
Contra Costa Mental Health System of Care Needs Assessment

November 2016

Contra Costa Behavioral Health
Services

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Executive Summary

Contra Costa Behavioral Health Services (CCBHS) conducted a quantitative assessment of public mental health need in preparation for developing the Fiscal Year 2017-20 Mental Health Services Act (MHSA) Three Year Program and Expenditure Plan (Three Year Plan). This data driven analysis complements the Community Program Planning Process (CPPP), where interested stakeholders provided input on priority needs and suggested strategies to meet these needs.

Data was obtained to determine whether CCBHS was a) reaching the people it is mandated to serve, b) appropriately allocating its resources to provide a full spectrum of care, and c) experiencing any significant workforce shortfalls.

Benchmarks for the CCBHS target population were established for the county and county regions (East, Central, West) as well as by race/ethnicity, age group and identified gender to determine whether CCBHS was serving more or less than these benchmarks. Benchmarks for appropriate resourcing by level of mental health care, ranging from locked facilities to basic services for prevention and health maintenance, were also established to determine whether the level of funding CCBHS spent on each level met recommended standards. Finally, all CCBHS position classifications were reviewed to determine whether any significant shortfalls existed between authorized versus filled positions, staffing demographics, and bi-lingual staff.

Data analysis supports that CCBHS is serving the number of clients that approximate the estimated number of individuals requiring services, and serves more eligible clients than the majority of counties in California. This is based upon prevalence estimates and penetration rates of low income children with serious emotional disturbance and adults with a serious mental illness as compared with other counties. In addition, regions and sub-populations within Contra Costa County are generally appropriately represented, with the exception of Asian/Pacific Islanders, Latina/os, children ages 0-5 years, and adults ages 60 and over as being somewhat underrepresented in each region when compared to other sub-populations within Contra Costa County.

Fiscal Year 2015-16 expenditure data indicate services were available at every level of care as defined by the Level of Care Utilization System (LOCUS/CALOCUS). However, compared to benchmarks, CCBHS over spends on the most acute level of in-patient care (Level 6), and is below the benchmark in expenditures related to programs providing high intensity community-based services (Levels 4 and 5).

Workforce analysis indicates a significant shortage of psychiatry time, both in county positions as well as contract psychiatrists. Compounding the issue of filling vacant psychiatrist positions is that Contra Costa County reimburses psychiatrists at a lower rate than neighboring counties. Latina/o and Asian/Pacific Islander populations are under-represented among county staff when compared to the county population. Finally, CCBHS has incrementally increased the number of bilingual staff each year, and has made available as needed phone, in-person and video interpretation services.

This quantitative needs assessment suggests attention in the following areas:

- Outreach and engagement strategies for identified underserved populations across the county
- Improve capacity to assist consumers move from locked facilities to community based services

- Explore strategies to recruit and retain psychiatrists and staff representing underserved populations

I. Introduction

This report addresses three questions:

- a. Is Contra Costa Behavioral Health Services (CCBHS) reaching the target population it is mandated to serve?
- b. Is CCBHS apportioning its funding to ensure it is providing a full spectrum of mental health care and meeting established allocation benchmarks?
- c. Is CCBHS adequately addressing its Mental Health Plan workforce needs?

The Mental Health Services Act (MHSA) directs county mental health programs to prepare and submit an integrated three year program and expenditure plan (Plan) for services funded by MHSA.

Furthermore, each county shall provide for a community program planning process as the basis for developing Three Year Plans and Annual Plan Updates. In partnership with stakeholders, the planning process is to 1) identify community issues related to mental illness resulting from lack of community services and supports, 2) analyze the mental health needs in the community, and 3) identify and re-evaluate priorities and strategies to meet those mental health needs.

CCBHS is currently undertaking a community program planning process to inform the development of the MHSA Three Year Program and Expenditure Plan for Fiscal Years 2017/2018 through 2019/2020. The community program planning processes which informed the MHSA Three Year Program and Expenditure Plan for Fiscal Years 2014/2015 through 2016/2017 and its Annual Updates primarily utilized qualitative data studies to identify system needs. While qualitative data provides useful descriptions and observations, quantitative data is needed to provide a more objective complement to subjective experiences and observations. Qualitative data is often used to inform the type and amount of quantitative data to be collected to inform an evaluation. Therefore, in combination with qualitative information gathered through community engagement events, a quantitative needs assessment will ascertain if there are any discrepancies, or gaps, in the Mental Health System of Care, and to identify unserved or underserved populations.

A needs assessment is a systematic set of procedures used to determine if there are differences between current and desired conditions. Often, it also examines the nature and causes of the discrepancies and assists agencies in setting priorities for operations. Such information is fundamental for the community program planning process as it assists CCBHS and stakeholders to determine if the system of care is serving the target populations it is mandated to serve with a spectrum of services that address basic needs for care.

This needs assessment was guided by the findings of previous community program planning processes, which included key informant interviews, focus groups, and community forums. Stakeholders participating in the community program planning processes identified the following significant shortfalls as priority needs, and weighed in on strategies to improve access to services, quality and levels of

service provided, integration of effort, accountability, and stakeholder participation in planning and evaluation¹:

- Getting to and from services
- Navigating the system
- Culturally/linguistically appropriate outreach and engagement
- Serve those who need it the most
- Crisis response
- Housing and homeless services
- Assistance with meaningful activity
- Children in-patient beds
- Supporting family members and significant others
- Support for peer and family partners
- Care for homebound frail and elderly
- Intervening early in psychosis
- Integration between levels of care
- Integration between service providers
- Trauma informed care
- Education through social media
- Improved program response
- Increased funding
- Persons with developmental and mental health issues
- Youth with co-occurring mental health and substance abuse issues
- Support our behavioral health workers

Additionally, the extensive outreach and data collection effort conducted as part of the 2005 MHSA planning process identified a number of specific barriers to care in Contra Costa County, to include issues related to cultural and linguistic competencies. Related barriers were identified as²:

1. Not enough linguistically and/or culturally/ethnically diverse staff
2. Not enough culturally appropriate/culturally specific services and interventions
3. Lack of integration of mental health outreach and services with existing ethnic communities, agencies and faith-based organizations
4. Difficult location of services – often far from lower income, ethnically diverse neighborhoods.
5. Lack of culturally/linguistically based outreach efforts
6. Lack of staff trained to be sensitive to different cultures

These barriers and suggested system improvements have guided the development of this needs assessment, meant to enhance the community program process by addressing three questions, 1) is CCBHS reaching the target population it is mandated to serve, 2) is CCBHS apportioning its funding to

¹ Contra Costa Behavioral Health Services. “Mental Health Services Act Plan Update Fiscal Year 2016-2017”. 2016. Available at: <http://cchealth.org/mentalhealth/pdf/2016-0920-MHSA-Plan.pdf>.

² Contra Costa Mental Health Administration. “Mental Health Services Act (MHSA) Three-Year Program and Expenditure Plan Community Services and Supports Fiscal Years 2005-06, 2006-07, and 2007-08”. 2005.

ensure it is providing a full spectrum of mental health care and meeting established allocation benchmarks, and 3) is CCBHS adequately addressing its Mental Health Plan workforce needs?

When appropriate, the data outlined below will also provide recommendations for further research as well as for addressing identified system needs with existing resources. The needs assessment report includes a detailed description of the methodology used to analyze data, a results section outlining major findings, the limitations of this report, and recommendations for addressing findings.

II. Methodology

Qualitative needs assessments conducted during prior years' community programming planning processes were reviewed and general findings used to identify appropriate indicators for this quantitative needs assessment. When appropriate, citations from previous needs assessments were used to identify data sources. An extensive literature search was conducted to establish service and expenditure benchmarks for public mental health systems of care. A methodology was then developed to collect and analyze data to answer the three research questions posed by this needs assessment. When appropriate, a determination was made as to whether data collected through prior community programming planning processes supported the findings of the current needs assessment and, if not, the reasons for the discrepancies.

The methodology section below is divided into three parts. The first, *Prevalence, Numbers Served, and Penetration Rates*, addresses the question, "is CCBHS reaching the target population it is mandated to serve?" The second, *Spectrum of Services and Service Expenditures*, addresses the question, "is CCBHS apportioning its funding to ensure it is providing a full spectrum of mental health care and meeting established allocation benchmarks?" The third, *Contra Costa Behavioral Health Services Staffing*, addresses the question, "is CCBHS adequately addressing its Mental Health Plan workforce needs?"

i. *Prevalence, Numbers Served, and Penetration Rates*

In order to address the question, "is CCBHS reaching the target population it is mandated to serve?", county prevalence³ and penetration⁴ rates were analyzed and compared to state benchmarks. As part of the planning process for implementation of the Affordable Care Act, the California Department of Health Care Services utilized existing mental health prevalence studies to create prevalence estimates

³ Prevalence is the proportion of people in a population who have a particular disease at a specified point in time.

⁴ Penetration rates are used by CCBHS Mental Health to evaluate the accessibility of services for different populations of MediCal eligible clients. Penetration rate refers to the proportion of eligible MediCal service units being utilized by mental health consumers in Contra Costa County. CCBHS Mental Health calculates penetration rates by dividing the number of MediCal eligible clients who accessed services from CCBHS Mental Health by the total number of MediCal eligible clients in the county. This calculation results in the proportion of MediCal eligible clients who access services.

$$\text{Penetration Rate} = \left(\frac{\text{Number of MediCal eligible clients who accessed services from CCMH}}{\text{Total number of MediCal eligible clients in CCC}} \right)$$

for each county in California⁵. The prevalence estimate for Contra Costa County was applied to census estimates to determine an estimate of the number of individuals with serious mental illness in Contra Costa County. This number was then compared to the number of individuals served by CCBHS Mental Health to determine what proportion of potential clients have been served by CCBHS. Estimates for three years (2013-2015) were compared to identify trends. PSP/INSYST⁶ billing data was used to identify the number of individuals served by CCBHS Mental Health. No filters⁷ were used when extracting the total number of clients served from the PSP/INSYST billing system so all providers and service types were included in this data.

However, the benchmark described above is for the total population. CCBHS Mental Health is primarily responsible for providing mental health services to individuals with moderate to severe mental illness who are MediCal eligible, indigent, or uninsured, not the entire population of individuals with serious mental illness. In order to create benchmarks to be used to ascertain whether CCBHS is reaching its target population, prevalence rates for serious mental illness for Contra Costa County's population below 200 percent poverty⁸ were applied to estimates of the County's population below 200 percent poverty level based upon population statistics taken from the Healthcare Workforce Development Division of Office of Statewide Health Planning and Development (OSHPD) "Medical Service Study Areas (MSSA)" county census data. With the purpose of establishing estimates for the population below 200 percent poverty, the 2010 OSHPD census data was used to determine the proportion of the Contra Costa County population that was below 200 percent poverty in 2010. This proportion was then applied to the census estimates for total population to establish estimates for the population below 200 percent poverty for the years 2013 through 2015. The estimated number of individuals with serious mental illness who are below 200 percent poverty was compared to the total number of individuals served by CCBHS Mental Health

PSP/INSYST billing data was also used to identify the number of individuals served by CCBHS Mental Health who were MediCal eligible at least one month during the calendar year. No filter was placed on MediCal type when the data was extracted from the billing system; all eligible clients were included regardless of MediCal type. The number of MediCal eligible clients was compared to the prevalence estimates for the population below 200 percent poverty.

Next, penetration rates, the percentage of individuals' eligible for services actually served by CCBHS Mental Health, were used to identify if any populations were underserved. CCBHS Mental Health penetration rates were compared to statewide average penetration rates to verify whether CCBHS Mental Health was reaching populations at the same rate as other counties. CCBHS Mental Health penetration rates were analyzed by racial/ethnic group, age group, gender, and region of the county to

⁵ Department of Health Care Services Task Team. "California Mental Health Prevalence Estimates". 2012. Available at: <http://www.dhcs.ca.gov/provgovpart/Documents/CaliforniaPrevalenceEstimates.pdf> . Accessed on 8/10/2016.

⁶ PSP (Poolman, Shih and Platten) INSYST is a patient tracking and billing computer system created for county behavioral health providers in California.

⁷ Filters are used when extracting data from the PSP/INSYST billing system to obtain subsets of data. When no filters are used, an entire data set is extracted.

⁸ This refers to the population whose income is 200 of the federal poverty level or below. It is a common benchmark used to define low income populations.

establish if any subpopulations were underserved or unserved. PSP/INSYST billing data was used to calculate the number of individuals within each subpopulation served by CCBHS Mental Health. Note, the business logic⁹ used to extract penetration rate data from PSP/INSYST was different from the business logic used to determine the total number of clients served. Since the PSP/INSYST penetration rate reports showed Mental Health MediCal eligible clients versus the MediCal eligible population county-wide, the report is based entirely on MediCal eligibility data, regardless of services. Therefore, the penetration rate numbers do not exactly match the total number served, which is based on service data. MediCal eligibility data was used as the denominator for penetration rates since the majority of low-income individuals were eligible for MediCal, and, therefore, a potential client for the public mental health system.

ii. Spectrum of Services and Program Expenditures

In order to address the question, “is CCBHS apportioning its funding to ensure its providing a full spectrum of mental health care and meeting established allocation benchmarks?”, county mental health expenditures were compared to benchmarks established by the Mental Health Association in California in 1981¹⁰. Additionally, these expenditure benchmarks were mapped to the Level of Care Utilization Services/Child and Adolescent Level of Care Utilization Serves (LOCUS/CALOCUS) levels of care to assist in identifying service gaps in the CCBHS Mental Health continuum of care. Mental Health Association in California recommended expenditures for each service level were divided by the total recommended expenditures for a public mental health system of care to calculate the recommended percentage to be allocated to each level of care. The Mental Health Association in California levels of care were mapped to the LOCUS/CALOCUS levels of care. Because many of the same clients were served by Level 4 and Level 5 programs, the decision was made to combine the expenditures for these levels of care. Additionally, Level 1 and Level 2 expenditures were combined because many of the programs included in these levels of care provide services to both Level 1 and Level 2 clients, making it difficult to credibly attribute expenditures to a single level of care.

CCBHS Mental Health expenditures for FY 15/16 were extracted from the Contra Costa County Auditor’s Intranet Site by Organizational Number. When all programs within an Organizational Number fell within a single LOCUS/CALOCUS level of care, the total expenditures were assigned to the level of care. When programs within an Organizational Number aligned with different levels of care, expenditures were grouped by program and the program expenditures were assigned to the appropriate levels of care. Total expenditures were calculated for each level of care and compared to the FY 15/16 Expenditure Report for Department Code 0467 (CCBHS Mental Health) to ensure all costs were included. Approximately \$25 was unaccounted for when adding up costs by level of care as compared to the FY 15/16 Expenditure Report. Because this discrepancy was insignificant, it was disregarded. Administrative costs were evenly distributed across each level of care (from 0 to 6). Expenditures for each

⁹ Business logic describes the specific sequence of procedural steps required to extract data from the database. It is the programming that manages the communication between a user and a database.

¹⁰ Mental Health Association in California. “A Model for California Community Mental Health Programs”. 1981. Pages 27-29. Available at:

http://histpubmh.semel.ucla.edu/sites/default/files/archival/d8485804_Doc_7_1981_California_Model.pdf.

LOCUS/CALOCUS level of care was divided by the total expenditures to calculate a percentage of expenditures for each level of care. This percentage was then compared to the benchmark for recommended expenditures for each level of care. When the CCBHS Mental Health percentage expenditures did not match the benchmark, the difference was noted. This comparison allowed over and under expenditures to be highlighted.

iii. Contra Costa Behavioral Health Services Staffing

To address the question, “is CCBHS adequately addressing its Mental Health Plan workforce needs?”, psychiatry vacancies, psychiatrist salaries, staff demographics, and staff language capacity were analyzed.

Qualitative data gathered during previous community program planning processes and quality improvement activities indicated Contra Costa County struggles to fill and retain psychiatrist positions. To assess the validity of this finding, the total number of psychiatrist positions, both county and contract, were compared to filled positions as well as actual hours worked. To aid in identifying possible reasons for hiring challenges, psychiatric salary ranges were taken from the county human resource websites of Contra Costa County and its neighbors to determine if there is parity in compensation. High and low steps of each classification were averaged to determine the mid-range salary for each classification. Alameda County had five psychiatry classifications, Marin County had two classifications, San Francisco County had three classifications, and Solano County had four classifications. An average of each county’s mid-range salaries was calculated using all relevant classifications. Note, Contra Costa County only had one relevant classification.

The qualitative data also indicated language as well as cultural barriers and staff demographics may have been impediments to care for underserved populations. To verify these findings with quantitative data, a study of staff demographics was taken from the Workforce Education and Training Plan study presented in the 2010 Cultural Competency Plan¹¹ and inserted into this report. Finally, the findings from a quality improvement study of the bilingual capacity of CCBHs Mental Health staff and interpretation use was inserted into this report.

III. Results

The results section below is divided into three parts. The first, *Prevalence, Numbers Served, and Penetration Rates*, addresses the question, “is CCBHS reaching the target population it is mandated to serve?” The second, *Spectrum of Services and Service Expenditures*, addresses the question, “is CCBHS apportioning its funding to ensure it is providing a full spectrum of mental health care and meeting established allocation benchmarks?” The third, *Contra Costa Behavioral Health Services Staffing*, addresses the question, “is CCBHS adequately addressing its Mental Health Plan workforce needs?”

i. Prevalence, Numbers Served, and Penetration Rates

¹¹ Contra Costa County Mental Health Services. “Cultural Competence Plan Three Year Plan Fiscal Year 2010-11, 2011-12, 2012-13”. 2010 (Revised). Page 91. Available at: http://cchealth.org/mentalhealth/pdf/2010_cultural_competence_plan.pdf

Contra Costa County Mental Health Prevalence Rates

Table 1: Estimated Prevalence of Serious Mental Illness in Contra Costa County, Calendar Years 2013-2015 outlines the prevalence, or frequency, of serious mental illness among the total population of Contra Costa County.

Calendar Year	Total Population ¹²	County Prevalence Rate for SMI (Total Population) ¹³	Estimated Prevalence of SMI (Total Population)	Total Number Served by CCBHS Mental Health	Percent of Estimated Individuals with SMI Served by CCBHS Mental Health (All Mental Health Clients)
2013	1,095,959	4.26%	46,688	21,497	46.0%
2014	1,111,710		47,359	22,716	48.0%
2015	1,126,745		47,999	22,848	47.6%

The Contra Costa County prevalence rate for serious mental illness is 4.26 percent. In 2013, an estimated 46,688 individuals had a serious mental illness, the total number of individuals served by CCBHS Mental Health was 21,497, and the percent of estimated individuals with serious mental illness served by CCBHS Mental Health was 46.0 percent. In 2014, the percent of estimated individuals with serious mental illness served by CCBHS Mental Health increased to 48.0 percent. In 2015, the percent of estimated individuals with serious mental illness served by CCBHS Mental Health was 47.6 percent. CCBHS Mental Health consistently serves just under half of the estimated county population with serious mental illness.

