



Policy Brief

Toward a Meaningful Dashboard for Behavioral Health Services

March 2019

In setting expenditure priorities for behavioral health services, county decision makers should consider establishing policy goals that are based on measurable indices. This policy brief provides an example of a data dashboard that may help inform the decision-making process by comparing objective measures and trends among similar counties. The metrics included in the dashboard are presented, not as the definitive indicators for measuring success in the behavioral health system, but rather a starting place for a discussion about what data is most valuable and available. In our example dashboard, behavioral health services for the Medi-Cal population and for foster care youth are arrayed by the ten most populous counties. Additionally, most of the metrics presented focus on mental health, and additional metrics on behavioral health should be added.

Meaningful data can inform meaningful change. Most of the metrics presented are reported by counties to the California Department of Health Care Services (DHCS) and are publicly available. State and local elected officials, staff, and stakeholders who best understand a community's needs and values can use data to inform decision-making processes about the allocation of resources for behavioral health programs. While anecdotes and personal testimonials can help illustrate needs or suggest program effectiveness, there is no substitute for rigorous data collection systems that produce reliable and meaningful data. A dashboard is a simple tool that includes a menu of the key indicators that provide both a reference point for current efforts as well as trends. This information can help identify underlying needs and program effectiveness. If trends, positive or negative, the dashboard can help raise questions about causes and policy changes that might be needed. Comparisons with other large counties can also yield valuable information.

Quality metrics, when designed thoughtfully and trended accurately, can provide invaluable information to policy makers. Although no metric is perfect, they convey directional improvement, which is particularly relevant for comparing counties or regions across California.

California's Mental Health Services Act (MHSA) passed in 2004 with the intention of improving the state's provision of mental health services. By funding counties to administer programs and deliver services, the strategic use of resources could be governed locally, with county officials and agencies allocating funds according to their communities' needs.

How is the state's behavioral health care system performing? Are individuals with serious mental illness receiving better or more frequent care than before? Are they receiving the care they need? How can we begin to more systematically assess the behavioral health care system across the state and for specific populations?

The following two dashboards present **five key indicators** that compile publicly available data. The indicators convey trends in Alameda, Contra Costa, Fresno, Los Angeles, Orange, Riverside, Sacramento, San Bernardino, San Diego, and Santa Clara Counties and display the variation across these counties. The indicators are:

- Penetration rates, i.e. the percent of the population served.
- Percent of patients discharged from psychiatric inpatient care who receive step down of post-discharge services within 7 days of discharge.
- Hospital psychiatric inpatient days.
- Hospital psychiatric inpatient administrative days, and indicator that discharge from the inpatient facility is being delayed.
- Mean number of days between inpatient and step down or post-discharge service.

Also included are data regarding the percentage of incarcerated individuals who receiving psychotropic medication as well as data about the prevalence of mental health diagnoses in emergency departments.

There are many other additional measures that should be considered, but unfortunately, there is no central state repository of county data that would allow for cross-county comparisons. Other measures for consideration could include:

- adult metrics relating to number of 5150 calls,
- attempts at suicides,
- unsheltered homeless who are seriously mentally ill,
- drug overdoses,
- inmates deemed to be incompetent to stand trial, etc.
- similar data could be collected for youth.

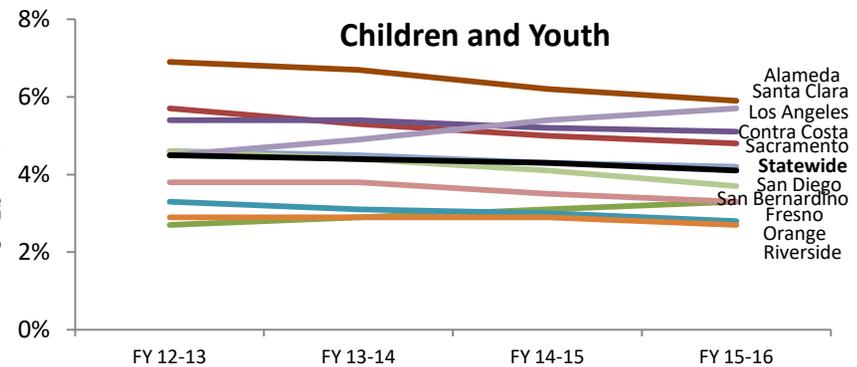
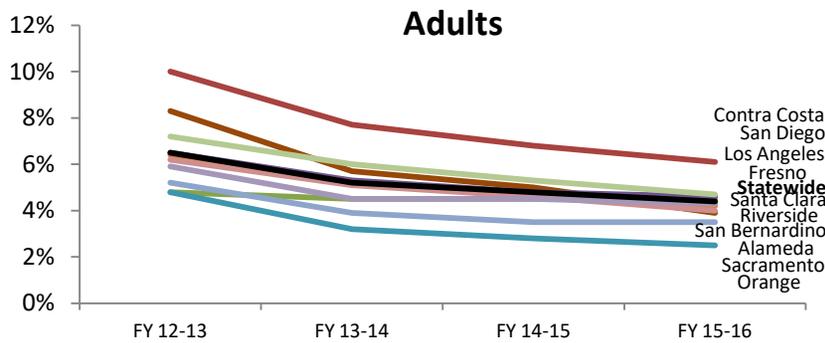
Recognizing the limitations of our dashboard, it is hoped that it will spark a discussion about the value of creating a dashboard for counties and the metrics that can and should be included in it.

