Final Report

CAEQRO Report, FY12-13

Contra Costa

Conducted on

February 13-15, 2013

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❖INTRODUCTION❖

BACKGROUND AND METHODOLOGY

The California Department of Health Care Services (DHCS) is charged with the responsibility of evaluating the quality of specialty mental health services provided to beneficiaries enrolled in the Medi-Cal managed mental health care program.

This report presents the fiscal year 2012-13 (FY12-13) findings of an external quality review of the Contra Costa County mental health plan (MHP) by the California External Quality Review Organization (CAEQRO), a division of APS Healthcare, from February 13-15, 2013.

The CAEQRO review draws upon prior year's findings, including sustained strengths, opportunities for improvement, and actions in response to recommendations. Other findings in this report include:

- Changes, progress, or milestones in the MHP's approach to performance management – emphasizing utilization of data, specific reports, and activities designed to manage and improve quality.
- Ratings for Key Components associated with the four domains: quality, access, timeliness, and outcomes. Submitted documentation as well as interviews with a variety of key staff, contracted providers, advisory groups and other stakeholders serve to inform the evaluation within these domains. Detailed definitions for each of the review criterion can be found on the CAEQRO Website www.caeqro.com
- Analysis of Medi-Cal Approved Claims data
- Two active Performance Improvement Projects (PIPs) – one clinical and one non-clinical
- Three 90-minute focus groups with beneficiaries and family members
- Information Systems Capabilities Assessment (ISCA) V7.3

❖FY12-13 REVIEW FINDINGS❖

STATUS OF FY11-12 REVIEW RECOMMENDATIONS

In the FY11-12 site review report, CAEQRO made a number of recommendations for improvements in the MHP's programmatic and/or operational areas. During this year's FY12-13 site visit, CAEQRO and MHP staff discussed the status of those FY11-12 recommendations, which are summarized below.

ASSIGNMENT OF RATINGS

- Fully addressed – The issue may still require ongoing attention and improvement, but activities may reflect that the MHP has either:
  - resolved the identified issue
  - initiated strategies over the past year that suggest the MHP is nearing resolution or significant improvement
  - accomplished as much as the organization could reasonably do in the last year

- Partially addressed – Though not fully addressed, this rating reflects that the MHP has either:
  - made clear plans and is in the early stages of initiating activities to address the recommendation
  - addressed some but not all aspects of the recommendation or related issues

- Not addressed – The MHP performed no meaningful activities to address the recommendation or associated issues.

KEY RECOMMENDATIONS FROM FY11-12

- Continue to work collaboratively with DHCS to monitor the status of unprocessed claims files to assure complete resolution of processing issues and optimal revenue generation:

  ☒ Fully addressed ☐ Partially addressed ☐ Not addressed

  A contractor was retained to review claiming operations in order to provide feedback for streamlining and improving processing procedures. A series of reports were also developed to better monitor the status of outgoing claims as well as incoming payment information. These reports also isolate areas of potential concern for proactive review. All previously backlogged claims have been submitted to DHCS. The MHP continues regular conference calls with DHCS to monitor outstanding claim status as DHCS still has a statewide claim backlog that is beyond the MHP's control.

Unfortunately, contractor providers reported ongoing problems with the existing IS, such as discrepancies between the MHP and their organizations on billing, case and capacity reporting, and fiscal reports.

- Provide staff with regular and recurrent data, especially reports on consumer outcomes system-wide, by clinic and by program. Consider developing service/action protocols triggered by high scores on risk variables within the outcome tools used:
  ☐ Fully addressed ☒ Partially addressed ☐ Not addressed

  The lack of an electronic health record (EHR) makes implementation of consumer outcome measures cumbersome and resource intensive, and outcomes are still not yet tracked systemwide. Nonetheless, the MHP has implemented the use of the LOCUS/CALOCUS (Level of Care Utilization System) tools systemwide and now has over one year of collected data, beginning to develop baselines with these measures. Staff are provided with a client level report each time a LOCUS/CALOCUS is completed. One of the uses of the measures has been to isolate cases where the tools are discrepant from services rendered in the system of care – either high scores with low service intensity or low scores with high service intensity. Tool scores are also reviewed when triggered by the tracking of open episodes (using a threshold of six reporting units) and during the examination of cases where fewer than five percent of services are being rendered by a county provider. The MHP is in the process of developing a matrix to crosswalk Level of Care scores to service delivery options. While certain high risk scores are assessed using the Quality/Coordination of Care Worksheet developed by the Utilization Review (UR) Unit, no standardized, embedded clinical protocols have been established for such occurrences during tool administration.

  Full Service Partnership (FSP) programs receive monthly LOCUS/CALOCUS trend reports for consumers who have completed an assessment in the previous month so consumer trends may aid treatment decisions-making. All contract providers are now expected to submit a LOCUS/CALOCUS score for both initial and reauthorizations for service. Specific outcomes measures are also being utilized in the older adult program; administrative staff attend line staff meetings quarterly to provide updates on consumer outcomes. The MHP anticipates implementing the Child and Adolescent Needs and Strengths (CANS) tool in 2013.

- Revitalize the virtual staff suggestion box on the intranet. Advertise it to staff and create a mechanism to give feedback/follow-up back to staff on the issues. Administration should consider attending team meetings or creating regular regional meetings:
  ☒ Fully addressed ☐ Partially addressed ☐ Not addressed

  The MHP's focus this year continues to be on integration of Mental Health, Alcohol and Drug Services (AOD), and Homeless Services into a Behavioral Health Department.

There have been a plethora of meetings and activities designed to have staff and other stakeholders provide input on ways to facilitate the integration effort. Meetings have been organized by both Homebase and Zia Partners consulting, and all staff have been invited to participate in at least one of the various groups to provide input. MHP administrative staff also routinely attends regional meetings, including staff meetings at county clinics as well as at contract agencies. They also communicate with staff in the regions by way of centralized meetings held at Administration.

The virtual suggestion box was heavily marketed this year to solicit feedback from staff. A link to the online suggestion form is contained in all the *Behavioral Health Connections* Newsletter. In addition, all staff were sent an email inviting them to provide feedback on ways the organization can be improved and how to better serve consumers (about 100 response have been received so far). Unfortunately, staff at various levels are hesitant to use this medium to give feedback as it is not anonymous.

The Research and Evaluation Team also distributed an electronic survey to all Behavioral Health staff; ninety-six staff members completed the survey with Mental Health staff representing the majority of responses (at 88.2 percent), while AOD and Homeless Services represented 10.3 percent and 1.5 percent of survey responses, respectively. Fifty-three percent of staff who completed the survey identified as direct service providers, 23 percent identified as support staff, and 24 percent identified as management.

- When the information system implementation begins, assure communication with contract providers to assess interest in utilizing the new system and to provide updates on project status as is relevant to their planning and to eventual system use:
  ☐ Fully addressed ☒ Partially addressed ☐ Not addressed

There has been no change in the information system since the last CAEQRO review. Due to the ongoing Epic implementation in the County Health Services Department (HSD) and concentration of IT resources required for that ongoing project, resources to move forward with a Mental Health EHR continue to be unavailable. MHP access to primary care data (Hospital/Ambulatory Care) through the Epic system is problematic and this impedes referrals from primary care. The MHP communicated with contract providers, along with various other stakeholders this last year by way of the MHP newsletter, Clerical Operations Group meetings, Consolidated Planning Advisory Workgroup (CPAW) meetings, and the Contractor Luncheon for child providers.

The primary IT goals of administration were to keep providers abreast of the Epic project and to assess whether the Epic system would be feasible for use by the MHP. An HSD/MHP feasibility assessment of the Epic system shows it will not work for Mental Health, so once there is a more concrete action plan for moving ahead with their own EHR, the MHP reports it will re-engage stakeholders. This is projected for later in 2013.

Unfortunately, due to the continued delay, some contract providers continue to move forward with their own EHR implementations.

- Develop concrete systemic exit points throughout the system of care; develop strategies to engage step-down providers in a more comprehensive manner. Consider automatic service reviews triggered by pre-set outcome tool scores:

☐ Fully addressed ☒ Partially addressed ☐ Not addressed

There has been some improvement in step-down transitions from the MHP to other providers for consumers who are more stable and appropriate for the ambulatory care system or the provider network. There are ongoing monthly meetings of executive staff of the various components of Health Services (i.e., Mental Health, AOD Services, County Health Plan [CCHP], Regional Hospital, Ambulatory Care, Psychiatric Emergency Services [PES]) which focus on developing strategies for transitioning consumers between care areas. Further, the data collected on the LOCUS/CALOCUS measures informs the ongoing effort to map scores to various service levels which are tailored specifically for the Contra Costa system (relying on the concept of the "right level of care"). The Quality of Care committee is currently validating the scoring of the measures vis-à-vis services delivered. In addition, Children's Services will implement the CANS as part of the assessment process, so that data gathered from both the CALOCUS and CANS will be used collectively to better empirically determine consumers who are appropriate to step down; this validation process and baseline development will continue in 2013.

To date however, MHP efforts have not risen to the necessary level of organizational provider engagement to create viable step-down options nor have they set up triggers for case review to consider stepping down a consumer. There is also no clearly developed "middle" level of system services between intensive programs and medication-only services. The MHP expressed the desire to employ another systemwide Wellness/Recovery-based functional outcome tracking tool as well that consumers could be a part of.

Changes in the MHP Environment and within the MHP

Changes since the last CAEQRO review, identified as having a significant effect on service provision or management of those services are discussed below. This section emphasizes systemic changes that affect access, timeliness, quality, and outcomes, including those changes that provide context to areas discussed later in this report.

- The effort to integrate County Mental Health, AOD, and Homeless Services into a BH Department continues to be a major focus this year as the MHP is in year two of the three year process. After garnering stakeholder input and planning, management and

staff resources have been shifted toward total system redesign. This has resulted in various systemwide committees such as the Integration Steering Committee (ISC), Change Agent Team (CAT), and four service/program integration design (SPID) teams (child/family, Transition Aged Youth [TAY], adult and older adult) that include supervisors, managers and line staff; their recommendations for integrated infrastructure development are forwarded to an Executive Integration Committee. The driving ideals behind this integration are to view consumers holistically, be culturally informed, used Evidence-Based Practices (EBPs) to direct treatment, and strive to make "any door the right door" for service access. A separate advisory board continues for each of the three programs arm; however, an assigned member of each Board attends the other two Boards' monthly meetings and chairs of all three meet with the County's Behavioral Health Director.

- Requests for Proposals (RFPs) have been issued for both a County Assessment and Recovery Center and a Crisis Residential Facility. A location for a Transitional Residential Facility for TAY has been established but will need remodeling. An RFP will be issued for a contract provider to operate the facility once remodeling is completed.
- There are already about 1,200 county residents enrolled in the County's Low Income Health Plan and the first and second wave of Healthy Families beneficiaries are expected after transferring in March and April 2013; at least 71 child consumers have already been identified. While the county is unsure of the prevalence of Severe and Persistent Mental Illness (SPMI) in new Medi-Cal enrollees in January 2014, they do expect an enormous need for sub-medical necessity threshold behavioral health services.
- The MHP continues to actively pursue primary health and behavioral health integration with various ongoing pilots of different types throughout the county, collaborating with both the County Department of Public Health (DPH) and the CCHP, which serves about 88 percent of county Medi-Cal consumers' health needs. Contra Costa County is uniquely poised for health integration as it has a county-run health plan, a large in-county hospital and numerous Federally Qualified Health Centers (FQHCs) embedded in the County HSD.
- The MHP rolled out use of LOCUS/CALOCUS level of care tools systemwide, providing training for everyone initially and now beginning various reporting measures.
- The MHP is committed to use of Evidenced-Based Practices (EBPs) throughout the system, such as Triple P Parenting; First Hope (an early psychosis intervention program); Multi-disciplinary Family Therapy (MDFT) in the Children's FSP program; Multi-Systemic Therapy (MST) for juvenile offenders; Cognitive Behavioral Therapy (CBT- both Trauma Focused and for Depression); Dialectical Behavior Therapy (DBT); Improving Mood: Promoting Access to Collaborative Treatment (IMPACT) for older adults and Wraparound; they intend to expand use of some practices if initial implementation/pilot is successful.

- The MHP transitioned Educationally Related Mental Health Services (EHRMS) to the 18 school districts as the responsible party and the MHP has now dedicated a supervisor position to track ERMHS consumers/referrals/assessments.
- There was a shift in Other Health Coverage/Medicare billing from the county to contract agencies, so Community Based Organizations (CBOs) were trained on the necessary billing practices.
- Major administrative/leadership positions are/were vacant this last year. The MHP was without a Mental Health Director between June 2012 until the end of the year, there has been no MHSA Coordinator since September 2012, and a total of nine supervisors and managers retired in 2011/12 (although these positions were all filled by March 2012). Additional psychiatric staff has been retained (for a total of 47 Medical Doctors [MDs]) as the Medical Director endeavored to convert various Locum Tenems MDs into permanent county positions. Candidates were being actively recruited for the three vacant Nurse Practitioner (NP) positions.
- County AB109 implementation continued and the MHP formed a Forensics Unit in early 2012 to better serve criminal justice system consumers in need of specialty mental health care. The Unit has served 48 AB109 consumers and 67 Adult Probation-referred consumers so far.
- Although Contra Costa county was one of the original ten California counties in the DHCS' dual eligibles demonstration project, they have now dropped from the first implementation tier to the second tier as Blue Cross Health Plan refused to participate at the level needed. In the meantime, the county health plan has applied to be one of three health plans to be a part of the State's Health Exchange to create a bridge for Medi-Cal consumers to transition to Exchange insurance (as they are close to the 200 percent Federal Poverty Level threshold) as of January 2014.
- The MHP finalized its Suicide Prevention Strategic Plan in October 2012 and a dedicated clinician was hired to spearhead the pilot of a piece of the Henry Ford Prevention model in Central County this year.

PERFORMANCE & QUALITY MANAGEMENT KEY COMPONENTS

CAEQRO's overarching principle for review emphasizes the MHP's use of data to promote quality and improve performance. Components widely recognized as critical to successful performance management – an organizational culture with focused leadership and strong stakeholder involvement, effective use of data to drive quality management, a comprehensive service delivery system, and workforce development strategies which support system needs – are discussed below.

Quality

CAEQRO identifies the following components of an organization that is dedicated to the overall quality services. Effective quality improvement activities and data-driven decision making requires strong collaboration among staff, including consumer/family member staff, working in information systems, data analysis, executive management and program leadership. Technology infrastructure, effective business processes, and staff skills in extracting and utilizing data for analysis must be present in order to demonstrate that analytic findings are used to ensure overall quality of the service delivery system and organizational operations.

Figure 1. Quality

	Component	Present	Partial	Not Present	Not Rated
1A	Quality management and performance improvement are organizational priorities	X			
1B	Data is used to inform management and guide decisions	X			
1C	Investment in information technology infrastructure is a priority		X		
1D	Integrity of Medi-Cal claim process, including determination of beneficiary eligibility and timely claims submission	X			
1E	Effective communication from MHP administration		X		
1F	Stakeholder input and involvement in system planning and implementation		X		
1G	Consumers and family members are employed in key roles throughout the system	X			

Issues associated with the components identified above include:

- The MHP's Quality Improvement Committee is an executive committee that meets as needed. However, they also have a Quality Management Committee (QMC) which includes various stakeholders and meets monthly. This committee handles the on-the-ground quality improvement work/projects and makes recommendations to the QIC. The MHP evaluated both their proposed FY11-12 initiatives as well as their FY11-12 QI work plan, and then used the findings to direct their current FY12-13 QI work plan. For 2013, the MHP continued its goal of increasing penetration rates for the Asian Pacific Islander, Latino, TAY, and Older Adult populations. Along the way, the MHP plans to document its progress by 1) tracking outreach activities conducted by PEI programs, 2) analyzing service data to determine utilization trends, and 3) analyzing data to

determine regional differences. Additionally, they plan to train staff to appropriately document the race/ethnicity of clients and to develop targeted activities to increase the penetration rate such underserved groups. The QMC has also been working to refine the existing system level dashboard to include other performance indicators, such as no shows. Additionally, they promoted the use of newly designed templates for clinical documentation, and incorporated necessary changes to the assessment instrument as new mandates have occurred. The QMC also supports the roll out of various EBPs so that fidelity in ensured and appropriate outcomes are tracked as expected.

In response to concerns raised by consumers and family members (C/FMs), providers and the community about transportation challenges, the QMC formed a Transportation Committee in fall of 2011 (comprised of consumers, peer providers, clinical and administrative staff, and community stakeholders), tasking it with examining the transportation needs of consumers receiving MHP services and determining whether existing resources/resource allocations meet their needs. A systematic review of policies, existing resources, and identification of potential gaps led the Committee to make a series of recommendations to senior management in September 2012. Data was also collected from a focus group held with MHP Community Support Workers (CSWs) and focus groups held with consumers at both children and adult County Clinics throughout the County. Information gleaned from two relevant ROSI questions given in 2011 was also analyzed and an informal two-week survey at all clinic receptions took place as reception staff asked consumers how they got to the clinic and how long it took them. Among the final recommendations were the suggestions that the MHP should:

- pilot the use of a shuttle to provide transportation to primary care appointments and community-based support services
- create cadre of trained peer workers to assist clients in learning how to take public transportation, how to manage harassment, apply for discount passes, and learn other skills necessary to successfully use public transportation
- implement a "transportation 101" hotline for consumers.

Action items were created for each of nine recommendations and assigned parties will begin implementation in 2013.

- Monthly, the MHP reviews various MHSA program outcomes to revise/refine these programs through CPAW. They also track FSP consumer outcomes and all consumers served by the Transition Team, and have begun capturing Senior Peer counseling program contacts (i.e., consumer demographics and other functional variables) in a separate Access database. In July 2012, they produced their first annual summary report of LOCUS/CALOCUS scores by MHP program, but so far are limited in how they use these scores as actually outcomes measures for individual consumers. Such barriers as lack of an EHR, no mapping of scores to services, and valid/consistent use of the tools across staff hinder such use.

  In 2011, the MHP designed and implemented a data dashboard reporting measurable utilization trends across the system of care; in 2012, they compiled this data and

reported the findings to all staff. Unfortunately, various staff reported that the current form of the dashboard is not useful clinically as its data points are intended for too many audiences. While supervisors said they see little routine data, if they ask for any data/reports, they do get what they need immediately. Staff at all levels agreed that the use of data to inform quality overall has improved this year. Nonetheless, contractors asserted they get very little reliable data/reports from the MHP, that much of what is provided is discrepant to their own data and no clear explanation for this has been given. They also reported there are no performance management/quality improvement expectations in their contracts and no ongoing consumer tracking requirements (except for an annual report on units of service).

The MHP continued it medication monitoring program this year with weekly chart reviews of 492 cases (of all 47 MDs). The biggest finding was that MDs not consistently ordering required monitoring labs, so a physician protocol was created detailing relevant medications and corresponding labs. Problems were also found with MDs failing to update medication sheets so nurses had trouble arranging refills at pharmacies for the most recent prescription. As a result, there are ongoing one-on-one performance improvement efforts for various MDs with the Pharmacist, as well as monthly MD peer chart review sessions.

- IT support is available to the MHP for the current legacy systems; however, due to the ongoing Epic implementation and concentration of County IT resources required for that project, resources to move forward with a Mental Health EHR continue to be unavailable. This lack of resource availability has been cited as the predominant reason for the inability to move forward on the selection and implementation of a replacement information system for at least the last two CAEQRO reviews. Due to the delayed implementation, some contract providers have moved forward with their own EHR implementations.
    - At the time of the review County resources had not yet been allocated nor a specific implementation date identified. Since the review, the MHP reports that County is in contract negotiations with its selected vendor and that resources are scheduled to be allocated to the MHP's EHR project over the summer; the project is slated to begin in September 2013.

- The MHP administration evidenced various communication efforts across the system, such as convening the Communications Design Team, March-April 2012, and tasking them with documenting/reviewing the existing avenues for communication to all stakeholders. Avenues include I-site (used internally for staff), the County Behavioral Health website, the Community Action Site, www.CChealth.org (which has a separate contract provider portal), Yahoo groups (which is only for providers), *Constant Contact*/email lists (this is only for staff/contractors), numerous newsletters, email blasts, and standing meetings. Consumers and family members (C/FMs) can also get information through the Speakers Bureau, SPIRIT, the Putnam Clubhouse/Wellness

Centers, or the Peer Perspectives quarterly newsletter written by the Office of Consumer Empowerment (OCE) as of Fall/Winter 2012. In the past, the OCE produced a monthly TV show on CCTV called *Mental Health Perspectives*. The last show was nine months ago but the effort may be revived. Four recovery DVDs now show in adult clinic waiting rooms, show tours of various available community services, dispelling stigma myths and airing interviews on recovery with both consumers and mental health providers. The C/FM Social Inclusion committee, begun mid-2011, continues; while it involves many system consumers, the goal is to include more family members. The OCE has developed and stocked all clinics with numerous new pamphlets regarding system access and resources, and overcoming stigma for parents; they are also working on a consumer website as they do not use the Network of Care.

Despite all of the above mechanisms for communication, interviewed consumers reported inconsistent information, reporting that new information generally comes from line staff. A few reported receiving mailed flyers, and many consumers were unaware of the Wellness Centers. Staff at various levels did not feel communication is two-way nor are policies/procedures rolled out or communicated consistently across clinics. Few staff are using the virtual suggestion box, most notably because it is linked to their email address.

Contractors saw communication as predominantly inconsistent and ineffective. While the child contractor luncheon resumed in 2012, adult contractor meetings do not occur despite being requested. While many have individual access to MHP staff after long relationship histories, they fear this may be lost when people retire/leave. Many stakeholders felt there were inconsistent messages given from numerous levels in the 'chain of command' including Executive management; different committees say different things or MHP contacts answer questions with "I don't know" and do not follow-up with a response. For contract providers, in general, there is a lack of clarity on where to go for answers to important questions surrounding policies, procedures and problem resolution, especially in getting feedback to correct billing errors.

- Despite the MHP's efforts, stakeholder involvement is not optimal. Staff at all levels did not feel their input is valued, and feel decisions are made before their input is solicited. In some cases, there is a fear of retaliation for speaking up. Overall, management is seen to not take suggestions well and their decision making processes are not transparent. All agreed that the last true group process for stakeholders systemwide was in mid-2012 for the MHSA Plan update. The ongoing child high utilization PIP has no line staff, contract providers or family member representation, despite their relevance to the topic. Only a minority of staff are engaged as stakeholders (as it is often difficult for newer staff to find the time to join committees). Systemwide, some stakeholders report disillusionment with initial/ongoing efforts by consultants to engage them (i.e., they were told their input was wanted but no clear tools were outlined for it to happen). Thus staff felt their concerns about the practicalities of integration have not been addressed. Further, many suspect that no real outcomes will result from attending committees/acting as a

stakeholder; even the SPID teams are now perceived as useless as consultants have a "hidden agenda." Although a few staff are deemed Change Agents, many believe there are too few in each clinic/program to have any real impact to reinforcing change, the perceived initial flurry of activity resulting from the CAT has now diminished. The perception is that executives only deal with other executives and there is no ongoing forum between managers and Director(s).

Contractors did report opportunities to be stakeholders but perceived them as isolated events; there is some discourse on limited projects/efforts, but not on ongoing, systemwide issues. Despite the many invitations to sit on committees, it is hard to take advantage of them due to time constraints. They suggested a central listing of all monthly committees/meetings and what is expected of attendees would aid them in their decision to attend.

C/FMs participate in numerous committees, and there are numerous efforts to get the organized consumer voice, such as the Social Inclusion Committee, CPAW, the Mental Health Commission, and the Youth Advocacy Council. The OCE outreached to C/FMs about any upcoming MHSA committees/subcommittees, Mental Health Commission meetings, and community forums. An outreach subcommittee of the ISC intends to hold community living room conversation with C/FMs to infuse lived experiences and recovery ideals into the newly integrated behavioral health system. Peer employees serve on a number of committees and in numerous organized stakeholder efforts and feel heard; however when they speak up individually outside of organized arrangements, they often feel that they are dismissed, may be labeled a troublemaker, or get no response to their input They have the impression that their input is the least valued of any stakeholder group. Unfortunately, they also feel they cannot speak up if they have quality concerns about clinical staff or their service delivery.

- The MHP has 22 CSW positions throughout the adult system. There are also ten family partners and nine wraparound facilitators in the child system. There remains only one Family Support Worker at one Adult clinic, as the other two positions at the remaining clinics are still unfilled, as is the Family Service Coordinator position (although recruitment was underway). Additionally, two (of three) peer CSW positions dedicated to Wellness Coaching are also vacant. Three additional CSW positions dedicated to driving consumers to/from appointments have just been created as a result of the FY12-13 MHSA plan update.

  Monthly, CSWs in the adult system are provided group training and peer support during their meetings. Child Family Partners meet less frequent and not routinely have a clear desire for monthly group meetings/trainings. All C/FM employees wished for a routine forum for all C/FM employees to meet and give one another support. While most reportedly feel their supervisors were available for consultation as needed, in a number of cases, peer employees have not been encouraged to stretch their wings past

identified C/FM positions into staff positions (despite having applicable education), nor were they told about available WET scholarships to pursue additional education.

While the contractor, MHCC, runs 12 week series on Leadership to empower consumers to be leaders, the MHP continues their peer-education program (SPIRIT) in collaboration with the local Community College. The MHP also offers SPIRIT graduates a six-week internship and arranges site visits to various community organizations/clinics during this time. MHP has tracked SPIRIT graduates since 2008, finding nearly 70 percent of the 2011 program graduates now work in the behavioral health field or went onto additional college programs. In 2012, the SPIRIT program had 96 applicants, and 41 students were selected; in 2013, there were 107 applicants resulting in 40 students.
Created in January 2011, the MHP's WREACH Speakers Bureau continues; speakers gave 55 presentations in 2011, and in 2012, created an outreach video to encourage more staff training/inclusion efforts.

Access

CAEQRO identifies the following components as representative of a broad service delivery system which provides access to consumers and family members. Examining capacity, penetrations rates, cultural competency, integration and collaboration of services with other providers form the foundation of access to and delivery of quality services.

Figure 2. Access

	Component	Present	Partial	Not Present	Not Rated
2A	Service accessibility and availability are reflective of cultural competence principles and practices	X			
2B	Manages and adapts its capacity to meet beneficiary service needs	X			
2C	Penetration Rates are used to monitor and improve access	X			
2D	Integration and/or collaboration with community based services	X			

Issues associated with the components identified above include:

- The MHP's Reducing Health Disparities (RHD) workgroup includes staff, other stakeholders, and C/FMs. Their overarching goal is to create and implement strategies to reduce disparities, this last year focusing on LGBTQ and senior populations. Annual evaluations were undertaken on both Innovations projects: the LGBTQ Youth Collaboration and the Trauma Recovery Group (TRG - a promising practice for treating

Post-Traumatic Stress Disorder among clients who have a co-occurring SPMI). The MHP continues to grow its outreach and engagement efforts (as well as track contacts) through its ten PEI programs. The MHP has contracted with local CBOs to reach various underserved communities, address community violence, offer parenting, serve youth/families in the juvenile justice system, and help community youth be empowered.

The OCE continues a number of efforts to decrease mental health stigma, such as displaying *Wellness Boards* in each adult mental health clinic waiting rooms; these host a myriad of information related to resources for consumers, (i.e. support services, community events and information on transportation). A recent Photovoice social advocacy project involved 20 consumers of all ages resulting in a personal visual that best represents that consumer's story. Older Adults are now being served though the Senior Peer counseling program, SNAP, the IMPACT program (offering depression treatment by a team of mental health professionals in the primary care setting), and the Lifelong Medical program. There also exists a MHP Intensive Older Adult Management Team which serves 100 high need older adults countywide in their homes to avoid residential placement.

In January 2013, the MHP began its Early Psychosis Intervention program, First Hope. This program is aimed at 12 to 25 year olds and uses an intensive model of early intervention/prevention of psychosis with a capacity for up to 70 cases. It is staffed by an MD, occupational therapists, mental health therapists, and a clinical lead. As of mid-February 2013, the program had 37 referrals from all over the county leading to 16 assessments. While the program targets those with transient psychotic symptoms and negative symptoms at assessment. If a candidate is screened out, they/their family is given other resources. Consumers are highly engaged throughout the program in meetings, treatment, and education sessions. The program also engages family at every step; they have multifamily groups and family psycho-educational days.

The MHP hosted an Aging/Older Adult community event in May 2012 and an Anti-stigma conference is slated for September 2013. Ongoing, the training department offers staff specialized cultural competence trainings on such topics as serving African-Americans or sexual minority youth, addressing vicarious trauma, and understanding Latino traditions. They continue to use of HCIN for interpreter services. The RHD committee did a Cultural Humility Organization assessment at the MHP in Oct 2012; the results are still being analyzed.

- The MHP evidences numerous efforts this last year to growing its system capacity.
  - The Medical Director worked to transition numerous MDs from locum tenens status into various county positions, adding six-plus new MDs since the last review. A Nursing Manager was also hired and positions exist for a number of intern NPs.
  - In 2012, a workforce assessment was undertaken to assess the language capacity of MHP staff. Results revealed there are 88 current staff who identify as bilingual, the majority being Spanish-speaking, followed by Punjabi, then Chinese. Individual staff

reported bilingual capabilities in Dari, Farsi, Hindi, Ibo, Khmu, Korean, Lao, Russian, Tagalog, Tamil, Thai, Urdu, Vietnamese and American Sign Language. The system also has a number of bilingual Spanish-speaking C/FM staff.

- There had been an issue in 2012 where consumers at the East Clinic were waiting in long lines, for long periods to check in for their appointments, as the clinic was down a number clerical staff; this has been resolved as nearly all of the positions have now been filled.
- The MHP redesigned its Children's FSP program; the previous FSP model was program-based, meaning if the youth was a participant of a particular program they were considered FSP, regardless of current level of need. However, the new FSP model attaches the FSP status to the individual and not to any particular program. Entry into a FSP will now occur through a countywide assessment team, made up of clinicians and peers. In addition to treatment referrals for these youth (and families) experiencing severe stressors, such as out-of home placement, contact with the juvenile justice system, repeated PES admissions/hospitalizations, or co-occurring disorders, consumers may also be referred to a Personal Services Coordinator. Four points of entry were designed to ease access: the Access Line, the Mobile Response Team, the hospitals/residential treatment, and the three children's clinics.
- A number of psychiatrists were moved from an ambulatory care clinic to the West County clinic to increase MD capacity, and psychiatric resources were added to Transition Team.
- Mental health staff has been dedicated to a number of local homeless shelters.
- Linguistic capacity was increased for the Older Adult Intensive Care Management team as one Spanish-speaking clinical specialist was assigned to each of the three regions.
- The Adult FSP program was expanded into Central County.
- There are now 70 housing units for 55+ consumers at Villa Vasconcellos, Lille Mae Jones Plaza, and Virginia St apartments. More units are forthcoming with shared housing options through Anka, older adult units in Antioch, and family units in Concord and in El Cerrito.
- A county Urgent Care/Assessment and Recovery drop in center will open in 2014; this is MHSA Capital Funding project integrated with the County Regional Medical Center. Hours of operation will be established based on research of projected use and available budget.
- Wellness Nurses has been placed at both East and Central Adult clinics to develop wellness supports to help consumers take care of their overall health.

The MHP still lacks formal strategies/options for consumer exit from the system. Staff in various roles expressed resolute acceptance that there is no community options to

discharge medication-only consumers to, and this truncates the continuum of care. Reportedly the biggest service gap/delay is the transition of child consumers into the TAY system, with numerous months between appointments being the norm. Additionally, the MHP found, when assessing average assessment LOCUS/CALOCUS scores, county clinics consumer scores are markedly different from those assessed at contract agencies. That is, while county clinic consumer scores present a fairly normal distribution, those served at contract agencies evidence an extensive score range. Further understanding of this phenomenon is pending.

The MHP tracks some individual program consumer outcomes, such as how the 333 consumers served by Transition Team (made up of nurses, therapists, CSWs, and an MD) are doing. The Team can work with a consumer for up to 60 days from first contact, providing assessment, consultation and referral, clinical support during transitions from higher to lower levels of care, medication monitoring/evaluation, WRAP, short term clinical case management services, and brief problem focused psychotherapy. The MHP also tracks fidelity to the Wraparound service delivery model, and evaluated the High School Mental Health curriculum delivered in a number of settings with pre/post-tests of 102 participants. Tracking of the diversity of interns based on awarded funds to various CBOs also occurred.

- Medi-Cal PRs are calculated yearly by ethnicity, age, service type, sub-group and geographic area. Retention rates are also analyzed annually by gender, age and ethnicity. This data is trended over a five-year time period. They use such findings to identify the various groups (e.g., by ethnicity or age) who have lower penetration rates, implying there are barriers to system access. They also track prevalence rates to assess unmet need to identify program areas that focus on clients with low penetration rates (e.g., Latino, Older Adults, TAY).

- As in past years, the MHP evidences numerous ongoing collaborations to best serve its consumers.
  - The MHP has been working closely with Kaiser as Healthy Families beneficiaries transition to Medi-Cal.
  - The MHP serves on the Interagency Placement Council with Child Welfare and Probation representatives. They also have an Emergency Foster Care unit which assesses all detained children for mental health needs. Mental health liaisons are co-located/embedded in both the County Child Welfare and Social Service offices.
  - A new second year residency rotation began for family medicine MDs in the intensive case management program for older adults. A new internship program began for two Masters' level clinicians for older adults with co-occurring mental health/medical issues. There is now a mental health concentration program at the Dozier Libbey Medical high school Health Academy. Collaboration also took place

in some local school districts for the youth LGBTQ innovation project.

- In addition to working with local law enforcement on CIT trainings and serving AB 109 parolees, MHP staff attend juvenile hall meetings twice a month. There is also a criminal justice subcommittee of the County Mental Health commission. Three mental health clinicians are embedded part-time in various adult Probation offices to screen for mental health needs; mental health staff co-lead groups at these offices.
- At the executive level, the Behavioral Health and Mental Health Directors meet with Mental Health Program Chiefs, the DPH director, the AOD director, the CCHP director, the PES chief, and hospital executives to both discuss health care integration and work to develop a fuller continuum of care. There are also quarterly meetings between the MHP and the Housing Authority, the MHP and the Department of Rehabilitation.
- The MHP hosts the county's Suicide Prevention Committee that includes numerous community organizations, such as the County Crisis Center, a nationally certified crisis line provider, and local hospitals. They also work with a number of CBOs that provide both TAY and adult FSP programs.
- The OCE co-facilitates a monthly writers group with the local NAMI chapter and the MHP awarded grant to NAMI to create a Spanish language psycho-educational program for families.
- Various faith-based organizations received mini-grants from the MHP as a part of the LGBTQ youth innovations project.
- The MHP has seven behavioral health/physical health integration pilots, including two embedded behaviorist positions in an FQHC, an FQHC embedded in a Homeless Respite facility, psychiatric consultation for PCPs who treat consumers taking psychotropic medication, collaboration with the Wright Institute to provide brief group therapy in the form of health coaching and screening perinatal clients for depression. They are using the four quadrant model of behavioral and physical health needs to guide service stream development for both severe and modest needs; the goal is that providers throughout the integrated system will recognize a consumer's needs in any quadrant and refer them to appropriate services rather than onus being on consumer to self-identify their needs. The biggest hurdle reported is combining of funding streams and program mandates, as well as data sharing between distinct databases.

