Addendum B

Identification of Project

Project Title:	**Crisis Call Reporting Improvement**	Clinical: ____	Non-Clinical: _X__
Project Leader:	**Amanda Fenn, MPH candidate**	Title: PIP Coordinator	Role: Independent Contractor
Initiation Date:	**December, 2015**		
Completion :	**Active and On-going**		

Section 1: Select & Describe the Study Topic

MCBH assembled a committee for this PIP comprised of the Director (Robin Roberts), the Fiscal & Administrative Services Officer (Shirley Martin), the Quality Assurance Coordinator (Julie Jones), the Clinical Supervisor (Annie Linaweaver), and the PIP Coordinator (Amanda Fenn). These committee members were selected for their expertise as it relates to the crisis call log. While the Clinical Supervisor is responsible for ensuring that the data is entered correctly and follow-ups are recorded, the QA Coordinator uses the data for reporting, and the Fiscal & Administrative Services Officer uses it for billing and reporting. By understanding how each entity uses the call log and understanding the barriers to use, the PIP Coordinator has been able to outline a plan that will improve crisis call log reporting.

Accurately and consistently reporting data from crisis calls and any resulting follow-up calls/visits is essential to the functioning of MCBH – it ensures that consumers are getting the best care and it allows the department to report accurate timeliness data and generate comprehensive fiscal reports. Presently, MCBH uses a dual entry system in which providers record data in a crisis call log (an Excel sheet housed on the department's shared drive) and record the crisis in the EHR. However, it has come to the attention of the PIP Coordinator that the crisis call log is not being filled out in its entirety 100% of the time, and that providers are not recording post-crisis follow-up calls/visits in the EHR 100% of the time. This incomplete data creates a barrier to accurate reporting and creates a burden for administrative staff who have to later fill in missing information (when obtaining the missing information is even possible).

When brainstorming possible PIP projects, the Director and Fiscal and Administrative Services Officer wanted to analyze the crisis call data and subsequent follow-ups to look for trends that could inform an improvement project. The PIP Coordinator launched into this effort and discovered that at least 15 percent of the cells in the crisis call log were incorrectly or incompletely filled out. Further conversation with the clinical supervisor revealed that the she suspects that not all follow-ups (especially phone calls) are accurately reported in the EHR, a finding that further invalidated the PIP Coordinator's efforts at analyzing the crisis call and follow-up data.

As a result, MCBH will be targeting improved crisis call and follow-up reporting as a non-clinical PIP. This improvement will ensure that the department is able to report accurate crisis call data and it will help ensure that consumers are receiving follow-up calls after crisis. Following this PIP, all clinical staff will fill out the crisis call log completely and properly 100 percent of the time within 48 hours of the initial crisis call. Additionally, all clinical staff will record all post-crisis follow-up calls/visits in the EHR notes. These goals will be accomplished through a combination of processes/systems improvement and provider education and training.

Section 2: Define & Include the Study Question

After implementation of the improved crisis call system and the related provider training, do clinical staff:

1. Fill out the crisis call log completely?
2. Fill out the crisis call log properly?
3. Fill out the crisis call log within 48 hours?
4. Record notes for all post-crisis follow-up calls/visits?

Section 3: Identify Study Population

The study population for this PIP will consist of all MCBH clinical staff who go on crisis calls. The team is approximately 50 percent Caucasian and 50 percent Hispanic/Latino. The data for this study will come from self-report measures, audits of the crisis call log, and chart reviews of crisis call consumers.

Section 4: Select & Explain the Study Indicators

See Table 1.