Dashboard #1 - Behavioral Health Services

Key Indicator 1 -- Penetration Rates: the total number of Med-Cal eligible individuals (all adults or all youth) who received at least one specialty mental health service at any time in the fiscal year divided by the total number individuals eligible for Medi-Cal (both adults and youth) for that fiscal year.¹ One factor that would affect the overall penetration rates is the expansion of Medi-Cal eligibility for low income childless adults in 2014. We would expect that the penetration rates for adults would decline due to the inclusion of childless adults because some number of them who have serious mental illness will have already been diagnosed and may already have been eligible for Medi-Cal as categorically-eligible disabled. Another variable relates to how managed health care plans are treating mild and moderate mental health needs, which may result in decreased demand for specialty mental health services.

Adults	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	8.3%	5.7%	5.0%	3.9%
Contra Costa	10.0%	7.7%	6.8%	6.1%
Fresno	4.8%	4.5%	4.5%	4.5%
Los Angeles	6.5%	5.3%	4.8%	4.6%
Orange	4.8%	3.2%	2.8%	2.5%
Riverside	6.4%	5.2%	4.7%	4.2%
Sacramento	5.2%	3.9%	3.5%	3.5%
San Bernardino	6.2%	5.1%	4.6%	4.0%
San Diego	7.2%	6.0%	5.3%	4.7%
Santa Clara	5.9%	4.5%	4.5%	4.3%
Statewide	6.5%	5.2%	4.8%	4.4%

Children and Youth	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	6.9%	6.7%	6.2%	5.9%
Contra Costa	5.7%	5.3%	5.0%	4.8%
Fresno	2.7%	2.9%	3.1%	3.3%
Los Angeles	5.4%	5.4%	5.2%	5.1%
Orange	3.3%	3.1%	3.0%	2.8%
Riverside	2.9%	2.9%	2.9%	2.7%
Sacramento	4.6%	4.5%	4.3%	4.2%
San Bernardino	3.8%	3.8%	3.5%	3.3%
San Diego	4.6%	4.4%	4.1%	3.7%
Santa Clara	4.5%	4.9%	5.4%	5.7%
Statewide	4.5%	4.4%	4.3%	4.1%

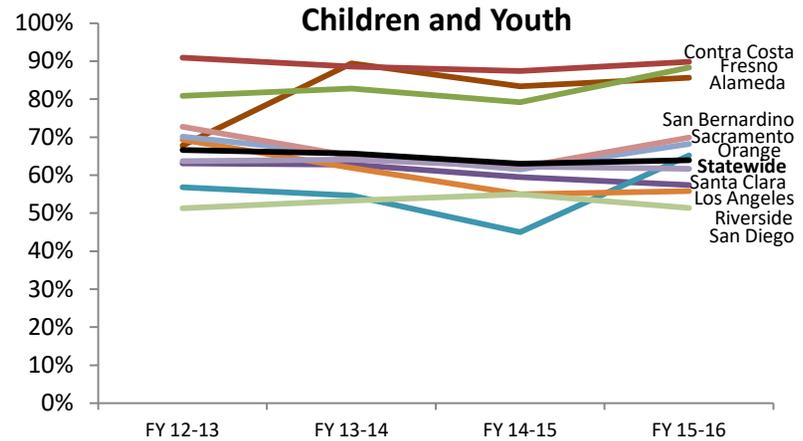
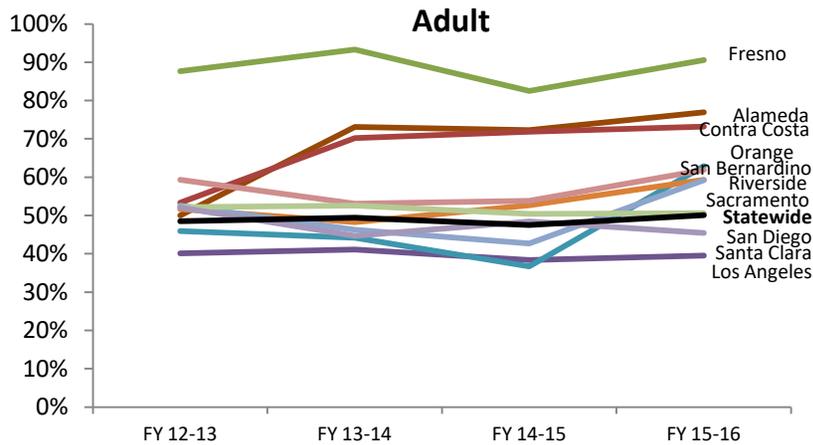


¹ The denominator for penetration rate is based on the total cumulative number of Medi-Cal enrollees throughout the year; it is not a point-in-time count.

Key Indicator 2 -- Percent of Psychiatric Inpatient Discharges with Step Down Services within 7 days of Discharge: The graphs below show the proportion of individuals who receive step down services post-discharge. This metric is claims-based. An accurate percent of inpatient discharges with step down relies on accurate claims documentation.

