

County: Ventura Date Submitted 2/26/2018

Project Name: Push Technology Project

I. Project Overview

1) 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 you have prioritized this project over alternative challenges identified in your county.*

A simple Google search for psychiatric bed shortage reveals pages of news articles nationwide decrying the need for additional psychiatric hospital beds. The number of psychiatric beds in the United States has been decreasing dramatically over the past few decades. The Treatment Advocacy Center recently published estimates of state hospital bed needs, noting in 1955 (before deinstitutionalization), the nation was served by roughly 337 state beds per 100,000 persons, and by 2016, there were fewer than 12 beds per 100,000 persons (Swartz 2016). Since 1998, there has been a 35% reduction in available beds per 100,000 people (Bastiampillai, Sharfstein, Allison, 2016). Ventura County has experienced similar declines in the number of available beds – a problem exasperated by the recent Thomas Fire that burned one of only two psychiatric facilities in the County. The affected hospital treated adults and was the only facility in the County licensed to treat youth. The result has been a recent spike in youth hospitalizations out-of-county, 77 in the past 15 weeks since the fire, often as far away from family as Bakersfield or the San Francisco Bay area. Adult facilities were also affected by the fire however even prior to this event in FY 16/17 the local inpatient unit at the county hospital had roughly an additional 700 individuals that could not be served at the site due to already being at capacity.

Research has demonstrated a lack of available hospital beds leads to higher occupancy rates, shorter inpatient rates of stay and prolonged emergency department waiting times (Bastiampillai, Sharfstein, Allison, 2016). This causes the most vulnerable patients in crisis to wait for hours or days, crowding hospital hallways while they wait for a bed to become available, only to then be released back into the community at faster rates than in the past.

Individuals with a current or recent inpatient psychiatric hospitalization are also at an elevated risk for suicide. Significant clustering of suicides has been found soon after discharge from psychiatric care – the most critical period being the first 28 days (Goldacre, Seagroatt, Hawthorne, 1993). Reinforcing the need for additional beds but also supports to be instituted during the critical period between discharge and treatment.

The most obvious solution to this issue is to increase the number of available beds. However, the lengthy licensing processes, high cost and lack of available space restrict this possibility. A

workgroup has been formed in Ventura County to advocate for additional bed space, but this simple solution may never be enough. A simulation to study the reduction in psychiatric hospital admission delays in North Carolina by increasing available beds was employed in 2015. The results emphasized the scale of the problem as “the substantial capacity shortfalls in the current system. For example, opening an additional 24-bed unit was projected to decrease average (ER) wait time by only six percent. Capacity would need to be increased by 165 percent (356 beds) to reduce average wait time below 24 hours” (La, Lich, Wells, Ellis, Swartz, Zhu, Morrissey 2014). No County can accommodate that 165 percent growth in any sort of reasonable time frame.

There are plenty of reasons to explore new and innovative complimenting treatments to reduce the need for these beds in any way possible, though. The County seeks to explore whether technology can aid in this goal by offering mobile bridge support post-discharge to reduce rates of re-hospitalization.

2) WHAT HAS BEEN DONE ELSEWHERE TO ADDRESS YOUR PRIMARY PROBLEM?

A Literature Review was performed during the winter of 2017/2018 searching push technology, ecological momentary interventions, re-hospitalization reduction, discharge support and rates of psychiatric re-hospitalization. Searches of MHSAs-funded County behavioral health departments were also reviewed for existing programs using technology to support reducing re-hospitalization rates. There were not enough examples in literature to support an evidence-based model that had consistent positive findings on reducing re-hospitalization, and even fewer that used technology as a bridge support. Utilizing technology platforms to support mental health is a new and emerging business with new applications and websites consistently being developed. However, research on these efforts is lacking. Research is still developing on many of these adjunct treatment approaches and supports. Kern and Los Angeles County are embarking on the use of technology supports to increase accesses to mental health services but do not target seriously and persistently mentally ill individuals exiting hospitalization.