Table 1: Study Indicators	
Study Question	**After implementation of the improved crisis call system and the related provider training, do clinical staff fill out the crisis call log completely, properly, and within 48 hours? Do clinical staff record notes for all post-crisis follow-up calls?**
Quantifiable Measure #1:	Percent of cells in crisis call log not filled in completely or properly during prescribed time period.
Rationale for Selection of Study Measures 1-2:	The goal of this PIP is to increase complete and proper crisis call log reporting within 48 hours to 100 percent. Therefore, an audit of the call log will allow the PIP Coordinator to assess whether the goal has been met.
Numerator	# of complete and properly filled in cells/fields in crisis call log during prescribed time period
Denominator	# of cells/fields in crisis call log during prescribed time period
Measurement dates:	Post implementation: Days 0-30 (measured at Day 30); Days 31-90 (measured at Day 90); Days 91-180 (measured at Day 180)
Goal:	100% complete and properly filled out from Days 91-180.
Quantifiable Measure #2	Percent of crisis calls that are logged within 48 hours during prescribed time period.
Numerator	# of crisis calls that were recorded in crisis call log within 48 hours during prescribed time period
Denominator	# of calls in crisis call log during prescribed time period
Measurement dates:	Post implementation: Days 0-30 (measured at Day 30); Days 31-90 (measured at Day 90); Days 91-180 (measured at Day 180)
Goal:	100% of crisis calls are recorded in the crisis call log within 48 hours from Days 91-180.
Quantifiable Measure #3:	Percent of post-crisis follow-up calls/visits that are recorded in the EHR notes, as measured by clinical staff self-report.
Rationale for Selection of Study Measures 3:	It is challenging to objectively measure whether 100% post-crisis follow-up calls/visits are reported in the notes because the denominator (all post-crisis follow-up calls/visits made) also requires clinical staff self-report. As a substitute for this self-reporting mechanism, this evaluation will ask providers "In the last [30, 60, or

	90 days], I wrote notes in the EHR for __ percent of the post-crisis follow-up calls/visits I made."
Reported Measure	Self-reported single measure.
Measurement dates:	Post implementation: Days 0-30 (measured at Day 30); Days 31-90 (measured at Day 90); Days 91-180 (measured at Day 180)
Goal:	Clinical staff members report that 100% of post-crisis follow-up calls/visits are recorded in the EHR notes from Days 91-180.
Quantifiable Measure #4:	Percent change in the number of crisis call consumers with post-crisis follow-up. Compare: baseline (a 6-month period pre-implementation) to 6-month periods post-implementation.
Rationale for Selection of Study Measures 4:	Quantifiable Measure #3 will be followed-up with a chart review of crisis call consumers. This will allow the PIP Coordinator to compare the pre-intervention baseline with the current number of crisis call consumers whose records show clinician follow-up. Although this will not tell us if the goal of 100% recording has taken place, it will tell us if there has been measurable improvement in recording at least one call/visit.
Numerator	Difference between % of consumers with reported post-crisis follow-up calls/visits from post-implementation to baseline
Denominator	% of consumers with reported post-crisis follow-up calls/visits at baseline
Measurement dates:	Post-implementation: Days 0-180 (measured at Day 180); Days 181-365 (measured at Day 365). These will be compared with a baseline drawn from a six-month period before implementation.
Goal:	50% increase in the number of crisis call consumers who have a post-crisis follow-up reported in their EHR notes from Days 181-365.

Section 5: Develop & Describe Study Interventions

The intervention that will lead to improvement in the case of this PIP is still in the design phases. At present, the PIP Coordinator is conducting a small-scale needs assessment to identify barriers to use and solutions for improvement. (See Table 2 below for a sample of the questions asked during the initial phases of the needs assessment). Through this assessment, the PIP Coordinator has identified that few clinical staff like filling out the log, understand why every cell is important, or report being satisfied with the log. In the open ended questions, the four of the five clinical staff members polled mentioned that they disliked how redundant the log seems and would like it to be simplified. Additionally, rates of inputting data into the log within 48 hours were low. Focusing in on such barriers as low satisfaction and lack of knowledge about the log, the PIP Coordinator will move forward with the Non-Clinical PIP Committee to brainstorm solutions that will make the crisis call log easier to use. This process will also involve a consultation with members of the Mono County IT Department.

As a result of this process, the PIP Committee will introduce an improved crisis call log system to the rest of the department. Depending upon the resources required and the agreements reached, this could be as simple as a streamlined Excel sheet or as complex as a custom-built app. Immediately following the introduction of the improved crisis call log, the PIP and QA Coordinators will train the clinical staff on how to use the log to completely and properly record the crisis call data. This will be measured by Quantifiable Measure #1. In order to further overcome the barriers outlined above, the PIP and QA Coordinators will provide technical assistance when requested, and specifically during the first month of implementation.

The training will also emphasize two additional requirements: 1) Crisis call data must be recorded in the crisis call log within 48 hours and 2) Staff must record notes in the EHR when they complete post-crisis follow-up calls/visits. In order to facilitate change, administrative staff will explain the importance of these reports and the rationale behind the 48 hour time limit. The clinical supervisor will also work with staff regularly to ensure that they comply with these expectations. This portion of the intervention will be measured by Quantifiable Measures 2-4. Furthermore, the PIP Coordinator has built several short-term measurement periods into the data collection plan (0-30 days and 31-91 days). Collecting data from these time periods will allow her to assess whether clinical staff are making changes in the short-term and develop solutions for compliance if they are not.

