PERFORMANCE IMPROVEMENT PROJECT (PIP) VALIDATION WORKSHEET FY17-18 NON- CLINICAL PIP

GENERAL INFORMATION

MHP: Sacramento

PIP Title: Implementing a Streamlined E-Scheduling Tool to Increase Timeliness to First Offered Appointment

Start Date: July 2016

Completion Date: June 30, 2017

Projected Study Period (#of Months): 12

Completed: Yes ☒ No ☐

Date(s) of On-Site Review: 08/08- 08/10/17

Name of Reviewer: Jovonne Price

Status of PIP (Only Active and ongoing, and completed PIPs are rated):

Rated

☐ Active and ongoing (baseline established and interventions started)

☒ Completed since the prior External Quality Review (EQR)

Not rated. Comments provided in the PIP Validation Tool for technical assistance purposes only.

☐ Concept only, not yet active (interventions not started)

☐ Inactive, developed in a prior year

☐ Submission determined not to be a PIP

☐ No Non-Clinical PIP was submitted

Brief Description of PIP (including goal and what PIP is attempting to accomplish): Prolonged wait times by consumers to access have been a problem and concern across Sacramento County MHP SOCs. This PIP attempts to address this issue by allowing Access Team, through the use of the EHR Scheduler tool, to offer an appointment during initial call requesting services, and to notify the provider who needs to contact the perspective consumer within 24 hours. The interventions in this PIP aim at changing the current business process used to schedule first appointments through the use of the EHR Scheduling module.

ACTIVITY 1: ASSESS THE STUDY METHODOLOGY

STEP 1: Review the Selected Study Topic(s)

Component/Standard	Score	Comments
1.1 Was the PIP topic selected using stakeholder input? Did the MHP develop a multi-functional team compiled of stakeholders invested in this issue?	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	MHP administrative staff from QM, Research, Evaluation and Performance Outcome (REPO) staff, Avatar (Electronic Health Record), Access, Behavioral Health Services (BHS) Program, and Cultural Competence. Direct Care Providers from Adult and Child systems, Family Advocates and Community member were also included.
1.2 Was the topic selected through data collection and analysis of comprehensive aspects of enrollee needs, care, and services?	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	2014 SB964 enhanced regulations required in Knox-Keen Health Care Service Plan Act of 1975 that requires the Department of Health Care Services (DHCS) to adopt standards for timeliness of access to care and to review it contractors for timely access to care and to post findings on the internet website. The MHP has measured timeliness to service since 2009. The FY13-15 EQRO Site Review made a number of recommendations for improvement in Sacramento MHPs programmatic and/or operational areas to include improving timely access to system wide services, give the evidence that data showed that Sacramento had one of longest wait times in state. Data reviewed in three main areas: consumer satisfaction, timeliness, and consumer engagement (no-show data).
Select the category for each PIP: *Clinical:* ☐ Prevention of an acute or chronic condition ☐ High volume services ☐ Care for an acute or chronic condition ☐ High risk conditions	*Non-Clinical:* ☒ Process of accessing or delivering care	
1.3 Did the Plan's PIP, over time, address a broad spectrum of key aspects of enrollee care and services? *Project must be clearly focused on identifying and correcting deficiencies in care or services, rather than on utilization or cost alone.*	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	While the initial PIP is to be piloted with a combination of three contracted providers/programs of children and adult services, the plan is for the findings to be generalized to all users of the Access line.