Behavioral Intervention Technologies (BIT) are a good way to test ecological momentary interventions (EMIs). EMIs are repeated assessments provided to people during their everyday lives in real time and in their natural settings. According to research done by Mohr and his colleagues, older studies have tried this – beginning with pen and paper then moving to personal digital assistants popular in the late ‘90s – while more recent studies have used cell phones and smartphones. Trials have found some positive effects on treating anxiety, eating disorders, bipolar and schizophrenia with mobile EMIs, though the literature is limited and of variable quality (Mohr, Burns, Schuller, Clarke, and Klinkman 2013). None of the research found made any definitive conclusions regarding the efficacy of BITs and EMIs. No studies were found utilizing EMIs to reduce re-hospitalization rates. Literature found focusing on lowering rates of re-hospitalization interventions also varied widely.

Common themes that emerged for reducing re-hospitalization across the literature focused on bridge supports that offered integrated service delivery between inpatient and outpatient treatment staff, phone calls for appointment reminders and higher number of hours spent in treatment post hospitalization as being effective (Dixon, Goldberg, Iannone, Lucksted, Brown, Kreyenbuhl, Lijuan Fand, Potts 2015; Beebe 2001). The primary positive factor found in the review of existing research

was family support during and after hospitalization. Family support is routinely identified as a determining factor in a patient’s success after discharge across age groups, from children to adults (Blader, 2004; Dixon, Goldberg, Iannone, Lucksted, Brown, Kreyenbuhl, Lijuan Fand, Potts 2015; Compton, Rudisch, Craw, Thompson, Owens, 2006). The Push Technology Innovation attempts to utilize these findings in the design of the proposed project.

3) THE 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.

- *Provide a brief narrative overview description of the proposed project.*
- *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).*
- *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.*

The proposed project will focus on individuals exiting county inpatient psychiatric hospitals and residential crisis stabilization units. The project is designed to increase the quality of mental health services. The primary goal of the project is to improve post-discharge outcomes through the employment of mobile EMI through automated push technology provided in partnership with the local 211 services provider. The project makes a change to an existing mental health practice by utilizing EMI to reduce re-hospitalization through repeated mini-assessments and appropriate follow-up during the first 90 days post hospitalization. According to repeated research, this is the time period when individuals are at the highest risk for re-hospitalization or attempted suicide (James, Charlemagne, Gilman, Alemi, Smith, Tharayil, Freeman 2010; Goldacre, Seagroatt, and Hawthorn 1993).

Youth and adults will be invited to enroll in the trial upon discharge and participants will receive a daily text assessment measuring mood on a scale of 1-10 for the first 30 days after discharge, then weekly for the remaining 60 days. Any downward trend in the assessments or sudden dip will automate a follow-up text offering one of the following options:

- Connect the patient to their clinic

- Connect the patient to a warm line
- Have the operator call them
- Provide a resources referral
- Connect to the crisis team
- No action

In addition, enrollees may identify a support person (i.e., a friend, parent, sibling, spouse, etc.) to participate in the program. These support participants will receive weekly assessments asking for their perception as to how they feel the person is doing and what contact they have had with the participant. Similarly, these individuals will receive follow-up texts after downward trends or sharp declines with the same menu of services.

Appointment reminders are another important intervention recommended by the literature review. Therefore, both the participants and their support people will receive a first appointment reminder text in addition to the 90 days of EMI. The project attempts to utilize the most consistent recommendations from the literature to build a best practice into the innovative program design. The goal of the program is to intervene with the already available support services prior to the participant decompensating to the point of needing re-hospitalization.

4) INNOVATIVE COMPONENT

Describe the key elements or approach(es) that will be new, changed or adapted in your project (potentially including project development, implementation or evaluation). What are you doing that distinguishes your project from similar projects that other counties and/or providers have already tested or implemented?

The Push Technology Innovation project uses mobile behavioral intervention technology to adapt EMI and connect vulnerable participants to ongoing services during the first 90 days post discharge from an inpatient psychiatric hospital or crisis stabilization unit. By offering this intervention during this critical time, the project anticipates participants will utilize services at a higher rate, thus reducing re-hospitalization.

5) 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.

- Are clients satisfied with EMI technology and do they find it valuable in their mental health recovery?
- Do participants make it to their follow up appointment more frequently with text support?
- Does using mobile EMI increase treatment engagement?
- Does using mobile EMI reduce the rate of re-hospitalizations?