Timeliness

CAEQRO identifies the following components as necessary to support a full service delivery system that provides timely access to mental health services. The ability to provide timely services ensures successful engagement with consumers and family members and can improve overall outcomes while moving beneficiaries throughout the system of care to full recovery.

Figure 3. Timeliness					
Component		Present	Partial	Not Present	Not Rated
3A	Tracks and trends access data from initial contact to first appointment	X			
3B	Tracks and trends access data from initial contact to first psychiatric appointment	X			
3C	Tracks and trends access data for timely appointments for urgent conditions	X			
3D	Tracks and trends timely access to follow up appointments after hospitalization.	X			
3E	Tracks and trends No Shows	X			

Issues associated with the components identified above include:

- During 2012, the MHP made substantial effort to address barriers to timely access by increasing system capacity, enhancing existing programs, and improving the way data is collected to track access trends. As a result, average wait times for appointments declined across the county. In July 2012, the MHP switched to a "real-time" method of collecting routine timeliness data; by calling the Access Line weekly (or the clinics for MD appointments) they obtain information on the next available initial clinical and psychiatric appointments. Two data points are collected: the first and third available appointment for all regional clinics. The third available appointment is used in the data analysis to reflect a more accurate picture of when clients are likely to come in for an appointment. While this method is an improvement in tracking timeliness for the MHP (and all they can feasibly undertake without an EHR), it is important to note they are not tracking to actual appointments as of yet but to available appointments instead.

- Using 2012 claims data, the MHP reported the average time from service request to first appointment for adults was 20.2 days, with a range of 3-41 days. They have a 28 days standard, 69 percent meeting this standard. Children were seen on average in 14.7 days, with a range of 4 to 45 days. The MHP has a seven day standard for a child's first appointment but only 40 percent met the standard. The MHP reported the disparity between timeliness standards for child versus adult first appointments is based on historical precedent established when there were more child clinicians available to do initial assessments.

- Using 2012 claims data, the MHP reported the average time to first psychiatric appointment was 46 days, with a range of 2 to 118 days. The established standard for

adults is 60 days and 63 percent met standard. For children, the average wait time was 16.6 days, with a range of 2 to 53 days; the established standard for children is 45 days with 97 percent meeting the standard. Prior to beginning the PIP targeting wait times for psychiatrists at the East clinic, new consumers had to wait nearly 95 days for an initial psychiatric assessment. After increasing capacity, the average wait time dropped to 16 days. In addition, all three regional clinics have implemented new clinic processes to improve the scheduling and intake of new consumers.

- Quarterly, the MHP reviews Access line documentation regarding services for adult consumers with urgent needs. Using actual scheduled appointments an average wait of 3.6 days was found. The MHP standard is 2 days; 43 percent met the standard.

  Each clinic reportedly has different strategies in place to respond to consumers with urgent needs. Some set aside an hour at the end of each day in every MD's schedule to see such consumers, others have scheduled drop in hours with an nurse; all tell consumers to call the clinic anytime during business hours if they are in urgent need and they will be seen that day. In some clinics, an on-call MD or nurse is assigned daily to cover only urgent consumer needs. When a consumer with urgent needs is identified at Access, a process is in place that ensures the pertinent clinic is contacted immediately so that a two-hour triage response occurs. Both the clinic manager is called and the fax is sent so that a team leader can assign staff to call the consumer back within two hours. The two-hour time frame is tracked at the end of each business day at Access.

- The MHP collects hospital discharge follow up data by calling the Access line to identify the next available medical staff appointment; the actual number of hospital discharges and follow up appointments are not tracked. Both adults and children have a seven day standard. 2012 data revealed for adults the *offered* wait time averaged eight days, and 12.2 days for appointments for children; 62 percent of adults and 45 percent of child appointments met seven day standard.

  The different clinics have developed different strategies to provide timely hospital follow up appointments. For example, the East County Children's clinic has set aside two appointment slots per week dedicated to clients being discharged from the hospital in order to see these high need clients in a timely manner. The Rapid Access project at the West County adult clinic was tested in 2012 to assess whether the goal of transitioning clients from PES/Inpatient services to outpatient services could be facilitated by the addition of the Rapid Access team. Two time slots were carved out each day for this transition; however, this process resulted in inefficiencies at the clinic since it required staff to block off portions of their day to these time slots. Due to poor enrollment and high no show rates, the program was suspended. Instead, as of November 2012, this clinic now has a daily assigned on-call MD to field all hospital discharges and urgent need issues. Systemwide, the weekly bed committee meeting

tracks hospitalized consumers, and the Transition team reaches out to discharged consumers to increase engagement.

The MHP is in the process of collecting readmit data for analysis. The established goal for both children and adults is 15 percent. Annually, the MHP looks at retention data; a consumer is counted as "retained" for a particular year if they received any outpatient mental health service within 12 months after opening an inpatient psychiatric episode. It is unclear why the MHP elected such a long time frame to use as a point of retention rather than a seven, thirty, or even ninety day time span. Annual trending showed the overall retention rate at twelve months for hospital discharged consumers is fairly stable, fluctuating only a few percentage points yearly (from 87 to 81 percent). But as a decreasing trend has been discovered, the QMC intends to implement targeted quality improvement programs aimed at increasing the rate in which consumers engage outpatient services after an inpatient episode, specifically because they found nearly half of older adult consumers who had an inpatient service failed to link to outpatient treatment within 12 months of their inpatient episode.

- Quarterly, the MHP tracks no shows. Recent data revealed an average no show rate for clinicians was fifteen percent for adults and nine percent for children (the MHP's goals are 15 and 10 percent, respectively). The average no show rate for MDs was 17 percent for adults and 11 percent for children. In October 2011, for one week a telephone survey was undertaken with consumers who missed their appointments, asking for reasons for failing to show and how the MHP could assist them with any barriers to attending in future. Most often people forgot (40%), had a confounding emergency (27%), or had transportation problems (17%). A quarter said reminder call would help. As a result, the QMC was tasked in 2012 with developing improvements to the existing manual reminder calls process. The Clinical Coordinator visited each clinic to remind clerical staff to do the reminder calls as expected; unfortunately clerical staff continues to turnover and tracking is not ongoing to ensure calls still occur and/or if this effort is reducing no show rates.

Outcomes

CAEQRO identifies the following components as essential elements of producing measurable outcomes for beneficiaries and the service delivery system. Evidence of consumer run programs, viable performance improvement projects, consumer satisfaction surveys and measuring functional outcomes are methods to evaluate the effectiveness of a service delivery system as well as identifying and promoting necessary improvement activities to increase overall quality and promote recovery for consumers and family members.

Figure 4. Outcomes					
Component		Present	Partial	Not Present	Not Rated
4A	Consumer run and or consumer driven programs	X			
4B	Measures clinical and/or functional outcomes of consumers served	X			
4C	One active and ongoing clinical PIP	X			
4D	Clinical PIP shows post-intervention results			X	
4E	One active and ongoing non-clinical PIP	X			
4F	Non-Clinical PIP shows post-intervention results	X			
4G	Utilizes information from Consumer Satisfaction Surveys	X			

Issues associated with the components identified above include:

- MHCC runs one wellness center in all three county regions (Antioch, Concord, and Richmond). Each is peer-run and membership is driven by consumers. They offer groups, WRAP plans, advocacy, outings, peer support, and some meals. They also provide peer training if a consumer wants to be a WRAP or group facilitator. The EBP-based Putnam Clubhouse continues in Central County. Systemwide, there are three peer wellness coach positions at each adult clinic funded by Innovations monies. Quarterly, MHCC administers the Mental Health Recovery Measure to all members and created an Access database to capture information, with the MHP's help. Data analysis has not yet occurred. Adult clinicians reported routinely telling consumers about these wellness center programs; everyone noted increased efforts this last year to advertise this resource. MHP administration is working with the OCE toward the implementation of welcome packets which will be available to consumers at their first appointment and will contain information about services/other resources available to them as consumers in the County.

- The MHP tracks consumer outcomes in a number of specific programs; that is, they generate the expected FSP reports, track PES admits/readmits, crisis Stabilization usage, arrests, homelessness, and changes in living situation. This last year was also the first full year of using LOCUS/CALOCUS, and they have just begun piloting the CANS. The outcome reports are disseminated to a variety of audiences (MHP Executives, QMC,

CPAW), depending on the specific purpose behind collecting the data, (i.e., FSP data is routinely provided back to programs to help them understand their outcomes on both a client and program level. It is also summarized and put in a high level dashboard for review. The LOCUS/CALOCUS data are reported on a client level and given back to clinicians for review. These measures are now being used across all county programs. Contract providers are beginning to use measures with full implementation slated for March 2013.

- The MHP has a high number of high utilization beneficiaries; MHP data revealed more than half of high use consumers were under the age of 18, had an average annual cost of $61,000, and were predominantly served by an extensive child organizational provider network. The MHP's concern is that the decentralizing such services has led to poor care coordination, duplicative services/assessments, disorganized treatment, and thus, unnecessarily elevated costs and possibly, poor information sharing. Starting with a sample of high utilizer child consumers, UR-reviewed cases that are identified as open for "excessively long periods" and with little county provider involvement, will be assigned a care coordinator (until a sample of 30 cases is reached). Using the MHP's own Quality and Coordination of Care tool, the goal is for higher tool scores (indicating better coordination/service quality) post-intervention. Other indicators may include redundancy of services in a given day and/or number of months with excessive service hours. The "case coordination" intervention may be broken out into identifiable duties/themes so that duplication of successful coordination strategies will result. Each PIP case will also undergo enhanced UR at one, three, six and 12 month intervals to provide updated tool scores for comparison.

- Concerned about how they handle new consumer referrals at the East County Adult Clinic, the MHP examined average wait times for psychiatric appointments, finding they exceeded their goal of 60 days and that the clinic was significantly understaffed with psychiatrists (3.7 FTEs compared to ideal staffing of 7.0 FTEs). The clinics long MD wait times were also thought related to the high/increasing no show rates (19 to 23 percent in FY10-11). PIP interventions included recruiting additional clinic medical staff, routing of new Medi-Cal beneficiaries to network/contract providers from the point of access, and assigning nursing staff to do intake evaluations. Indicators focused on wait time to first MD appointment as well as MD no show rates, along with monthly referrals to the East clinic MD(s) versus available network providers. Results revealed decreased wait times (by 83 percent) and new referrals assigned to network providers increasingly (14-58 percent increases). However, no show rates actually increased by eight percent, a result which the MHP reported they intend to research fully to understand.

- In 2012, the MHP used the DHCS-required POQI surveys; it went out to all clinics, FSPs, and contract providers. In 2011, as the POQI was not required, the MHP used their chosen instrument, the ROSI. Unfortunately this has complicated efforts to compare findings, although the MHP could compare 2010 to 2012 POQI findings. 479 recent

POQI responses indicated that consumers were generally satisfied with their treatment; the average response to all questions was above the midpoint score of 2.5 for all survey respondents included in the analyses.

❖CURRENT MEDI-CAL CLAIMS DATA FOR MANAGING SERVICES❖

Information to support the tables and graphs, labeled as Figures 5 through 15, is derived from four source files containing statewide data.[1] A description of the source of data and summary reports of Medi-Cal approved claims data – overall, foster care, and transition age youth (TAY) – follow as an attachment. The MHP was also referred to the CAEQRO Website at www.caeqro.com for additional claims data useful for comparisons and analyses.

RACE/ETHNICITY OF MEDI-CAL ELIGIBLES AND BENEFICIARIES SERVED

The following figures show the ethnicities of Medi-Cal eligibles compared to those who received services in CY11. Charts which mirror each other would reflect equal access based upon ethnicity, in which the pool of beneficiaries served matches the Medi-Cal community at large.

Figure 5 shows the ethnic breakdown of Medi-Cal eligibles statewide, followed by those who received at least one mental health service in CY11. Figure 6 shows the same information for the MHP's eligibles and beneficiaries served. Similar figures for the foster care and TAY populations are included in Attachment D following the MHP's approved claims worksheets.

[1] Percentages may not add up to 100% in some of the figures due to rounding of decimal points.

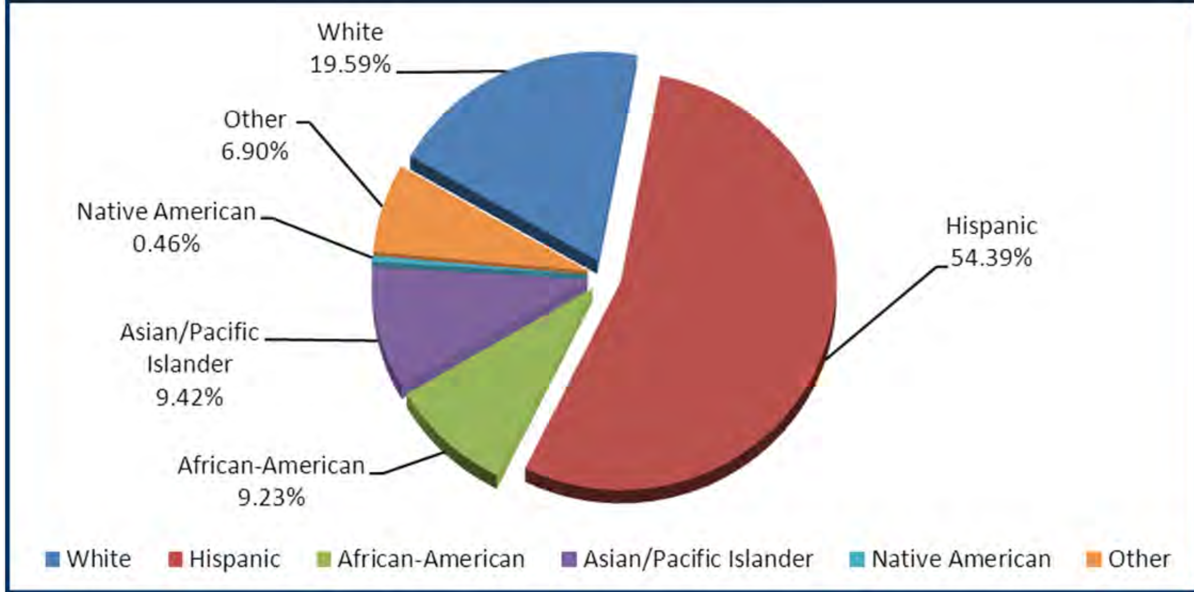


Figure 5a. Statewide Medi-Cal Average Monthly Unduplicated Eligibles, by Race/Ethnicity CY11
White 19.59%
Other 6.90%
Native American 0.46%
Asian/Pacific Islander 9.42%
African-American 9.23%
Hispanic 54.39%
White
Hispanic
African-American
Asian/Pacific Islander
Native American
Other

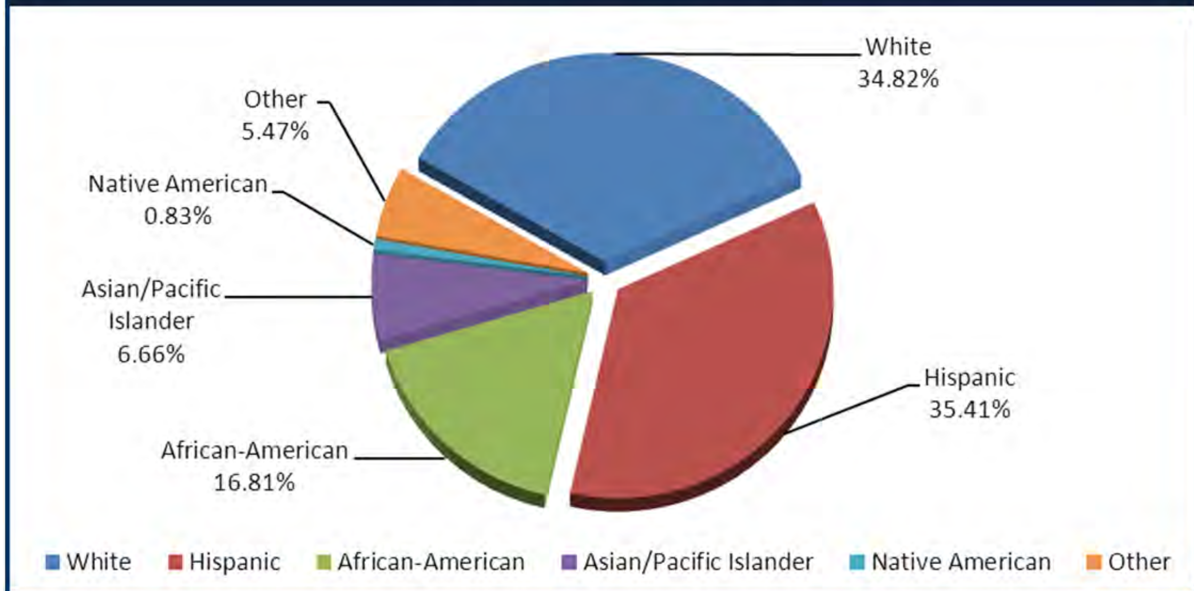


Figure 5b. Statewide Medi-Cal Beneficiaries Served, by Race/Ethnicity CY11
White 34.82%
Other 5.47%
Native American 0.83%
Asian/Pacific Islander 6.66%
African-American 16.81%
Hispanic 35.41%
White
Hispanic
African-American
Asian/Pacific Islander
Native American
Other

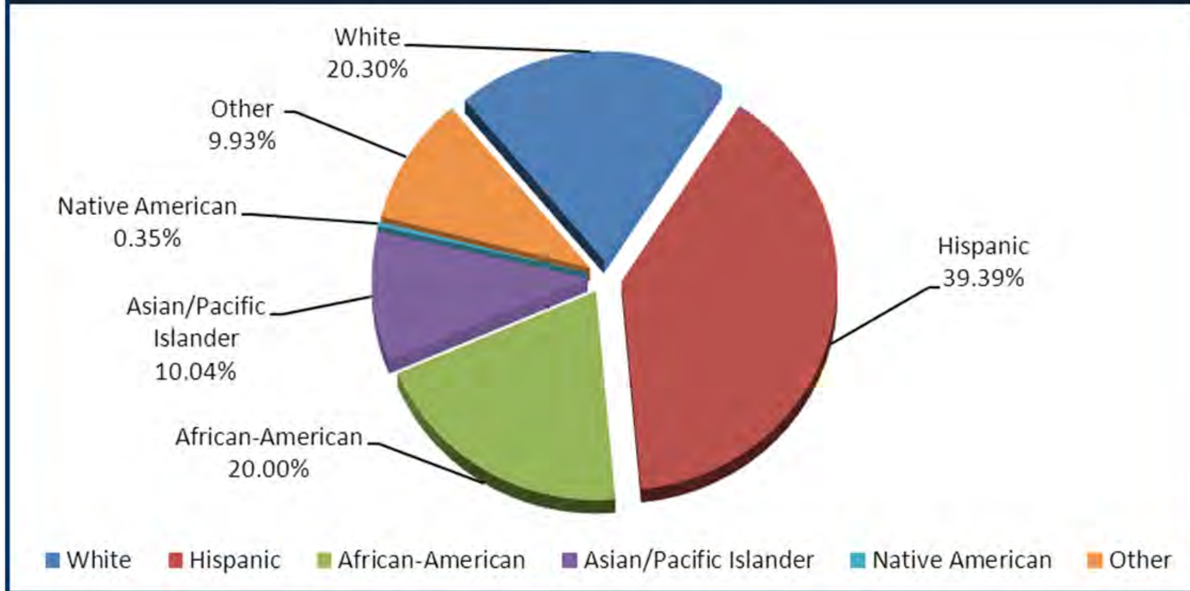


Figure 6a. MHP Medi-Cal Average Monthly Unduplicated Eligibles, by Race/Ethnicity CY11
White 20.30%
Other 9.93%
Native American 0.35%
Asian/Pacific Islander 10.04%
African-American 20.00%
Hispanic 39.39%
White
Hispanic
African-American
Asian/Pacific Islander
Native American
Other

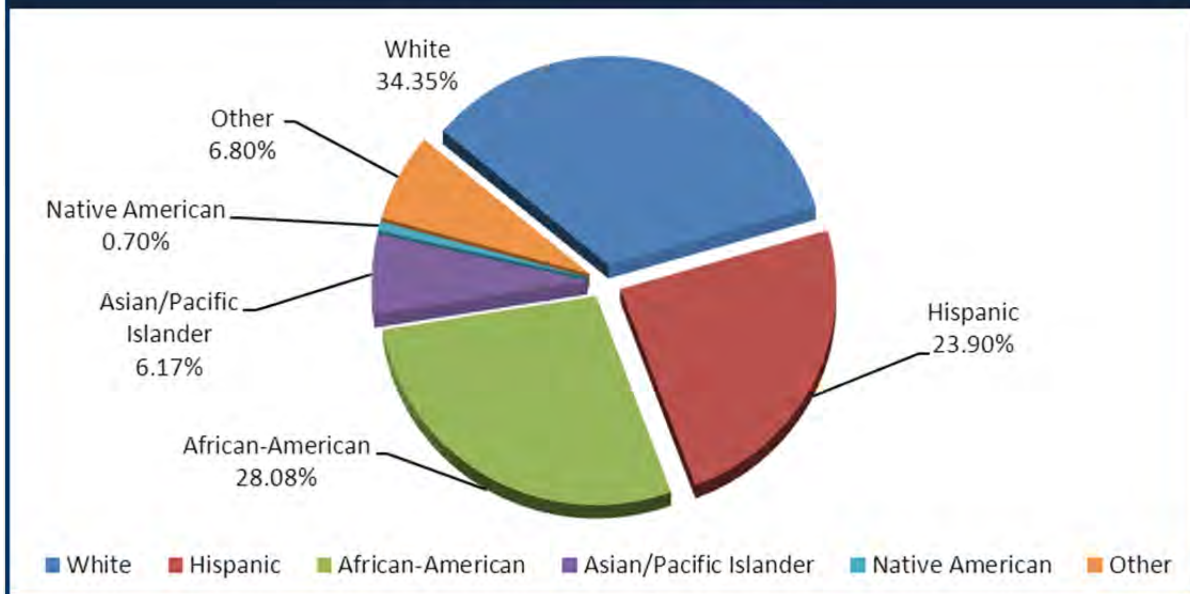


Figure 6b. MHP Medi-Cal Beneficiaries Served, by Race/Ethnicity CY11
White 34.35%
Other 6.80%
Native American 0.70%
Asian/Pacific Islander 6.17%
African-American 28.08%
Hispanic 23.90%
White
Hispanic
African-American
Asian/Pacific Islander
Native American
Other

PENETRATION RATES AND APPROVED CLAIM DOLLARS PER BENEFICIARY

The penetration rate is calculated by dividing the number of unduplicated beneficiaries served by the monthly average eligible count. The average approved claims per beneficiary served per year is calculated by dividing the total annual dollar amount of Medi-Cal approved claims by the unduplicated number of Medi-Cal beneficiaries served per year. Rankings, where included, are based upon 56 MHPs, where number 1 indicates the highest rate or dollar figure and number 56 indicates the lowest rate or dollar figure.

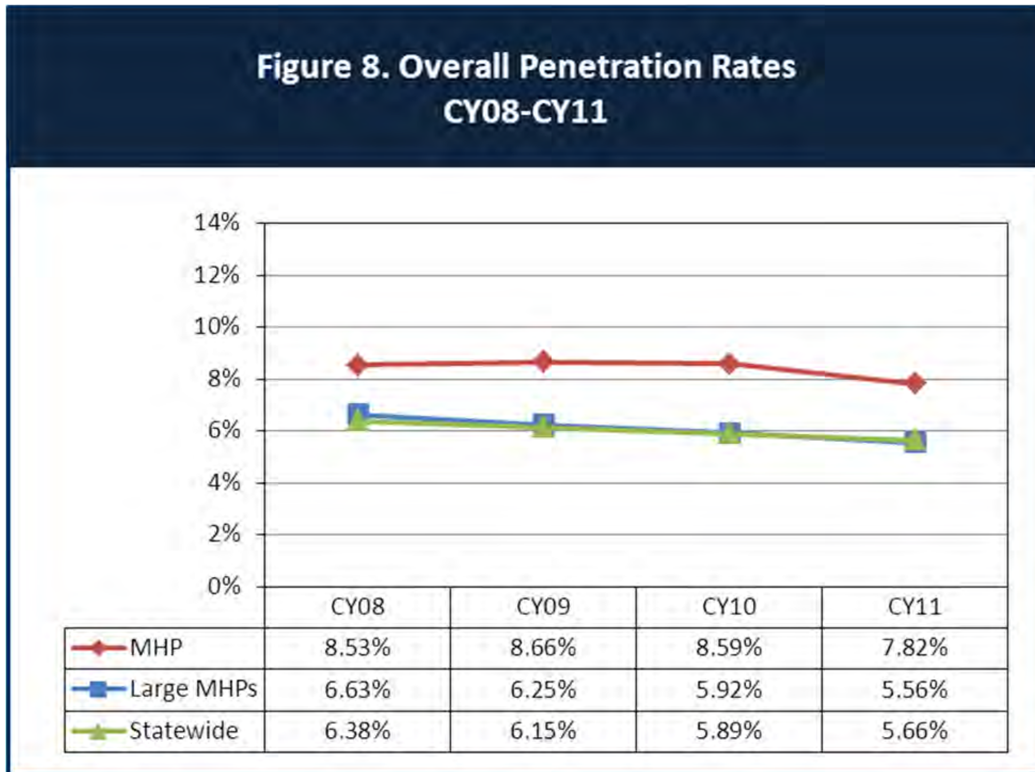
Figure 7 displays key elements from the approved claims reports for the MHP, MHPs of similar large size, and the state.

Figure 7. CY11 Medi-Cal Approved Claims Data

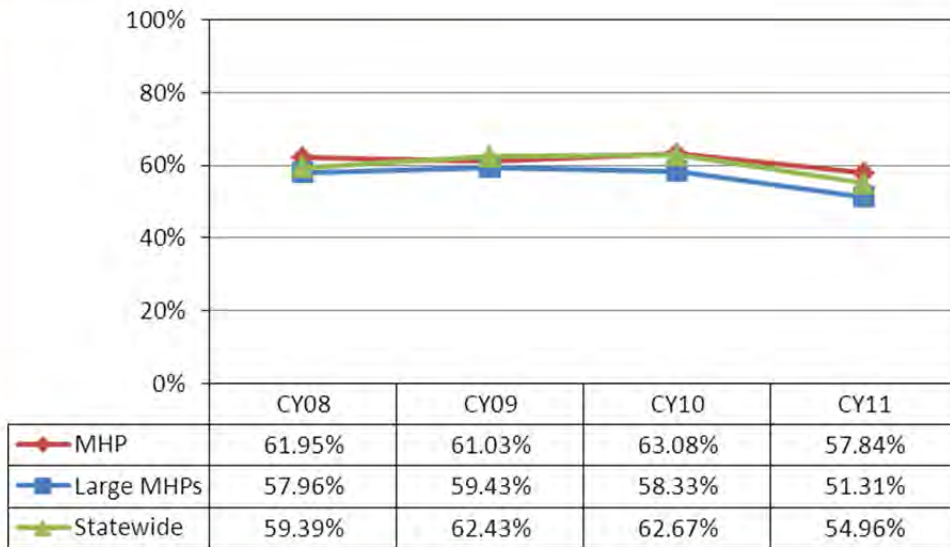
Element	MHP	Rank	Large MHPs	Statewide
Total approved claims	$57,121,809	N/A	$860,852,770	$2,133,800,328
Average number of eligibles per month	148,743	N/A	3,707,783	7,909,312
Number of beneficiaries served	11,634	N/A	206,267	447,585
Penetration rate	7.82%	20	5.56%	5.66%
Approved claims per beneficiary Served	$4,910	20	$4,173	$4,767
Penetration rate – Foster care	57.84%	22	51.31%	54.96%
Approved claims per beneficiary served – Foster care	$10,459	8	$7,350	$6,910
Penetration rate – TAY	9.72%	18	6.60%	6.72%
Approved claims per beneficiary served – TAY	$6,324	14	$5,236	$6,000
Penetration rate – Hispanic	4.75%	17	3.48%	3.68%
Approved claims per beneficiary served – Hispanic	$4,611	20	$3,873	$4,706
Penetration rate – African-American	10.98%	21	9.70%	10.30%
Approved claims per beneficiary served – African-American	$5,904	15	$5,082	$5,163

Figure 7. CY11 Medi-Cal Approved Claims Data				
Element	MHP	Rank	Large MHPs	Statewide
Penetration rate –Asian/Pacific Islander	4.81%	23	3.89%	4.00%
Approved claims per beneficiary served – Asian/Pacific Islander	$4,411	15	$3,396	$3,578

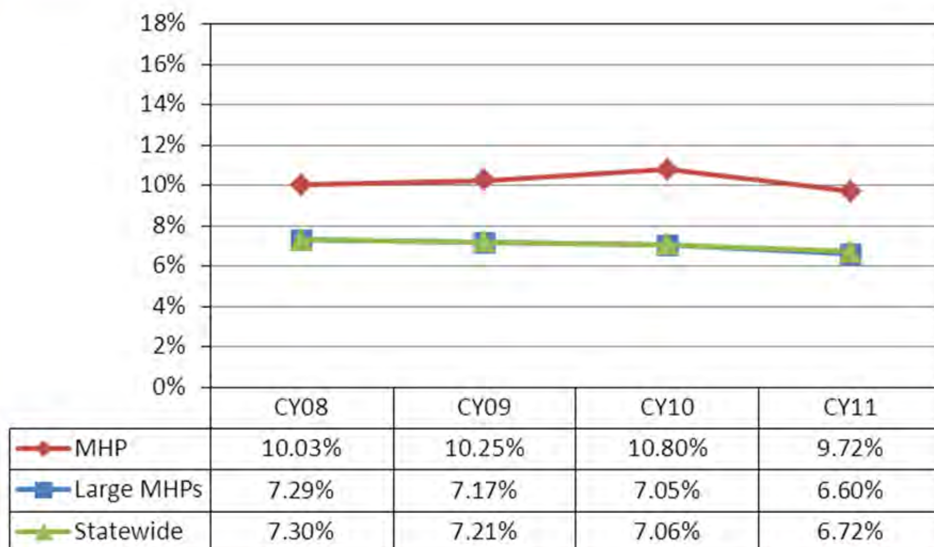
Figures 8 through 11 highlight four year trends for penetration rates and average approved claims.



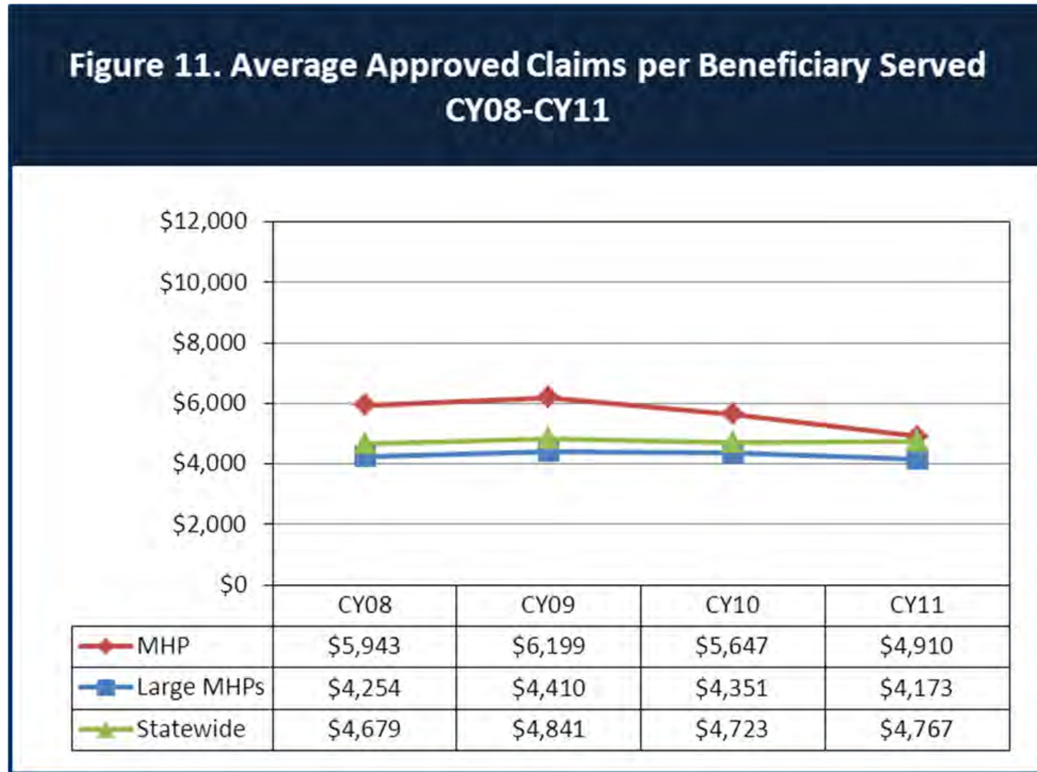
	CY08	CY09	CY10	CY11
MHP	8.53%	8.66%	8.59%	7.82%
Large MHPs	6.63%	6.25%	5.92%	5.56%
Statewide	6.38%	6.15%	5.89%	5.66%



	CY08	CY09	CY10	CY11
MHP	61.95%	61.03%	63.08%	57.84%
Large MHPs	57.96%	59.43%	58.33%	51.31%
Statewide	59.39%	62.43%	62.67%	54.96%



	CY08	CY09	CY10	CY11
MHP	10.03%	10.25%	10.80%	9.72%
Large MHPs	7.29%	7.17%	7.05%	6.60%
Statewide	7.30%	7.21%	7.06%	6.72%



MEDI-CAL APPROVED CLAIMS HISTORY

The table below provides trend line information from the MHP's Medi-Cal eligibility and approved claims files from the last five fiscal years. The dollar figures are not adjusted for inflation.

Figure 12. MHP Medi-Cal Eligibility and Claims Trend Line Analysis

Fiscal Year	Average Number of Eligibles per Month	Number of Beneficiaries Served per Year	Penetration Rate		Total Approved Claims	Approved Claims per Beneficiary Served per Year	
			%	Rank		$	Rank
FY10-11	140,539	9,853	7.01%	29	$45,005,844	$4,568	21
FY09-10	139,120	11,618	8.35%	16	$67,589,390	$5,818	11
FY08-09	130,259	11,045	8.48%	25	$69,284,284	$6,273	10
FY07-08	123,576	9,532	7.71%	32	$55,374,161	$5,809	9
FY06-07	120,065	9,148	7.62%	34	$50,281,409	$5,496	9

Review of Medi-Cal approved claims data, displayed in Figures 5 through 12 reflect the following issues that relate to quality and access to services:

- Neither CAEQRO nor the MHP know to what extent their Medi-Cal approved claims data is incomplete; this has been ongoing for a few years. In the FY10-11 CAEQRO report, it was noted that the MHP was doing ad hoc analysis on some unbilled services. Further, in the FY11-12 CAEQRO report it was noted the MHP had a significant claims lag and were reviewing claims processing and procedures as a result. This FY, the MHP continues to reviews claims processing and procedures but they still lack full resolution and complete, dependable data. Given this, comparisons to previous years of MHP data, when there was a known claims lag or other disturbance, would not be meaningful. The below comparisons to CY11 data from other large MHP and statewide are thus *general* comparisons, keeping in mind the incomplete status of MHP's claims. .
- In CY11, the overall penetration rate (7.82 percent) was 41 percent greater than the large county average (5.56 percent) and 38 percent greater than the statewide average (5.66 percent). MHP penetration rates exceeded that of the large county and statewide averages in every age and gender category.
- The MHP's approved claims dollars per beneficiary served ($4,910) was 18 percent greater than that of the large county average ($4,173) and was comparable to the statewide average ($4,767). Approved claims dollars per beneficiary were greater than the statewide and large county averages in both the 0-5 and 6-17 age categories but less than the large county and statewide averages in both the 18-59 and 60+ categories.
- TAY approved claims dollars per beneficiary served ($6,324) was 21 percent greater than the large county average ($5,236) and was comparable to the statewide average ($6,000). Penetration rate for this group (9.72 percent) was 47 percent greater than the large county average (6.60 percent) and was 45 percent greater than the statewide average (6.72 percent).
- Approved claims dollars per Hispanic beneficiary served ($4,611) was 19 percent greater than the large county average ($3,873) and was comparable to the statewide average ($4,706). The Hispanic penetration rate (4.75 percent) was 36 percent greater than the large county average (3.48 percent) and 29 percent greater than the statewide average (3.68 percent). Hispanic eligibles represented 39 percent of the MHP's monthly unduplicated eligibles compared to the statewide eligible demographic of 54 percent. This Hispanic PR ranks Contra Costa as third highest among large counties.
- Approved claims dollars per African American beneficiary served ($5,904) was 16 percent greater than the large county average ($5,082) and 14 percent greater than the statewide average ($5,163). The African American penetration rate (10.98 percent) was 13 percent greater than the large county average (9.70 percent) and six percent greater than the statewide average (10.30%). African American eligibles represented 20 percent of the MHP's monthly unduplicated eligibles compared to the statewide eligible demographic of 9.23 percent.

