

CALIFORNIA HEALTH CARE ALMANAC



Mental Health in California: For Too Many, Care Not There

MARCH 2018

Introduction

Mental health disorders are among the most common health conditions faced by Californians: Nearly 1 in 6 California adults experience a mental illness of some kind, and 1 in 24 have a serious mental illness that makes it difficult to carry out major life activities. One in 13 children has an emotional disturbance that limits participation in daily activities.

Federal and state laws mandating parity in coverage of mental and physical illness, together with expansion under the ACA of both Medi-Cal eligibility and scope of mental health services, have made more services available to more Californians. Public and private actors have devoted significant resources to expand access to care, better integrate physical and mental health care, and reduce stigma. Despite these efforts, the incidence of some mental illnesses continues to rise, many Californians still fail to receive treatment for their mental health needs, and many have poor overall health outcomes.

Using the most recent data available, *Mental Health in California: For Too Many, Care Not There* provides an overview of mental health in California: disease prevalence, suicide rates, supply and use of treatment providers, and mental health in the correctional system. The report also highlights available data on quality of care and mental health care spending.

KEY FINDINGS INCLUDE:

- The prevalence of serious mental illness varied by income, with much higher rates of mental illness at lower income levels for both children and adults.
- Compared to the US, California had a lower rate of suicide, although it varied considerably within the state by gender, age, race/ethnicity, and region.
- About two-thirds of adults with a mental illness and two-thirds of adolescents with major depressive episodes did not get treatment.
- Medi-Cal pays for a significant portion of mental health treatment in California. The number of adults receiving specialty mental health services through Medi-Cal has increased by nearly 50% from 2012 to 2015, coinciding with expansion of Medi-Cal eligibility.
- The supply of acute psychiatric beds may have stabilized after a long period of decline. However, emergency department visits resulting in an inpatient psychiatric admission increased by 30% between 2010 and 2015. More robust community services might decrease emergency department use.
- The incidence of mental illnesses in California’s jails and prisons is very high. In 2015, 38% of female prison inmates and 23% of the male prison population received mental health treatment while incarcerated.

Mental Health

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Mental Health and Mental Disorders Defined

Any mental illness (AMI) is a categorization for adults 18 and older who currently have, or at any time in the past year had, a diagnosable mental, behavioral, or emotional disorder, regardless of the level of impairment in carrying out major life activities. This category includes people whose mental illness causes serious, moderate, or mild functional impairment.

Serious mental illness (SMI) is a categorization for adults 18 and older who currently have, or at any time during the past year have had, a diagnosable mental, behavioral, or emotional disorder resulting in functional impairment that interferes with or limits major life activities.

Serious emotional disturbance (SED) is a categorization for children 17 and under who currently have, or at any time during the past year have had, a mental, behavioral, or emotional disorder resulting in functional impairment that substantially limits functioning in family, school, or community activities.

A **major depressive episode (MDE)** is a period of at least two weeks when a child or adult has experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Approximately 64% of adults and 70% of children with MDE have functional limitations that meet the criteria for SMI or SED.

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Overview

Mental health disorders encompass many diagnoses, including depression, anxiety, schizophrenia, attention deficit hyperactivity disorder, and post-traumatic stress disorder. These diagnoses may affect a person's thinking, mood, or behavior. Some disorders are acute and short-lived. Others are persistent and can lead to difficulty with functioning and disability. Psychotherapies, behavioral management, and medications have been proven effective in promoting recovery from mental disorders.

Sources: *Behavioral Health Barometer: California, Volume 4*, Substance Abuse and Mental Health Services Administration, 2017, www.samhsa.gov (PDF); 58 Fed. Reg. 96 (May 20, 1993): 29422; "12-Month Prevalence of Major Depressive Episode with Severe Impairment Among U.S. Adults (2015)," in "Mental Illness," National Institute of Mental Health, www.nimh.nih.gov.

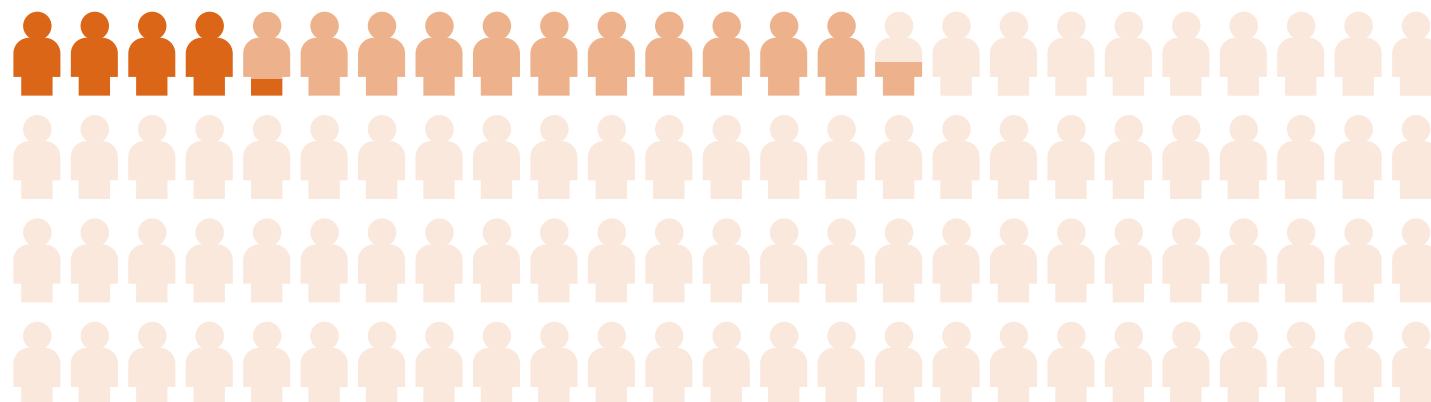
Incidence of Mental Illness

Adults and Children, California, 2014

PERCENTAGE OF POPULATION

4.2% Adults with Serious Mental Illness

15.4% Adults with Any Mental Illness



7.6% Children with Serious Emotional Disturbance



Notes: *Serious emotional disturbance (SED)* is a categorization for children age 17 and under. *Serious mental illness (SMI)* is a categorization for adults age 18 and older. See page 3 for full definitions. See page 54 for a description of the methodology used to develop these estimates.

Source: Charles Holzer and Hoang Nguyen, "Estimation of Need for Mental Health Services," accessed December 22, 2017, charlesholzer.com.

