Performance Improvement Project Implementation & Submission Tool

PLANNING TEMPLATE

INTRODUCTION & INSTRUCTION

This tool provides a structure for development and submission of Performance Improvement Projects (PIPs). It is based on EQR Protocol 3: Validating Performance Improvement Projects (PIPs), as a mandatory protocol delivered by the Centers for Medicare & Medicaid Services (CMS) in September of 2012.

The use of this format for PIP submission will assure that the MHP addresses all of the required elements of a PIP. If the MHP uses another format, they must ensure that all of the required elements of the PIP are addressed and included in their submission.

- The PIP should target improvement in either a clinical or non-clinical service delivered by the MHP.
- The PIP process is not used to evaluate the effectiveness of a specific program operated by the MHP. If a specific program is experiencing identified problems, changes and interventions can be studied using the PIP process. This can be done to create improvements in the program and should be included in the narrative.
- The narrative should explain **how addressing the study issue will also address a broad spectrum of consumer care and services over time.** If the PIP addresses a high-impact or high risk condition, it may involve a smaller portion of the MHP consumer population, so the importance of addressing this type of issue must be detailed in the study narrative.
- Each year a PIP is evaluated is separate and specific. Although topic selection and explanation may cover more the one PIP year, every section should be reviewed and updated, as needed, to ensure continued relevance and to address on-going and new interventions or changes to the study.
- If sampling methods are used the documentation presented must include the appropriateness and validity of the sampling method, the type of sampling method used and why, and what statistical subset of the consumer population was used.
- General information about the use of sampling methods and the types of sampling methods to use to obtain valid and reliable information can be found in Appendix II of the EQR Protocols.[1]

[1] EQR Protocol: Appendix II: Sampling Approaches, Sept. 2012, DHHS, Centers for Medicare & Medicaid Services (CMS), OMB Approval No. 0938-0786

IDENTIFICATION OF PLAN/PROJECT

Plan Name:	**DECREASING NO SHOW RATES TO PSYCHIATRIST APPTS.**		
Project Title:	**Reducing No Show Rates**	**Clinical: X** Clinical:	
Project Leader:	**Leticia V. Garcia**	Title: Administrative Analyst III	Role: Coordinator
Initiation Date:	**September 02, 2015**		
Completion :	**In progress**		

SECTION 1: SELECT & DESCRIBE THE STUDY TOPIC

1. **The PIP Study Topic selection narrative should include a description of stakeholders involved in developing and implementing the PIP. MHPs are encouraged to seek input from consumers and all stakeholders who are users of, or are concerned with specific areas of service.**

   - **Assemble a multi-functional team.**

     ICBHS formed a PIP Committee to include, but not be limited to, the following: Assistant Director, Deputy Director of YAYA Services, Behavioral Health Manager of YAYA Services and the Quality Management Unit, Program Supervisors for the YAYA Teams and Quality Management Unit, and Administrative Analysts. These PIP committee members were selected due to their knowledge and experience with the target population, which is the Youth and Young Adults Services division.

   - **Describe the stakeholders who are involved in developing and implementation of this PIP, and how they were selected to participate.**

     Andrea Kuhlen, Assistant Director
     Cindy Guz, Deputy Director, YAYA Services
     Gabriela Jimenez, Behavioral Health Manager, YAYA Services
     Anna Welzein, Behavioral Health Manager, YAYA Services
     Isabel Chavez, Behavioral Health Manager, Managed Care
     Sarah Moore, Program Supervisor, Quality Management Unit
     Leticia V. Garcia, Administrative Analyst, Quality Management Unit/Coordinator
     Sonia Contreras, Administrative Analyst, Quality Management Unit
     Elizabeth Van Zant, Program Supervisor, YAYA
     Mary Campos, Program Supervisor, YAYA
     Jessica Aviles, Program Supervisor, YAYA
     Dalia Pesqueira, Program Supervisor, YAYA
     Lilly Trillas, Office Assistant, QM

Define the problem.

