Behavioral Health Concepts, Inc – California EQRO | www.caleqro.com | info@bhceqro.com
5901 Christie Ave, Ste 502, Emeryville, CA 94608 | Tel: (855) 385-3776 | Fax: (855) 385-3770

LOS ANGELES COUNTY DEPARTMENT OF MENTAL HEALTH (LACDMH)
CLINICAL PERFORMANCE IMPROVEMENT PROJECT (PIP)

IDENTIFICATION OF PLAN/PROJECT

MHP Name:	LACDMH		
Project Title:	**Post Discharge Outpatient Follow-up Appointment Scheduling for Hospital Discharges – Impact of Care Coordination and CQM Protocols**	Check One: Clinical ✓	Non-Clinical
Project Leader:	Dr. Michael Tredinnick	Title: Mental Health Clinical Program Manager III	Role: **Lead Manager, Intensive Care Division**
Start Date (MM/DD/YY):	July 19, 2017		
Completion Date (MM/DD/YY):	July 19, 2019	Projected Study Period (# of months): **24**	

Brief Description of PIP:
(Please include the GOAL of the PIP and what the PIP is attempting to accomplish.)

Reducing preventable hospital readmissions is a priority for Los Angeles County Department of Mental Health (LACDMH) with the goal of improving clinical care and health outcomes for vulnerable populations. According to research, pre-discharge interventions and bridging strategies such as discharge planning and continuity of care between inpatient and outpatient settings and post-discharge interventions such as integrated outpatient treatment participation have effectively targeted the clinical and demographic factors that contributed to repeated hospitalizations. Over the course of this project, the PIP team recognized the system-level need for a greater focus on the preventative aspect of timely outpatient follow-up on hospital readmissions. As a result, this PIP now impacts a broader range of consumers.

Since the September 2017 EQRO review, the target population has changed from exclusively Intensive Service Recipients (ISRs) to all Adult LACDMH consumers discharged from Fee For Service (FFS) hospitals and in need of immediate outpatient follow-up. The initial interventions for this PIP, specifically, the Co-Occurring Disorders (COD) support groups and prolonged stabilization in the 30-day treatment at a Crisis Residential Treatment Program (CRTP), continued following the September 2017 review and were no longer exclusive to ISRs. Several barriers were encountered in engaging ISRs in COD support groups and referring to the CRTPs. A small number of consumers received these interventions.

Initial data analysis involved a review of: readmission rates; post discharge outpatient follow-up rates; length of hospital stay days; and outpatient treatment engagement for the entire ISR cohort. Pre-post data review (between June 13, 2017 and July 18, 2018) for the 1,772 ISRs who comprised the baseline cohort showed notable improvement on the outcome measure related to the number of ISRs who received outpatient services in the follow-up period. There was no improvement noted on the remaining four of the five outcome measures reviewed. It is important to note that due to unforeseen barriers, post interventions changes cannot be attributed to the effects of the intervention as there was a minimal number of consumers who received the intervention.

In response to stakeholders' concerns regarding lack of appropriate outpatient follow-up and scheduling of urgent appointments for hospital discharge; on March 15, 2018, the Hospital Discharge Outpatient Follow-up Care Coordination (HDOFCC) protocol was implemented as a third intervention. The number of hospital-reported issues with scheduling urgent outpatient appointments has decreased since March and several process improvements have been noted. The HDOFCC protocol will continue for all DO and Contract programs. Efforts to engage additional hospitals, beyond the three pilot hospitals, will be on-going.

A fourth intervention, through the Transforming Clinical Practice Initiative (TCPI), was implemented in June 2018. Fifteen (15) of the Directly Operated (DO) LACDMH programs, with the help of TCPI coaches, established protocols for responding to appointment requests from hospitals, consumers, and families following a recent inpatient discharge. Clinic-level data was reviewed for August and September 2018 to better understand the effectiveness of clinic work flows; specifically, the proportion of clients given appointments within five (5) business days of discharge. A variety of data collection methods were employed by the clinics to coincide with their existing clinic operations, including utilization of the Cognos hospitalization reports, the Service Request Log (SRL), and customized manual tracking systems.

STEP 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 (e.g. clinical staff, consumers, contract providers as appropriate).

Members of the clinical PIP team were chosen based on their familiarity, expertise, or interest in the subject matter. The Quality Improvement Division (QID) organized and coordinated the QI related activities for this clinical PIP. Team membership reflects QID collaboration with various LACDMH Bureaus, Divisions, and Programs, including: County Resource Management (CRM); Intensive Care Division; Service Area (SA) Administration for SA(s) 1 through 8; DO and Contract programs; staff and leadership from LACDMH DO and Contract programs; and consumers and family advocacy representatives. Clinical trainings for this PIP were designed and facilitated by the University of California, Los Angeles (UCLA) Integrated Substance Abuse Programs (ISAP). Consumers and service providers were also involved in the design of this

project. The TCPI project manager and coaches contributed in their efforts to test clinic workflows aimed at improving outpatient follow-up for hospital discharges.

- Describe the stakeholders who are involved in developing and implementation of this PIP. Be sure to include CFM group representation.

  Please refer to ***Attachment 3D.1*** for a detailed list of stakeholders.

- Describe the stakeholders' role(s) in the PIP and how they were selected to participate.

SA Mental Health Clinical Program Managers (MHCPMs III) and District Chiefs with oversight over the DO and Contract programs providing outpatient treatment services across all eight SAs were directly involved in addressing appointment scheduling issues with their programs and reporting back the program follow-up to address these issues. Program managers, supervisors, and clinicians participated in the monthly PIP meetings to present program follow-up strategies for hospital discharges and clinic-based activities for outpatient follow-up within their respective programs. As their Service Area's hospital liaisons, Dr. Renfrow and Ms. Weiner contributed important information regarding hospital discharge follow-up activities in SA 2 and SA 4 as well as CRTP referral follow-up issues. Dr. Arns is the Chief of Clinical Informatics for LACDMH. Dr. Arns and his staff, Dr. Cacialli, provided the ISR cohort data, including demographics and pre-post outcomes data. Dr. Freese, Mr. Hasson, and Ms. Rutkowski designed the COD Support Groups training curriculum and pre-post training surveys with feedback from the LACDMH QID leads. Mr. Hasson facilitated COD trainings and experiential activities with training participants. Clinicians and staff from DO and Contract programs participated in the two-day COD trainings, provided feedback on the training, and conducted COD groups in their programs. Ms. Gildemontes served as a liaison between LACDMH and UCLA ISAP for the COD trainings. Dr. Brian Hurley, as the LACDMH lead on integrated COD treatment, provided consultation to the PIP team in this area. Dr. Kasarabada, Dr. Chang Ptasinski, and Dr. Shonibare maintained QI roles with QID. Consumers participating in COD groups reported their perceptions on the benefits of COD group participation. Ms. Cathy Williamson, Family Advocate, actively participated in discussions surrounding hospital discharge practices and appointment scheduling related concerns from the families of consumers. Dr. Tredinnick, MHCPM III with the Intensive Care Division, was the project leader responsible for the two new interventions implemented for this PIP. He and his team: Ms. Willock, former Program Head, and Ms. Palacios, Mental Health Clinical Supervisor for the Care Coordination Team (CCT), were instrumental in implementing the HDOFCC protocol; tracking appointment scheduling issues reported by the four hospitals on a monthly basis; and working with SA leads in troubleshooting appointment scheduling issues. Ms. Marx and Ms. Yu were leads for implementing the CRTP referral protocols; providing monthly updates to the PIP team on the number of referrals and admissions; and troubleshooting issues with program leads on referrals that were deemed not eligible per the criteria. Ms. Phelps and Ms. Benton served as the project managers for TCPI (***Attachment 3D.2***). They along with TCPI coaches assigned to 15 DO clinics worked collaboratively with the PIP team to improve hospital discharge workflows and participated in the hospital providers meeting to address concerns with appointment scheduling at specific DO clinics.

2. 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?

Stakeholders were pivotal in identifying the problem to be addressed by the clinical PIP this fiscal year. The Family Advocacy representative from the PIP team expressed concerns regarding the lack of effective care coordination and failure to schedule urgent appointments following inpatient discharges for all consumers, not just the ISR population. The SA program leads also expressed multiple barriers to engaging the ISR population in outpatient treatment and highlighted the importance of focusing on prevention. Program managers and service providers noted that the ISR population would be better served through intensive programs, such as the Whole Person Care (WPC) and Full Service Partnership (FSP) programs, with appropriate staffing resources. The CRTP referral protocols (***Attachment 3D.3***) were also limited to only the ISR population and it was important to identify follow-up care for all consumers discharged from hospitals, including those not identified as ISRs. The PIP team recognized that due to challenges faced by the system to address a difficult to engage population through the two interventions initially identified, the project's efforts should focus on closely monitoring outpatient follow-up appointments post hospital discharge, and for all consumers. Not all consumers referred to CRTPs were eligible for admission and this limited the scope of this project to a specific group of consumers. The PIP team recognized that expanding the scope of this PIP to address outpatient follow-up and care coordination for all hospital discharges would result in more effective interventions that are better aligned with current resources available for LACDMH outpatient programs and current initiatives such as WPC and FSP expansion.

- How did it come to your attention?

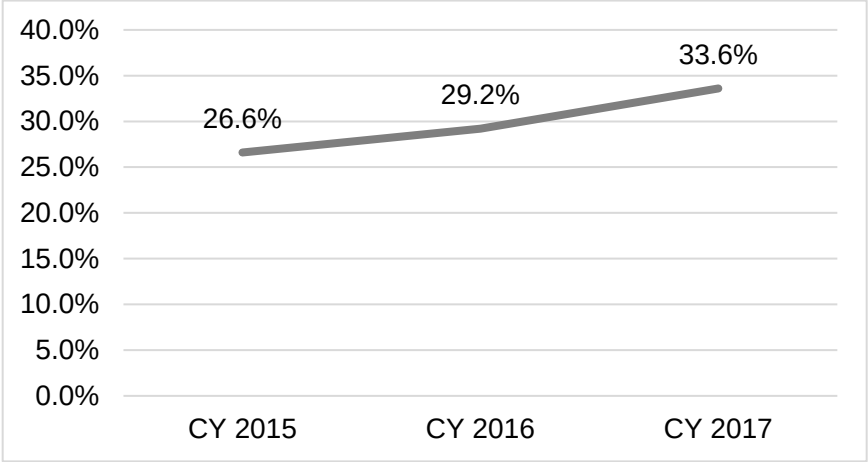
Stakeholders, PIP committee members (including SA and Program leads who maintained oversight for DO and Contract programs), and data on the 30-day hospital readmission rates and post discharge outpatient follow-up appointments directed the focus of this clinical PIP.