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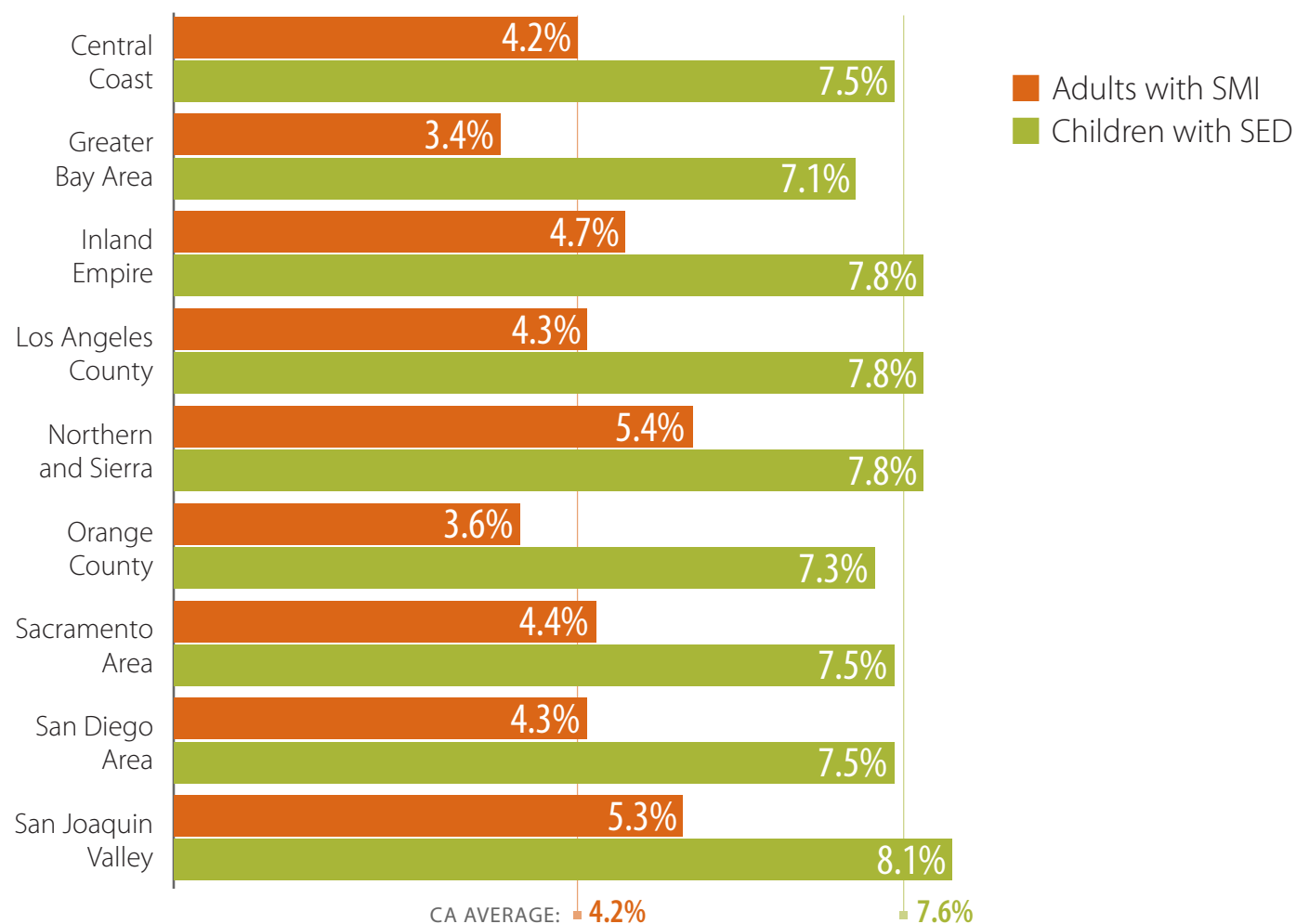
Prevalence

In 2014, 1 in 24 adults in California experienced a serious mental illness, defined as difficulty in carrying out major life activities. About 1 in 6 adults experienced a mental, behavioral, or emotional disorder (any mental illness). One in 13 children in California had a serious emotional disturbance that could interfere with home, learning, or getting along with people. Children do not have an equivalent "any mental illness" designation.

Adults with SMI and Children with SED, by Region

California, 2014

PERCENTAGE OF POPULATION



Notes: *Serious emotional disturbance (SED)* is a categorization for children age 17 and under. *Serious mental illness (SMI)* is a categorization for adults age 18 and older. See page 3 for full definitions. See page 54 for a description of the methodology used to develop these estimates. See Appendix A for a map of counties included in each region.

Source: Charles Holzer and Hoang Nguyen, "Estimation of Need for Mental Health Services," accessed December 22, 2017, charlesholzer.com.

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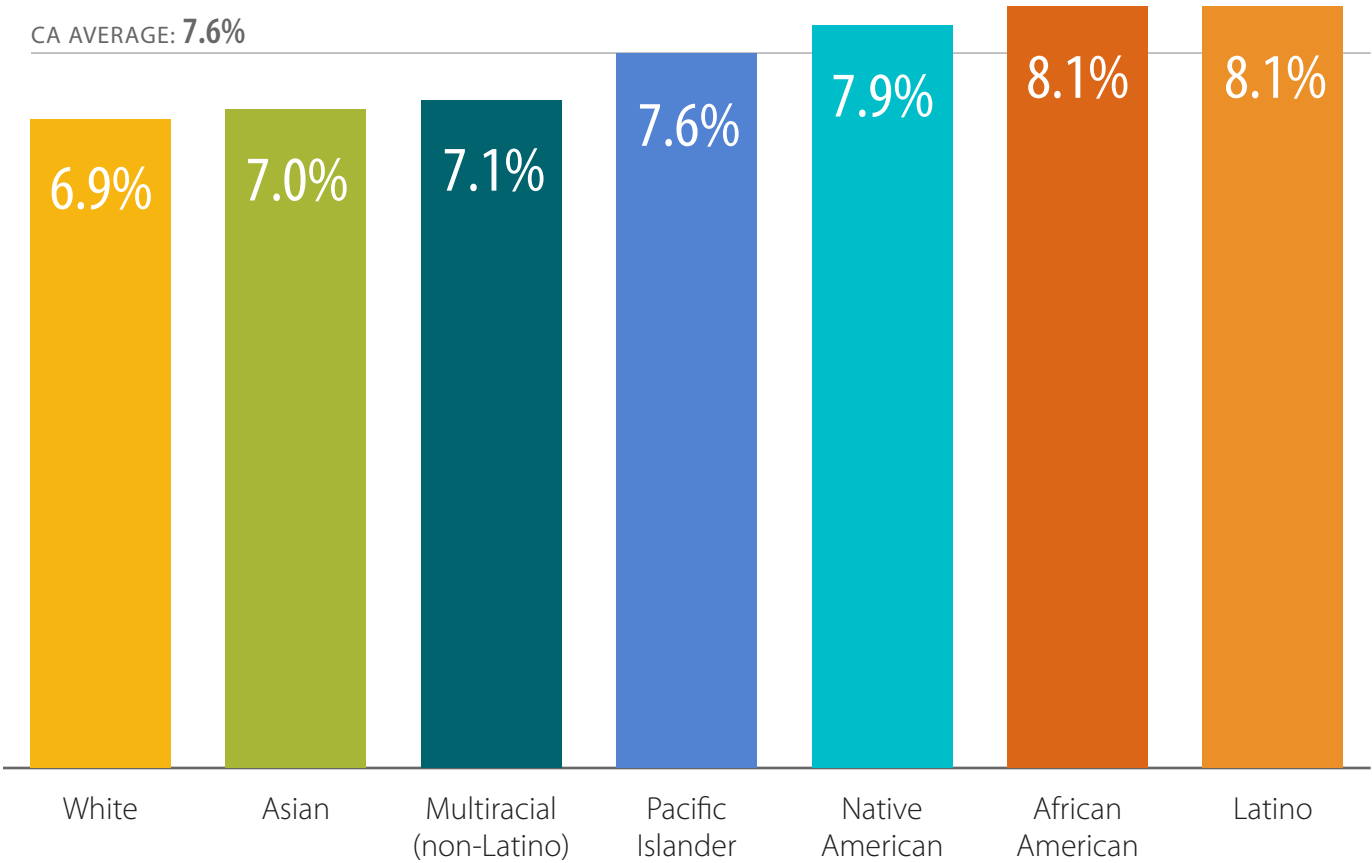
Prevalence

The rate of serious emotional disturbance among children in California regions varied from a high of 8.1% in San Joaquin Valley to a low of 7.1% in the Greater Bay Area. The prevalence of serious mental illness among adults ranged from a high of 5.4% in the Northern and Sierra region to a low of 3.4% in the Greater Bay Area.