- The penetration rate for children in foster care (57.84 percent) was 13 percent greater than the large county average (51.31 percent) and five percent greater than the statewide average (54.96 percent). The approved claims per beneficiary served for this group ($10,459) was 42 percent greater than the large county average ($7,350) and 51 percent greater than the statewide average ($6,910).

High-Cost Beneficiaries

As part of an analysis of service utilization, CAEQRO compiled claims data to identify the number and percentage of beneficiaries within each MHP and the state for whom a disproportionately high dollar amount of services were claimed and approved. A stable pattern over the last five calendar years of data reviewed shows that statewide, roughly 2 percent of the beneficiaries served accounted for one-quarter of the Medi-Cal expenditures. The percentage of beneficiaries meeting the high cost definition has increased in each of the four years analyzed. For purposes of this analysis, CAEQRO defined "high cost beneficiaries" as those whose services met or exceeded $30,000 in the calendar year examined—this figure represents roughly three standard deviations from the average cost per beneficiary statewide.

Figure 13. High-Cost Beneficiaries (greater than $30,000 per beneficiary)

	Beneficiaries Served			Approved Claims		
	# HCB	# Served	%	Average per HCB	Total Claims for HCB	% of total claims
Statewide CY11	10,905	447,585	2.44%	$48,955	$533,858,819	25.02%
MHP CY11	391	11,634	3.36%	$50,003	$19,551,308	34.23%
MHP CY10	490	11,956	4.10%	$55,509	$27,199,342	40.29%
MHP CY09	562	11,655	4.82%	$54,540	$30,651,489	42.42%
MHP CY08	505	10,718	4.71%	$54,721	$27,634,004	43.39%

CAEQRO also analyzed claims data for beneficiaries receiving $20,000 to $30,000 in services per year. Statewide, this population also represents a small percentage of beneficiaries for which a disproportionately high amount of Medi-Cal dollars is claimed. Statewide in CY11, 37.09 percent of the approved Medi-Cal claims funded 4.81 percent of the beneficiaries served when this second tier of high cost beneficiaries is included. For the MHP, 46.5 percent of the approved Medi-Cal claims funded 5.81 percent of the beneficiaries served. This information is also depicted in pie charts in Attachment D.

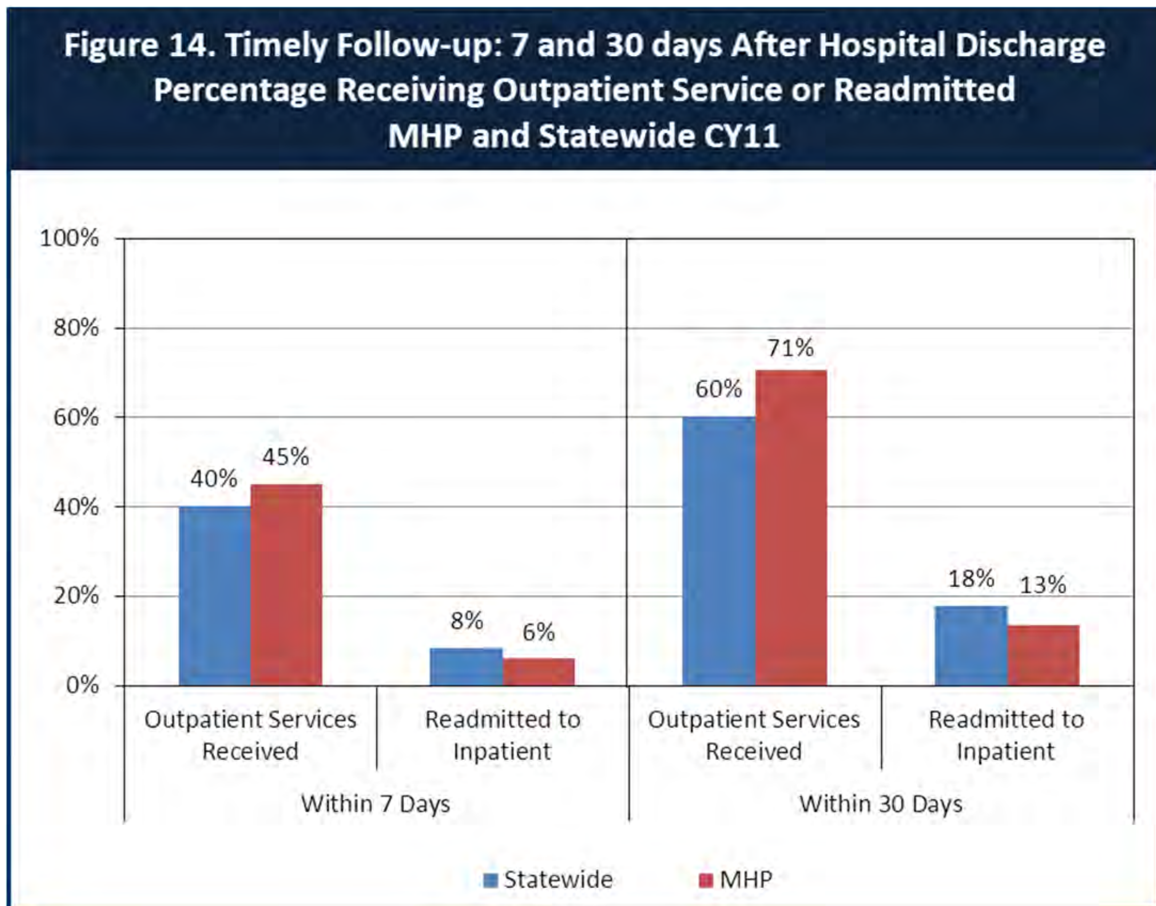
- Compared to the statewide average, the MHP spent a larger percentage of its Medi-Cal dollars for high-cost beneficiaries in CY10 (34.23 percent vs. 25.02 percent). While

continuing to exceed the statewide average, the percent of claims for high cost beneficiaries have been trending downward since CY09. The MHP has historically spent more than the statewide average on high-cost beneficiaries and while claim lag or unbilled services may be causing some of the decrease this FY, verification of the extent is not possible. The MHP is cognizant of its continued high representation of high-cost beneficiaries and have begun a PIP targeting this issue.

- The average approved claim dollars for the MHP's high cost beneficiaries was at its lowest level in CY11 since CY08 and comparable to the statewide average ($50,003 vs. $48,955).

TIMELY FOLLOW-UP AFTER HOSPITAL DISCHARGE

CAEQRO reviewed Medi-Cal approved claims to identify what percentage of beneficiaries statewide and within each MHP received a follow-up service after discharge from an inpatient setting -- within seven days and thirty days. Similarly, this analysis shows the percentage of beneficiaries who were re-hospitalized during those time frames. It should be noted that when Medi-Cal beneficiaries are admitted to inpatient facilities that do not bill Medi-Cal, those inpatient episodes are not represented in the claims analysis.



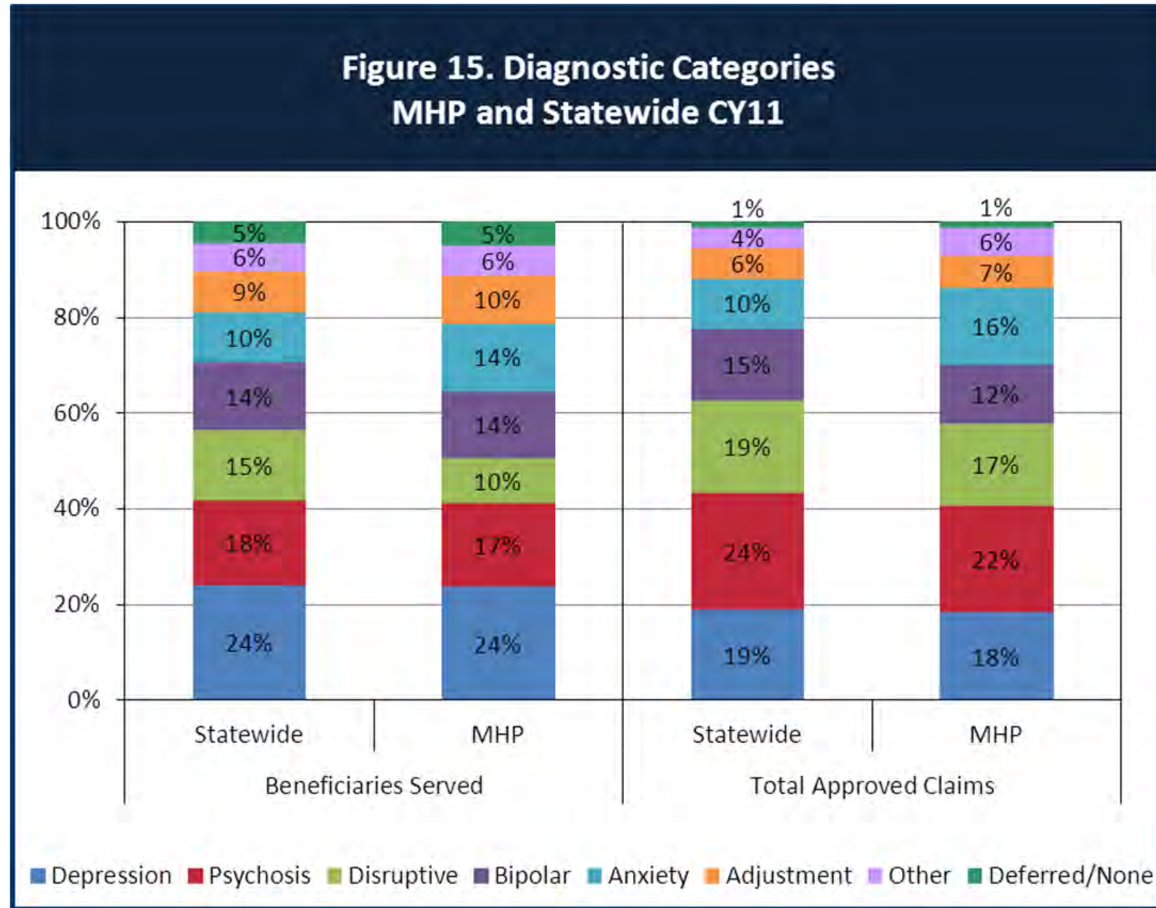
Statewide in CY11, within seven days of discharge, 40 percent of beneficiaries received at least one non-inpatient service. Also within that time frame, eight percent of beneficiaries were readmitted to an inpatient setting. Within a thirty day time frame, 60 percent of beneficiaries received a non-inpatient service after discharge, and 18 percent returned to an inpatient setting.

For the MHP, the follow-up and readmission rates (based on available incomplete claims) reflect the following:

- When compared to the statewide average, a greater percentage of MHP beneficiaries received at least one outpatient service within seven days of hospital discharge (45 percent vs. 40 percent). The percentage of MHP beneficiaries readmitted within seven days is less than the statewide average (six percent vs. eight percent).
- In the 30 day hospital follow up analysis, compared to the statewide average, a greater percentage of MHP beneficiaries received at least one service within 30 days of discharge (71 percent vs. 60 percent). The MHP's rate of readmission to an inpatient setting within 30 days was less than the statewide average (13 percent vs. 18 percent).
- Again, given the incomplete nature of the data, this data should be viewed with caution.

Diagnostic Categories

CAEQRO reviewed approved claims to analyze the frequency of primary diagnoses throughout the state and each MHP. Similarly, this analysis examined the dispersal of approved claims by diagnostic category. For a complete list of the diagnoses within each diagnostic category, please refer to the CAEQRO Website at www.caeqro.com. The diagnoses reflect the primary diagnosis as reported on the Medi-Cal approved claims.



Statewide in CY11, depressive disorders are most frequent at 24 percent. This is followed by psychotic disorders at 18 percent, disruptive disorders at 15 percent, and bipolar disorders at 14 percent. When examining approved claims, there are proportionately more funds expended on psychotic disorders (24 percent) and disruptive disorders (19 percent) and proportionately fewer funds expended on depressive disorders (19 percent) and adjustment disorders (six percent). Statewide, five percent of diagnoses are deferred/none, though they represent only one percent of claims.

For the MHP, diagnostic categories show the following:

- Both Depressive and Psychotic disorders were diagnosed at a rate comparable to statewide averages. Spending for these disorders was also comparable to statewide averages.
- Disruptive disorders were diagnosed at a lower rate at the MHP when compared to the statewide average; whereas, Anxiety disorders were diagnosed at a higher rate. Approved claims dollars in both these diagnostic categories follow the same lower/higher pattern when compared to statewide averages.

❖PERFORMANCE MEASUREMENT❖

Each year CAEQRO is required to work in consultation with DHCS to identify a performance measurement (PM) which will apply to all MHPs – submitted to DHCS within the annual report due on August 31, 2013. These measures will be identified in consultation with DHCS for inclusion in this year's annual report.

❖CONSUMER AND FAMILY MEMBER FOCUS GROUPS❖

FOCUS GROUPS SPECIFIC TO THE MHP

CAEQRO conducted three 90-minute focus groups with consumers and family members during the site review of the MHP. As part of the pre-site planning process, CAEQRO requested focus groups as follows:

1. A culturally diverse group of adult consumers served at the East County clinic.
2. A culturally diverse group of parents/caretakers of child consumers who have begun services in the past 24 months.
3. A culturally diverse group of older adult consumers served either at a County clinic or by a contract provider.

The focus group questions were specific to the MHP reviewed and emphasized the availability of timely access to services, recovery, peer support, cultural competence, improved outcomes, and consumer and family member involvement. CAEQRO provided gift certificates to thank the consumers and family members for their participation.

CONSUMER/FAMILY MEMBER FOCUS GROUP 1

This focus group of seven English-speaking adult consumers was held at the East County Adult clinic in Pittsburg, CA.

Presently, among the seven consumers, services included various support groups, use of the MHCC wellness center, a case manager, referrals to primary care, medication support/M.D. appointments, and in one case, assistance with housing.

Participants reported being referred for services out of the TAY system or post-hospital discharge. In some cases a family member or another service provider assisted with access. No one reported any difficulties or delay in initial access. Routinely, the group reported a relatively quick response of anywhere to from four to seven days for appointments, although securing a psychiatry appointment can be a little harder. In a few instances where a primary care provider

was involved with follow-up care or home visits (depending on the program), there was very little wait for those appointments. The only concerns about wait times was actually on site in clinic waiting rooms where there may be long lines to check in or protracted waits to see one's provider.

While some consumers have access to various County crisis services and report no problems with them, there was a general dislike for services at the Martinez Hospital, as they felt unsafe at discharge, being given a BART pass only and sent on their way. Recent improvements have been seen as now hospital staff call a cab or relatives for the discharging consumer.

Information/communication is garnered through case managers, posted flyers, word of mouth, and the MHCC Wellness Centers. Some reported using a Wellness Center, but a few no longer go to the Antioch center as they experienced it as unfriendly and located in an unsafe location; one consumer reported being stalked by another consumer and feeling the staff did not do enough about it. Participants knew of the change of provider form and the grievance form, and have not had difficulties getting a change of staff when requested. Otherwise, attendees felt the many groups offered throughout the system were helpful, especially the spiritual and tai chi groups. Others reported good things about the Phoenix Center run by Anka as it more structured and has specific groups (they were aware use of the Phoenix Center is by referral only).

Staff were endorsed as doing their jobs really well, as very kind, and giving good suggestions. The nurses were reportedly helpful and even support staff (including the janitors and grounds staff) are very nice. One consumer said their case manager and the conservator were very helpful in getting the right thing done for them. Family members can be involved and it's easy to request before it's offered; psychiatrists have asked if the consumer wants family engagement. Other than completing a number of surveys, including satisfaction surveys, no consumer in attendance has ever been invited to any committee or knew they could volunteer within the system of care.

Recommendations arising from this group included:

- Provide a working TV in the waiting room at the Pittsburg clinic
- Make bus passes for travel to/from appointments
- Provide a coffee machine in the reception area of clinics

Participants from the group provided the following demographic information:

Figure 16. Consumer/Family Member Focus Group 1

Number/Type of Participants	
Consumer Only	7
Consumer and Family Member	
Family Member of Adult	
Family Member of Child	
Family Member of Adult & Child	
Total Participants	7

Ages of Participants	
Under 18	
Young Adult (18-24)	2
Adult (25-59)	5
Older Adult (60 and older)	

Preferred Languages	
English	7

Race/Ethnicity	
Caucasian/White	2
African American/Black	2
Other/Mixed	2
Asian/Pacific Islander	1

Gender	
Male	3
Female	4

Interpreter used for focus group 1: ☒ No ☐ Yes

CONSUMER/FAMILY MEMBER FOCUS GROUP 2

This focus group of Spanish and English-speaking parents/caregivers of child consumers was held at the East County Children's Clinic in Antioch, CA, included seven participants.

The group was comprised of four parents, two grandparents and a cousin who are parenting a number of children in MHP wraparound services. All reported the wraparound program comes to their home, the child's school, and offers certain services in a clinic, as it has a "whatever works" for the child and family approach. Everyone present endorsed the MHP services as culturally sensitive.

Participants reported finding out about MHP services through employment contacts or Families Forward (a local CBO), being referred by Social Services, or attending a TBS Coffee session. When their child was in crisis, caretakers reported calling the County crisis hotline (and a mobile services team responded as they are available 24 hours a day). In other instances, a caregiver knew they could call a contractor provider, Seneca, and they will assess and refer their child as needed. One parent called the County Abuse Hotline after finding out that her child was sexually abused. Another family only finally got into CalWORKs (and related MHP services) after moving to East County, as the county offices in Richmond were not very helpful.

Recent changes in services were reported as there being no set way to learn about the services available throughout the system. One parent reported cutbacks eliminate the available parenting classes she previous accessed; but others said that they have received parenting training recently in other venues. One caregiver looked for support groups for parents of abused children but could not find any, feeling the system lacked this resource. While one parent reported getting some support from an outside CBO, after her child's condition worsened, more appropriate ones were harder to find. For some consumers/families that receive mostly home-based services, service provision is too dependent on the assigned home outreach person to pass any relevant information to other providers, rather than a more consistent means of information sharing. One parent reported hearing of MHCC Wellness Centers and the SPIRIT program. All the English-speaking caregivers reported having a parent partner but only one Spanish-speaking parent had one.

Access to psychiatry was inconsistent; one parent reported a three week wait for her child, but a five month wait for herself. A Spanish-speaking parent reported it took five months to get a Spanish-speaking therapist assigned.

Recommendations arising from this group include:

- Offer more mentoring services for children and parenting groups.
- Offer more therapy appointments during the weekdays.
- Increase the frequency of service to more than once a month.
- Publicize available service in more diverse ways, as the present mediums are limited.
- Decrease wait times for service from Spanish-speaking providers

Participants from the group provided the following demographic information:

Figure 17. Consumer/Family Member Focus Group 2

Number/Type of Participants	
Consumer Only	
Consumer and Family Member	
Family Member of Adult	
Family Member of Child	5
Family Member of Adult & Child	2
Total Participants	7

Ages of Participants	
Under 18	
Young Adult (18-24)	
Adult (25-59)	7
Older Adult (60 and older)	

Preferred Languages	
Spanish	3
English	4

Race/Ethnicity	
Latino/Hispanic	3
Caucasian/White	1
Native American	1
African American/Black	1

Gender	
Male	
Female	7

Interpreter used for focus group 2: ☐ No ☒ Yes Language: Spanish

CONSUMER/FAMILY MEMBER FOCUS GROUP 3

This focus group of eight English-speaking older adult consumers was held at the Central County Older Adult Clinic in Concord, CA.

Consumers were receiving MHP services anywhere from 4 months to 39 years. Present services included case management, nursing care, psychiatry appointments/medication, individual therapy, transportation to appointments, day treatment, home visits (including by MDs), and group therapy. Attendees were from all over the county (i.e., El Cerritos, Antioch, Concord, and Richmond) and entered services in a number of ways that is referred by Social Services or a physician, self-referred by calling the access line, by way of a scheduled hospital discharge follow-up appointment.

Attendees said routine access is good and that it is not difficult to schedule or reschedule an appointment; often they can get in the same day they call. Transportation will pick them up and drop them off or a taxi voucher is given to get home if the drivers are busy picking up other consumers. In a crisis, consumers knew to call the crisis line or 911. In one instance, a consumer said they called their case manager who advised them to go to the hospital. All agreed they were invited to have family involved, if they wished it.

Information about the MHP stemmed from various case managers and nurses, or in a few cases, by letter. Only two consumers knew of the Wellness Centers. No one had ever felt the need to change providers but knew one could; they were very satisfied with staff and agreed they are extremely supportive of cultural diversity. Attendees felt they could make suggestions about their own care to their case manager or therapist, but if it was systemwide input, they might instead make it to their MD (although no one reported having done so). Staff do give consumers a sense of hope, especially about possibly going back to work or school. They are empowered by staff, despite being physically handicapped in one instance. A few attendees reported receiving something in mail about volunteer/paid consumer positions and about half had heard of the Spirit training program or been asked if they were interested in participating.

Recommendations arising from this group included:

- Adding more arts and crafts classes, more outings, and more opportunities for interaction; there was a predominant theme among all present of the need for more socialization
- Providing transportation to physical health doctor appointments
- Ensuring home visits by psychiatrists continue, as needed.

Participants from the group provided the following demographic information:

Figure 18. Consumer/Family Member Focus Group 3

Number/Type of Participants	
Consumer Only	8
Consumer and Family Member	
Family Member of Adult	
Family Member of Child	
Family Member of Adult & Child	
Total Participants	8

Ages of Participants	
Under 18	
Young Adult (18-24)	
Adult (25-59)	
Older Adult (60 and older)	8

Preferred Languages	
English	8

Race/Ethnicity	
African American/Black	3
Mixed	1
Caucasian/White	3
Asian/Pacific Island	1

Gender	
Male	1
Female	7

Interpreter used for focus group 3: ☒ No ☐ Yes

❖PERFORMANCE IMPROVEMENT PROJECT VALIDATION❖

CLINICAL PIP

The MHP presented its study question for the clinical PIP as follows:

> "Does the introduction of a "Care Coordinator" and an increased frequency of UR review for clients who are receiving uncoordinated care, duplicated services, or an unnecessary level of service intensity, facilitate more efficient use of services in the system of care?"

Year PIP began: February 2012

Status of PIP:

- ☒ Active and ongoing
- ☐ Completed
- ☐ Inactive, developed in a prior year
- ☐ Concept only, not yet active
- ☐ No PIP submitted

The MHP is a state outlier in terms of high utilization consumers; (i.e., in 2010, 4.1 percent of MHP consumers accounted for 40 percent of total service costs). Data revealed more than half of these consumers (262 of 500) were under the age of 18, had an average annual cost of $61,000, and were predominantly served by an extensive child organizational provider network. The MHP's concern is that the decentralizing of such services has led to poor care coordination, duplicative services/assessments, disorganized treatment, and thus, unnecessarily elevated costs and possibly, poor information sharing.

Starting with a ethnicity-stratified random sample of 60 high utilizer child consumers (defined as having costs of over $30,000 a year), UR-reviewed cases that are noted as open for "excessively long periods" and with little county provider involvement, will be assigned a care coordinator (until the PIP sample goal of 30 cases is reached). Using the MHP's own Quality and Coordination of Care tool as one indicator, the goal is to have higher tool scores (indicating better coordination/service quality) post-intervention. The MHP is also developing other indicators, such as the redundancy of services in a given day and/or number of months with excessive service hours; these last two indicators are still in flux, but informed by reasonable clinical judgment, as the baseline data has yet to reveal any notable variables worthy of tracking. The specific intervention of 'case coordination' should be broken out into identifiable duties/themes so that duplication of successful coordination strategies can be generalized to high utilizer adult consumers next; this was discussed on-site. Each PIP case will also undergo enhanced UR at one, three, six and twelve-month intervals to provide updated tool scores for comparison.

CAEQRO applied the PIP validation tool, which follows in Attachment E, to all PIPs – rating each of the 44 individual elements as either "met," "partial," "not met," or "not applicable." Relevant details of these issues and recommendations are included within the comments of the PIP validation tool. Thirteen of the 44 criteria are identified as "key elements" indicating areas that are critical to the success of a PIP. These items are noted in grey shading in the PIP Validation Tool included as Attachment E. The results for these thirteen items are listed in the table below.

Figure 19. Clinical PIP Validation Review—Summary of Key Elements

Step	Key Elements	Present	Partial	Not Met
1	The study topic has the potential to improve consumer mental health outcomes, functional status, satisfaction, or related processes of care designed to improve same	X		
2	The study question identifies the problem targeted for improvement	X		
3	The study question is answerable/demonstrable	X		
4	The indicators are clearly defined, objective, and measurable	X		
5	The indicators are designed to answer the study question		X	
6	The indicators are identified to measure changes designed to improve consumer mental health outcomes, functional status, satisfaction, or related processes of care designed to improve same		X	
7	The indicators each have accessible data that can be collected	X		
8	The study population is accurately and completely defined	X		
9	The data methodology outlines a defined and systematic process	X		
10	The interventions for improvement are related to causes/barriers identified through data analyses and QI processes	X		
11	The analyses and study results are conducted according to the data analyses plan in the study design			X
12	The analyses and study results are presented in an accurate, clear, and easily understood fashion			X
13	The study results include the interpretation of findings and the extent to which the study demonstrates true improvement			X

Figure 19. Clinical PIP Validation Review—Summary of Key Elements				
Step	Key Elements	Present	Partial	Not Met
Totals for 13 key criteria		**8**	**2**	**3**

CAEQRO offered further technical assistance as needed as the MHP continues to develop, implement, and improve this or other PIPs. The PIP, as submitted by the MHP, is included in an attachment to this report.

NON-CLINICAL PIP

The MHP presented its study question for the non-clinical PIP as follows:

> "Will implementing activities such as increasing psychiatric staff capacity at the East County Adult Mental Health Clinic, and fielding new clients to network providers to reduce the length of wait time for an initial appointment with a psychiatrist for clients waiting to be seen in East County?"

Year PIP began: August 2011

Status of PIP:

- ☐ Active and ongoing
- ☒ Completed (as of December 2012) – active for the review period
- ☐ Inactive, developed in a prior year
- ☐ Concept only, not yet active
- ☐ No PIP submitted

Concerned about how they handle new consumer referrals, the MHP examined average wait times for psychiatric appointments at the East County Adult Clinic in early 2011 and found they exceeded their goal of 60 days (by another 30 days on average) and that the clinic was significantly understaffed with psychiatrists (only 3.7 FTEs), compared to their other two regional clinics (6.8 and 6.0 FTEs). Ideal staffing for each clinic is set at 7.0 FTEs. Further, the long wait times were thought related to the high and increasing no show rate for such appointment at this clinic (ranging from 19 to 23 percent in FY10-11).

Proposed PIP interventions included recruiting additional clinic medical staff, routing of new Medi-Cal beneficiaries to network/contract providers immediately from the point of access, initiating group intake sessions, and assigning nursing staff to do intake evaluations. Interventions one, two and four began during/before the PIP; intervention three did not occur as it was reserved in case of excessive referral numbers to the clinic. Indicators focused on wait time to first psychiatric appointment as well as MD no show rates, along with the number of

monthly referrals to the East County Clinic MDs versus available two network providers. Post-intervention data showed wait times decreased by 83 percent and new consumers were effectively assigned to network provider increasingly (14-58 percent increases were seen). However, no show rates actually increased by eight percent, a result which the MHP reported they intend to research fully to understand, as well as ensure correct use of the no show code in the future IS.

CAEQRO applied the PIP validation tool, which follows in Attachment E, to all PIPs – rating each of the 44 individual elements as either "met," "partial," "not met," or "not applicable." Relevant details of these issues and recommendations are included within the comments of the PIP validation tool. Thirteen of the 44 criteria are identified as "key elements" indicating areas that are critical to the success of a PIP. These items are noted in grey shading in the PIP Validation Tool included as Attachment E. The results for these thirteen items are listed in the table below.

Figure 20. Non-Clinical PIP Validation Review—Summary of Key Elements

Step	Key Elements	Present	Partial	Not Met
1	The study topic has the potential to improve consumer mental health outcomes, functional status, satisfaction, or related processes of care designed to improve same	X		
2	The study question identifies the problem targeted for improvement	X		
3	The study question is answerable/demonstrable	X		
4	The indicators are clearly defined, objective, and measurable	X		
5	The indicators are designed to answer the study question	X		
6	The indicators are identified to measure changes designed to improve consumer mental health outcomes, functional status, satisfaction, or related processes of care designed to improve same	X		
7	The indicators each have accessible data that can be collected	X		
8	The study population is accurately and completely defined	X		
9	The data methodology outlines a defined and systematic process that consistently and accurately collects baseline and remeasurement data	X		
10	The interventions for improvement are related to causes/barriers identified through data analyses and QI	X		

Figure 20. Non-Clinical PIP Validation Review—Summary of Key Elements				
Step	Key Elements	Present	Partial	Not Met
	processes			
11	The analyses and study results are conducted according to the data analyses plan in the study design	X		
12	The analyses and study results are presented in an accurate, clear, and easily understood fashion	X		
13	The study results include the interpretation of findings and the extent to which the study demonstrates true improvement	X		
Totals for 13 key criteria		**13**		

CAEQRO offered further technical assistance as needed as the MHP continues to develop, implement, and improve this or other PIPs. The PIP, as submitted by the MHP, is included in an attachment to this report.

❖INFORMATION SYSTEMS REVIEW❖

Knowledge of the capabilities of an MHP's information system is essential to evaluate the MHP's capacity to manage the health care of its beneficiaries. CAEQRO used the written response to standard questions posed in the California-specific ISCA Version 7.3, additional documents submitted by the MHP, and information gathered in interviews to complete the information systems evaluation.

KEY ISCA INFORMATION PROVIDED BY THE MHP

The above information is self-reported by the MHP in the ISCA and/or the site review:

- Of the total number of services provided, what percentage is provided by:

Type of Provider	Distribution
County-operated/staffed clinics	37%
Contract providers	45%
Network providers	18%
	100%

- Normal cycle for submitting current fiscal year Medi-Cal claim files:

☒ Monthly ☐ More than 1x month ☐ Weekly ☐ More than 1x weekly

- Reported percent of consumers served with co-occurring (substance abuse and mental health) diagnoses:

22%

- Reported average monthly percent of missed appointments:

13%

- Does MHP calculate Medi-Cal beneficiary penetration rates?

☒ Yes ☐ No

Penetration rates are calculated yearly by ethnicity/age/service type/sub-group (e.g., foster care) and geographic area. Retention rates are analyzed by gender, age and ethnicity. Data was trended from 2007-2012.

CURRENT OPERATIONS

There has been no change in the information system since the last CAEQRO review; the MHP continues to utilize InSyst, a legacy system implemented in 1989. NetPro, implemented in 1990, is used for Managed Care.

MAJOR CHANGES SINCE LAST YEAR

- Contract providers are required to submit their own Other Health Coverage (OHC) and Medicare claims. The MHP provided training for this new responsibility. A protocol for sending denials due to OHC/Medicare to contract agencies was developed.
- A contractor was retained to review claiming processes. A series of reports were developed to better monitor the status of outgoing claims as well as incoming payment information. All previously backlogged claims have been submitted to DHCS. Conference calls with DHCS to monitor outstanding claim status are ongoing.
- Void and Replace claims are separated from routine claim files.
- All non-active user IDs were deleted.

PRIORITIES FOR THE COMING YEAR

- Sign the contract and begin implementation of a replacement information system/EHR.
- Clean data in preparation for replacement information system implementation.
- Implement a three-tier IS support methodology.
- Re-initiate routine bimonthly user training.
- Continue to improve revenue cycle workflow with additional reports to assure timely claim file submissions.

OTHER SIGNIFICANT ISSUES

- Due to the ongoing Epic implementation and concentration of IT resources, the resources necessary to move forward with a Mental Health EHR continue to be unavailable.
- Contract providers are now required to submit their own OHC and Medicare claims. Since this change, some contract providers have stated they will only see full-scope Medi-Cal beneficiaries. Additionally, some contract providers are still in the process of becoming Medicare certified.

The table below lists the primary systems and applications the MHP uses to conduct business and manage operations. These systems support data collection and storage, provide EHR functionality, produce Short-Doyle/Medi-Cal and other third party claims, track revenue, perform managed care activities, and provide information for analyses and reporting.

Figure 21. Current Systems/Applications				
System/ Application	Function	Vendor/ Supplier	Years Used	Operated By
InSyst	Practice Management	The Echo Group	24	Health Services IS
NetPro	Managed Care	Health Services IS	13	Health Services IS
Epic	Provider Portal	Epic	<1	Health Services IS
Panasoft	Conservatorship	Panoramic	1+	Health Services IS

PLANS FOR INFORMATION SYSTEMS CHANGE

At the time of the review the MHP was hoping to select and implement an EHR within the next year, but the allocation of County IS resources was unclear. Since the review, the MHP has begun contract negotiations with its selected vendor. Resources are scheduled to be allocated to the MHP's EHR project over the summer, with the implementation anticipated to begin in September 2013.

ELECTRONIC HEALTH RECORD STATUS

See the table below for a listing of EHR functionality currently in widespread use at the MHP.

Figure 22. Current EHR Functionality					
Function	System/Application	Rating			
		Present	Partially Present	Not Present	Not Rated
Assessments				X	
Clinical Decision Support				X	
Document imaging				X	
Electronic signature - client				X	
Electronic signature - provider				X	
Laboratory results (eLab)				X	
Outcomes				X	
Prescriptions (eRx)				X	
Progress notes				X	

Figure 22. Current EHR Functionality					
Function	System/Application	Rating			
		Present	Partially Present	Not Present	Not Rated
Treatment plans				X	

Progress and issues associated with implementing an electronic health record over the past year are discussed below:

- Medical staff now have access to HSD's Epic system; however, their permission is currently read-only. There have been no other changes in IS status over the past year. Although many staff continue to hand-write progress notes, structured templates are available. If the structured template is utilized, after completion it is printed, signed, and filed in the chart. These notes are not part of an integrated EHR.
- The replacement IS will include the components of an EHR. Functionality will include practice management, clinical documentation, ePrescribing, electronic signature, and document imaging. Interoperability with the Epic system is considered a high priority. The new system will replace InSyst as well as the managed care functionality of NetPro.