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

The 30-day Adult readmission rates for CY 2015 through CY 2017 are presented in Figure 1 below. In CY 2015, there were 28,297 hospital admissions for Adult consumers; 7,533 were readmitted within 30 days at a rate of 26.6%. In CY 2016, there were 29,361 hospital admissions for Adult consumers; 8,582 consumers were readmitted within 30 days at a rate of 29.2%. In CY 2017, there were 29,383 hospital admissions for Adult consumers; 10,123 consumers were readmitted within 30 days at a rate of 33.6%. The rate of 30-day hospital readmissions increased by 2.6 Percentage Points (PP) from CY 2015 to CY 2016 and by an additional 4.4 PP from CY 2016 to CY 2017.

The LACDMH TCPI Clinical Quality Measures (CQM) data for 7-day and 30-day follow-up after hospitalization are presented in ***Attachment 3D.4***. There was a decline in the percent of hospital discharges that received a follow up appointment within 7 calendar days from 28% in CY 2015 to 27% in CY 2017 and per the Jan-Feb 2018 data this dropped to 22%.

FIGURE 1: 30-DAY ADULT HOSPITAL READMISSION RATES CY 2015 TO CY 2017



Note: This data represents 30-day acute psychiatric re-hospitalization rates across the MHP and includes both Medi-Cal beneficiaries and indigent clients. It likely lacks most or all data on hospitalizations that are paid for by Medicare or private insurance as LACDMH does not serve as the fiscal intermediary of nor authorize those stays. Data Source: LACDMH client and episode registration (partially in Integrated Behavioral Health Information System (IBHIS) and partially in the legacy Integrated System (IS), CY 2015 to CY 2017).

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

Nearly 1 in 5 Medi-Cal beneficiaries treated in a hospital are readmitted within 30 days (Black, 2014). Early readmissions or recurrent hospitalizations between 30 and 180 days post discharge are shown to have a negative impact on an individual's activities of daily living (Akerele et al., 2017). Adverse clinical outcomes associated with recurrent hospitalizations may include: an increased experience of stigma; disruptions in daily life; declining physical health; economic strain; and changes in relationships following hospitalization (Weller et al., 2015). More often than not, recurrent early admissions are linked to an individual's reduced ability to function independently within their community. The five conditions associated with the most readmissions by Medi-Cal beneficiaries include: mood disorders; schizophrenia and other psychotic disorders; diabetes mellitus with complications; complications of pregnancy; and alcohol-related disorders (Advisory Board, 2014).

Strategies for Reducing Repeated Hospitalizations

Mental Health and Substance Use Disorders (SUDs) are major contributors to substantial social and economic costs and many of these conditions can be addressed through outpatient wellness, prevention, and rehabilitation services. Failure to engage consumers in follow-up services after discharge has been shown to significantly increase the frequency of relapse and hospitalizations (Akerele et al., 2017). The importance of effective outpatient and supportive services are detailed in the Agency for Healthcare Research and Quality (AHRQ; 2015) strategies aimed at reducing repeated psychiatric hospitalizations.

The AHRQ is the health services research branch of the United States (US) Department of Health and Human Services (HHS). In response to the rapid growth in hospital costs for mental health care for adults age 18 to 64, the AHQR designated three factors that are essential to reducing multiple psychiatric hospitalizations. The key factors in reducing the occurrence of recurrent psychiatric hospitalizations are: (1) effectively addressing the consumer's acute presenting problem and stabilizing their psychiatric status with adequate inpatient (or residential) care; (2) developing a discharge plan that includes supportive services to assist the consumer with a successful transition from an inpatient to an outpatient setting (e.g., discharge services, follow-up calls, short-term case management, bridging strategies, and psychoeducation); and (3) delivering effective outpatient services that support consumers with remaining in their community (AHRQ, 2015). Mental health, substance use, and physical health problems rarely occur in insolation. When the aforementioned strategies are considered and care is properly coordinated, consumers will experience improved health outcomes. A well-rounded discharge plan involves timely follow-up care and even so, effective strategies are lacking to assure optimal outpatient follow-up.

Timeliness of Outpatient Follow-up

Nationally, approximately one-half of Medicare and Medicaid beneficiaries readmitted within 30 days of a hospital discharge did not receive outpatient follow-up prior to readmission (Jackson et al, 2015). Strategic transitional care practices, or the care consumers receive when they move between health care settings and providers, are supportive towards: reducing readmission rates; preventing adverse events; and ensuring safe and clinically appropriate transitions (Rennke & Ranji, 2015). Safe and effective transfer of responsibility for a consumer's care relies on effective provider communication. Access to outpatient care is a preventable readmissions risk factor and one-size-fits-all discharge protocols are not reflective of evidence-based decision making or clinical need. According to AHRQ (2015), effective care coordination begins by ensuring that accurate clinical information is available to support mental health care decisions by consumers and providers.

The weeks (or days) following inpatient care remain a particularly challenging time for consumers. Approximately, 1 in 5 consumers experience adverse events such as Adverse Drug Events (ADEs) and hospital-related complications in the weeks following hospital discharge (Rennke & Ranji, 2015). The scheduling of appropriate health care services in a complex system such as LACDMH requires balancing clinical criteria and acuity; consumer needs; and organizational resources, structure, and culture (Jackson et al, 2015).

Co-Occurring Disorders

Over the past few decades, practitioners and researchers have increasingly recognized the relationship between illicit substance use and impaired mental health. In spite of these developments, individuals with substance use and mental health disorders commonly appear at facilities that are not equipped to treat them. Per the LACDMH June 2017 ISR cohort data analysis, approximately 60% of the ISRs were identified as having COD as a secondary diagnosis. Delivering effective outpatient services for this population (i.e., COD support groups with peers) was noted by AHRQ as a key factor in reducing hospital readmissions.

Medi-Cal beneficiaries who are managing symptoms of both a mental health and SUD are diagnosed as having a COD. In 2014, out of the 20.2 million adults that received a SUD diagnosis in the past year, approximately 7.9 million (39.1%) were also diagnosed with a serious mental illness (SAMHSA, 2016). A history of medication non-compliance, substance use or dependence, and difficulty recognizing one's own symptoms are significantly associated with an increased risk of rehospitalization (Olfson et al., 2000). In response to the nationwide increase in the frequency of repeated hospitalizations among individuals diagnosed with CODs, several treatment approaches have been examined.

Integrated Treatment for Co-Occurring Disorders

The foundation of best practices for CODs is seen in integrated treatment where providers are able to address mental health impairments and problems with substance use simultaneously (McKee, 2017). Integrated treatment plans incorporate common risks seen in CODs, such as mental health or substance use relapse, homelessness, or legal problems. Researchers have described ideal integrated treatment programs as those that offer psychotherapy utilizing a combined Cognitive Behavioral Therapy (CBT) and Motivational Interviewing (MI) approach; prolonged stabilization through licensed residential SUD treatment facilities or crisis stabilization units; group treatment, including psychoeducation, skills-building, and self-help groups like Alcoholics Anonymous (AA); and family interventions, as seen in family psychoeducation (McKee, 2017; SAMHSA, 2016; & Weller et al., 2015). Common motivations for SUD treatment include decreasing symptoms, relapses and re-hospitalizations, increasing independent living, and improving relationships. Unlike individual therapy, group treatment focuses exclusively on relationships.

Group treatment approaches for CODs and residential COD programs have been the most extensively studied. Group interventions that emphasize education, motivational enhancement, or cognitive-behavioral techniques were seen as effective at improving substance use outcomes (McKee, 2017; Mueser et al., 2005). Residential COD treatment programs have demonstrated promising results for consumers who are homeless and without psychosocial supports (Mueser et al., 2005; Wüsthoff, Waal, & Gŕawe, 2014).

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

The overarching goal for this PIP can be understood in four objectives: (1) Improve continuity of care for ISRs through prolonged stabilization at CRTPs; (2) Improve clinical care for consumers with COD issues by implementing the COD groups at DO and Contract clinics that have staff trained to conduct support groups; (3) Improve clinical care and continuity of care for consumers discharged from FFS hospitals by implementing the HDOFCC protocol (***Attachment 3D.5***) for all DO and Contract programs; and (4) Improve hospital discharge outpatient

follow-up rates at the 15 DO clinics collaborating with TCPI and who set forth to develop specific Continuous Quality Improvement (CQI) protocols by testing workflows at clinics with a unique staffing mix, client population, and established clinical operations.

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

The PIP aimed to improve processes and outcomes of care by implementing two additional interventions and expanding the scope of the project to focus on outpatient follow-up following hospital discharge from FFS hospitals for the entire LACDMH Adult population. The PIP actively engaged additional stakeholders such as the hospital providers; the LACDMH Intensive Care Division CCT; TCPI coaches and site leadership staff from 15 DO clinics; consumers experiencing COD issues; and ISRs who benefitted from prolonged stabilization. It was hoped that this would effectively engage key players and address the barriers to outpatient follow-up in order to positively impact continuity of care and related processes. Examples of improved processes include: increased communication between hospitals and outpatient programs; improved triaging of hospital discharge-related calls to outpatient clinics; training of clinicians at DO and Contract clinics to run COD groups; and implementation of CQI processes related to urgent appointment scheduling at clinics. The project's interventions were intended to result in: a reduction in preventable hospital admissions; timely scheduling of urgent appointments and outpatient follow-up; increased engagement of ISRs in outpatient services, increased engagement of consumers with COD issues in COD groups with their peers; and improved COD-related outcomes as measured through a survey administered to consumers participating in COD groups.

- How any proposed interventions are grounded in proven methods and critical to the study topic?

The implementation of the four proposed interventions to address preventable hospital readmissions was supported by research. These interventions were also essential to improving clinical care for consumers discharged from hospitals as they relate to scheduling of post discharge appointments, prolonged stabilization following hospital discharge for ISRs, and engaging consumers in COD groups.

- The study topic narrative will clearly demonstrate:
  - How the identified study topic is relevant to the consumer population?

In CY 2017, there were 29,383 hospital admissions for Adult consumers served by LACDMH; 10,123 consumers were readmitted within 30 days at a rate of 33.6%. Additionally, the DMH TCPI CQM data for hospital post discharge urgent appointment follow up shows a decline in the percent of hospital discharges that received a follow up appointment within 7 calendar days. This study topic is relevant to the LACDMH consumer population as this data demonstrates a decrease in outpatient follow-up and an increase in 30-day hospital readmission rates. The two new interventions for this fiscal year were focused on this study topic. The other two interventions were continued from the initial implementation of this PIP in September 2017 and were developed collaboratively with the consumers and providers who participated in focus groups.