Children with SED, by Race/Ethnicity

California, 2014

PERCENTAGE OF CHILD POPULATION



Notes: *Serious emotional disturbance (SED)* is a categorization for children age 17 and under. See page 3 for full definitions. See page 54 for a description of the methodology used to develop these estimates.

Source: Charles Holzer and Hoang Nguyen, "Estimation of Need for Mental Health Services," accessed December 22, 2017, charlesholzer.com.

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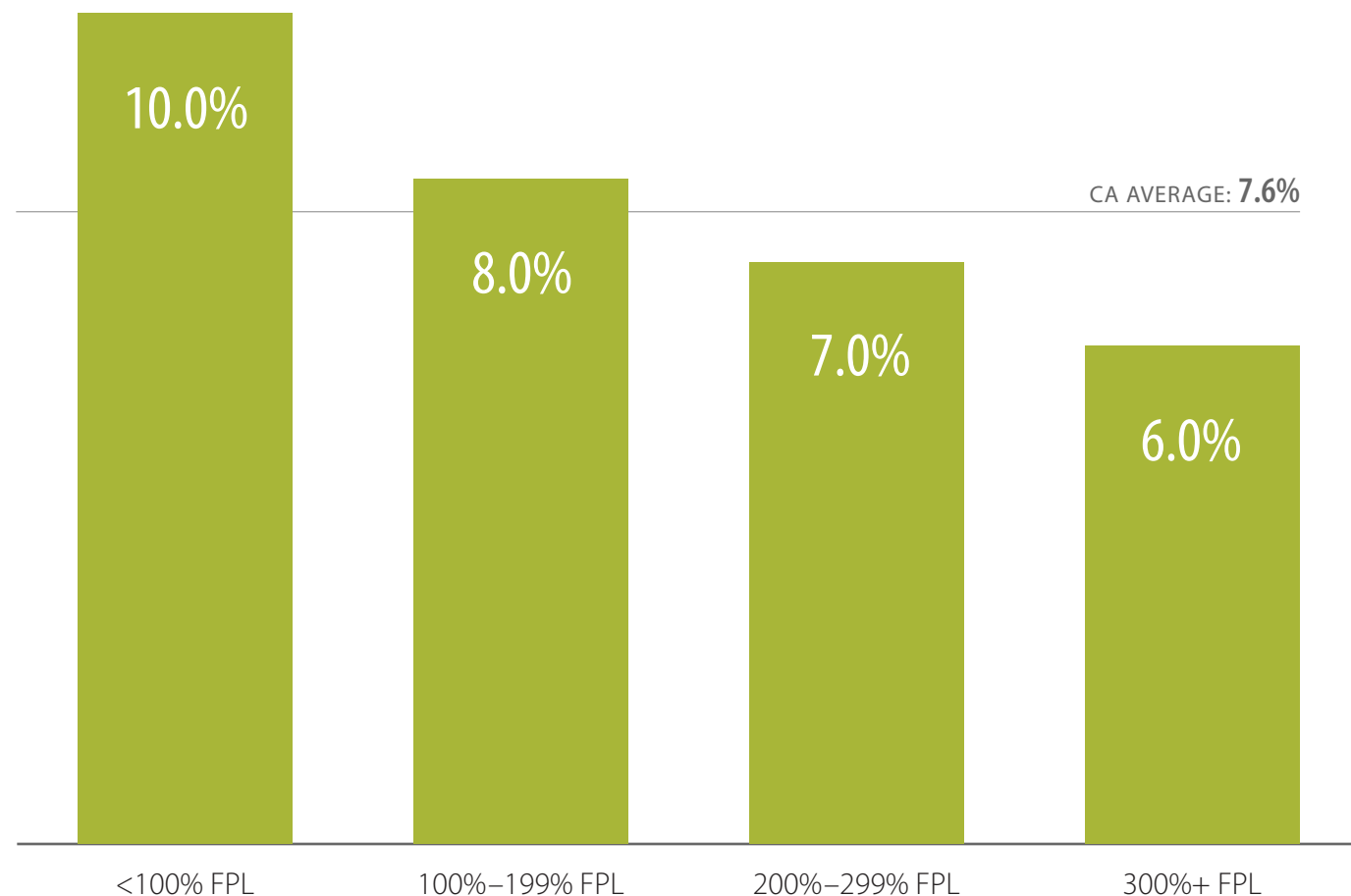
Prevalence

Serious emotional disturbance in California children varied slightly by race/ethnicity: Latino, African American, Native American, and Pacific Islander children experienced rates of SED close to 8%, while rates for white, Asian, and multiracial children were about 7%.

Children with SED, by Income

California, 2014

PERCENTAGE OF CHILD POPULATION



Notes: *Serious emotional disturbance (SED)* is a categorization for children age 17 and under. See page 3 for full definitions. *FPL* is federal poverty level; 100% of FPL was defined in 2014 as an annual income of \$11,670 for an individual and \$23,850 for a family of four. Excludes 2% of children for whom the level of income could not be determined. See page 54 for a description of the methodology used to develop these estimates.

Sources: Charles Holzer and Hoang Nguyen, "Estimation of Need for Mental Health Services," accessed December 22, 2017, charlesholzer.com; 79 Fed. Reg. 14 (January 22, 2014): 3593–94.

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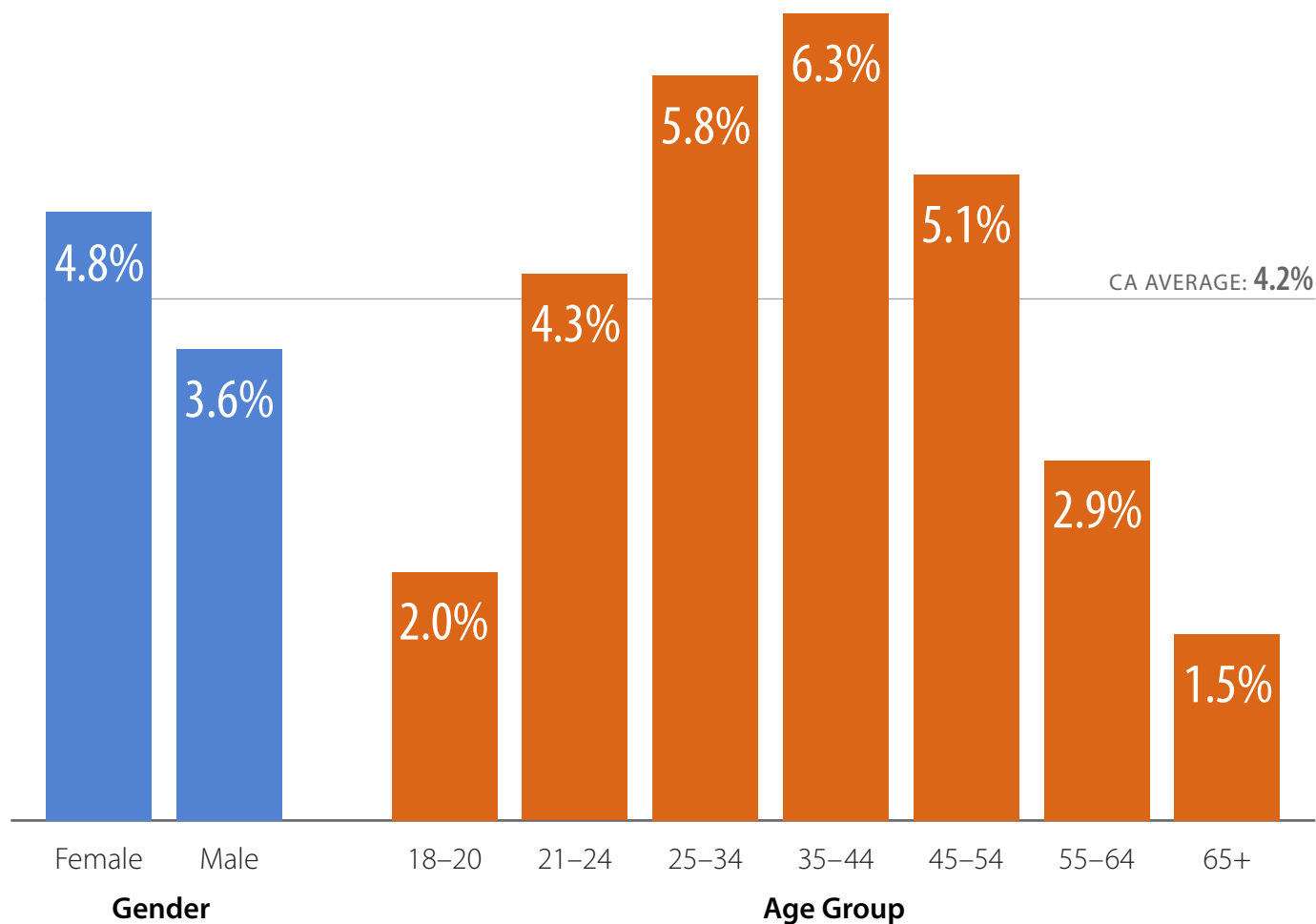
Prevalence