6) 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. What observable consequences do you expect to follow from

your project's implementation? How do they relate to the project's objectives? What else could cause these observables to change, and how will you distinguish between the impact of your project and these potential alternative explanations?

- *Who are the target participants and/or data sources (e.g., who you plan to survey to or interview, from whom are you collecting data); How will they be recruited or acquired?*

Target Participants will include Adults and youth being discharged from psychiatric hospitalization or crisis stabilization units. Local psychiatric hospitals and crisis stabilization services only receive patients ages 6-59. Potential participants will be offered to enroll in the program when they meet with the discharge planner from either facility. At that time, they can choose to sign a consent form if they wish to participate.

Support Participants will be identified by target participants. Youth must choose a parent or guardian. Adults may identify anyone they believe is or has been a positive support in their wellness and recovery. Participants who are not on-site to sign consent forms will be able to give their consent through the text messaging capacity.

Comparison Records: VCBH is requesting to utilize the demographics, outpatient attendance rates, and re-hospitalization rates of individuals hospitalized at the same time of those who chose to participate in the study for comparison. If approval is not granted by the IRB, benchmarks utilizing current literature will be utilized.

- *What is the data to be collected? Describe specific measures, performance indicators, or type of qualitative data. This can include information or measures related to project implementation, process, outcomes, broader impact, and/or effective dissemination. Please provide examples.*

Data to be collected will include participant demographics, the number of responses to EMI, outpatient attendance rates, hospitalization rates, satisfaction with services, and overall engagement with push technology services will be collected through a push technology platform as well as the participant's electronic health record (EHR). A qualitative design method will be used to evaluate the learning goals, using the above data, and patient electronic health records. Self-report survey data and the EHR will be evaluated to establish treatment history and past hospitalizations for comparison post-intervention. Treatment history will be defined as participants who have received treatment from VCBH or other confirmed provider and have progress notes that support that they are engaged and taking any prescribed medications. Text pre and post surveys will measure self-report of treatment adherence, the value of service, and any hospitalizations that happen out of the county or out of network. Treatment engagement will be defined as attending outpatient appointments and taking prescribed psychotropic medication. EHR will be compared against the self-report survey to ensure the most complete data set of re-hospitalization rates. Out-of-network or out-of-county hospitalizations are not automatically reported. EMI assessments will measure mood and any requests for needed services (clinical or otherwise) in the first 90 days after discharge to establish levels of engagement. EMI data will be measured separately by participant and support person responses.

- *What is the method for collecting data (e.g. interviews with clinicians, focus groups with family members, ethnographic observation by two evaluators, surveys completed by clients, analysis of encounter or assessment data)?*
 - *Are clients satisfied with EMI technology and do they find it valuable in their mental health recovery?*
 Follow up post survey completed through text response will indicate whether participants were satisfied with the services and found the service valuable.
 - *Do participants make it to their follow-up appointment more frequently with text support?*
 EHR records will identify which patients are leaving the hospital, or crisis stabilization services attended their appointments post discharge. The rate of attendance will be compared with EHRs of participants and individuals who chose not to participate in the study with IRB approval. Otherwise a benchmark indicator will be set from a review of existing research and used for comparison purposes.
 - *Does using mobile EMI increase treatment engagement?*
 Services utilization and medication compliance will be tracked in the EHR records and compared with participants and individuals discharged during the same period who chose not to participate in the study, pending IRB approval.
 - *Does using mobile EMI reduce the rate of re-hospitalizations?*
 Recidivism rates will be compared through EHR records and self-report surveys with participants and individuals who chose not to participate in the study or with participant's previous EHR history, one-year post initial hospitalization.
- *How is the method administered (e.g., during an encounter, for an intervention group and a comparison group, for the same individuals pre and post-intervention)?*

This is a quantitative method research design utilizing self-assessment surveys and EHR records to assess the intervention's impact. EMI daily and weekly assessment surveys will measure mood over a 90-day period and any additional requests for services or connections to services from the participant and the support person's perspectives through their personal cell phones. A one-year follow-up self-report will take place through a text survey designed to measure any additional hospitalizations, as well as satisfaction and value of the intervention service.