In collaboration with SA 2 and SA 4 administration, four focus groups were conducted for the purpose of developing this PIP – two with direct service providers, one in each SA and two with consumers, one in each SA. In the focus groups with ISR service providers, underlying substance use issues were identified as a predominant barrier to reducing rehospitalization rates. In addition, absence of a warm hand-off or appropriate discharge plan between inpatient and outpatient care providers; lack of access and timely communication regarding the

hospitalization of an existing ISR enrolled in an outpatient program, and limited housing resources were identified as critical barriers in achieving positive outcomes for the LACDMH ISR population. Focus groups with consumers revealed "hands on" services such as those provided through FSP programs; peer support services (i.e., support groups, Peer-run Wellness Center services); and therapy (individual or group) as key contributors to their reduced need to seek inpatient care. The interventions for this clinical PIP considered both stakeholder input and supported research.

- How addressing the problem will impact a significant portion of MHP consumer population

This clinical PIP supports the Department's goal of reducing rehospitalization rates for Los Angeles County's most vulnerable populations and targets consumers being discharged from hospitals. Currently, the HDOFCC protocol is being utilized by four hospital providers and will address issues related to scheduling appointments for consumers at DO and Contract outpatient programs across all eight SAs.

- How the interventions have the potential to impact the mental health, functional status, or satisfaction of consumers served?

The project's four interventions were designed with the potential to impact the functional status of ISRs and all consumers receiving the interventions during FY 17-18 as explained below:

1) Developing bridging strategies that include supportive services to assist the consumer with a successful transition from an inpatient to an outpatient setting; specifically, providing crisis residential services upon discharge from a hospital and facilitating communication between outpatient providers and hospitals. Lack of prolonged stabilization was an important contributing factor to rehospitalization within a short time frame and the prioritization of access to crisis residential services was intended to reduce LACDMH rehospitalization rates.
2) Delivering effective outpatient services focused on integrated COD treatment. Due to the increased presence of CODs (60%) among consumers with a significant history of multiple hospitalizations, there was an evident need for quality improvement as it related to clinical care for ISRs.
3) Implementing the HDOFCC protocol was intended to address outpatient follow up appointment scheduling issues with FFS hospitals, both DO and Contract programs, and thereby enable successful continuity of care and reduced rehospitalization rates.
4) Implementing the TCPI CQM protocols at 15 DO clinics was aimed at testing workflows, implementing CQI processes, and improving continuity of care for consumers seeking outpatient appointments at these clinics following a hospital discharge.

STEP 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 more space is needed, press "Enter")

Will implementing prolonged stabilization post hospital discharge impact hospital readmission rates?

Will COD group participation contribute to positive perceptions regarding COD groups and self-reported reduction in substance use?

Will implementing hospital discharge outpatient follow-up care coordination protocols reduce barriers to scheduling post hospital discharge urgent outpatient appointments at LACDMH DO and Contract programs?

STEP 3: IDENTIFY STUDY POPULATION

Clearly identify the consumer population included in the study. Include an explanation of 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 MHP's enrolled consumers, as well as the number of consumers relevant to the study topic.

This project's interventions were open to all Adult Medi-Cal beneficiaries who received inpatient services from a County or Fee-For-Service (FFS) hospital during FY 17-18. Consumers seeking COD group treatment at LACDMH outpatient programs in all eight SAs also benefitted from this project. Access to prioritized CRTP beds were available to Medi-Cal beneficiaries who qualified.

Intensive Service Recipients (ISRs)

As of June 13, 2017, the ISR list included approximately 1,658 ISRs. Of these, 476 ISRs did not receive outpatient services in the past six months. The original ISR cohort/dataset ran in June 2017 could not be reused due to the new set of cluster IDs. A point in time method was used to establish the ISR cohort and some data was received later. Consumers discharged after the June 13, 2017 cutoff date or consumers discharged prior to June 13, 2017 who would have been included in the cohort if data was available, met ISR criteria when data was reviewed in July 2018. In December 2017, the criteria for the WPC- ISR program changed from four hospitalizations in the past 395 days to two hospitalizations. However, the PIP followed the original June 2017 ISR cohort.

This Step may include:

- Demographic information;

As of July 13, 2018, a total of 1,772 distinct ISRs comprised the baseline cohort. This represented a difference of 114 ISRs from the number of ISRs reported in the September 2017 review. Due to the minimal increase in the total number of distinct ISRs, no major changes were noted for the demographic profile of the baseline cohort.

FY-17-18 ISR cohort demographics are summarized in the following:

- 42% of the ISR cohort are aged 40-49 (N=700), followed by 26-39 (N=578) at 35%, and 18-25 (N=278) at 17%.
- 34.8% of the ISR cohort identified as Black/African American (N=616), followed by Latino (N=473) at 26.7%, White (N=465) at 26.2% and two or more races (N=100) at 5.6%.

- 70.3% of the ISR cohort identified as male (N=1,246) followed by female (N=525) at 29.6%, and transgender (female to male) at <0.01% (N=1).
- 93.4% of the ISR cohort reported English (N=1,655) as their primary language, followed by Spanish (N=76) at 4.3%; 1.3% reported a language other than English or Spanish (N=26) and the language was unknown or not reported (N=15) for 0.8%.
- In the prior 13 months, 47.8% (N=793) of the ISR cohort had 5-9 hospital admissions, followed by 4 hospital admissions at 31.8% (N=527), 10-20 hospital admissions at 16.6% (N=275), and 21-60 hospital admissions at 3.8% (N=63).
- At the last inpatient admit, 32.9% of the ISR cohort received a primary diagnosis of Schizoaffective (N=545), followed by Schizophrenia (N=499) at 30.1%, and Major Depression (N=226) at 13.6%.
- 60% of the ISR cohort received a COD diagnosis (N=996) compared to 40% who did not receive a COD diagnosis (N=662).
- 445 (29%) of the 1,772 ISRs did not receive any outpatient services in the past six months. LACDMH is currently focusing efforts on these "Unengaged ISRs" and will provide an update at the September review session.

Outpatient Treatment Activity – FY 17-18 ISR Cohort. The number of ISRs who received outpatient services from LE Contracted programs in FY 16-17 is summarized below. Crisis Stabilization and Crisis Intervention Services, such as those provided by Emergency Outreach and Triage Bureau (EOTB) and Urgent Care Centers (UCCs) were included in these counts. **Counts are unduplicated only within a given program.** Duplicates are likely as ISRs may have received outpatient services from more than one provider, in the prior six months.

- 445 of 1,772 ISRs showed no history of receiving outpatient services in the prior six months.
- 851 ISRs received outpatient services from DO programs.
- 1,183 ISRs received outpatient services (including those provided by UCCs) from LE Contracted programs.
- Of the ISRs receiving services from DO programs in the prior 6 months, 69.3% (N=964) received a secondary COD diagnosis.
- the highest percentage of ISRs diagnosed with a COD (31.7%, N=394) received outpatient services from DO programs in SA 4, followed by SA 2 DO programs at 17.4% (N=259), and SA 8 DO programs at 14.3% (N=215).
- Of the ISRs receiving outpatient services from LE Contracted programs in the prior 6 months, 69.5% (N=1,097) received a secondary COD diagnosis.
- The highest percentage of ISRs diagnosed with a COD (36.6%, N=401) received outpatient services from LE Contracted programs in SA 4, followed by SA 6 LE Contracted programs at 19.0% (N=208), and SA 5 LE Contracted programs at 18.9% (N=207).

- Utilization and outcome data or information available; and
- Other study sources (such as pharmacy data) that may be utilized to identify all consumers who are to be included in the study.

STEP 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."[1] 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 in 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.

The study measures chosen for this PIP include: 1) **Clinical Care indicators**; specifically, pre-post participation in COD groups and CRTPs focusing on rehospitalization rates; post discharge outpatient follow up rates; length of hospital stay days; and process measures, and 2) **Increased Engagement** as evidenced by increased engagement in outpatient services and participation in COD groups.

COD Feedback Survey

The PIP team developed the COD Feedback survey (***Attachment 3D.6***) to evaluate the effectiveness of COD support groups from the consumer's perspective. The brief feedback survey was administered to COD group participants who attended multiple sessions. Responses

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

were reported on a five-point Likert scale (Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree). The surveys were anonymous – tracked by clinic name, Provider number, and SA. An open-ended comments section was included to support consumers with expressing themselves freely.

The following five (5) questions were used to assess the consumers' perception of COD support group treatment:

1. I am able to handle stress better
2. I learned alternate ways to cope with stress from my peers in the group
3. I reduced my use of substances
4. Overall, I feel better
5. I would recommend others to attend this group

Survey data was collected between August 8, 2018 and September 6, 2018.

Specify the performance indicators in a Table.

Please refer to Tables 1 and 2.

TABLE 1: CLINICAL PIP PERFORMANCE INDICATORS
FY 16-17 TO FY 17-18

#	Performance Indicator(s)	Numerator	Denominator	Baseline for Performance Indicator (number)	Goal (number)
1	Number of ISRs admitted to Crisis Residential Treatment Program (CRTP) services	Total number of ISRs admitted to CRTP programs	Not Applicable	0	100 per FY
2	2a. Level of understanding in the assessment and screening of CODs	Difference in the total number of correct responses between the pre-training survey and post survey X 100	Total number of correct responses on the pre training survey	18%	10 PP increase
	2b. Perception of COD treatment as reported by group participants (consumers)	Total number of Strongly Agree and Agree responses to Question 1 through Question 5 of the COD Group Feedback Survey	Total number of responses to Question 1 through Question 5 on the COD Group Feedback survey	78%	2 PP increase
3	Consumers participating in LACDMH COD treatment groups	Total number of consumers participating in COD treatment groups	Not Applicable	0	500

4	Psychiatric Inpatient Hospital 7-Day Rehospitalization Rates (Adult services)	Number of readmissions that occurred within 7 days of discharge	Number of psychiatric inpatient hospital admissions	35.3%	2 PP decrease
5	Psychiatric Inpatient Hospital 30-Day Rehospitalization Rates (Adult services)	Number of readmissions that occurred within 30 days of discharge	Number of psychiatric inpatient hospital admissions	66.6%	2 PP decrease
6	Post-Psychiatric Inpatient Hospital 7-Day Outpatient Service Follow-Up Rates (Adult services)	Number of episodes with an outpatient service within 7 days of hospital discharge	Number of psychiatric inpatient hospital discharges	30.1%	5 PP increase
7	Average Length of Stay (LOS) at Psychiatric Inpatient Hospitals(Adult services)	Number of inpatient hospital days	Number of psychiatric inpatient hospital admissions	7.2 days	6.2 days
8	Increased engagement in the number of ISRs in outpatient treatment services	Number of ISRs with *No Outpatient Services*	Not Applicable	25%	10 PP decrease
9	Clinic Workflows – percent of consumers seen within five (5) business days of discharge	Number of consumers given an appointment within 5 days of discharge	Number of consumer referred for an appointment following discharge	22%	10 PP increase
Note: The hospitalization data related to rehospitalization rates, hospital days, and post discharge outpatient follow up were tracked through IS and IBHIS. The number of ISRs accessing CRTP services were tracked by the CRM Division. Data analysis followed ISRs included in the FY 17-18 ISR cohort.					