Serious emotional disturbance is more common in children from lower-income families. One in 10 children below the poverty level suffered from a serious emotional disturbance.

Adults with SMI, by Gender and Age Group

California, 2014

PERCENTAGE OF ADULT POPULATION



Notes: *Serious mental illness (SMI)* is a categorization for adults age 18 and older. See page 3 for full definitions and page 54 for a description of the methodology used to develop these estimates.

Source: Charles Holzer and Hoang Nguyen, "Estimation of Need for Mental Health Services," accessed December 22, 2017, charlesholzer.com.

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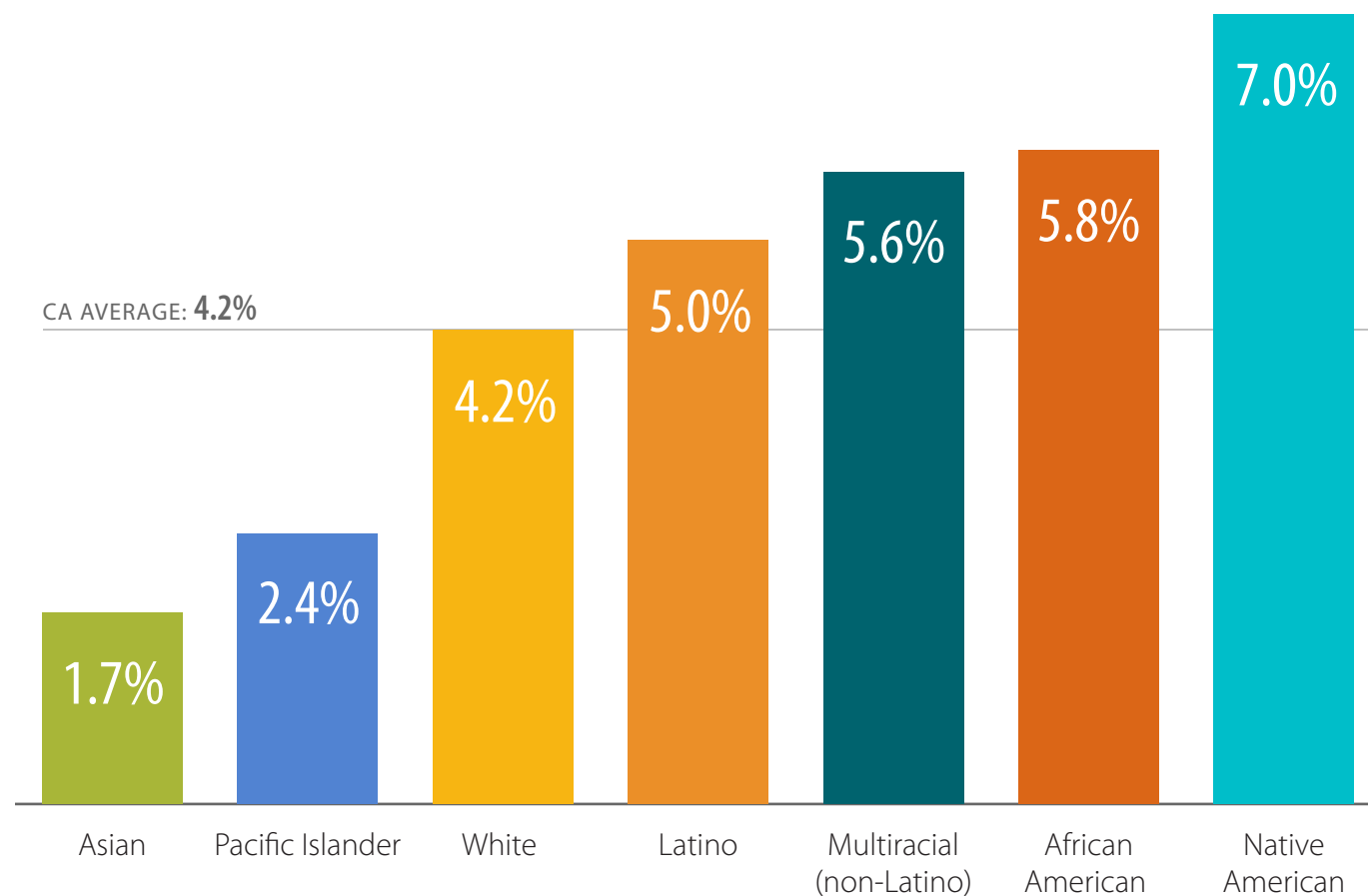
Prevalence

California women were more likely than men to experience serious mental illness. Rates of serious mental illness increased steadily by age group, from 2.0% (18 to 20) to a peak of 6.3% (35 to 44) and then declined in older age groups to a low of 1.5% among those 65 and over.

Adults with SMI, by Race/Ethnicity

California, 2014

PERCENTAGE OF ADULT POPULATION



Notes: *Serious mental illness (SMI)* is a categorization for adults age 18 and older. See page 3 for full definitions. See page 54 for a description of the methodology used to develop these estimates.

Source: Charles Holzer and Hoang Nguyen, "Estimation of Need for Mental Health Services," accessed December 22, 2017, charlesholzer.com.