However, CCBHS Mental Health is primarily responsible for providing mental health services to individuals with moderate to severe serious mental illness who are Medi-Cal eligible, indigent, or uninsured, not the entire population of individuals with serious mental illness. *Table 2: Estimated Prevalence of Serious Mental Illness in Contra Costa County for Households Below 200% Poverty, Calendar Years 2013-2015* outlines the prevalence of serious mental illness among households in Contra Costa County below 200% poverty, the target population for CCBHS Mental Health.

¹² United States Census. Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2015. 2015 Population Estimates. Available at:

<http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk> . Accessed on 8/10/2016.

¹³ Department of Health Care Services Task Team. "California Mental Health Prevalence Estimates". 2012. Available at: <http://www.dhcs.ca.gov/provgovpart/Documents/CaliforniaPrevalenceEstimates.pdf> . Accessed on 8/10/2016.

Table 2: Estimated Prevalence of Serious Mental Illness in Contra Costa County for Households Below 200% Poverty, Calendar Years 2013-2015

Calendar Year	Population Households Below 200% Poverty ¹⁴	County Prevalence Rate for SMI (Households Below 200% Poverty) ¹⁵	Estimated Prevalence of SMI (Households Below 200% Poverty)	Total Number Served by CCBHS Mental Health	Percent of Estimated Individuals with SMI Served by CCBHS Mental Health (All Mental Health Clients)	Total MediCal Clients Served by CCBHS	Percent of Estimated Individuals with SMI Served by CCBHS Mental Health (MediCal Clients)
2013	237,823	8.13%	19,335	21,497	111.2%	14,886	77.0%
2014	241,241		19,613	22,716	115.8%	18,889	96.3%
2015	244,504		19,878	22,848	114.9%	19,733	99.3%

Low income populations have greater prevalence of serious mental illness than the general population, 8.13 percent in Contra Costa County. In 2013, the estimated number of individuals below 200 percent poverty with serious mental illness was 19,335, the total number of individuals served by CCBHS Mental health was 21,497, and the percent of estimated number of individuals below 200 percent poverty with serious mental illness served by CCBHS Mental Health was 111.2 percent. In 2014, the percent of estimated number of individuals below 200 percent poverty with serious mental illness served by CCBHS Mental Health increased to 115.8 percent. In 2015, the percent of estimated number of individuals below 200 percent poverty with serious mental illness served by CCBHS Mental Health was 114.9 percent. CCBHS consistently served more than 100 percent of the estimated number of individuals with serious mental illness who were below 200 percent poverty. If one only considers clients eligible for MediCal, the percent of estimated number of individuals below 200 percent poverty with serious mental illness served by CCBHS increased from 77.0 percent in 2013 to 99.3 percent in 2015. Note, while the number of individuals with MediCal eligibility served by CCBHS Mental Health increased, from 14,886 in 2013 to 19,733 in 2015, there was still a proportion of clients who were uninsured.

Contra Costa County Penetration Rates

CCBHS Mental Health penetration rates, the percentage of individuals' eligible for services actually served by CCBHS Mental Health, were compared to statewide averages for the same populations to determine if CCBHS Mental Health is serving a similar proportion of clients as other counties in

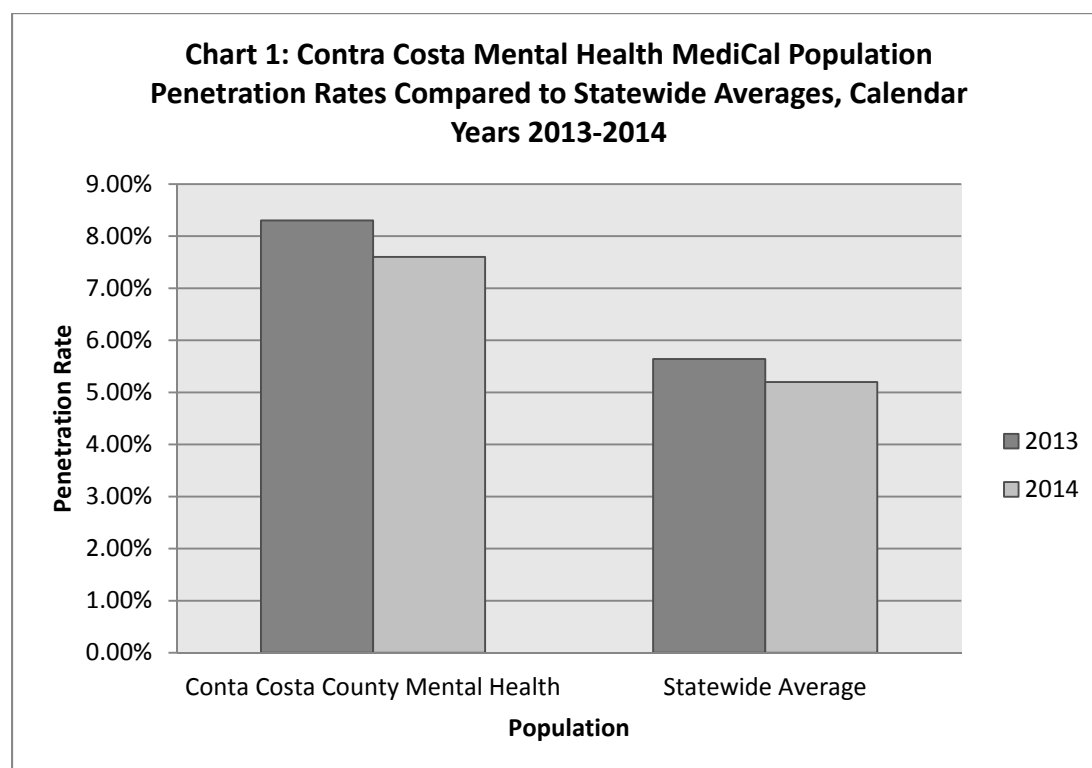
¹⁴Healthcare Workforce Development Division of Office of Statewide Health Planning and Development. "Medical Service Study Areas (MSSA)". 2013. Available at: <http://www.oshpd.ca.gov/hwdd/MSSA/index.html> . Accessed on 8/10/2016.

¹⁵Department of Health Care Services Task Team. "California Mental Health Prevalence Estimates". 2012. Available at: <http://www.dhcs.ca.gov/provgovpart/Documents/CaliforniaPrevalenceEstimates.pdf> . Accessed on 8/10/2016.

California. *Table 3 and Chart 1: Contra Costa Mental Health MediCal Population Penetration Rates Compared to Statewide Averages, Calendar Years 2013-2014*, outline overall county penetration rates.

Table 3: Contra Costa Mental Health MediCal Population Penetration Rates Compared to Statewide Averages, Calendar Years 2013-2014

Calendar Year	Number MediCal Eligible Population Served by Mental Health	MediCal Eligible Population, Countywide	Penetration Rate	Statewide Average Penetration Rate ¹⁶
2013	15,341	185,417	8.3%	5.64%
2014	19,343	254,658	7.6%	5.2%



The CCBHS Mental Health penetration rates for the MediCal population in 2013, 8.3 percent, and 2014, 7.6 percent, were greater than the statewide average penetration rates for the same population, 5.64 percent and 5.2 percent respectively.

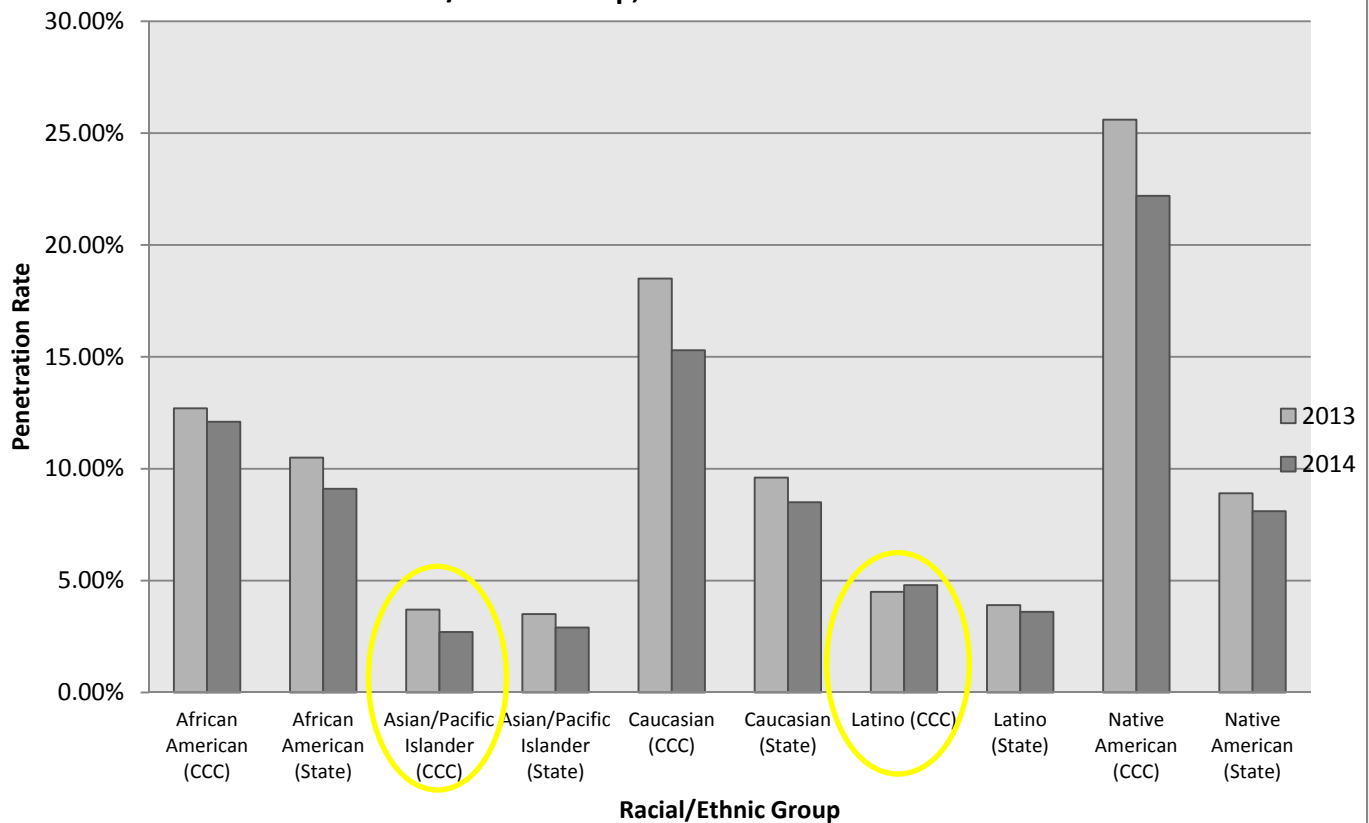
¹⁶ APS Healthcare. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2013". 2014. And Behavioral Health Concepts. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2014". 2015.

Next, penetration rates were compared by racial/ethnic group and compared to statewide averages for the same populations (*Table 4: Contra Costa Mental Health MediCal Population Penetration Rates by Racial/Ethnic Group, Calendar Years 2013-2015 and Chart 2: Contra Costa Mental Health MediCal Population Penetration Rates by Racial/Ethnic Group, Calendar Years 2013-2014*).

Race/Ethnicity	Calendar Year	Number MediCal Eligible Population Served by Mental Health	MediCal Eligible Population, Countywide	Penetration Rate for Racial/Ethnic Group	Statewide Average Penetration Rate for Racial/Ethnic Group¹⁷
African American					
	2013	4,248	33,526	12.7%	10.5%
	2014	4,963	41,104	12.1%	9.1%
	2015	5,085	45,445	11.2%	
Asian/Pacific Islander					
	2013	776	20,996	3.7%	3.5%
	2014	1,028	37,743	2.7%	2.9%
	2015	1,110	44,862	2.5%	
Caucasian					
	2013	6,091	32,907	18.5%	9.6%
	2014	8,021	52,433	15.3%	8.5%
	2015	8,587	59,085	14.5%	
Latino					
	2013	3,280	72,503	4.5%	3.9%
	2014	4,032	84,244	4.8%	3.6%
	2015	4,518	90,490	5.0%	
Native American					
	2013	154	601	25.6%	8.9%
	2014	178	801	22.2%	8.1%
	2015	191	934	20.4%	
Other					
	2013	327	15,415	2.1%	5.9%
	2014	436	26,139	1.7%	6.1%
	2015	441	32,116	1.4%	
Unknown					
	2013	465	9,469	4.9%	
	2014	685	12,194	5.6%	
	2015	725	12,479	5.8%	
Total					
	2013	15,341	185,417	8.3%	5.64%
	2014	19,343	254,658	7.6%	5.2%
	2015	20,657	285,411	7.2%	

¹⁷ APS Healthcare. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2013". 2014. And Behavioral Health Concepts. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2014". 2015.

Chart 2: Contra Costa Mental Health MediCal Population Penetration Rates by Racial/Ethnic Group, Calendar Years 2013-2014

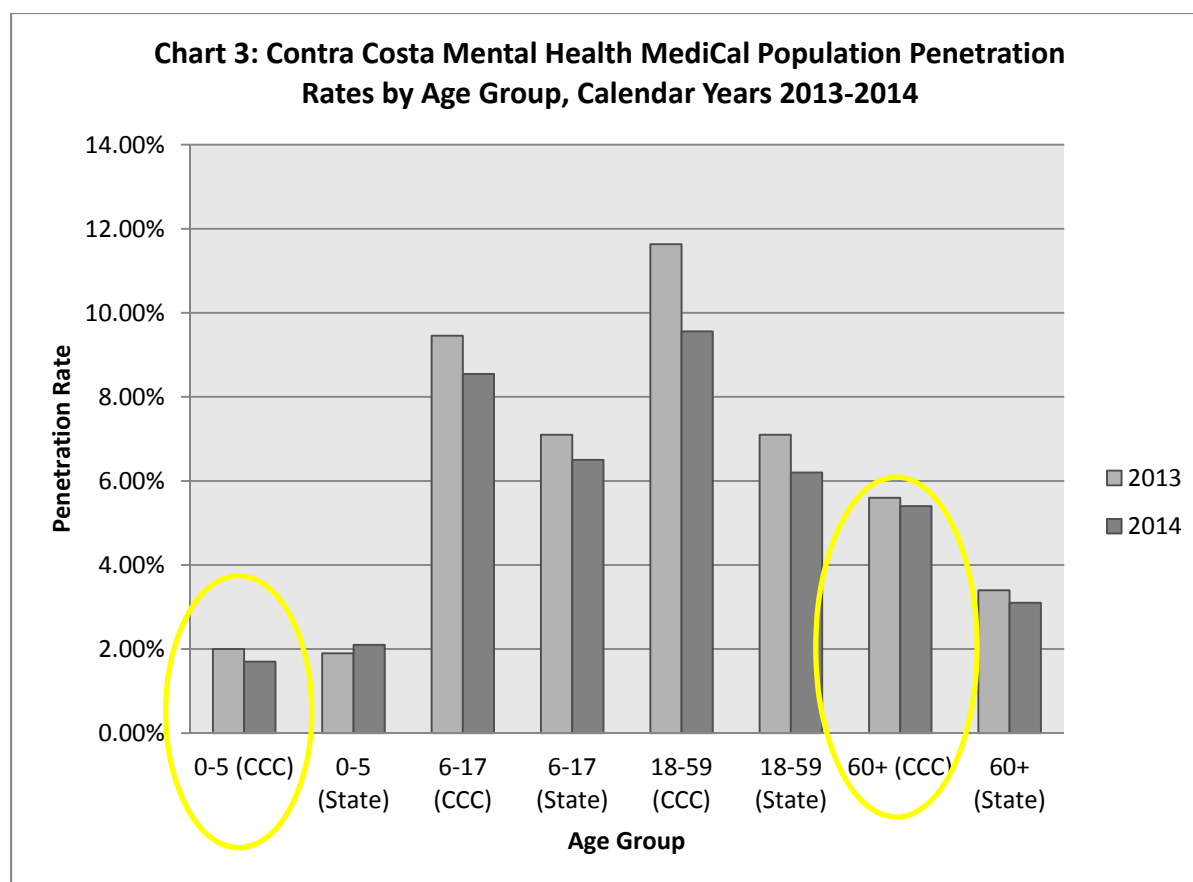


With the exception of the “Other” population, which is comprised of individuals of mixed race/ethnicity as well as individuals who identify with a racial/ethnic group not listed in the table and whose composition varies from county to county, CCBHS Mental Health penetration rates for racial/ethnic groups were greater than or equal to the statewide average penetration rates for the same groups. The Caucasian (18.5 percent in 2013, 15.3 percent in 2014, and 14.5 percent in 2015) and Native American (25.6 percent in 2013, 22.2 percent in 2014, and 20.4 percent in 2015) populations had the highest penetration rates in Contra Costa County. The Asian/Pacific Islander (3.7 percent in 2013, 2.7 percent in 2014, and 2.5 percent in 2015) and Latino (4.5 percent in 2013, 4.8 percent in 2014, and 5.0 percent in 2015) populations had the lowest penetration rates among the racial/ethnic groups. Penetration rates at the local and state level decreased between 2013 and 2015, likely due to the increase in individuals eligible for MediCal as part of the Medicaid expansion.

Contra Costa Mental Health penetration rates were then compared by age group and compared to statewide averages for the same populations (*Table 5: Contra Costa Mental Health MediCal Population Penetration Rates by Age Group, Calendar Years 2013-2015 and Chart 3: Contra Costa Mental Health MediCal Population Penetration Rates by Age Group, Calendar Years 2013-2014*).

Table 5: Contra Costa Mental Health MediCal Population Penetration Rates by Age Group, Calendar Years 2013-2015					
Age Group	Calendar Year	Number MediCal Eligible Population Served by Mental Health	MediCal Eligible Population, Countywide	Penetration Rate for Age Group	Statewide Average Penetration Rate for Age Group ¹⁸
0-5					
	2013	770	37,853	2.0%	1.9%
	2014	698	39,910	1.7%	2.1%
	2015	743	38,844	1.9%	
6-12					6-17
	2013	2,428	32,789	7.4%	7.1%
	2014	2,521	38,106	6.6%	6.5%
	2015	2,575	37,566	6.9%	
13-17					
	2013	2,547	19,817	12.9%	
	2014	2,794	24,080	11.6%	
	2015	2,876	23,656	12.1%	
18-21					18-59
	2013	891	10,852	8.2%	7.1%
	2014	1,109	15,841	7.0%	6.2%
	2015	1,214	18,036	6.7%	
22-59					
	2013	7,348	59,965	12.3%	
	2014	10,594	106,587	9.9%	
	2015	11,422	132,828	8.6%	
60+					
	2013	1,357	24,141	5.6%	3.4%
	2014	1,627	30,134	5.4%	3.1%
	2015	1,827	34,481	5.3%	
Total					
	2013	15,341	185,417	8.3%	5.64%
	2014	19,343	254,658	7.6%	5.2%
	2015	20,657	285,411	7.2%	

¹⁸ APS Healthcare. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2013". 2014. And Behavioral Health Concepts. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2014". 2015.

