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:

Project Title: **Vacancy Adjustment and Notification System** Clinical: _____ Non-Clinical: __X___

Project Leader: **Edward Viduaari** Title: MH Clinical District Chief Role:

Initiation Date: **July 2013**

Completion : **June 2016**

SECTION 1: SELECT & DESCRIBE THE STUDY TOPIC

The PIP team consist of

- Chris Chapman, Information Technology Specialist, LA County Internal Services Department
- Charles Lu, Information Technology Manager, Chief Information Office Bureau, LA County Department of Mental Health (LACDMH)
- Edward Vidaurri, Mental Health Clinical District Chief, SA 4 and Project Lead, LACDMH
- Sylvia M. Guerrero, Health Program Analyst, SA 4 Administration, LACDMH
- Jacquelyn Wilcoxen, Mental Health Clinical District Chief, SA 5, LACDMH
- Gwendolyn Davis, Mental Health Clinical Supervisor, SA 5 Administration, LACDMH
- Monika Johnson, Clinical Psychologist II, SA 5 Administration, LACDMH
- Toya Swan, Mental Health Service Coordinator I
- Helena Ditko, Director, Office of Consumer and Family Affairs, LACDMH
- Naga Kasarabada, Mental Health Clinical Program Manager III, Quality Improvement Division, LACDMH
- Vandana Joshi, Mental Health Clinical Program Head, Quality Improvement Division, LACDMH
- Ella Granston, Health Program Analyst, Quality Improvement Division, LACDMH
- Michael Boroff, Clinical Psychologist II, Quality Improvement Division, LACDMH

The Vacancy Adjustment and Notification System (VANS) is an online tool that allows providers to share real-time information on available program slots at their agencies to make appropriate and timely referrals to consumers. The stakeholders involved in developing this PIP is a multifunctional team consisting of SA 4 Administration who is also the Project Lead, Quality Improvement Division (QID), Chief Information Office-Bureau (CIOB), Internal Services Department (ISD), Office of Consumer and Family Affairs and SA 5 Administration.

The concept of the VANS project began with Service Area (SA) 4 administration seeking a solution for providers to fill vacant program slots and make appropriate referrals to other agencies when program slots are unavailable at their own agency. SA 4 administration and providers noted that they did not have real-time information on available slots at other provider agencies in order to refer a client. To do so they have to either email or make a phone call to get this information. This is time consuming and delays providing timely services to clients. SA 4 District Chief collaborated with QID to explore existing resources to implement a solution to improve timely and appropriate referrals to clients between agencies.

An online survey using VOVICI was developed and administered to the SA 4 providers to establish baseline benchmarks related to the need for this information. Survey data showed that only 55% of providers: 1) provide referrals based on immediate knowledge of available slots or openings and 2) provide referrals based upon knowledge of availability of slots related to the consumer's preferred language request. About 63% of survey respondents reported they provide referrals based upon knowledge of availability of slots related to consumer's preferred location of services. In addition 58% reported that they make three or more calls for each referral.

Various options were explored such as posting a list on the website, emailing a list to provider agencies etc. However an efficient solution was needed that would allow all providers to see the same information for each agency simultaneously. As a result a dedicated web interactive tool was considered appropriate for this problem so that providers could update vacancies at their agency as well as view vacancies at other provider agencies.

After discussions between QID, SA 4 Administration, technical staff from DMH-CIOB, a web development specialist staff from ISD were contracted to build this tool. Several technical issues needed to be resolved to build this application. Some of these included, the need for providers

updating this list to be able to access DMH servers via a common User ID and password using the Active Directory (AD). The CIOB staff assisted the QID and ISD team in developing a solution for

providers to obtain access to this web based tool (***Attachment 4.b.1***). This tool as the Vacancy Adjustment Notification System (VANS) allows providers to update their program slot information by service type, language and funding source as well as view the same information for other provider agencies known.