- **The problem to be addressed should be clearly stated with narrative explanation including what brought the problem to the attention of the MHP.**

- **What is the problem?**
- **How did it come to your attention?**

The MHP has identified that the Youth and Young Adults (YAYA) Division has a high no show rate to psychiatric appointments. The Quality Management (QM) Unit monitors appointment no show rates to on a quarterly basis and has determined that the YAYA Division has consistently high no show rates to psychiatric appointments. No show data for psychiatric appointments for the overall MHP and each MHP division is presented to the Quality Improvement Committee (QIC) at least annually. On June 11, 2015, the QIC members reviewed the no show data for psychiatric appointments and recommended that a PIP be developed to target the high no show rates seen in the YAYA division.

- **What data have you reviewed that suggests the issue is indeed a problem for the MHP? Describe any relevant benchmarks.**

The MHP has a benchmark for no show rates to psychiatry appointment of 25% or less. Anything over the benchmark is considered opportunities for improvement. The QM Unit has been measuring the No Show Rates for all divisions, and the YAYA Division has consistently exceeded the 25% benchmark. The data reviewed was the quarterly No Show To Psychiatry Appointments Reports for FY 13-14 and FY 14-15 and is included as **Attachment 1.** The YAYA Division has exceeded the benchmark for the last two fiscal years as follows:

Fiscal Year	Percentage
FY 14-15	32%
FY 13-14	36%

The no show rates were also analyzed by program for FY 14-15 and is included as **Attachment 2.**

- **What literature and/or research have been reviewed that explain the issue's relevance to the MHP's consumers?**

There is considerable literature dedicated to the study of medical patient no-shows and their importance in clients' outcomes, health risks associated, and delays in care. The MHP examined the following literature regarding patient "no-shows" to a medical appointments:

There are multiple effects felt by the provider, staff, system as well as the patient which include:

- *Health risk of the patient that does not show to the appointment*
- *Health risk of the patient seeking an appointment, unable to book in that no-show slot*
- *Delay care for both the no-show patient and the patient unable to book in that slot*
- *Poor staff utilization*
- *Poor continuity of care*
- *Patient liability risks*
- *Loss of multiple streams of revenue (staff utilization, provider, productivity, etc.)*

Literature also offers many reasons for patients to not show for an appointment, as well as general characteristics of a no-show patient.
A recent study suggests that patients may be more likely to show up for their appointments if they get a telephone call from the office – a call from an actual person, not a machine. *Approximately 23.1% of patients who received **no** reminder call missed their appointments. The number went down to 17.3% if patients were contacted by the House Calls automated appointment reminder system offered by TeleVox Software Inc. in Mobile Ala., they system used for the study. But the no-show went down further to almost 13.6% if an actual staff member made the call.* *Amednews.com: No –Show rates lowest when patients called by human being. Retrieved from http://www.amendnews.com/article/20100628*
To develop effective solutions for reducing no-shows, missed appointments rates and reasons must be identified. *Defife J. Conklin C. Smith J. 2010. Brief Reports: Psychotherapy Appointments No-Shows: Rates and Reasons.*
The predominant model of ambulatory health care currently involves intermittent visits to a physician's office, whether in a private practice, a group practice, or a hospital-based clinic. Access to visits can be constrained by many factors: system design, including geographic availability, hours of operation, IT capability, and practice management; availability of providers, including expertise and numbers individual preferences, and accountability; and capability of patients, including preference, transportation, and insurance status. Balancing these factors when scheduling appointments makes the scheduling process exceedingly complex and often frustrating for patients and providers. Newer models of care aim to simplify this model, with the development of targeted strategies to standardize processes, simplify steps, and redesign the local system of care. Brandenburg, Gabow, Steele, Toussaint, & Tyson February 2015. Innovation and Best Practices in Health Care Scheduling. Retrieved from: http://nam.edu/wp-content/uploads/2015/06/SchedulingBestPractices.pdf
Studies have explored demographic variables correlated with missed appointments. Factors identified relate to the ease of access to mental health services across demographic groups. Individuals with greater barriers to care such as those who are younger, ethnic minorities, living farther away from treatment settings, poorly insured, less educated or lower socioeconomic status have greater no-show rates. *Psychiatric severity has demonstrated links with missed appointment rates, but mostly at the extreme ends of the symptomatic spectrum; patient who are acutely ill or those who are low in symptomatic and interpersonal*