TABLE 2: CLINICAL PIP RATIONALE FOR SELECTION OF PERFORMANCE MEASURES FY 16-17 TO FY 17-18

Rationale for Selection of Study Measure 1 & 3:	The availability of short-term acute residential services or integrated COD groups would lead to improved outcomes for individuals with substance use disorders and are at high risk of rehospitalization.
Quantifiable Measure 1:	Number of ISRs referred for CRTP services
Numerator:	Total number of ISRs admitted to CRTP programs
First measurement period date(s):	August 2017 to September 2017
Baseline benchmark	0
Source of benchmark	Number of ISRs enrolled in CRTP services
Goal:	100 per FY
Quantifiable Measure 3:	Consumers participating in LACDMH COD treatment groups
Numerator:	Total number of consumers (distinct) participating in COD treatment groups
Denominator:	Not Applicable
First measurement period date(s):	September 2017 to August 2017
Baseline benchmark	0
Source of benchmark	Number of ISRs attending COD support group sessions
Goal:	500

Rationale for Selection of Study Measure 2:	Enhanced trainee knowledge in the assessment and screening of CODs and their confidence in delivering effective COD group treatment can lead to improved beneficiary outcomes
Quantifiable Measure 2a:	Demonstrating an increase in knowledge and skills to run COD groups as evidenced by the trainees' pre to post improvement in scores on the training surveys
Numerator:	Difference in the total number of correct responses on the pre versus post training surveys
Denominator:	Total number of correct responses on the pre - training survey
First measurement period date(s):	September 14, 2017
Baseline benchmark	18%
Source of benchmark	Difference in pre and post training scores acquired during the first (Part I) COD training
Goal:	10 PP increase
Quantifiable Measure 2b:	Perception of COD treatment as reported by group participants (consumers)
Numerator:	Total number of Strongly Agree and Agree responses on the COD Group Feedback Survey
Denominator:	Total number of responses on the COD Group Feedback survey
First measurement period date(s):	August 8,2018
Baseline benchmark	78% (Overall Strongly Agree and Agree ratings)
Source of benchmark	Results from the COD Group Feedback survey administered to consumers on August 8, 2018
Goal	2 PP increase
Rationale for Selection of Study Measure 4 & 5:	Efforts to prevent rehospitalizations can be targeted for LACDMH consumers known to be at a higher risk for repeat hospitalizations, including those at higher risk for adverse events post-discharge.
Quantifiable Measure 4:	The rate of 7 day psychiatric rehospitalizations (percent)
Numerator:	Number of readmissions within 7 days of discharge
Denominator:	Number of psychiatric inpatient hospital admissions
First measurement period date(s):	June 13, 2017 – June 13, 2018
Baseline benchmark	35.3%
Source of benchmark	Average percent of ISRs who received inpatient admissions within 7 days of their prior inpatient discharge.
Goal:	2 PP decrease
Quantifiable Measure 5:	The rate of 30 day psychiatric rehospitalizations (percent)
Numerator:	Number of readmissions within 30 days of discharge
Denominator:	Number of psychiatric inpatient hospital readmissions
First measurement period date(s):	June 13, 2017 – June 13, 2018
Baseline benchmark	66.6%
Source of benchmark	Average percent of ISRs who received inpatient admissions within 30 days of their prior inpatient discharge.
Goal:	2 PP decrease
Rationale for Selection of Study Measure(s) 6, 8, & 9:	Timely outpatient follow-up has been promoted as a key strategy to reduce rehospitalizations
Quantifiable Measure 6:	Post-Psychiatric Inpatient Hospital 7-Day Outpatient Service Follow-Up Rates
Numerator:	Number of episodes with an outpatient service within 7 days of hospital discharge
Denominator:	Number of hospital discharges
First measurement period date(s):	June 13, 2017 – June 13, 2018
Baseline benchmark	30.1%
Source of benchmark	Outpatient service provider contact within 7 calendar days of discharge
Goal	5 PP increase

Quantifiable Measure 8:	Increased engagement in the number of ISRs in outpatient treatment services
Numerator:	PP difference in the number of ISRs with no outpatient services at baseline and post study periods
Denominator:	Not Applicable
First measurement period date(s):	June 13, 2017
Baseline benchmark	25%
Source of benchmark	Percent of ISRs with no outpatient treatment services in the prior six months
Goal	10 PP decrease
Quantifiable Measure 9:	Percent of clients seen within 5 business days of discharge
Numerator:	Number of consumers given an appointment within 5 days of discharge
Denominator:	Number of consumers referred for an appointment following discharge
First measurement period date(s):	January 2018 – February 2018
Baseline benchmark	22%
Source of benchmark	LACDMH 7-day follow-up after hospitalization rates
Goal	10 PP increase
Rationale for Selection of Study Measure 7:	Increased outpatient or short term acute treatment engagement can lead to shorter inpatient stays
Quantifiable Measure 7:	Average Length Of Stay (LOS) at Psychiatric Inpatient Hospitals
Numerator:	Total number of inpatient hospital days
Denominator:	Total number of psychiatric inpatient hospital admissions
First measurement period date(s):	June 13, 2017 – June 13, 2018
Baseline benchmark	7.2 days
Source of benchmark	Average LOS for inpatient admissions by ISRs.
Goal:	6.2 days

STEP 5: SAMPLING METHODS (IF APPLICABLE)

The MHP must provide the study description and methodology.

- Identify the following:
  - Calculate the required sample size?
  - Consider and specify the true or estimated frequency of the event?
  - Identify the confidence level to be used?
  - Identify an acceptable margin of error?

  Describe the valid sampling techniques used?

_____N of enrollees in sampling frame
_____N of sample
_____N of participants (i.e. – return rate)

Sampling techniques were not applicable. The entire FY 17-18 ISR cohort was included in this PIP. LACDMH captured data in both their legacy Integrated System (IS) and Integrated Behavioral Health Information System (IBHIS). An identified "person" in the cohort may have

had multiple distinct DMH ID (client records). The process of identifying ISRs involved a statistical matching algorithm used to "cluster" all DMH Client IDs/records so that all services and hospitalizations for that "person" were linked together (regardless of the DMH Client ID used for a particular encounter). Whenever the same person had multiple DMH IDs/registration records, the likelihood that a specific demographic data element is not in concordance across ID's and/or registration systems increased. The mechanism for capturing data across information systems differed (e.g., in the IS, race/ethnicity is captured by a single value whereas in IBHIS, it is possible to select multiple values for individuals with multiracial backgrounds). For this reason, complex business rules were applied to obtain the "best" categorization; some may have defaulted to an unknown/undefinable category.

The number of enrollees (or beneficiaries) per implemented intervention is outlined in the following.

COD Support Groups Participants. Participation logs were collected for COD groups conducted between September 2017 and July 2018. Approximately, 168 distinct consumers participated in COD group treatment, of which, five were identified as ISRs.

CRTP Referrals and Admissions. There were 97 referrals for CRTP services between August 2017 and August 2018. Of the 97 consumers referred, 48 were identified ISRs. Nineteen (19) consumers were enrolled into CRTP services between December 2017 and August 2018. Of the 19 consumers admitted into CRTPs, 10 were identified ISRs.

HDOFCC Protocols. Between March 2018 and July 2018, scheduling issues for urgent outpatient appointment were encountered for 55 consumers approaching discharge from a FFS hospital; five clients were identified ISRs.

For the HDOFCC protocol, all consumers discharged from the four FFS hospital sites for whom outpatient appointments could not be scheduled at DO and Contract programs across all SAs were included in the PIP. For the TCPI CQM protocols, all consumers for whom a follow-up outpatient appointment was requested at the 15 DO programs across all SAs were included in the PIP.

STEP 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.
- 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.

Please refer to Table 3.

TABLE 3 CLINICAL PIP METHODS AND SOURCES OF DATA COLLECTION FY 17-18 TO FY 18-19

#	Data collected for FY 17-18	Methods of Data Collection and Sources of Data
1	**CRTP referrals and admissions**	Review of CRTP referral and admissions data submitted by CRM
2	**Pre-post COD training survey data**	Pre-post training survey data was collected from trainees at COD trainings conducted between 9/4/17 and 6/6/18.
3	**LACDMH outpatient COD groups' sign in sheets**	COD groups' sign-in sheets were collected on a monthly basis. Client IDs were aggregated and ISR treatment participation was tracked by attendance.
4	**Consumer perception of COD group participation**	COD Group Feedback survey data was collected between August 8, 2018 and September 6, 2018. The survey was administered to consumers that attended greater than four COD support group sessions.
5	**HDOFCC log**	Review of hospital discharge outpatient appointment care coordination log/report maintained by the Intensive Care Division
6	**7 day and 30 day Hospital readmission rates**	Psychiatric inpatient readmission rates were derived from psychiatric re-hospitalization rates across LACDMH and included both Medi-Cal beneficiaries and indigent clients. During this period, LACDMH system of care remained in transition with regard to client and episode registration (partially in IBHIS and partially in the legacy IS) so the analytic model needed to adjust for potential duplicate DMH Client ID's as well as possible duplicate/overlapping inpatient episodes. That is, a given "person" receiving services under LACDMH could have multiple DMH ID's across or within these information systems, and could have hospitalizations under different ID's at different facilities (or within different information systems). To adjust for this, a statistical matching algorithm (using SAS Dataflux) was applied to "link" together all the DMH ID's (and associated hospitalizations) for a given person (represented in the data by a "ClusterID"). Age group was derived based on the client's age on the date of discharge for each "index" hospitalization.
7	**7 day follow-up outpatient service rates**	Review of claims data – Outpatient service provider contact within 7 calendar days of discharge from a psychiatric inpatient hospital.
8	**Average LOS days**	Review of claims data - operationalized as the average (mean) number of calendar days between the date of admission and date of discharge across all inpatient episodes occurring during the reporting period (e.g., baseline versus follow-up).
9	**Increased engagement in the number of ISRs in outpatient treatment services**	Review of claims data – Receipt of outpatient services through LACDMH DO or LE Contracted clinics in the prior six months.
10	**TCPI CQM measures**	Cognos hospitalization report, SRL tracking, and manual tracking

- Describe the prospective data analysis plan. Include contingencies for untoward results.