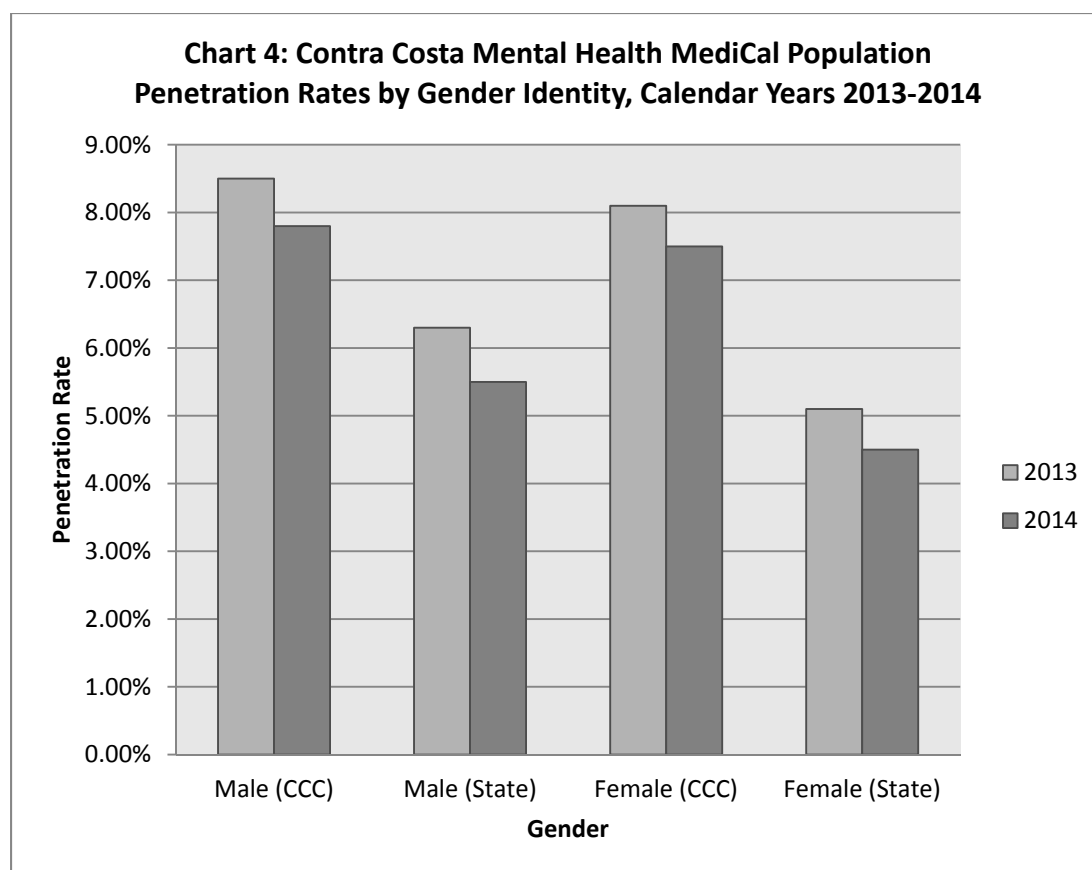


For all but one population, the 0 to 5 in 2014, CCBHS Mental Health penetration rates for all age groups were greater than the statewide average penetration rates for the same groups. The 13 to 17 (12.9 percent in 2013, 11.6 percent in 2014, and 12.1 percent in 2015) and 22 to 59 (12.3 percent in 2013, 9.9 percent in 2014, and 8.6 percent in 2015) populations had the highest penetration rates in Contra Costa County. The 0 to 5 (2.0 percent in 2013, 1.7 percent in 2014, and 1.9 percent in 2015) and 60+ (5.6 percent in 2013, 5.4 percent in 2014, and 5.3 percent in 2015) populations had the lowest penetration rates among the age groups. Penetration rates at the local and state level decreased between 2013 and 2015, likely due to the increase in individuals eligible for MediCal as part of the Medicaid expansion.

Contra Costa Mental Health penetration rates were compared by gender group and compared to statewide averages for the same populations (*Table 6: Contra Costa Mental Health MediCal Population Penetration Rates by Gender Identity, Calendar Years 2013-2015* and *Chart 4: Contra Costa Mental Health MediCal Population Penetration Rates by Gender Identity, Calendar Years 2013-2014*).

Table 6: Contra Costa Mental Health MediCal Population Penetration Rates by Gender Identity, Calendar Years 2013-2015					
Gender Identity	Calendar Year	Number MediCal Eligible Population Served by Mental Health	MediCal Eligible Population, Countywide	Penetration Rate for Gender Group	Statewide Average Penetration Rate for Gender¹⁹
Male					
	2013	6,884	81,046	8.5%	6.3%
	2014	8,954	115,386	7.8%	5.5%
	2015	9,555	130,244	7.3%	
Female					
	2013	8,457	104,371	8.1%	5.1%
	2014	10,388	139,272	7.5%	4.5%
	2015	11,100	155,167	7.2%	
Unknown					
	2013	0	0	N/A	
	2014	1	0	N/A	
	2015	2	0	N/A	
Total					
	2013	15,341	185,417	8.3%	5.64%
	2014	19,343	254,658	7.6%	5.2%
	2015	20,657	285,411	7.2%	

¹⁹ APS Healthcare. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2013". 2014. And Behavioral Health Concepts. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2014". 2015.



The penetration rate for the Male population was 8.5 percent in 2013, 7.8 percent in 2014, and 7.3 percent in 2015. The statewide penetration rate for the Male population was 6.3 percent in 2013, and 5.4 percent in 2014. The penetration rate for the Female population was 8.1 percent in 2013, 7.5 percent in 2014, and 7.2 percent in 2015. The statewide penetration rate for the Female population was 5.1 percent in 2013, and 4.5 percent in 2014.

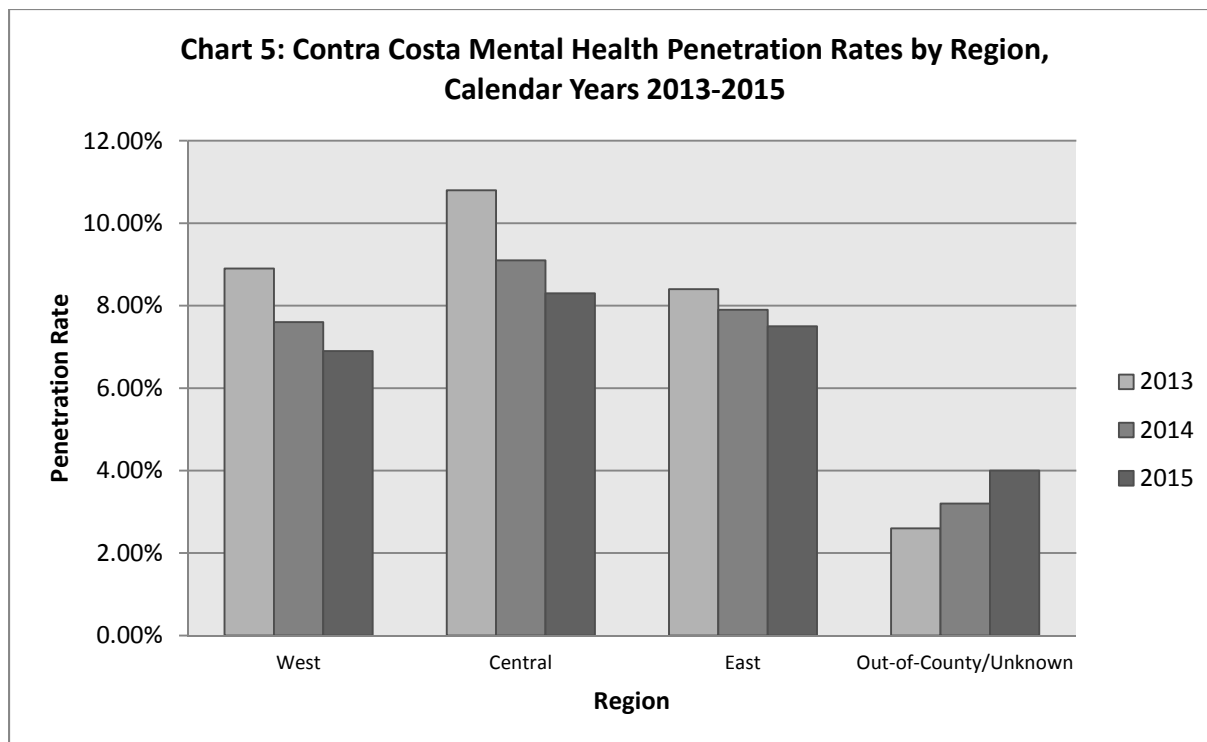
CCBHS Mental Health penetration rates for all gender groups were greater than the statewide average penetration rates for the same groups. The Male and Female populations had similar penetration rates in Contra Costa County, with Females being served at a slightly lower rate than Males. Penetration rates at the local and state level decreased between 2013 and 2015, likely due to the increase in individuals eligible for MediCal as part of the Medicaid expansion.

Finally, Contra Costa Mental Health penetration rates were compared by region and compared to statewide averages (*Table 7 and Chart 5: Contra Costa Mental Health MediCal Population Penetration Rates by Region, Calendar Years 2013-2015*).

Table 7: Contra Costa Mental Health MediCal Population Penetration Rates by Region, Calendar Years 2013-2015

Region	Calendar Year	Number MediCal Eligible Population Served by Mental Health	MediCal Eligible Population, Countywide	Penetration Rate	Statewide Average Penetration Rate ²⁰
West					
	2013	4,642	52,142	8.9%	5.64%
	2014	5,524	72,274	7.6%	5.2%
	2015	5,759	83,531	6.9%	
Central					
	2013	4,127	38,220	10.8%	5.64%
	2014	5,459	60,012	9.1%	5.2%
	2015	5,820	69,974	8.3%	
East					
	2013	5,925	70,607	8.4%	5.64%
	2014	7,501	95,163	7.9%	5.2%
	2015	8,104	107,788	7.5%	
Out-of-County/Unknown					
	2013	647	24,448	2.6%	
	2014	859	27,209	3.2%	
	2015	974	24,118	4.0%	
Total					
	2013	15,341	185,417	8.3%	5.64%
	2014	19,343	254,658	7.6%	5.2%
	2015	20,657	285,411	7.2%	

²⁰ APS Healthcare. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2013". 2014. And Behavioral Health Concepts. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2014". 2015.



The penetration rate for the West County population was 8.9 percent in 2013, 7.6 percent in 2014, and 6.9 percent in 2015. The penetration rate for the Central County population was 10.8 percent in 2013, 9.1 percent in 2014, and 8.3 percent in 2015. The penetration rate for the East County population was 8.4 percent in 2013, 7.9 percent in 2014, and 7.5 percent in 2015. The penetration rate for the Out-of-County/Unknown population was 2.6 percent in 2013, 3.2 percent in 2014, and 4.0 percent in 2015.

CCBHS Mental Health penetration rates for all regions of the county were greater than the statewide average penetration rates for the same groups. The Central County region had the highest penetration rates in Contra Costa County, while the East County region had the lowest penetration rates; however, all regional penetration rates were within a few percentage points of each other. Penetration rates at the local and state level decreased between 2013 and 2015, likely due to the increase in individuals eligible for MediCal as part of the Medicaid expansion.

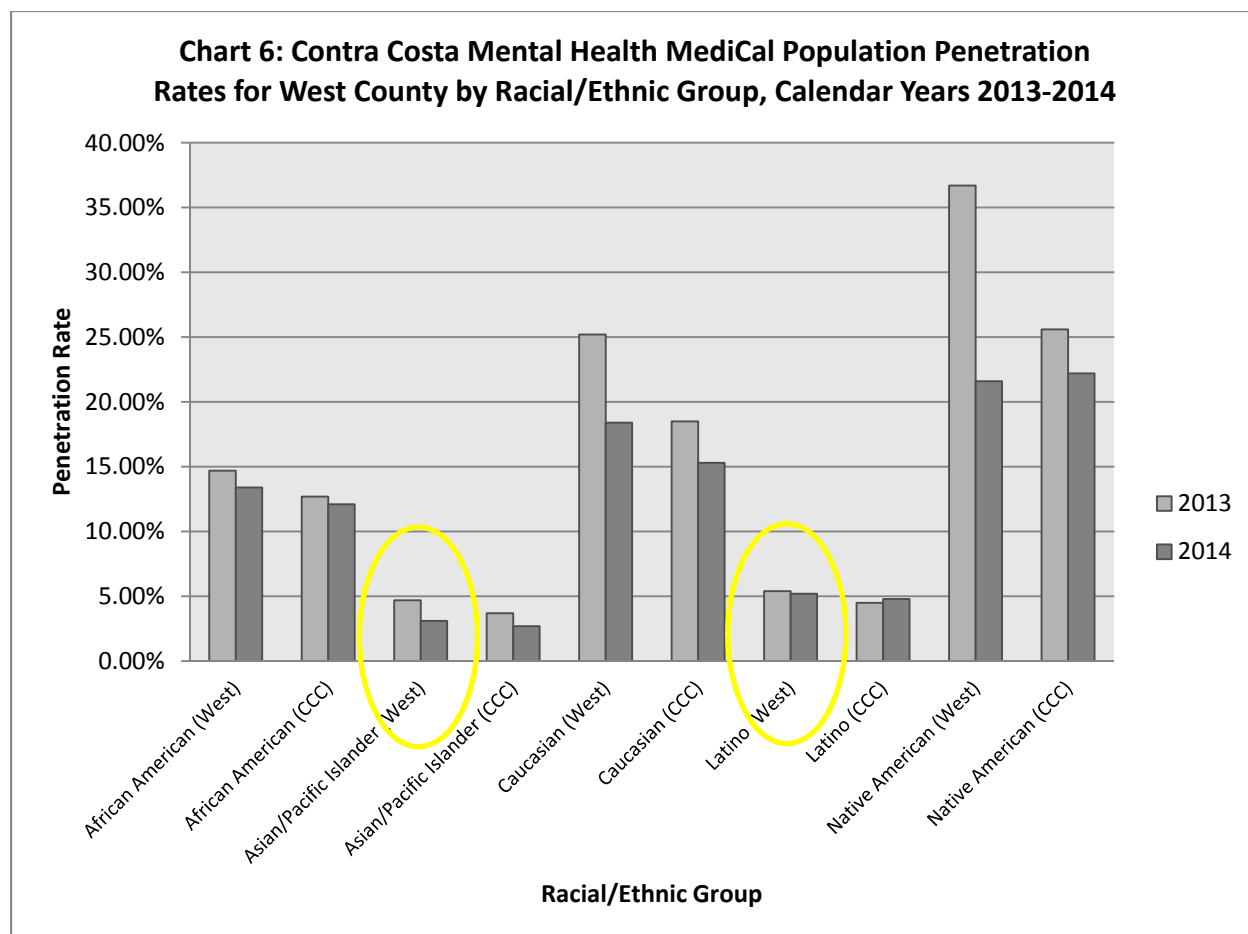
In order to determine if there are differences within sub-populations of each region of the county, CCBHS Mental Health regional penetration rates were analyzed by racial/ethnic group and age group. These penetration rates were then compared to county as well as statewide average rates for the same populations. The results for each region of the county are outlined below.

West County Penetration Rates

CCBHS Mental Health penetration rates for West County were compared by racial/ethnic group and compared to county penetration rates and statewide averages for the same populations (*Table 8: Contra Costa Mental Health MediCal Population Penetration Rates for West County by Racial/Ethnic Group, Calendar Years 2013-2015* and *Chart 6: Contra Costa Mental Health MediCal Population Penetration Rates for West County by Racial/Ethnic Group, Calendar Years 2013-2014*).

Race/Ethnicity	Calendar Year	Number MediCal Eligible Population Served by Mental Health, West County	MediCal Eligible Population, West County	Penetration Rate	County Penetration Rate for Racial/Ethnic Group	Statewide Average Penetration Rate for Racial/Ethnic Group ²¹
African American						
	2013	1,719	11,657	14.7%	12.7%	10.5%
	2014	2,020	15,079	13.4%	12.1%	9.1%
	2015	1,974	17,174	11.5%	11.2%	
Asian/Pacific Islander						
	2013	328	7,011	4.7%	3.7%	3.5%
	2014	405	12,859	3.1%	2.7%	2.9%
	2015	409	15,661	2.6%	2.5%	
Caucasian						
	2013	1,025	4,075	25.2%	18.5%	9.6%
	2014	1,280	6,955	18.4%	15.3%	8.5%
	2015	1,356	8,157	16.6%	14.5%	
Latino						
	2013	1,252	23,307	5.4%	4.5%	3.9%
	2014	1,438	27,743	5.2%	4.8%	3.6%
	2015	1,618	30,889	5.2%	5.0%	
Native American						
	2013	47	128	36.7%	25.6%	8.9%
	2014	40	185	21.6%	22.2%	8.1%
	2015	51	233	21.9%	20.4%	
Other						
	2013	82	3,680	2.3%	2.1%	5.9%
	2014	114	6,456	1.8%	1.7%	6.1%
	2015	109	8,232	1.3%	1.4%	
Unknown						
	2013	189	2,284	8.3%	4.9%	
	2014	227	2,997	7.6%	5.6%	
	2015	242	3,185	7.6%	5.8%	
Total (Region)						
	2013	4,642	52,142	8.9%		5.64%
	2014	5,524	72,274	7.6%		5.2%
	2015	5,759	83,531	6.9%		

²¹APS Healthcare. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2013". 2014. And Behavioral Health Concepts. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2014". 2015.