distress are more likely to miss scheduled treatment appointments. *In approaching the no-show problem from a different perspective, Garuda et. Al (1998)* ***discourages the exploration of general demographic factors related to treatment noncompliance in favor of identifying more specific underlying reasons behind patient no-shows.*** *Some commonly identified reasons for missed appointments can be categorized as related to the logistical (limited access to transportation, difficulty leaving work or getting childcare, illness), the administrative (longer lag-times between appointment scheduling and the date for which an appointment is to occur, longer waiting times on arrival at the clinic, poor understanding to the scheduling system, perceived disrespect from health care providers) or the personal (forgetting, skepticism of health care service efficacy, and emotional discomfort or embarrassment; Centorrino et al., 2001; Lacy et al., 2004; However, these investigations overlook any ongoing clinical process factors contributing no-show behavior.* *Psychotherapy appointment no-shows: rates and reasons* *Jared A. Defife, Carolyn Z. Conklin and Janna M. Smith*
Individuals who have substance abuse or mental health problems can face particular health challenges. For example, they frequently experience difficulties in accessing, receiving, and benefiting from care. *Institute of Medicine.*
Patients who do not keep physician appointments (no-shows) represent a significant loss to healthcare providers. For patients, the cost includes their dissatisfaction and reduced quality of care. An automated telephone appointment reminder system may decrease the no-show rate. Understanding characteristics of patients who miss their appointments will aid in the formulation of interventions to reduce no-show rates. *The Institute of Medicine: The Effectiveness of Outpatient Appointment Reminder Systems in Reducing No-Show Rates*
Patient no-Shows and last minute cancelations are a high source of frustration and expense for some physician practices. There are a number of ways an office may attempt to remedy this problem, but some of the more popular flawed while other important steps are often overlooked. *Evaluate the Reminder System. If the reminder system you are currently using is not working, try something else, such as sending reminder emails/text messages or having patients self-address reminder postcards for their next visit as they check out.* *Dos and don'ts for reducing no-show appointments.* *Retrieved from:* http://www.fiercepracticemanagement.com

Adolescents with both traumatic stress and substance abuse often have complex problem histories and numerous additional problems that make them particularly difficult to treat. Although empirical-based treatment interventions offer adolescents a good change of success in overcoming a variety of psychological problems, many youth fail to obtain treatment, and those who enter treatment often terminate prematurely. *Retrieved from: The National Child Traumatic Stress Network – http://www.NCTSN.org*
Regular monitoring has shown to lead to significant improvements in adherence to medication regimens… As discontinuation of medication can lead to significant deterioration in quality of life, it can be said that clinical contacts, medication use, and quality of life are inter-related. Non-attendance is particularly closely linked with medication non-adherence. Patients who discontinue medication of their own accord may be reluctant to disclose this to medical staff, and indeed cannot disclose it if not seen again. Conversely, patients who miss appointments will not receive the full benefit of medical advice and hence are less likely to make an informed choice about their care and are more likely to act autonomously in a self-directed manner. *Research indicates that patients who miss appointments tend to be younger and of lower socio-economic status.* *Kruse et al(2002) examined the medical records of 313 individuals with serious mental illness who were attending the US psychiatric outpatient clinics and found that 36% had missed their first appointment. The significance predictors of non-attendance were young age, Hispanic ethnicity, having a poor family support system, not having health insurance and also poor adherence to psychotropic medications.* *Predictors of non-adherence were lack of insight, positive symptoms, younger age, male gender, substance misuse, unemployment, and poor social functioning.* *Advances in Psychiatric Treatment (2007), vol.13. retrieved from: http://apt.rcpsych.org/*

- **The study topic narrative will address:**
  - **What is the overarching goal of the PIP?**

    The overarching goal of this PIP is to reduce the rates of No-Show to the psychiatry appointments from 32% to 25%, 7 percentage points or a 22% improvement.