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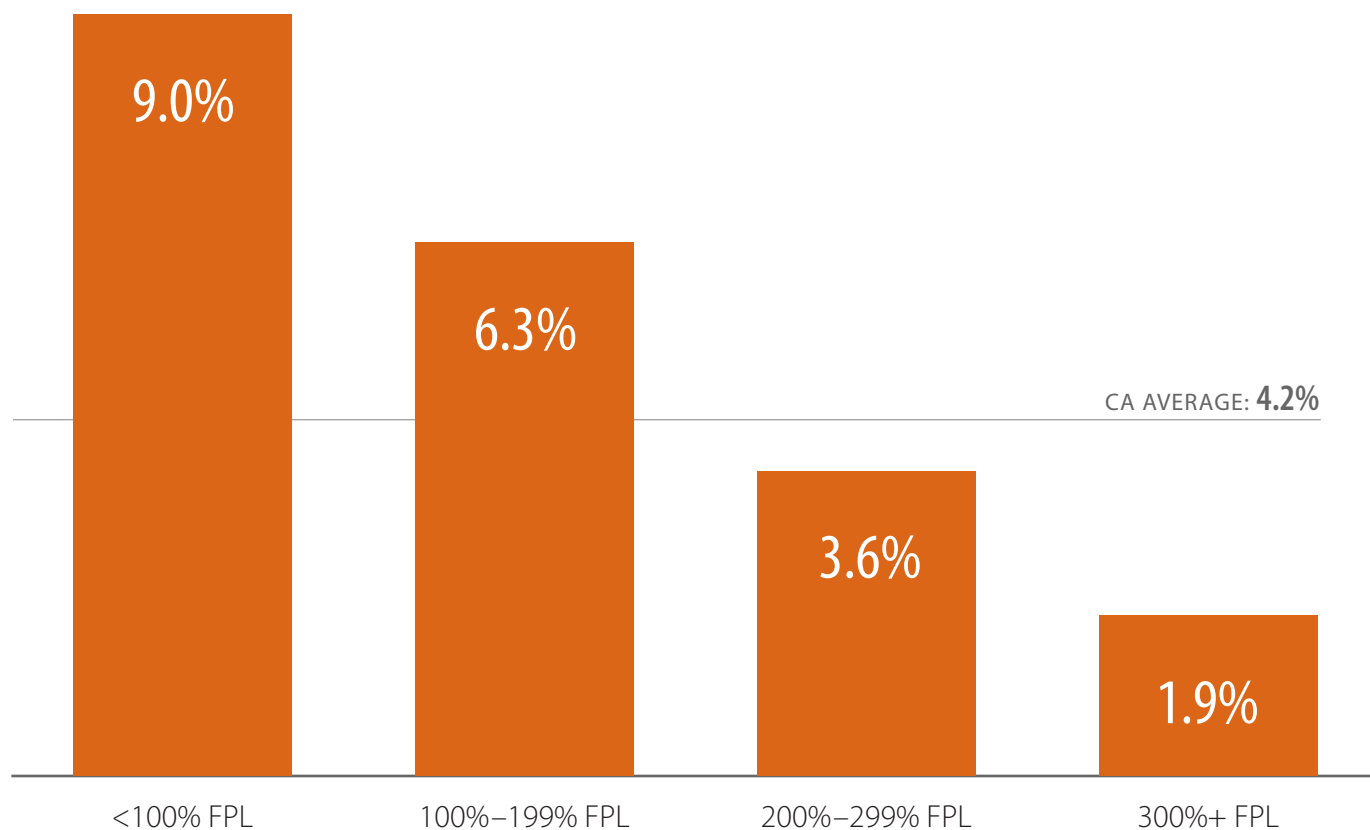
Prevalence

Rates of serious mental illness in California adults varied considerably among racial and ethnic groups. Native American, African American, and multiracial adults experienced the highest rates, and Asians and Pacific Islanders had the lowest.

Adults with Serious Mental Illness, by Income

California, 2014

PERCENTAGE OF ADULT POPULATION



Notes: *Serious mental illness (SMI)* is a categorization for adults age 18 and older. See page 3 for full definitions. *FPL* is federal poverty level; 100% of FPL was defined in 2014 as an annual income of \$11,670 for an individual and \$23,850 for a family of four. Excludes 2% of adults for whom the level of income could not be determined. See page 54 for a description of the methodology used to develop these estimates.

Source: Charles Holzer and Hoang Nguyen, "Estimation of Need for Mental Health Services," accessed December 22, 2017, charlesholzer.com.

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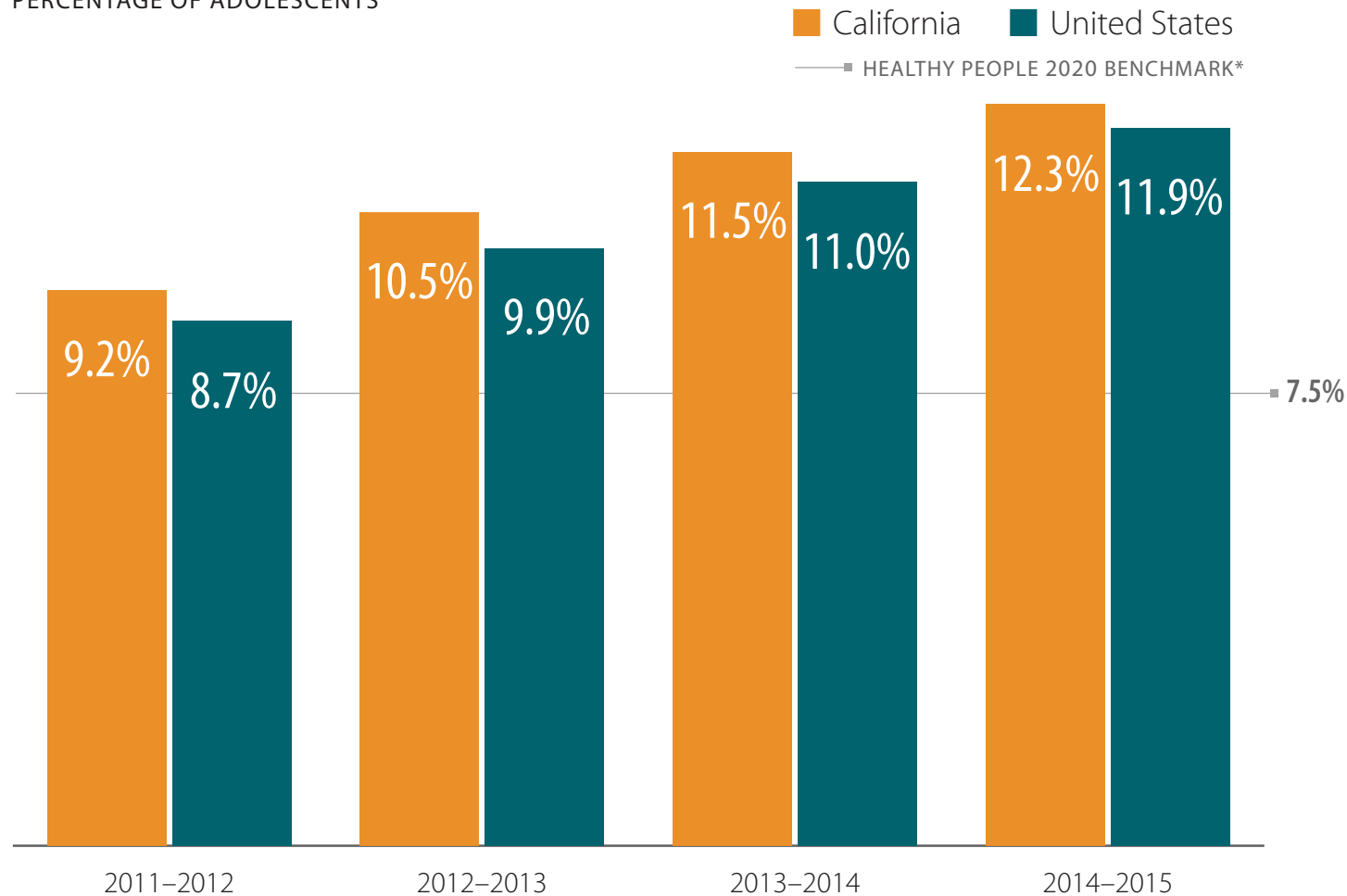
Prevalence

The prevalence of serious mental illness was highest among the poorest Californians, affecting close to 1 in 10 adults below 100% of the federal poverty level.