1.4 Did the Plan's PIPs, over time, include all enrolled populations (i.e., did not exclude certain enrollees such as those with special health care needs)? *Demographics:* ☐ Age Range ☐ Race/Ethnicity ☐ Gender ☐ Language ☐ Other	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	All consumers who contact Access who are part of the pilot study programs/providers are included.
Totals	**4** Met **0** Partially Met **0** Not Met **0** UTD	
STEP 2: Review the Study Question(s)		
2.1 Was the study question(s) stated clearly in writing? Does the question have a measurable impact for the defined study population? *Include study question as stated in narrative:* Will the practice of electronically scheduling appointments for consumers during their initial contact with the MHP decrease the wait time to first offered appointment and improve the likelihood that the consumer attends the initial appointment?	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	
Totals	**1** Met **0** Partially Met **0** Not Met **0** UTD	
STEP 3: Review the Identified Study Population		
3.1 Did the Plan clearly define all Medi-Cal enrollees to whom the study question and indicators are relevant? *Demographics:* ☐ Age Range ☐ Race/Ethnicity ☐ Gender ☐ Language ☐ Other	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	The PIP will pilot the Avatar Scheduler functionality with select providers/programs. A combination of three providers/programs will be included in the pilot program. The number of beneficiaries will vary, according to number of calls received by the Access team and the number of appointments available at the provider/program.

3.2 If the study included the entire population, did its data collection approach capture all enrollees to whom the study question applied? *Methods of identifying participants:* ☒ Utilization data ☒ Referral ☐ Self-identification ☐ Other:	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	This PIP will pilot the Avatar Scheduler functionality with select providers/programs. Selection of providers included both providers that utilize the County's EHR (Avatar) as well as providers that have their own EHR. The PIP includes the entire population of individuals referred and authorized for services through the Access Team to the selected providers and does not utilize a sampling method. The number of beneficiaries will vary, depending on the number of requests for services received by the Access team. It is anticipated that approximately 175 new beneficiaries per quarter will be included in the sample (based on the number of new service requests in the EHR-Avatar, Jan-April monthly average 2016).
	Totals	**2** Met 0 Partially Met 0 Not Met 0 UTD
STEP 4: Review Selected Study Indicators		
4.1 Did the study use objective, clearly defined, measurable indicators? *List indicators:* 1.Timeliness to First OP Face to Face Service at 3 distinct providers (BM1) 2.Timeliness for Acute Hospital Discharge to 1st OP Face to Face service (BM5) 3. Timeliness for 1st contact to 1st offered appointment (Scheduler data). NEW* 4.1st appointment cancellation and no-show data. 5. Problem resolution – grievances related to timeliness issues. 6.Engagement in Services	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	The Indicator #1 reports the "# of days to first OP and Indicator #2 reports the # of days following discharge to…." Recommendation: The data should be reported in raw #'s and then analyzed to % or rates to show the progress to the goal/outcome.

4.2 Did the indicators measure changes in: health status, functional status, or enrollee satisfaction, or processes of care with strong associations with improved outcomes? All outcomes should be consumer focused. ☐ Health Status ☐ Functional Status ☒ Member Satisfaction ☐ Provider Satisfaction Are long-term outcomes clearly stated? ☒ Yes ☐ No Are long-term outcomes implied? ☒ Yes ☐ No	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	Engagement as measured through decreased no-show rates and decreased problem resolutions addressing timeliness can measure satisfaction and engagement potentially measures functional status.
Totals		2 Met 0 Partially Met 0 Not Met 0 UTD
STEP 5: Review Sampling Methods		
5.1 Did the sampling technique consider and specify the: a) True (or estimated) frequency of occurrence of the event? b) Confidence interval to be used? c) Margin of error that will be acceptable?	☐ Met ☐ Partially Met ☐ Not Met ☒ Not Applicable ☐ Unable to Determine	No sampling methods used.
5.2 Were valid sampling techniques that protected against bias employed? *Specify the type of sampling or census used:* <Text>	☐ Met ☐ Partially Met ☐ Not Met ☒ Not Applicable ☐ Unable to Determine	
5.3 Did the sample contain a sufficient number of enrollees? _____N of enrollees in sampling frame _____N of sample _____N of participants (i.e. – return rate)	☐ Met ☐ Partially Met ☐ Not Met ☒ Not Applicable ☐ Unable to Determine	