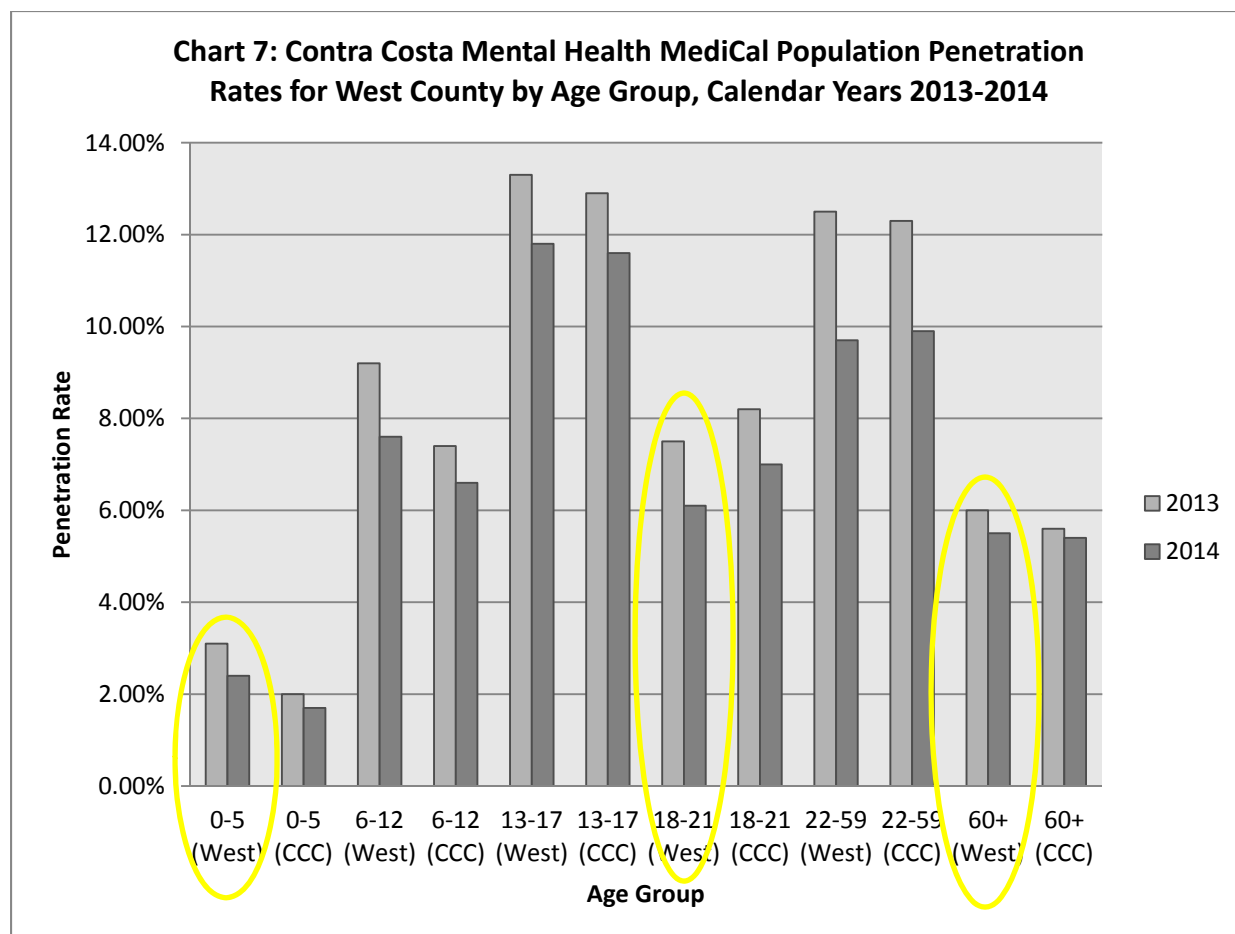
With the exception of the “Other” population, which is comprised of individuals of mixed race/ethnicity as well as individuals who identify with a racial/ethnic group not listed in the table, West County penetration rates for racial/ethnic groups were greater than or equal to the CCBHS Mental Health penetration rates. The Caucasian (25.2 percent in 2013, 18.4 percent in 2014, and 16.6 in 2015) and Native American (36.7 percent in 2013, 21.6 percent in 2014, and 21.9 percent in 2015) populations had the highest penetration rates in West County. The Asian/Pacific Islander (4.7 percent in 2013, 3.1 percent in 2014, and 2.6 percent in 2015) and Latino (5.4 percent in 2013, 5.2 percent in 2014, and 5.2 percent in 2015) populations had the lowest penetration rates among the racial/ethnic groups in West County.

CCBHS Mental Health penetration rates for West County were compared by age group and compared to CCBHS Mental Health and statewide average penetration rates for the same populations (*Table 9: Contra Costa Mental Health MediCal Population Penetration Rates for West County by Age Group, Calendar Years 2013-2015 and Chart 7: Contra Costa Mental Health MediCal Population Penetration Rates for West County by Age Group, Calendar Years 2013-2014*).

Table 9: Contra Costa Mental Health MediCal Population Penetration Rates for West County by Age Group, Calendar Years 2013-2015

Age Group	Calendar Year	Number MediCal Eligible Population Served by Mental Health, West County	MediCal Eligible Population, West County	Penetration Rate	County Penetration Rate for Age Group	Statewide Average Penetration Rate for Age Group ²²
0-5						
	2013	344	10,939	3.1%	2.0%	1.9%
	2014	284	11,901	2.4%	1.7%	2.1%
	2015	294	11,902	2.5%	1.9%	
6-12						6-17
	2013	858	9,331	9.2%	7.4%	7.1%
	2014	839	10,974	7.6%	6.6%	6.5%
	2015	880	11,297	7.8%	6.9%	
13-17						
	2013	735	5,520	13.3%	12.9%	
	2014	795	6,712	11.8%	11.6%	
	2015	783	6,916	11.3%	12.1%	
18-21						18-59
	2013	222	2,953	7.5%	8.2%	7.1%
	2014	265	4,371	6.1%	7.0%	6.2%
	2015	287	5,082	5.6%	6.7%	
22-59						
	2013	2,070	16,505	12.5%	12.3%	
	2014	2,862	29,581	9.7%	9.9%	
	2015	2,979	38,167	7.8%	8.6%	
60+						
	2013	413	6,894	6.0%	5.6%	3.4%
	2014	479	8,735	5.5%	5.4%	3.1%
	2015	536	10,167	5.3%	5.3%	
Total (Region)						
	2013	4,642	52,142	8.9%		5.64%
	2014	5,524	72,274	7.6%		5.2%
	2015	5,759	83,531	6.9%		

²² APS Healthcare. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2013". 2014. And Behavioral Health Concepts. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2014". 2015.



For all but the 18 to 21 and 22 to 59 populations, the West County penetration rates were greater than or equal to the CCBHS Mental Health penetration rates for the same age groups. That being said, the 18 to 21 and 22 to 59 penetration rates in West County are within a percentage point of the county penetration rates for the same age groups. The 13 to 17 (13.3 percent in 2013, 11.8 percent in 2014, and 11.3 percent in 2015) and 22 to 59 (12.5 percent in 2013, 9.7 percent in 2014, and 7.8 percent in 2015) populations had the highest penetration rates in West County, while the 0 to 5 (3.1 percent in 2013, 2.4 percent in 2014, and 2.5 percent in 2015) and 60+ (6.0 percent in 2013, 5.5 percent in 2014, and 5.3 percent in 2015) populations had the lowest penetration rates among the age groups in West County.

Central County Penetration Rates

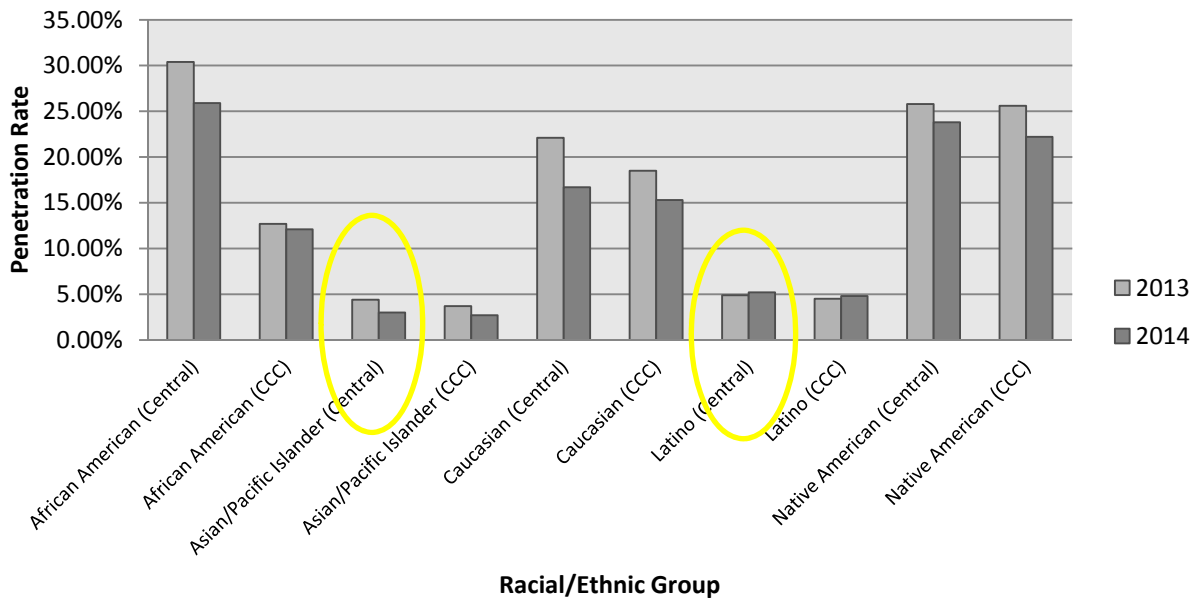
CCBHS Mental Health penetration rates for Central County were compared by racial/ethnic group and compared to county penetration rates and statewide averages for the same populations (*Table 10: Contra Costa Mental Health MediCal Population Penetration Rates for Central County by Racial/Ethnic Group, Calendar Years 2013-2015 and Chart 8: Contra Costa Mental Health MediCal Population Penetration Rates for Central County by Racial/Ethnic Group, Calendar Years 2013-2014*).

Table 10: Contra Costa Mental Health MediCal Population Penetration Rates for Central County by Racial/Ethnic Group, Calendar Years 2013-2015

Race/Ethnicity	Calendar Year	Number MediCal Eligible Population Served by Mental Health, Central County	MediCal Eligible Population, Central County	Penetration Rate	County Penetration Rate for Racial/Ethnic Group	Statewide Average Penetration Rate for Racial/Ethnic Group ²³
African American						
	2013	526	1,729	30.4%	12.7%	10.5%
	2014	609	2,347	25.9%	12.1%	9.1%
	2015	617	2,813	21.9%	11.2%	
Asian/Pacific Islander						
	2013	228	5,141	4.4%	3.7%	3.5%
	2014	299	9,924	3.0%	2.7%	2.9%
	2015	339	12,078	2.8%	2.5%	
Caucasian						
	2013	2,473	11,195	22.1%	18.5%	9.6%
	2014	3,371	20,217	16.7%	15.3%	8.5%
	2015	3,573	23,921	14.9%	14.5%	
Latino						
	2013	654	13,256	4.9%	4.5%	3.9%
	2014	819	15,756	5.2%	4.8%	3.6%
	2015	905	17,084	5.3%	5.0%	
Native American						
	2013	41	159	25.8%	25.6%	8.9%
	2014	50	210	23.8%	22.2%	8.1%
	2015	44	247	17.8%	20.4%	
Other						
	2013	119	4,527	2.6%	2.1%	5.9%
	2014	165	8,416	2.0%	1.7%	6.1%
	2015	176	10,487	1.7%	1.4%	
Unknown						
	2013	86	2,213	3.9%	4.9%	
	2014	146	3,142	4.6%	5.6%	
	2015	166	3,344	5.0%	5.8%	
Total (Region)						
	2013	4,127	38,220	10.8%		5.64%
	2014	5,459	60,012	9.1%		5.2%
	2015	5,820	69,974	8.3%		

²³APS Healthcare. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2013". 2014. And Behavioral Health Concepts. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2014". 2015.

Chart 8: Contra Costa Mental Health MediCal Population Penetration Rates for Central County by Racial/Ethnic Group, Calendar Years 2013-2014

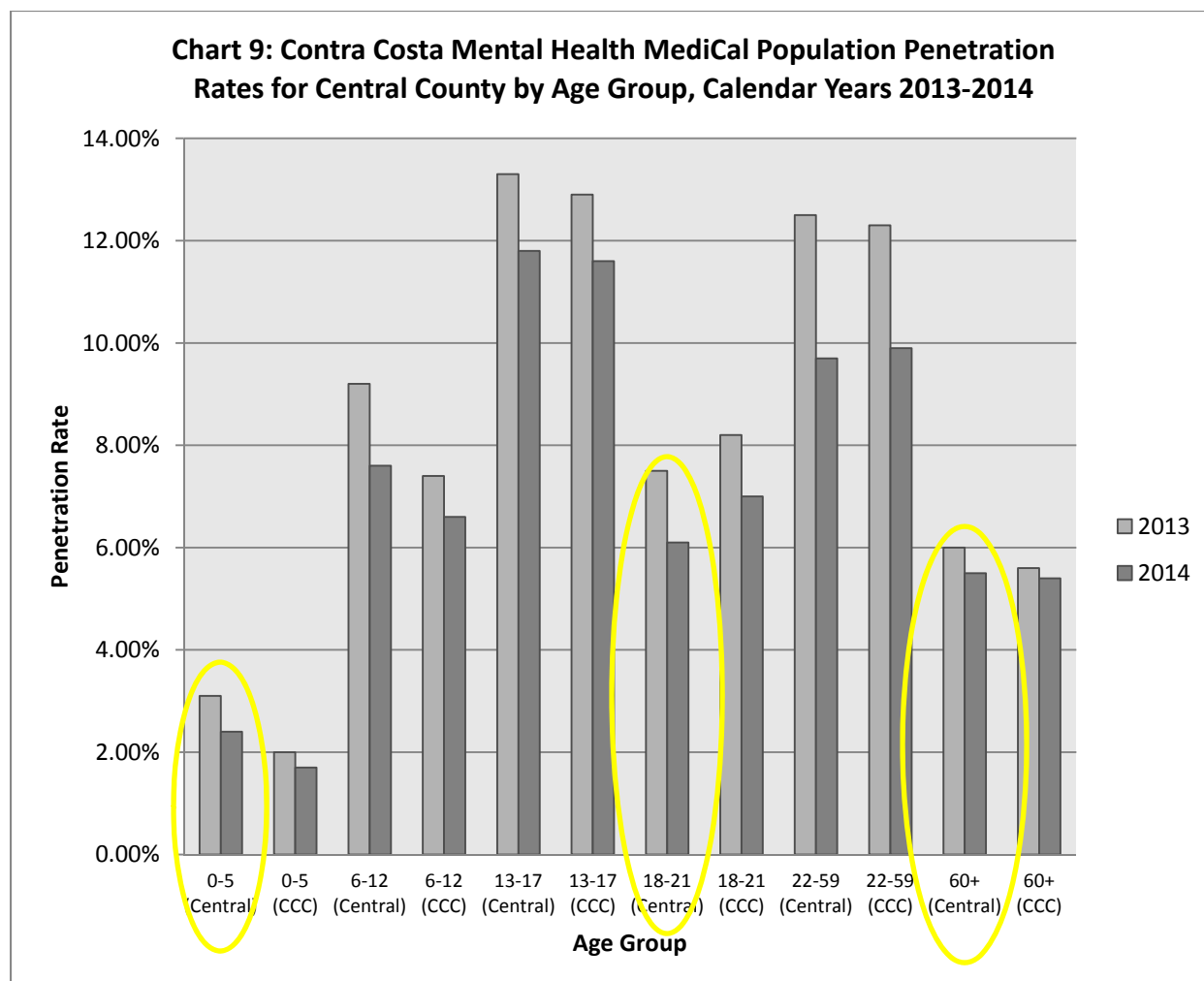


With the exception of the “Other” population, which is comprised of individuals of mixed race/ethnicity as well as individuals who identify with a racial/ethnic group not listed in the table, and the Native American population in 2015, Central County penetration rates for racial/ethnic groups were greater than or equal to the CCBHS Mental Health penetration rates for the same groups. The African American (30.4 percent in 2013, 25.9 percent in 2014, and 21.9 percent in 2015) and Native American (25.8 percent in 2013, 23.8 percent in 2014, and 17.8 percent in 2015) populations had the highest penetration rates in Central County. The Asian/Pacific Islander (4.4 percent in 2013, 3.0 percent in 2014, and 2.8 percent in 2015) and Latino (4.9 percent in 2013, 5.2 percent in 2014, and 5.3 percent in 2015) populations had the lowest penetration rates among the racial/ethnic groups in Central County.

CCBHS Mental Health penetration rates for Central County were compared by age group and compared to CCBHS Mental Health and statewide average penetration rates for the same populations (*Table 11: Contra Costa Mental Health MediCal Population Penetration Rates for Central County by Age Group, Calendar Years 2013-2015 and Chart 9: Contra Costa Mental Health MediCal Population Penetration Rates for Central County by Age Group, Calendar Years 2013-2014*).

Table 11: Contra Costa Mental Health MediCal Population Penetration Rates for Central County by Age Group, Calendar Years 2013-2015						
Age Group	Calendar Year	Number MediCal Eligible Population Served by Mental Health, Central County	MediCal Eligible Population, Central County	Penetration Rate	County Penetration Rate for Age Group	Statewide Average Penetration Rate for Age Group ²⁴
0-5						
	2013	120	6,789	1.8%	2.0%	1.9%
	2014	121	7,687	1.6%	1.7%	2.1%
	2015	127	7,620	1.7%	1.9%	
6-12						6-17
	2013	493	6,057	8.1%	7.4%	7.1%
	2014	515	7,793	6.6%	6.6%	6.5%
	2015	514	7,667	6.7%	6.9%	
13-17						
	2013	695	3,787	18.4%	12.9%	
	2014	722	5,252	13.7%	11.6%	
	2015	768	5,069	15.2%	12.1%	
18-21						18-59
	2013	256	1,797	14.2%	8.2%	7.1%
	2014	336	3,199	10.5%	7.0%	6.2%
	2015	364	3,867	9.4%	6.7%	
22-59						
	2013	2,114	12,293	17.2%	12.3%	
	2014	3,215	26,392	12.2%	9.9%	
	2015	3,450	34,502	10.0%	8.6%	
60+						
	2013	449	7,497	6.0%	5.6%	3.4%
	2014	550	9,689	5.7%	5.4%	3.1%
	2015	597	11,249	5.3%	5.3%	
Total (Region)						
	2013	4,127	38,220	10.8%		5.64%
	2014	5,459	60,012	9.1%		5.2%
	2015	5,820	69,974	8.3%		

²⁴APS Healthcare. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2013". 2014. And Behavioral Health Concepts. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2014". 2015.



For all but the 0 to 5 population, the Central County penetration rates were greater than or equal to the CCBHS Mental Health penetration rates for the same age groups. The 13 to 17 (18.4 percent in 2013, 13.7 percent in 2014, and 15.2 percent in 2015) and 22 to 59 (17.2 percent in 2013, 12.2 percent in 2014, and 10.0 percent in 2015) populations had the highest penetration rates in Central County. The 0 to 5 (1.8 percent in 2013, 1.6 percent in 2014, and 1.7 percent in 2015) and 60+ (6.0 percent in 2013, 5.7 percent in 2014, and 5.3 percent in 2015) populations had the lowest penetration rates among the age groups in Central County.