❖SITE REVIEW PROCESS BARRIERS❖

The following conditions significantly affected CAEQRO's ability to prepare for and/or conduct a comprehensive review:

- There were no barriers affecting the preparation or the activities of this review.

❖CONCLUSIONS❖

During the FY12-13 annual review, CAEQRO found strengths in the MHP's programs, practices, or information systems that have a significant impact on the overall delivery system and its supporting structure. In those same areas, CAEQRO also noted opportunities for quality improvement. The findings presented below relate to the operation of an effective managed care organization, reflecting the MHP's processes for ensuring access and timeliness of services and improving the quality of care.

STRENGTHS

1. Through a strong partnership with the county's DPH and Health Plan, the MHP evidenced numerous ongoing physical health/mental health integration pilots that endeavor to better serve consumers.
   [Quality, Other: Physical Health integration]

2. The MHP is committed to routine evaluation of various programs/projects, both to track measurable progress (and adapt, if necessary) and to isolate successful strategies to repeat elsewhere.
   [Quality, Outcomes]

3. The MHP's commitment to wellness and recovery ideals remains strong; its OCE spearheaded numerous projects/outreach efforts supporting C/FMs and the community at large, such as creating four Recovery DVDs, Wellness Boards at each clinic, a Welcome Packet, and a Photovoice project.
   [Quality, Other: wellness and recovery]

4. Despite not having an EHR, the MHP has endeavored to use other means (i.e., external and/or Access databases, hand logs, weekly schedule monitoring) to collect some performance management data for analysis and system oversight.
   [Quality]

5. The MHP demonstrates a commitment to adopting a number of EBPs and ensuring clinical fidelity across its system to best treat various subgroups of the SPMI population.
   [Quality]

OPPORTUNITIES FOR IMPROVEMENT

1. The lack of an EHR is limiting the data that is available to the organization, as well as necessitating less efficient methods of tracking performance indicators. Contractor providers are also impacted, receiving minimal data from the MHP.
   [Information Systems]

2. Procedures/policies/daily best practices are inconsistent across regions and clinics, resulting in varying degrees of service quality and timeliness, and confusion/ misinformation among staff at various levels, consumers and family members.
   [Quality]

3. Senior management changes over the last two years, coupled with county reorganization, has negatively impacted staff morale and created an environment where administration is perceived as non-transparent, uncommunicative, and lacking a genuine desire to be inclusive.
   [Quality, Other: communication/stakeholders]

4. Notwithstanding initial efforts, the system of care still needs more effective and routine exits/step-down options. Further, there are few general level of care options that serve consumers in between intensive and medication-only service tracks.
   [Outcomes]

5. While the MHP is committed to tracking timeliness indicators however they can, data revealed wait times longer than established MHP standards (i.e., urgent services, children's assessments, post-hospital follow-ups).
   [Timeliness]

6. Due to the extended amount of time that has transpired in the ongoing selection of a replacement information system, some contract providers are moving forward independent of MHP considerations in their EHR selection.
   [Information Systems]

RECOMMENDATIONS

The following recommendations are in response to the opportunities for improvement identified during the review process, identified as an issue of access, timeliness, outcomes, quality, information systems, or others that apply:

1. When the IS implementation begins, assure contract provider communication to assess interest in utilizing the new system; query them to establish data/reporting needs which could be met with the new system. Assure interoperability with the County Epic system.
   [Information Systems]

2. Undertake efforts that include Program Chiefs/Managers, Supervisors and Team Leads to create equitable effective policies/procedures/business practices across the system, especially where differences lead to sub-optimal outcomes. Identify and standardize identified best practices related to such activities as scheduling MD appointments,

assigning on-duty medical/clinical staff, team/team leader meetings, triaging new referrals, use of case conferencing, medical necessity criteria application, safety responses, and AOD resources use.
[Quality]

3. Commit to leadership communication efforts that create a transparent environment which promotes communication and productive change; ensure routine stakeholder opportunities for all, so that clinical and C/FM staff, as well as contractors, feel like valuable contributors.
[Quality, Other: communication/stakeholders]

4. As planned, continue to map the crosswalk between Level of Care scores and services/programs, as well as build triggers for automatic case review and/or certain risk variables. Develop system levels of care to correspond with consumer needs.
[Outcomes]

5. In addition to ongoing capacity building efforts, assess clinic/regional barriers and ongoing improvement efforts to timely service provision as the majority of consumers are not being served within established time goals. Reassess disparate child versus adult benchmarks.
[Timeliness]

6. Continue to work collaboratively with DHCS to monitor the status of remaining unprocessed claims files to assure complete resolution of processing issues and optimal revenue generation.
[Information Systems]

❖ATTACHMENTS❖

Attachment A: Review Agenda

Attachment B: Review Participants

Attachment C: Approved Claims Source Data

Attachment D: Data Provided to the MHP

Attachment E: CAEQRO PIP Validation Tools

Attachment F: MHP PIP Summaries Submitted

A. Attachment—Review Agenda

<table>
<tr><th>Time</th><th colspan="2">Wednesday, February 13, 2013 -Day 1 Activities
1340 Arnold Dr. Martinez Ste. 200
*Location for all sessions unless otherwise notated</th></tr>
<tr><td rowspan="3">9:00 - 12:00</td><td colspan="2"><u>Performance Management</u>
Access, Timeliness, Outcomes, and Quality</td></tr>
<tr><td>• Introduction of participants
• Overview of review intent
• Significant MHP changes in past year
• Dept. Reorg - challenges/successes
• Strategic Initiatives - progress & plans
• Last Year’s CAEQRO Recommendations</td><td>• Performance improvement measurements utilized to assess access, timeliness, outcomes, and quality
• Examples of MHP reports used for to manage performance and decisions
• CAEQRO approved claims data</td></tr>
<tr><td colspan="2">Participants – Those in authority to identify relevant issues, conduct performance improvement activities, and implement solutions –including but not limited to the MH and BH Directors, senior management team, other managers/senior staff in Fiscal, Program, IS, Medical, QI, Research/Evaluation, patients’ rights advocate(s), and involved consumer and family member representatives.</td></tr>
<tr><td>12:00 – 1:00</td><td colspan="2">APS Working Lunch</td></tr>
<tr><td>1:00 - 2:30</td><td><u>Consumer/Family Member Employee Group Interview</u>

6-8 MHP employees who are consumers or family member, such as Peer Advocates/Support Specialists/Consumer Liaisons, and/or Parent Partners/Family Liaisons.</td><td><u>IS Manager/Key IS/Billing/Fiscal Staff Group Interview</u>

• Review and discuss ISCA
• IS priorities
• FY11-12 CAEQRO information technology concerns</td></tr>
<tr><td>2:45 – 4:15</td><td><u>Contract Provider Group Interview</u>

6-8 Clinical Directors or Operational Directors/Managers from Child and Adult contract providers</td><td><u>Fiscal/Billing/Finance Group Interview</u>

• Short-Doyle II Claim Process
• Medicare/Medi-Cal claim submissions for contract Providers
• Void & Replace claim transactions
• New policies & procedures since last review</td></tr>
</table>

Time	Thursday, February 14, 2013 –Day 2 Activities	
See scheduled times	**8:45 – 9:30** **Travel Time** **9:30 - 11:00 am** **Parents/Caretakers Focus Group** 8-10 participants as specified in the notification letter *East County Children's Clinic, Antioch*	**9:00 – 10:30 am** **MHP Line Staff Group Interview** 6-8 clinical line staff (all peers) representing various programs and geographical areas
See scheduled times	**11:00 – 11:20 am** **Travel Time** **11:30 am – 1:00 pm** **Adult Consumer Focus Group** 8-10 participants as specified in the notification letter *East County Adult Clinic, Pittsburg*	**10:45 am – 12:15 pm** **MHP Clinical Supervisors/Managers Group Interview** 6-8 program managers representing various programs and sites
	1:00 – 2:30 (Lunch + Travel)	**12:15 – 1:00 (Lunch)**
See scheduled times	**2:30 – 3:30 pm** **Wellness/Consumer-run Center Site Visit** Tour and informal discussion with members/staff of Antioch site *MHCC Concord*	**1:00 – 2:30 pm** **Disparities in Service Access, Retention, Quality, or Outcomes** • MHP data/CAEQRO approved claims data to examine penetration rates/utilization patterns by age, ethnicity, or gender • Cultural Competency strategies to improve access/engagement and improve health equity • Activities to address overall capacity • Data used to measure functional outcomes and satisfaction
See scheduled times	**3:00 pm** **Travel Time**	**2:45 – 4:15 pm** **Quality Improvement Activities** • Discussion with QIC Members, including C/FM representatives (non-MHP stakeholders) • Review of QI activities & accomplishments to improve access, timeliness, outcomes, quality

<table>
<tr><th>Time</th><th colspan="2">Friday, February 15 –Day 3 Activities</th></tr>
<tr><td>See scheduled times</td><td>9:00 – 10:30 am

<u>Older Adult Consumer Focus Group</u>

8-10 participants as specified in the notification letter

Central County Adult Clinic, Concord

10:30 - 10:50 am
<u>Travel Time</u></td><td><u>Performance Improvement Projects</u>

• Discussion includes PIP topics and study questions selection, baseline data, barrier analysis, intervention selection, methodology, results, and plans
• MHP examples of data used to measure timeliness

Participants should be those involved in the development and implementation of each PIP including the PIP committees & SR managers.</td></tr>
<tr><td>11:00 – 12:30</td><td colspan="2"><u>Integrated Services</u>

Efforts surrounding
• mental health and AOD service integration into behavioral health
• physical health (primary care/FQHC/Axis III diagnoses) integration for consumers</td></tr>
<tr><td>12:30 - 1:30</td><td colspan="2">APS Working Lunch & Staff Meeting</td></tr>
<tr><td>1:30 – 2:00</td><td colspan="2"><u>Final Questions Session</u>

MHP Director, QI Director, Senior leadership, and APS staff only
• Clarification discussion on any outstanding review elements
• MHP opportunity to provide additional evidence of performance
• CAEQRO next steps after the review</td></tr>
</table>

B. Attachment—Review Participants

CAEQRO Reviewers

Mila Green, Ph.D. - Lead Reviewer
Saumitra SenGupta, Ph.D. -Information Systems Director
Lisa Farrell, Senior Systems Analyst – Information System Reviewer
Walter Shwe, Consumer/Family Member Consultant

Additional CAEQRO staff members were involved in the review process, assessments, and recommendations. They provided significant contributions to the overall review by participating in both the pre-site and the post-site meetings and, ultimately, in the recommendations within this report.

Sites of MHP Review

CAEQRO staff visited the locations of the following county-operated and contract providers:

County provider sites

Contra Costa Mental Health Administrative Offices
1340 Arnold Dr. Ste. 200
Martinez, CA 94553

East County Children's Clinic
3501 Lone Tree Way #200
Antioch, CA 94509

East County Adult Clinic
2311 Loveridge Rd.
Pittsburg, CA 94565

Central County Adult Clinic
1420 Willow Pass Rd
Concord, CA 94520

Contract provider organizations

MHCC-Concord
2975 Treat Blvd. Bldg C.
Concord, CA 94518

Participants Representing the MHP

Angela Pride, Contra Costa Mental Health (CCMH) Planner/Evaluator
Anita Devera, CCMH Adult Program Supervisor
Beverly Fuhrman, CCMH East Clinic Program Manager

Brenda Crawford, Mental Health Consumer Concerns (MHCC) Executive Director
Brett Beaver, CCMH Children's Program Manager
Carol Frank, Early Childhood Mental Health Program Associate Director
Chet Spikes, CHD Assistant IT Director
Christine Madruga, CCMH Children's Program Supervisor
Christine Bohsquez, CCMH UR Coordinator
Corina Martinez, CCMH Community Support Worker (CSW)
Cynthia Belon, Behavioral Health Director
David Cassell, CCMH Quality Improvement Coordinator
David Seidner, CCMH Forensics Program Supervisor
Debra Beckert, CCMH Nurse Program Manager
Diane Renton, CCMH UR Coordinator
Dianna Collier, CCMH Children's Family Services Coordinator
Eileen Brooks, CCMH East Clinic Program Manager
Elizabeth Siliezar, CCMH Community Support Worker
Erika Barrow, CCMH Administrative Services Analyst
Erin McCarty, CCMH Planner/Evaluator
Eva Crose, CCMH CSW
Floris Mendoza, CCMH Mental Health Clinical Specialist
Francisca McGuire, CCMH CSW
Fred Harris, CCMH Community Support Worker
Gerold Loenicker, CCMH PEI Coordinator
Grace Marlar, CCMH UR Program Manager
Halle Friedman, Rubicon Inc. Program Manager
Heather Sweeten-Healy, CCMH IMPACT Program Manager
Helen Kearns, CCMH Children's Project Manager
Hillary Bowers, CCMH Community Support Worker
Holly Page, CCMH Acting Program Manager
Imo Momoh, CCMH Ethnic Services and Training Coordinator
Jan Cobaleda-Kegler, CCMH Concord Program Manager
Jeff Cotta, CCMH Utilization Review Clinician
Jerry Halterman, CHD IT Supervisor
Joanna Jeremy, CCMH Mental Health Clinical Specialist
Jonathan San Juan, CCMH CSW
JR Ang, CCMH Patient Accounting Manager
Judith Jones-German, MHCC Program Coordinator
Ken Gallagher, CCMH Planner/Evaluator
Kennisha Johnson, MMCH Adult Program Supervisor
Lavonna Martin, Acting Director - Contra Costa Homeless Program
Leslie Gunsalus, CCMH Mental Health Clinical Specialist
Loan Tran, CCMH Mental Health Specialist
Mahsa Lindeman, CCMH Mental Health Clinical Specialist
Maria Guerrero, CCMH CSW

Mary Roy, CCMH First Hope Program Supervisor
Mathew Luu, CCMH West Clinic Program Manager
Michael Pereira, CCMH Mental Health Specialist
Michael Penkunas, CCMH Planner/Evaluator
Michaela Mougenkoff, CCMH Transition Team Acting Manager
Michelle Rodriquez-Ziemer, CCMH Mental Health Clinical Specialist
Nancy O'Breen, CCMH Mental Health Clinical Specialist
Patricia Tanquary, C.E.O. Contra Costa Health Plan
Paula Cardenas, CCMH CSW
Priscilla Olivas, CCMH Planner/Evaluator
Radhika Miles, CCMH Mental Health Clinical Specialist
Robert Thigpen, CCMH Family Support Worker
Roberto Roman, CCMH CSW
Ross Andelman, CCMH Medical Director
Sandy Marsh, CCMH Probation Services Program Manager
Sara Marsh, Director of Support Services – Contra Costa Integrated Health
Shelley Okey, CCMH Access Line Program Manager
Steve Blum, CCMH Mental Health Clinical Specialist
Steven Grolnic-McClurg, CCMH Director
Steve Hahn-Smith, CCMH Quality Management Program Coordinator
Susan Medlin, CCMH Consumer Empowerment Program Coordinator
Susan Kalaei, CCMH Pharmacist/Medication Monitoring
Teresa Gibson, CCMH Mental Health Clinical Specialist
Terry Ahab, CCMH Mental Health Clinical Specialist
Thomas Tighe, CCMH Older Adult Program Supervisor
Tina Martin-Swift, Lynne Center Clinical Director
Travis Curran, Crestwood Pleasant Hill Campus Administrator
Vern Wallace, CCMH Child/Adolescent Services Program Chief
Wendel Brunner, County Department of Public Health Director
Ziba Rahimzadeh, CCMH Provider Services Program Manager

C. Attachment—Approved Claims Source Data

- **Source:** Data in Figures 5 through 15 and Attachment D are derived from four statewide source files:
  - Short-Doyle/Medi-Cal approved claims (SD/MC) from the Department of Mental Health (DMH)
  - Short-Doyle/Medi-Cal denied claims (SD/MC–D) from the Department of Mental Health
  - Inpatient Consolidation claims (IPC) from the Department of Health Care Services via DMH
  - Monthly MEDS Extract Files (MMEF) from the Department of Health Care Services via DMH

- **Selection Criteria:**
  - Medi-Cal beneficiaries for whom the MHP is the "County of Fiscal Responsibility" are included, even when the beneficiary was served by another MHP
  - Medi-Cal beneficiaries with aid codes eligible for SD/MC program funding are included

- **Process Date:** The date DMH processes files for CAEQRO. The files include claims for the service period indicated, calendar year (CY) or fiscal year (FY), processed through the preceding month. For example, the CY2008 file with a DMH process date of April 28, 2009 includes claims with service dates between January 1 and December 31, 2008 processed by DMH through March 2009.

  - CY2011 includes SD/MC and IPC approved claims with process date June 2012
  - CY2010 includes SD/MC and IPC approved claims with process date June 2012
  - CY2009 includes SD/MC and IPC approved claims with process date February 2011
  - CY2008 includes SD/MC and IPC approved claims with process date December 2009
  - CY2007 includes SD/MC and IPC approved claims with process date April 2009
  - CY2006 includes SD/MC and IPC approved claims with process date October 2007
  - CY2005 includes SD/MC and IPC approved claims with process date July 2006
  - FY10-11 includes SD/MC and IPC approved claims with process date November 2011
  - FY09-10 includes SD/MC and IPC approved claims with process date February 2011
  - FY08-09 includes SD/MC and IPC approved claims with process date December 2009
  - FY07-08 includes SD/MC and IPC approved claims with process date April 2009
  - FY06-07 includes SD/MC and IPC approved claims with process date May 2008
  - FY05-06 includes SD/MC and IPC approved claims with process date October 2007
  - FY04-05 includes SD/MC and IPC approved claims with process date April 2006
  - FY03-04 includes SD/MC and IPC approved claims with process date October 2005
  - FY02-03 includes SD/MC and IPC approved claims as of final reconciliation
  - FY08-09 denials include SD/MC claims (not IPC claims) processed between July 1, 2008 and June 30, 2009 (without regard to service date) with process date November 2009. Same methodology is used for prior years.
  - Most recent MMEF includes Medi-Cal eligibility for April 2011 and 15 prior months

- **Data Definitions:** Selected elements displayed in many figures within this report are defined below.
  - Penetration rate – The number of Medi-Cal beneficiaries served per year divided by the average number of Medi-Cal eligibles per month. The denominator is the monthly average of Medi-Cal eligibles over a 12-month period.
  - Approved claims per beneficiary served per year – The annual dollar amount of approved claims divided by the unduplicated number of Medi-Cal beneficiaries served per year

- **MHP Size:** Categories are based upon DMH definitions by county population.
  - Small-Rural MHPs = Alpine, Amador, Calaveras, Colusa, Del Norte, Glenn, Inyo, Lassen, Mariposa, Modoc, Mono, Plumas, Siskiyou, Trinity
  - Small MHPs = El Dorado, Humboldt, Imperial, Kings, Lake, Madera, Mendocino, Napa, Nevada, San Benito, Shasta, Sutter/Yuba, Tehama, Tuolumne
  - Medium MHPs = Butte, Marin, Merced, Monterey, Placer/Sierra, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Cruz, Solano, Sonoma, Stanislaus, Tulare, Yolo
  - Large MHPs = Alameda, Contra Costa, Fresno, Kern, Orange, Riverside, Sacramento, San Bernardino, San Diego, San Francisco, Santa Clara, Ventura
  - Los Angeles' statistics are excluded from size comparisons, but are included in statewide data.

D. Attachment— Medi-Cal Approved Claims Worksheets and Additional Tables

Medi-Cal Approved Claims Data for CONTRA COSTA County MHP Calendar Year 11

Date Prepared:	08/23/2012, Version 1.0
Prepared by:	Hui Zhang, APS Healthcare / CAEQRO
Data Sources:	DMH Approved Claims and MMEF Data - Notes (1) and (2)
Data Process Dates:	06/11/2012, 08/21/2012, and 04/02/2012 - Note (3)

	CONTRA COSTA						LARGE			STATEWIDE	
	Average Number of Eligibles per Month (4)	Number of Beneficiaries Served per Year	Approved Claims	Penetration Rate	Approved Claims per Beneficiary Served per Year		Penetration Rate	Approved Claims per Beneficiary Served per Year		Penetration Rate	Approved Claims per Beneficiary Served per Year
TOTAL											
	148,743	12,203	$63,177,418	8.20%	$5,177		5.76%	$4,303		5.78%	$4,856
AGE GROUP											
0-5	26,651	600	$4,066,440	2.25%	$6,777		1.56%	$3,769		1.75%	$3,797
6-17	39,550	3,974	$30,407,934	10.05%	$7,652		7.16%	$5,392		7.52%	$6,342
18-59	60,206	6,653	$25,760,535	11.05%	$3,872		7.79%	$3,822		7.37%	$4,164
60+	22,337	976	$2,942,510	4.37%	$3,015		3.34%	$2,997		3.42%	$3,170
GENDER											
Female	85,146	6,675	$28,644,609	7.84%	$4,291		5.24%	$3,795		5.22%	$4,347
Male	63,597	5,528	$34,532,809	8.69%	$6,247		6.42%	$4,836		6.51%	$5,379
RACE/ETHNICITY											
White	30,190	4,214	$19,191,784	13.96%	$4,554		10.75%	$4,147		10.28%	$4,825
Hispanic	58,585	2,886	$13,762,820	4.93%	$4,769		3.61%	$3,960		3.76%	$4,766
African-American	29,745	3,437	$20,940,391	11.55%	$6,093		10.07%	$5,234		10.56%	$5,261
Asian/Pacific Islander	14,933	753	$3,655,376	5.04%	$4,854		3.95%	$3,513		4.05%	$3,677

	CONTRA COSTA						LARGE			STATEWIDE	
	Average Number of Eligibles per Month (4)	Number of Beneficiaries Served per Year	Approved Claims	Penetration Rate	Approved Claims per Beneficiary Served per Year		Penetration Rate	Approved Claims per Beneficiary Served per Year		Penetration Rate	Approved Claims per Beneficiary Served per Year
Native American	523	84	$378,458	16.06%	$4,505		12.55%	$5,114		10.46%	$5,330
Other	14,769	829	$5,248,590	5.61%	$6,331		4.67%	$5,109		4.59%	$5,746
ELIGIBILITY CATEGORIES											
Disabled	26,966	5,818	$29,832,987	21.58%	$5,128		17.84%	$4,467		18.00%	$4,771
Foster Care	1,129	658	$6,955,930	58.28%	$10,571		52.99%	$7,396		55.88%	$6,977
Other Child	62,267	3,589	$21,226,351	5.76%	$5,914		4.00%	$4,040		4.44%	$4,876
Family Adult	29,205	2,063	$3,536,929	7.06%	$1,714		4.11%	$2,047		3.87%	$2,472
Other Adult	29,362	481	$1,625,221	1.64%	$3,379		1.01%	$3,246		0.98%	$3,251
SERVICE CATEGORIES											
Inpatient Services	148,743	690	$6,428,993	0.46%	$9,317		0.47%	$7,326		0.46%	$7,452
Residential Services	148,743	209	$1,781,665	0.14%	$8,525		0.07%	$7,635		0.06%	$7,749
Crisis Stabilization	148,743	1,789	$3,572,342	1.20%	$1,997		0.44%	$1,812		0.35%	$1,661
Day Treatment	148,743	261	$3,253,366	0.18%	$12,465		0.10%	$11,269		0.07%	$12,308
Case Management	148,743	3,355	$4,477,407	2.26%	$1,335		2.21%	$932		2.42%	$853
Mental Health Serv.	148,743	8,671	$30,548,572	5.83%	$3,523		4.51%	$2,730		4.69%	$3,286
Medication Support	148,743	6,253	$8,405,418	4.20%	$1,344		3.05%	$1,029		2.96%	$1,206
Crisis Intervention	148,743	513	$425,973	0.34%	$830		0.46%	$705		0.59%	$946
TBS	148,743	264	$4,283,682	0.18%	$16,226		0.10%	$9,436		0.09%	$12,064

Footnotes:

1 - Includes approved claims data on MHP eligible beneficiaries who were served by other MHPs, based on Medi-Cal recipient's "County of Fiscal Responsibility"

2 - Includes Short-Doyle/Medi-Cal (SD/MC) and Inpatient Consolidation (IPC) approved claims for those whose aid codes were eligible for SD/MC program funding

3 - The most recent data processing dates for SD/MC and IPC approved claims and MEDS Monthly Extract File (MMEF) respectively by DMH for the reported calendar year

4 - County total number of yearly unduplicated Medi-Cal eligibles is 182,039

CONTRA COSTA County MHP Medi-Cal Services Retention Rates CY11

	CONTRA COSTA			STATEWIDE			
Number of Services Approved per Beneficiary Served	**# of beneficiaries**	**%**	**Cumulative %**	**%**	**Cumulative %**	**Minimum %**	**Maximum %**
1 service	1,260	10.33	10.33	9.55	9.55	4.42	20.52
2 services	837	6.86	17.18	6.31	15.86	3.89	15.79
3 services	759	6.22	23.40	5.33	21.19	2.48	10.38
4 services	694	5.69	29.09	5.03	26.22	2.58	10.59
5 - 15 services	3,973	32.56	61.65	32.58	58.80	21.03	43.53
> 15 services	4,680	38.35	100.00	41.20	100.00	21.05	61.62

Prepared by APS Healthcare / CAEQRO

Source: Short-Doyle/Medi-Cal approved claims as of 06/11/2012; Inpatient Consolidation approved claims as of 08/21/2012

Note: Number of services is counted by days for any 24 hours and day services, and by visits or encounters for any outpatient services

Medi-Cal Approved Claims Data for CONTRA COSTA County MHP Calendar Year CY11

Foster Care

Date Prepared:	08/24/2012, Version 1.0
Prepared by:	Hui Zhang, APS Healthcare / CAEQRO
Data Sources:	DMH Approved Claims and MMEF Data - Notes (1) and (2)
Data Process Dates:	06/11/2012, 08/21/2012, and 04/02/2012 - Note (3)

	CONTRA COSTA						LARGE			STATEWIDE	
	Average Number of Eligibles per Month (4)	Number of Beneficiaries Served per Year	Approved Claims	Penetration Rate	Approved Claims per Beneficiary Served per Year		Penetration Rate	Approved Claims per Beneficiary Served per Year		Penetration Rate	Approved Claims per Beneficiary Served per Year
TOTAL											
	1,129	658	$6,955,930	58.28%	$10,571		52.99%	$7,396		55.88%	$6,977
AGE GROUP											
0-5	255	91	$648,253	35.69%	$7,124		32.65%	$3,519		37.69%	$3,202
6+	874	567	$6,307,677	64.87%	$11,125		60.82%	$8,199		62.77%	$7,835
GENDER											
Female	544	307	$3,088,402	56.43%	$10,060		52.13%	$7,248		54.82%	$6,839
Male	585	351	$3,867,528	60.00%	$11,019		53.79%	$7,530		56.87%	$7,101
RACE/ETHNICITY											
White	334	219	$2,303,527	65.57%	$10,518		58.52%	$6,970		44.37%	$7,121
Hispanic	206	131	$967,837	63.59%	$7,388		50.49%	$6,570		71.47%	$6,266
African-American	507	256	$2,845,368	50.49%	$11,115		55.21%	$8,651		69.55%	$7,736
Asian/Pacific Islander	45	36	$571,500	80.00%	$15,875		56.21%	$9,385		64.55%	$8,072

	CONTRA COSTA					LARGE		STATEWIDE	
	Average Number of Eligibles per Month (4)	Number of Beneficiaries Served per Year	Approved Claims	Penetration Rate	Approved Claims per Beneficiary Served per Year	Penetration Rate	Approved Claims per Beneficiary Served per Year	Penetration Rate	Approved Claims per Beneficiary Served per Year
Native American	11	7	$109,595	63.64%	$15,656	49.16%	$8,107	45.44%	$7,297
Other	28	9	$158,103	32.14%	$17,567	21.50%	$9,667	21.69%	$9,467
SERVICE CATEGORIES									
Inpatient Services	1,129	22	$253,004	1.95%	$11,500	1.82%	$7,605	2.04%	$7,346
Residential Services	1,129	0	$0	0.00%	$0	0.00%	$0	0.01%	$4,618
Crisis Stabilization	1,129	37	$49,913	3.28%	$1,349	1.40%	$1,207	1.10%	$1,405
Day Treatment	1,129	65	$1,147,969	5.76%	$17,661	3.41%	$12,279	2.52%	$12,474
Case Management	1,129	271	$381,656	24.00%	$1,408	21.60%	$1,400	24.18%	$1,053
Mental Health Serv.	1,129	633	$3,592,267	56.07%	$5,675	49.87%	$4,955	53.17%	$4,777
Medication Support	1,129	187	$289,852	16.56%	$1,550	16.82%	$1,312	17.30%	$1,415
Crisis Intervention	1,129	35	$33,383	3.10%	$954	2.55%	$926	3.30%	$1,312
TBS	1,129	68	$1,207,886	6.02%	$17,763	3.46%	$9,456	3.21%	$10,423

Footnotes:

1 - Includes approved claims data on MHP eligible beneficiaries who were served by other MHPs, based on Medi-Cal recipient's "County of Fiscal Responsibility"

2 - Includes Short-Doyle/Medi-Cal (SD/MC) and Inpatient Consolidation (IPC) approved claims for those whose aid codes were eligible for SD/MC program funding

3 - The most recent data processing dates for SD/MC and IPC approved claims and MEDS Monthly Extract File (MMEF) respectively by DMH for the reported calendar year

4 - County total number of yearly unduplicated Medi-Cal eligibles is 1,599

CONTRA COSTA County MHP Medi-Cal Services Retention Rates CY11

Foster Care

	CONTRA COSTA			STATEWIDE			
Number of Services Approved per Beneficiary Served	**# of beneficiaries**	**%**	**Cumulative %**	**%**	**Cumulative %**	**Minimum %**	**Maximum %**
1 service	31	4.71	4.71	6.70	6.70	0.00	50.00
2 services	15	2.28	6.99	5.58	12.28	0.00	15.63
3 services	22	3.34	10.33	4.42	16.70	0.00	13.51
4 services	29	4.41	14.74	4.02	20.73	0.00	9.38
5 - 15 services	157	23.86	38.60	26.87	47.60	4.76	66.67
> 15 services	404	61.40	100.00	52.40	100.00	25.00	80.95

Prepared by APS Healthcare / CAEQRO

Source: Short-Doyle/Medi-Cal approved claims as of 06/11/2012; Inpatient Consolidation approved claims as of 08/21/2012

Note: Number of services is counted by days for any 24 hours and day services, and by visits or encounters for any outpatient services

Medi-Cal Approved Claims Data for CONTRA COSTA County MHP Calendar Year 11

Transition Age Youth (Age 16-25)

Date Prepared:	08/23/2012, Version 1.0
Prepared by:	Hui Zhang, APS Healthcare / CAEQRO
Data Sources:	DMH Approved Claims and MMEF Data - Notes (1) and (2)
Data Process Dates:	06/11/2012, 08/21/2012, and 04/02/2012 - Note (3)

	CONTRA COSTA						LARGE			STATEWIDE	
	Average Number of Eligibles per Month (4)	Number of Beneficiaries Served per Year	Approved Claims	Penetration Rate	Approved Claims per Beneficiary Served per Year		Penetration Rate	Approved Claims per Beneficiary Served per Year		Penetration Rate	Approved Claims per Beneficiary Served per Year
TOTAL											
	21,377	2,145	$14,048,772	10.03%	$6,550		6.83%	$5,353		6.86%	$6,083
AGE GROUP											
16-17	6,043	847	$6,589,336	14.02%	$7,780		9.33%	$6,226		9.73%	$7,206
18-21	9,390	857	$5,243,539	9.13%	$6,118		6.27%	$4,916		6.19%	$5,492
22-25	5,945	441	$2,215,897	7.42%	$5,025		4.84%	$4,351		4.62%	$4,661
GENDER											
Female	12,712	1,109	$6,694,560	8.72%	$6,037		5.69%	$5,043		5.70%	$5,838
Male	8,666	1,036	$7,354,212	11.95%	$7,099		8.50%	$5,660		8.53%	$6,320
RACE/ETHNICITY											
White	4,102	614	$3,539,971	14.97%	$5,765		11.55%	$4,983		11.77%	$6,116
Hispanic	8,352	568	$3,051,039	6.80%	$5,372		4.91%	$4,763		5.03%	$5,717
African-American	5,541	694	$5,129,974	12.52%	$7,392		11.11%	$6,346		11.00%	$6,425
Asian/Pacific Islander	1,696	102	$827,732	6.01%	$8,115		3.64%	$5,956		3.69%	$6,197

	CONTRA COSTA					LARGE		STATEWIDE	
	Average Number of Eligibles per Month (4)	Number of Beneficiaries Served per Year	Approved Claims	Penetration Rate	Approved Claims per Beneficiary Served per Year	Penetration Rate	Approved Claims per Beneficiary Served per Year	Penetration Rate	Approved Claims per Beneficiary Served per Year
Native American	75	21	$61,062	28.00%	$2,908	12.72%	$6,706	11.81%	$6,207
Other	1,613	146	$1,438,994	9.05%	$9,856	6.00%	$7,162	5.56%	$8,076
ELIGIBILITY CATEGORIES									
Disabled	2,955	692	$5,631,927	23.42%	$8,139	20.42%	$6,205	21.31%	$6,693
Foster Care	283	190	$2,315,239	67.14%	$12,185	67.63%	$8,619	72.40%	$8,018
Other Child	5,422	622	$3,683,466	11.47%	$5,922	7.56%	$4,645	8.25%	$5,646
Family Adult	9,560	611	$1,588,504	6.39%	$2,600	4.07%	$2,973	4.16%	$3,644
Other Adult	3,216	137	$829,636	4.26%	$6,056	3.42%	$4,125	2.98%	$4,232
SERVICE CATEGORIES									
Inpatient Services	21,377	204	$2,081,437	0.95%	$10,203	0.85%	$6,921	0.82%	$6,763
Residential Services	21,377	33	$244,073	0.15%	$7,396	0.06%	$7,841	0.06%	$8,125
Crisis Stabilization	21,377	428	$674,511	2.00%	$1,576	0.70%	$1,427	0.55%	$1,433
Day Treatment	21,377	75	$877,705	0.35%	$11,703	0.21%	$11,741	0.16%	$13,166
Case Management	21,377	803	$1,132,734	3.76%	$1,411	2.71%	$1,119	2.96%	$983
Mental Health Serv.	21,377	1,759	$6,930,874	8.23%	$3,940	5.59%	$3,336	5.77%	$4,100
Medication Support	21,377	884	$1,163,686	4.14%	$1,316	3.16%	$1,043	3.07%	$1,252
Crisis Intervention	21,377	110	$96,871	0.51%	$881	0.72%	$737	0.92%	$1,008
TBS	21,377	62	$846,881	0.29%	$13,659	0.14%	$8,669	0.14%	$10,411

Footnotes:

1 - Includes approved claims data on MHP eligible beneficiaries who were served by other MHPs, based on Medi-Cal recipient's "County of Fiscal Responsibility"

2 - Includes Short-Doyle/Medi-Cal (SD/MC) and Inpatient Consolidation (IPC) approved claims for those whose aid codes were eligible for SD/MC program funding

3 - The most recent data processing dates for SD/MC and IPC approved claims and MEDS Monthly Extract File (MMEF) respectively by DMH for the reported calendar year

4 - County total number of yearly unduplicated Medi-Cal eligibles is 30,100

CONTRA COSTA County MHP Medi-Cal Services Retention Rates CY11

Transition Age Youth (Age 16-25)