Totals	0 Met 0 Partially Met 0 Not Met 3 Not Applicable 0 UTD

STEP 6: Review Data Collection Procedures		
6.1 Did the study design clearly specify the data to be collected?	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	Instances of 1st offered appointments within 10 days and no-show and cancellation data. Other data to be collected include demographics, provider admissions and discharges, and psychiatric hospitalization data.
6.2 Did the study design clearly specify the sources of data? *Sources of data:* ☐ Member ☐ Claims ☐ Provider ☒ Other: Service authorizations and utilization data	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	Service authorization and utilization data will be used to determine timeliness to services.
6.3 Did the study design specify a systematic method of collecting valid and reliable data that represents the entire population to which the study's indicators apply?	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	
6.4 Did the instruments used for data collection provide for consistent, accurate data collection over the time periods studied? *Instruments used:* ☐ Survey ☒ Medical record abstraction tool ☐ Outcomes tool ☐ Level of Care tools ☐ Other:	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	Access team reviews referral, assesses level of need, and authorizes services. If consumers meet the need for outpatient services, Access sends referral to MH Providers. MH provider receives the authorization and referral via EHR. Providers contact the consumer and schedule an intake appointment. With exception of consumer satisfaction, all data is captured in EHR and available for reporting purposes.
6.5 Did the study design prospectively specify a data analysis plan? Did the plan include contingencies for untoward results?	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	Data to be analyzed by comparing results from baseline to PIP implementation with results one year after implementation, permeated on a quarterly basis. Result and trends to be reviewed quarterly with the PIP Steering Committee meeting to determine whether interventions set forth are providing intended results. Interventions will be adjusted and training/coaching may be implemented as required.

6.6 Were qualified staff and personnel used to collect the data? *Project leader:* Name: Rolanda Reed Title: Beneficiary Protection Program Coordinator, QM Role: Project Coordinator Other team members: Names: Lisa Sabillo Alex Rechs Dawn Williams Alba Garcia Melissa Jacobs Kathy Burlingame Ann Mitchell Kacey Vencill Christy Veneroni Marcia Marsh JoAnn Johnson Mary Nakamura Nicole Hill Mariah Plassmeyer Tina Traxler Roland Udy Mary Bush Marlyn Sepulveda Eva Avila	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	REPO Program Manager oversees the monthly data extraction and reporting by designated staff. Staff is comprised of Program Planners who specialize in data collection, analysis and reporting.
	Totals	6 Met 0 Partially Met 0 Not Met 0 UTD

STEP 7: Assess Improvement Strategies		
7.1 Were reasonable interventions undertaken to address causes/barriers identified through data analysis and QI processes undertaken? *Describe Interventions:* 1. Make scheduling tool available and operational at Access and the 3 provider sites. 2. Develop "Scheduling Tool" curriculum, orientation, and training to ensure model fidelity and consistency of use across all 3 sites. 3. Deliver training to three sites. 4. Access utilizes the Scheduler to schedule appointment while they have the consumer on the phone. 5. Provider utilizes the Scheduler to ensure that there are appointment slots available for Access to schedule Appointment for consumer. 6. Provider reviews Avatar on daily basis to learn of newly scheduled consumers. 7. Provider follow-up with consumer to confirm appointment. 8. If consumer is hospitalized, provider follows-up with hospital discharge planner and consumer to confirm appointment.	☒ Met ☐ Partially Met ☐ Not Met ☐ Unable to Determine	Data collection will occur 10 days following each quarter and will be captured using the county's existing EHR. Data from the EHR will be reviewed in quarterly intervals to determine if the Scheduler is making a difference in reducing appointment wait times for first offered appointment and will inform on cancellation and no-show reasons and numbers. The interventions will change the business process so that the consumer is offered an appointment at the point they are requesting services. This first offered appointment will be captured in the EHR. Providers will be responsible for following up with consumers to confirm and remind them of their scheduled appointment. With the use of the Scheduler, immediate real-time appointments will be offered and the electronic ability to capture 1st offered appointment will be tracked.
	Totals	1 Met 0 Partially Met 0 Not Met 0 NA **0** UTD