    (To calculate % change: 32%-25%/32%= 22% improvement) or 7 percentage points (from 32% to 25%)

    This PIP will assist the MHP in developing strategies to reduce psychiatric no show rates and improve client outcomes and quality of care.

  - **How will the PIP be used to improve processes and outcomes of care provided by the MHP?**

    The quality of care is improved as clients who show to their scheduled appointments are able to get the treatment they

need. Individuals will have a higher likelihood of completing their treatment; improved chances of maintaining stability; and have an opportunity to be seen by a psychiatrist, allowing for monitoring symptoms of their mental illness and reduced hospitalizations, resulting in positive client outcomes.

- **How any are grounded in proven methods and critical to the study topic.**
  n/a

- **The study topic narrative will clearly demonstrate:**
  - **How the identified study topic is relevant to the consumer population**
  - **How addressing the problem will impact a significant portion of MHP consumer population**
  - **How the interventions have the potential to impact the mental health, functional status, or satisfaction of consumers served.**

SECTION 2: DEFINE & INCLUDE THE STUDY QUESTION

The study question must be stated in a clear, concise and answerable format. It should identify the focus of the PIP. The study question establishes a framework for the goals, measurement, and evaluation of the study.

If the MHP YAYA Division implements strategies to engage and educate clients on the importance of attending their appointments, will the MHP YAYA Division decrease the no-show rates by 22% from the baseline and improve client outcomes?

SECTION 3: IDENTIFY STUDY POPULATION

Clearly identify the consumer population included in the study. An explanation about how the study will address the entire consumer population, or a specific sample of that population. If the study pertains to an identified sector of the MHP consumer population, how inclusion of all members will occur is required. The documentation must include data on the MHPs enrolled consumers, as well as the number of consumers relevant to the study topic.

This section may include:

- **Demographic information;**

The consumer population consists of approximately 783 youth and young adult clients who receive medication support services from the six YAYA programs. The approximate number by program is included in the table below:

Programs	
YAYA Brawley Anxiety and Depression	129
YAYA Brawley FSP	75
YAYA Calexico Anxiety and Depression	105
YAYA Calexico FSP	43
YAYA El Centro Anxiety and Depression	261
YAYA El Centro FSP	170
Grand Total	783

The clients range in age from 12 to 26 years; the primary gender group is male and the primary ethnic group is Hispanic/Latino.

The status of the clients is 88% Medi-Cal recipients and 12% non-Medi-Cal recipients which includes private insurance and private pay. The largest age group is the 12-17 with 46% of the clients; the largest gender is male with 50% of clients; The largest ethnicity is Hispanic/Latino with 83% of the clients.

The demographic characteristics of the clients are included in the table below:

Demographic Characteristics YAYA Clients		
Status	#	%
Medi-Cal	689	88%
Non-Medi-Cal	94	12%
Total	**783**	**100%**
Age group	#	%
12-17	364	46%
18-20	191	24%
21-24	162	21%
25-34	41	5%
Unknown	21	3%
Total	**783**	**100%**
Gender	#	%
Female	370	47%
Male	389	50%
Unknown	24	3%
Total	**783**	**100%**
Ethnicity	#	%
Hispanic/Latino	650	83%
White	75	10%
African Am./Black	18	2%
Asian/Pac. Islander	6	1%
Alaskan Native or American Indian	3	0%

Other/Unknown	31	4%
Total	**783**	**100%**
Language	**#**	**%**
English	527	67%
Spanish	218	28%
Other Sign Language	2	0%
Unknown / Not Reported	36	5%
Total	**783**	**100%**
City of Residence		
El Centro	283	36%
Brawley	144	18%
Calexico	140	18%
Imperial	61	8%
Holtville	27	3%
Seeley	20	3%
Heber	32	4%
Calipatria	19	2%
Salton City	10	1%
Niland	8	1%
Westmorland	8	1%
Desert Hot Springs	1	0%
Desert Shores	1	0%
Bombay Beach	1	0%
Lakeside	2	0%
Niland	8	1%
Thermal	6	1%
Other/unknown	20	3%
Grand Total	**783**	**100%**

- **Utilization and outcome data or information available; and**

Utilization of services is found in **Attachment 3** which includes the **Client Appointment Information for FY 14-15 for Quarter #4**. This report includes the number of appointments which resulted in a No-Show by psychiatrist and by program. Information in the report supports the need to implement strategies to decrease the no-show rates in order to utilize the psychiatrist time more effectively, and for clients to be able to show better treatment outcomes.