	CONTRA COSTA			STATEWIDE			
Number of Services Approved per Beneficiary Served	**# of beneficiaries**	**%**	**Cumulative %**	**%**	**Cumulative %**	**Minimum %**	**Maximum %**
1 service	254	11.84	11.84	10.27	10.27	0.00	26.98
2 services	145	6.76	18.60	6.48	16.75	2.47	20.00
3 services	110	5.13	23.73	5.19	21.94	0.00	15.06
4 services	109	5.08	28.81	4.55	26.49	0.00	15.38
5 - 15 services	601	28.02	56.83	28.89	55.38	19.05	42.86
> 15 services	926	43.17	100.00	44.62	100.00	10.81	64.29

Prepared by APS Healthcare / CAEQRO

Source: Short-Doyle/Medi-Cal approved claims as of 06/11/2012; Inpatient Consolidation approved claims as of 08/21/2012

Note: Number of services is counted by days for any 24 hours and day services, and by visits or encounters for any outpatient services

RETENTION RATES

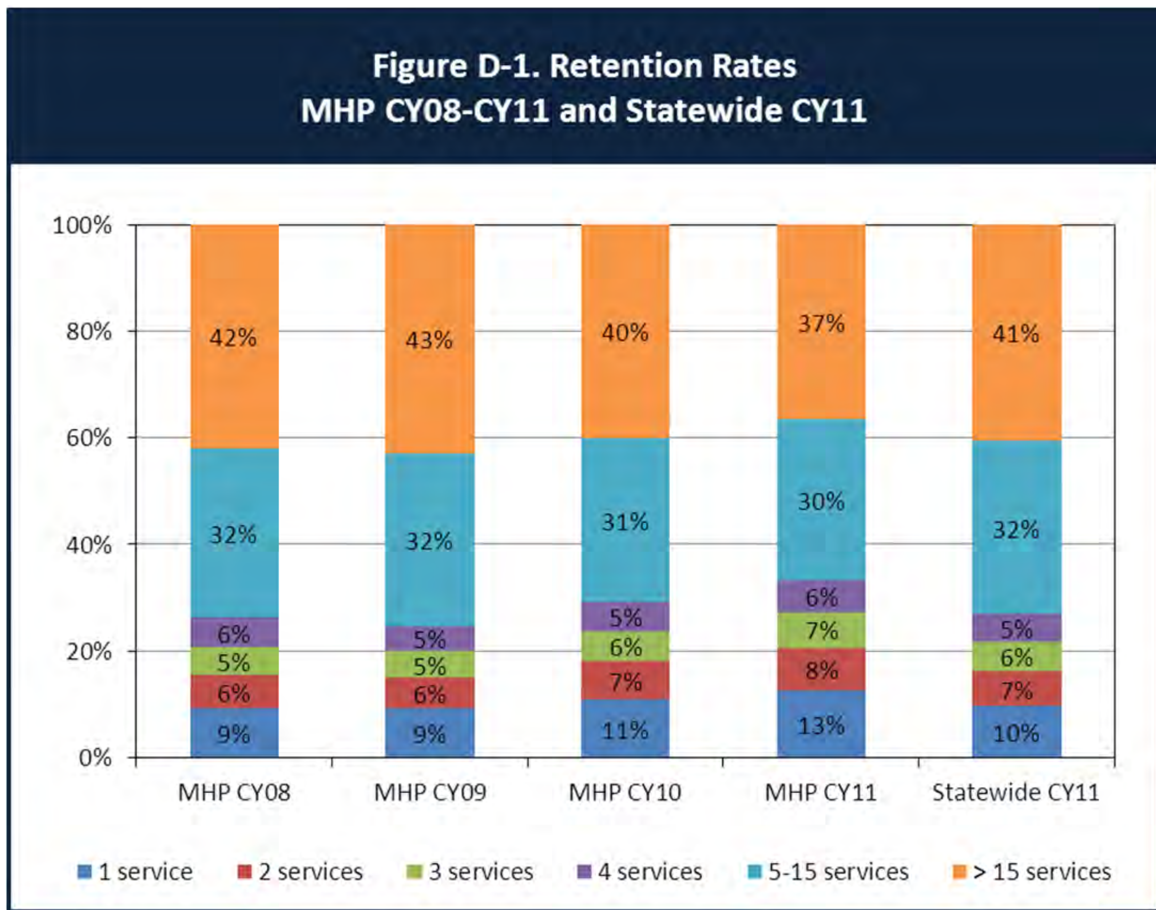


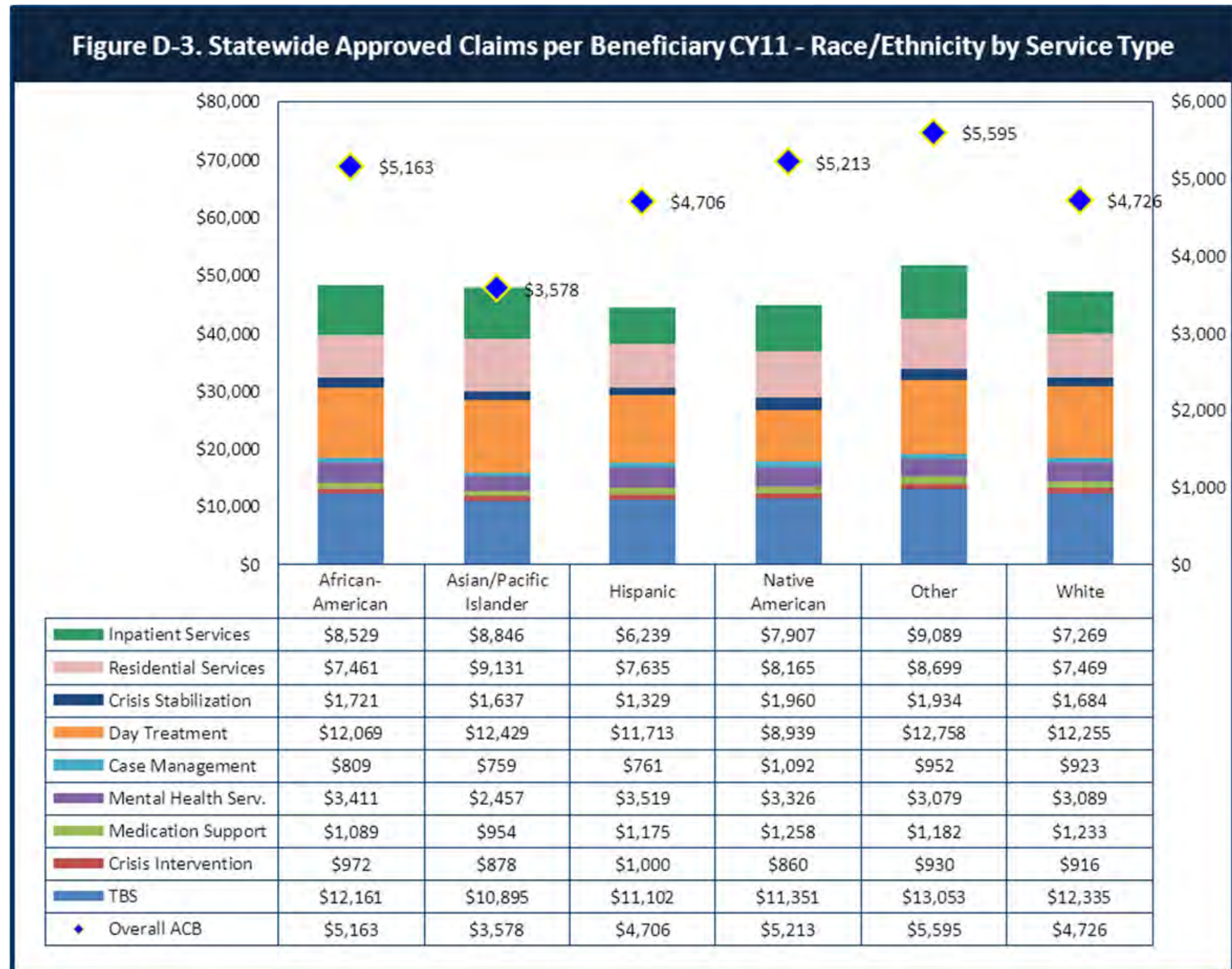
Figure D-2. CY11 Retention Rates with Average Approved Claims per Category

Number of Services Approved per Beneficiary Served	MHP Number of beneficiaries served	MHP $ per beneficiary served	Statewide $ per beneficiary served
1 service	1,467	$339	$301
2 services	934	$495	$472
3 services	780	$606	$604
4 services	684	$799	$754
5 – 15 services	3,517	$1,534	$1,543
> 15 services	4,252	$11,700	$10,175

SERVICE TYPE BY ETHNICITY - STATEWIDE

The following stacked bar charts show the average claims by service modality and ethnicity. It should be noted that these elements are not additive (i.e., the height of the bar has no meaning), and the main use for comparison is the differential use of particular services across various ethnicities. The blue diamond shows the average approved claims by ethnicity for all service modalities. Again, there is no direct relationship between the height of the bar (claims per service modality) and the average claims for that ethnicity.

Figure D-3. Statewide Approved Claims per Beneficiary CY11 - Race/Ethnicity by Service Type

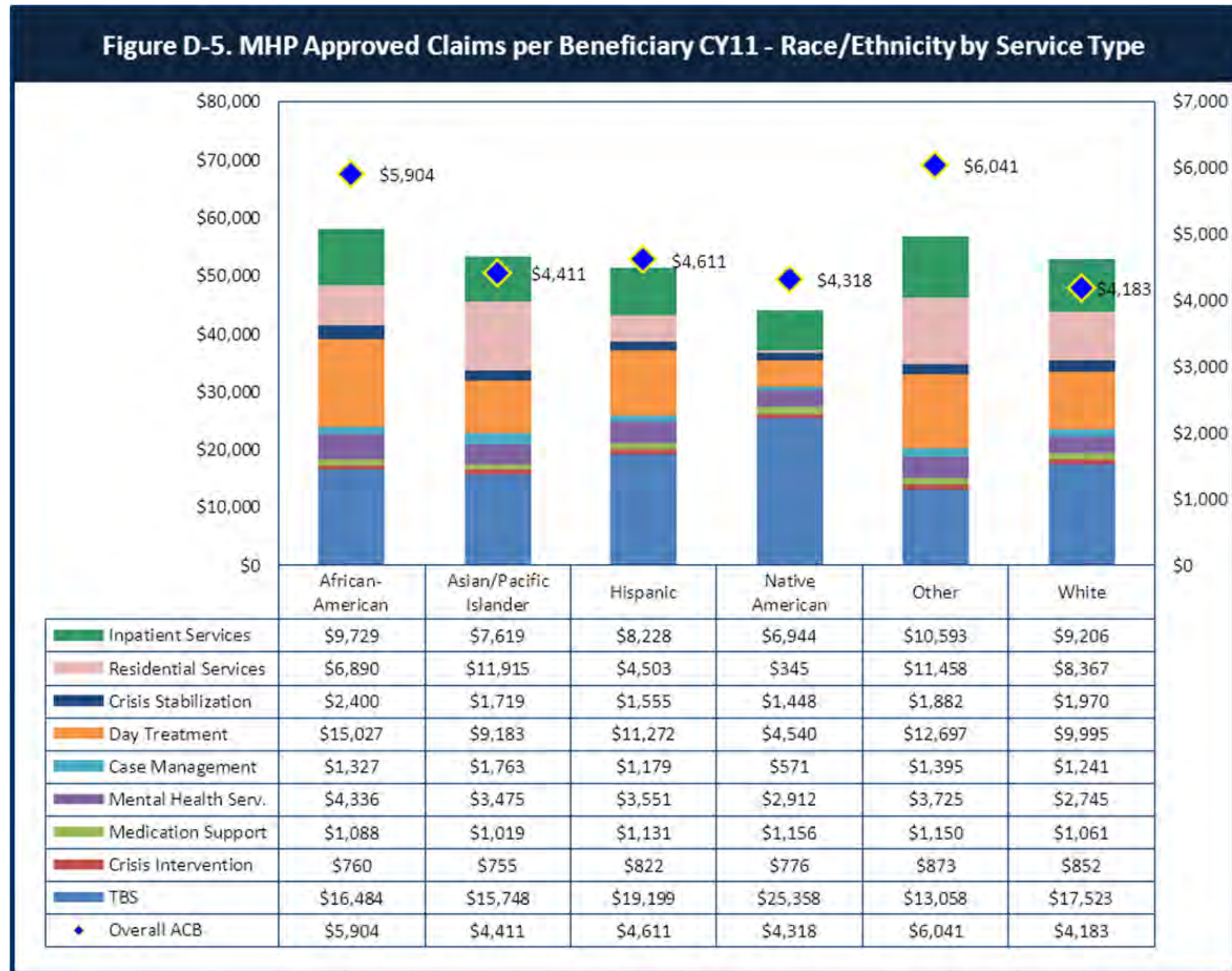


	African-American	Asian/Pacific Islander	Hispanic	Native American	Other	White
Inpatient Services	$8,529	$8,846	$6,239	$7,907	$9,089	$7,269
Residential Services	$7,461	$9,131	$7,635	$8,165	$8,699	$7,469
Crisis Stabilization	$1,721	$1,637	$1,329	$1,960	$1,934	$1,684
Day Treatment	$12,069	$12,429	$11,713	$8,939	$12,758	$12,255
Case Management	$809	$759	$761	$1,092	$952	$923
Mental Health Serv.	$3,411	$2,457	$3,519	$3,326	$3,079	$3,089
Medication Support	$1,089	$954	$1,175	$1,258	$1,182	$1,233
Crisis Intervention	$972	$878	$1,000	$860	$930	$916
TBS	$12,161	$10,895	$11,102	$11,351	$13,053	$12,335
Overall ACB	$5,163	$3,578	$4,706	$5,213	$5,595	$4,726

Note: The left axis refers to the columns, and the right refers to the diamonds (overall ACB for each category)

Figure D-4. Statewide Number of Beneficiaries Served CY11 - Race/Ethnicity by Service Type						
	African-American	Asian/Pacific Islander	Hispanic	Native American	Other	White
Inpatient Services	6,655	1,696	10,655	341	3,130	12,768
Residential Services	859	235	678	50	345	2,523
Crisis Stabilization	6,668	1,269	6,763	265	1,351	9,883
Day Treatment	1,479	230	1,428	54	313	1,804
Case Management	32,519	12,362	66,204	1,671	9,702	65,353
Mental Health Serv.	59,477	21,795	137,393	2,980	17,363	122,188
Medication Support	40,075	19,905	62,633	1,850	14,599	88,994
Crisis Intervention	7,929	1,810	12,995	504	2,170	19,654
TBS	1,313	139	2,643	57	348	2,490
All	75,231	29,822	158,486	3,730	24,481	155,835

SERVICE TYPE BY ETHNICITY - MHP



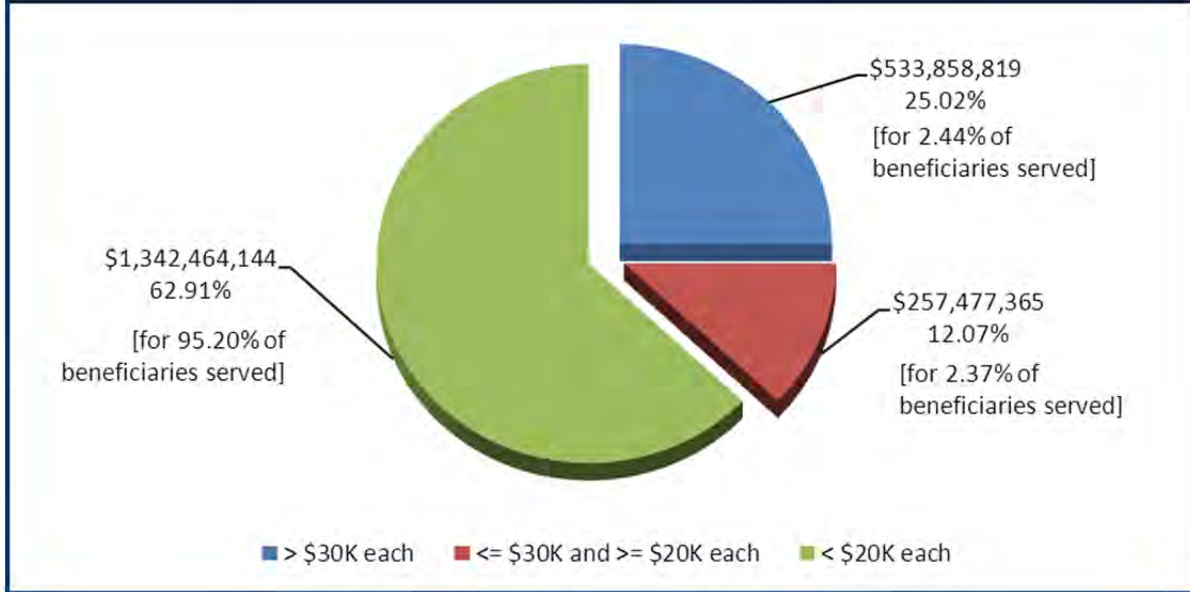
	African-American	Asian/Pacific Islander	Hispanic	Native American	Other	White
Inpatient Services	$9,729	$7,619	$8,228	$6,944	$10,593	$9,206
Residential Services	$6,890	$11,915	$4,503	$345	$11,458	$8,367
Crisis Stabilization	$2,400	$1,719	$1,555	$1,448	$1,882	$1,970
Day Treatment	$15,027	$9,183	$11,272	$4,540	$12,697	$9,995
Case Management	$1,327	$1,763	$1,179	$571	$1,395	$1,241
Mental Health Serv.	$4,336	$3,475	$3,551	$2,912	$3,725	$2,745
Medication Support	$1,088	$1,019	$1,131	$1,156	$1,150	$1,061
Crisis Intervention	$760	$755	$822	$776	$873	$852
TBS	$16,484	$15,748	$19,199	$25,358	$13,058	$17,523
Overall ACB	$5,904	$4,411	$4,611	$4,318	$6,041	$4,183

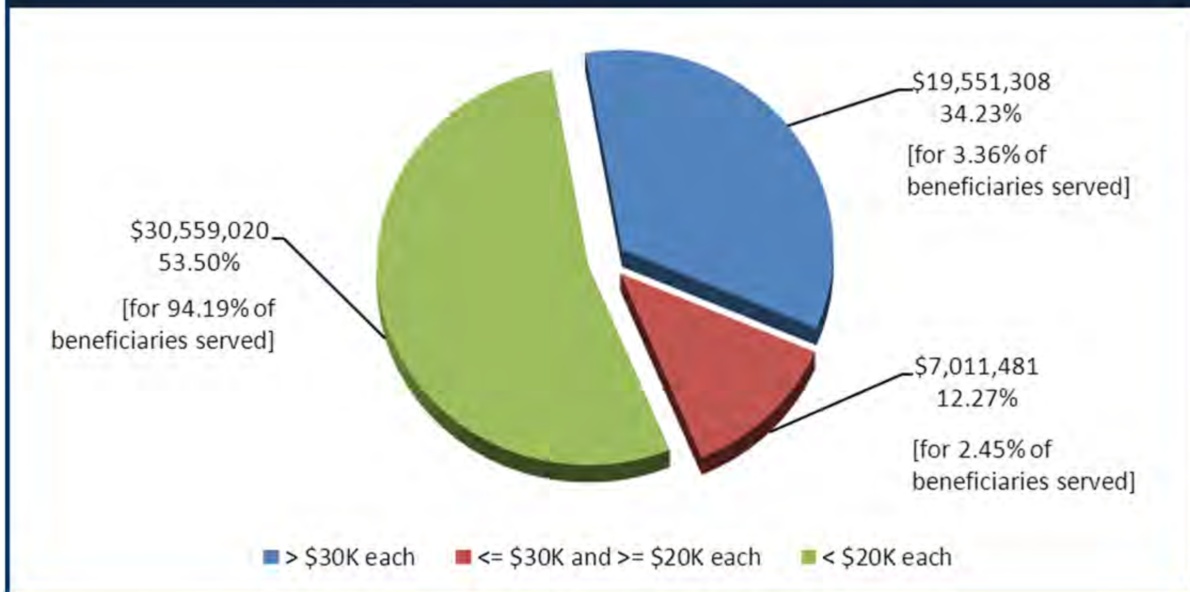
Note: The left axis refers to the columns, and the right refers to the diamonds (overall ACB for each category)

Figure D-6. MHP Number of Beneficiaries Served CY11 - Race/Ethnicity by Service Type

	African-American	Asian/Pacific Islander	Hispanic	Native American	Other	White
Inpatient Services	195	30	120	6	70	194
Residential Services	55	13	16	1	15	85
Crisis Stabilization	505	88	324	19	110	702
Day Treatment	77	10	45	1	21	92
Case Management	962	230	794	28	225	948
Mental Health Serv.	2,336	403	2,312	57	498	2,560
Medication Support	1,566	467	838	39	465	2,375
Crisis Intervention	157	24	104	3	27	156
TBS	90	15	31	2	19	79
All	3,267	718	2,780	82	791	3,996

HIGH COST BENEFICIARIES





EXAMINATION OF DISPARITIES

Statewide disparities remain for Hispanic and female beneficiaries:

- Approved claims for Hispanic beneficiaries are now at parity with White beneficiaries. While the relative penetration rate disparity has decreased significantly, due to both a decrease in White penetration rate and an increase in Hispanic penetration rate, there remains a continued notable disparity in access.
- The relative access and the average approved claims for female beneficiaries are lower than for males. These disparities have remained relatively stable over the last five years.

For each variable (Hispanic/White and female/male), two ratios are calculated to depict relative access and relative approved claims. The first figure compares approved claims data and penetration rates between Hispanic and White beneficiaries. This penetration rate ratio is calculated by dividing the Hispanic penetration rate by the White penetration rate, resulting in a ratio that depicts the relative access for Hispanics when compared to Whites. The approved claims ratio is calculated by dividing the average approved claims for Hispanics by the average approved claims for Whites. Similar calculations follow in the second figure for female to male beneficiaries.

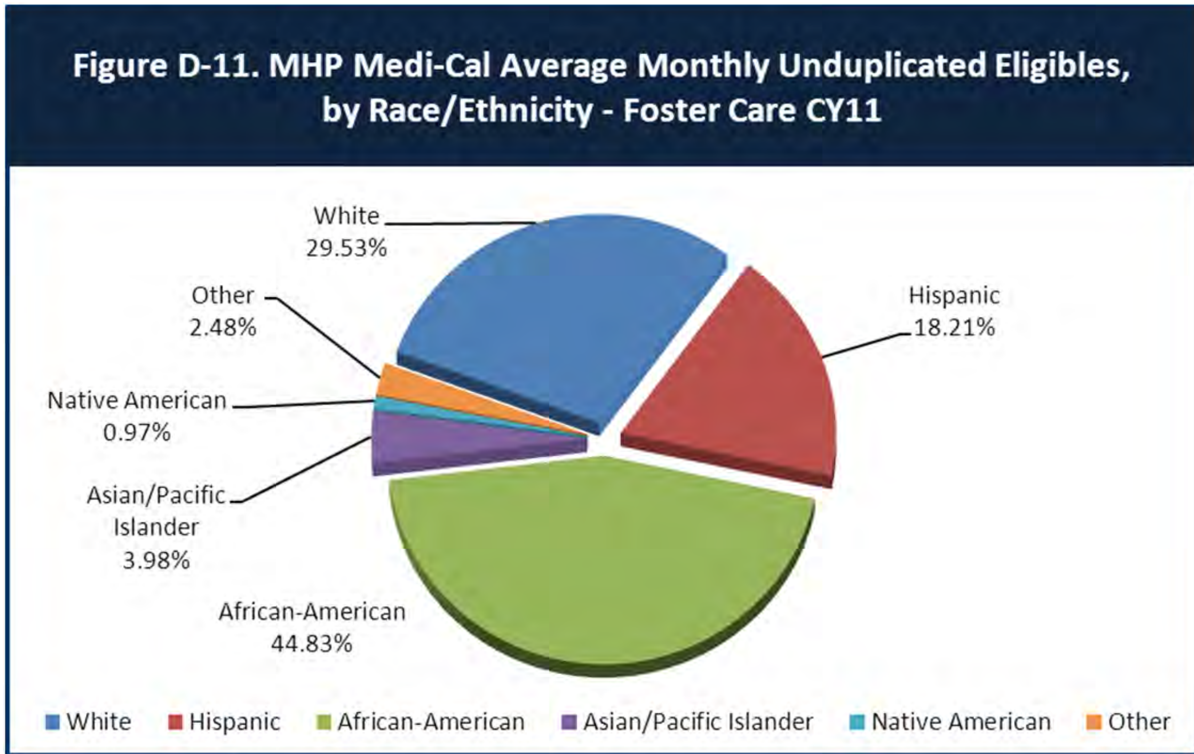
For all elements, ratios depict the following:

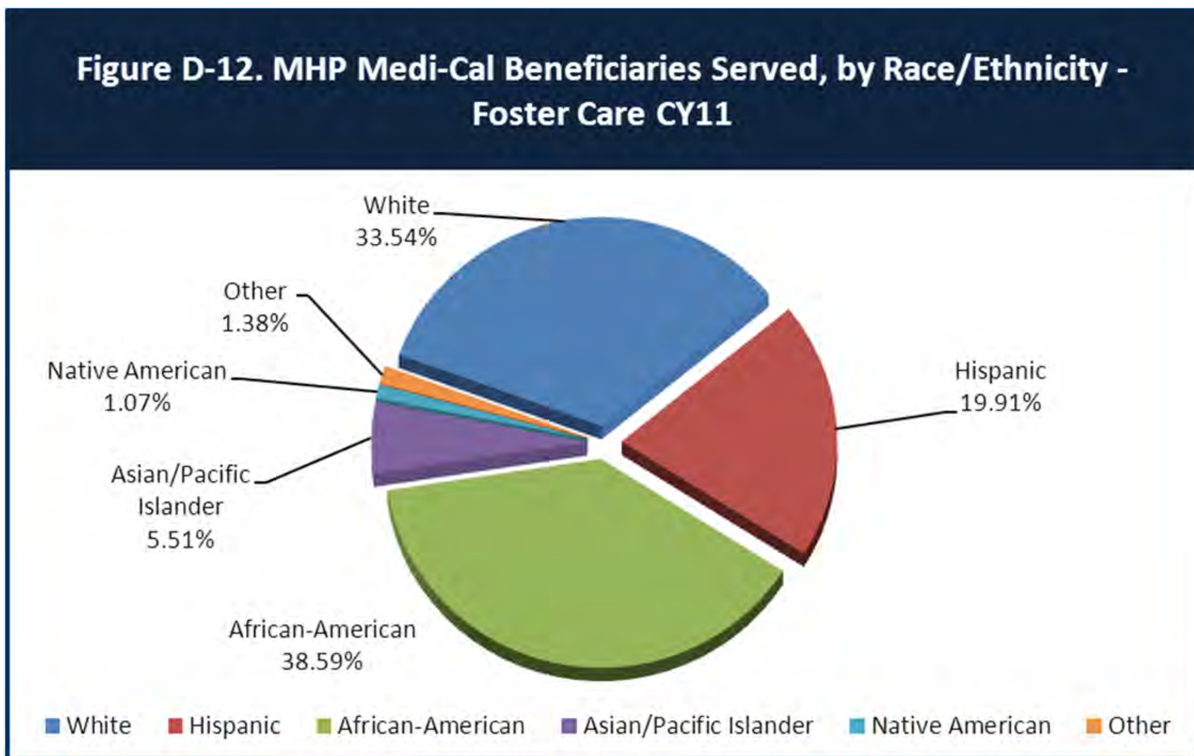
- 1.0 = parity between the two elements compared
- Less than 1.0 = disparity for Hispanics or females
- Greater than 1.0 = no disparity for Hispanics or females. A ratio of greater than one indicates higher penetration or approved claims for Hispanics when compared to Whites or for females when compared to males.

Figure D-9. Examination of Disparities—Hispanic versus White								
Calendar Year	Number of Beneficiaries Served & Penetration Rate per Year				Approved Claims per Beneficiary Served per Year		Ratio of Hispanic versus White for	
	Hispanic		White		Hispanic	White	PR Ratio	Approved Claims Ratio
	# Served	PR %	# Served	PR %				
Statewide CY11	158,486	3.68%	155,835	10.06%	$4,706	$4,726	.37	1.00
MHP CY11	2,780	4.75%	3,996	13.24%	$4,611	$4,183	.36	1.10
MHP CY10	2,629	4.75%	4,140	14.55%	$5,141	$5,054	.33	1.02
MHP CY09	2,303	4.36%	4,036	14.33%	$5,530	$5,669	.30	.98
MHP CY08	1,934	4.01%	3,794	14.02%	$5,237	$5,269	.29	.99

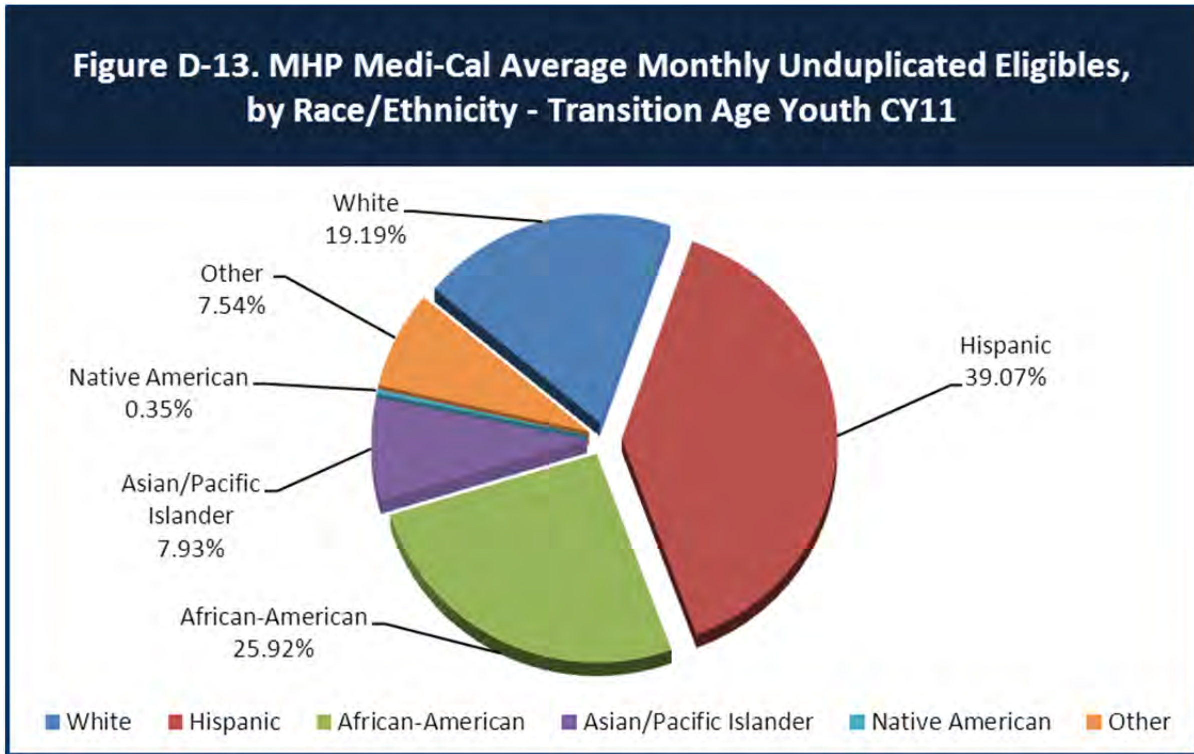
Figure D-10. Examination of Disparities—Female versus Male								
Calendar Year	Number of Beneficiaries Served & Penetration Rate per Year				Approved Claims per Beneficiary Served per Year		Ratio of Female versus Male for	
	Female		Male		Female	Male	PR Ratio	Approved Claims Ratio
	# Served	PR %	# Served	PR %				
Statewide CY11	226,580	5.10%	221,005	6.37%	$4,269	$5,278	.80	.81
MHP CY11	6,348	7.46%	5,286	8.31%	$4,047	$5,947	.90	.68
MHP CY10	6,610	8.28%	5,346	8.99%	$4,416	$7,169	.92	.62
MHP CY09	6,522	8.41%	5,133	9.00%	$4,908	$7,840	.93	.63
MHP CY08	5,980	8.22%	4,738	8.96%	$4,737	$7,464	.92	.63

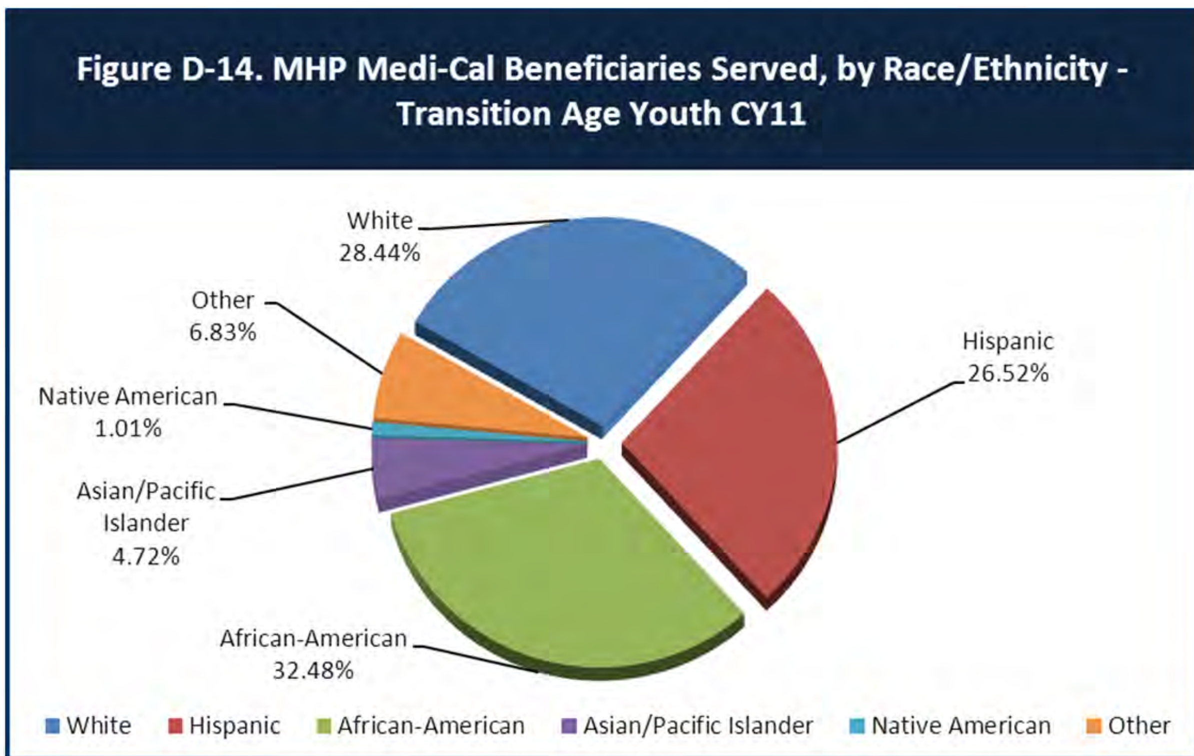
ELIGIBLES VERSUS BENEFICIARIES SERVED - FOSTER CARE





ELIGIBLES VERSUS BENEFICIARIES SERVED - TRANSITION AGE YOUTH





E. Attachment—PIP Validation Tool

FY12-13 Review of: Contra Costa ☒ Clinical ☐ Non-Clinical

PIP Title: Improved Coordination of Care for High Utilization Clients

Date PIP Began: Feb 2012

PIP Category: ☐Access ☐Timeliness ☒Quality ☐Outcomes ☐Other

Descriptive Category: Improved diagnosis or treatment processes

Target Population: other age group: children

Step		Rating				Comments/Recommendations
		Met	Partial	Not Met	N/A	
1	**Study topic** *The study topic:* poor coordination of care/info sharing for high cost consumers, the bulk of whose services are often at contractors					
1.1	Focuses on an identified problem that reflects high volume, high risk conditions, or underserved populations	x				Several factors might contribute to higher cost/inefficient use of resources in providing services, including a possible lack of coordination in care, treatment plans with varying goals, issues with transitions to other possible treatment modalities/a deficit in info sharing.
1.2	Was selected following data collection and analysis of data that supports the identified problem	x				Clients' record of service utilization, lists of service providers used by clients, costs associated with the services being provided, and clients' CALOCUS scores. CAEQRO data shows increase % of consumers account for increased % of claims total. Found 6.7% of 6-17 yr olds in 2010 hitting $30K+ mark.
1.3	Addresses key aspects of care and services	x				Poor treatment coordination
1.4	Includes all eligible populations that meet the study criteria, and does not exclude consumers with special needs	x				Identified clients whose CALOCUS score does not correspond with the amount of costs accrued, identified a clients who accrued very high costs through the use of contract providers and received very few services through county providers, clients who are receiving long duration services that appears to lack justification given the treatment goal.
1.5	Has the potential to improve consumer mental health outcomes, functional status,	x				Can improve process of care, outcomes and satisfaction. PIP reflects MHP's effort to switch