STEP 8: Review Data Analysis and Interpretation of Study Results		
8.1 Was an analysis of the findings performed according to the data analysis plan? *This element is "Not Met" if there is no indication of a data analysis plan (see Step 6.5)*	☒ Met ☐ Partially Met ☐ Not Met ☐ Not Applicable ☐ Unable to Determine	Analysis will include quarterly review of baseline data and performance against that baseline data. Achievable improvement targets will be set based on results from Q1 data. Training and coaching will be made available if untoward results are found to eliminate any model implementation fidelity issues and staff turnover, etc. Measurements and data analysis occurred as planned (quarterly) and data extract dates are included with each respective measure in Section 8. Data were extracted from the County's EHR several days after the quarter ended, to accommodate delayed data entry. The data extraction method from AVATAR consisted of SQL script with parameters needed to select the subset population data (from the three providers). Monitoring occurred with sufficient frequency.
8.2 Were the PIP results and findings presented accurately and clearly? Are tables and figures labeled? ☒ Yes ☐ No Are they labeled clearly and accurately? ☒ Yes ☐ No	☒ Met ☐ Partially Met ☐ Not Met ☐ Not Applicable ☐ Unable to Determine	

8.3 Did the analysis identify: initial and repeat measurements, statistical significance, factors that influence comparability of initial and repeat measurements, and factors that threaten internal and external validity? Indicate the time periods of measurements: varied Indicate the statistical analysis used: _____ Indicate the statistical significance level or confidence level if available/known: _____% _____Unable to determine	☒ Met ☐ Partially Met ☐ Not Met ☐ Not Applicable ☐ Unable to Determine	Statistical significance testing is not in the original plan; however, it was conducted on Measure 3. T-tests demonstrated that the Scheduler Tool intervention represents a true causal relationship and not a chance occurrence (t-value of 3.0). The probability of the results arising by chance was less than 5% ($p<0.05$), so this is a significant result. The MHP is planning on performing continued data analyses to determine the ability to replicate the pilot with additional providers. Differing business processes at each of the three providers is one area that requires some further analyses. There were no factors that influenced the comparability of the initial and repeat measures. Since the methodology for data collection and extraction was replicated every time. Repeat measurements only differed in date range timeframes; otherwise initial and repeat measurements remained consistent throughout the PIP. Data were extracted from the County's EHR at a minimum ten (10) days after the end of the quarter. Differing business processes around appointment scheduling practices for the three providers may have threatened the validity of the outcomes. Two providers used the full EHR and one provider only used the stand-alone "Scheduler" portion of the EHR. All authorizations for services occur at the point of Access. However, the business processes for one of the providers did not consistently rely upon Access to schedule the first appointment. Appointments may, or may not, have been added to the Scheduler when a consumer "dropped-in" for an initial service, or an appointment may have been made by a provider without the input of the consumer, such as in cases of hospital discharges. Consumers discharged from the hospital may or may not have been added to the Scheduler, and

		consumers may not have attended the initial scheduled appointment due to remaining in the hospital past the anticipated discharge date, or may have failed to attend the appointment for various other reasons affecting no-show rates. In addition, the level of appointment follow-up utilized to improve engagement varied for each provider. Engagement efforts ranged from calling the consumer on the phone to remind them of their upcoming appointment, to going out into the field to locate the consumer to encourage engagement in services, to sending appointment reminder letters through the mail.