The data analysis plan was to use IS/IBHIS data to review hospital readmission rates, average length of stay, post discharge appointment follow-up for the baseline and post 1 year follow up for the initial cohort of ISRs. Additionally, for the HDOFCC protocol implemented in March 2018, the plan was to use an excel spreadsheet (***Attachment 3D.7***) to track urgent appointment scheduling issues for three FFS hospitals on this log to incorporate the information from the HDOFCC forms (***Attachment 3D.8***) faxed by the hospitals to the Care Coordination team of the Intensive Care Division. The TCPI coaches and clinic leadership team reviewed Cognos reports from IBHIS to review hospitalization related data. Untoward results (understood as unusual or difficult to address results identified in data) were reviewed on an ongoing basis and adjustments to data collection or interventions were made as indicated.

- Identify the staff that will be collecting data, and their qualifications. Include contractual, temporary, or consultative personnel.

Staff overseeing data collection for this clinical PIP includes:

- Quality Improvement staff and Program Managers
- Clinical Informatics staff
- Staff of LACDMH Intensive Care and CRM Divisions
- SA District Chiefs
- DO and LE Contracted outpatient service providers

STEP 7: 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.
- Describe how the interventions will impact the indicators and help to answer the study question.

Please refer to Table 4.

TABLE 4: CLINICAL PIP STUDY INTERVENTIONS
FY 17-18 TO FY 18-19

Number of Intervention	Specific Intervention	Barriers/Causes Addressed	Corresponding Indicator	Date Applied
1	Prioritization of access to 10 beds (monthly/ongoing) for crisis residential services	Lack of current and prolonged stabilization programs in place to address successful transition from inpatient to outpatient for the ISRs	1, 4-8	8/17/2017
2	Provision of COD groups training for LACDMH outpatient programs in all 8 SAs	1. Lack of foundational knowledge in the screening and assessment of COD (Professionals and Paraprofessionals) 2. Lack of training needed to gain knowledge and skills to implement effective techniques/skills in facilitating COD Groups	2	9/14/2017 11/13/2017 12/7/2017 12/14/2017 1/18/2018 1/25/2018 3/1/2018 3/6/2018 3/8/2018 3/13/2018 4/4/2018 4/11/2018 5/7/2018 5/14/2018 5/30/2018 6/6/2018
3	Implementation of integrated COD group treatment services at LACDMH outpatient programs in all 8 SAs	Lack of consistently run COD groups by staff trained to engage consumers with COD issues. Staff trained in COD groups facilitated groups at their respective programs.	3-8	6/6/2018
4	Implement the Hospital Discharge Outpatient Follow up Care Coordination (HDOFCC)	Lack of collaboration and coordination between outpatient service provider(s) and Psychiatric Inpatient Hospitals for discharge planning.	4-8	3/2018
5	Establishing TCPI CQI protocols for hospital discharge outpatient follow up at fifteen (15) DO outpatient clinics	Lack of standardization for responding to requests for outpatient appointments following hospitalization	4-8	6/2018

1. Prioritization of Access to Crisis Residential Services to ISRs who meet the Criteria.

LACDMH made 10 of the 32 crisis residential beds available to Medi-Cal beneficiaries who qualify for crisis residential services. The average length of stay at CRTPs is 30 days and therefore it was estimated that approximately 100 high-risk individuals would receive

access to these services in a fiscal year. The goal was to enable successful transition from an inpatient to an outpatient setting through prolonged stabilization via crisis residential services. Access and transition to crisis residential services were coordinated through the CRM – Continuing Care Unit (CCU) per the CRTP referral protocols established in August 2017.

Crisis Residential Treatment Programs. CRTPs utilize a strengths-based, trauma-informed approach that supports and promotes the wellness and recovery of individuals in a safe, home-like setting. CRTPs provide short-term, recovery-based services and supports, including integrated services for co-occurring substance use disorders. Residents participate in the development of individualized plans that promote care in voluntary treatment settings and successful re-integration into the community. The focus is on the prevention of acute hospitalization, when possible, and facilitating early hospital discharge when admission is unavoidable, by stabilizing clients who are in psychiatric crisis but no longer considered acute. The objectives are to stabilize symptoms through medication intervention and develop social rehabilitation skills to facilitate community reintegration. Admission to a bed is based on the availability and appropriateness of the referred client.

Individuals residing in CRTPs were granted the following services:

- Assessment
- Counseling
- Individual Treatment Plan
- Culturally and Linguistically Appropriate Services
- Housing Services
- Medication Evaluation and Support
- Evidenced-based and Emerging Effective Practice Models
- 24/7 Assessment and Crisis Services
- Self-Help and Family Support Groups
- Transportation Services
- Physical Health Care Services
- Benefits Establishment and Services
- Representative Payee and Money Management
- Education
- Independent Living Skills
- Activities
- Discharge Planning and Linkage

In August 2017, the CRTP referral procedures were forwarded to SA District Chiefs and subsequently disseminated to all DO and LE Contracted programs within their SAs.

2. COD Support Group Trainings for **Provision of COD related services, specifically COD support services to address COD related issues**

LACDMH implemented COD trainings from 9/4/17 to 6/6/18 for clinicians and Substance Abuse Counselors serving both DO and LE Contracted programs. Following the training, participants facilitated COD groups at their respective programs. Per the AHRQ report, COD groups were an effective intervention to address COD related issues that serve as barriers to reducing rehospitalizations.

Trainings were facilitated by UCLA ISAP. The training was initially rolled out in SA 2 and SA 4. The trainings were conducted in all SAs 1 through 8 within FY 17-18 per the original plan. The September 4th training targeted DO providers. Subsequent trainings were made available to LE Contracted programs. The initial training was designed as a one day (six-hour) training for LACDMH clinicians who are treating consumers with COD and will be facilitating COD support groups. Participants from various disciplines, including: Psychologists, LMFTs and LCSWs; Registered Nurses; Certified Substance Use Disorder Treatment Counselors; and other Behavioral Health Specialists/Clinicians were invited to attend. Pre-post surveys were administered to determine knowledge gained and perspective preparedness. The training bulletin is attached (***Attachment 3D.9***).

Part I of the COD support groups trainings included an overview of the science of addiction; co-occurring disorders; review of specific drugs; and an introduction to Motivational Interviewing (MI). Part II continued with information regarding MI; provided an overview of utilizing CBT for substance use disorders, including principles of classical and operant conditioning, drawing parallels of CBT for mental health and substance use disorders; and how the structure of a CBT group session would be implemented. Trainees role played individual and group CBT sessions utilizing materials from the Matrix Model during Part II. Each of the cohorts were provided electronic copies of CBT treatment manuals for smoking cessation, anger management, and substance use disorders.

Initially, the trainer thought that it would be helpful to focus Part II on how to use MI in a group setting. However, it was quickly realized that the majority of those in attendance were not fluent in their ability to adequately implement the MI micro-skills and processes, let alone convey it to clients within either an individual or group setting. Therefore, additional MI skill practice along with additional opportunities to learn and understand the use of CBT for substance use disorders were provided in Part II. This decision repeatedly proved to be the optimal way to proceed.

The American Society of Addiction Medicine (ASAM) Criteria. The Substance Abuse Service Helpline (SASH) was launched on July 1, 2017 and served as the entryway for Los Angeles County's Substance Use Disorder Organized Delivery System (ODS). SASH is a toll-free call line that helps connect individuals (youth, young adults, and adults), providers and other stakeholders who are seeking specialty SUD services with appropriate SUD providers throughout Los Angeles County. The call line was established in a collaboration between the County's Substance Abuse Prevention and Control (SAPC) and Department of Health Services. SASH implementation facilitated SUD access by removing the need for an in-person, pre-treatment appointment.

Screening for SUD involves determining the most appropriate provisional ASAM level of care. ASAM criteria is a comprehensive set of guidelines for placement, continued stay and transfer/discharge of patients with addiction and COD. In August 2017, the PIP determined that SASH should be shared with COD group treatment trainees and participants as a valuable resource for SUD services. Per SASH, the lack of foundational skills in ASAM criteria was somewhat evident while working with LACDMH providers. In November 2017, the PIP team recognized a need for half-day training that covers ASAM criteria, SUD levels of care, and an added piece on navigating SAPC resources among LACDMH staff.

In January 2018, a half-day ASAM criteria training was developed. The initial training, on February 25, 2018, was opened to DO and LE Contracted providers. Upon request, a second training was offered on April 25, 2018 for SA 6 DO and LE Contracted providers. The training provided a general overview of ASAM with an emphasis on the use of the ASAM Criteria as a tool for initial client placement

and ongoing services at a given level of care. MI and CBT skills/techniques utilized in relapse prevention treatment were also integrated into the training. ASAM Criteria trainings will be ongoing. The goal is to offer on-site ASAM Criteria trainings that are individualized and weave in a cultural component.

To date, 47 LACDMH clinicians from DO (N=16) and LE Contracted programs (N=31) were trained in the ASAM levels of care. Additional ASAM Criteria trainings are scheduled for September 13, 2018 in SA 7 and September 20, 2018 in SA 8.

3. COD Support Group Implementation

Groups were not limited to ISR PIP clients. WPC-ISR clients and consumers receiving services at the program's site were welcomed. Group participation was tracked via sign-in sheets (***Attachment 3D.10***) and forwarded to QID via secure email, by the 5th of the following month. The following programs provided Integrated COD group treatment to 168 LACDMH consumers (unduplicated) between September 6, 2017 and August 31, 2018:

- Downtown Mental Health Clinic (DO, SA 4)
- Hathaway Sycamore Child and Family Services (LE – SA 2, 3, and 4)
- Hollywood Mental Health Clinic – FSP program (DO, SA 4)
- Northeast Wellness Center (DO, SA 4)
- Rio Hondo Mental Health Center (DO; SA 7)
- San Fernando Mental Health Center (DO, SA 2)
- Santa Clarita Valley Mental Health Center (DO, SA 2)
- West Valley Mental Health Center (SA 2)

4. Implement the Hospital Discharge Outpatient Follow up Care Coordination (HDOFCC) protocols

In FY 17-18 the PIP team expanded their efforts beyond ISRs to include consumers seeking urgent outpatient appointments post discharge from a FFS hospital. In support of facilitating outpatient follow-up and reducing barriers to clinical care, LACDMH staff from the Intensive Care Division was invited to participate in this PIP.