Data Collection Procedures

- **Behavioral Intervention Technology utilizing EMI for target participants (N=1,000)**
 The intervention will involve using a personal cell phone to deliver daily and weekly assessments of participants' moods/feelings for the first 90 days post discharge from a hospital or crisis stabilization facility. At one year, the participants will get a follow-up survey

measuring any hospitalizations, as well as their satisfaction and value of the service. These surveys, in addition to their EHR, will be utilized to measure whether the program had a positive effect on first appointment attendance, treatment adherence, and re-hospitalization rates.

- **Behavioral Intervention Technology utilizing EMI assessments for support person of target participants (N=1,000)**

The intervention will involve using a support person’s personal cell phone to deliver weekly assessments of target participants’ behaviors from the point of view of the support person for the first 90 days post discharge from a hospital or crisis stabilization facility. At one year, the support person will receive a follow-up survey measuring any hospitalizations of the target participant, as well as their frequency of contact, satisfaction, and value of the service. These surveys, in addition to the target participants’ self-report surveys and EHR, will be utilized to measure whether the program had a positive effect on first appointment attendance, treatment adherence, and re-hospitalization rates.

- **Protection of Privacy-** The research team will include the 211 staff: the Contact Specialist, Supervisor, and 211 Director, the principal evaluator, discharge staff from the hospital IPU and crisis stabilization services, and Evalcorp. All members of the research team may have access to personally identifiable information and will be required to be trained in human subjects’ research protocols and sign the oath of confidentiality. All entities involved are HIPPA compliant organizations.

Discharge specialists will recruit subjects and administer informed consent. 211 will administer the push technology EMI data, self-report survey, follow up resources, and upload data via encrypted excel spreadsheets to VCBH. Informed consent forms will be administered by the discharge staff on paper hard copies will be kept in a locked file cabinet with limited access by authorized personnel. All EMI and self-report survey data will be downloaded automatically into encrypted Excel spreadsheets. Spreadsheets will include password protection. Hard copies of the forms will be destroyed after year four of the project or when the project is terminated. The research team will take active steps to ensure privacy is maintained during the administering of all project paperwork.

Measures

| Question | Indicator | Measures/Sources being Considered |
|--|--|--|
| 1. Are clients satisfied with EMI technology and do they find it valuable in their mental health recovery? | Participant engagement rates with EMI and positive response to satisfaction survey | Technology platform analytics data reported monthly. Text survey designed by Evalcorp measuring satisfaction and value |

| | | |
|--|---|--|
| 2. Do participants make it to their follow up appointment more frequently with text support? | First appointment attendance rate increases | Comparison group utilizing electronic health records (EHR) (pending IRB) or benchmark |
| 3. Does using mobile EMI increase treatment engagement? | Higher services utilization rates. | Services tracked in the EHR records and compared with participants and individuals in the comparison group (pending IRB approval) or benchmark |
| 4. Does using mobile EMI reduce the rate of re-hospitalizations? | Lower recidivism rates one-year post-intervention | Recidivism rates tracked by EHR records and self-report surveys with participants and comparison group or with participant's previous EHR history. |

- *What is the preliminary plan for how the data will be entered and analyzed?*

Data will be reviewed to establish any effect the intervention had on participation, value, satisfaction, treatment engagement, and recidivism rates. Data will be compared by age demographic of the participants and comparison groups using t-tests and chi-square analyses. Comparison of continuous measures, scores and Likert scales will be conducted by age and clinical characteristics.

Because of potential differences in the level of engagement of the support person, and to account more directly for the degree of adherence to the model, additional analyses will be performed repeating all the analyses above, including only individuals who had a support person identified in the study. This group will be separated into two groups (Parent and Other) and compared by the age of the enrolled participant. The groups will be compared by t-tests. Additional analysis will look at the support individuals by the degree of participation during the 90-day periods and be compared by repeated the above analysis.

7) **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?

Interface is a proven contractor with the County, successfully fulfilling multiple contracts to serve children and family and provide 211 services. They will be responsible for sending monthly data reports to the County for implementation and monitoring purposes. The County will provide project management, data analysis, technical support, regulation compliance and evaluation throughout the project.

II. ADDITIONAL INFORMATION FOR REGULATORY REQUIREMENTS

1) 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.

