/practice, and targets one of the four (4) allowable primary purposes.

### **The Need**

Mono County is a remote, rural county with a population of 14,000. This population is spread over 3,000 square miles. Mono County Behavioral Health (MCBH) reports that they have limited resources and because of the wide geographic spread, staff are challenged to provide consistent, high-quality services in all of Mono County's outlying areas. Mono County also reports a need to identify the onset of mental illness among transition age youth in the County.

Mono County community members echoed these challenges in the 2017 community planning process when they identified isolation, lack of social support/engagement and lack of access to services as the top mental health needs to be addressed with this population.

In addition, Cerro Coso Community College officials recently approached the MCBH, and asking for greater engagement around mental health services on their Mammoth Lakes campus in Mono County.

### **The Response**

To address these issues, the County envisions joining Los Angeles County and Kern County in a multi-county collaboration project to address a shared need of increasing access to mental health services for unserved and underserved groups; to reduce stigma and increase early intervention. In order to address these shared needs, the collaboration proposes to partner with one or more technology-based mental health services with the goal to: (1) detect mental illness earlier; (2) intervene earlier to prevent mental illness and relapse and improve client outcomes; (3) provide alternate modes of engagement, support and intervention; and (4) test out the collection of passive data as a method to identify early signs of mental health symptoms.

In order to meet these goals by digitally expanding access to mental health care, the Counties propose to develop and implement an application that individuals can voluntarily download and access through smartphones, home computers and computer stations at various locations (schools, libraries, NAMI offices, client run organizations, senior centers, etc.)

Mono County specifically proposes to access technology products most likely to improve social support/engagement, improve access to care, and identify early onset of mental illness among users in small rural communities. These products will be chosen for use at the local community colleges and within the County Behavioral Health system. Both the Behavioral Health Director and MHTA coordinator state that they will work with the collaborative to ensure applications are appropriate for the needs of Mono County.

If this plan is approved, the County reports that virtual services will be launched at Cerro Coso Community College in Mammoth Lakes and that case managers will start working with clients in remote areas to build buy-in around and implement applications beginning in March 2018.

Mono County's proposed partnership with the local community college is in line with concerns raised by Commissioners during the original presentation of the technology suite of how to engage schools and measure success in reaching students.

**County may wish to participate in collaborative meetings with CalMHTA and the project manager in order to encourage the inclusion of prior Commission recommendations including: hiring and compensating peers and establishing implementation milestones.**

LA County defines passive data as "collected patterns of use without required participation from the user (devoid of content)" and plan to incorporate it into an interactive approach to digital phenotyping. Digital phenotyping is defined as, "using device usage patterns to identify behavior patterns that may be associated with mental health conditions, where the technology analyzes factors associated with cell phone usage (passive data) and interacts with the user via a pop-up or chat..." Additional research corroborates with the County's definition. In the article, *Digital Phenotyping, Technology for a New Science of Behavior*, Dr. Insel describes digital phenotyping as "...new approach to measuring behavior from smartphone sensors, keyboard interaction, and various features of voice and speech."

The County hopes that the use of the digital platform, including digital phenotyping, will support the user to increase understanding of how they are feeling and lead to earlier detection of mental health needs/problems and treatment options. Dr. Insel cautions that better data does not result in better care without an effective bridge. He states that smartphones can provide the tools for assessments and interventions in order to create a "learning mental health system" but that a set of standards and a consumer's guide for digital mental health in the public sector needs to be created.

Additional researchers have encouraged the development of procedures that, "... offer individuals better control of their diverse digital footprints with opportunities to control the information they wish to share" (Bidargaddi et al). This approach may build trust with individuals and avoid ethical challenges. There is an opportunity for the Counties

participating in this demonstration project to develop a set of standards and a consumer's guide to digital mental health as a dynamic contribution to statewide learning.

### **The Community Planning Process**

The County reports that during their 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.

The County also reports receiving support to join the technology-based collaborative from the Mono County Behavioral Health Advisory Board (BHAB) after discussing the results of the needs assessment and community college discussions. County states that the BHAB was excited about the prospect and expressed support to pursue the project to help reduce isolation, increase access to services, and identify onset of mental illness sooner.

### **County may wish to discuss how consumers and family members can be included in the continued development and implementation of this innovation plan.**

This Innovation Project was shared with MHSOAC stakeholders beginning January 22, 2018. No letters of opposition or support were received.

### **Learning Objectives and Evaluation**

Mono County has proposed collaborating with Los Angeles County and Kern County in their implementation of their Innovation project titled, "Increasing Access to Mental Health Services and Supports Utilizing a Suite of Technology-Based Mental Health Solutions." The technology suite will be implemented to educate users on the signs and symptoms of mental illness, improve early identification of emotional and/or behavioral destabilization, and to increase access to mental health services among consumers. Specifically, Mono County seeks to access components of the technology suite that meet the need of their target population—namely, 1) individuals in remote, isolated areas of the county who have less access to social support and mental health services; and 2) students attending Cerro Coso Community College in Mammoth Lakes. Mono County estimates that they will serve approximately 350 consumers through their Innovation project.

The County has identified three main goals that will guide their Innovation project, particularly among Mammoth Lakes Cerro Coso Community College Students and individuals in remote, isolated areas:

1. Detect mental illness earlier, including depression, psychosis, and bipolar disorder
2. Intervene earlier to prevent mental illness and improve client outcomes
3. Provide alternate modes of engagement, support, and intervention.

Learning questions the County has identified match those laid out in Los Angeles County's original innovation plan, and have been revised to address their target

population as appropriate. In order to measure outcomes that address each learning question, the County will use passive data, as well as retrospective and prospective utilization of hospital resources from claims and medical records data. The data gathered will be analyzed by an outside evaluator who will complete the final evaluation report.

### **The Budget**

The proposed budget for this Innovation Project is \$85,000 over the course of 17 months.

Personnel costs total \$17,000 and support the Behavioral Health Director, MHSA Coordinator, Director of Information Technology and case managers to plan and implement the Innovation project.

Operating costs total \$8,500 and cover the cost of travel for planning and implementation meetings.

Non-recurring costs total \$55,250 and will be Mono County's contribution towards the technology suite and access to products specifically designed to meet the needs of the target populations previously identified.

Direct administrative costs total \$4,250 and will be paid to CalMHSA to oversee the multi-county administrative and financial components.

**The County may wish to clarify what their financial contribution will buy.**

**The County may also wish to identify how the evaluation of their part of the collaborative will be funded.**

If the project is deemed successful, Mono County will ensure that individuals have continued access to the applications and will consider utilizing a combination of CSS and PEI funds to sustain the project.

### **Additional Regulatory Requirements**

The proposed project appears to meet the minimum requirements listed under MHSA Innovation regulations.

### **References**

<https://www.census.gov/quickfacts/fact/table/monocountycalifornia/PST045216+>

Insel TR. Digital Phenotyping Technology for a New Science of Behavior. JAMA. 2017;318(13):1215–1216. doi:10.1001/jama.2017.11295

Bidargaddi, N., Musiat, P., Makinen, V.-P., Ermes, M., Schrader, G., & Licinio, J. (2017). Digital footprints: facilitating large-scale environmental psychiatric research in naturalistic settings through data from everyday technologies. *Molecular Psychiatry*, 22(2), 164–169. <http://doi.org/10.1038/mp.2016.224>