8.4 Did the analysis of the study data include an interpretation of the extent to which this PIP was successful and recommend any follow-up activities? *Limitations described:* *Conclusions regarding the success of the interpretation:* *Recommendations for follow-up:*	☐ Met ☒ Partially Met ☐ Not Met ☐ Not Applicable ☐ Unable to Determine	The PIP is being successfully implemented. Data show that the County can document and provide timeliness from 1st contact to 1st offered appointment for the majority of consumers at the test sites within the 14 calendar-day timeframe goal (Indicator #3). For quarters where data had been posted in the Scheduler, the County's initial performance for Indicator #3, the 1st quarter was 89%. It increased in the 2nd quarter to 95%, and in the 3rd quarter to 97%. For Indicator #4 a decline in percent is desired. The number of consumers with "Missed" visits equaled 26.7% in the 1st quarter, 24.4% in the 2nd quarter, and increased slightly to 25.6% in the 3rd quarter. The long wait time for appointments that was seen previously has improved and no-shows (patients who do not appear to their scheduled appointment) have been reduced. When looking at percent change, a significant increase occurred for Indicator #3 (timeliness between the initial contact and first offered appointment) accounting for a 9% increase in offered appointments within 10 business days from the 1st quarter (89%) to the 3rd quarter (97%). For Indicator #4, missed visits, there was a 4.6 percent decrease from the 1st quarter (26.8%) to the 3rd quarter (25.6%). If these trends continue, the MHP can expect to see positive change in future quarters until an area of stability is reached. The Scheduler intervention has worked. The MHP will continue to promote the use of the Scheduler with the three providers and explore the feasibility of replicating the "Scheduler" module with other providers. It was uncovered early on that the three providers had different business processes. The variation in business processes posed

		fidelity issues, as not all providers followed the same methodology for scheduling. Also, the degree of EHR utilization varied among the providers, with two providers utilizing it as their full EHR and one provider only using the scheduling tool portion of the EHR. Each provider's business process is detailed in the PIP Submission Tool.
	Totals	3 Met 1 Partially Met 0 Not Met 0 NA **0** UTD
STEP 9: Assess Whether Improvement is "Real" Improvement		
9.1 Was the same methodology as the baseline measurement used when measurement was repeated? *Ask: At what interval(s) was the data measurement repeated?* *Were the same sources of data used?* *Did they use the same method of data collection?* *Were the same participants examined?* *Did they utilize the same measurement tools?*	☒ Met ☐ Partially Met ☐ Not Met ☐ Not Applicable ☐ Unable to Determine	The same methodology was used to collect and report the data throughout the PIP. Administrative data was exported out of Avatar in the same manner, by the same staff member, every quarter to ensure data validity and reliability. Limitations: Differing processes by each site and the differing timeframes. The MHP utilized the same methodology as the baseline measurement on all repeated measurements. The limitation of differing business processes by each site may impact the outcomes but do not impact the consistent methodology that was used by the MHP.

9.2 Was there any documented, quantitative improvement in processes or outcomes of care? Was there: ☒ Improvement ☐ Deterioration Statistical significance: ☒ Yes ☐ No Clinical significance: ☒ Yes ☐ No	☐ Met ☒ Partially Met ☐ Not Met ☐ Not Applicable ☐ Unable to Determine	Since this PIP just ended, the MHP is in the preliminary stages of analyzing the data set. During the initial telephone call, consumers are assessed by the Access Team to provisionally determine if Medical Necessity criteria are met, and, when determined to qualify for services, consumers are immediately offered an appointment with a provider for a more comprehensive assessment (i.e., an intake appointment) in real-time. This process streamlines customer service and has facilitated shorter wait times from initial contact to first offered appointments.

9.3 Does the reported improvement in performance have internal validity; i.e., does the improvement in performance appear to be the result of the planned quality improvement intervention? *Degree to which the intervention was the reason for change:* ☐ No relevance ☐ Small ☐ Fair ☐ High	☒ Met ☐ Partially Met ☐ Not Met ☐ Not Applicable ☐ Unable to Determine	In analyzing baseline data compared to data from the PIP, the interventions that were put in place (i.e. the scheduling tool), made it possible for consumers to receive an appointment at the time of request for services as opposed to waiting for the outpatient provider to call them to schedule an appointment. The MHP had not previously tracked initial appointment s offered to the consumer nor offered consumers an appointment during the initial contact/request for service. The PIP interventions of changing the business practice to utilizing the Scheduler module in the EHR; having specific times set aside to schedule appointments; offering and scheduling appointments during initial contact; and, following up with consumers about scheduled appointment date/time appears to support the improvements seen in the PIP. The MHP hypothesized that delays occurring at the point of Access were negatively impacting timeliness to services. Initially, consumers were authorized for services, then had to wait up to several days to connect with the provider to schedule an appointment. This wait time, according to the literature, impacts whether or not a consumer attends the first appointment, engages in services, or develops a positive sense of satisfaction with the services provided. The PIP interventions that allows Access to utilize the Scheduler module in the EHR to schedule appointments for consumers during their first contact with the MHP appears to demonstrate subjective improvement based upon reports from the Access Team that consumers are satisfied with the ability to obtain an appointment immediately. The consumer is further engaged by the provider within two business days of the authorization