As of March 2018, the Care Coordination Team (CCT) within the Intensive Care Division implemented the HDOFCC protocols, a system of addressing barriers that hospitals face when scheduling appointments at LACDMH clinics. The goal was to prevent multiple and subsequent hospital readmissions at an earlier stage and/or prior to meeting ISR criteria. This intervention was developed to address issues with scheduling urgent outpatient appointments following hospital discharge and to expand the scope of the project to all recently discharged consumers. Hospitals were encouraged to participate in the HDOFCC protocol by faxing the "Outcome of seeking Follow-up After Hospitalization Appointment" form to CCT for immediate follow-up.

This process involved reviewing the logs of reported issues and addressing them directly with the clinics. A feedback loop was established for the CCT to disseminate this information to SA MHCPMs III and their designated program staff for troubleshooting and issue(s) resolution. SA MHCPMs and Chiefs were asked to review the information provided on the log with their respective programs and report the outcome of the follow-up and why the appointment could not be scheduled within five business days. At present, LACDMH hospital liaisons are in SA 2 and SA 4 only; where the majority of their duty is to be in the FFS hospitals and track issues related to discharges. The PIP team worked towards developing a system-wide comparison of discharges.

HDOFFOC logs - Between March and August of 2018, four hospitals participated in this process. A total of 56 faxes were received regarding DO and LE Contracted Clinics in SAs 2, 3, 4, 6, 7 and 8. Upon receipt of the fax, the issues were immediately communicated to the program.

5. Establishing Protocols for Following Up After Hospitalization – TCPI CQM Protocols

Transforming Clinical Practice Initiative and Los Angeles Practice Transformation Network. L.A. Care, the nation's largest Medicaid health plan, received a federal award to implement a Practice Transformation Network in Los Angeles (LAPTN) as part of the Transforming Clinical Practice Initiative (TCPI). LAPTN aimed to improve health outcomes and experience of care for individuals served by the safety net system. L.A. Care retained **Integrated Behavioral Health Partners (IBHP)** to provide practice coaches to work with DMH, which is one of five network partners. This project was based on the Quadruple Aim and was primarily, although not exclusively, focused on patients with diabetes and/or depression.

As of June 2018, 15 of the DMH programs participating in the TCPI have been working with coaches to establish standard protocols for responding to appointment requests from hospitals, consumers and families following a recent discharge. The aim was to comply with the DMH Access to Care policy of providing an appointment date and time at the point of the request that falls within the required 5-day time frame.

Site leadership and clinical staff have begun implementation and aim to have tested workflows by early September 2018. Each of the 15 participating sites have a unique staffing mix, client population, and established clinical operations; therefore, coaches were working with each clinic individually to implement a system that best served their clientele and supported existing workflows.

A central feature in the resulting plans was establishing systems of accountability by clarifying each staff member's role and responsibility. Sites are also using this as an opportunity to hold regular staff trainings and refreshers on the newly refined protocols. Clinic-level data collection for the months of August and September 2018 served as an additional source of accountability, as well as making recently hospitalized clients a regular part of case conferencing agendas.

Participating Sites*

- Antelope Valley MHC

- Palmdale MHC
- San Fernando MHC
- Arcadia MHC
- East San Gabriel MHC
- Hollywood MHC
- Northeast MHC
- Edelman Adult Outpatient Program
- Augustus F. Hawkins Adult and Child/Adolescent Outpatient Programs
- Compton Family MHC
- American Indian Counseling Center
- Roybal Family MHC
- Coastal API MHC
- Long Beach API MHC
- Valor
- **Other TCPI sites include Telemental Health and DMH/DHS Collaboration Program*

Additional PIP Activities to Note

Per the recommendation by the EQRO reviewers, the PIP sought collaboration with the SA 82 Mobile Triage Teams to evaluate if the engagement of ISRs by the SB 82 team would be beneficial. Of the 330 clients who received services from SB 82 for CY 2017, only 5 were identified as ISRs from the data match by DMH Clinical Informatics staff. Due to the low number and after further discussion, it was decided that SB 82 would not be pursued as an intervention for this PIP. SB 82 has certain guidelines to follow regarding outreach to homeless clients and focusing on ISRs specifically was not considered as an efficient strategy.

STEP 8: 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 any follow-up activities?
- 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 data analysis for the pre-post outcomes evaluation for the ISR cohort occurred as planned (Table 5). However, due to the limited number of ISRs who actually received the two interventions initially planned, the data analysis revealed no specific outcomes tied to the project's interventions. Analysis targeted towards data post interventions was not conducted as reliable and valid information would have been minimal for the small number of participants who received the intervention.

A systemic issue related to the creation of duplicate IDs for clients presented during the data analysis. Although a client should only have one ID number, many of our clients have multiple IDs created over time due to a variety of reasons. This is a more significant issue for our clients with four or more inpatient admissions (i.e., ISRs) because their extensive service utilization across different providers increases the potential for a duplicate ID to be created. In order to address this issue, the County utilized a process that identified likely duplicate IDs based on demographic and other factors and assigned a superordinate "cluster" ID. Using this cluster ID, it became possible to examine the services provided to an individual despite the distribution of service-related data across the multiple client IDs. Unfortunately, the cluster ID was regenerated on a recurring basis and it was not possible to re-use the data set generated for the previous ISR PIP analyses. Therefore, the data set was re-generated and included a small number of cases that were not identified as ISRs in the prior analyses; likely due to readmissions near the conclusion of the 13-month reporting period that ended June 13, 2017. The following data analysis refer to the revised ISR cohort which includes 1,772 ISRs and 445 ISRs identified as not having received outpatient treatment services in the six months prior to the baseline reporting period. ISR PIP analyses were based on the 13 months prior to the date of data extrapolation. In order to maintain consistency, figures below include service data for 13 months following the original date of data extrapolation. Services delivered after July 13, 2018 were not included, although it's extremely likely that a great deal of service data between July 13, 2018 and the July date of the data run were not available in the data warehouse in any case.

TABLE 5: PRE-POST OUTCOMES DATA FOR THE ISR COHORT

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**
Number of ISRs admitted for Crisis Residential Treatment Program (CRTP) services	9/2017 – 8/2017	0	100 per FY	8/17/17	8/2018	19	
Level of understanding in the assessment and screening of CODs	9/17/17 – 11/13/17	TBD	18%	9/14/17	6/6/18	28%	28-18=**10 PP** improvement
Perception of COD support group effectiveness (consumers)	8/8/18	=78%	**2 PP**	9/2018	8/8/18-9/6/18		
Psychiatric Inpatient Hospital 7-Day	June 13, 2017	4776/13548 *100 = 35.3%	2 PP decrease	Varies – 8/17/17-6/30/18	July 13, 2018	3314 / 8378 x 100 = **39.5%**	35.3-39.6 =

Rehospitalization Rates for ISRs							**-4.3 PP** improvement
Psychiatric Inpatient Hospital 30-Day Rehospitalization Rates for ISRs	June 13, 2017	9018/13548*100 = 66.6%	2 PP decrease	Varies – 8/17/17-6/30/18	July 13, 2018	5753 / 8378 x 100 = **68.7%**	66.6-68.7 = **-2.1 PP** improvement
Post-Psychiatric Inpatient Hospital 7-Day Outpatient Service Follow-Up Rates for ISRs	June 13, 2017	4076/13548 *100 = 30.1%	5 PP increase	Varies – 8/17/17-6/30/18	July 13, 2018	2032 / 8378 x 100 = **24.3%**	24.3-30.1 = **-5.8 PP** improvement
Average Length Of Stay (LOS) at Psychiatric Inpatient Hospitals for ISRs	June 13, 2017	7.2 days	6.2 days	Varies – 8/17/17-6/30/18	July 13, 2018		7.2-6.2 = **1 day** improvement
Increased engagement in the number of ISRs in outpatient treatment services	June 13, 2017	25%	10 PP decrease	Varies – 8/17/17-6/30/18	July 13, 2018	1 - (1,523/1772) x 100 = **14.1%**	**11 PP** improvement

Summary of Outaptient Treatment and Rehospitaliztion Data for the FY 16-17 ISR Cohort

7-day hospital readmission rates at June 13, 2017 (baseline) and July 13, 2018: A total of 1,772 distinct ISRs comprised the baseline cohort when the data was analyzed for this project, with a total of 13,548 distinct inpatient admissions in the 13 months between May 13, 2016 and June 13, 2017. Of these inpatient admissions, 4,776 occurred within seven days of the prior inpatient discharge. Reported differently, 35.25% of inpatient admissions for ISRs in the baseline reporting period were readmissions within seven days of discharge. Of the 1,772 ISRs comprising the baseline cohort, 1,215 received one or more inpatient admissions in the 13-month follow-up reporting period, with a total of 8,378 distinct inpatient admissions during that time. Of these inpatient admissions, 3,314 occurred within seven days of the prior inpatient discharge. Reported differently, 39.56% of inpatient admissions for ISRs from the baseline cohort between June 13, 2017 and July 13, 2018 were readmissions within seven days of discharge. *Readmission rates in the follow-up period may be slightly higher than reported due to data lag, but are believed to be a relatively valid measure as reported.*

Baseline - 35.25% v. Follow-up – 39.56%

30-day hospital readmission rates at June 13, 2017 (baseline) and July 13, 2018: Of the 13,548 distinct inpatient admissions during the baseline reporting period, 9,018 occurred within 30 days of the prior inpatient discharge. These 30-day readmissions constituted 66.56% of inpatient admissions for ISRs in the baseline reporting period. Of the 8378 distinct inpatient admissions for ISRs comprising the baseline cohort that occurred during the 13-month follow-up period, 5753 occurred within 30 days of the prior inpatient discharge. During the follow-up reporting period, 30-day readmissions constitute 68.67%. *Readmission rates in the follow-up period may be slightly higher than reported due to data lag, but are believed to be a relatively valid measure as reported.*

Baseline – 66.56% v. Follow-up – 68.67%

7-day follow-up outpatient service rates at June 13, 2017 (baseline) and July 13, 2018: Of the 13,548 distinct inpatient admissions during the baseline reporting period, outpatient service delivery (e.g., any Mode 10 or Mode 15 service) took place within 7 days of discharge on 4,076 occasions. This represents a 30.10% rate of 7-day post-discharge outpatient service delivery. Of the 8378 distinct inpatient admissions for ISRs comprising the baseline cohort that occurred during the 13-month follow-up period, outpatient service delivery took place within 7 days of discharge on 2032 occasions. This represents a 24.25% rate of 7-day post-discharge outpatient service delivery.

When interpreting figures for 7-day follow-up outpatient service rates, it was important to keep in mind that the follow-up rate may be spuriously low due to data lag. There was a delay between the time of service delivery and the entry of these services into IS/IBHIS, and an additional delay in the replication of the data in the data warehouse. As a result, discharges that occurred toward the end of the follow-up period may have been followed by outpatient service delivery that did not yet appear in our database.