Adults	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	50.0%	73.1%	72.3%	76.9%
Contra Costa	53.3%	70.2%	71.9%	73.2%
Fresno	87.7%	93.3%	82.5%	90.6%
Los Angeles	40.1%	41.1%	38.4%	39.5%
Orange	45.9%	44.2%	36.7%	62.9%
Riverside	51.7%	48.3%	52.7%	59.3%
Sacramento	52.6%	46.3%	42.7%	59.2%
San Bernardino	59.3%	53.1%	53.8%	61.9%
San Diego	52.2%	52.6%	50.4%	50.6%
Santa Clara	52.1%	44.7%	48.4%	45.4%
Statewide	48.5%	49.4%	47.5%	50.1%

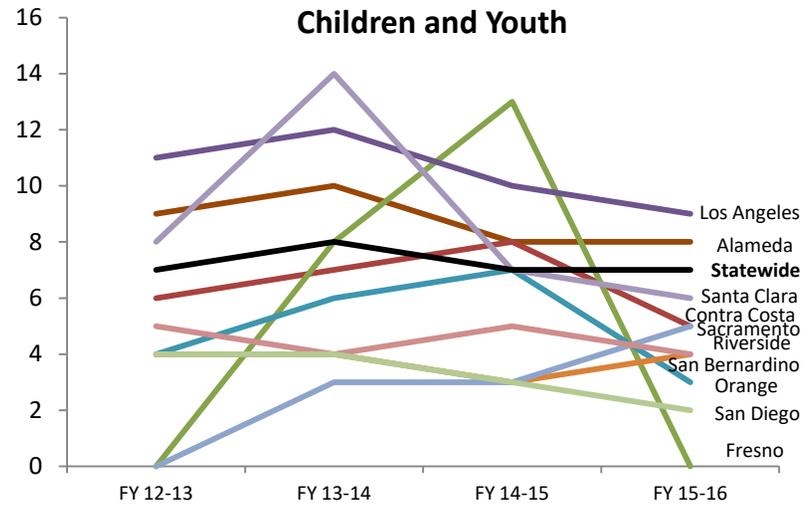
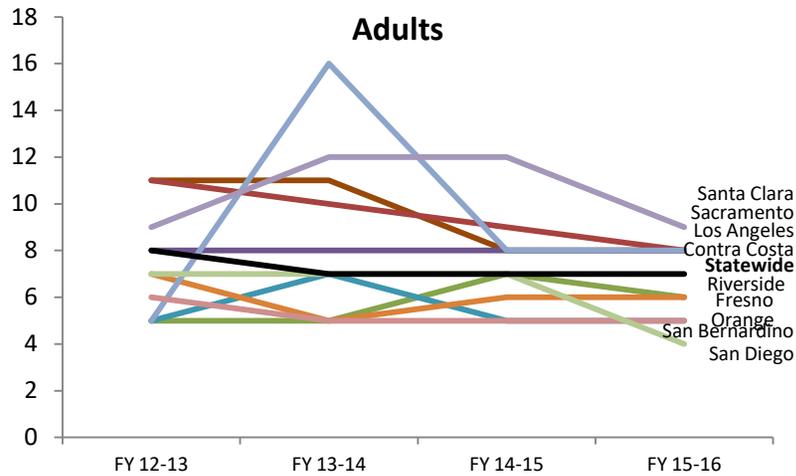
Children and Youth	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	67.8%	89.4%	83.4%	85.6%
Contra Costa	90.9%	88.6%	87.4%	89.8%
Fresno	80.9%	82.8%	79.2%	88.3%
Los Angeles	63.1%	62.8%	59.5%	57.4%
Orange	56.8%	54.6%	45.0%	65.2%
Riverside	69.3%	61.9%	55.0%	55.8%
Sacramento	70.1%	65.4%	61.5%	68.2%
San Bernardino	72.7%	65.0%	62.0%	69.9%
San Diego	51.3%	53.3%	55.0%	51.4%
Santa Clara	63.7%	64.1%	62.3%	61.7%
Statewide	66.6%	65.7%	63.0%	63.9%



Key Indicator 3 -- Hospital Psychiatric Inpatient Days reflect the number of days individuals receive inpatient care in a hospital divided by the total number of beneficiaries. This value portrays the level of service acuity.

Adults	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	11	11	8	8
Contra Costa	11	10	9	8
Fresno	5	5	7	6
Los Angeles	8	8	8	8
Orange	5	7	5	5
Riverside	7	5	6	6
Sacramento	5	16	8	8
San Bernardino	6	5	5	5
San Diego	7	7	7	4
Santa Clara	9	12	12	9
Statewide	8	7	7	7