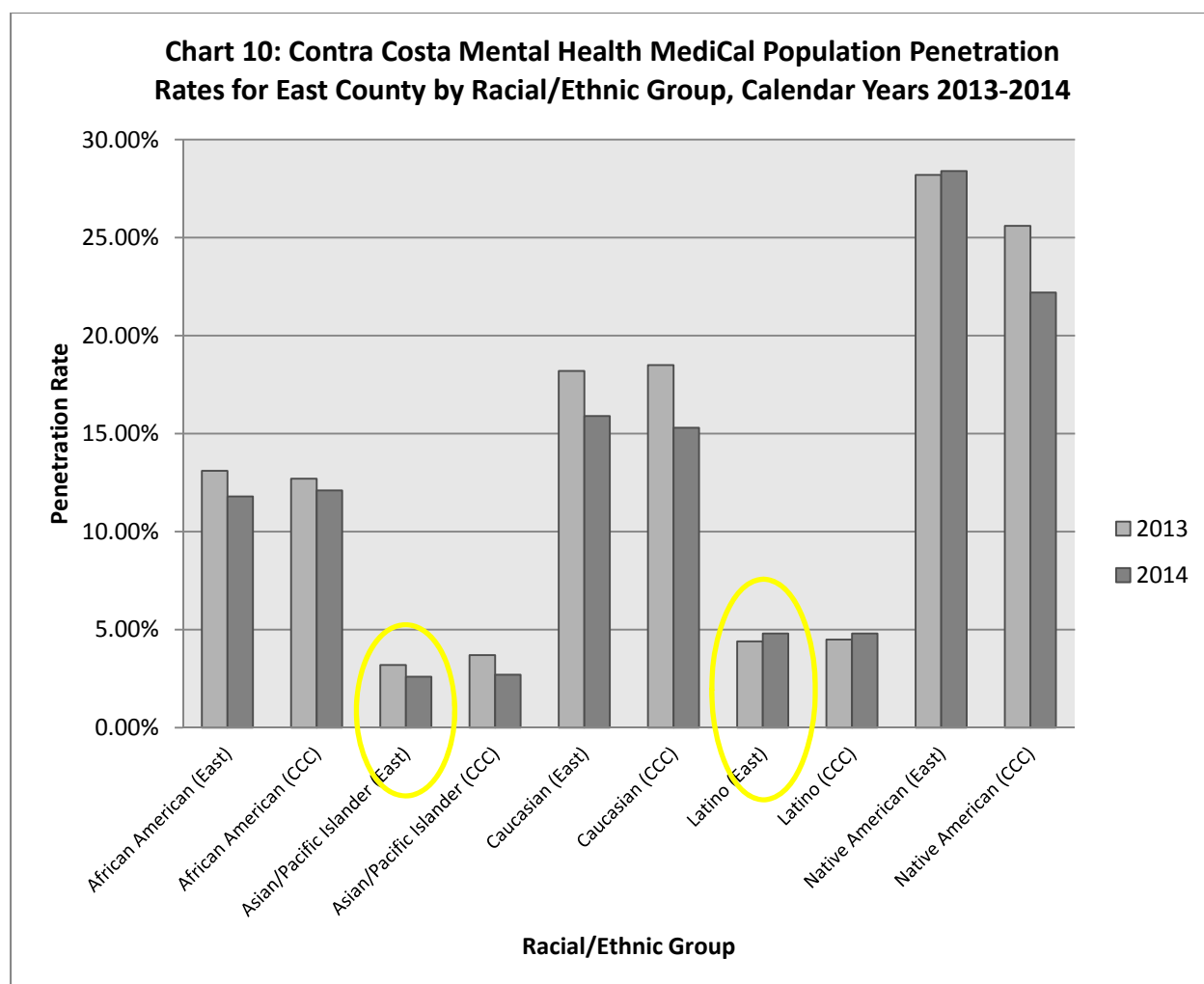
East County Penetration Rates

CCBHS Mental Health penetration rates for East County were compared by racial/ethnic group and compared to county penetration rates and statewide averages for the same populations (*Table 12: Contra Costa Mental Health MediCal Population Penetration Rates for East County by Racial/Ethnic*

Group, Calendar Years 2013-2015 and Chart 10: Contra Costa Mental Health MediCal Population Penetration Rates for East County by Racial/Ethnic Group, Calendar Years 2013-2014).

Race/Ethnicity	Calendar Year	Number MediCal Eligible Population Served by Mental Health, East County	MediCal Eligible Population, East County	Penetration Rate	County Penetration Rate for Racial/Ethnic Group	Statewide Average Penetration Rate for Racial/Ethnic Group²⁵
African American						
	2013	1,784	13,664	13.1%	12.7%	10.5%
	2014	2,042	17,321	11.8%	12.1%	9.1%
	2015	2,167	19,781	11.0%	11.2%	
Asian/Pacific Islander						
	2013	196	6,211	3.2%	3.7%	3.5%
	2014	289	11,318	2.6%	2.7%	2.9%
	2015	324	13,935	2.3%	2.5%	
Caucasian						
	2013	2,298	12,641	18.2%	18.5%	9.6%
	2014	2,977	18,724	15.9%	15.3%	8.5%
	2015	3,215	21,097	15.2%	14.5%	
Latino						
	2013	1,310	29,585	4.4%	4.5%	3.9%
	2014	1,680	35,120	4.8%	4.8%	3.6%
	2015	1,898	37,843	5.0%	5.0%	
Native American						
	2013	59	209	28.2%	25.6%	8.9%
	2014	83	292	28.4%	22.2%	8.1%
	2015	89	340	26.2%	20.4%	
Other						
	2013	115	5,376	2.1%	2.1%	5.9%
	2014	142	8,622	1.6%	1.7%	6.1%
	2015	137	10,821	1.3%	1.4%	
Unknown						
	2013	163	2,921	5.6%	4.9%	
	2014	288	3,766	7.6%	5.6%	
	2015	274	3,971	6.9%	5.8%	
Total (Region)						
	2013	5,925	70,607	8.4%		5.64%
	2014	7,501	95,163	7.9%		5.2%
	2015	8,104	107,788	7.5%		

²⁵APS Healthcare. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2013". 2014. And Behavioral Health Concepts. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2014". 2015.



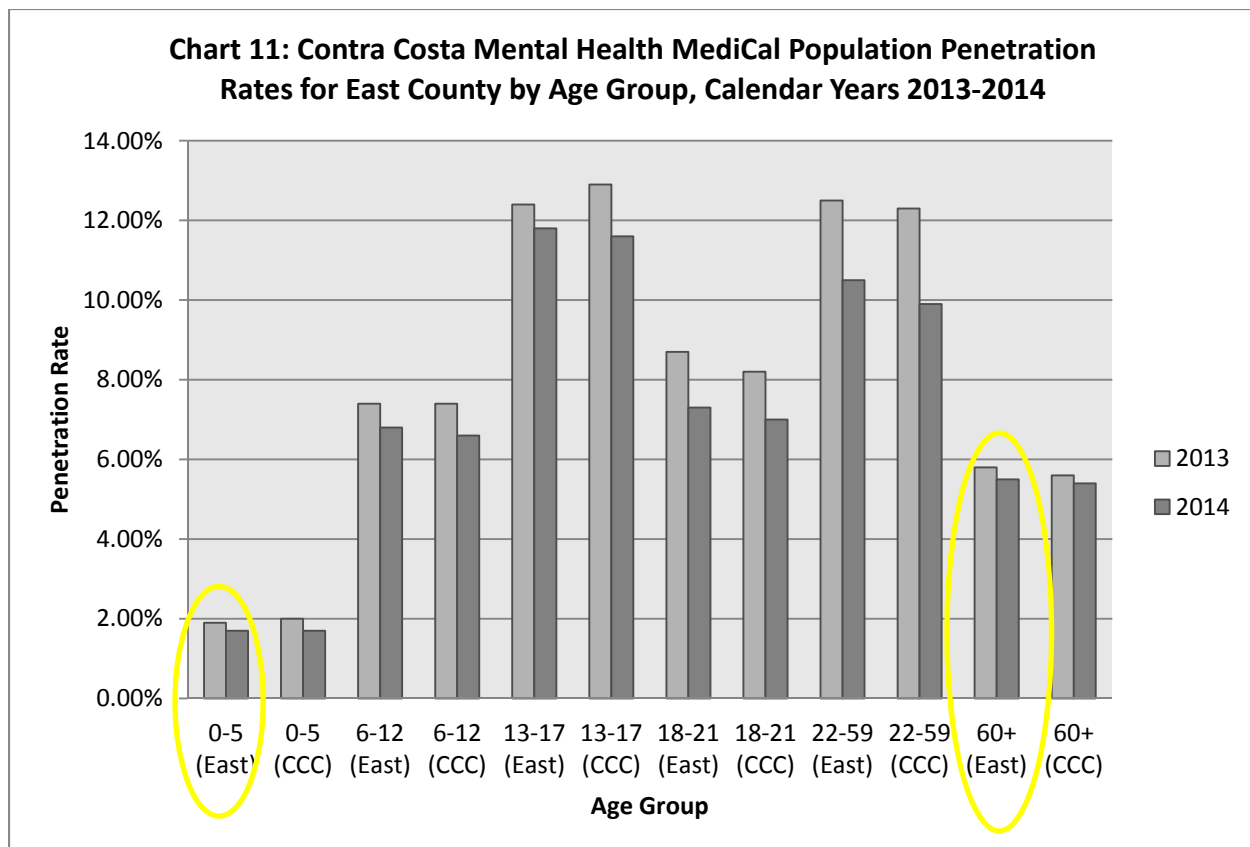
The majority of the East County African American penetration rates are less than the CCBHS Mental Health penetration rate for the same population. Additionally, the East County Asian/Pacific Islander and Other population penetration rates are less than the CCBHS Mental Health penetration rates for the same populations. The majority of the East County Caucasian, Latino, Native American, and Unknown population penetration rates are greater than or equal to the CCBHS Mental Health penetration rates for the same populations. The Caucasian (18.2 percent in 2013, 15.9 percent in 2014, and 15.2 in 2015) and Native American (28.2 percent in 2013, 28.4 percent in 2014, and 26.2 percent in 2015) populations have the highest penetration rates in East County. The Asian/Pacific Islander (3.2 percent in 2013, 2.6 percent in 2014, and 2.3 percent in 2015) and Latino (4.4 percent in 2013, 4.8 percent in 2014, and 5.0 percent in 2015) populations have the lowest penetration rates among the racial/ethnic groups in East County.

CCBHS Mental Health penetration rates for East County were compared by age group and compared to CCBHS Mental Health and statewide average penetration rates for the same populations (*Table 13: Contra Costa Mental Health MediCal Population Penetration Rates for East County by Age Group*,

Calendar Years 2013-2015 and Chart 11: Contra Costa Mental Health MediCal Population Penetration Rates for East County by Age Group, Calendar Years 2013-2014).

Table 13: Contra Costa Mental Health MediCal Population Penetration Rates for East County by Age Group, Calendar Years 2013-2015						
Age Group	Calendar Year	Number MediCal Eligible Population Served by Mental Health, East County	MediCal Eligible Population, East County	Penetration Rate	County Penetration Rate for Age Group	Statewide Average Penetration Rate for Age Group²⁶
0-5						
	2013	280	14,723	1.9%	2.0%	1.9%
	2014	260	15,728	1.7%	1.7%	2.1%
	2015	279	15,761	1.8%	1.9%	
6-12						6-17
	2013	1,023	13,786	7.4%	7.4%	7.1%
	2014	1,079	15,798	6.8%	6.6%	6.5%
	2015	1,108	15,903	7.0%	6.9%	
13-17						
	2013	1,025	8,271	12.4%	12.9%	
	2014	1,187	10,065	11.8%	11.6%	
	2015	1,242	10,132	12.3%	12.1%	
18-21						18-59
	2013	373	4,281	8.7%	8.2%	7.1%
	2014	458	6,276	7.3%	7.0%	6.2%
	2015	510	7,438	6.9%	6.7%	
22-59						
	2013	2,826	22,650	12.5%	12.3%	
	2014	4,025	38,361	10.5%	9.9%	
	2015	4,379	48,006	9.1%	8.6%	
60+						
	2013	398	6,896	5.8%	5.6%	3.4%
	2014	492	8,935	5.5%	5.4%	3.1%
	2015	586	10,548	5.6%	5.3%	
Total (Region)						
	2013	5,925	70,607	8.4%		5.64%
	2014	7,501	95,163	7.9%		5.2%
	2015	8,104	107,788	7.5%		

²⁶APS Healthcare. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2013". 2014. And Behavioral Health Concepts. "Medi-Cal Approved Claims Data for Contra Costa County Mental Health Plan Calendar Year 2014". 2015.



For all but the 0 to 5 population, the East County penetration rates were greater than or equal to the CCBHS Mental Health penetration rates for the same age groups. The 13 to 17 (12.4 percent in 2013, 11.8 percent in 2014, and 12.3 percent in 2015) and 22 to 59 (12.5 percent in 2013, 10.5 percent in 2014, and 9.1 percent in 2015) populations had the highest penetration rates in East County. The 0 to 5 (1.9 percent in 2013, 1.7 percent in 2014, and 1.8 percent in 2015) and 60+ (5.8 percent in 2013, 5.5 percent in 2014, and 5.6 percent in 2015) populations had the lowest penetration rates among the age groups in East County.

ii. *Spectrum of Services and Service Expenditures*

In order to address the question of whether CCBHS is apportioning its funding to ensure its providing a full spectrum of mental health care and meeting established allocation benchmarks, FY 2015-16 CCBHS Mental Health expenditures were grouped by Level of Care Utilization System/ Child and Adolescent Level of Care Utilization System (LOCUS/CALOCUS) level of care and compared to benchmarks developed by the Mental Health Association in California.

Percentage Spent on Levels of Care in Mental Health System of Care

Table 14: Contra Costa Mental Health Expenditures by Level of Care, Fiscal Year 2015-2016, defines each level of care as well as, lists the FY 15/16 expenditures, percentage of expenditures, and the difference between the percentage of expenditures and recommended benchmark for each level of care.

Level of Care	Description of Level of Care	LOCUS/ CALOCUS Level of Care	LOCUS / CALOCUS Score Range	Contra Costa Mental Health Expenditures FY 15/16²⁸	Percentage of Expenditures	Recommended Percentage of System Care²⁹	Difference Between Percentage of Expenditures and Recommended Benchmark
Locked Facilities	Medically Managed Residential Services	6	28-30	\$ 38,907,909.73	22%	17%	+5
24-Hour Community Care and Residential Services	Medically Monitored Residential Services and Medically Monitored Non-Residential Services	4 and 5	20-27	\$ 43,768,180.49	24%	33%	-9
Outpatient Services for Seriously Mentally Ill/Severely Emotionally Disturbed	High Intensity Community Based Services	3	17-19	\$ 42,310,062.27	24%	22%	+2
Therapy	Low Intensity Community Based Services and Recovery and Maintenance and Health Management	1 and 2	10-16	\$ 45,722,415.87	25%	22%	+3
Outreach and Engagement	Basic Services for Prevention and Health Maintenance	0	7-9	\$ 7,996,715.78	4%	5%	-1
Training/ Staff Development	Training/ Staff Development	N/A	N/A	\$ 613,994.69	0.3%	1%	-0.7
Total				\$ 179,319,278.84	100%	100%	

²⁷ Administrative costs, \$14,558,808.13, were evenly distributed across expenditures for each level of care, 0-6. Administrative costs were included in the benchmark percentages as well so percentages are comparable.

²⁸ Data from the Auditor's Intranet Site. FY 15/16 expenditure data was extracted by organization number for all organization numbers listed under Department Number 0467 in the Auditor's Codebook for FY 15/16.

²⁹ Mental Health Association in California. "A Model for California Community Mental Health Programs". 1981. Pages 27-29. Available at: http://histpubmh.semel.ucla.edu/sites/default/files/archival/d8485804_Doc_7_1981_California_Model.pdf.

Level 6 of the LOCUS/CALOCUS levels of care, score range 28-30, provides medically managed residential services. CCBHS Mental Health FY 15/16 expenditures for Level 6 were \$38,907,909.73, which was 22 percent of expenditures. The recommended percentage of expenditures for Level 6 is 17 percent, 5 percentage points less than CCBHS currently expends on Level 6 services. Level 5 of the LOCUS/CALOCUS levels of care, score range 23-27, provides medically monitored residential services. Level 4 of LOCUS/CALOCUS levels of care, score range 20-22, provides medically monitored non-residential services. CCBHS Mental Health FY 15/16 expenditures for Levels 4 and 5 were \$43,768,180.49, which was 24 percent of expenditures. The recommended percentage of expenditures for Levels 4 and 5 is 33 percent, 9 percentage points more than CCBHS currently expends on Level 4 and 5 services. Level 3 of the LOCUS/CALOCUS levels of care, score range 17-19, provides high intensity community based services. CCBHS Mental Health FY 15/16 expenditures for Level 3 were \$42,310,062.27 which was 24 percent of expenditures. The recommended percentage of expenditures for Level 3 is 22 percent, 2 percentage points less than CCBHS currently expends on Level 3 services. Level 2 of the LOCUS/CALOCUS levels of care, score range 14-16, provides low intensity community based services. Level 1 of LOCUS/CALOCUS levels of care, score range 10-13, provides recovery maintenance health management. CCBHS Mental Health FY 15/16 expenditures for Levels 1 and 2 were \$45,722,415.87, which was 25 percent of expenditures. The recommended percentage of expenditures for Levels 1 and 2 is 22 percent, 3 percentage points less than CCBHS currently expends on Level 1 and 2 services. Level 0 of the LOCUS/CALOCUS levels of care, score range 7-9, provides basic services for prevention and health maintenance. CCBHS Mental Health FY 15/16 expenditures for Level 0 were \$7,996,715.78, which was 4 percent of expenditures. The recommended percentage of expenditures for Level 0 is 5 percent, 1 percentage point more than CCBHS currently expends on Level 0 services. CCBHS Mental Health spent \$613,994.69 on training and staff development in FY 15/16, which is 0.3 percent of expenditures. The recommended percentage of expenditures for training and staff development is 1 percent, 0.7 percentage points more than CCBHS currently expends on training and staff development.