- **The Community Program Planning Process**

The County modified its approach to the Community Planning Process this past year, with community forums conducted in three different geographic regions of the County, and translation services available in all three. Community members were trained on MHSA rules and regulations, guiding principles and Innovation criteria. Community members were then asked to submit ideas for needed program and any innovative concepts. Needs and concepts could be contributed to the meeting by writing on the provided posters on the wall, picking up a submission form or going online. In addition to community forums, this training was presented to several groups and committees to invite their participation. Through these events, a full list of community needs was compiled with 52 innovative concepts.

- **The MHSA Planning Committee**

The MHSA Planning Committee reviewed all 52 innovation concepts, along with a small accompanying literature review that highlighted which programs seemed to be new concepts after a preliminary search. The Planning Committee was comprised of Behavioral Health Advisory Members (BHAB) who represented the following populations: consumers, youth, transitional age youth, law enforcement, older adults, and adults. The group each picked five innovative project ideas to pursue. The final list with the highest number of votes was compiled and presented to the full Behavioral Health Advisory Board for approval.

- **Interface Focus Groups**

The contractor conducted focus groups for youth and adults to determine the willingness and interest in a text-based communication line. Based on these results, they launched 211 text capability. Since going live, they have received an average of 167 requests for information a month.

2) PRIMARY PURPOSE

*Select **one** of the following as the primary purpose of your project. (I.e., the overarching purpose that most closely aligns with the need or challenge described in Item 1 (The Service Need).*

Increasing the quality of mental health services, including measurable outcomes, is the primary purpose for the project.

3) MHSA INNOVATIVE PROJECT CATEGORY

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

Making 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 – is the definition that best applies to the project.

4) POPULATION (IF APPLICABLE)

If your project includes direct services to mental health consumers, family members or individuals at risk of serious mental illness/serious emotional disturbance, please estimate number of individuals expected to be served annually. How are you estimating this number? Does the project plan to serve a focal population, e.g., providing specialized services for a target group, or having eligibility criteria that must be met? If so, please explain.

The project estimates 500 individuals at risk of serious mental illness or serious emotional disturbance will be served annually, with 1,000-1,500 over the three-year period. Eligibility criteria consist of discharge from hospitalization or crisis stabilization services (serving ages 6-59) during the project's active enrollment period.

5) 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.

- **Community Collaboration**

The project partners with local service agencies through the 211 service. All participants can be connected to housing, employment, food, education and any needed services through the regular 211 service built into the model.

- **Cultural Competency**

The text SMS service of 211 can be provided in multiple languages. The current top needs locally, outside of English, include Spanish, Mandarin, Arabic, Farsi, Russian and Vietnamese. According to the Pew Research Center, 95% of Americans own a cell phone. Pew also found that sending notifications via text to consenting survey panel members improves response time and boosts the share of respondents completing the survey on a mobile device (2015). The County is utilizing the cultural norm of texting to communicate on a cell phone to employ this project.

- **Client-Driven**

Participants will decide whether to participate, which support person they prefer and determine when and what intervention to take advantage of if and when they start to experience declining moods or thoughts of harm.

- **Family-Driven**

The family will be included in the project to help support participants in their wellness and recovery efforts after hospitalization.

- **Wellness, Recovery, and Resilience-Focused**

The project target goal is to lower rates of recidivism to psychiatric hospitalization through the utilization of EMI real-time, real-world assessment and connect participants to the supports they need. The idea is to support participants in their wellness and recovery through a non-intrusive client-driven model.

- **Integrated Service Experience for Clients and Families**

Agencies partnering on this project include Behavioral Health, the Healthcare Agency, local contractor Seneca children’s services and Interface 211 service, provider.

6) CONTINUITY OF CARE FOR INDIVIDUALS WITH SERIOUS MENTAL ILLNESS

The project is designed to enhance the use of current services, not add additional services. There will be no loss of services if the project is unsuccessful.

7) DECIDING WHETHER AND HOW TO CONTINUE THE PROJECT WITHOUT INN FUNDS

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. For example, if the evaluation does (or does not) indicate that the service or approach is effective, what are the next steps?

At the end of year three, if the project produces positive results and is deemed a success, the County will include the project in its PEI budget for the following year. If the project is unsuccessful in any of the four learning goals, the project will be discontinued.