SA 4 contract providers began using VANS in 2013. Each contract provider agency in SA 4 who expressed an interest in using this tool was trained on the use of VANS and User IDs were given for provider analysts to access this application on the internet. Initially out of the 75 contract provider sites in SA 4 only about 5 providers began using VANS. Subsequently this number increased to 11 providers in August 2014, 12 providers in November 2014 and 24 providers in by February 2015. Additional trainings are now being planned for all providers in SA 4 including directly operated clinics to use this tool. After about one year and a half of implementation of VANS in SA 4, another SA in DMH, SA 5 expressed an interest in implementing a tool to track availability of slots by funding source and type of services for providers, to address issues related to timely access for consumers in SA 5. In March 2015 QID team met with SA 5 District Chief and her administrative team to discuss the implementation of VANS. The SA 5 administrative staff will be working with QID staff to prepare SA 5 provider lists for the creation of VANS User IDs. In addition QID will be presenting the VANS application to the SA 5 Executive Provider Meeting in April 2015 and collecting baseline data using the survey to assess the need for immediate knowledge of availability of program slots at provider agencies.

The sharing of information on the availability of program slots between provider agencies will help LACDMH meet timeliness goal of providing timely and appropriate referrals to Consumers within 21 calendar days.

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.

Will the continued implementation of VANS increase the number of referrals to consumers by providers using VANS in SA 4 and SA 5 and thereby improve access to care? Will updates of slot information by funding source such as for Medi-Cal versus Indigent by providers using VANS increase referrals to consumers and thereby increase access to care for the indigent population in these SAs? Will the

updates of slot information by language capacity by providers using VANS increase referrals and thereby improve access to care for Non-English speaking consumers in SA 4 and SA 5?

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;

SA 4 has 6 Directly Operated clinics and Wellness Centers, and 75 contract provider sites, serving approximately 44,000 consumers annually. Nearly 25% are African Americans, 6% Asians, 51% Latinos, 0.7% Native Americans and 17% White. A majority of the consumers (72%) are English speaking, 21% Spanish speaking and the remaining 7% speak other languages. The PIP will evaluate referrals for appropriate services to consumers by contract providers in SA 4.

SA 5 has 1 Directly Operated Outpatient clinic and a Wellness Center for both adults and children and 2 Outpatient clinics for Specialized Foster Care and approximately 30 contract provider sites, serving approximately 9,500 consumers annually. Nearly 27% are African Americans, 3% Asians, 32% Latinos, 0.5% Native Americans and 38% White. Majority of these consumers (88%) speak English, 11% speak Spanish, 0.4% speak Farsi and the remaining 1.0% speak other languages.

> Utilization and outcome data or information available; and

An online survey was conducted for SA 4 providers to establish baseline benchmarks related to the need for information on providing appropriate and timely referrals to consumers. Baseline data showed that only 55% of provider: 1) provide referrals based on immediate knowledge of available slots or openings and 2) provide referrals based upon knowledge of availability of slots related to the consumer's preferred language request. About 63% of survey respondents reported they provide referrals based upon knowledge of availability of slots related to consumer's preferred location of services. In addition 58% of survey respondents reported that

they make three or more calls for each referral. Similar baseline data will be gathered for SA 5 providers in the upcoming months.

> Other study sources (such as pharmacy data) that may be utilized to identify all consumers who are to be included in the study.

In CY 2014, the Los Angeles County Department of Mental Health (LACDMH) implemented the SRTS, an electronic tracking system to track timeliness of appointments for initial service requests and also implemented the Service Request Log (SRL) to track the same for programs that implemented the Integrated Behavioral Health Information Systems (IBHIS). All referrals and requests for initial services via phone or in person are tracked on the SRL and SRTS. The outcomes of referrals made via VANS to another provider can be tracked via the SRTS/SRL to check if these referrals resulted in scheduled appointments with the provider receiving the referral.

SECTION 4: SELECT & EXPLAIN THE STUDY INDICATORS

"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 PIP study includes both process and outcome measures.