Table 2: Crisis Call Log Practices/Needs Assessment Survey	
Item	Answer Options
I like filling out the crisis call log.	Agree/Disagree 1-4 Scale
I always fill out every single cell of the call log.	Agree/Disagree 1-4 Scale
I am satisfied with the crisis call log.	Agree/Disagree 1-4 Scale
I think filling out the call log is hard.	Agree/Disagree 1-4 Scale
I know how to fill out the crisis call log.	Agree/Disagree 1-4 Scale
I think the crisis call log is important.	Agree/Disagree 1-4 Scale
I think every cell in the call is important.	Agree/Disagree 1-4 Scale
I think I fill out the crisis call log exactly the same as everyone else.	Agree/Disagree 1-4 Scale
I always input my crisis call data within 48 hours.	Agree/Disagree 1-4 Scale
After a crisis call, how often do you follow-up with consumers by calling them?	Always/Never 1-5 Scale
When you make follow-up phone calls, how often do you record the calls in the notes?	Always/Never 1-5 Scale
What do you like/dislike about the log?	Open-ended
What keeps you from filling out every single cell?	Open-ended
If you could design a new log, what would it be like?	Open-ended
What could make filling out the log easier?	Open-ended

Section 6: Develop Study Design & Data Collection Procedures

See Table 3 below and the accompanying text on the following page.

Table 3: Data Collection & Analysis				
Measure	Who	Timing	Data Collection Process	Analysis Steps
Percent of cells in crisis call log not filled in completely or properly	PIP Coordinator	Data collected on: - Day 30 for 0-30 days post-implementation; - Day 90 for 31-90 days; - Day 180 for 91-180 days	Collected from the crisis call log during an audit looking for cells/fields that are incompletely or improperly filled out. PIP Coordinator will highlight these cells and count them at the end of the audit.	1. Calculate the total number of cells that should be filled out 2. Calculate the number of cells actually filled out by subtracting the number of highlighted cells from the number of cells that should be filled out 3. Divide the number of cells actually filled out by the number of cells that should be filled out.*
Percent of crisis calls that are logged within 48 hours	PIP Coordinator	See Above	Collected from the crisis call log during an audit assessing the time of the initial call and the time the call was logged (an item will be added to the log asking for the current date/time).	1. Calculate the number of calls that were logged within 48 hours of the initial crisis call during the time period. 2. Divide by total number of calls during time period.*
Percent of post-crisis follow-up calls that are recorded in the EHR notes.	PIP Coordinator	See Above	This measure requires a simple self-report survey, which will be administered and analyzed via SurveyMonkey at each time period.	PIP Coordinator will average the self-reported scores and report whether or not they meet the 100 percent goal.*
Percent change in the number of crisis call consumers with post-crisis follow-up	PIP Coordinator Fiscal and Admin Services Officer	Data collected on: - Day 180 for days 0-180 post-implementation - Day 365 for days 181-365 These data will be compared with a baseline drawn from a 180-day period before implementation.	The Fiscal and Administrative Services Officer, will pull post-crisis follow-up call data from the EHR and provide it to PIP Coordinator in Excel.	1. Calculate the total number of crisis calls within a 180-day period before implementation 2. Of these, calculate the number of consumers who received post-crisis follow-up calls/visits as recorded in the EHR. 3. Divide those who received calls/visits by the total to generate a percentage. 4. 180 days after implementation, repeat steps one through three with the post-crisis call follow-up data for days 0-180. 5. Calculate the percent increase by subtracting baseline percentage from post-implementation percentage. 6. Divide baseline percentage by the difference. 7. Repeat at day 365 using the post-crisis call follow-up data from days 181-365.*

Data collection and analysis continued:

*These data will be reported using Table 4 in Section 7 below.

These simple data collection processes will allow for consistent and accurate data collection over time. Additionally, because measures 1-2 focus solely on the results of the crisis call log, we will be capturing all the data required using this single source, which also encompasses the work of the entire study population. Furthermore, measure 3 will capture all clinical staff who complete crisis calls and measure 4 will audit all crisis call consumers and therefore also captures the work of the entire study population.