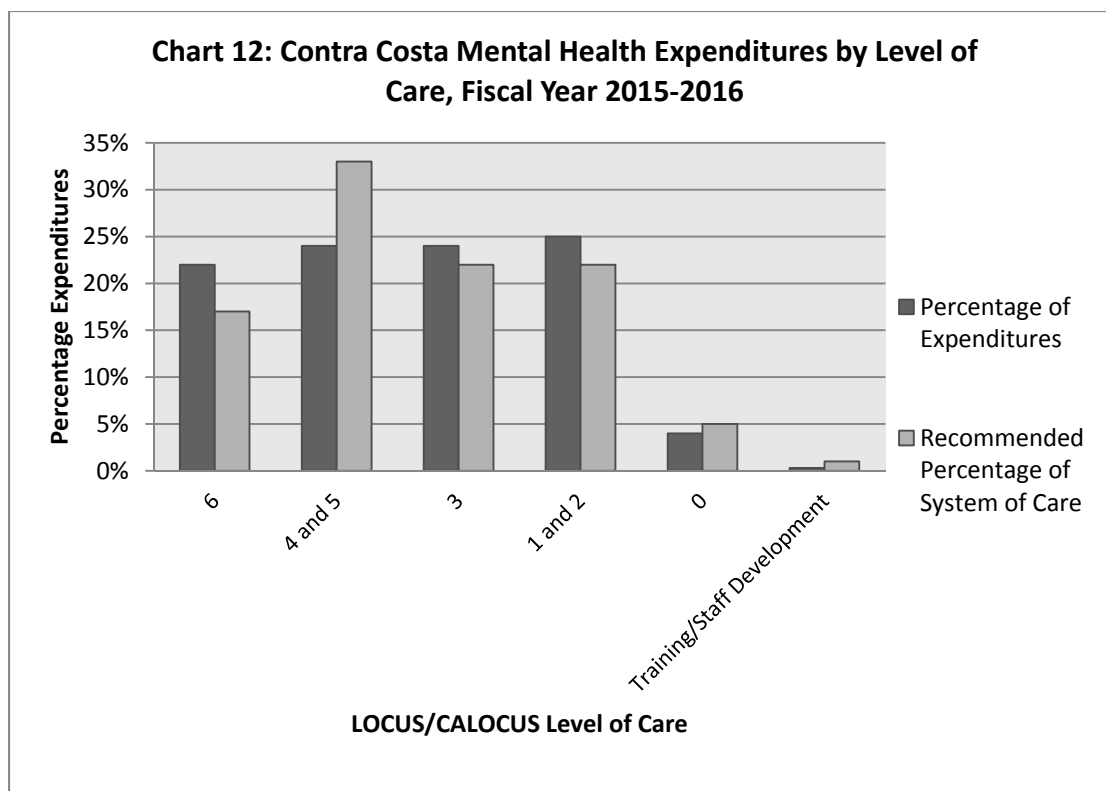


Chart 12: Contra Costa Mental Health Expenditures by Level of Care, Fiscal Year 2015-2016 graphically depicts the comparison of FY 15/16 expenditures with the benchmark for each type of expenditure. As noted above, in comparison to the benchmarks, CCBHS Mental Health over-expends on Levels 6, 3, and 1 and 2. CCBHS Mental Health under-expends on Levels 4 and 5, 0, and training/staff development. That being said, the differences between Level 3 and Level 1 and 2 expenditures are within a couple of percentage points of the benchmarks.

Appendix A: Mental Health Service Maps outlines CCBHS programs by region and age-related system of care. *Appendix B* groups the CCBHS programs included in the expenditures described in *Table 14: Contra Costa Mental Health Expenditures by Level of Care, Fiscal Year 2015-2016* by level of care, from Level Six to Level Zero.

iii. Contra Costa Behavioral Health Services Staffing

In order to establish if CCBHS is adequately addressing its Mental Health Plan workforce needs, psychiatric vacancies, psychiatric compensation, staff demographics, and bilingual capacity were analyzed.

Psychiatric Staffing

Staffing levels of key positions has a significant impact on the County's ability to provide mental health care. The most prominent shortfall is the lack of county psychiatrists to participate as multi-disciplinary team members at the County's children and adult clinics. *Table 15: Contra Costa County Behavioral Health Service Mental Health Full Time Equivalent Psychiatrist Positions*, outlines the number of approved full time equivalent positions, the positions filled, the equivalent hours worked, and current vacancies for both county and contract psychiatrists.

Table 15: Contra Costa County Behavioral Health Services Mental Health Full Time Equivalent Psychiatrist Positions				
Type of Psychiatrist	Approved Full Time Equivalent	Filled Full Time Equivalent	Full Time Equivalent Worked	Approved Full Time Equivalent Currently Vacant or Not Being Utilized
County	18.925	10.425	8.175	10.75
Contract	25.035	25.035	21.35	3.685
Total	43.96	35.46	29.525	14.435

CCBHS Mental Health has been authorized 20 full-time equivalent (FTE) psychiatrists to serve children and adults who experience moderate to severe mental illness or serious emotional disturbance. However, only 10 positions are filled by County employees, with their actual aggregate work time equaling 8.2 FTEs. Part-time non-county psychiatry time is contracted out in order to ensure that essential psychotropic medications are prescribed. Quality of care is compromised, as fewer psychiatrists are available to actively participate as staff team members in the long term recovery of consumers.

In order to identify factors contributing the psychiatric vacancies, CCBHS salaries were compared to neighboring counties. *Table 16: Comparison of Neighboring Bay Area County Psychiatrist Salaries*, describes the salary ranges for psychiatrists employed by Contra Costa, Alameda, Marin, San Francisco, and Solano counties.

Table 16: Comparison of Neighboring Bay Area County Psychiatrist Salaries³⁰		
County	Annual Salary (Midrange)	Difference from Contra Costa County
Contra Costa	\$ 155,497.80	\$ -
Alameda	\$ 194,190.88	\$ 38,693.08
Marin	\$ 170,347.50	\$ 14,849.70
San Francisco	\$ 208,086.67	\$ 52,588.87
Solano	\$ 210,050.85	\$ 54,553.05

Contributing to this situation is that Contra Costa County pays approximately 82 percent of the salary of the average paid to psychiatrists in Alameda, Marin, San Francisco, and Solano counties. Consequently Contra Costa County has difficulty competing with neighboring Bay Area counties in recruiting and retaining psychiatrists.

Staffing Demographics

As part of the needs assessment conducted to inform the Workforce Education and Training (WET) Plan, CCBHS Mental Health compared its staff demographics to the county demographics to determine if staffing matched the population being served by CCBHS Mental Health or if discrepancies exist. This data was again included in the 2010 Cultural Competency Plan³¹ to inform recommendations for staffing policies to ensure clients are appropriately served (*Table 17: Comparison of WET Assessment Data and County Population*).

³⁰ Data from County Human Resource Websites:

<https://www.governmentjobs.com/careers/contracosta/classspecs> ,
<https://www.jobaps.com/alameda/auditor/ClassSpecs.asp>,
<http://www.marincounty.org/depts/hr/divisions/classification-and-compensation/job-classification> ,
<http://sfdhr.org/classification-and-compensation-database>,
<https://www.solanocounty.com/depts/hr/classifications.asp>

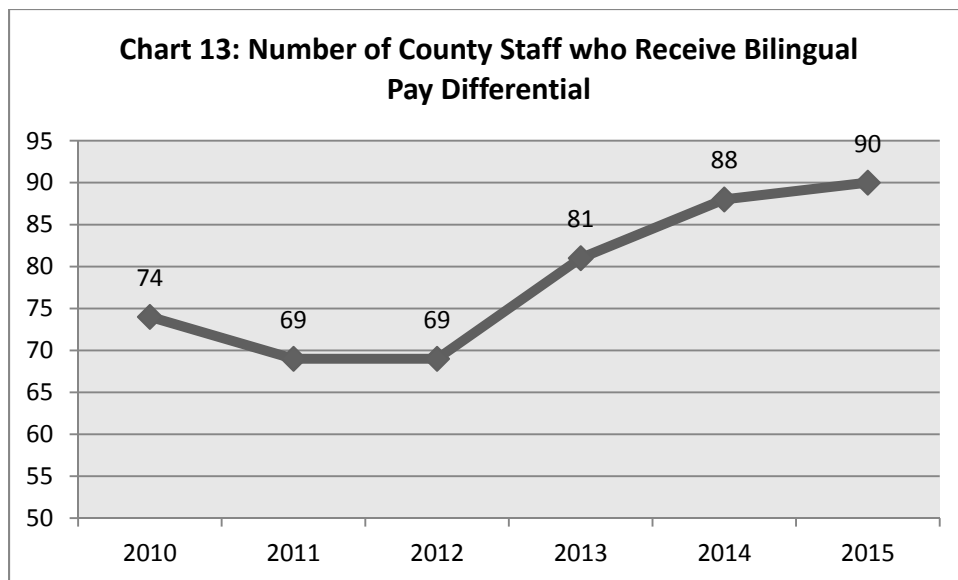
³¹ Contra Costa County Mental Health Services. "Cultural Competence Plan Three Year Plan Fiscal Year 2010-11, 2011-12, 2012-13". 2010 (Revised). Page 91. Available at:
http://cchealth.org/mentalhealth/pdf/2010_cultural_competence_plan.pdf .

Table 17: Comparison of WET Assessment Data and County Population			
Race/Ethnicity	2010 Cultural Competency Plan	WET Assessment	
	County Population	Consumers Served	County Staff
White	48.63%	35.65%	46.01%
Hispanic	24.23%	17.94%	11.15%
African-American	9.29%	30.23%	19.00%
Asian/Pacific Islander	13.82%	6.15%	7.42%
Native American	0.43%	0.64%	0.35%
Other	3.61%	9.40%	16.06%

Latina/os are underrepresented in the county staff population when compared to all the populations listed in the table. Latina/os in the county population comprise of 24.2 percent of those populations respectively; and yet only make up 11.15 percent of the county staff population. African Americans are over-represented when comparing the county staff population to the county general population. African Americans represent 9.3 percent of the general population and 19 percent of the county staff population. However, the African American group is underrepresented when comparing the county staff population to that of the consumers served. In this case, this ethnic group comprises of 30.2 percent of the consumers served and only 19 percent of the county staff. Asians and Pacific Islanders are underrepresented in the County Staff population when compared to the general population. This group represents 7.42 percent of the County staff population but 13.82 percent of the general population. However, this ethnic group is represented when the County Staff population is compared to the Consumers served. White county staff are over represented, 46.01 percent, when compared to consumers served, 35.65 percent.

Bilingual Pay Differential and Flagged Positions

CCBHS understands the importance of quality, prompt and accurate translation and interpretation services to increase access for all mental health clients. As a part of monitoring the rate and quality of language services across the County, CCBH collects data on the number of requests for all modes of translation as well as the costs. *Chart 13: Number of County Staff who Receive Bilingual Pay Differential* shows data for a 7 year period, from 2009 through 2015.



Data from 2009-2015 for all County Mental Health Clinics³²

The number of staff with the differential increased from 74 staff in 2010 to 90 staff in 2015. A majority of staff who receive bilingual pay speak Spanish, followed by Punjabi and Chinese; other languages include Dari, Farsi, Hindi, Ibo, Khum, Korean, Lao, Russian, Tagalog, Tamil, Thai, Urdu, Vietnamese and American Sign Language (ASL). Currently, there are 36 positions that are flagged Spanish-speaking, 2 flagged for Vietnamese, 1 for Chinese, and 1 for American Sign Language; this is slightly lower than the average of 38 positions flagged in recent years (2011-2014)³³.

Interpretation services were available to meet the language needs of clients when bilingual staff were unavailable. All of the interpretation requests in 2010 were for in-person interpretation. After alternate modes of interpretation services began to be offered, by 2015 approximately 50 percent of all requests were phone language line requests, approximately 25 percent were for video Healthcare Interpreter Network requests, and slightly less than 25 percent of requests were for in-person interpretation. The most notable development in recent years is the utilization of video interpretation machines through the Healthcare Interpreter Network, which in turn has decreased the costs spent on in-person interpretation. Although CCBH has adopted video as the primary mode of interpretation, the in-person option is still available for clients for whom video is not appropriate.

iv. Comparison of Findings from Needs Assessment to Findings from Previous Community Program Planning Process Assessments

Previous community program planning processes indicated there were underserved populations in Contra Costa County. As outlined in this needs assessment, based upon prevalence estimates of the number of individuals below 200 percent poverty with a serious mental illness, CCBHS Mental Health is

³² Research and Evaluation Unit. "Interpretation Usage Summary". Contra Costa Mental Health Services. FY 2015/2016. Note, 2015 Data reflects January through October only.

³³ Research and Evaluation Unit. "Service Accessibility and Availability Reflective of Cultural Competency Principles". Contra Costa Mental Health Services. FY 2015/2016.

serving a number of clients approximate to the estimated number of individuals requiring CCBHS Mental Health services. Additionally, CCBHS Mental Health penetration rates are equal to or greater than statewide average penetration rates, indicating CCBHS Mental Health serves more eligible clients than the majority of counties in California. However, when comparing subpopulations within Contra Costa County, there are a few with lower penetration rates than other subpopulations. These populations include Asian/Pacific Islanders, Latina/os, children ages zero to five years, and adults ages 60 years and older. When comparing subpopulations regionally, these trends continue, with Asian/Pacific Islanders, Latina/os, children ages zero to five years, and adults ages 60 years and older, having the lowest penetration rates in each region of the county.

Previous community program planning processes also raised questions about whether services were available at all levels of care and whether services were going to those with the highest acuity. FY 15/16 CCBHS Mental Health expenditures indicate services are available at every level of care as defined by the LOCUS/CALOCUS. However, compared to benchmarks, CCBHS MH over spends on the most acute level of inpatient care (Level 6), and is below the benchmark in expenditures related to programs providing high intensity community-based services (Levels 4 and 5).

Finally, previous community program planning processes indicated there was a shortage of mental health staff, particularly psychiatrists, as well as staff with bilingual capacity to serve CCBHS Mental Health's diverse target population. CCBHS Mental Health does have psychiatrist vacancies as well as psychiatrists who do not maximize the number of hours available in their contracts, leading to an ongoing shortage in psychiatrists. Compounding the issue of filling vacant psychiatrist positions is the fact that CCBHS Mental Health reimburses psychiatrists at a lower rate than neighboring counties. Latina/o and Asian/Pacific Islander populations are under-represented among county staff when compared to the county population. However, CCBHS Mental Health has incrementally increased the number of bilingual individuals on staff each year. Additionally, CCBHS Mental Health has phone, in-person, and video interpretation services available as needed.

IV. Limitations

This needs assessment is meant to assist CCBHS Mental Health determine the system's capacity to serve its target populations; it does not assess the quality of the services being provided to clients. Quality assessments are performed through utilization and program reviews as well as through CCBHS' contract monitoring process.

The following are the limitations of this quantitative needs assessment. First, the prevalence data was based upon population and prevalence rate estimates. This means the prevalence benchmarks are approximate calculations, they are not exact figures. Therefore, the benchmarks may be over or under representations of the county's true prevalence rate for serious mental illness. Additionally, because no filters were used to exclude clients when extracting the numbers served by CCBHS Mental Health, this may be an over-representation of the number of clients with serious mental illness served by the system as some of these clients may not have met medical necessity for services. Because CCBHS Mental Health does not have an electronic health record system, client and service data are strictly based upon billing records, not health records.

Second, different logic methodologies were used to extract the total number served by CCBHS Mental Health for the prevalence and penetration data; as a result, the numbers vary slightly. This applies to the number of MediCal eligible clients as well. Different logic methodologies were used to extract the MediCal eligibility data for the prevalence and penetration data, resulting in slightly different figures. Furthermore, the denominator of the penetration rates includes all individuals in Contra Costa County who are eligible for MediCal, not only individuals with a serious mental illness who are eligible for MediCal. This reduces the penetration rates, creating an underrepresentation of the proportion of eligible clients accessing CCBHS Mental Health's services. Finally, the majority of individuals served by Prevention and Early Intervention programs contracted to outreach to and engage underserved populations are not included in the penetration rate data as these programs do not enter client information into the PSP/INSYST billing system.

Third, the public mental health systems of care expenditure benchmarks recommended by the Mental Health Association in California were established in 1981. As a result, the benchmarks do not fully reflect the impact of the movement to decrease institutional services and increase community-based outpatient services. Therefore, the recommended expenditures for Level 6 may be greater than is appropriate for standards of care in 2016. Also, for convenience, some of the programs, such as the CCBHS Mental Health Clinics and the Board and Care facilities, included in a single level of care may actually be providing services to clients representing more than one level of care. It is recommended further study determine the proportion of these program expenditures that should be allocated to each level of care. Administrative costs were evenly distributed across each level of care (from 0 to 6); however, administrative costs may not be evenly attributed to each level of care. For example, higher levels of care require more utilization review staff time than lower levels of care. Additionally, the decision to combine Levels 4 and 5 was made because many of the clients served by these programs receive care from both levels of care. Levels 1 and 2 were combined because many of the programs included in these levels of care provide services to both Level 1 and Level 2 clients, making it difficult to credibly attribute expenditures to a single level of care. It is recommended service data be analyzed and compared to expenditure data to tease apart Level 4 and 5 expenditures as well as Level 1 and 2 expenditures. Finally, a small discrepancy of approximately \$20,000 in expenditures was found when extracting expenditure data by organization code as compared to the total expenditure report. Because this figure is insignificant in comparison the approximately \$170 million in total CCBHS expenditures, the expenditure data was presented with the discrepancy included.

Fourth, the staff demographic data was taken directly from the Contra Costa Mental Health Services, "Cultural Competence Plan Three Year Plan Fiscal Year 2010-11, 2011-12, 2012-13". The data used to inform the Cultural Competency Plan was collected as part of the 2009 Workforce Education and Training Plan. Therefore, as populations have migrated, both the county and staff demographics may have changed since the Plan was published.

V. Summary of Findings and Recommendations

This needs assessment addressed three questions: 1) is CCBHS reaching the target population it is mandated to serve?; 2) is CCBHS apportioning its funding to ensure its providing a full spectrum of

mental health care and meeting established allocation benchmarks?; and 3) is CCBHS adequately addressing its Mental Health Plan workforce needs?

First, overall, CCBHS Mental Health is reaching the target population it is mandated to serve. Based upon prevalence estimates of the number of individuals under 200 percent poverty with a serious mental illness, CCBHS Mental Health is serving a number of clients approximate to the estimated number of individuals requiring CCBHS Mental Health services. Additionally, CCBHS Mental Health penetration rates are equal to or greater than statewide average penetration rates, indicating CCBHS Mental Health serves more eligible clients than the majority of counties in California. However, when comparing subpopulations within Contra Costa County, there are a few with slightly lower penetration rates than other subpopulations. These populations include Asian/Pacific Islanders, Latina/os, children ages zero to five years, and adults ages 60 years and older. When comparing subpopulations regionally, these trends continue, with Asian/Pacific Islanders, Latina/os, children ages zero to five years, and adults ages 60 years and older, having the lowest penetration rates in each region of the county.