Process measures:

1) Number of providers issued VANS User Ids
2) Number of providers using VANS
3) Number of provider updating available slots by service and program type
4) Number of providers updating available slots for language capacity

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

5) Number of providers updating available slots by funding source - Medi-Cal versus Non-Medi-Cal.

Outcome Measures:

1) Number of referrals made using VANS
2) Number of referrals from VANS with an appointment in the Service Request Tracking System (SRTS)/Service Request Log (SRL).

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.

TABLE 1: PERFORMANCE INDICATORS

Number	Describe Performance Indicator	Numerator	Denominator	Baseline for Performance Indicator	Goal
1	Providers using VANS	Number of providers within a SA with a VANS User ID	All providers selected for implementation in a SA	0%	90%
2.	Providers updating available slots	Number of providers within a SA updating available slots on a monthly basis.	Number of providers within a SA with a VANS User ID	0%	90%
3.	Providers updating available slots by funding source	Number of providers within a SA updating available slots in VANS by funding source on a monthly basis.	Number of providers using VANS within a SA	0%	90%
4.	Providers updating available slots by service type	Number of providers within a SA updating available slots in VANS by service type on a monthly basis.	Number of providers using VANS within a SA	0%	90%

5.	Provider referrals via VANS	Number of providers using VANS within a SA	0%	7b Referrals to Consumers	All providers using VANS with additional language capacity 0%
	Number of providers within a SA with additional language capacity updating available slots in VANS by language on a monthly basis		90%	Referrals to Non-English speaking consumers	
6 Providers with additional language		Number of providers using VANS within a SA			0%
capacity besides English updating available slots by language	Number of providers within a SA that made referrals using VANS	0%	100%	Total Number of referrals within a SA made using VANs	
				Number of referrals made by providers using VANS for preferred language requests	50%
			7a		50%
				Number of providers using VANS within a SA	

# Indicator (number)	Describe Performance	Numerator	Denominator	Baseline for Performance Indicator	Goal (number)
1	**See Table Above**				
2					
3					
4					

SECTION 5: DEVELOP & DESCRIBE STUDY INTERVENTIONS

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.

For example:

Number of Intervention	List each Specific Intervention	Barriers/Causes Intervention Designed to Target	Corresponding Indicator	Date Applied
1				
2				
3				
4				

In April 2014 during the annual EQRO review, EQRO reviewers recommended that a referral tracking button be added to the website to keep track of the number of clients being referred as a result of information available in VANS. This recommendation was implemented in August of 2014 by the PIP team in collaboration with ISD.

Several efforts were made to increase the use of VANS and thereby increase provider's capacity to provide more appropriate and timely referrals. Some improvements to the application were made via PDSA cycles.

In 2014 the SA 4 District Chief met with contract providers on a monthly basis and discussed the use of VANS. In these meetings providers were encouraged to use VANS to refer clients as well as to maximize their contract dollars by filling available program slots. In the months of August and November of 2014, QID staff distributed and discussed VANS provider reports in the SA 4 provider meetings (***Attachment 4.b.2***). These discussions generated additional questions by providers on the use of VANS and any issues associated with updating and using the information for referring clients.

Providers received technical consultation from QID staff to help address issues related to User IDs, connection to the website, and updating information on active users of VANS. A number of technical consultations were provided to VANS users in 2014 and 2015 by QID staff (***Attachment 4.b.3***)

The first PDSA cycle was done to increase the use of VANS by providers. Reports were distributed at the SA 4 executive provider meetings. Some executive managers were unaware of this application although their technical and program staff were using this application. Also some providers were concerned that they would lose some MCA dollars as a result of using VANS. These concerns were clarified by the SA 4 administration. Trainings were setup by QID staff to train additional provider staff to use the VANS. This resulted in a 100% increase in use of VANS from 12 providers to 24 providers between October 2014 and February 2015. (***Attachment 4.b.4.)***

Another PDSA cycle was completed when barriers to the use of VANS were addressed in a PIP meeting. Factors contributing to the successful use of VANS were discussed. The action step in this PDSA cycle was to schedule a workgroup meeting with at least five provider agencies in SA 4 who have successfully used VANS and to share their success strategies with other providers ***(Attachment 4.b.5.)***