- **Other study sources that may be utilized to identify all consumers who are to be included in the study.**
  N/A

"A study indicator is a measurable characteristic, quality, trait, or attribute of a particular individual, object, or situation to be studied."[2] Each PIP must include one or more measurable indicators to track performance and improvement over a specific period of time. Indicators should be:

- **Objective;**
- **Clearly defined;**
- **Based on current clinical knowledge or health service research; and**
- **A valid indicator of consumer outcomes.**

The indicators will be evaluated based on:

- **Why they were selected;**
- **How they measure performance;**
- **How they measure change a mental health status, functional status, beneficiary satisfaction; and/or**
- **Have outcomes improved that are strongly associated with a process of care;**
- **Do they use data available through administrative, medical records, or another readily accessible source; and**
- **Relevance to the study question.**

The measures can be based on current clinical practice guidelines or health services research. The MHP must document the basis for adopting the specific indicator.
In reporting on the chosen indicators include:

- **A description of the indicator;**
- **The numerator and denominator;**
- **The baseline for each performance indicator; and**
- **The performance goal.**

Specify the performance indicators in a Table. For example:

#	Describe Performance Indicator	Numerator	Denominator	Baseline for Performance Indicator (number)	Goal (number)
1	Number of applicable psychiatry appointments during FY 14-15 which were	**1,249** Psychiatry Appointments scheduled	**3,961** Total number of applicable psychiatry	**32%** No Show Rate **(1,249/3,961)**	**25%** Of psychiatry appointments scheduled that will

[2] EQR Protocol 3, Validation of Performance Improvement Project, Sept. 2012, DHHS, Centers for Medicare & Medicaid Services (CMS), OMB Approval No. 0938-0786

	recorded in the electronic record AVATAR	that resulted in No-Shows In FY 14-15	appointments scheduled in FY 14-15		result in No-Shows (a decrease of 7 percentage points) (Benchmark to psychiatry appointments is 25% or less)

The MHP must develop reasonable interventions that address causes/barriers identified through data analysis and QI processes. Summarize interventions in a table that:

- **Describes each intervention;**
- **Identifies the specific barriers/causes each intervention is designed to address;**
- **Identifies the corresponding indicator that measures the performance of the intervention; and**
- **Maintains the integrity/measurability of each intervention.**

In preparation for this PIP, the PIP committee reviewed and revised the definitions of appointment no shows and canceled and rescheduled appointments in order to deter lack of uniformity in appointment clerical coding and ensure the validity of data collected. Clerical staff were issued a memo and program supervisors met with staff to ensure understanding of these definitions.

Additionally, the PIP committee developed a survey to be administered via telephone call and collected through entry in AVATAR when a client was a no show to a psychiatric appointment. Questions were designed to determine the reasons clients did not attend their scheduled psychiatric appointment. The survey was conducted for all YAYA division psychiatric appointment no shows that occurred during the period of December 7-8, 2015, and December 28, 2015, through January 9, 2016. The top two reasons clients indicated they did not attend their psychiatric appointment were due to forgetting about the appointment (30%) and not having transportation available (25%). Transportation is a process that can be easily remedied at the program level, so interventions for this PIP will be targeted toward engaging clients in their treatment to increase their attendance rates to their psychiatric appointments.