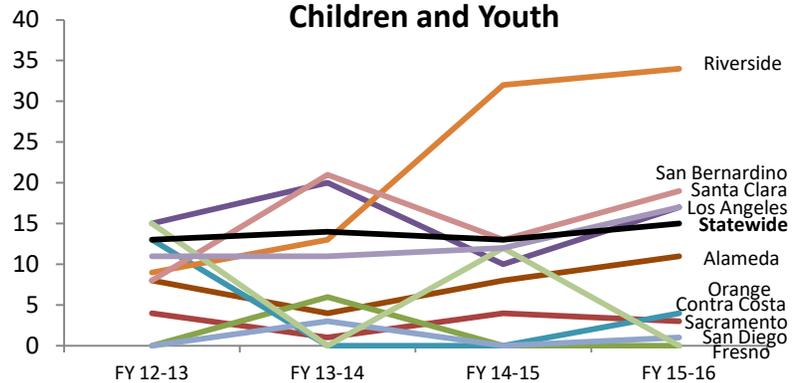
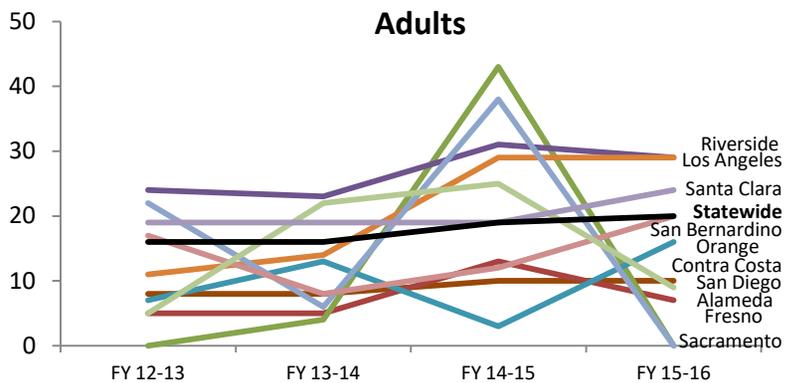
Children and Youth	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	9	10	8	8
Contra Costa	6	7	8	5
Fresno	0	8	13	0
Los Angeles	11	12	10	9
Orange	4	6	7	3
Riverside	4	4	3	4
Sacramento	0	3	3	5
San Bernardino	5	4	5	4
San Diego	4	4	3	2
Santa Clara	8	14	7	6
Statewide	7	8	7	7



Key Indicator 4 -- Hospital Psychiatric Inpatient Admin Days show the duration that individuals wait to transfer to another, lower-acuity setting after their acute illness is stabilized and because they no longer meet county mental health plan medical necessity criteria for a continued stay in an acute bed. This measure could reflect the capacity and/or availability of lower-acuity settings. This figure could be an underrepresentation because hospitals must document certain processes in order to receive payment for admin days. Also, for dual-eligible individuals, the County may not always pay for admin days. One interpretation of an increasing trend is that more individuals are needing a higher level of care.

Adults	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	8	8	10	10
Contra Costa	5	5	13	7
Fresno	0	4	43	0
Los Angeles	24	23	31	29
Orange	7	13	3	16
Riverside	11	14	29	29
Sacramento	22	6	38	0
San Bernardino	17	8	12	20
San Diego	5	22	25	9
Santa Clara	19	19	19	24
Statewide	16	16	19	20

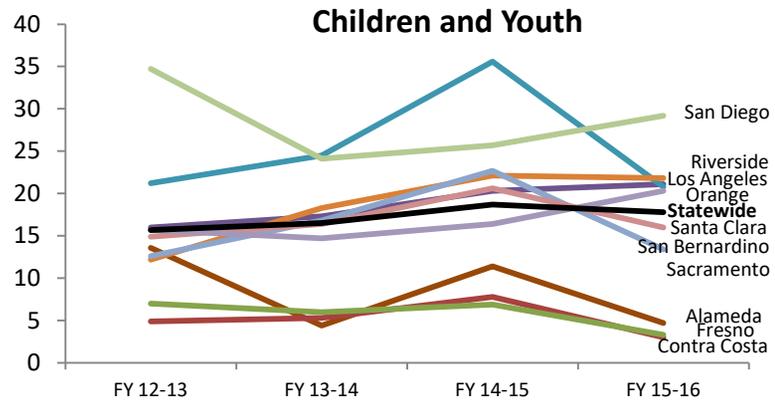
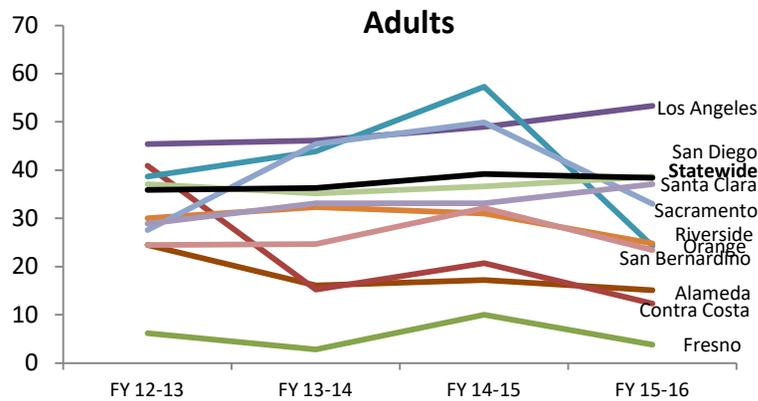
Children and Youth	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	8	4	8	11
Contra Costa	4	1	4	3
Fresno	0	6	0	0
Los Angeles	15	20	10	17
Orange	13	0	0	4
Riverside	9	13	32	34
Sacramento	0	3	0	1
San Bernardino	8	21	13	19
San Diego	15	0	12	0
Santa Clara	11	11	12	17
Statewide	13	14	13	15



Key Indicator 5 -- Mean Number of Days Between Inpatient and Step Down Service conveys the speed at which individuals receive care, going from an inpatient setting to an outpatient program. An increasing trend could reflect inadequate outpatient service capacity. Note: the step down service must be billable, which may not consider other types of services. Furthermore, step down services may not capture all outpatient services such as community-based organizations.