The next PDSA cycle was done to increase the use of VANS by providers in an additional SA which is contiguous to SA 4 geographical boundary so that providers can refer consumers to a more convenient location. Meetings with providers revealed that some Legal Entities were referring clients to their own service locations throughout the County. Since VANS has been launched in only one SA, providers had no way of knowing what program slots were available in the neighboring SA. Therefore it was considered important to expand this service to a neighboring SA so that consumers could be referred to a more convenient location. SA 5 administration in previous QI meetings had expressed an interest in participating in VANS. A joint meeting with QID and SA 5 administration was held in March 2015 in which QID demonstrated the functionality of the VANS website. SA 5 will now be using VANS and will work closely with QID staff to prepare the provider list to generate User IDs for program staff.
(***Attachment 4.b.6***)

Another PDSA cycle was done to increase the efficacy of the Referral Button. Some providers using VANS to provide referrals to other agencies expressed concerns regarding some form of acknowledgement from the "receiving" provider regarding the referrals made. Providers have requested an email notification by the "receiving" agency to the "referring" agency that they have received a referral. The technical staff on the VANS team is working on this solution. (***Attachment 4.b.7.***)

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:

SQL data reports are being used to build bi-monthly and monthly reports. These reports are disseminated to PIP workgroup members for monitoring purposes. These reports are reviewed in detail by the SA 4 District Chief to monitor availability of slots. **(*Attachments 4.b.2, 4.b.8, and 4.b.9*)** Based on these reports the SA 4 District communicates with providers on a regular basis to ensure the use of VANS and updates of program slot information by providers.

In SA 5 a demonstration of the VANS application by QID staff to the Executive Providers is scheduled for April 7th, 2015. In addition, SA 5 administration will send provider information on "type of service offered," "funding source," "language capacity," to QID for preparation to enter the information in the VANS application and generate user IDs.

> Describe the data to be collected.
> 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.

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**

As a result of the PDSA cycles there has been a 100% increase in the use of VANS from 12 to 24 providers between November 2014 and February 2015.

Approximately 31 referrals have been made by 5 providers by using the VANS between August 2014 and February 2015. This represents 20% of VANS users who made referrals. The goal is to have 100% of the VANS users to make an appropriate referral to reduce wait-list **(Attachment 4.b.9)**

- Out of these referrals two (2) were for Adults, one (1) for Older Adult, two (2) for Transition Age Youth (TAY) and twenty six (26) were for Children. The high number of referrals for Children shows the need for available slots among children and information related to their availability. The MHSIP consumer satisfaction survey results for the past four survey periods since May 2009 to April 2014 has also shown a high percent of youth reporting a need for services in a timely manner and in a more convenient location. It is expected that the information available to providers using VANS will help meet some of this need for children and youth.

The VANS application also has information on language capacity of providers. Therefore it also helps providers in making appropriate referrals by language. Currently the referrals and availability of slots is available from providers with the following language capacity: Arabic, Cantonese, Ethiopian, English, Spanish, Farsi, Armenian, Japanese, Cambodian, Korean, Lao, Mandarin, Russian, Thai, Tagalog, Vietnamese and Other Chinese. Future reports will track referral notification by intake agency's language capacity to see how many Non-English referrals are being made using VANS.

After the VANS application has been fully implemented in SA 5, the usage by providers in updating their information and the referrals to consumers will be tracked via bi-monthly and monthly reports.

SRTS/SRL information will also be received for referrals that were made using VANS.

Overall, the current PIP has expanded its scope to SA 5 and also to track the outcome of the referrals made via VANS from data related to the scheduled appointments for these referrals via the SRTS/SRL. The providers in SA 4 who have been using VANS have found this to be a valuable tool for tracking accurate referral information on availability of slots by type of service, funding, and language and have reported that this has been helpful to improve access and timeliness to the consumers served. SA 5 is hopeful of similar outcomes with the usage of VANS in this SA.

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?

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?)