8) COMMUNICATION AND DISSEMINATION PLAN

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

Annual updates will report on the process of the project’s learning goals, with a final report submitted to the State at the project’s conclusion. Ongoing presentation updates will be provided to the BHAB annually.

- *KEYWORDS for search: Please list up to 5 keywords or phrases for this project that someone interested in your project might use to find it in a search.*

Keywords for searching will include: “push technology,” “text message support,” “crisis care,” “re-hospitalization prevention” and “ecological momentary interventions.”

9) TIMELINE

- *Specify the total timeframe (duration) of the INN Project: 3 Years 0 Months*
- *Specify the expected start date and end date of your INN Project:
7/1/2018 - Start Date, 6/30/2021 - End Date*

- *Note: Please allow processing time for approval following official submission of the INN Project Description.*

- *Include a timeline that specifies key activities and milestones and a brief explanation of how the project's timeframe will allow sufficient time for startup and evaluation:*

| Time | |
|-----------------------|--|
| Year 1 Month 1-6 | <ul style="list-style-type: none"> - Contractor hires needed program staff - Contractor works with its staff to create text messaging surveys, assessments, timing sequences and follow up procedures - Training for enrolling participants takes place for hospitalization and crisis stabilization staff - IRB approval finalized - Project presented at the VCBH clinic town halls to ensure awareness |
| Year 1 Months 7-12 | <ul style="list-style-type: none"> - Enrollment of participants begins - Program proceeds to enrollment target of 300-500 participants - Enrollment targets are broken down into a range due to the fluctuation in hospitalization rates |
| Year 2 | <ul style="list-style-type: none"> - Year 1 data gathered and organized - Follow up surveys begin - Past 5 years of data collected for all enrolled participants (as possible) - Program proceeds to enroll 500-1000 participants |
| Year 3 Months 1-5 | <ul style="list-style-type: none"> - Year 2 data gathered and organized - Program proceeds to enroll 0-250 participants as need to complete enrollment targets then enrollment concludes |
| Year 3 Months 6-12 | <ul style="list-style-type: none"> - Follow up surveys conclude - All data from the evaluation questions are analyzed for the final report |

10) INN Project Budget and Source of Expenditures

The next three sections identify how the MHSa funds are being utilized:

- **BUDGET NARRATIVE**
(Specifics about how money is being spent for the development of this project)
- **BUDGET BY FISCAL YEAR AND SPECIFIC BUDGET CATEGORY**
(Identification of expenses of the project by funding category and fiscal year)
- **BUDGET CONTEXT** *(If MHSa funds are being leveraged with other funding sources)*

III. BUDGET NARRATIVE

Provide a brief budget narrative to explain how the total budget is appropriate for the described INN project. The goal of the narrative should be to provide the interested reader with both an overview of the total project and enough detail to understand the proposed project structure. Ideally, the narrative would include an explanation of amounts budgeted to ensure/support stakeholder involvement (For example, “\$5000 for annual involvement stipends for stakeholder representatives, for 3 years: Total \$15,000”) and identify the key personnel and contracted roles and responsibilities that will be involved in the project (For example, “Project coordinator, full-time; Statistical consultant, part-time; 2 Research assistants, part-time...”). Please include a discussion of administration expenses (direct and indirect) and evaluation expenses associated with this project. Please consider amounts associated with developing, refining, piloting and evaluating the proposed project and the dissemination of the Innovative project results.

OPERATING COSTS

Indirect Costs

VCBH Administrative Allocation (15%) – County standard administration cost allocation includes personnel, equipment, office space, taxes, etc.

Total Indirect Costs: \$57,252

CONSULTANT COSTS/CONTRACTS

Direct Costs

Push Technology Services: (Interface)

Personnel

Contact Specialist: Trained on VCBH Push Technology Project process, procedures, and goals of the program. Connects participants to services menu, provides follow up support, and connection to any additional non clinical needs that participants request. Includes a 3% year over year increase.

Time to Project: 36 months; 100% FTE Annual Salary \$34,320 Project Salary= \$106,080

Supervisor: Develop VCBH Push Technology Project process, procedures, that support the goals of the program. Provides supervision to contact specialist. Responsible for sending monthly data reports and quarterly narrative reports. Includes a 3% year over year increase.