The measures for this project were designed by the PIP Coordinator, who is an independent contractor. She will also be responsible for collecting and analyzing the data. The PIP Coordinator is a Master of Public Health Student with experience in survey development, evaluation plan development, and program planning. She is proficient in SPSS statistical software.

Finally, if it appears that progress is not being made at any of the shorter-term time periods, then the PIP and QA Coordinator will work with the clinical supervisor to ensure that clinical staff understand the importance of this compliance. If necessary, the PIP Coordinator may also complete another needs assessment to explore why staff are not utilizing the crisis call log system despite the improvements.

Section 7: Data Analysis & Interpretation of Study Results

This PIP is active and on-going, therefore the analysis of the each of the Quantifiable Measures has not yet been completed. Please see Table 3 in Section 6 for the analysis steps for each measure. The data that has been collected has been organized in the Table 4 below. The cells highlighted in gold indicate where future data will be input.

The data analysis plan has been designed to measure progress at several key milestones; for Measures 1-3, measurement will occur at 30, 90, and 180 days. The first two measurements have been built in to allow the PIP and QA Coordinators opportunities to assess progress toward the six-month goal. If the clinical staff are not showing improvement at 30 and 90 days, then steps will be taken immediately to improve outcomes. Since each of the measures for this PIP have either a 100 percent adherence or specific percentage increase goal, this PIP will not by analyzing the data for statistical significance.

Table 4: Summary of Performance Indicators & Measurement

Performance Indicator	180-Day Pre-Imp Baseline	Post-Imp: 0-30 Days	Post-Imp: 31-90 Days	Post-Imp: 91-180 Days	Post-Imp 181-365 Days	Goal	Goal Met? (Y/N)
Percent of cells in crisis call log not filled in completely or properly.	n/a				n/a	100% during 91-180 Days	
Percent of crisis calls that are logged within 48 hours.	n/a				n/a	100% during 91-180 Days	
Percent of post-crisis follow-up calls that are recorded in the EHR notes.	n/a				n/a	100% during 91-180 Days	
Percent change in the number of crisis call consumers with post-crisis follow-up recorded.	12/24-6/24 - Total calls: 22 - Calls with follow-up: 16 - Baseline: 72%	n/a	n/a	% this Period: __ % Increase from baseline: __	% this Period: __ % Increase from baseline: __	50% Increase from Baseline to 181-365 Days	

Section 8: Assess Outcomes of PIP

This PIP is active and ongoing, therefore a thoughtful reflection on the results of the PIP is not possible at this time. However, given the small sample size of the provider population at MCBH and the accessibility of the primary data sources (EHR and crisis call log), we do not anticipate distinct challenges related to sampling, monitoring, or analysis for measures 1-2. Since each of the measures for this PIP have either a 100 percent adherence or specific percentage increase goal, this PIP will not by analyzing the data for statistical significance.

If this PIP meets its goal of the crisis call log being completely and properly filled out within 48 hours 100 percent of the time, then we can assume that the intervention was the cause of success. There are minimal threats to internal validity for these two measures; this study is not designed to be generalized across individuals, settings, and times, and is therefore not subject to threats to external validity.

Measures 3-4 pose more challenges in terms of measuring success; however, given the difficult nature of measuring the number of post-crisis call follow-up calls, and subsequently being able to measure the percent that are actually recorded, measures 3 and 4 do provide some insight into the practices that MCBH would like to improve.

Section 9: Plan for "Real" Improvement

The same methodology will be used when each measurement is repeated because 1) the PIP Coordinator, who designed the measures, will carry out both measurements and 2) the instructions for calculating each measure are clearly laid out in this report.

This PIP is active and on-going, however, it is designed specifically to tell MCBH if there is quantitative improvement in processes of reporting. The data collection plan is also designed to measure the improvement over time. Once MCBH has reached the end of the designated data collection and analysis plans, the PIP committee will work together to determine if further measurement/monitoring is needed.

If there are improvements in reporting (as measured by items 1-4), then it is likely that the PIP led to these improvements. Generally, this PIP has good "face validity": it is unlikely that clinical staff simply started improving their reporting at the same time that this PIP was implemented and it was not a result of the PIP.

Finally, since each of the measures for this PIP have either a 100 percent adherence or specific percentage increase goal, this PIP will not by analyzing the data for statistical significance. However, given the lofty goals of this PIP (100% compliance), if the goals are met, then the MCBH will consider this to be real improvement.