The MHP developed the following interventions to reduce psychiatric no show rates:

Number of Intervention	List each Specific Intervention	Barriers/Causes Intervention Designed to Target	Corresponding Indicator	Date Applied
1	Mindfulness Training for Doctors in order to train on engagement strategies and empathy.	Lack of awareness of engagement strategies and empathy. Doctors will be trained on mindful awareness and implication of mindfulness working with difficult people.	Number of doctors who attended the full three-day training.	October 13-15, 2015
2	Mindfulness Training Refresher Course - conduct Refresher course with doctors.	Review engagement strategies and empathy. Doctors will refresh on mindful awareness and implication of mindfulness working with difficult people.	The number of doctors who attend refresher course	Pending

Commented [RW1]: The literature and survey information does not seem to line up with rapport being an issue.

What is identified is transportation and forgetting.

Why wouldn't the MHP opt to explore a variety of transportation and reminder interventions FIRST

Reminders: Who calls, what is the message, is there some incentive (like showing up/making the appointment and/or calling and rescheduling in advance = enrolled in a monthly drawing for some incentive)

Seems like
Reminder calls – aslo use text messages, and other types of reminders, try out two days and one day reminders
Transportation
Resurvey to see if something new is identified.

3	When a client is a no show to his or her psychiatric appointment, the psychiatrist or nurse will call the client personally, if available, to educate and engage the client.	Lack of client engagement	Number of engagement calls for no show clients completed.	Pending
4	Addition of a drop-down menu in the psychiatrists' progress notes area in AVATAR that includes a list of engagement strategies to ensure implementation of engagement strategies and allows for electronic tracking. Strategies will include: • Open-ended questioning • Affirmation • Reflective listening • Summary • Reframing • Health coaching	Lack of client engagement	Number of visits in which psychiatrists utilized engagement strategies with clients.	Pending
5	All YAYA programs will conduct a home visit or phone call to those clients who missed 2+ consecutive appointments during the duration of the PIP.	Clients' lack of knowledge of the importance of making it to their doctors' appointments; clients' lack of engagement in treatment.	Number of home visits/phone calls conducted.	Pending
6	Intake clinician will contact client and family (when applicable) prior to scheduled intake assessment to explain the intake process and the importance of attending appointments, share a client success story, and answer any questions to engage the client and family at the start of treatment.	Lack of client and family engagement in treatment.	Number of introductory calls made by intake clinicians.	Pending
7	YAYA FSP Program community service workers/mental health workers will meet with clients and family members (when	Lack of client and family engagement in treatment.	Number of visits conducted by community service	Pending

	applicable) at time of intake and during scheduled appointments to engage and educate the client and family.		workers/mental health workers.	

SECTION 6: DEVELOP STUDY DESIGN & DATA COLLECTION PROCEDURES

A study design must be developed that will show the impact of all planned interventions. Include the information describing the following:

- **Describe the data to be collected.**

Appointments being collected and analyzed for this PIP are clients' appointments to medication support services.

When the clients request an appointment for medication support services, the assigned clerk records the request in the AVATAR Information System and gives the appointment a code depending on the specific service the client has requested. The appointment is also assign a site/team, appointment time, duration; Service code, Practitioner, and location.

The initial appointment code is later changed depending on the outcome of the appointment: 1 for Cancel appointment; 2 for No Show to Appointment, and 3 for Re-scheduling of Appointment. If the client shows to the appointment, then the designated staff changes the appointment code to the particular service provided by the psychiatrists, such as 99213, 99214, 99215, etc.

Describe the methods of data collection and sources of the data. How do these factors produce valid and reliable data representing the entire consumer population to which the study indicators apply?

- **Describe the instruments for data collection, and how they provided for consistent and accurate data collection over time.**
- **Describe the prospective data analysis plan. Include contingencies for untoward results.**
- **Identify the staff that will be collecting data, and their qualifications. Include contractual, temporary, or consultative personnel.**

The Information System manager created a "No Show to all appointments details report" crystal report in the AVATAR Information System which captures appointment data. This report is retrieved from the AVATAR Information System into excel file by the QM Analyst who will analyze and arrange the appointment information by using pivot tables.