Baseline – 30.10% v. Follow-up – 24.25%

Average Length of Stay (LOS) at June 13, 2017 (baseline) and July 13, 2018: During the baseline reporting period, the average length-of-stay for inpatient admissions by ISRs was 7.15 days. During the follow-up reporting period, the average length of stay for inpatient admissions by ISRs who comprised the baseline cohort was 7.09 days.

Baseline – 7.15 days v. Follow-up – 7.09 days

ISRs with no outpatient treatment services: Of the 1,772 ISRs who comprised the baseline cohort, 445 were identified as not having received outpatient treatment services in the final six months of the baseline reporting period. During the follow-up reporting period, 196 of the 445 ISRs (44.04%) did receive one or more outpatient services, leaving 249 (55.96%) of the ISRs still without receipt of outpatient services through DMH Directly-Operated programs or contract agencies.

As noted above, there was a delay between the time of service delivery and the entry of these services into IS/IBHIS, and an additional delay in the replication of the data in the data warehouse. As a result, some ISRs may have received outpatient services toward the end of the follow-up period that did not yet appear in our database.

Baseline – 25.11% v. Follow-up – 14.05%

The only notable pre-post improvement was in the number of ISRs engaged in outpatient treatment services. The statistical significance of these results has not been established.

The Impact of the PIP's Interventions on LACDMH consumers

For **Intervention # 2** related to conducting COD trainings in all SAs, this was completed as planned and the breakdown of training participants by DO and LE participants and their respective SA is presented in Table 6.

TABLE 6: NUMBER OF LACDMH CLINICIANS TRAINED IN "CONDUCTING EFFECTIVE COUNSELING GROUPS WITH CONSUMERS WITH CO-OCCURRING DISORDERS" BY SERVICE AREA FY 17-18

	Part I				Part II			
SA	Date of Part I	Total Trained	From DO	From LE	Date of Part II	Total Trained	From DO	From LE
1	5/30/18	35	14	21	6/6/18	32	13	19
2	*9/14/17	23	23	0	11/13/17	15	15	0
3	4/4/18	35	3	32	4/11/18	28	2	26
4	12/7/17	27	0	27	12/14/17	24	0	24
5	3/1/18	24	11	13	3/8/18	20	12	8
6	5/7/18	8	3	5	5/14/18	7	3	4
7	3/6/18	26	16	10	3/13/18	26	16	10
8	1/18/18	34	12	22	1/25/18	29	11	18
TOTALS		**212**	**82**	**130**		**181**	**72**	**109**
	Percent	100%	39%	61%		100%	40%	60%

Note: *Training was open to SA 2 and SA 4 participants from DO clinics. Trainings were facilitated by UCLA Integrated Substance Abuse Programs, in their respective SA. Part I and Part II trainings were full day (six-hour). Participants were of varying disciplines, including but not limited to Psychologists, Social Workers, Marriage and Family Therapists, and Certified Substance Use Disorder Treatment Counselors.

Between September 14, 2017 and June 6, 2018, LACDMH provided Part I of the COD training series to 212 LACDMH clinicians from SA 1 through SA 8. Of the 212 trainees who participated in Part I, 39% (N=82) were from DO programs and 61% (N=130) were from LE Contracted programs. Of the 181 trainees who participated in Part II, 40% (N=72) were from DO programs and 60% (N=109) were from LE Contracted programs. The total number of participants from Part I to Part II dropped by 40 and showed a 19 PP decrease in participation in the Part II training.

Pre- and post-test data were collected from the COD support group training participants. Matched pairs analysis fostered the comparison of pre-post improvement in the participant's level of understanding in the assessment and screening of CODs. Only participants with both pre and post-test scores were included in the analysis (N=363), while the remaining (N=26) who completed either a pre-test or a post-test were excluded. Results before and after the training were compared for each question. As a result of Part I of the COD support groups trainings, there was 28.1% overall increase in the level of understanding in the assessment and screening of CODs. Part II of the COD support groups trainings contributed to an 8.1% overall increase in the knowledge and skills to run COD groups.

The overall post training results for **Part I (N=211) versus Part II (N=189) were positive**. On specific survey questions there were differences in the ratings as described below:

- The Question, **"I have adequate knowledge in this training area" showed that Part II (91%) had a greater percentage report that they strongly agreed and agreed (higher ratings) with this statement compared to Part I (81%)**
- The same pattern was seen for **the Question "I possess the skills required in this topic area" with Part II (91%) showing higher ratings compared to Part I (83%)**
- **The reverse pattern was noted with the Question "How useful was the information you received from the instructor" with 90% for Part I versus 86% for Part II**

The overall post training results for **Part I (N=30) versus Part II (N=16) on the 30 day follow up related questions**: "How useful was the information you received from the instructor;" "The training has enabled me to serve my clients better;" "I would take additional training from CSAT;" and "Did you share any of the information from the training with others;" were positive with ratings above 90%. However, the Question related to applied work, "**Have you applied any of what you learned in the training to your work?" showed that Part I had a greater percentage reporting "Yes" at 96% compared to Part II at 81%**

Multiple **positive open-ended comments** were received for Part I and Part II of these trainings.

Part I

- The interactive Motivational Interviewing activity was the most useful in supporting my work experience and responsibilities.

- MI exercises practiced during training
- The presenter was very clear with information he provided and made topic interesting while helping understand how to utilize it.
- hands on role playing
- The material that was taught was relevant to job responsibilities and targeted the age for our youths. Bigger space, otherwise the material was appropriate.
- The substance abuse group work info was new and helpful.
- It was excellent... One of the best I have attended.
- How to assess for a Clt's readiness for change (increase in change talk, decrease in sustain talk), and how to use
- Motivational Interviewing to elicit more change talk.
- It was extremely well done! I
- The training presented content that was an excellent review as well as being able to interact with the trainer
- through questions and experiential exercises for clarity of material presented
- The intervention models were most useful. The training re-shaped my thinking. My thought process went from pushing the client to do things the way we feel he should, to more supporting the client, offering options, but understanding that the goal is to keep him in treatment not push him away

Part II

- This training was helpful in providing me information onhow to address substance use with clients who may not
- always feel comfortable sharing. Cognitive behavior therapy helped with my current clients [distorted] thoughts.
- Practical and role playing applications.
- No suggestions, the quality was superb! Thank you.
- In-depth discussion and modeling of MI interventions. Timing group work, particularly facilitator/co-facilitator exercise.
- Role plays were beneficial to grasping concepts
- The information on Motivational Interviewing is extremely relevant and I try to implement this intervention with clients, not only with substance abuse, but other changes they could make to be healthier overall (e.g. following MD recommendations for specific health concerns, ending toxic relationships, responsible money management, etc.) Exercises, verbal examples, positive delivery of information

Few negative open-ended comments were received for Part I and Part II of these trainings.

Part I

- Extend the training to two days, to ensure we have all the information that has been prepped.
- Unlike many of the past ATTC trainings I have taken. Found this training to be boring.

Part II

- Longer time for training - more time to practice the MI with feedback. More practice with group format too.
- Not a two full day training. Very lengthy.

For **Intervention 3** related to provision of services, COD Support Groups Participants. Participation logs were collected for COD groups conducted between September 2017 and July 2018. Approximately, 168 distinct consumers participated in COD group treatment, of which, five were identified as ISRs. Participants who attended at least four group sessions were given a survey to COD feedback survey to complete. Survey data was collected between August 8, 2018 and September 6, 2018.

Approximately 67.6% of respondents either strongly agreed or agreed with the statement, "I am able to handle stress better (N=20)." When asked to rate the statement, "I learned alternate ways to cope with stress from my peers in the group," 93.3% (N=28) of the respondents strongly agreed or agreed. When asked to rate the statement, "I reduced my use of substances," 93.3% (N=28) of the respondents strongly agreed or agreed. When asked to rate the statement, "Overall, I feel better," 76.6% (N=23) of the respondents strongly agreed or agreed. One-hundred percent (100%) of the respondents strongly agreed or agreed with the statement, "I would recommend others to attend this group.

As mentioned earlier, challenges and barriers related to engaging ISRs in routine outpatient services voiced by stakeholders of the PIP committee triggered additional interventions related to HDOFCC protocols and TCPI CQM protocols. The SA program leads expressed multiple barriers to engaging the ISR population in outpatient treatment and highlighted the importance of focusing on prevention. Program managers and service providers noted that the ISR population would be better served through intensive programs, such as the WPC and FSP programs, with appropriate staffing resources. Although the two interventions were targeted at reducing hospital readmissions for ISRs, only four (4) of the entire cohort participated in COD groups and an additional **two (2)** were admitted to the CRTPs. Per the programs participating in the PIP, population being transient and moving across different SAs in the county, refusal of services offered, and lack of staffing resources focused on intensive care services in general outpatient programs to engage the ISR population were barriers to engaging the ISRs in COD groups and in CRTP programs for prolonged stabilization.

The CRTP referral protocols were also limited to only the ISR population and it was important to identify follow up care for all consumers discharged from hospitals, including those not identified as ISRs. Some of the consumers referred to CRTPs refused services. For some cases, the hospitals discharged clients before the DMH team reached on site to facilitate the linkage. Other concerns expressed were related to the criteria for the CRTPs that may result in certain ISRs being ineligible for referral. Other barriers to referrals and admission to CRTPs included refusal from CRTP for admissions due to the lack of clear understanding of the protocols by CRTP providers. This generated a Plan Do Study Act (PDSA) cycle to improve the process for referral as explained below.

The PIP team recognized that due to challenges faced by the system to address a very difficult to engage population through the two interventions initially identified, the project's efforts should focus on closely monitoring outpatient follow up appointments post hospital discharge, and for all consumers. The PIP team recognized that expanding the scope of this PIP to address outpatient follow up and care coordination for all hospital discharges would result in more effective interventions that would be better aligned with current resources available for LACDMH outpatient programs and current initiatives such as WPC and FSP expansion. Further, the concerns with hospital

discharge practices and related scheduling of outpatient follow up were noted as an important area to address. This resulted in Interventions 4 and 5 being implemented as outlined in this section.