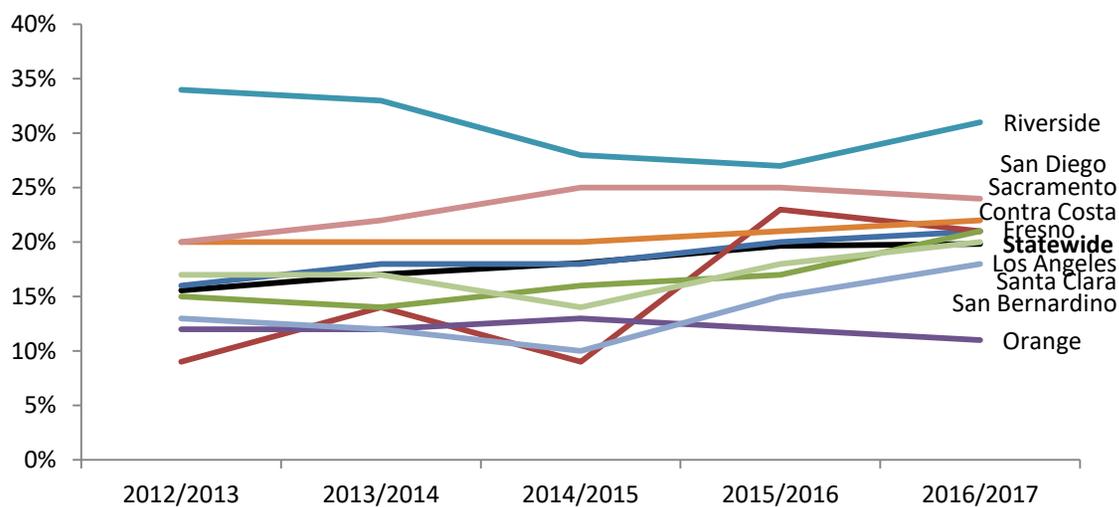
Adults	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	24.5	16.1	17.2	15.1
Contra Costa	40.9	15.2	20.7	12.3
Fresno	6.2	2.8	10.0	3.8
Los Angeles	45.4	46.1	49.0	53.3
Orange	38.7	43.9	57.3	24.3
Riverside	30.0	32.3	31.0	24.8
Sacramento	27.6	45.4	49.9	33.0
San Bernardino	24.5	24.7	32.1	23.4
San Diego	37.1	35.2	36.6	38.7
Santa Clara	28.9	33.1	33.1	37.1
Statewide	35.9	36.3	39.2	38.4

Children and Youth	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	13.6	4.4	11.4	4.7
Contra Costa	4.9	5.3	7.8	3.0
Fresno	7.0	6.0	6.9	3.3
Los Angeles	16.0	17.3	20.3	21.1
Orange	21.2	24.5	35.6	20.8
Riverside	12.2	18.3	22.1	21.8
Sacramento	12.6	16.8	22.7	13.4
San Bernardino	14.9	16.4	20.6	16.0
San Diego	34.7	24.1	25.7	29.2
Santa Clara	15.7	14.7	16.4	20.3
Statewide	15.7	16.5	18.7	17.8



Incarcerated Individuals Receiving Psychotropic Medications – the relative share of incarcerated individual by county. These figures reflect the number of individuals receiving psychotropic medications divided by the average daily population incarcerated in that year in that county. (Note: Data from Alameda County are not available.)

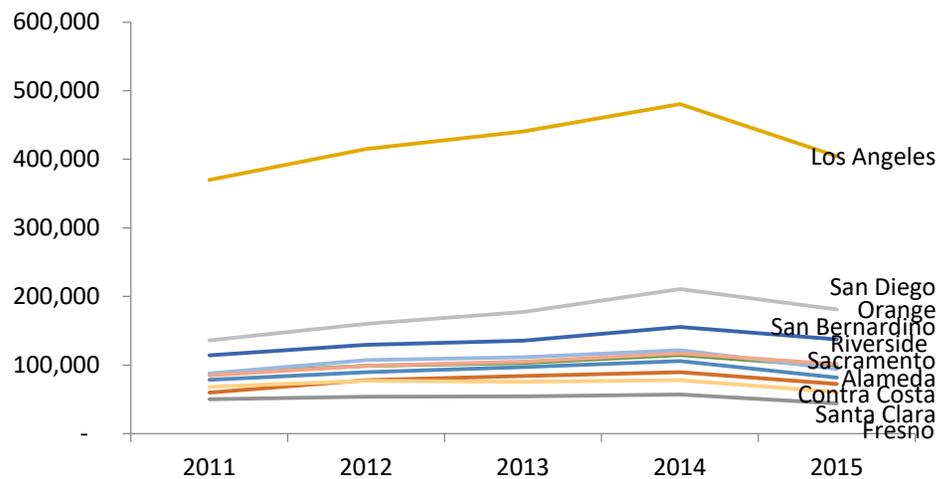
	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017
Contra Costa	16%	18%	18%	20%	21%
Fresno	9%	14%	9%	23%	21%
Los Angeles	15%	14%	16%	17%	21%
Orange	12%	12%	13%	12%	11%
Riverside	34%	33%	28%	27%	31%
Sacramento	20%	20%	20%	21%	22%
San Bernardino	13%	12%	10%	15%	18%
San Diego	20%	22%	25%	25%	24%
Santa Clara	17%	17%	14%	18%	20%
Statewide	16%	17%	18%	20%	20%



Mental health diagnoses in emergency departments – Using emergency department data from the California Office of Statewide Health Planning and Development, the following graph shows the prevalence of primary and secondary diagnoses (up to 10 diagnoses) for suicidal ideation, schizophrenia and other psychotic disorders, mood and personality disorders, and anxiety disorders within a given county, divided by the county population.