The QM Unit collects and analyzes data related to the total number of clients' appointments by program and psychiatrist from the AVATAR Information System. The QM Analyst will prepare reports for "No Show" to Psychiatrist Appointment by Division and Program. At the beginning of the PIP, the reports will be done quarterly; and, as the interventions are applied, the No Show Report by Practitioner will be produced on a monthly basis in order to measure the impact of the interventions in reducing the "no show" rates to psychiatric appointments" with the overall goal of reducing the No Show rate to psychiatrist appointments from 32% to 25%.

The staff who will be collecting the appointment data will be the Quality Management - Administrative Analyst III. She has a Master's Degree in Business Administration, and she has 25 years of experience in Behavioral Health and Substance Abuse Programs.

SECTION 7: DATA ANALYSIS & INTERPRETATION OF STUDY RESULTS

Data analysis begins with examining the performance of each intervention, based on the defined indicators. (For detailed guidance, follow the criteria outlined in Protocol 3, Activity 1, Step 8.)

- **Describe the data analysis process. Did it occur as planned?**
- **Did results trigger modifications to the project or its interventions?**
- **Did analysis trigger other QI projects?**
- **Review results in adherence to the statistical analysis techniques defined in the data analysis plan.**
- **Does the analysis identify factors that influence the comparability of initial and repeat measurements?**

The analysis of the study data must include an interpretation of the extent to which the PIP is successful and any follow-up activities planned.

Present objective data analysis results for each performance indicator. A Table can be included (see example), and attach all supporting data, tables, charts, or graphs as appropriate.

Performance Indicator	Date of Baseline Measurement	Baseline Measurement (numerator/denominator)	Goal for % Improvement	Intervention Applied & Date	Date of Re-measurement	Results (numerator/denominator	% Improvement Achieved
No Show Rates: To track performance the indicators are: Number of applicable psychiatry appointments which were recorded in the electronic record AVATAR And appointments that resulted in No Shows (NS) (Code 2)	August 2015	1,249 NS appts/3,961 appts. **=32%**	**25%** Of psychiatry appointments scheduled that will result in No-Shows	Non-clinical interventions to include reviewing and revising the definitions of "no shows" to appointments and training staff on definitions as well as preparing for the client survey.	October, 6, 2015 Quarter #1 Jul-Sept. 2015	311NS appts/1,008 appts. = 31% No Show rate	1 percentage point
No Show rates To track performance the indicators are: Number of applicable	January 2016	1,249 NS appts/3,961 appts. **= 32%**	**25%** Of psychiatry appointments scheduled that will	Mindfulness Training in October 2015	January 11, 2016 Quarter#2 Oct-Dec. 2015	248 NS appts/856 appts.= 29% No Show rate	2 percentage points

psychiatry appointments which were recorded in the electronic record AVATAR And appointments that resulted in No Shows (NS) (Code 2)			result in No-Shows				

Pending

SECTION 8: ASSESS OUTCOMES OF PIP

Real and sustained improvement are the result of a continuous cycle of measuring and analyzing performance, thoroughly analyzing results, and ensuring implementation of appropriate solutions. To analyze the results of the PIP the MPH must document the following steps:

- **Describe issues associated with data analysis –**
  - **Did data cycles clearly identify when measurements occurred? Should monitoring have occurred more frequently?**
  - **Results of statistical significance testing.**
  - **What factors influenced comparability of the initial and repeat measures?**
  - **What, in any, factors threatened the internal or external validity of the outcomes?**
- **To what extent was the PIP successful and how did the interventions applied contribute to this success?**
- **Are there plans for follow-up activities?**
- **Does the data analysis demonstrate an improvement in processes or consumer outcomes?**

Pending

SECTION 9: PLAN FOR "REAL" IMPROVEMENT

It is essential to determine if the reported change is "real" change, or the result of an environmental or unintended consequence, or random chance. The following questions should be answered in the documentation:

- **How did you validate that the same methodology was used when each measurement was repeated?**
- **Was there documented quantitative improvement in process or outcomes of care?**
- **Describe the "face validity," or how the improvements appear to be the results of the PIP interventions.**
- **Describe the statistical evidence supporting that the improvement is true improvement.**
- **Was the improvement sustained through repeated measurements over comparable time periods? (If this is a new PIP, what is the plan for monitoring and sustaining improvement?)**