Reported Having an MDE in the Past Year

Adolescents, California vs. United States, 2011 to 2015

PERCENTAGE OF ADOLESCENTS



*Healthy People is a set of goals and objectives with 10-year targets designed to guide national health promotion and disease prevention efforts, www.healthypeople.gov.

Notes: *Adolescents* are age 12 to 17. *MDE* is major depressive episode. Respondents with unknown past-year MDE data were excluded. State estimates are based on a small area estimation procedure in which state-level National Survey on Drug Use and Health (NSDUH) data from two consecutive survey years are combined with local-area county and census block group / tract-level data from the state to provide more precise state estimates.

Source: *Behavioral Health Barometer: California, Volume 4*, Substance Abuse and Mental Health Services Administration, 2017, www.samhsa.gov (PDF).

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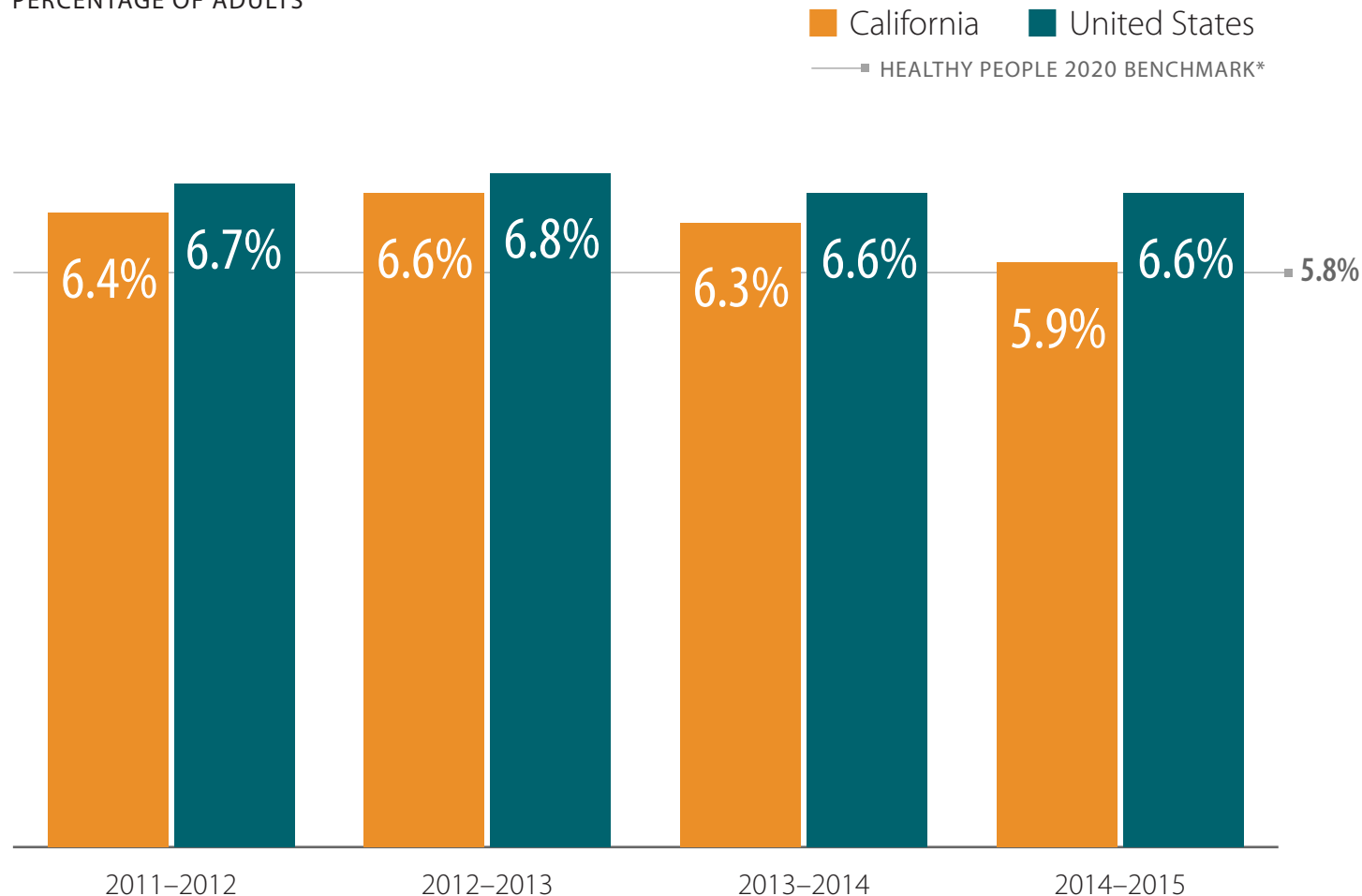
Prevalence

Depression, one of the most prevalent mental health disorders, has been steadily increasing among teens in California and the US. In 2014–2015, one in eight teens reported experiencing a major depressive episode (MDE) in the past year. Approximately 70% of teens who have MDE experience functional limitations that meet criteria for a serious emotional disturbance (not shown).

Reported Having an MDE in the Past Year

Adults, California vs. United States, 2011 to 2015

PERCENTAGE OF ADULTS



*Healthy People is a set of goals and objectives with 10-year targets designed to guide national health promotion and disease prevention efforts, www.healthypeople.gov.

Notes: MDE is major depressive episode. See page 3 for full definitions. The National Survey on Drug Use and Health is a nationally representative survey of the civilian, noninstitutionalized population of the US, age 12 or older. Approximately 70,000 people are surveyed each year. Data from more than one year were combined to ensure statistically precise estimates.

Sources: *National Survey on Drug Use and Health Model-Based Prevalence Estimates (50 States and the District of Columbia)*, Substance Abuse and Mental Health Services Administration, 2009–2010 to 2014–2015; Jean-Pierre Lépine and Mike Briley, "The Increasing Burden of Depression," *Neuropsychiatric Disease and Treatment* 7, Suppl. 1 (2011): 3–7, [doi.org](https://doi.org/10.1186/1745-0273-7-S1-3).