	2011	2012	2013	2014	2015
Alameda	78,609	89,793	96,876	105,840	81,721
Contra Costa	59,810	78,089	83,826	89,753	72,222
Fresno	50,262	53,811	54,096	57,140	43,953
Los Angeles	370,048	415,132	440,737	480,570	404,354
Orange	114,209	129,312	135,625	155,356	137,270
Riverside	87,308	98,680	102,957	114,497	97,790
Sacramento	87,879	107,114	111,600	121,761	94,018
San Bernardino	84,750	98,972	104,687	117,201	101,342
San Diego	135,955	160,373	177,479	210,543	180,935
Santa Clara	68,390	77,170	75,432	77,961	60,805

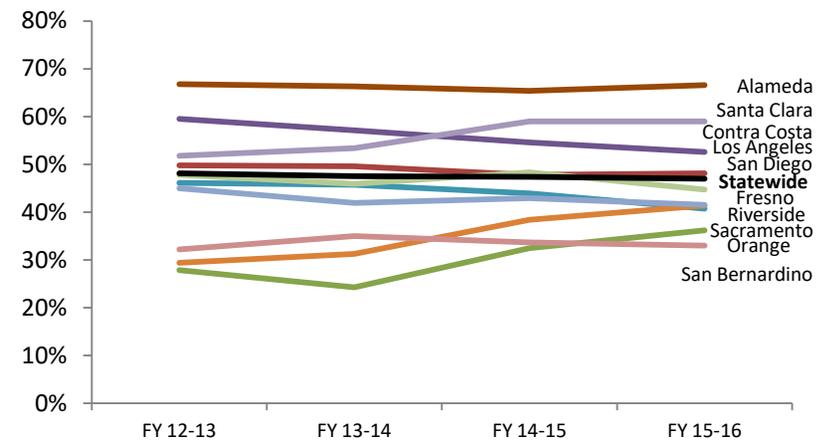
Note: statewide not available



Dashboard #2 - Foster Youth Data

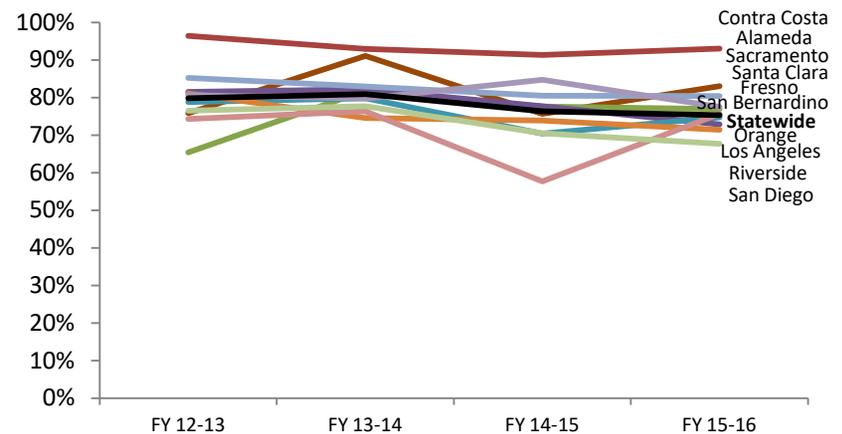
Key Indicator 1 -- Penetration rates with at least one specialty mental health services visit, Foster Youth

	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	66.8%	66.3%	65.4%	66.6%
Contra Costa	49.8%	49.6%	47.8%	48.1%
Fresno	27.9%	24.3%	32.5%	36.2%
Los Angeles	59.5%	57.1%	54.6%	52.6%
Orange	46.1%	45.7%	43.9%	40.7%
Riverside	29.4%	31.3%	38.4%	41.4%
Sacramento	45.0%	41.9%	42.9%	41.5%
San Bernardino	32.2%	35.0%	33.7%	33.0%
San Diego	47.8%	45.9%	48.3%	44.7%
Santa Clara	51.8%	53.4%	59.0%	59.0%
Statewide	48.1%	47.5%	47.4%	47.0%



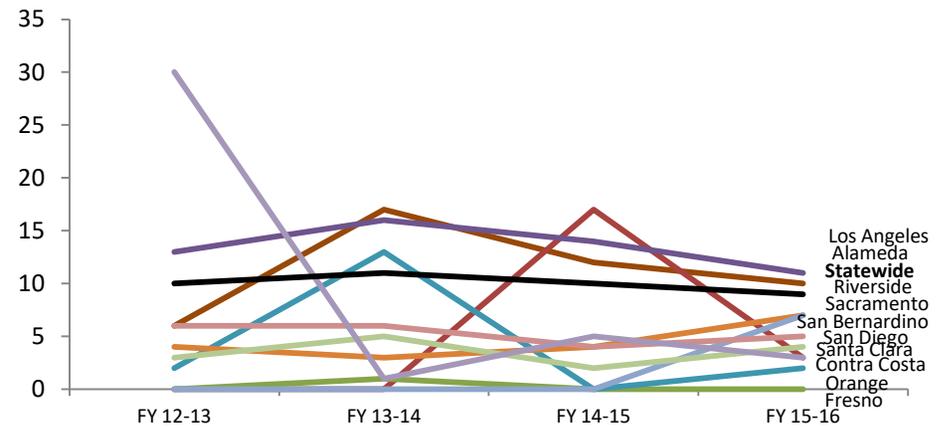
Key Indicator 2 -- Percent of discharges within 7 days between inpatient discharge and step-down service, Foster Youth