Time to Project 36 months; 50% FTE Annual Salary \$47,116 Project Salary= \$72,815

Benefits: (22.50%) Total= \$40,251

Total Personnel = \$219,146

Operating Expense: Occupancy, Telephone, Texting, Network Management, Supplies, Equipment

Operating Expense Total = \$36,725

Indirect Costs: (15%) Overhead cost allocation of contractor.

Total Indirect Cost = \$38,381

Total Push Technology Services: \$294,252

Evaluation: (Evalcorp)-Creation of formal evaluation plan, matching participants, control group data records, analysis of data findings, two annual reports and one final summation report of project outcomes.

Total Evaluation Cost = \$87,429

TOTAL CONSULTANT/CONTRACTORS =\$381,681

GRAND TOTAL: \$438,933

[FY2009-10 – AB114 Funds of \\$680.300 to be utilized for estimated expenditures \\$438,933 for INN project Push Technology.](#)

| I. New Innovative Project Budget By FISCAL YEAR (FY)* | | | | | |
|--|-----------------------|----------------|----------------|----------------|---------------|
| EXPENDITURES | | | | | |
| PERSONNEL COSTs (salaries, wages, benefits) | | FY 2019 | FY 2020 | FY 2021 | Total |
| 1. | Salaries | | | | |
| 2. | Direct Costs | | | | |
| 3. | Indirect Costs | | | | |
| 4. | Total Personnel Costs | | | | |
| | | | | | |
| OPERATING COSTs | | FY 2019 | FY 2020 | FY 2021 | Total |
| 5. | Direct Costs | | | | |
| 6. | Indirect Costs | 18,100 | 18,483 | 20,669 | 57,252 |
| 7. | Total Operating Costs | | | | |

| NON-RECURRING COSTS (equipment, technology) | | FY 2019 | FY 2020 | FY 2021 | Total |
|---|---------------------------|----------------|----------------|----------------|----------------|
| 8. | | | | | |
| 9. | | | | | |
| 10. | Total Non-recurring costs | | | | |
| CONSULTANT COSTS/CONTRACTS (clinical, training, facilitator, evaluation) | | FY 2019 | FY 2020 | FY 2021 | Total |
| 11. | Direct Costs | 108,234 | 110,430 | 124,636 | 343,300 |
| 12. | Indirect Costs | 12,435 | 12,791 | 13,155 | 38,381 |
| 13. | Total Consultant Costs | 120,669 | 123,221 | 137,789 | 381,681 |

| OTHER EXPENDITURES (please explain in budget narrative) | | FY 2019 | FY 2020 | FY 2021 | Total |
|--|--------------------------|----------------|----------------|----------------|--------------|
| 14. | | | | | |
| 15. | | | | | |
| 16. | Total Other expenditures | | | | |

| BUDGET TOTALS | FY 2019 | FY 2020 | FY 2021 | Total |
|---|----------------|----------------|----------------|----------------|
| Personnel (line 1) | | | | |
| Direct Costs (add lines 2, 5 and 11 from above) | 108,234 | 110,430 | 124,636 | 343,300 |
| Indirect Costs (add lines 3, 6 and 12 from above) | 30,535 | 31,274 | 33,824 | 95,633 |
| Non-recurring costs (line 10) | | | | |
| Other Expenditures (line 16) | | | | |
| TOTAL INNOVATION BUDGET | 138,169 | 141,704 | 158,460 | 438,933 |

- For a complete definition of direct and indirect costs, please use DHCS Information Notice 14-033. This notice aligns with the federal definition for direct/indirect costs.