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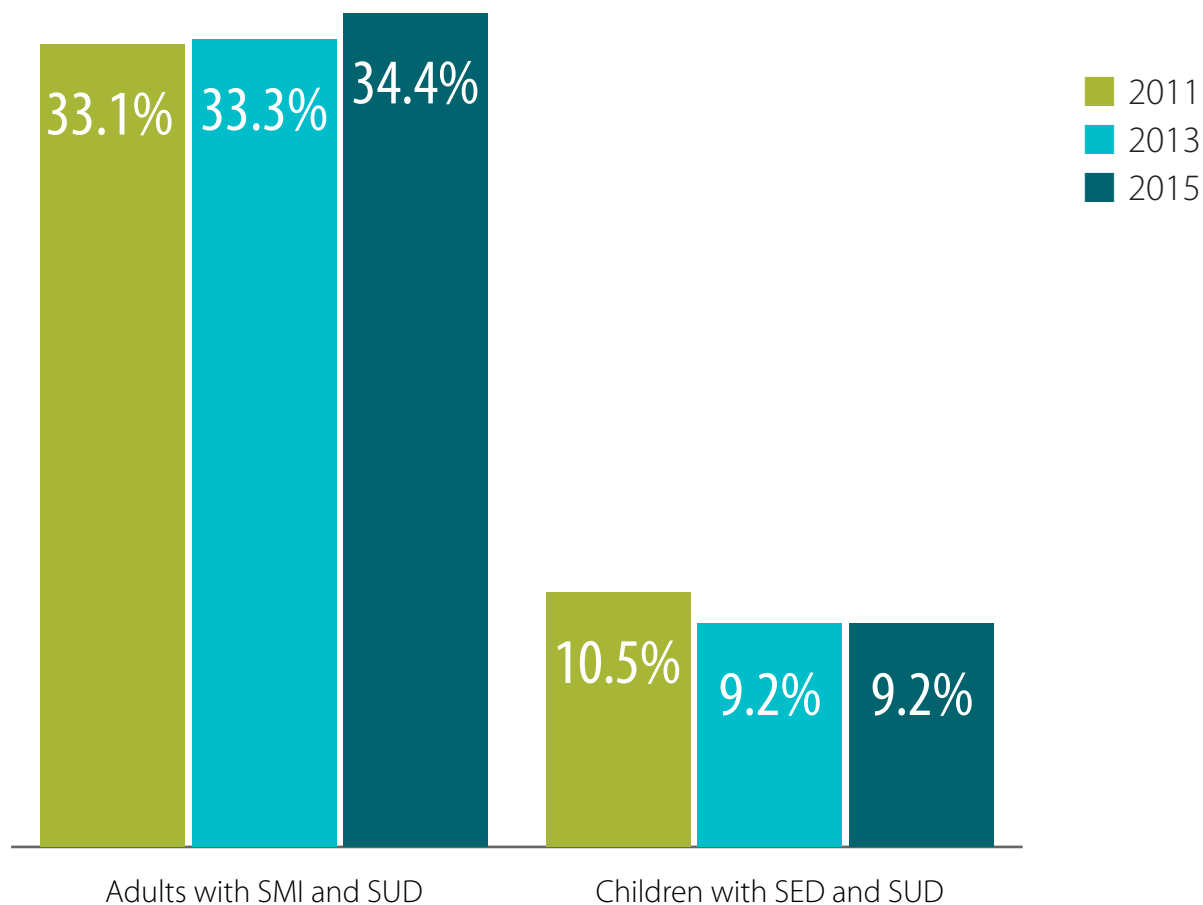
Prevalence

Depression is one of the most common forms of mental illness. From 2011 to 2015 roughly 6% of California adults annually, or close to two million people, experienced a major depressive episode. Depression is associated with higher risk of suicide and cardiovascular death.

Adults with SMI and SUD and Children with SED and SUD

California, 2011 to 2015, Selected Years

PERCENTAGE USING COUNTY MENTAL HEALTH SERVICES



Notes: *Serious emotional disturbance (SED)* is a categorization for children age 17 and under. *Serious mental illness (SMI)* is a categorization for adults age 18 and older. See page 3 for full definitions. *Substance use disorder (SUD)* is a problematic pattern of substance use leading to clinically significant impairment or distress as manifested by two or more diagnostic symptoms occurring in a 12-month period. County health services are provided for people with SED or SMI who are uninsured.

Sources: *California Mental Health National Outcome Measures (NOMS): SAMHSA Uniform Reporting System, 2011–2015*, www.samhsa.gov; Sarra Hedden et al., *Behavioral Health Trends in the United States: Results from the 2014 National Survey on Drug Use and Health*, Substance Abuse and Mental Health Services Administration, 2015, www.samhsa.gov (PDF).

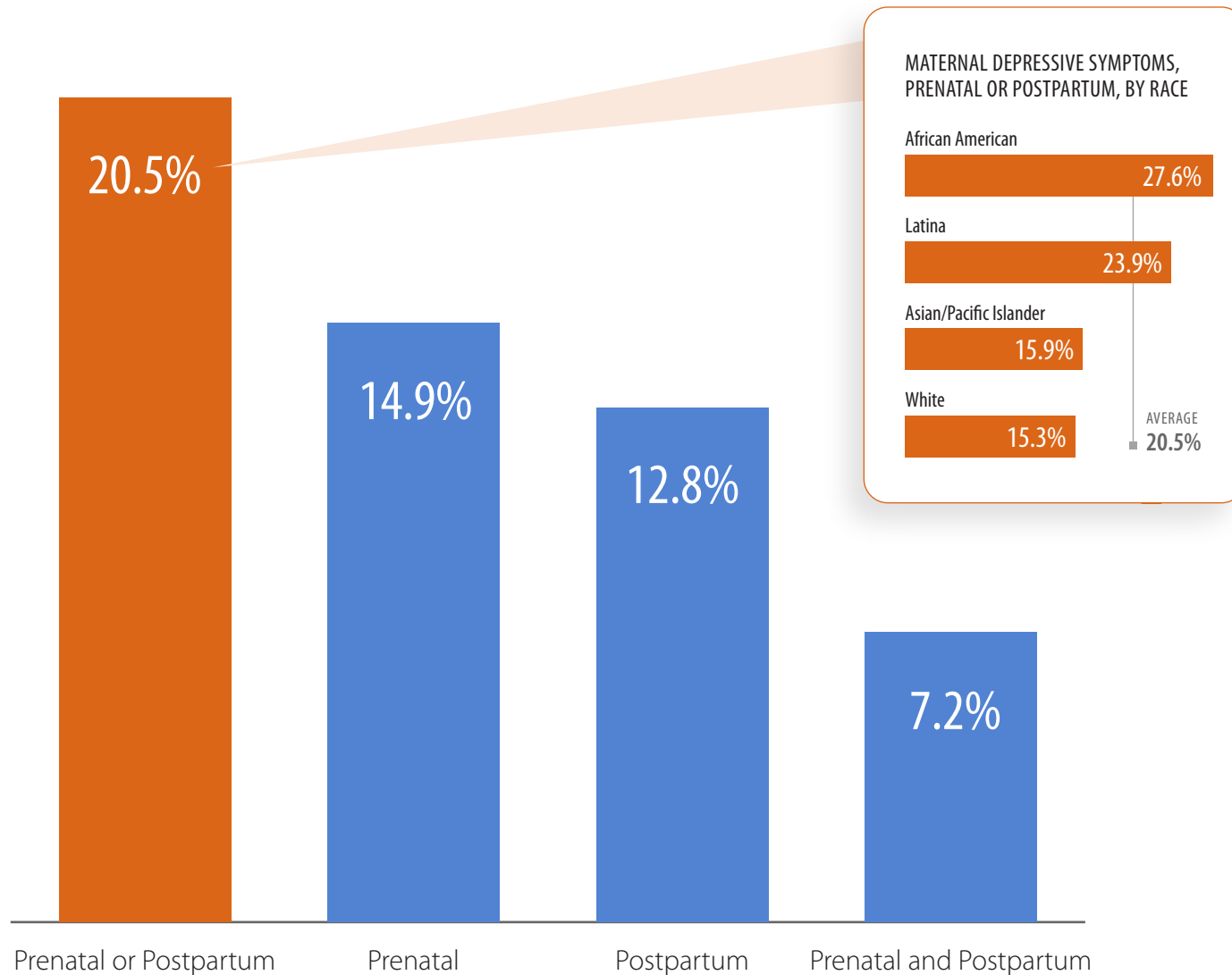
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Prevalence

The rate at which people with mental health disorders experience a co-occurring alcohol or substance use disorder was high compared to those with no mental health disorder (not shown). For those using county mental health services in California, a third of adults with serious mental illness, and nearly 10% of children with serious emotional disturbance, had a co-occurring substance use disorder.

Maternal Depressive Symptoms

Prenatal and/or Postpartum, California, 2013



Notes: Data from population-based survey of California-resident women with a live birth in 2013. Data are weighted to represent all women with a live birth in California.

Source: "Maternal Mental Health in California" (Presentation at Maternal, Child, and Adolescent Health Statewide Directors' Meeting, October 7, 2015), [cloudfront.net](#) (PDF).