Step		Rating				Comments/Recommendations
		Met	Partial	Not Met	N/A	
	satisfaction, or related processes of care designed to improve same					from compliance and costs issues to quality- now have clinical UR positions to ensure compliance and proper re/authorization so QI can move to quality.
Totals for Step 1:		**5**				
2	**Study Question Definition** *The written study question:* Does the introduction of a "Care Coordinator" and an increased frequency of UR review for clients who are receiving uncoordinated care, duplicated services, or an unnecessary level of service intensity facilitate more efficient use of services in the system of care?					
2.1	Identifies the problem targeted for improvement	**X**				
2.2	Includes the specific population to be addressed		**x**			For any consumer above a $ threshold is not written into question as a descriptor to "clients"- Need high cost verbiage in question to reflect specificity.
2.3	Includes a general approach to interventions		**x**			Is care coordination role/positions feasible systemwide; would it be more generalizable if the duties were broken down into themes/units of activities that could be generalizable? Could the system review high users routinely based upon learning from this project?
2.4	Is answerable/demonstrable	**x**				
2.5	Is within the MHP's scope of influence	**x**				
Totals for Step 2:		**3**	**2**			
3	**Clearly Defined Study Indicators** *The study indicators:* Quality and Coordination of Care score from UR, Volume of potentially redundant services administered for greater than 5 hours in single day, Number of months with greater than 30 hours of services provided					
3.1	Are clearly defined, objective, and measurable		**x**			While MHP hopes these demonstrates effectiveness of care coordination with increased provider collaboration (and the Q&CC score is clear and measurable), the other two goals were chosen apriori with reasonable clinical guesses but not informed by actual high user service use (as no data patterns have emerged); MHP expects indicator 2 may change (i.e., 5 hrs)
3.2	Are designed to answer the study question		**x**			This can improve once indicators are validated;

Step		Rating				Comments/Recommendations
		Met	Partial	Not Met	N/A	
						indicators should NOT be chosen after intervention
3.3	Are identified to measure changes designed to improve consumer mental health outcomes, functional status, satisfaction, or related processes of care designed to improve same	x				Indicators collectively assess the clients' need for and response to the introduction of a care coordinator
3.4	Have accessible data that can be collected for each indicator		x			Data source exist to collect from, but unclear how helpful the data is at meeting the measurement needs of the PIP
3.5	Utilize existing baseline data that demonstrate the current status for each indicator	x				
3.6	Identify relevant benchmarks for each indicator				x	
3.7	Identify a specific, measurable goal(s) for each indicator	x				Increases and decreases by numerical thresholds established
Totals for Step 3:		**3**	**3**		**1**	
4	**Correctly Identified Study Population** *The method for identifying the study population:* both child and adult clients who are high utilizers of services					
4.1	Is accurately and completely defined	x				Current focus is on youth under age 18 due to the extensive use of the contract agencies and high cost for outpatient services (n =262). As the PIP evolves and more resources are available for the review of cases, more focus will be paid to adult clients, most likely in spring of 2013.
4.2	Included a data collection approach that captures all consumers for whom the study question applies	x				Will initially be child consumers who are accruing high service costs (over $30,000 in a 12 month period) and have been identified as clients receiving uncoordinated, duplicated and/or redundant care (screening out those evaluated as receiving appropriate/non-redundant care)
Totals for Step 4:		**2**				
5	**Use of Valid Sampling Techniques** *The sampling techniques: goal-*select 10% of child consumers who have accrued over $30,000 for enrollment in the intervention (then 10% of applicable adult consumers later in 2013)					
5.1	Consider the true or estimated frequency of occurrence in the population	x				Plan to repopulate the list of potential clients to include in the PIP on a quarterly basis to

Step		Rating				Comments/Recommendations
		Met	Partial	Not Met	N/A	
						continuously identify clients that may be in need of a care coordinator. Aim to review 60 cases during the initial year (MHP very clear to repopulate list before each data pull as high cost data changes monthly)
5.2	Identify the sample size	x				30 child from 60 (total) to start- time/method to cull sample is labor-intensive and may serious delay PIP- MHP needs to consider swift/unique id process so that care coordination can begin asap
5.3	Specify the confidence interval to be used				X	
5.4	Specify the acceptable margin of error				X	
5.5	Ensure a representative and unbiased sample of the eligible population that allows for generalization of the results to the study population	x				To ensure sample was selected without bias, attempted to use stratified sampling to represent the demographic diversity of the county as a whole (but this attempt may also slow down the id process and needs to be rethought). Onsite discussion suggested purely random sample instead.
Totals for Step 5:		**3**			**2**	
6	**Accurate/Complete Data Collection** *The data techniques:*					
6.1	Identify the data elements to be collected	x				QandCC data will be obtained from the UR team's pre- and post-intervention reviews. Data on duration of services per day/number of hours of service per month will be collected from PSP system
6.2	Specify the sources of data	x				
6.3	Outline a defined and systematic process that consistently and accurately collects baseline and remeasurement data	x				Collected for individuals who were assigned a care coordinator only.
6.4	Provides a timeline for the collection of baseline and remeasurement data	x				Reviewed four times during the 12 month period post-intervention: at 1 month, 3 months, 6 months, and 12 months after the introduction of the care coordinator.
6.5	Identify qualified personnel to collect the data	x				

Step		Rating				Comments/Recommendations
		Met	Partial	Not Met	N/A	
Totals for Step 6:		5				
7	**Appropriate Intervention and Improvement Strategies** *The planned/implemented intervention(s) for improvement:* care coordinator, enhanced UR at pre-set intervals for all PIP cases (1, 3, 6 and 12 months)					
7.1	Are related to causes/barriers identified through data analyses and QI processes		x			Care coordinator intervention needs to broken down in smaller units of activities for better measurement, replicability, assessment, understanding
7.2	Have the potential to be applied system wide to induce significant change	x				Enhanced UR refers to existing level 3 UR review at Central admin
7.3	Are tied to a contingency plan for revision if the original intervention(s) is not successful		x			Have already morphed the care coordination role/duties so now it will work with existing services/staff- not yet applied
7.4	Are standardized and monitored when an intervention is successful	x				Same team for all URs and one assigned care coordinator
Totals for Step 7:		2	2			
8	**Analyses of Data and Interpretation of Study Results** *The data analyses and study results:*					
8.1	Are conducted according to the data analyses plan in the study design				X	
8.2	Identify factors that may threaten internal or external validity				X	
8.3	Are presented in an accurate, clear, and easily understood fashion				X	
8.4	Identify initial measurement and remeasurement of study indicators				X	
8.5	Identify statistical differences between initial measurement and remeasurement				X	
8.6	Include the interpretation of findings and the extent to which the study was successful				X	
Totals for Step 8:					6	
9	**Improvement Achieved** *There is evidence for true improvement based on:*					
9.1	A consistent baseline and remeasurement methodology				X	

Step		Rating				Comments/Recommendations
		Met	Partial	Not Met	N/A	
9.2	Documented quantitative improvement in processes or outcomes of care				X	
9.3	Improvement appearing to be the result of the planned interventions(s)				X	
9.4	Statistical evidence for improvement				X	
Totals for Step 9:					4	
10	**Sustained Improvement Achieved** *There is evidence for sustained improvement based on:*					
	Repeated measurements over comparable time periods that demonstrate sustained improvement, or that any decline in improvement is not statistically significant				X	
Totals for Step 10:					1	

FY12-13 Review of: Contra Costa ☐ Clinical ☒ Non-Clinical

PIP Title: Improving Timely Access to Mental Health Services

Date PIP Began: August 2011

Date PIP Completed: Dec 2012

PIP Category: ☐Access ☒Timeliness ☐Quality ☐Outcomes ☐Other

Descriptive Category: other- Access

Target Population: all population

Step		Rating				Comments/Recommendations
		Met	**Partial**	**Not Met**	**N/A**	
1	**Study topic** *The study topic:* timeliness to psychiatric appointments in East County					
1.1	Focuses on an identified problem that reflects high volume, high risk conditions, or underserved populations	x				County has experienced an increase in the number of Medi-Cal eligibles, which may be due to a number of factors, such as the downturn of the economy. Unfortunately, the County mental health system's staff resources remain constant, mainly due to budgetary constraints and County hiring freezes. Additionally, staffing levels have been difficult to maintain as some staff members leave due to retirement or job change. The combination of these factors has resulted in appointment wait times that are longer than goals.
1.2	Was selected following data collection and analysis of data that supports the identified problem	X				At the beginning of the PIP, wait times were collected by obtaining client appointment information and utilizing the County's billing data system PSP, to obtain appointment information. Wait time data for East County reviewed quarterly through QI.
1.3	Addresses key aspects of care and services	x				Access
1.4	Includes all eligible populations that meet the study criteria, and does not exclude consumers with special needs	x				Any consumer served at East County clinic

Step		Rating				Comments/Recommendations
		Met	Partial	Not Met	N/A	
1.5	Has the potential to improve consumer mental health outcomes, functional status, satisfaction, or related processes of care designed to improve same	x				delays in scheduling appointments has a significant impact on the rate of kept appts. The impact of the length of time a client waits for an appointment has been documented as a significant factor that leads to missed appts.vi e January 2011, no show rate for East 19% to 23% in September 2011.
Totals for Step 1:		5				
2	**Study Question Definition** *The written study question:* Will implementing activities such as increasing psychiatric staff capacity at the East County Adult Mental Health Clinic, and fielding new clients to network providers to reduce the length of wait time for an initial appointment with a psychiatrist for clients waiting to be seen in East County?					
2.1	Identifies the problem targeted for improvement	x				
2.2	Includes the specific population to be addressed	x				
2.3	Includes a general approach to interventions	x				
2.4	Is answerable/demonstrable	x				
2.5	Is within the MHP's scope of influence	x				
Totals for Step 2:		5				
3	**Clearly Defined Study Indicators** *The study indicators:* average psychiatry appointment wait time, No Show rate for psychiatrist appointments, # of New Clients for ECAMH MD per month, # of New Clients routed to network provider,					
3.1	Are clearly defined, objective, and measurable	x				
3.2	Are designed to answer the study question	x				
3.3	Are identified to measure changes designed to improve consumer mental health outcomes, functional status, satisfaction, or related processes of care designed to improve same	x				
3.4	Have accessible data that can be collected for each indicator	x				
3.5	Utilize existing baseline data that demonstrate the current status for each indicator	x				
3.6	Identify relevant benchmarks for each indicator	x				Pre-set MHP timeliness/no show goals
3.7	Identify a specific, measurable goal(s) for	x				

Step		Rating				Comments/Recommendations
		Met	Partial	Not Met	N/A	
	each indicator					
Totals for Step 3:		**7**				
4	**Correctly Identified Study Population** *The method for identifying the study population:* Because the PIP focuses on an intervention at one county clinic site, the population is identified during the point of initial contact via Access Line. All appointments designated to the East County Adult Mental Health clinic site are included in the sample.					
4.1	Is accurately and completely defined	x				
4.2	Included a data collection approach that captures all consumers for whom the study question applies	x				247 consumers initially as those are all consumers served at the East County clinic at the time
Totals for Step 4:		**2**				
5	**Use of Valid Sampling Techniques** *The sampling techniques:* not applicable					
5.1	Consider the true or estimated frequency of occurrence in the population				X	
5.2	Identify the sample size				X	
5.3	Specify the confidence interval to be used				X	
5.4	Specify the acceptable margin of error				X	
5.5	Ensure a representative and unbiased sample of the eligible population that allows for generalization of the results to the study population				x	
Totals for Step 5:					**5**	
6	**Accurate/Complete Data Collection** *The data techniques:* see below					
6.1	Identify the data elements to be collected	x				
6.2	Specify the sources of data	x				wait time was calculated using a point in time sampling method, using the Access Line's appointment availability for first and third appointment for ECAMH. Data related to the County's network providers is collected using billing data in PSP.
6.3	Outline a defined and systematic process that consistently and accurately collects baseline and remeasurement data	x				Survey the Access Line weekly, obtaining two data points—the first and third available appointment. The date of the third available

Step		Rating				Comments/Recommendations
		Met	Partial	Not Met	N/A	
						appointment is considered for the study, assuming the third available date is the likely choice the client will agree to in a real life setting. The number of new clients for Dr. Singh is obtained through another County database exclusively for network providers.
6.4	Provides a timeline for the collection of baseline and remeasurement data	x				While the call logs cannot be removed from the department, as an alternative the records are emailed or faxed to Mental Health Administration, where an Access database has been established for tracking purposes. Because of the difficulty in reconciling the data captured in the call log and data in the PSP system for next appointment, an alternative approach has been started. The new method involves a weekly call-in to clinics to query staff when next appointments are available in the different appoint type categories. These data are kept in a database on an ongoing basis for analysis.
6.5	Identify qualified personnel to collect the data	x				Res and Eval staff
Totals for Step 6:		**5**				
7	**Appropriate Intervention and Improvement Strategies** *The planned/implemented intervention(s) for improvement:* Access Line to route new Medi-Cal clients (as appropriate) to network providers, Hire additional Psychiatrists at ECAMH, Initiate group intake sessions, Mental Health nursing staff to be assigned to perform intake appointments					
7.1	Are related to causes/barriers identified through data analyses and QI processes	x				
7.2	Have the potential to be applied system wide to induce significant change	x				
7.3	Are tied to a contingency plan for revision if the original intervention(s) is not successful	X				Added a second contract provider (Pathways) during second year. Created policy the even if initially referred to contractor, is higher needs best served by county MD- can be transferred back at any time post initial eval.
7.4	Are standardized and monitored when an intervention is successful	x				All licensed Access clinicians do standard screen to assess severity/risk (using set protocol) and

Step		Rating				Comments/Recommendations
		Met	Partial	Not Met	N/A	
						trained on decision tree i.e. if higher need/distress sent to county MD, if non-MC must be seen in County, if non-Eng speaking must be seen a County. Group sessions have yet to begin- says to begin 3/2013 when necessary, was lacking space to do so/and short necessary clerical staff to support groups and after increased MD capacity (group sessions targeted at those who NS for eval and present later without an appt. but there was no need for this).
Totals for Step 7:		**4**				
8	**Analyses of Data and Interpretation of Study Results** *The data analyses and study results:*					
8.1	Are conducted according to the data analyses plan in the study design	**x**				Timeliness data collected weekly and reviewed quarterly. Still looking at how to distinguish better needs so lower need consumers still get the best services with network providers after intake & ongoing.
8.2	Identify factors that may threaten internal or external validity	**x**				Well done!
8.3	Are presented in an accurate, clear, and easily understood fashion	**x**				
8.4	Identify initial measurement and remeasurement of study indicators	**x**				
8.5	Identify statistical differences between initial measurement and remeasurement	**x**				Used *t* tests, significant to highest *p* level
8.6	Include the interpretation of findings and the extent to which the study was successful	**x**				
Totals for Step 8:		**6**				
9	**Improvement Achieved** *There is evidence for true improvement based on:*					
9.1	A consistent baseline and remeasurement methodology			**x**		measurement technique changed during PIP in July 2012
9.2	Documented quantitative improvement in processes or outcomes of care		**x**			While wait times decreased, and use of network providers increased as hoped, no shows

Step		Rating				Comments/Recommendations
		Met	Partial	Not Met	N/A	
						increased 8% (opposite to expected goal)- actual NS rated climbing quarterly despite PIP efforts!
9.3	Improvement appearing to be the result of the planned interventions(s)		x			one intervention not used yet; "the degree to which the intervention is the cause of the improvement in wait times will need to be validated" per county but data collected at East in 2012 showed PIP efforts had decreased wait times for both routine and initial MD appts.
9.4	Statistical evidence for improvement	x				
Totals for Step 9:		**2**	**1**	**1**		
10	**Sustained Improvement Achieved** *There is evidence for sustained improvement based on:*					
	Repeated measurements over comparable time periods that demonstrate sustained improvement, or that any decline in improvement is not statistically significant	x				Measured repeatedly, reviewed quarterly- Wait time data is collected on an ongoing basis with monthly and quarterly trending, and we have allowed a long baseline period to avoid temporary trends that may distort the data. Also intend to address rising NS rates and whether a data entry error or true representation of NS or both. Now plan to apply similar interventions in West County as data reveal their wait times for evals are much too high- know now that full MD capacity is part of the picture.
Totals for Step 10:		**1**				

F. Attachment—MHP PIPs Submitted

California EQRO

Regarding this PIP Submission Document:

- **This outline is a compilation of the "Road Map to a PIP" and the PIP Validation Tool that CAEQRO uses in evaluating PIPs. The use of this format for PIP submission will assure that the MHP addresses all of the required elements of a PIP.**
- **You are not limited to the space in this document. It will expand, so feel free to use more room than appears to be provided, and include relevant attachments.**
- **Emphasize the work completed over the past year, if this is a multi-year PIP. A PIP that has not been active and was developed in a prior year may not receive "credit."**
- **PIPs generally should not last longer than roughly two years.**

CAEQRO PIP Outline via Road Map

MHP: Contra Costa County Mental Health Plan
Date PIP Began: 2/1/2012
Title of PIP: Improving Coordination of Care for High Utilization Clients
Clinical or Non-Clinical: Non-clinical

Assemble multi-functional team

1. Describe the stakeholders who are involved in developing and implementing this PIP.

Utilization Review Staff, Clinical Program Chiefs, Quality Management staff, Research & Evaluation staff, Clinic Managers.

"Is there really a problem?"

2. Define the problem by describing the data reviewed and relevant benchmarks. Explain why this is a problem priority for the MHP, how it is within the MHP's scope of influence, and what specific consumer population it affects.

The Contra Costa Mental Health Plan (CCMHP) has been identified as an outlier in terms of high utilization clients. For example, in 2010 4.1% of clients accounted for 40% of total cost of services in the Contra Costa Mental Health Plan (CCMHP). Over half of high utilization clients are children under that age of 18. Currently, 262 out of the top 500 highest cost clients are under the age of 18. Collectively, services for these 262 clients totaled almost $18 million for the year under review at an average cost of almost $61,000 (published rate) per client. Contra Costa uses an extensive contract agency network, especially for children's services. In fact, when examining the service setting for the top 262 clients, contract agencies accounted for the top 12 reporting units. Below is a sorted list of reporting units where at least $500,000 of services were provided to children in the top 500 high utilization list:

ProviderName	RU Total Cost
YOUTH HOMES C5 PROGRAM	$1,028,767
SENECA DAY STDNTS GLBRK AB3632	$866,338
INACT SENECA RIVERVIEW AB DAY	$799,697
COMMUNITY OPTIONS TBS	$796,137
FAMILIES FIRST- DAVIS DAY	$716,272
YOUTH HOMES, INC - TBServices	$695,582
STAND RM	$668,572
MT DIABLO SUNRISE AB3632	$626,302
YOUTH SERVICES BUREAU	$590,510
LYNN CENTER MENTAL HEALTH SVCS	$584,784
LA CHEIM – TBServices	$553,273
WE CARE MENTAL HEALTH SERVICES	$504,854

Having services provided by such a vast array of agencies is beneficial in that clients' needs can be better matched to resources and specialty services that are available at contracting agencies and network providers. The decentralized nature of services, however, presents challenges in terms of ensuring coordination of care and ensuring optimal use of resources. Contra Costa County does not have a centralized electronic medical record that can be used to manage care provided by outside agencies and this lack of service management may account for some of the unnecessary costs accrued by high utilization clients. Research has indicated that providing disorganized treatment services and redundant assessments increases individual expenditures by many thousands of dollars, and simply providing service coordination substantially reduces spending without sacrificing quality of care (Sweeney, Halpert, & Waranoff, 2007). Additionally, adults in the public mental health system who do not have a coordinated care plan have been found to accumulate greater expenses for both physical and mental health care (Parks, Swinfard, & Stuve, 2010). In Kentucky, this issue was addressed for children in the mental health system by introducing case management, allowing for the formation of cost effective individualized treatment plans. As a result, multidisciplinary teams coordinated care effectively, without redundancy, and in a true collaboration which lead to positive behavior changes, more stable placements, and fewer psychiatric hospitalizations (Illback & Neill, 1995). Information sharing is also an issue in the county, in part due to the absence of a centralized electronic health record. Each provider keeps its own clinical record, which presents real challenges in terms of efficiency, avoiding duplication of services, having common goals, and generally providing client-centered care. For our population of consumers, it appears that several factors might contribute to higher cost and inefficient use of resources in providing services to these youth, including a possible lack of coordination in care, treatment plans with varying goals, issues with transitions to other possible treatment modalities, and a deficit in information sharing.

Illback, R. J., & Neill, T. K. (1995). Service coordination in mental health systems for children, youth, and families: Progress, problems, prospects. *Journal of Mental Health Administration*, *22*(1), 17–28.

Parks, J. J., Swinfard, T., & Stuve, P. (2010). Mental health community case management and its effect on healthcare expenditures. *Psychiatric Annals*, *40*(8), 415–419.

Sweeney, L., Halpert, A., & Waranoff, J. (2007). Patient-centered management of complex patients can reduce costs without shortening life. *American Journal of Managed Care*, *13*, 84–92.

Team Brainstorming: "Why is this happening?"
Root cause analysis to identify challenges/barriers

3. a) Describe the data and other information gathered and analyzed to understand the barriers/causes of the problem that affects the mental health status, functional status, or satisfaction. How did you use the data and information to understand the problem?

The data gathered primarily consists of clients' record of service utilization, lists of service providers used by clients, the costs associated with the services being provided, and clients' CALOCUS scores. We are using these data to select clients who are potentially in need of service coordination in three ways. First, we have identified clients whose CALOCUS score does not correspond with the amount of costs accrued; that is, clients who have accrued a large cost in the past 12 months yet scored relatively low on the CALOCUS. Using our second method, we have identified a group of clients who have accrued very high costs through the use of contract providers and have received very few services through county providers. We speculate that these clients using primarily non-county providers may be receiving care from contract providers without oversight from a county professional and are thus receiving services that are more likely to be duplicated, redundant, and lacking coordination. Lastly, our third methodology identifies clients who are receiving long duration services (e.g., 6 hours in length) that, on the face of it, appears to lack justification given the treatment goal. Here, we have attempted to pinpoint which contractors are providing excessive amounts of particular services, such as more than four hours of rehabilitation during a single day, for review. Our methodology aims to identify specific clients that are receiving excessive services, the specific provider responsible for the services, and the individual staff member providing the potentially unwarranted service.

b) What are barriers/causes that require intervention? <u>Use Table A, and attach any charts, graphs, or tables to display the data.</u>

Table A – List of Validated Causes/Barriers

Describe Cause/Barrier	Briefly describe data examined to validate the barrier
Minimal oversight of contract agencies and clients they see.	Review of all charts from all providers for sample of clients. In some cases there was not even a county clinic episode opened and, therefore, no county staff acting as a case manager. In these cases, contractors showed evidence of referring to one another.

Describe Cause/Barrier	Briefly describe data examined to validate the barrier
Charts for review come in piecemeal fashion, by RU. Can't see the whole picture.	Examination of Level 1 authorization process. Charts are called in by reporting unit. New review process calls in charts from all agencies rendering services to the client.
Lack of staff resources to review charts fully for quality issues. Existing UR is mostly for compliance issues.	System has over 18,000 clients each year. The reviewers on site can do little more than check off the chart to make sure all the required paperwork is present. For the most part, they don't review the chart for quality or coordination of services.
Review happens only once a year.	This barrier is again traced to resource issues and the cumbersome nature of collecting charts, the UR review only occurs once a year for most clients. Changing to a 6-month schedule would double the work load and there is not adequate staffing for such a change.
There is a deficit with the documentation for requesting a re-authorization. Level 1 UR is perfunctory and generally does not examine quality or coordination of care.	Feedback from UR staff.
Poor gatekeeping	Lack of adequate tools that help determine the proper level of care for the client, and lack of flexibility in the re-authorization process in terms of referrals to other providers (e.g., step down to the network).

Formulate the study question

4. State the study question. This should be a single question in 1-2 sentences which specifically identifies the problem that the interventions/approach for improvement.

Does the introduction of a "Care Coordinator" and an increased frequency of UR review for clients who are receiving uncoordinated care, duplicated services, or an unnecessary level of service intensity facilitate more efficient use of services in the system of care?

5. Does this PIP include all beneficiaries for whom the study question applies? If not, please explain.

The PIP focuses on both child and adult clients who are high utilizers of services. Both age groups have been reviewed as the study methodology has gone through developmental refinements. The current focus is on youth under age 18 due to the extensive use of the contract agencies and high cost for outpatient services. As the PIP evolves and more resources are available for the review of cases, more focus will be paid to adult clients, most likely in spring of 2013. Currently, this PIP focuses on those clients under the age of 198 who are receiving services that are potentially redundant, excessive in terms of treatment goals, duplicated, and/or uncoordinated.

6. Describe the population to be included in the PIP, including the number of beneficiaries.

The population to be included in this PIP will initially be child consumers who are accruing high service costs (over $30,000 in a 12 month period) and have been identified as clients receiving uncoordinated, duplicated and/or redundant care. We have identified the top 262 children, by cost of services, accessing treatment though the county mental health system. We are in the process of identifying specific children who would benefit from the addition of a care coordinator. Because clients are constantly accruing costs and the client's extremely complex and volatile situations influence their rate of cost accrual, we are unable to determine how many beneficiaries will be included in the PIP. We plan to repopulate the list of potential clients to include in the PIP on a quarterly basis to continuously identify clients that may be in need of a care coordinator. We aim to review 60 cases during the initial year of this PIP. Of the 60 cases reviewed, we anticipate that approximately half will be assigned a care coordinator as a result of their Coordination and Quality of Care review. The review sample will be expanded to include adult consumers during 2013.

7. Describe how the population is being identified for the collection of data.

The population is being identified by reviewing the charts of clients who are accumulating high service costs and determining whether or not additional care coordination is needed for each individual. The population is being identified by considering each client's total cost accumulation during the past 12 months, the number of service providers open to the client over the past 12 months, the number of county and non-county service providers open to the client during the past 12 months, the CALOCUS score for the client, the number of excessively long services, and the Quality and Coordination of Care score calculated from the UR review. See attached Quality and Coordination of care Worksheet.

8. a) If a sampling technique was used, how did the MHP ensure that the sample was selected without bias?

It is our aim to review as many charts as possible out of the top 262 children consumers. The ideal sample would include all children with cost accruals above $30,000, but with such a large number of clients accruing high service costs and with different children accruing large costs during different periods of time, we cannot realistically review every high cost case. We are currently exploring a variety of techniques for identifying clients that would benefit from improved care coordination and increased UR review including identifying clients with little county involvement, identifying clients with costs that do not correspond to their CALOCUS assessment scores, identifying clients who are receiving services for excessively long durations, and identifying clients who are in the second and third quartile in cost accrual assuming that the top quartile of clients are truly in need of exceptionally high level of services. To ensure our sample was selected without bias, we have attempted to review a set of cases that represent the demographic diversity of the county as a whole. We did not exclude any case from review because of ethnicity, gender, or location and actively assess our list of clients for review to ensure bias is not arising.

b) How many beneficiaries are in the sample? Is the sample size large enough to render a fair interpretation?

Our sample will include those clients accruing high service costs who have been assigned a care coordinator. Initially, we hope to select 10% of child consumers who have accrued over $30,000 for enrollment in the intervention. If the trend of high cost child clients continues as in previous years, this method should yield approximately 30 children for our sample. As 2013 progresses and additional resources become available, we will begin reviewing adult clients that are accruing costs over $30,000. We again aim to enroll 10% of these clients in the PIP resulting in approximately 15 clients in our sample. This total sample of approximately 45 to 50 clients will be sufficiently large to render fair interpretation of the effectiveness of the PIP and we likely will not be able to increase the sample size because of the large amount of staff resources required to identify clients through the review process and to coordinate care for each client in the intervention with a case manager.

"How can we try to address the broken elements/barriers?"
Planned interventions

Specify the performance indicators in Table B and the Interventions in Table C.

9. a) Why were these performance indicators selected?

Quality and Coordination of Care score from UR – the difference between the pre- and post-intervention scores will indicate the effectiveness of the care coordinator in increasing collaboration between providers.

Volume of potentially redundant services administered for greater than 5 hours in single day – decrease of high dosage services post-intervention compared to pre-intervention will indicate that the addition of the care coordinator was effective in reducing redundant services.

Number of months with greater than 30 hours of services provided – a post-intervention reduction in the number of months which client is receiving a high volume of services (greater than 30 hours per month) will indicate that the amount that redundancy in services has decreased as through increasing the coordination of care.

b) How do these performance indicators measure changes in mental health status, functional status, beneficiary satisfaction, or process of care with strong associations for improved outcomes?

These performance indicators collectively assess the clients' need for and response to the introduction of a care coordinator. Care coordinators will be assigned to only those clients with evidence of uncoordinated/duplicated services as determined by the UR team. Presumably through the introduction of the care coordinator, the client will receive fewer redundant services and a greater depth of appropriate services thus improving the mental health status and the client's overall quality of life.

Clients assigned care coordinators will be reviewed four times during the 12 month period post-intervention: at 1 month, 3 months, 6 months, and 12 months after the introduction of the care coordinator. At the time of the 1 month post-intervention assessment, a blanket improvement in the indicators listed above will indicate a decrease in duplicated services and an improvement in the process of care received by our clients. We do not expect the improvement in coordination to be linear over the 12 month period but anticipate the greatest reduction in redundancy to be evident at the 1 and 3 month reviews with the 6 and 12 month reviews showing the sustained effects of the intervention but indicating little additional change. Particularly of interest is the change in the Quality and Coordination of Care score after the care coordinator has been introduced. A marked increase in this indicator will indicate that the introduction of a care coordinator decreases the redundancy of treatments and increases collaboration between providers.

Remember the difference between *percentage* changed and *percentage points* changed – a very common error in reporting the goal and also in the re-measurement process.

Table B – List of Performance Indicators, Baselines, and Goals

#	Describe Performance Indicator	Numerator	Denominator	Baseline for performance indicator	Goal

#	Describe Performance Indicator	Numerator	Denominator	Baseline for performance indicator	Goal
1	Quality and Coordination of Care score from UR Team	Care coordination score post-intervention minus care coordination pre-intervention	Care coordination score pre-intervention	Pre-intervention data	Increase average care coordination score by 20% at 12 months post-intervention compared to baseline
2	Total volume of services lasting for greater than five hours in a single day	Number of services greater than five hours in length post-intervention minus number of services greater than five hours in length pre-intervention	Number of services greater than five hours in length pre-intervention	Pre-intervention data	Decrease number of services greater than five hours in length by 50% at 12 months post-intervention compared to baseline
3	Number of months with greater than 30 hours of services provided	Total number of months with greater than 30 hours of services provided for the 6 months post-intervention minus the number of months with greater than 30 hours of services for 6 months prior to intervention.	Total number of months with greater than 30 hours of services during the 6 months prior to intervention	Pre-intervention data	Decrease number of months with 30 or more hours of services by 50% at 6 month post-intervention review period

10. <u>Use Table C to summarize interventions</u>. In column 2, describe each intervention. Then, for each intervention, in column 3, identify the barriers/causes each intervention is designed to address. Do not cluster different interventions together.

Table C - Interventions

Number of Intervention	List each specific intervention	Barrier(s)/causes each specific intervention is designed to target	Dates Applied
1	Introduction of care coordinator	Lack of care coordination	
2	Introduction of enhanced UR interval for identified cases (e.g., 1, 3, 6, 12 months)	More focused treatment services, step down	

Apply Interventions: "What do we see?"
Data analysis: apply intervention, measure, interpret

11. Describe the data to be collected.

For the purposes of this PIP, data will be collected for individuals who were assigned a care coordinator only. The care coordinator will be a county employee who is specifically aligned with a single client in order to aid in the management of services for the client. Initially, the role of care coordinator may be fulfilled by clinic line-staff or clinic managers.
Data will be collected at 1 month, 3 months, 6 months, and 12 months post-intervention to assess the influence of introducing a care coordinator in decreasing service costs. The primary data will consist of the Quality and Coordination of Care score produced by the UR team, the number of potentially redundant lasting over five hours in a day services, and the number of service hours per month.

12. Describe method of the data collection and the sources of the data to be collected. Did you use existing data from your Information System? If not, please explain why.

The Quality and Coordination of Care data will be obtained from the UR team's pre- and post-intervention reviews. Data on the duration of services per day and the number of hours of service per month will be collected from the PSP system currently operating in Contra Costa County. PSP is the billing tracking system for the county and yields the most reliable data on service utilization.

13. Describe the plan for data analysis. Include contingencies for untoward results.

Data will be analyzed by comparing pre-intervention data to the data collected at the 1, 3, 6, and 12 month post-intervention reviews. If a marked decrease in the clients' Quality and Coordination of Care score or a marked increase in service usage or service duration is found during the 1 or 3 month post-intervention reviews then a full chart review will be ordered for the client.

14. Identify the staff that will be collecting data as well as their qualifications, including contractual, temporary, or consultative personnel.

Data will be collected and analyzed by the Research and Evaluation Unit of the Behavioral Health Division at Contra Costa Health Services. The Research and Evaluation Unit is comprised of seven full time Health Services Planner/Evaluators, all with Master's or Doctoral level training. Oleg Andreev, MD, will be responsible for obtaining the client level data from PSP for

the pre- and post-intervention periods. Michael Penkunas, Ph.D., will be the Planner/Evaluator leading data analysis efforts. Additional assistance may be requested from other Research and Evaluation staff. Steve Hahn-Smith, Ph.D., will supervise progress and review intervention results throughout the implementation of the PIP.

The UR team will conduct the Quality and Coordination of Care Reviews to determine clients to be involved in the PIP and at the 1, 3, 6, and 12 month post-intervention intervals. The UR team is comprised of clinicians and professional administrators employed by Contra Costa County Health Services. As it stands, the UR team consists of: Charlene Bianchi, MFT, Christine Bohorquez, RN, David Cassell, LCSW, Natasha Coleman, Psy.D, Jeffery Cotta, LSW, Jennifer Jeffrey-Kent, MFT, Grace Marlar, MPA, and Diane Renton, RN.