	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	75.8%	91.1%	75.6%	83.0%
Contra Costa	96.4%	92.9%	91.3%	93.0%
Fresno	65.4%	81.8%	77.6%	76.9%
Los Angeles	81.5%	82.2%	77.7%	72.8%
Orange	78.8%	79.8%	70.4%	74.7%
Riverside	81.1%	74.5%	73.9%	71.4%
Sacramento	85.2%	82.9%	80.5%	80.4%
San Bernardino	74.3%	76.3%	57.7%	75.6%
San Diego	76.5%	77.7%	70.5%	67.7%
Santa Clara	80.6%	79.7%	84.7%	77.5%
Statewide	79.8%	80.9%	76.3%	75.3%



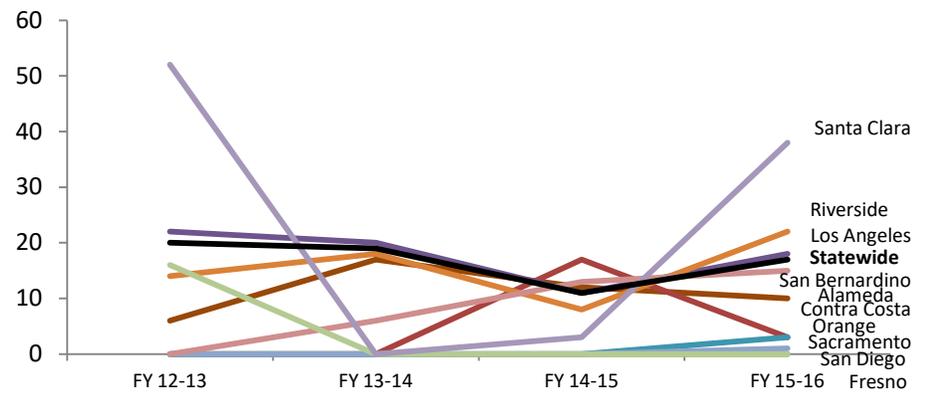
Key indicator 3 -- Hospital inpatient days per unique beneficiary, Foster Youth

	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	6	17	12	10
Contra Costa	0	0	17	3
Fresno	0	1	0	0
Los Angeles	13	16	14	11
Orange	2	13	0	2
Riverside	4	3	4	7
Sacramento	0	0	0	7
San Bernardino	6	6	4	5
San Diego	3	5	2	4
Santa Clara	30	1	5	3
Statewide	10	11	10	9



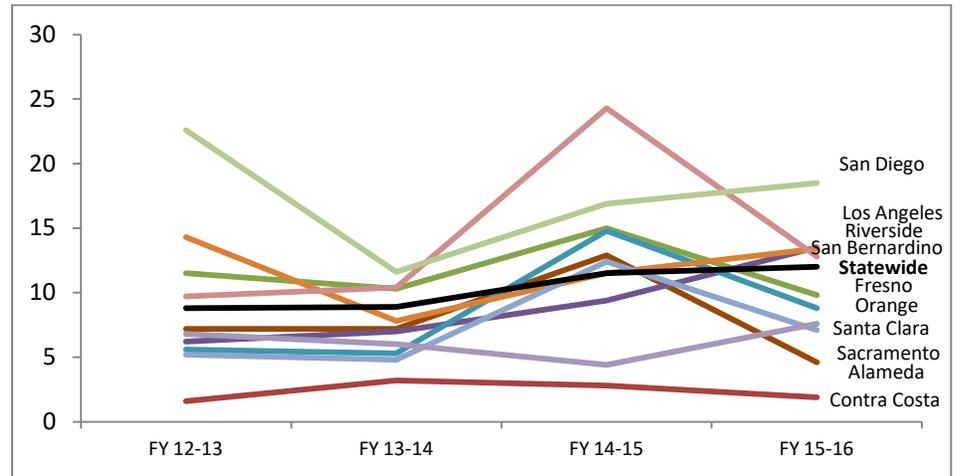
Key indicator 4 -- Hospital inpatient admin days per unique beneficiary, Foster Youth

	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	6	17	12	10
Contra Costa	0	0	17	3
Fresno	0	0	0	0
Los Angeles	22	20	11	18
Orange	0	0	0	3
Riverside	14	18	8	22
Sacramento	0	0	0	1
San Bernardino	0	6	13	15
San Diego	16	0	0	0
Santa Clara	52	0	3	38
Statewide	20	19	11	17