Second, CCBHS Mental Health is apportioning its funding to ensure it is providing a full spectrum of mental health care. However, it is not meeting recommended allocation benchmarks. CCBHS Mental Health spends more money on Level 6, Medically Managed Residential Services, than recommended (22 percent versus 17 percent respectively). At the same time, CCBHS Mental Health spent less on Levels 4 and 5, Medically Monitored Residential Services and Medically Monitored Non-Residential Services (24 percent versus 33 percent respectively).

Third, CCBHS Mental Health is not adequately addressing its psychiatry staffing needs. CCBHS Mental Health has psychiatrist vacancies as well as psychiatrists who do not maximize the number of hours available in their contracts, leading to an ongoing shortage in psychiatrists. Compounding the issue of filling vacant psychiatrist positions is the fact that CCBHS Mental Health reimburses psychiatrists at a significantly lower rate than neighboring counties. Latina/o and Asian/Pacific Islander populations are under-represented among county staff when compared to the county population. However, CCBHS Mental Health has incrementally increased the number of bilingual individuals on staff each year. Additionally, CCBHS Mental Health has phone, in-person, and video interpretation services available as needed.

Recommendations

- 1) CCBHS Mental Health is, overall, serving the population it is mandated to serve and has penetration rates that are equal to or greater than statewide averages. That being said, to better approximate parity among subpopulations, it is suggested that CCBHS Mental Health strengthen outreach and engagement strategies for the underserved populations identified in this needs assessment (Asian/Pacific Islanders, Latina/os, children ages 0 to 5, and adults ages 60+).
- 2) CCBHS Mental Health should further research program expenditures, separating Level 4 and Level 5 expenditures as well as Level 1 and Level 2 expenditures. Additionally, research should be conducted to determine service utilization associated with each level of care to determine if an adequate range of services is available within each level. It is suggested that CCBHS Mental

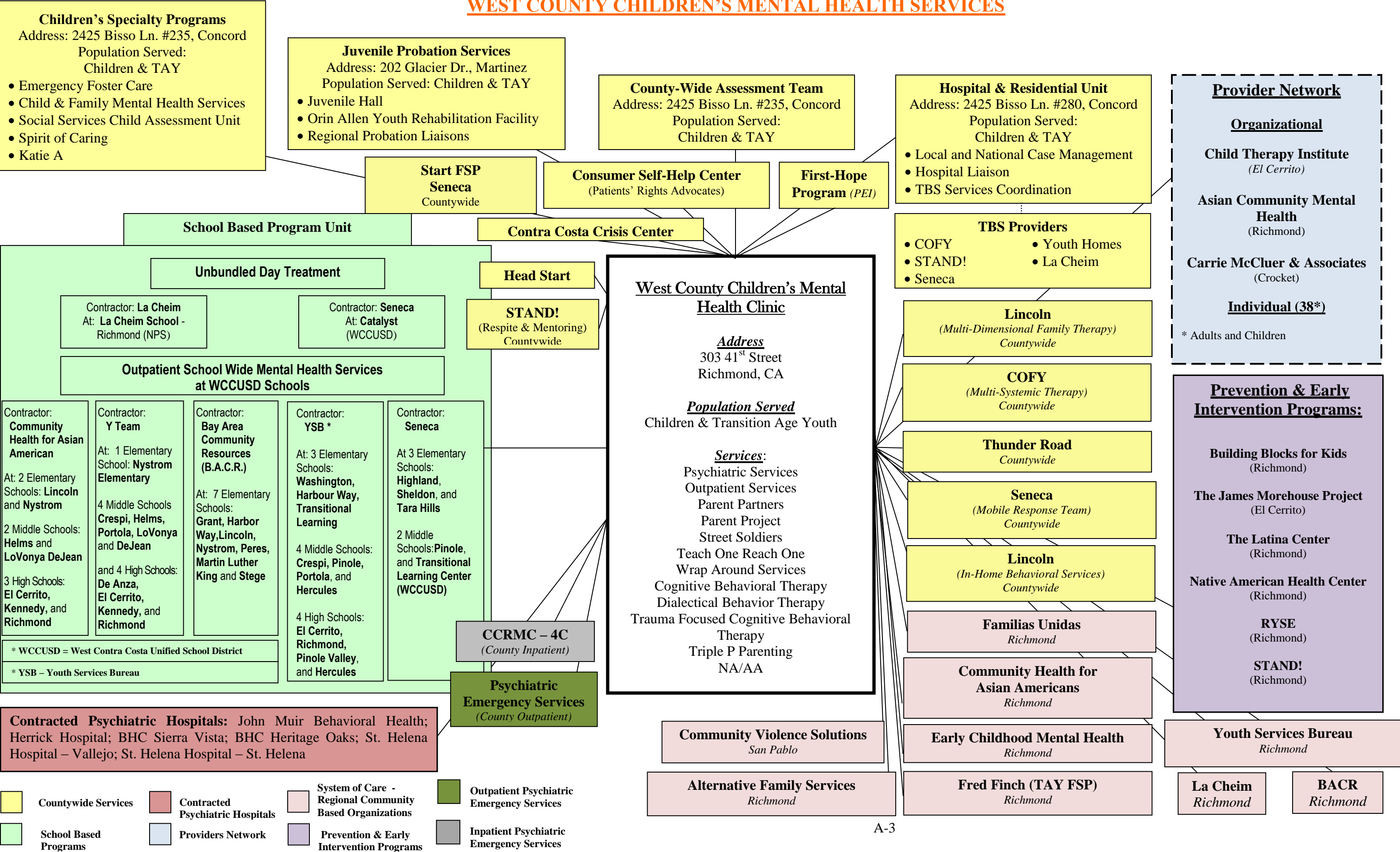
Health continue to improve its capacity to assist consumers move from higher levels of care, such as locked facilities, to lower levels of care that are community based.

- 3) CCBHS Mental Health should explore strategies for increasing authorized psychiatry time and increasing the number of bi-lingual staff, such as increasing psychiatry contract rates and county pay, focused recruitment of bi-lingual clinical interns, and establishing workforce incentives, such as establishing loan forgiveness programs for hard to fill or retain classifications.

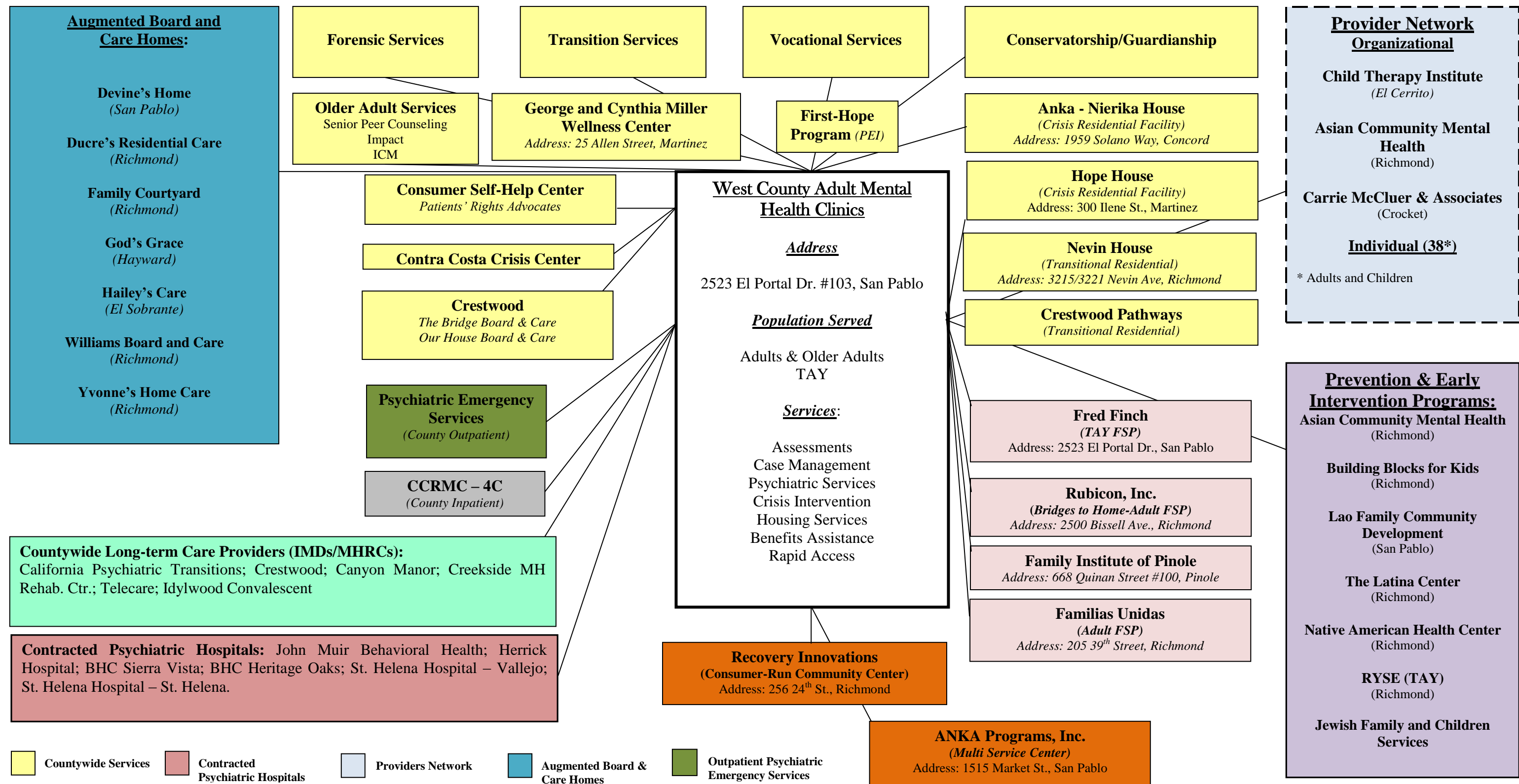
Appendix A: Mental Health Service Maps

The following six service maps provide a visual picture, or architecture, of the constellation of types of Contra Costa Mental Health's programs.