15. Describe the data analysis process. Did it occur as planned? Did results trigger modifications to the project or its interventions? Did analysis trigger other QI projects?

Because of the within-subjects design, repeated measures analysis of variance (ANOVA) will likely be employed to compare the pre-intervention data to post-intervention data. We hypothesize that the introduction of a care coordinator to aid in managing clients' care will result in an increase in the client's Quality and Coordination of Care coordination score, a decrease in the number of long duration services, and a decrease the total number of service hours provided per month. More complex analyses can also be performed on the data collected. Linear mixed modeling could be employed given that we will have data for each client for five separate time points. A variety of demographic and clinical variables such as gender, diagnosis, duration of treatment, location within the county, etc, could be entered into the model as fixed and random effects to determine the influence of specific client characteristics in lowering excelling in this PIP. Furthermore, segmented regression analysis could be useful since both pre- and post-intervention data will be available. This analysis would allow us to compare the trend over time for particular indicators (i.e. number of services, proportion of long duration services, etc.) to the trend over time post-intervention to determine both the immediate influence of the intervention and its effect throughout the post-intervention time period.

16. Present objective data results for each performance indicator. <u>Use Table D and attach supporting data as tables, charts, or graphs.</u>

Include the raw numbers that serve as numerator and denominator!

Table D - Table of Results for Each Performance Indicator and Each Measurement Period

Describe performance indicator	Date of baseline measurement	Baseline measurement (numerator/ denominator)	Goal for % improvement	Intervention applied & dates applied	Date of re-measurement	Re-measurement Results (numerator/	% improvement achieved

THIS IS THE BASELINE INFORMATION FROM TABLES A, B, AND C USED HERE FOR COMPARISON AGAINST RESULTS						denominator)	

"Was the PIP successful?" What are the outcomes?

17. Describe issues associated with data analysis:

a. Data cycles clearly identify when measurements occur.
N/A/ Data collection is ongoing.

b. Statistical significance

c. Are there any factors that influence comparability of the initial and repeat measures?

d. Are there any factors that threaten the internal or the external validity?

18. To what extent was the PIP successful? Describe any follow-up activities and their success.

19. Describe how the methodology used at baseline measurement was the same methodology used when the measurement was repeated. Were there any modifications based upon the results?

20. Does data analysis demonstrate an improvement in processes or client outcomes?

21. Describe the "face validity" – how the improvement appears to be the result of the PIP intervention(s).

22. Describe statistical evidence that supports that the improvement is true improvement.

23. Was the improvement sustained over repeated measurements over comparable time periods?

High-Utilization PIP - Identification methods for Quality Review

Contra Costa Mental Health Services

Research and Evaluation Unit

January 2013

SEPTEMBER 2012

GOAL: To identify potential clients for further review that will determine why a large number of clients in Contra Costa County are accruing service costs that are much greater than the typical consumer in California.

METHOD 1: CALOCUS Scores

To date, 59 high-utilization clients have been assessed using the CALOCUS measure
Mean age = 12.7 years
Age range = 5 to 19 years
18 females, 41 males

- The average CALOCUS score for these high-utilization clients is 19.3
- Not following the full decision tree, a score of 19 is on the boundary between Level Three and Level Four : "intensive outpatient services" and "intensive integrated services without 24-hour psychiatric monitoring"
- Scores ranged from 9 to 33
- The greatest numbers of clients (19 out of 59 or 32%) received a score recommending treatment at Level Four, "intensive integrated services without 24-hour psychiatric monitoring"

For the 59 consumers with CALOCUS scores (August 2011 to August 2012:
Average number of services: 256
Range: 89 to 485 services
Average cost of treatment: $64,863
Range: $42,685 to $110,182
The relationship between a consumer's CALOCUS score and their total cost of treatment is positive and statistically reliable, r (57) = .35, $p < .01$, (Figure 1).

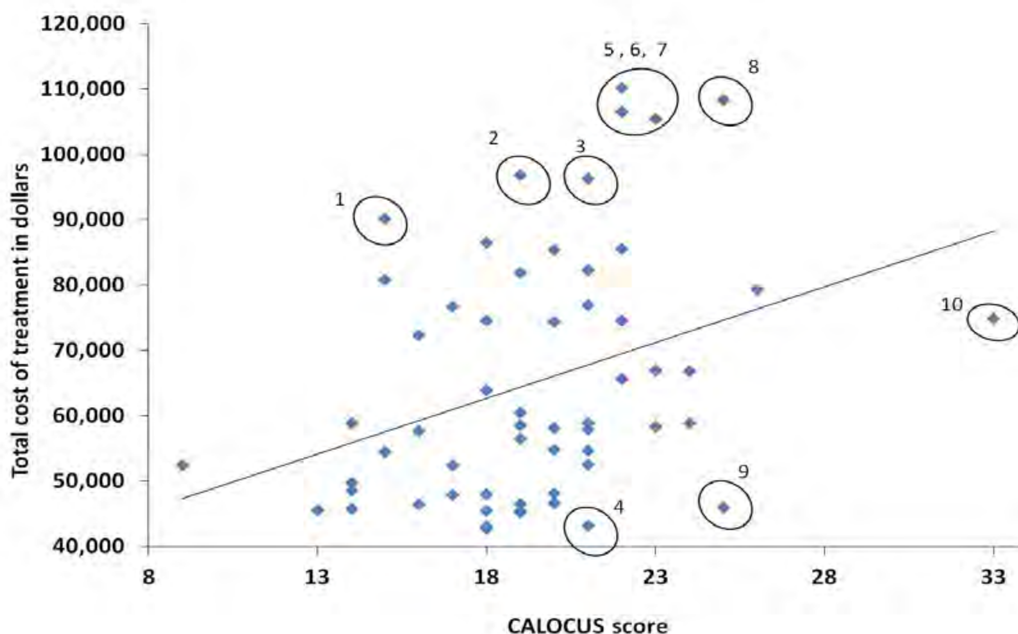


Figure 1. Total cost of treatment for 59 high-utilization consumers with consumers' CALOCUS assessment scores.

10 High-utilization clients identified through **CALOCUS score and cost**

	Sex	Age	Total cost	CALOCUS	Predicted cost	Cost difference	Residual	Total services	County services 1 year	First episode date	Open episodes	CALOCUS date	Diagnosis
1	M	13	$90,121	15	$57,511	$32,610	1.8	285	224	4/6/09	2	3/12/12	Diagnosis deferred
2	M	14	$96,813	19	$64,342	$32,471	1.8	290	175	2/25/09	4	1/30/12	Diagnosis deferred
3	M	13	$96,233	21	$67,758	$28,475	1.6	306	165	12/5/07	4	12/13/11	ADHD
4	F	14	$43,202	21	$67,758	$(24,556)	-1.4	197	10	6/8/11	5	6/12/12	Bipolar disorder
5	F	13	$110,182	22	$69,466	$40,716	2.3	410	123	3/2/09	5	5/10/12	Depressive disorder
6	M	6	$106,457	22	$69,466	$36,991	2.1	408	1	2/1/10	3	7/17/12	PTSD
7	F	12	$105,460	23	$71,174	$34,286	1.9	369	28	3/28/11	5	5/10/12	PTSD
8	M	16	$108,291	25	$74,590	$33,701	1.9	423	24	6/1/11	4	6/21/12	Mood disorder
9	M	16	$45,908	25	$74,590	$(28,682)	-1.6	169	87	1/26/11	0	1/18/12	Bipolar disorder
10	M	9	$74,845	33	$88,253	$(13,408)	-0.8	330	103	4/3/08	2	5/25/12	ADHD

METHOD 2: Multiple Reporting Units

Eighty-seven clients under the age of 19 were identified as receiving treatment from six or more unique providers.

Ten clients were identified as potential cases to review further based on their high number of unique providers. For this second set of client, we chose consumers who had not been assessed with the CALOCUS measure.

For the 10 individuals identified from the sample of consumers using services from six or more providers:

Mean age: 13.5 years
Age range: 8 to 18 years
3 females, 7 males

Average number of services: 254
Range: 193 to 310
Average cost of treatment: $63,735
Range: $43,080 to $87,307

High-utilization clients identified through treatment associated with **many unique RUs**

Sex	Age	Total cost	Unique RUs	Total services	County services 12 months	First episode date	Open episodes	Closed episodes	MRT/Crisis	Network	Diagnosis
F	11	$87,307	16	290	88	9/2/2011	4	15	5	7	Diagnosis deferred
M	18	$72,122	13	296	94	9/25/2006	4	11	1	0	Bipolar disorder
F	14	$67,427	13	217	83	5/5/2011	5	12	6	4	Major depressive disorder
M	10	$43,080	12	254	17	4/22/2011	4	8	0	4	Diagnosis deferred
M	8	$64,048	11	248	10	9/28/2011	3	11	4	4	Diagnosis deferred
M	15	$71,255	11	257	55	4/23/2010	3	11	3	2	Diagnosis deferred
F	15	$58,896	10	218	39	8/4/2004	1	12	3	1	Mood disorder
M	17	$55,248	9	193	51	11/18/2011	4	8	2	0	Bipolar disorder
M	15	$53,166	9	257	54	3/29/2010	4	5	0	0	Depressive disorder
M	12	$64,799	8	310	58	7/29/2010	0	10	2	0	ADHD

JANUARY 2013

Below is an outline of additional methods we have used to identify clients that could potentially benefit from the introduction of a care coordinator.

Many RUs and CALOCUS

Eighty-seven of the 262 high-utilization child clients are currently open to 6 or more RUs. The average 12-month cost for these clients is $69,961 with approximately 277 services per client. Thirty of the 86 clients have at least one CALOCUS assessment score.

The relationships between total costs and number of open RUs, r (85) = .16, p = .13, age and number of open RUs, r (85) = -.04, p = .73, and CALOCUS score and number of open RUs, r (28) = .12, p = .54, are not statically significant. The relationship between the number of services received in the last 12 months and the number of open RUs is approaching statistical significance, r (85) = .18, p = .10; clients with more open RUs received more services during the past 12 months. Thirty of the 86 clients have at least one CALOCUS assessment score. The correlation between the number of services received by a client and their CALOCUS score is moderate and statically significant, r (28) = .44, p = .01. Here, we see that clients with higher CALOCUS scores, indicating the need for a higher level of care, are receiving more services per year. As expected, the correlation between number of services and total cost for these 87 clients is strong and highly significant r (85) = .84, $p < .001$. See Figures 2 through 5 below.

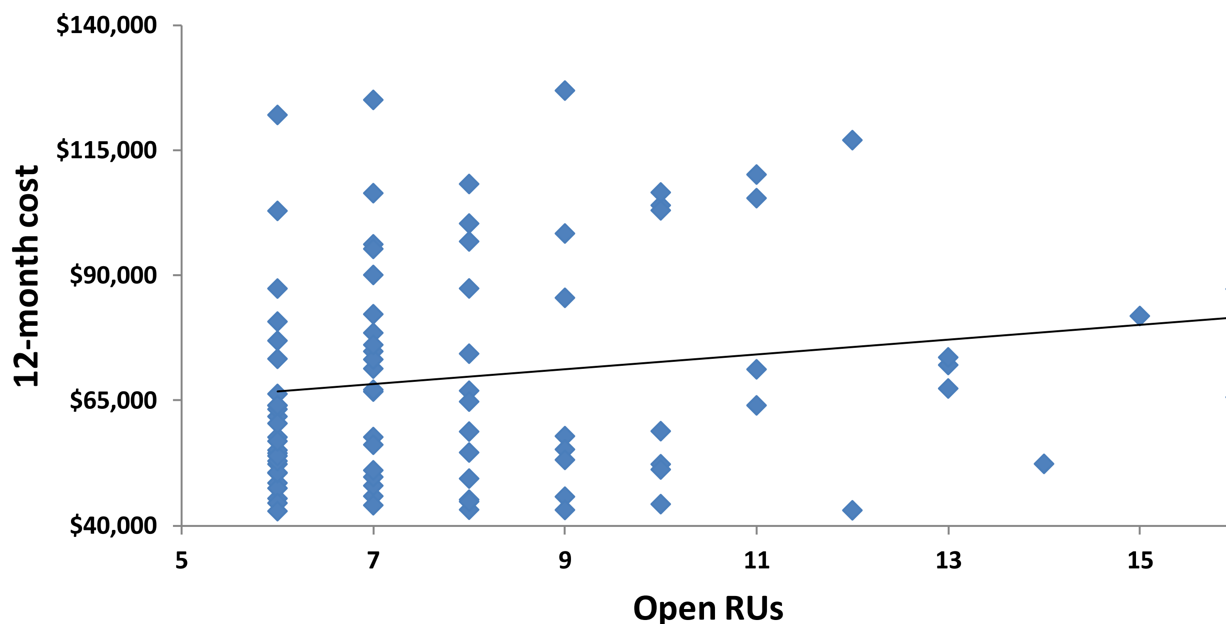


Figure 2. The relationship between total cost by number of open RUs for the 87 child clients with 6 or more open RUs. The relationship is positive but not statistically reliable.

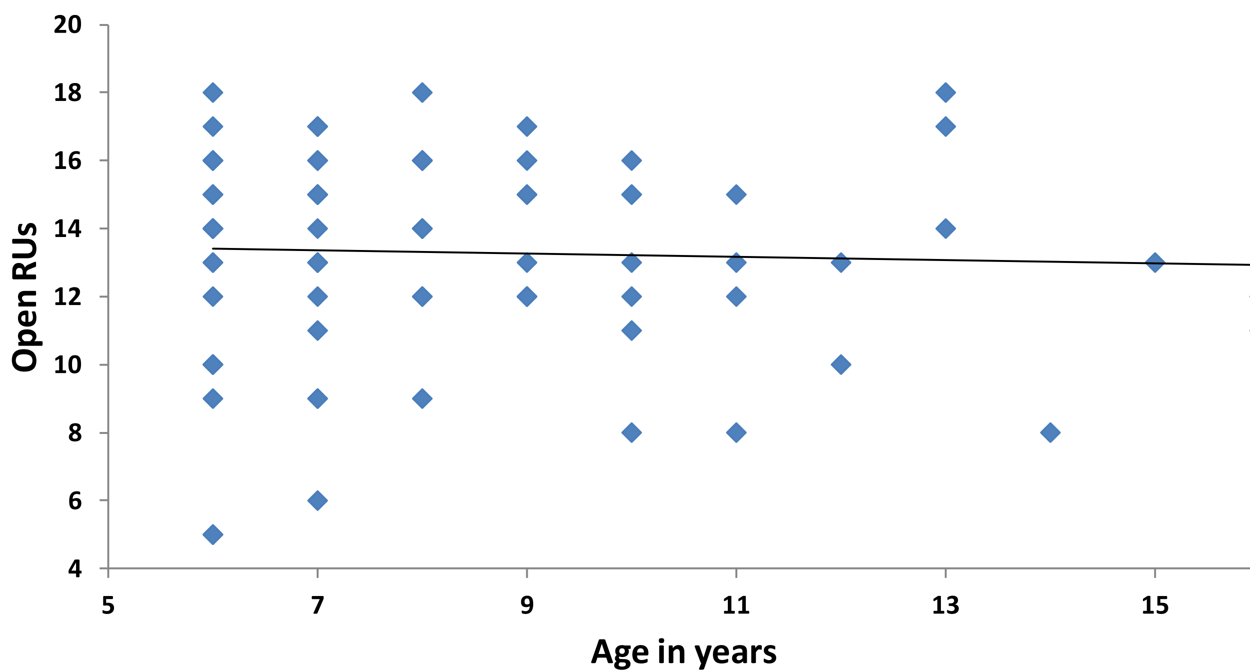


Figure 3. Number of open RUs plotted against age for the 87 child clients open to 6 or more RUs. This negative relationship is not statistically significant.

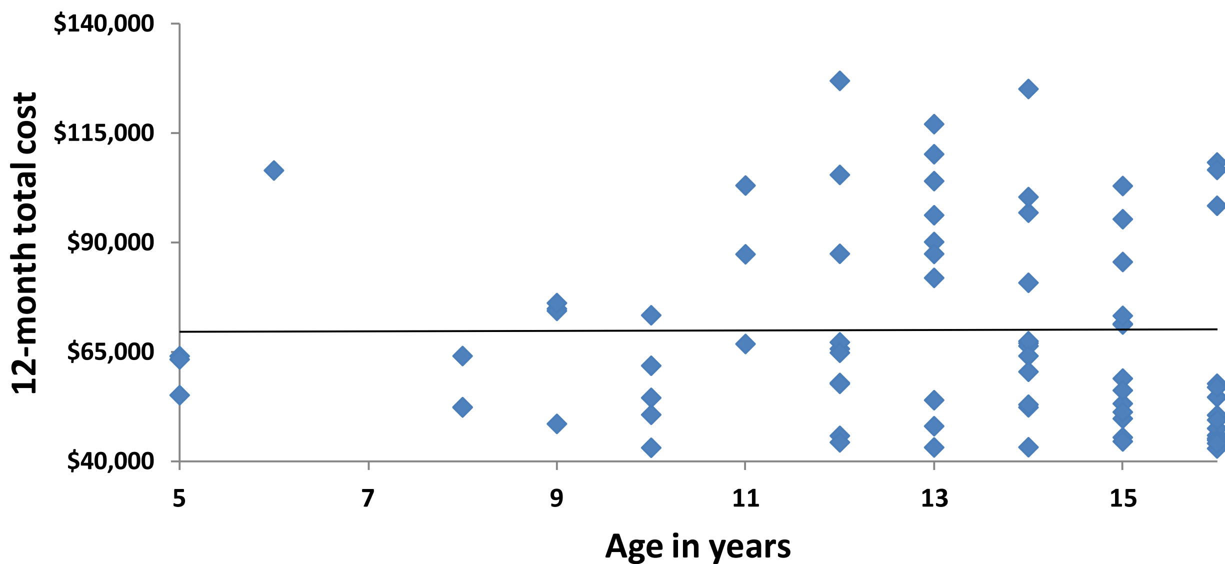


Figure 4. Total cost by age for the 87 child clients open to 6 or more RUs. The flat slope of the line of best fit indicates that this relationship is not statistically different from 0.

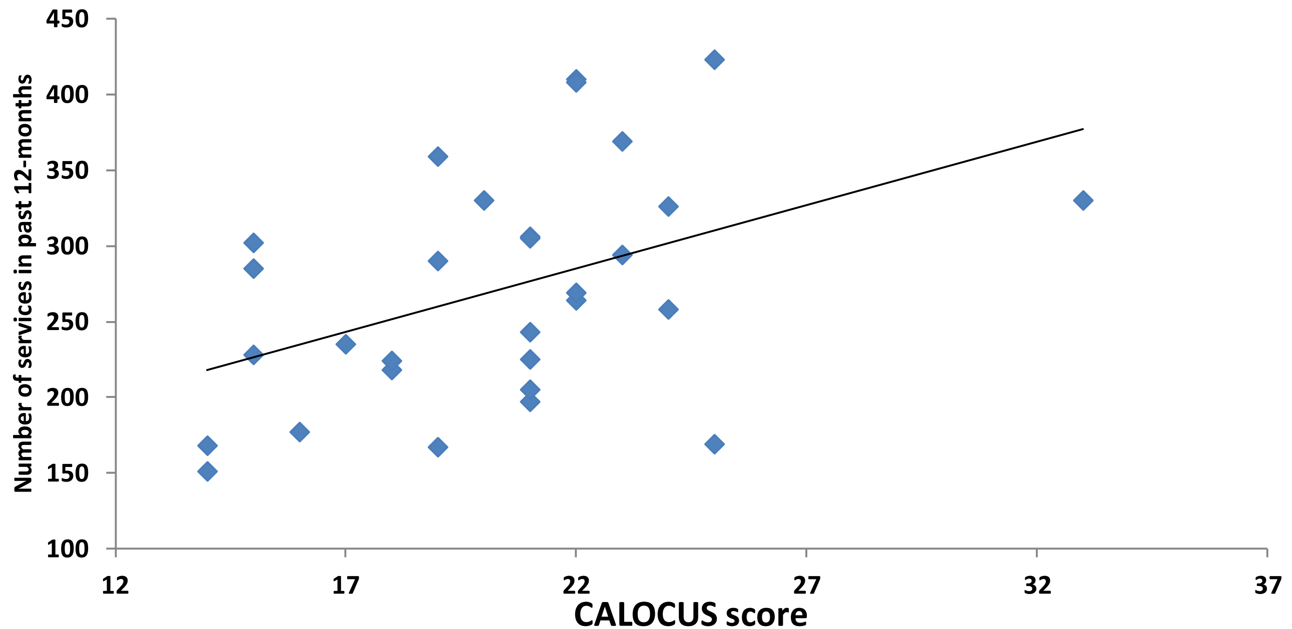


Figure 5. The relationship between the number of services provided to child clients with 6 or more open RUs and their CALOCUS assessment score. This relationship is moderately positive and statistically reliable.

When split by gender, the relationship between the number of open RUs and total cost is statistically significant for boys, r (32) = .37, p = .03, but not for girls, r (51) = -.10, p = .48. Similarly, the relationship between the number of open RUs and number of services is statistically significant for boys, r (32) = .36, p = .04, but not for girls, r (51) = -.06, p = .69. The correlation between CALOCUS score and total number of services is also statistically reliable for boys, r (10) = .63, p = .03, but not for girls, r (16) = .32, p = .19. The relationship between total cost and the total number of services is highly statistically significant for both boys, r (32) = .92, $p < .001$, and girls, r (51) = .71, $p < .001$.

One potential method for selecting clients to review could be to select clients who have received many services in the past 12 months but have a relatively low CALOCUS score. In Figure 5, this scenario is represented by the clients that are sustainably higher than the best fit line.

Little County Involvement

Sixty-seven of the top 262 high cost child clients have not received a service from a county provider during the past 12 months. The average cost during the past 12 months for these clients is $57,161 with a range of $43,660 to $111,742. On average, these clients received 249 services during the past 12 months ranging from 116 to 481 services. The majority of these clients are boys (41 boys; 26 girls). The most common diagnoses are PTSD (16%), opposition defiant disorder (12%), and ADHD (12%).

Therapeutic Behavioral Services (TBS)

TBS has previously been identified as a high cost service type that might be provided for periods longer than medically recommended. Upon investigation, we found the number of TBS services has decreased substantially over the past three years: 18,240 services in 2010, 16,869 services in 2011, and 11,465 services in 2012. Accordingly, the cost of TBS has decreased dramatically over the past three years. In 2010, the monthly average cost was $532,105, $463,064 in 2011, and $298,668 in 2012. See Figure 6 below.

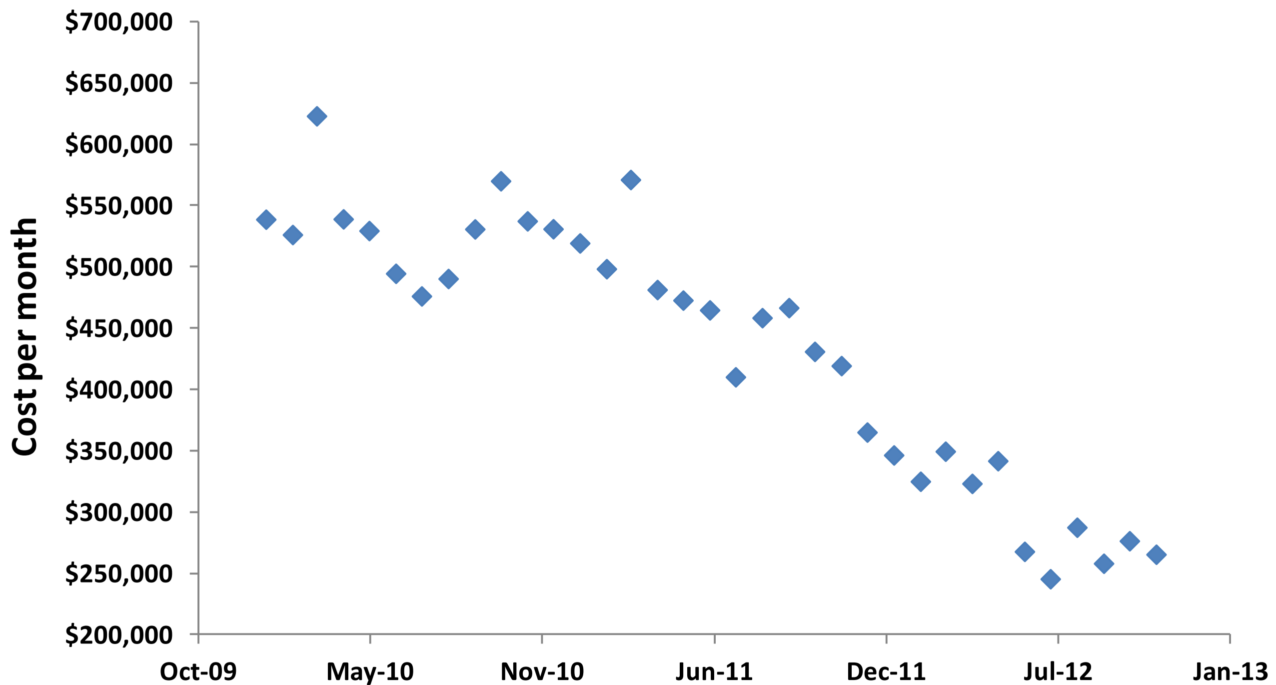


Figure 6. Average cost of TBS per month for January 2010 through November 2012.

Further examination did reveal a number of clients who have been receiving TBS for a period of time that may potentially be beyond the recommended duration for such services. Currently, 36 clients have been open to TBS for 150 or more days and 22 clients have been open for 200 or more days, 19 of which are in the top 262 child consumers. Of the 19, 32% have a diagnosis of PSTD and 74% are boys. These clients have received an average of 299 services, regardless of type, over the past 12 months ranging from 145 to 843. Twelve of these 19 clients have a CALOCUS score; the mean score is 21 and ranges from 15 to 26. For these TBS clients, age is positively correlated with the number of days a client is open to TBS, $r\,(17) = .56$, $p = .013$, and the number of TBS services a client received, $r\,(17) = .57$, $p = .01$; the older the client, the more days they are open to TBS and the more TBS services they receive. Not surprisingly, there is a very strong relationship between the number of TBS services a client received and the number of days a client is open to TBS, $r\,(17) = .85$, $p < .001$, and between the number of TBS services a client received and the total cost of TBS services, $r\,(17) = .92$, $p < .001$. Unexpectedly, the relationship between a client's CALOCUS score and the number of days of TBS is negative and approaching statistical significance, $r\,(17) = -.54$, $p = .07$.

California EQRO

Regarding this PIP Submission Document:

- **This outline is a compilation of the "Road Map to a PIP" and the PIP Validation Tool that CAEQRO uses in evaluating PIPs. The use of this format for PIP submission will assure that the MHP addresses all of the required elements of a PIP.**
- **You are not limited to the space in this document. It will expand, so feel free to use more room than appears to be provided, and include relevant attachments.**
- **Emphasize the work completed over the past year, if this is a multi-year PIP. A PIP that has not been active and was developed in a prior year may not receive "credit."**
- **PIPs generally should not last longer than roughly two years.**

CAEQRO PIP Outline via Road Map

MHP: Contra Costa County
Date PIP Began: August 1, 2011
Title of PIP: Improving Timely Access to Mental Health Services
Clinical or Non-Clinical: Non-clinical

Assemble multi-functional team

1. Describe the stakeholders who are involved in developing and implementing this PIP.

Vic Montoya	Adult System of Care- Program Chief Contra Costa Mental Health Administration
Ross Andelman, MD	Medical Director Contra Costa Mental Health Administration
Hala Fattah, M.D.	Lead Psychiatrist East County Adult Mental Health
Beverly Furman, LMFT	Program Manager East County Adult Mental Health
Shelley Oakey, LMFT	Care Management Unit- Manager Contra Costa Mental Health Administration
Steve Hahn-Smith, Ph.D.	Quality Improvement Program Coordinator Contra Costa Mental Health Administration
David Cassell, LCSW	Quality Improvement Coordinator Contra Costa Mental Health Administration
Caroline Sison, MPH	Planner/Evaluator Contra Costa Mental Health Administration

"Is there really a problem?"

2. Define the problem by describing the data reviewed and relevant benchmarks. Explain why this is a problem priority for the MHP, how it is within the MHP's scope of influence, and what specific consumer population it affects.

Background

Prompt and timely access to mental health services is imperative to the health of those who suffer from severe and persistent mental health conditions. Providing a mental health appointment within a reasonable time frame is one of Contra Costa Mental Health's priority areas. The affect of long wait times to mental health services can have serious, sometimes dire consequences on patient outcomes. Research has shown waiting weeks for a psychiatric appointment may result in patient decomposition, and may increase risk for suicide[i]. Additionally, long wait times may lead to a decrease in the rate of kept appointments. One of the most prevalent reasons for no shows is the length of appointment wait times[ii]. Some of the fiscal impacts related to long wait times include loss in staff productivity for no shows as well as clients accessing emergency services in the interim. Staff and financial resources are compromised, as clients may access high cost psychiatric emergency services while waiting to be seen by mental health.[iii] [iv]

As the ninth largest county in the state, Contra Costa County experiences a steady volume of consumers entering the system; in recent years, the growth has increased, most likely due to the downturn of the economy. While the number of staff has remained relatively constant, the number of Medi-Cal eligible and uninsured persons in the county has grown dramatically. The staff resource problem and related timeliness to services is particularly acute at East County Adult Mental Health Services, and this is the focus area for this Performance Improvement Project.

Appointment Wait Time Standards for Contra Costa

The External Quality and Review Organization of California allow counties to establish appropriate goals for appointment waiting times (with the exception of clients discharged from the hospital, who are required to be seen within 7 days of discharge). Informed by Contra Costa County's 2010 timeliness baseline data analysis and input from management staff, CCMH established goals for different categories of mental health appointments. Data from the Access Line and the county's central Medi-Cal billing system (PSP) is collected by the county's research unit, and reviewed quarterly by management staff to be utilized for program improvements. The Access Line, which serves as the first point for screening, financial eligibility and fielding client appointments to regional clinics, receives about 2,000[v] calls every month. Almost 50% of those calls result in a scheduled appointment in different parts of the county. At the beginning of the PIP, wait times were collected by obtaining client appointment information and utilizing the County's billing data system PSP, to obtain appointment information. In 2012, wait times collection was modified by

surveying the Access Line and regional psychiatrists to obtain the current dates available for the next and third appointment from that point in time.

Table 1: CCMH Wait Time Goals

Appointment Type	Adult Services	Children's Services
Routine	28 days	7 days
Urgent	2 days	2 days
Hospital Discharge	7 days	7 days
1st Psychiatric Appointment	60 days	45 days

Wait Times for East County Adult Mental Health

Contra Costa County has experienced an increase in the number of Medi-Cal eligibles, which may be due to a number of factors, such as the downturn of the economy. Unfortunately, the County mental health system's staff resources remain constant, mainly due to budgetary constraints and County hiring freezes. Additionally, staffing levels have been difficult to maintain as some staff members leave due to retirement or job change. The combination of these factors has resulted in appointment wait times that are longer than goals.

To understand the factors that affect timeliness, the PIP team examined the process of handling new client referrals. Contra Costa Mental Health collects data at several points of client engagement to measure and track timeliness of services. Contra Costa Mental Health utilizes the Access Line as the gateway to entering the county's mental health system for adult and children consumers. Clients contact CCMH's Access Line in order to complete an initial assessment and to be referred to an appropriate location for care, based on language need, geography, and level of acuity. During the initial call with a clinician through the Access Line, staff assess whether the client falls into one of the following categories: routine, non-routine, urgent, or hospital discharge. Data is collected to determine the length of time for a client to receive an initial appointment. Additionally, CCMH monitors the length of time from the initial contact to the first psychiatry appointment given by the clinic. This timeliness analysis helps the County monitor trends and facilitates program improvements. The data is collected and analyzed on a quarterly basis, as outlined in the County's quality management plan and is presented to management staff. Examination of average wait times for psychiatric appointments in East County Adult Mental Health in early 2011 reveal the averages wait times for urgent, hospital discharge and first appointment with a psychiatrist exceed the County's goals.

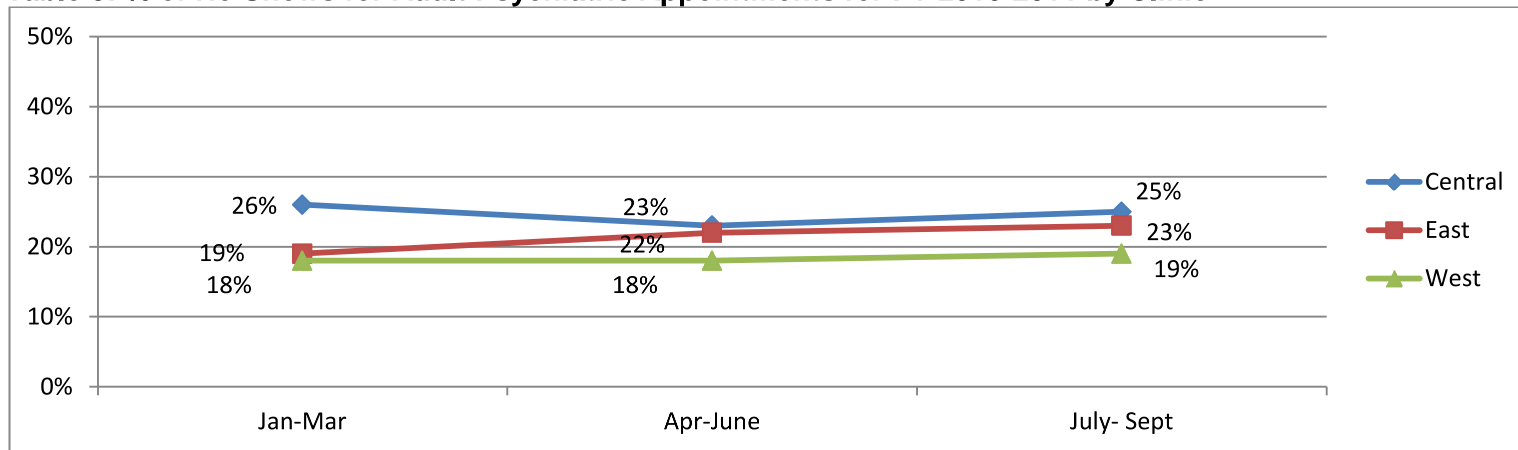
Table 2: East County Adult Mental Health Average Appointment Wait Times for Quarter 1 in 2011

Appointment Type	Adult Services goals	ECAMH Average for Jan-Mar 2011
Routine	28 days	12.7 days

Urgent	2 days	2.5 days
Hospital Discharge	7 days	8.1 days
1st Psychiatric Appointment	**60 days**	**91.7 days**

As noted in the research on timeliness of services, delays in scheduling appointments has a significant impact on the rate of kept appointments. The impact of the length of time a client waits for an appointment has been documented as a significant factor that leads to missed appointments.[vi] Since January 2011, the no show rate for ECAMH has slowly increased from 19% to 23% in September.

Table 3: % of No Shows for Adult Psychiatric Appointments for FY 2010-2011 by Clinic



Long delays in accessing mental health services may be alleviated through administrative improvements which the County is able to facilitate. For example, Administration has been working to increase staff capacity in the East County clinic in order to keep up with the growing pace of incoming clients. Although the focus of this project is on improving length of time clients wait in East County, the results of the intervention could potentially improve access for all consumers in the county entering the MHP.