PDSA: Reviewing the Crisis Residential Treatment Programs (CRTP) Referral Protocols (***Attachment 3D.11***)

On May 17, 2018, recent barriers with referrals to gatekeepers for CRTPs were discussed among the PIP team. It was also highlighted that documentation required when facilitating the CRTP referral process contains specific items that may be difficult to obtain in real time. In response to CRTP referral issues reported by providers, the MHCPM III with oversight for CRM facilitated a CRTP Provider meeting. An additional meeting with Whole Person Care –ISR/Kin Through Peer (KTP) Supervisors served to address questions or concerns regarding referrals and CRTP issues, was scheduled for June. This June 14th ISR (KTP) meeting offered valuable information regarding the struggles ISR KTP staff are experiencing with CRTP Providers. Moving forward, CRM will assist with streamlining the enrollment process. Certain licensing criteria (i.e., Tuberculosis or TB test) are required; however, a consumer's hygiene or COD related issues should not create a barrier to CRTP enrollment. Sharing the clinical PIP's prolonged stabilization efforts with CRTP Providers may have led to the increase in referrals and approved admissions. In June 2018, there were 24 inquiries for CRTP services; 21 referrals and three admissions.

Between August 2017 and August 2018, 97 LACDMH consumers were referred for CRTP services. Almost 50% (N=48) of the consumers referred for CRTP services were identified as ISRs. At rate greater than 50%, 10 of the 19 consumers that were admitted into a CRTP were ISRs.

Due to data lag, the length of stay days could not be established for consumers enrolled into a CRTP after June 2018. Those who were enrolled prior to June 2018 (N=6), received CRTP services between one and 27 days with an overall average LOS of 15.5 days.

For **Intervention # 4** related to HDOFCC protocols, a total of 56 forms were faxed from four hospitals and a summary of the number of programs with urgent appointment scheduling issues are outlined in Table 7.

TABLE 7: HOSPITAL FOLLOW-UP CALLS BY HOSPITAL
MARCH 14, 2018 THROUGH AUGUST 31, 2018

Hospital	Number of Faxes Received	Service Area(s)	Directly Operated (DO)	Legal Entity (LE) Contracted
College	44	2,3,4,6,7, and 8	Compton Downtown Rio Hondo Long Beach South Bay West Central	Hillview Enki Pacific Clinics Tri City MHA – The Village

Citrus Valley	5	2 and 3	East San Gabriel Valley	Enki Tri-City
White Memorial	6	2,3,6, and 7		Enki San Fernando Valley CMHC Heritage Mental Health SCHARP Oasis House – FSP Program
Intercommunity Hospital - Parkside West	1	3	East San Gabriel Valley	

Data Source: LACDMH Intensive Care Division, August 2018.

Success followed the implementation of HDOFCC protocol and the shift in project's focus on scheduling of urgent appointments for hospital discharges. Data showed that the number of hospital urgent appointment scheduling issues reported for the four hospitals decreased from a total of 40 in March 2018 to one (1) in August 2018 (with eight (8) reported in April, three (3) in May, three (3) in June, and one (1) in July). There were process improvements with outpatient programs both DO and LE Contracted programs that resulted in the improved appointment scheduling. For example, establishing a dedicated call center number by a large contract program, improved communication with front desk and On Duty staff at clinics. Following implementation of this protocol, there was great improvement with no issues reported for DO programs for the months of May and June 2018 after some initial issues reported in March and April.

The goal is to continue the implementation of the HDOFCC protocol that was launched in March 2018 for all DO and Contract programs. The clinical PIP will also continue their efforts to engage more hospitals on this intervention by expanding the HDOFCC protocols to additional hospitals.

Lessons learned from PIP meeting discussions and sharing of strategies to improve outpatient follow up: During the March 2018 PIP meeting, SA 2 program staff explained how hospitals call clinics directly in SA 2. Per her report, one day was dedicated for discharge appointments and appointments were being double booked to accommodate for urgent appointments. SA 2 lead manager highlighted challenges with staff capacity issues in addressing timely scheduling of urgent appointments for hospital discharges and alerted the team on how it is important not only to get urgent appointments but to also have the follow up between intake and medication appointments to ensure appropriate continuity of care. She explained that clinicians and managers are doing their best and despite their efforts, at times walk ins have to be requested when appointments cannot be scheduled. SA 2 also shared how West Valley MHC was in close contact with Henry Mayo Hospital regarding discharge appointments scheduled for the same client month after month but this client was a no show. Illicit substance use was a contributing factor in this case. This client was in relapse with alcohol and on the waiting list at Veteran's Affairs (VA) Hospital for a residential bed. Residential rehabilitation was further confirmed as a challenge for consumers with Co-occurring disorders (COD). Program staff from Northeast Wellness Center in SA 4 shared challenges with client no shows and explained how only 1 out of 5 clients appear for their scheduled appointments following hospital discharges. It was explained that family support was conducive to clients

showing up for appointments and participating in treatment following hospital discharge. Family Advocacy PIP team member from SA 8, shared concerns regarding hospitals discharging clients with bus tokens and inquired about protocols.

During the April 2018 PIP meeting, the PIP team discussed how hospitals seeking discharge appointments historically sought services from DO clinics before reaching out to the LE Contracted programs. Service providers expressed a need for rotation and balance for DO versus LE Contracted program appointments. Hospitals care coordinators do have access to the contact information for LACDMH DO and LE Contracted programs; however, the tendency is to continue to contact leads that have proven helpful in the past. The PIP team concluded that further exploration, through increased collaboration with the hospitals, regarding the process of seeking appointments at clinics based on consumer preference/need would prove helpful. The PIP will address the need for additional education on the following system-wide challenges to timely follow-up post discharge:

- Hospitals are not going through the SA navigators.
- Hospitals often seek appointments without a date of discharge. In response to this, clinics offered open/walk-in.
- An important follow up activity of the PIP team to address these issues was the PIP team's participation at the FFS hospital provider meeting to share the success of the implementation of the HDOFCC protocol among the three pilot hospital sites. The meeting's participants/hospital representatives were encouraged to implement this protocol at their hospital. The PIP team also shared concerns from stakeholders regarding hospital discharge practices. Several PIP members were present at the Hospital Provider Meeting on July 31, 2018 and the following items were discussed:
    - Concerns regarding Hospital discharge practices (i.e., medication, bus tokens)
    - The benefits of participating in the HDOFCC protocols with PIP involvement
    - TCPI efforts; specifically, how their outpatient discharge appointment efforts interface with this PIP
    - Shared success stories from the follow-up protocol and how the number of issues reported have reduced
        - For example, no issues were reported for Directly Operated (DO) programs in May and June.
    - Hospital representatives expressed concerns/barriers with scheduling appointments with East San Gabriel Valley and Tri-City Mental Health
    - Per Hospital representatives, there is no pharmacy on site and a prescription is provided to the client upon discharge
    - Some of the Hospitals were not aware of the protocols. Three Hospitals (including, St. Francis and Huntington) expressed interest and subsequently received the protocols via email.
    - BHC Alhambra and Aurora Charter provided several concerns and barriers but expressed no interest in participating in the protocols.
    - The TCPI project manager informed Charter Oak of her plan to follow up with the TCPI coach housed at East San Gabriel Valley and share any updated protocols with him
    - College Hospital confirmed a plan to follow-up with staff when issues regarding their communication to outpatient programs present and appropriate discharge practices for a successful transition to outpatient programs.

Immediately following the July Hospital Association meeting, San Dimas, St. Francis, Huntington and Intercommunity hospitals expressed interest in the HDOFCC protocols. In August 2018, Intercommunity Hospital – Parkside West submitted their first urgent

appointment scheduling issue which they encountered with East San Gabriel Valley. As of August 2018, East San Gabriel Valley provides discharge appointments routinely and every day. They have 60 intake slots available per week. A meeting between the District Chief, Lisa Wong, the MHCPM II at East San Gabriel Valley, Michelle Majors and Intercommunity Hospital to clarify the referral process is planned for the near future.

HDOFFC logs were reviewed and discussed at each PIP meeting. The April log sited issues with 14 programs, some new programs and some repeat problems. Patterns of repeat problems were addressed by the program's respective SA MHCPM III. In May, issues with scheduling an appointment were reported for Tri City Mental Health, in SA 3. The program's responses in the April and May reports were similar for Tri-City and due to this additional program follow-up, including a request for a clear plan of correction, was facilitated by the Contract lead in SA 3. In response to program follow up by the SA MCPM III in May, SCHARP in SA 6, developed a plan towards improving communication and supporting their staff with additional training. No issues were reported in the June HDOFCC log for DO programs. The PIP team reviewed the June 2018 report including program follow-up and outcomes from Enki and San Fernando CMHC. In response to the project's follow-up efforts, Enki announced its new Hospital Discharge Line (626-227-7012; ***Attachment 3D.12***), in July 2018.

Intervention # 5 TCPI CQM protocols: Multiple workflows for post hospitalization appointments were adopted by the 15 participating sites (***Attachment 3D.13***). Workflows were developed based on each program's individualized needs and current operations. For example, some clinics implemented "Officer of the Day" and "Set Appointment Days" in a focused effort to support new clients. Other programs recognized areas for improvement when supporting existing clients and utilized Cognos reports or the client's primary contact to assist with timely follow-up. The effectiveness of these workflows on timely follow-up measures were tested between August 1, 2018 and August 31, 2018. Data was tracked manually (by supervisors and front office staff), through the Service Request Log (SRL), and/or via Cognos reports. Overall, 357 LACDMH consumers were referred for an appointment following hospitalization. Approximately, 75.4% of the consumers (N=269) were provided an outpatient follow-up appointment within five days (business) of their hospital discharge.

STEP 9: ASSESS WHETHER IMPROVEMENT IS "REAL" IMPROVEMENT

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, if 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?

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?)

    - Data cycles clearly identified when measurements occurred for all outcomes reported. The current frequency reported seems appropriate.
    - Statistical significance testing has not been done. The only notable improvement for the ISR cohort not exactly related to the intervention is the decrease in the percent of consumers with no outpatient services from the ISR cohort from 25% at baseline to 14% at post one-year comparison. This change is however more likely due to the system-wide interventions such as WPC and less related to the PIP interventions.
    - There was documented quantitative improvement in the processes such as the increase in the number of staff trained to conduct COD groups and decrease in the number of issues reported monthly on the HDOFCC protocol since implementation. Additional quantitative improvement related data focusing on pre-post improvement in TCPI CQM protocols related outpatient follow up, knowledge and skills for COD groups and COD group participation feedback will be reported during the September review session.
    - The HDOFCC clearly indicate face validity that the number of post discharge urgent appointment issues reported for DO programs for example have diminished since the implementation of this intervention
    - At this time, there is no statistical evidence for the HDOFCC or TCPI CQM protocols related interventions as these were implemented more recently and additional data needs to be collected to demonstrate statistical evidence.
    - The improvement sustained through repeated measurements over comparable time periods for the HDOFCC protocols was notable for the DO programs with no issues reported in the month of May, June, and July and can be considered to be sustained.

Please refer to ***Attachment 3D.14*** for in-text references.