| II. Expenditures By Funding Source and FISCAL YEAR (FY) | | | | | |
|--|---|----------------|----------------|----------------|---------------|
| Administration: | | | | | |
| A. | Estimated total mental health expenditures for ADMINISTRATION for the entire duration of this INN Project by FY & the following funding sources: | FY 2019 | FY 2020 | FY 2021 | Total |
| 1. | Innovative MHSAs Funds | 18,100 | 18,483 | 20,669 | 57,252 |
| 2. | Federal Financial Participation | | | | |
| 3. | 1991 Realignment | | | | |
| 4. | Behavioral Health Sub-Account | | | | |
| 5. | Other funding* | | | | |
| 6. | Total Proposed Administration | | | | |
| Evaluation: | | | | | |
| B. | Estimated total mental health expenditures for EVALUATION for the entire duration of this INN Project by FY & the following funding sources: | FY 2019 | FY 2020 | FY 2021 | Total |
| 1. | Innovative MHSAs Funds | 25,333 | 25,163 | 36,933 | 87,429 |
| 2. | Federal Financial Participation | | | | |
| 3. | 1991 Realignment | | | | |
| 4. | Behavioral Health Sub-Account | | | | |
| 5. | Other funding* | | | | |
| 6. | Total Proposed Evaluation | 25,333 | 25,163 | 36,933 | 87,429 |
| TOTAL: | | | | | |
| C. | Estimated TOTAL mental health expenditures (this sum to total | FY 2019 | FY 2020 | FY 2021 | Total |

| | | | | | |
|--|--|----------------|----------------|----------------|----------------|
| | funding requested) for the entire duration of this INN Project by FY & the following funding sources: | | | | |
| 1. | Innovative MHSA Funds | 138,169 | 141,704 | 158,460 | 438,933 |
| 2. | Federal Financial Participation | | | | |
| 3. | 1991 Realignment | | | | |
| 4. | Behavioral Health Sub-Account | | | | |
| 5. | Other funding* | | | | |
| 6. | Total Proposed Expenditures | 138,769 | 141,704 | 158,460 | 438,933 |
| | | | | | |
| *If “Other funding” is included, please explain. | | | | | |

References

Bastiampillai, T. Sharfstein, S. Allison, S (2016) Increase in US Suicide Rates and the Critical Decline in Psychiatric Beds, *JAMA*, Vol 316 (24) Pages 2591-2592

Beebe, L. H. (2001) Community nursing support for clients with schizophrenia, *Archives of Psychiatric Nursing*, Volume 15 (5), Pages 214 - 222

Blader, J.C. (2004) Symptom, Family, and Service Predictors of Children's Psychiatric Rehospitalization Within One Year of Discharge, *Journal of the American Academy of Child and Adolescent Psychiatry*, Vol 43 (4) Pages 440-451

Compton M.T., Rudisch B.E., Craw J., Thompson, T. Owens, D.A. (2006) Predictors of missed first appointments at community mental health centers after psychiatric hospitalization. *Psychiatric Services* Vol 57(4), Pages531–537

Dixon, L., Goldberg, R., Iannone, V., Lucksted, A., Brown, C., Kreyenbuhl, J., Fang, L., & Potts, W. (2009). Use of a critical time intervention to promote continuity of care after psychiatric inpatient hospitalization. *Psychiatric Services*, 60(4), 451–458

Goldacre M., Seagroatt V., Hawton K. (1993) Suicide after discharge from psychiatric inpatient care, *The Lancet*, Vol 342 (8866), Pages 283-286

James, S., Charlemagne, S.J., Gilman, A.B. et al. (2010) Post-Discharge Services and Psychiatric Rehospitalization Among Children and Youth, *Administration and Policy in Mental Health and Mental Health Services Research*. Vol 37 (5) 433-445.

La E.M, Lich, K.H. Wells, R. Ellis, A. Swartz, M.S. Zhu, R. Morrissey, J.P. (2014) Increasing Access to State Psychiatric Hospital Beds: Exploring Supply Side Solutions, *Psychiatric Services*, Vol 67, (5) Pages 523-528
<https://doi.org/10.1176/appi.ps.201400570>

Mohr, D.C. Burns, M.N. Schueller, S.M. Clarke, G. Klinkman, M. (2013) Behavioral Intervention Technologies: Evidence review and recommendations or future research in mental health, *General Hospital Psychiatry*, Vol 35, Pages 322-338.

Pew Research Center, American Trends Panel (2015)
<http://www.pewresearch.org/2015/04/08/building-pew-research-centers-american-trends-panel/>

Wenze, S.J. Miller, I.W. (2010) Use of ecological momentary assessment I mood disorders research, *Clinical Psychology Review*, Vol 30 Pages 794-804