Efforts to Alleviate Appointment Wait Times
Efforts to recruit additional staff at ECAMH remain the central intervention to help reduce the wait times at the clinic. When comparing staffing levels to the other regional clinics, ECAMH is particularly under staffed when clinic volume is considered. As mentioned in Table 6: Staff Psychiatrist Staffing Hours, an additional 3.3 FTE are needed in ECAMH to adequately serve the number of clients. Although the only full time psychiatrist at ECAMH retired during 2011,

recruitment efforts proved to have preliminary success as one full time and two part time psychiatrists were added to the clinic during summer 2011.

In some cases where a referral seems appropriate for the client, ECAMH has utilized the provider network and primary care physicians as alternatives. Pathways to Wellness and Dr. Singh are the two main providers outside of the County clinic where patients are referred to. During 2011, the number of clients who were referred to a primary care physician increased from four referrals in January 2011 to eight in June 2011, and 14 in August.

The Access Line has continued the fax protocol to expedite the handling of urgent appointments. When a potential client calls the Access Line in need of an urgent appointment, a form with the client's information is faxed to the clinic for a clinician to make contact with the client to assess their need and potentially see them sooner, depending of their disposition.

Team Brainstorming: "Why is this happening?"

Root cause analysis to identify challenges/barriers

3. a) Describe the data and other information gathered and analyzed to understand the barriers/causes of the problem that affects the mental health status, functional status, or satisfaction. How did you use the data and information to understand the problem?

The PIP team examined data to better understand the causes of long appointment wait times in Contra Costa County. In recent years, there has been an influx of new clients entering the Contra Costa County's mental health system. Between 2007 and 2010, there has been a 17% increase in open episodes (2305 clients to 2695 clients) in ECAMH. The increase in the number of clients may be due to a several factors, including the downturn of the economy, resulting in higher unemployment rates and loss of job related health coverage; expected population increase in the eastern part of the County; improved referral process from the County's Transition Team and the Access Line; the expansion of coverage through new programs such as the County's Older Adult program; and increase in demand created by warm handoffs from Psychiatric Emergency Services (PES). In 2011 alone, there has been a steady increase in the number of new clients and number of services provided in East County.

Stemming from the review of the data was the call to action to address East County Adult Mental Health's appointment wait time. The table below provides a comparison of wait times for an initial appointment with a psychiatrist in the County's

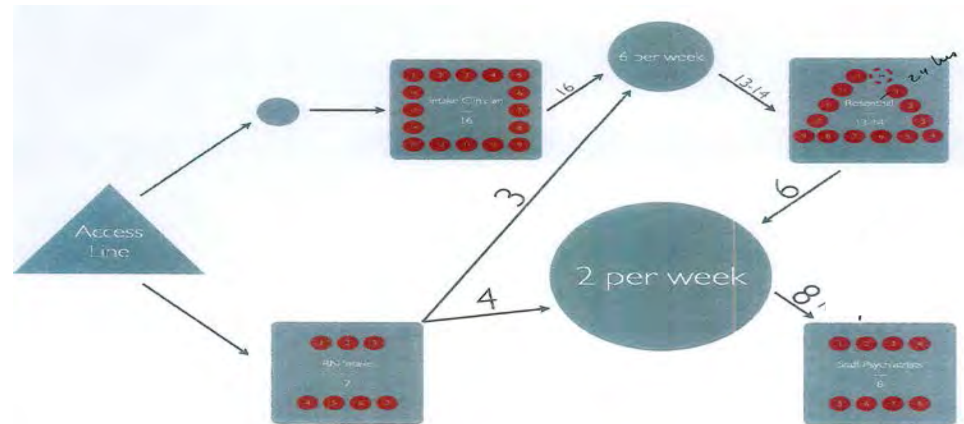
regions. East County Adult Clinic had the longest wait time for an initial psychiatry appointment during quarters one and two in 2011.

Table 4: 2011 Average Wait Times for an Initial Psychiatric Appointment by Region

	Q1 (Jan-Mar)	Q2 (Apr-Jun)	Q3 (Jul-Sept)
Central	33.8	36.8	20.9
East	**91.7**	**52.4**	**45.7**
West	35.0	38.3	66.5
County Average	45.2	38.7	37.5

Upon examination of the intake process of mental health clients, the PIP team discovered a process unique to East County for seeing new mental health clients. Once a client completes an initial assessment appointment with ECAMH, the initial psychiatric appointment is handled by only one psychiatrist. This process can create a bottle neck and may lead to possible redundancy with subsequent assessments. Clinics in Central and West County have multiple staff who handle the first psychiatric appointment. The chart below provides a snap shot of the patient intake process for the East County clinic.

Table 5: Current Intake Process for new clients in East County Adult Mental Health



The capacity of each of the regional clinics is dependent on the amount of psychiatrist staff hours available. An analysis in August 2011 revealed East County Adult Clinic had the psychiatrist staff time equivalent to 3.7 full-time psychiatrists; this is a significant difference between the two other regional clinics, which have 6.8 full-time psychiatrists in Central County and 8

full-time psychiatrists in West County. Furthermore, the main psychiatrist who performs intake appointments is scheduled for only 24 hours per week. Staff on site suggested the ideal workforce capacity of the County Adult Clinics is to have at least seven FTE.

Table 6: Staff Psychiatrist Staffing Hours

County Region	Staff Psychiatrist Hours (as FTE)	#FTE Needed Ideal Capacity of 7 FTE
East County	**3.7 FTE**	**3.3 FTE**
Central County	**6.8 FTE**	**0.2 FTE**
West County	**6 FTE**	**1.0 FTE**

b) **What are barriers/causes that require intervention? <u>Use Table A, and attach any charts, graphs, or tables to display the data.</u>**

Table A – List of Validated Causes/Barriers

Describe Cause/Barrier	**Briefly describe data examined to validate the barrier**
Insufficient current psychiatric staff capacity	Data related to psychiatrist staff time was examined by the PIP team to further understand the current state of East County's wait time for psychiatric appointments. As illustrated in Table 5, East County Adult Mental Health has less psychiatrist staff time available in comparison to Central and West.
Alternative options for referrals: new clients referred to Contra Costa's mental health network providers and community based organizations	A protocol for clients to be referred to providers other than in the county clinics, such as network providers and community based organizations is lacking in mental health. Routing a proportion of clients to providers other than the county clinics may provide relief for a heavily stretched system. There are a number of network providers and community based organizations that can alleviate the strain on the public mental health system by providing services to Medi-Cal clients.
Recruitment and retention of psychiatrists	Workforce attrition, either due to retirement or resignation, has made it difficult to maintain an adequate staff of psychiatrists. In Contra Costa County, it has been difficult to recruit mental health professionals to work in the community mental health system, which may be due to geographic location or competitive salary options when compared to other health

Describe Cause/Barrier	Briefly describe data examined to validate the barrier
	systems, hospitals or private practice.
Intake process for new mental health clients in East County	The current intake process for clients detailed in Table 4 illustrates an intake process unique to East County Adult Clinic- clients are screened by one intake psychiatrist before they are assigned to one of the staff psychiatrists for care. As the West and Central Adult County Clinics have multiple staff who share the duty of performing initial intake appointments for new clients, East County Adult rely on one psychiatrist to perform all intake appointments.
Improvements to appointment reminder system/protocol	Currently, East County Adult Mental Health, along with the other clinics in the county, lacks a uniformed appointment reminder protocol. Most times, attempts to reach a client to remind them of a future appointment occurs when time allows for the clerical staff; this process may be infrequent, data is not formally captured nor is the process enforced by policy. During the PIP period, a phone survey was administered to a sample of clients from each clinic that did not show for their appointment during the week of 10/24/11 through 10/28/11. Results from the survey revealed 40% of the clients sampled (12 of 30) surveyed missed their appointment because they forgot and 25% stated a reminder call would have helped them adhere to their appointment.
Exit strategy for mental health clients to transition out of care	In recent years, the Mental Health system has experienced an increase in the number of new clients entering the system; however the system's capacity has not been able to keep up with the spike of clients. Lack of resources, such as alternative placements for different levels of care as a referral destination, coupled with inadequate training of primary care providers to handle patients with complex mental health issues, impedes the system's ability to transition clients our of the County clinic system

Formulate the study question

4. State the study question. This should be a single question in 1-2 sentences which specifically identifies the problem that the interventions/approach for improvement.

Will implementing activities such as increasing psychiatric staff capacity at the East County Adult Mental Health Clinic, and fielding new clients to network providers to reduce the length of wait time for an initial appointment with a psychiatrist for clients waiting to be seen in East County?

5. Does this PIP include all beneficiaries for whom the study question applies? If not, please explain.

The PIP does include all clients for whom the study question applies.

6. Describe the population to be included in the PIP, including the number of beneficiaries.

The population for this PIP includes all clients who are scheduled to receive services in the East County Adult Mental Health clinic. Based on PSP and Access Line call log data, a total of 247 clients were included in the baseline calculation of wait time for the first appointment with a psychiatrist.

7. Describe how the population is being identified for the collection of data.

Contra Costa Mental Health utilizes the Access Line, a 24-hour hotline, as the gateway to entering the county's mental health system for the adult and child population. Clients contact CCMH's Access Line in order to complete an initial assessment and to be referred to an appropriate location for care, based on language need, geography, and level of acuity. Because the PIP focuses on an intervention at one county clinic site, the population is identified during the point of initial contact via Access Line. All appointments designated to the East County Adult Mental Health clinic site are included in the sample.

8. a) If a sampling technique was used, how did the MHP ensure that the sample was selected without bias?

For baseline data, sampling techniques were not being used. All clients assigned to East County Adult Mental Health will be included in the study. Subsequent wait time data was obtained using a sampling method. To prevent bias, data was collected on a weekly basis during various times to obtain an adequate sample size to derive an average.

b) How many beneficiaries are in the sample? Is the sample size large enough to render a fair interpretation?

A total of 247 clients are included in the baseline sample. The sample size is large enough to render a fair interpretation.

"How can we try to address the broken elements/barriers?"
Planned interventions

Specify the performance indicators in Table B and the Interventions in Table C.

9. a) Why were these performance indicators selected?

The performance indicator of average appointment wait time is a standard measure collected and analyzed quarterly as part of Contra Costa's quality improvement process. Trends in appointment wait time relate to patient access, patient satisfaction, efficiency in the appointment and clinic process. The time clients wait until the next available psychiatric appointment is an access performance indicator that can be measured and may reveal gaps in access to services and quality of care. Additionally no show rates are included, which may provide evidence of the success of the intervention. Research on wait times support the positive correlation between the time a client waits for an appointment and the no show rate[vii].

b) How do these performance indicators measure changes in mental health status, functional status, beneficiary satisfaction, or process of care with strong associations for improved outcomes?

Remember the difference between *percentage* changed and *percentage points* changed – a very common error in reporting the goal and also in the re-measurement process.

Table B – List of Performance Indicators, Baselines, and Goals

#	Describe Performance Indicator	Numerator	Denominator	Baseline for performance indicator*	Goal
1	Average Wait Time to 1st Appointment with a Psychiatrist	Sum of # of days between Initial Contact to 1st psychiatric appointment	Total # of Appointments	72 Day Average	60 Days (As noted in CC County's Timeliness Goals)
2	No Show Rate for Psychiatrist Appointments	# of Missed appointments	Total # of Appointments	21%	15% No Show Rate
3	# of New Clients for ECAMH MD, Dr. Rosenthal per month	Sum of # of new clients opened to ECAMH seen by	# of Months in calendar quarter	25 client average	20 client average per month

#	Describe Performance Indicator	Numerator	Denominator	Baseline for performance indicator*	Goal
		Dr. Rosenthal for initial psychiatric appt. during calendar quarter			
4	# of New Clients routed to network provider, Dr. Singh	Sum of # of new clients opened to ECAMH seen by Dr. Singh for initial psychiatric appt. during calendar quarter	# of Months in calendar quarter	56 client average	65 client average per month

* Baseline for performance indicators reflects the average of Q1 & Q2 (Jan-Jun) Data from 2011

10. <u>Use Table C to summarize interventions</u>. In column 2, describe each intervention. Then, for each intervention, in column 3, identify the barriers/causes each intervention is designed to address. Do not cluster different interventions together.

Table C – Interventions

Number of Intervention	List each specific intervention	Barrier(s)/causes each specific intervention is designed to target	Dates Applied
1	Access Line to route new Medi-Cal clients (as appropriate) to network providers (e.g. Dr. Singh)	Intake process for new MH clients	7/2011
2	Hire additional Psychiatrists at ECAMH *An additional two FTE and one 40 hour position*	Insufficient psychiatric staff resources	1/2012
3	Initiate group intake sessions *Group intake would provide an interim option for*	Intake process for new MH clients	3/2013

Number of Intervention	List each specific intervention	Barrier(s)/causes each specific intervention is designed to target	Dates Applied
	clients This may expedite the intake process, decreasing wait time as well as increasing the likelihood of keeping their first appointment		
4	Mental Health nursing staff to be assigned to perform intake appointments	Intake process for new MH clients	1/2011-7/2011

Apply Interventions: "What do we see?"
Data analysis: apply intervention, measure, interpret

11. Describe the data to be collected.

To calculate appointment wait times, the collection of data occurs during several points of client engagement. For the purposes of timely access to appointment monitoring as well as this study, the time of 'initial contact' is defined the first client call to the Access Line to enter the County Mental Health system for services. The call date serves as the starting point when measuring wait time for appointments for mental health services. For the baseline calculation, the date a client is seen for an initial assessment appointment is collected as well as the date of the first appointment with a psychiatrist. For 2012 data, the wait time was calculated using a point in time sampling method, using the Access Line's appointment availability for first and third appointment for ECAMH. Data related to the County's network providers is collected using billing data in PSP.

12. Describe method of the data collection and the sources of the data to be collected. Did you use existing data from your Information System? If not, please explain why.

The first initial assessment appointment for all county clinics is assigned by Access Line staff once the telephone screening and assessment is complete. Research and Evaluation staff survey the Access Line weekly, obtaining two data points-- the first and third available appointment. The date of the third available appointment is considered for the study, assuming the third available date is the likely choice the client will agree to in a real life setting. The number of new clients for Dr. Singh is obtained through another County database exclusively for network providers; however, the time to first appointment is not captured using current data collection systems.

13. Describe the plan for data analysis. Include contingencies for untoward results.

When a client contacts the Access Line to initiate linkages to County services, all information is tracked by physical records kept onsite. While the call logs cannot be removed from the department, as an alternative the records are emailed or faxed to Mental Health Administration, where an Access database has been established for tracking purposes. Because of the difficulty in reconciling the data captured in the call log and data in the PSP system for next appointment, an alternative approach has been started. The new method involves a weekly call-in to clinics to query staff when next appointments are available in the different appoint type categories. These data are kept in a database on an ongoing basis for analysis.

14. Identify the staff that will be collecting data as well as their qualifications, including contractual, temporary, or consultative personnel.

The primary staff who will be responsible for collecting the initial contact and initial assessment data will the Research and Evaluation staff in Mental Health Administration. Data related to psychiatric appointments will be provided by clinic staff at ECAMH once a week.

15. Describe the data analysis process. Did it occur as planned? Did results trigger modifications to the project or its interventions? Did analysis trigger other QI projects?

Analysis of the average wait times for mental health appointments was initiated prior to the PIP as a part of the County's quality improvement plan. Goals and baseline data related to timeliness have been established by the CCMH for different types of appointments and are monitored quarterly by the Research and Evaluation team and Management. A benefit of an established process is there are existing data to observe trends in wait time.

Present objective data results for each performance indicator. Use Table D and attach supporting data as tables, charts, or graphs. Include the raw numbers that serve as numerator and denominator!

Table D - Table of Results for Each Performance Indicator and Each Measurement Period

Describe performance indicator	Date of baseline measurement	Baseline measurement (numerator/ denominator)	Goal for % improvement	Intervention applied & dates applied	Date of re-measurement	Re-measurement Results (numerator/ denominator)	% improvement achieved
THIS IS THE BASELINE INFORMATION FROM TABLES A, B, AND C USED HERE FOR COMPARISON AGAINST RESULTS							

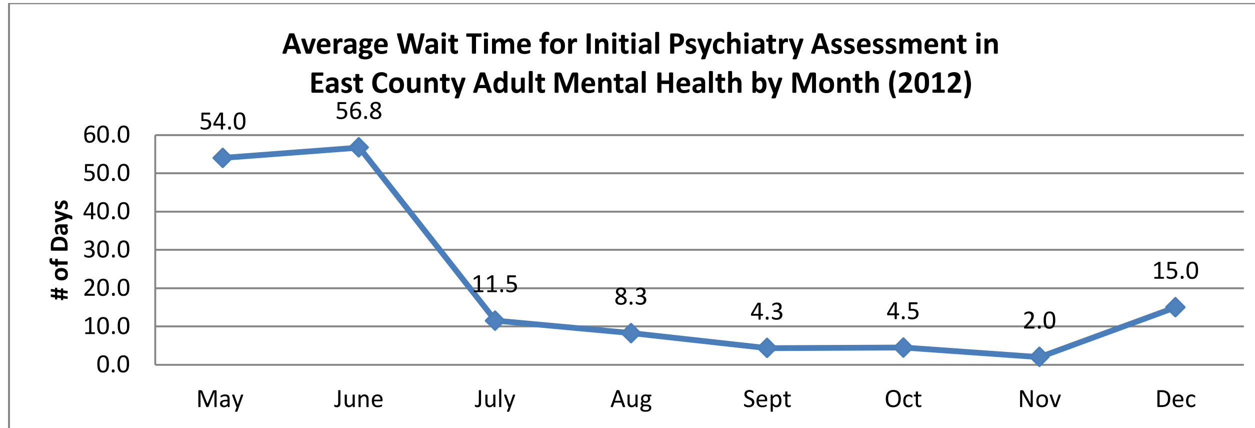
Describe performance indicator	Date of baseline measurement	Baseline measurement (numerator/ denominator)	Goal for % improvement	Intervention applied & dates applied	Date of re-measurement	Re-measurement Results (numerator/ denominator)	% improvement achieved
Average Wait Time to 1st Appointment with a Psychiatrist	*1/2011*	*3,943 total days between initial contact to 1st appointment with psychiatrist* *43 clients used in sample from Q1 (Jan-Mar)* *=97.1 days average wait time for a 1st appt with a psychiatrist*	*60 Days (Standard County Goal)*	*Route new Medi-Cal clients to network providers* *Beginning 7/2011*	*12/31/2012*	*531 total days between initial contact to 1st appointment with psychiatrist* *33 client sample dates* *= 16.1 days average wait time for a 1st appt with a psychiatrist*	*Wait time decreased by 83.4%*
No Show Rate for Adult Psychiatric Appointments	*1/2011*	*1158 No Shows* *5463 Clinic Visits* *=21% No Show Avg*	*15% No Show Rate*	*Hire additional psychiatrists at ECAMH* *7/2012*	*12/31/2012*	*2747 No Shows* *9387 Clinic Visits* *=29% No Show Avg*	*No show average increased 8%*
# of New Clients for ECAMH MD, Dr. Rosenthal	*1/2011*	*149 New Clients* *6 Months(Jan-June) used for Baseline* *= 25 client average per month*	*20 client average per month*	*Route new Medi-Cal clients to network providers* *Beginning 7/2011*	*In 2012,ECAMH revised its intake protocol, eliminating the initial screening performed by Dr. Rosenthal, thus no data was available for this indicator*		
# of New Clients routed to network	*7/2011*	*150 New Clients* *3 months used for baseline (July-Sept)*	*65 client average per month*	*Route new Medi-Cal clients to network*	*12/31/2012*	*864 New Clients* *11 months* *=79 client average*	*Client average increased by 58%*

Describe performance indicator	Date of baseline measurement	Baseline measurement (numerator/ denominator)	Goal for % improvement	Intervention applied & dates applied	Date of re-measurement	Re-measurement Results (numerator/ denominator)	% improvement achieved
provider, Dr. Singh		*=50 client average per month*		*providers* *Beginning 7/2011*		*per month*	
# of New Clients routed to network provider, Pathways to Wellness	*1/2010*	*1255 New Clients from July 2010-June 2011* *12 months used for baseline* *=119.7 client average per month*	*140 client average per month*	*Route new Medi-Cal clients to network providers* *Beginning 7/2011*	*12/31/2012*	*1241 New Clients* *12 months* *=103.4 client average per month*	*Client average decreased by 13.6%*

Increased staffing of psychiatrists at ECAMH has helped improve the average wait time to see a psychiatrist for the first time in East County. Since baseline, ECAMH has added additional psychiatrists, increasing the overall FTE from 3.7 to 7.7. Table 7 below illustrates the trend for wait time in East County during 2012.

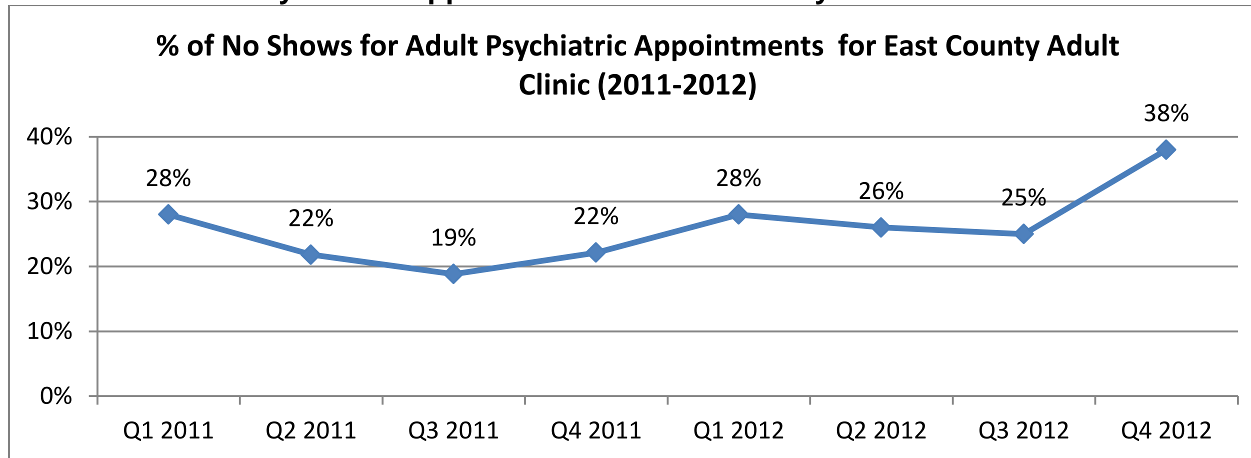
County Region	Staff Psychiatrist Hours (as FTE) at Baseline	Staff Psychiatrist Hours (as FTE) in 2012
East County	**3.7**	**7.7**
Central County	**6.8**	**6.2**
West County	**6**	**1.8**

Table 7: Average Wait Time in Days for 1st Appointment with a Psychiatrist in ECAMH in 2012



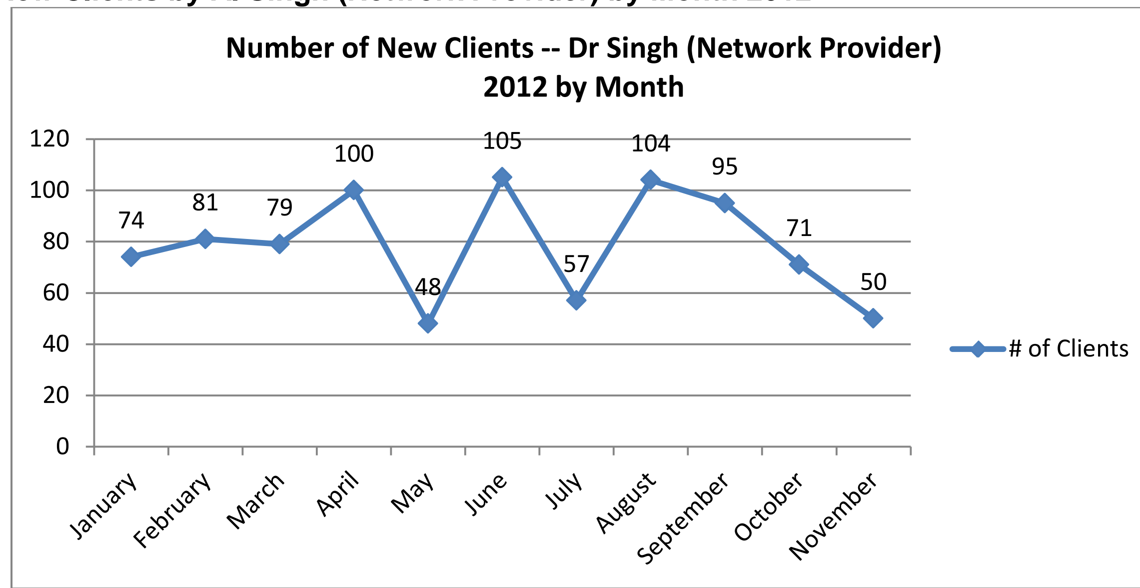
The addition of new psychiatrists in ECAMH was imperative to decreasing appointment wait times. During 2012, the clinic's average wait time for a new client to receive an initial assessment appointment with a psychiatrist dropped from 56.8 days at its peak in 2012 down to 2 days in November. The average wait time for the year was 16.1 days, far below the County's goal of 60 days.

Table 8: % of No Shows for Adult Psychiatric Appointments for East County Adult Clinic in 2011-2012



The average number of appointments classified as client no shows in ECAMH have increased slightly from 21% at baseline to 28% in 2012. Despite the addition of new psychiatrists in July 2012, the average number of no shows peaked at 38% during the fourth quarter in 2012 and overall did not meet the County's goal of 15%. The reason for the large increase in no show rates in Q4 is not clear at present, and it will take some research to understand this fully. It does not appear that there was a disruption in psychiatric availability during this time period, but this will need to be validated further. Another possibility is that there was a change in protocol such that the use of the "no show" procedure code was used more consistently and frequently when clients did not show up for an appointment. Closing the loop on no shows is not a perfect process and cannot be reinforced through the Information System: It is up to the psychiatrist to complete a progress note indicating the client did not show up, which is an administrative burden and not reinforced by inclusion in the productivity report. We are investigating whether the new psychiatrists are more diligently using the no show code, which might account for the large increase. In any event, we will be doing additional training and reminders to all practicing clinicians on the importance of using the no show code when clients miss appointments. This will be an important component in the set up with the new Information System.

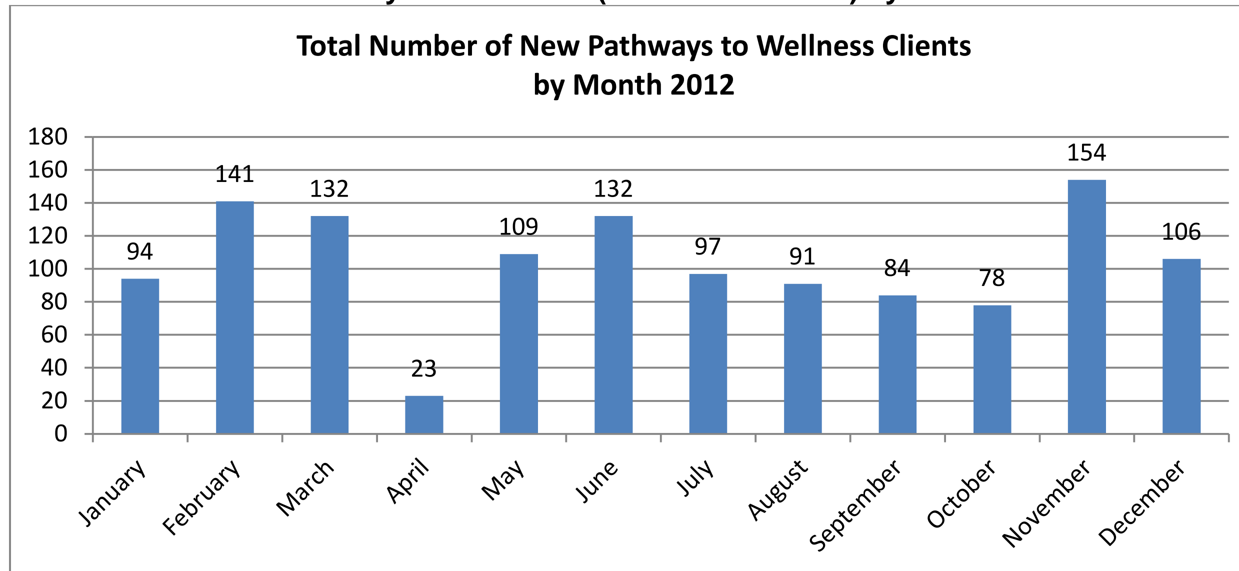
Table 9: Number of New Clients by A. Singh (Network Provider) by Month 2012



Dr.Singh's participation in the provider network in East County has been valuable to CCMH, helping to decrease appointment wait times. Since 2011, the number of new clients referred to Dr. Singh has steadily increased, peaking during April, June and August. The annual average of new clients entering Dr. Singh's practice is 79, an increase from an average of 50 in 2011.

The average number of clients being seen by Pathways to Wellness providers declined slightly compared to baseline. In 2012, there was an average of 103.4 new clients per month, a decrease from 119.7 clients in 2011. The graph below illustrates the trend of new clients by month in 2012.

Table 10: Number of New Clients for Pathways to Wellness (Network Provider) by Month in 2012



"Was the PIP successful?" What are the outcomes?

17. Describe issues associated with data analysis:

a. Data cycles clearly identify when measurements occur.

The data related to the number of clients who were seen for an initial intake appointment as well as the wait time for the first psychiatric appointment is collected by surveying the Access Line for the next available appointments on a weekly basis. The data reflects an estimated date of service as the data is based on appointment availability at the time of contact. Typically, we look at the data on a quarterly basis.

b. Statistical significance

The lag time between the initial call to the Access Line and the first appointment was analyzed using an independent samples T-Test. Baseline was coded as the period before July 1, 2011, when the more major interventions of additional staff resources at ECAMH were added as well as more utilization of MD's on the Provider Network. Data for the baseline period started in June, 2010 and extended until the end of June, 2011. The data indicate a significant trend toward shorter wait times, averaging 95.0 days during the baseline period and 16.1 days in 2012. The difference was statistically significant ($t\ (162)\ t = 10.78, p < .0001$).

c. Are there any factors that influence comparability of the initial and repeat measures?

Although there was noticeable improvement in the indicators between the first year of the PIP and 2012, the method of data collection may influence the comparability of repeat measures. The method of data collection during the initial and repeat measure periods are not consistent, as baseline data was based on actual scheduled appointments and 2012 data was derived from point-in-time phone calls from Access Line staff to the clinics. These calls were made on a weekly basis. As mentioned in the missed appointment analysis, there appears to be an unexpected increase in the ratio of missed appointments. If there has been a substantial change in the use of the no show procedure code, this could have a significant impact on no show trends.

d. Are there any factors that threaten the internal or the external validity?

Staff resources and network provider involvement evolve over time depending on the county hiring process and the timing of resource availability on the Network. The measurement method changed between years one and two. In general, however, the data collected and the relationship between variables (i.e., psychiatric availability/wait time) is relatively transparent and could likely be generalized to other county clinics. The initial data through 2012 is promising in terms of reducing wait times at ECAMH.

18. To what extent was the PIP successful? Describe any follow-up activities and their success.

As presented in Question 17b, the PIP was successful in identifying the dearth of psychiatric services at ECAMH relative to the other adult clinics as well as highlighting the relationship between wait time and psychiatric staff resources. The PIP

team will explore additional interventions to help further alleviate the issue of long appointment wait times by increasing staff resources. Such interventions include establishing protocols to transition more stable clients from psychiatrist case loads and re-assigning to a Psychiatric Nurse Practitioner; using benefits offered through the Professional Shortage Program as incentive to hire additional practitioners; and recommending a new funding stream category that would allow network providers to provide services for clients who have no insurance coverage. Currently, clients who are uninsured must be seen in the County-run clinics only.

The efforts of this PIP will continue throughout the next year. We will again re-assess how different types of appointments are coded, in particular appointments that are made that fall somewhere between current coding of "urgent" and "routine." One option we are considering is whether it would be worth the resources to build a shared database accessible to all the clinics so that the record keeping can occur in real time and the confusion that can happen with paper records and communicating by fax can be eliminated.

19. Describe how the methodology used at baseline measurement was the same methodology used when the measurement was repeated. Were there any modifications based upon the results?

The methodology to obtain data at baseline was different for the collection of subsequent measures. The baseline data was obtained from the service data, from Access Line call log archives and the County's PSP billing database. In 2012, the data collection method was modified. Administrative staff called the Access Line to determine the first and third available date for routine, urgent and hospital discharge appointments. The clerical supervisor for each clinic provides the first and third available appointment dates for psychiatric assessments.

20. Does data analysis demonstrate an improvement in processes or client outcomes?

Results reflect an improvement in the overall access to psychiatric services for new mental health clients in eastern region of Contra Costa, resulting in shorter wait times. A longer study period is needed to see trends in wait times and no show rates. CCMHP will continue to collect data about psychiatric resources and appointment wait times.

21. Describe the "face validity" – how the improvement appears to be the result of the PIP intervention(s).

The challenge of decreasing wait time for appointments involves solutions that are multifaceted. There was a decrease in wait times during the initial months of the PIP and, once the Access Line began referring clients to the provider network, a decrease in the number of new cases coming into ECAMH; however, the degree to which the intervention is the cause of the improvement in wait times will need to be validated.

22. Describe statistical evidence that supports that the improvement is true improvement.

As indicated in the data analysis, there has been a substantial decrease in the average wait times for appointments at East County Adult Mental Health after the intervention period compared to baseline data. The data collected for this PIP are clearly indicative of true improvement.

23. Was the improvement sustained over repeated measurements over comparable time periods?

Yes. Wait time data is collected on an ongoing basis with monthly and quarterly trending, and we have allowed a long baseline period to avoid temporary trends that may distort the data (e.g., a sudden increase due to a particular staff retirement). Nonetheless, additional data is needed to determine if the improvement for the indicators will be sustained. Data collection will continue in 2013.

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[i] Marian E. Williams, James Latta and Persila Conversano. Eliminating The Wait For Mental Health Services. The Journal for Behavioral Health Services and Research. Vol 35, No. 1107-114

[ii] F. P. M. L. Peeters and H. Bayer. No-show' for initial screening at a community mental health centre: rate, reasons and further help-seeking. Social Psychiatry and Psychiatric Epidemiology Volume 34, Number 6, 323-327

[iii] Marian E. Williams, James Latta and Persila Conversano. Eliminating The Wait For Mental Health Services. The Journal for Behavioral Health Services and Research. Vol 35, No. 1107-114

[iv] Gallucci, Gerard, M.D., M.H.S., Swartz, Wayne LCSW-C, Hackerman, Florence LCPC. Impact of the Wait for an Initial Appointment on the Rate of Kept Appointments at a Mental Health Center. Psychiatric Services. Vol 56:344-346 March 2005

[v] Average number of calls between 1/1/2011 and 9/30/2011. Source: AVAYA Reports

[vi] Gallucci, Gerard, M.D., M.H.S., Swartz, Wayne LCSW-C, Hackerman, Florence LCPC. Impact of the Wait for an Initial Appointment on the Rate of Kept Appointments at a Mental Health Center. Psychiatric Services. Vol 56:344-346 March 2005

[vii] Gallucci, Gerard, M.D., M.H.S., Swartz, Wayne LCSW-C, Hackerman, Florence LCPC. Impact of the Wait for an Initial Appointment on the Rate of Kept Appointments at a Mental Health Center. Psychiatric Services. Vol 56:344-346 March 2005