		to services with introductions and information about their programs and an offer to accommodate any needs or concerns. Improvements appear to have occurred at the provider level due to the Scheduler allowing them to set aside specific times to conduct intake appointments and ensuring that sufficient staff are available to accommodate the volume, and when the scheduled appointment is not convenient for the consumer, this is known immediately and addressed either by rescheduling the appointment or allowing the consumer to "drop-in" during specific hours. Lastly, the interventions made it possible for the MHP to track the time from the initial request to authorization, to first offered appointment, to completed face-to-face appointment, and the level of engagement of consumers in services. These measures allow the MHP to analyze trends and make any necessary improvements to timeliness to services in the future. These actions correlated with data that show an increase in timeliness to first offered appointment and a decrease in no-shows and cancellations rates.
9.4 Is there any statistical evidence that any observed performance improvement is true improvement? ☐ Weak ☐ Moderate ☐ Strong	☒ Met ☐ Partially Met ☐ Not Met ☐ Not Applicable ☐ Unable to Determine	Based on the findings, there was improvement in process and outcomes of care. Providers were able to see the consumer in a timely manner, which, in turn, improved overall retention for the consumer. Performance Indicators #3 and #4 as of July 20, 2017, document the quantitative improvement in process from baseline to Q4. Those same indicators, which document increased timely access to services, are supported by the literature that shows shorter wait times lead to better consumer outcomes and timely engagement into services, and reduces the impacts of untreated mental illness leading to better consumer outcomes.

9.5 Was sustained improvement demonstrated through repeated measurements over comparable time periods?	☐ Met ☒ Partially Met ☐ Not Met ☐ Not Applicable ☐ Unable to Determine	The improvement was sustained throughout the repeated measures for children, performance indicators 3 and 4 specifically (FY 16/17: Q2, Q3 and Q4 of the PIP). Since this PIP just ended, there is still data to be collected for performance Indicators #1, #2 and #6 for the 3rd and 4th quarters, as data for these measures was not available at the time of this iteration (providers have 90 days to capture consumer services).
	Totals	3 Met 2 Partially Met 0 Not Met 0 NA 0 **UTD**

ACTIVITY 2: VERIFYING STUDY FINDINGS (OPTIONAL)		
Component/Standard	**Score**	**Comments**
Were the initial study findings verified (recalculated by CalEQRO) upon repeat measurement?	☐ Yes ☒ No	

ACTIVITY 3: OVERALL VALIDITY AND RELIABILITY OF STUDY RESULTS: SUMMARY OF AGGREGATE VALIDATION FINDINGS

Conclusions:

With the implementation of the Scheduler tool, the MHP was able to track the time from the initial request to authorization, to first offered appointment, to completed face-to-face appointment, and the level of engagement of consumers in services. Based on the findings, there was an improvement in process and outcomes of care. Providers were able to see the consumer in a timely manner, which, in turn, improved overall retention for the consumer.

Recommendations:

Although the same methodology was used to collect and report the data for the PIP and the Administrative data was exported from Avatar in the same manner, by the same staff member, quarterly, there were limitations. The limitations were differing processes by each site and the differing timeframes. EQRO recommends that future data be collected at the same timeframe for comparisons.

Additionally, the MHP interchanged its metric for first appointment between the use of "14 calendar days" and the use of "10 days" (business days). This was clarified on-site. Consistent language is highly recommended for clarity.

Check one:

☐ High confidence in reported Plan PIP results

☒ Confidence in reported Plan PIP results

☐ Low confidence in reported Plan PIP results

☐ Reported Plan PIP results not credible

☐ Confidence in PIP results cannot be determined at this time