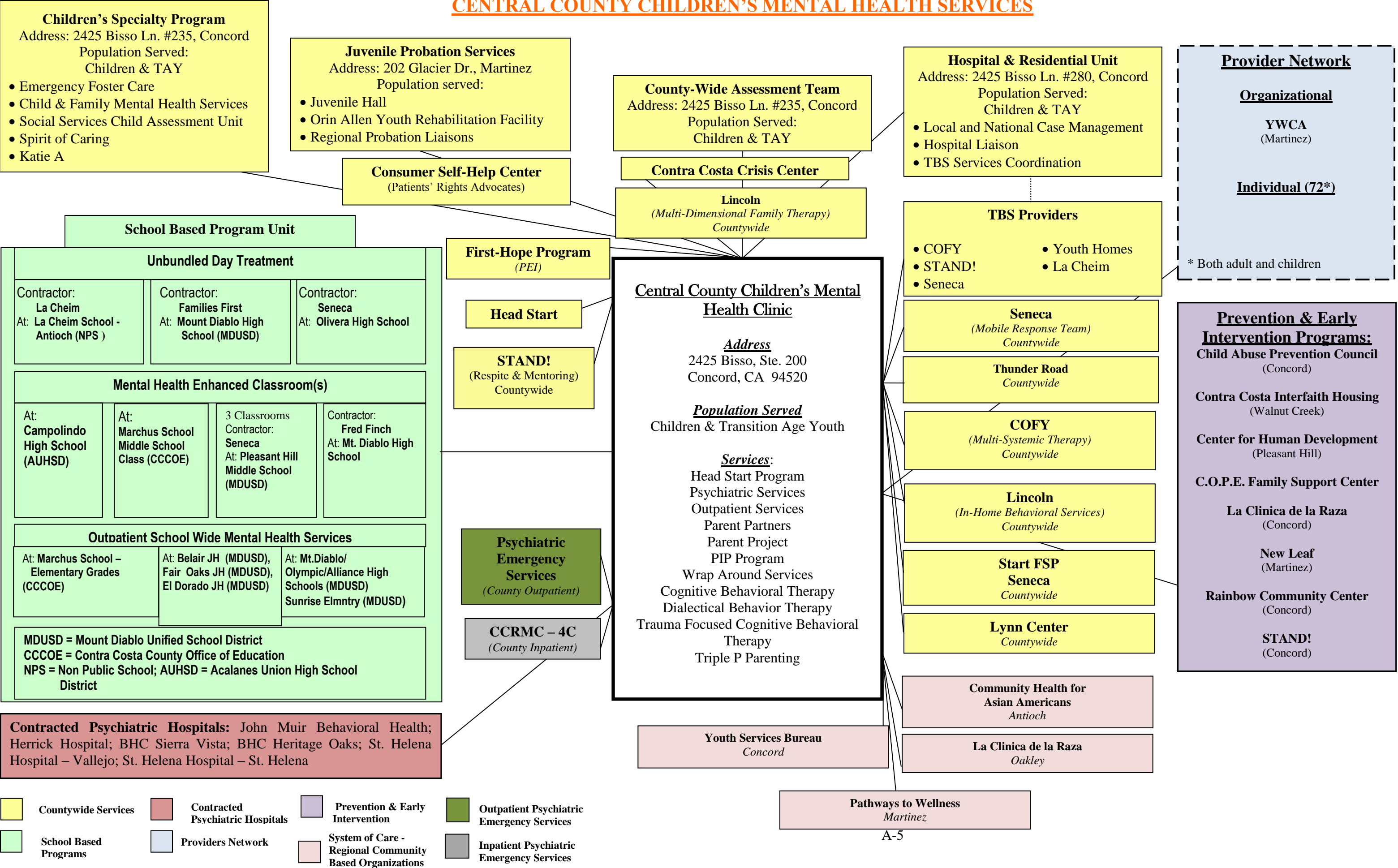
WEST COUNTY CHILDREN’S MENTAL HEALTH SERVICES



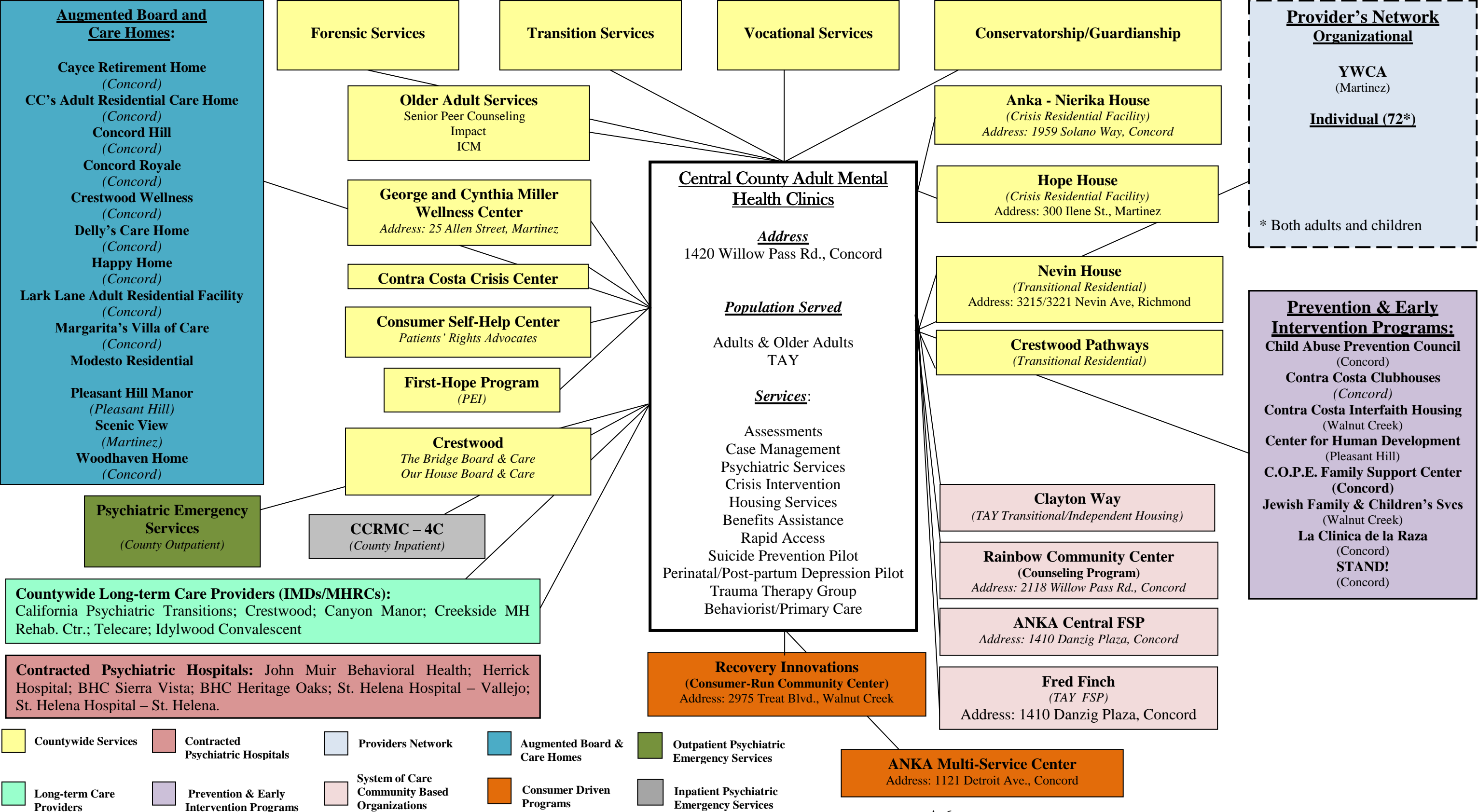
WEST COUNTY ADULT MENTAL HEALTH SERVICES



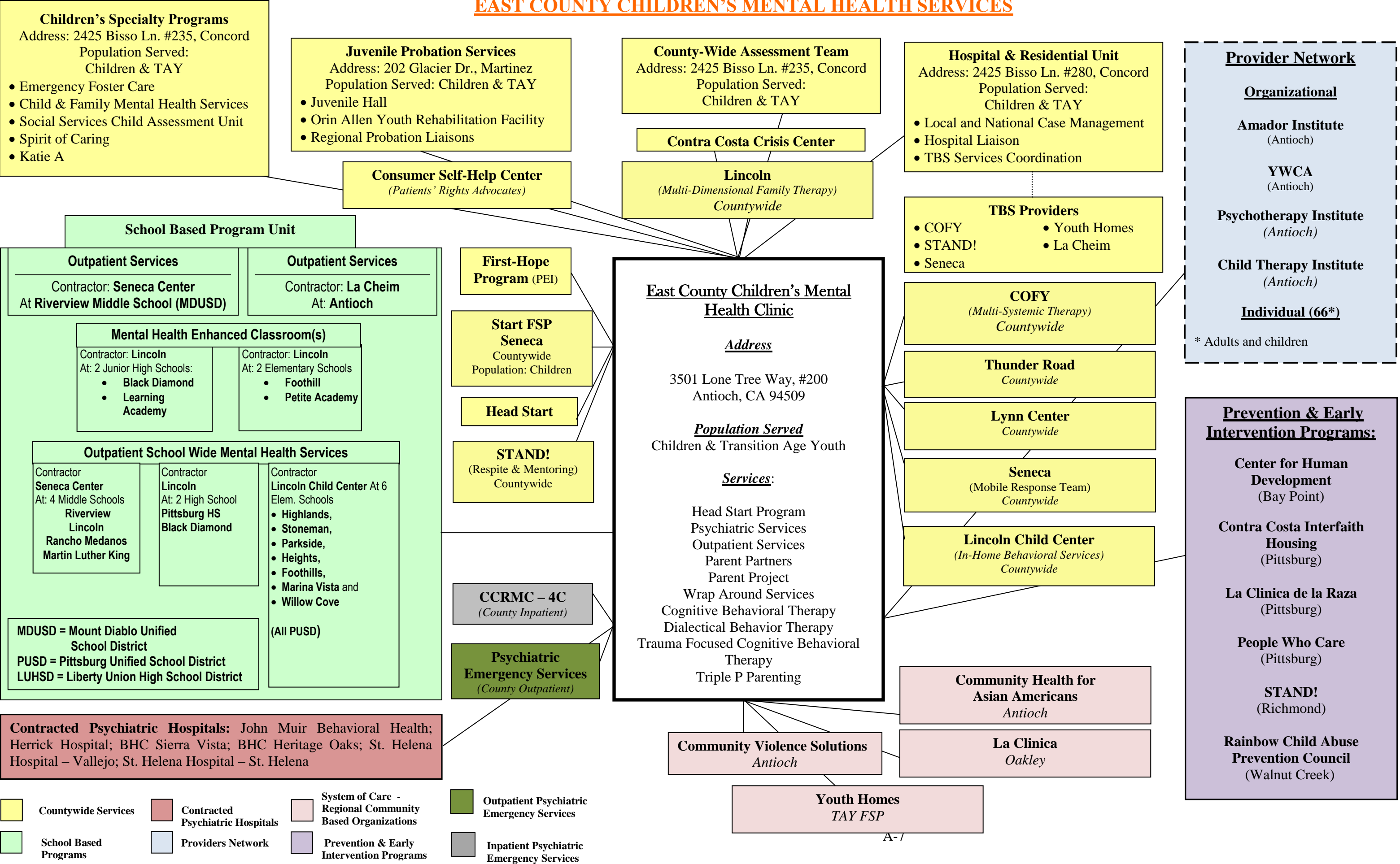
CENTRAL COUNTY CHILDREN’S MENTAL HEALTH SERVICES



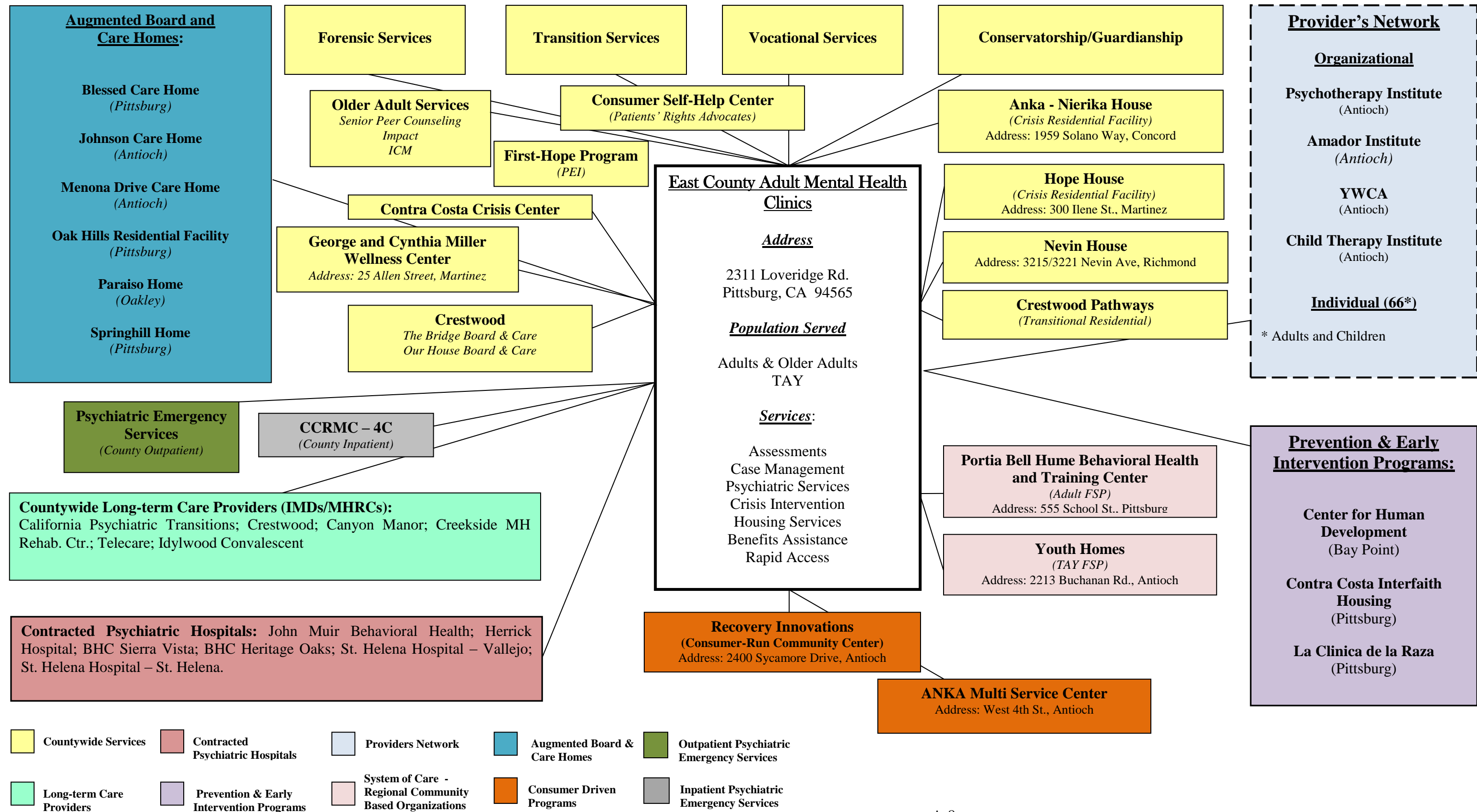
CENTRAL COUNTY ADULT MENTAL HEALTH SERVICES



EAST COUNTY CHILDREN’S MENTAL HEALTH SERVICES



EAST COUNTY ADULT MENTAL HEALTH SERVICES



Appendix B: Contra Costa Behavioral Health Services Mental Health Programs Grouped by Level of Care

Programs Included in Level Six (Medically Managed Residential Services)

Table B-1: Programs Included in Expenditures for Level Six (Medically Managed Residential Services)			
Program Name	Agency	Region(s) Served	Target Population
Contra Costa Regional Medical Center Inpatient Psych and Psychiatric Emergency Services	Contra Costa Health Services	Countywide	All
Hospital/Residential Services (Children's System of Care)	Contra Costa Behavioral Health Services	Countywide	Children
Psychiatric Health Facility	Central Star Behavioral Health	Countywide	Children
Probable Cause Hearing Officer	Dawdy	Countywide	Adult
Institute for Mental Disease	Various Contractors	Countywide	Adult
Contract Hospitals	Various Contractors	Countywide	All
State Hospitals	Contra Costa Behavioral Health Services	Countywide	Adult

Programs Included in Levels Four (Medically Monitored Non-Residential Services) and Five (Medically Monitored Residential Services)

Table B-2: Programs Included in Expenditures for Levels Four (Medically Monitored Non-Residential Services) and Five (Medically Monitored Residential Services)			
Program Name	Agency	Region(s) Served	Target Population
Assisted Outpatient Treatment	Mental Health Systems	Countywide	Adult
Assisted Outpatient Treatment Support	Contra Costa Behavioral Health Services	Countywide	Adult
Full Service Partnership Clinic Support	Contra Costa Behavioral Health Services	Countywide	All
Full Service Partnership Program	Seneca Family Agencies	Countywide	Children
Full Service Partnership Program	Community Options for Family and Youth	Countywide	Children
Full Service Partnership Program	Lincoln Center	Countywide	Children
Full Service Partnership Program	Youth Homes	Central and East County	Transition Age Youth
Full Service Partnership Program	Fred Finch Youth Center	West and Central County	Transition Age Youth
Full Service Partnership Program	Rubicon Programs	West County	Adult
Full Service Partnership Program	Anka Behavioral Health	Central County	Adult
Full Service Partnership Program	Desarrollo Familiar	West County	Adult
Full Service Partnership Program	Portia Bell Hume Center	West and East County	Adult
Full Service Partnership Program Supports	Recovery Innovations	Countywide	Adult
Older Adult Mental Health	Contra Costa Behavioral Health Services	Countywide	Older Adult
Vocational Services for High Needs Clients	Contra Costa Clubhouse	Countywide	Adult
Transition Team	Contra Costa Behavioral Health Services	Countywide	Adult
Outpatient Services in Residential Treatment Facility	Victor Treatment Centers	Countywide	Children
Residential Day Treatment Services	Summit View	Countywide	Children
Residential Day Treatment Services	Milhouse	Countywide	Children
Skilled Nursing Care, Medication Support	Brightstar	Countywide	Children
SB 163 WRAPAROUND	Contra Costa Behavioral Health Services	Countywide	Children
Wraparound Program - East	Contra Costa Behavioral Health Services	East County	Children
Wraparound Program - Central	Contra Costa Behavioral Health Services	Central County	Children
Wraparound Program- West	Contra Costa Behavioral Health Services	West County	Children
24th St Partial Hospitalization Day Treatment	Contra Costa Behavioral Health Services	West County	Adult
Crisis Residential Facility	Telecare Corporation and County	Countywide	Adult
Adult Full Service Partnership Housing Services, Residential Services	Crestwood	Countywide	Adult
Housing Support for High Needs Clients	Contra Costa Behavioral Health Services	Countywide	Adult
Residential Treatment Services	Various Contractors	Countywide	Children
Chris Adams Group Home	Contra Costa Behavioral Health Services	Countywide	Children
Supplemental Residential/Emergency Board and Care Contractors	Various Contractors	Countywide	Adult
Residential Treatment Services	Anka Behavioral Health	Countywide	Adult

Programs Included in Level Three (High Intensity Community Based Services)

Table B-3: Programs Included in Expenditures for Level Three (High Intensity Community Based Services)

Program Name	Agency	Region(s) Served	Target Population
PEI First Hope	Contra Costa Behavioral Health Services	Countywide	Children, Transition Age Youth
County-Operated Innovation Programs	Contra Costa Behavioral Health Services	Countywide	All
Mental Health Services Act, General Systems Development	Contra Costa Behavioral Health Services	Countywide	All
Criminal Justice System Alcohol and Other Drugs	Contra Costa Behavioral Health Services	Countywide	All
AB-109 Realignment	Contra Costa Behavioral Health Services	Countywide	All
Central County Children's Mental Health Clinic	Contra Costa Behavioral Health Services	Central County	Children
Child/Family Mental Health Services	Contra Costa Behavioral Health Services	Countywide	Children
West County Children's Mental Health Clinic	Contra Costa Behavioral Health Services	West County	Children
Juvenile Probation Mental Health Services	Contra Costa Behavioral Health Services	Countywide	Children
Miscellaneous County Related Contracts and Costs	Contra Costa Behavioral Health Services	Countywide	All
County-Operated School-Based Mental Health Services	Contra Costa Behavioral Health Services	Countywide	Children
East County Children's Mental Health Clinic	Contra Costa Behavioral Health Services	East County	Children
Child Social Services Assessment	Contra Costa Behavioral Health Services	Countywide	Children
Family Partnership	Contra Costa Behavioral Health Services	Countywide	Children
Mental Health Calworks	Various Contractors	Countywide	Adult
Uninsured Clients	Contra Costa Behavioral Health Services	Countywide	Adult
Dual Diagnosis Project	Contra Costa Behavioral Health Services	Countywide	Adult
Adult Vocational Services	Contra Costa Behavioral Health Services	Countywide	Adult
Conrep Mental Health Services	Contra Costa Behavioral Health Services	Countywide	Adult
Adult Mental Health EI Portal Clinic	Contra Costa Behavioral Health Services	West County	Adult
38th St Adult Mental Health Clinic	Contra Costa Behavioral Health Services	West County	Adult
West County Adult Mental Health 24 St	Contra Costa Behavioral Health Services	West County	Adult
East County Adult Mental Health Clinic	Contra Costa Behavioral Health Services	East County	Adult
Central County Adult Mental Health Clinic	Contra Costa Behavioral Health Services	Central County	Adult

Programs Included in Levels One (Recovery and Maintenance and Health Management) and Two (Low Intensity Community Based Services)

Table B-4: Programs Included in Expenditures for Levels One (Recovery and Maintenance and Health Management) and Two (Low Intensity Community Based Services)			
Program Name	Agency	Region(s) Served	Target Population
Patients Rights Support Services	Consumer Self Help Center	Countywide	All
Miller Wellness Center	Contra Costa Health Services	Countywide	All
Mental Health Services	Rainbow Community Center	Countywide	Lesbian, Gay, Bisexual, Transgender, and Questioning Communities
School-Based Mental Health Services, Mental Health Services, Intensive Home-Based Services	Lincoln Center	Countywide	Children
School-Based Mental Health Services	Mount Diablo Unified School District	Central County	Children
School-Based Mental Health Services, Outpatient Mental Health Services	Community Health for Asian Americans	Countywide	Children
School-Based Mental Health Services	West Contra Costa Youth Services Bureau	West County	Children
Mental Health Services	Contra Costa Interfaith Housing	Central County	Children
School-Based Mental Health Services, Outpatient Mental Health Services	Fred Finch Youth Center	Countywide	Children
School-Based Mental Health Services	West Contra Costa Unified School District	West County	Children
School-Based Mental Health Services	Families First	Central County	Children
Mental Health Services	La Clinica del a Raza	East County	Children
Mental Health Services	Desarrollo Familiar	Countywide	All
School-Based Mental Health Services, Outpatient Mental Health Services	Bay Area Community Resources	West County	Children
School-Based Mental Health Services	Young Men's Community Association	West County	Children
School-Based Mental Health Services, Outpatient Mental Health Services, Mobile Response	Seneca Family Agencies	Countywide	Children
Mental Health Services	Victor Community Support Services	Countywide	Children
Mental Health Services	Casa Serena Eating Disorders	Countywide	Children
School-Based Mental Health Services	Berkeley Youth Alternatives	West County	Children
Mental Health Services	Contra Costa Associate for Retarded Citizens	Countywide	Children, Ages 0 to 5
Mental Health Services, Respite Mentoring Services	STAND!	Countywide	Children
Mental Health Services	We Care	Central County	Children, Ages 0 to 5
Mental Health Services	Apspiranet	Countywide	Children
Mental Health Services	Community Options for Family and Youth	Countywide	Children
Mental Health Services	Alternative Family Services	West County	Children
Mental Health Services	Early Childhood Mental Health Program	West County	Children, Ages 0 to 5
Head Start Mental Health Services	Community Services Bureau of the Contra Costa County Employment and Human Services Department	Countywide	Children
Mental Health Services	Portia Bell Hume Center	West County	Adult
Mental Health Services	Pathways to Wellness	Central County	All
Mental Health Services	Rubicon Programs	West County	Adult
Outpatient Mental Health Services, Support Services, and Multi-Service Centers	Anka Behavioral Health	Countywide	Adult
Medi-Cal Outpatient Managed Care (Network Providers)	Various Contractors	Countywide	All

Programs Included in Level Zero (Basic Services for Prevention and Health Maintenance)

Table B-5: Programs Included in Expenditures for Level Zero (Basic Services for Prevention and Health Maintenance)

Program Name	Agency	Region(s) Served	Target Population
Prevention and Early Intervention, Supporting Youth	Contra Costa County Behavioral Health Services	Countywide	Youth and Families Experiencing Juvenile Justice System
Prevention and Early Intervention, Supporting Families	First Five Contra Costa	Countywide	Families
Prevention and Early Intervention, Supporting Families	Contra Costa Health Services	Central County	Adults
Prevention and Early Intervention, Supporting Older Adults	Contra Costa Behavioral Health Services	Countywide	Older Adults
Prevention and Early Intervention, Stigma Reduction	Contra Costa Behavioral Health Services	Countywide	All
Prevention and Early Intervention, Suicide Prevention	Contra Costa Behavioral Health Services	Countywide	All
Prevention and Early Intervention, Supporting Families	Contra Costa County Interfaith Housing	Central and East County	Formerly Homeless Families
Prevention and Early Intervention, Supporting Youth	People Who Care	East County	Youth
Prevention and Early Intervention, Supporting Older Adults	Lifelong	West County	Older Adults
Prevention and Early Intervention, Underserved Communities	La Clinica de la Raza	Central and East County	Latino Communities
Prevention and Early Intervention, Preventing Relapse	Putnam Clubhouse	Countywide	Adults
Prevention and Early Intervention, Supporting Families	Child Abuse Prevention Council	Central and East County	Families
Prevention and Early Intervention, Supporting Youth	James Morehouse Project	West County	Youth
Prevention and Early Intervention, Underserved Communities	Native American Health Center	Countywide	Native American Communities
Prevention and Early Intervention, Supporting Youth	The Latina Center	West County	Latino Families
Prevention and Early Intervention, Underserved Communities	Building Blocks For Kids	West County	At Risk Families
Prevention and Early Intervention, Underserved Communities	Lao Family Community Development	West County	Asian and Southeast Asian Communities
Prevention and Early Intervention, Suicide Prevention	Contra Costa Crisis Center	Countywide	All
Prevention and Early Intervention, Underserved Communities	Jewish Family and Children's Services	Central and East County	Immigrants and Refugees of Latino, Afghan, Bosnian, Iranian, and Russian Communities
Prevention and Early Intervention, Underserved Communities	Center for Human Development	East County	African American Communities
Prevention and Early Intervention, Supporting Youth	New Leaf	Central County	At Risk Youth
Prevention and Early Intervention, Supporting Youth	STAND! Against Domestic Violence	Countywide	At Risk Youth
Prevention and Early Intervention, Supporting Youth	Counseling Options Parenting Education	Countywide	Families
Prevention and Early Intervention, Underserved Communities	Rainbow Community Center	Countywide	Lesbian, Gay, Bisexual, Transgender, and Questioning Communities
Prevention and Early Intervention, Underserved Communities	Asian Community Mental Health	Countywide	Immigrant Asian Communities
Prevention and Early Intervention, Supporting Youth	RYSE	West County	At Risk Youth
Innovation, Reluctant to Rescue	Community Violence Solutions	West and East County	At Risk Youth