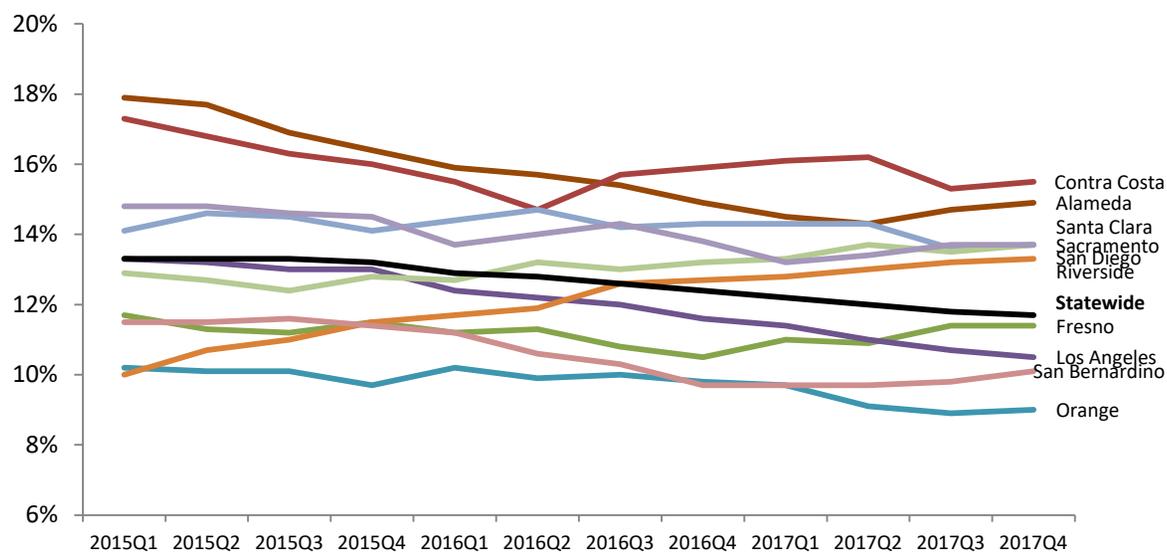
Key indicator 5 -- Mean time between inpatient discharge and step-down service, in days, Foster Youth

	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Alameda	7.2	7.2	12.9	4.6
Contra Costa	1.6	3.2	2.8	1.9
Fresno	11.5	10.3	15.0	9.8
Los Angeles	6.2	7.0	9.4	13.5
Orange	5.6	5.3	14.8	8.8
Riverside	14.3	7.8	11.5	13.4
Sacramento	5.2	4.8	12.4	7.1
San Bernardino	9.7	10.4	24.3	12.8
San Diego	22.6	11.6	16.9	18.5
Santa Clara	6.8	6.0	4.4	7.6
Statewide	8.8	8.9	11.5	12.0



Use of Psychotropic Medications among Foster Youth

	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Alameda	17.9%	17.7%	16.9%	16.4%	15.9%	15.7%	15.4%	14.9%	14.5%	14.3%	14.7%	14.9%
Contra Costa	17.3%	16.8%	16.3%	16.0%	15.5%	14.7%	15.7%	15.9%	16.1%	16.2%	15.3%	15.5%
Fresno	11.7%	11.3%	11.2%	11.5%	11.2%	11.3%	10.8%	10.5%	11.0%	10.9%	11.4%	11.4%
Los Angeles	13.3%	13.2%	13.0%	13.0%	12.4%	12.2%	12.0%	11.6%	11.4%	11.0%	10.7%	10.5%
Orange	10.2%	10.1%	10.1%	9.7%	10.2%	9.9%	10.0%	9.8%	9.7%	9.1%	8.9%	9.0%
Riverside	10.0%	10.7%	11.0%	11.5%	11.7%	11.9%	12.6%	12.7%	12.8%	13.0%	13.2%	13.3%
Sacramento	14.1%	14.6%	14.5%	14.1%	14.4%	14.7%	14.2%	14.3%	14.3%	14.3%	13.6%	13.7%
San Bernardino	11.5%	11.5%	11.6%	11.4%	11.2%	10.6%	10.3%	9.7%	9.7%	9.7%	9.8%	10.1%
San Diego	12.9%	12.7%	12.4%	12.8%	12.7%	13.2%	13.0%	13.2%	13.3%	13.7%	13.5%	13.7%
Santa Clara	14.8%	14.8%	14.6%	14.5%	13.7%	14.0%	14.3%	13.8%	13.2%	13.4%	13.7%	13.7%
Statewide	13.3%	13.3%	13.3%	13.2%	12.9%	12.8%	12.6%	12.4%	12.2%	12.0%	11.8%	11.7%



Dashboard Data Sources

For children and youth data -

http://www.dhcs.ca.gov/provgovpart/pos/Pages/September_2017_County_Aggregate_Reports.aspx

For adults -

http://www.dhcs.ca.gov/services/MH/Pages/2017_Adult_Population_County_Level_Aggregate_Reports.aspx

Incarcerated individuals receiving psychotropic medications –
BSCC JPS Online Query,

http://calhps.com/reports/PolicyBrief_PsychotropicMedications_CalHPS.pdf

Mental health diagnoses in emergency departments –
OHSPD data analyzed by CalHPS

Foster youth metrics, by county:

http://www.dhcs.ca.gov/services/MH/Pages/September_2017_Foster_Care_County_Level_Aggregate_Reports.aspx

Use of psychotropic medications among foster youth:
California Child Welfare Indicators Project,

http://cssr.berkeley.edu/ucb_childwelfare/CDSS_5A.aspx



About California Health Policy Strategies (CalHPS), LLC.

CalHPS is a mission-driven health policy consulting group based in Sacramento. For more information, visit www.calhps.com