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Prevalence

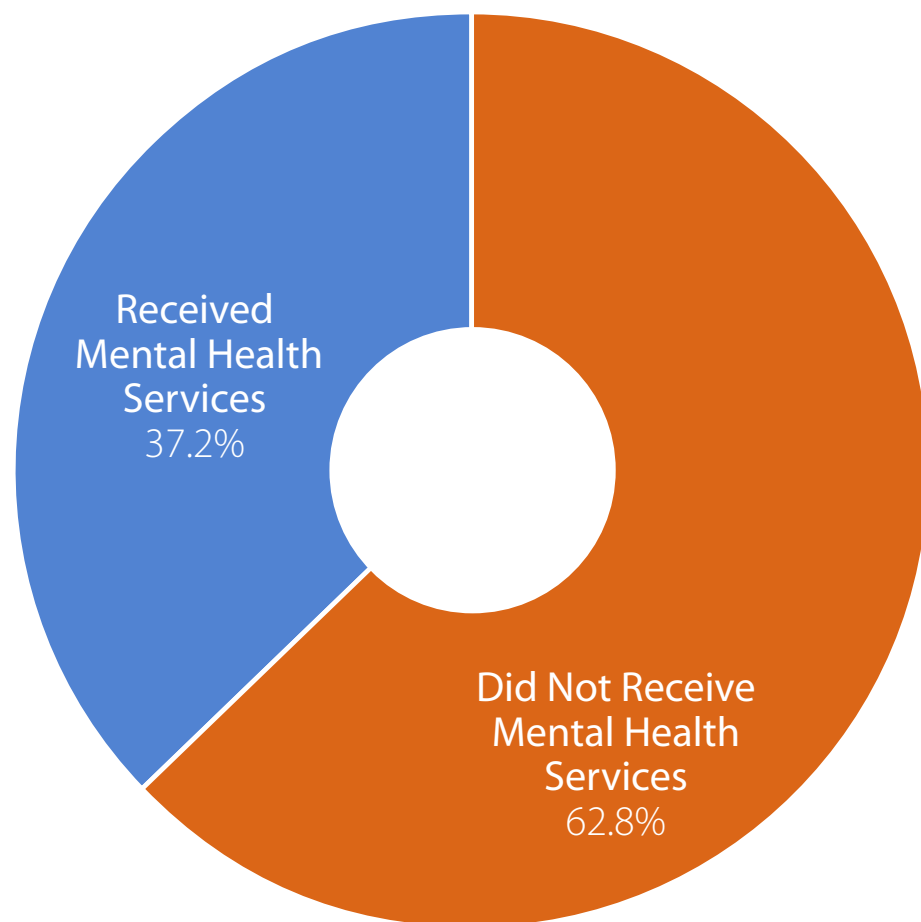
In 2013, one in five California women who gave birth had either prenatal or postpartum depressive symptoms.

Rates of prenatal and postpartum depressive symptoms varied by the mother's race/ethnicity. In 2013, about one in four African American and Latina mothers reported depressive symptoms. In contrast, about one in six Asian/Pacific Islander and white mothers reported these symptoms.

Treatment for Mental Illness

Adults with AMI, California, 2011 to 2015

PERCENTAGE WHO . . .



Notes: Estimates are annual averages based on combined 2011–2015 NSDUH data. Treatment estimates were based only on responses to items in the NSDUH Adult Mental Health Service Utilization module. Respondents with unknown treatment/counseling information were excluded. Estimates of any mental illness were based on self-report of symptoms indicative of any mental illness. *Any mental illness (AMI)* is a categorization for adults age 18 and older. See page 3 for full definitions.

Sources: *Behavioral Health Barometer: California, Volume 4*, Substance Abuse and Mental Health Services Administration, 2017, www.samhsa.gov (PDF); Larry Goldman, Nancy Nielsen, and Hunter Champion, "Awareness, Diagnosis, and Treatment of Depression," *Journal of General Internal Medicine* 14, no. 9 (September 1999): 569–80.

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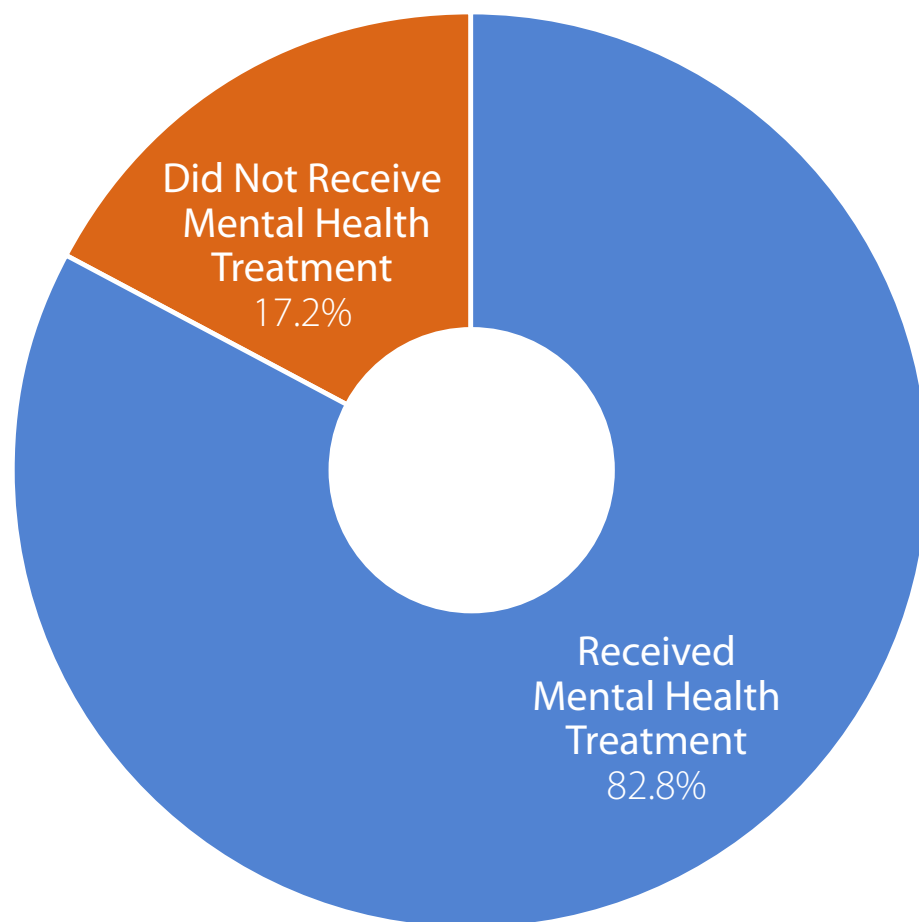
Treatment

Slightly more than one-third of California adults with a mental illness reported receiving mental health treatment or counseling during the past year. This was lower than the national rate of 42.9% (not shown). Adults may not be aware that they have a mental disorder, they may fear the stigma of mental illness, or they may encounter barriers to treatment.

Unmet Need for Mental Health Treatment

Adults with AMI, California, 2012 to 2014

PERCENTAGE WHO SOUGHT TREATMENT AND . . .



Notes: Estimates are a three-year average. *Unmet need* is defined as feeling a perceived need for mental health treatment/counseling that was not received. *Any mental illness (AMI)* is a categorization for adults age 18 and older. See page 3 for full definitions.

Sources: "Mental Health in America – Access to Care Data," www.mentalhealthamerica.net; "National Survey on Drug Use and Health (NSDUH)," Substance Abuse and Mental Health Services Administration, 2012–2014, www.datafiles.samhsa.gov.

Mental Health

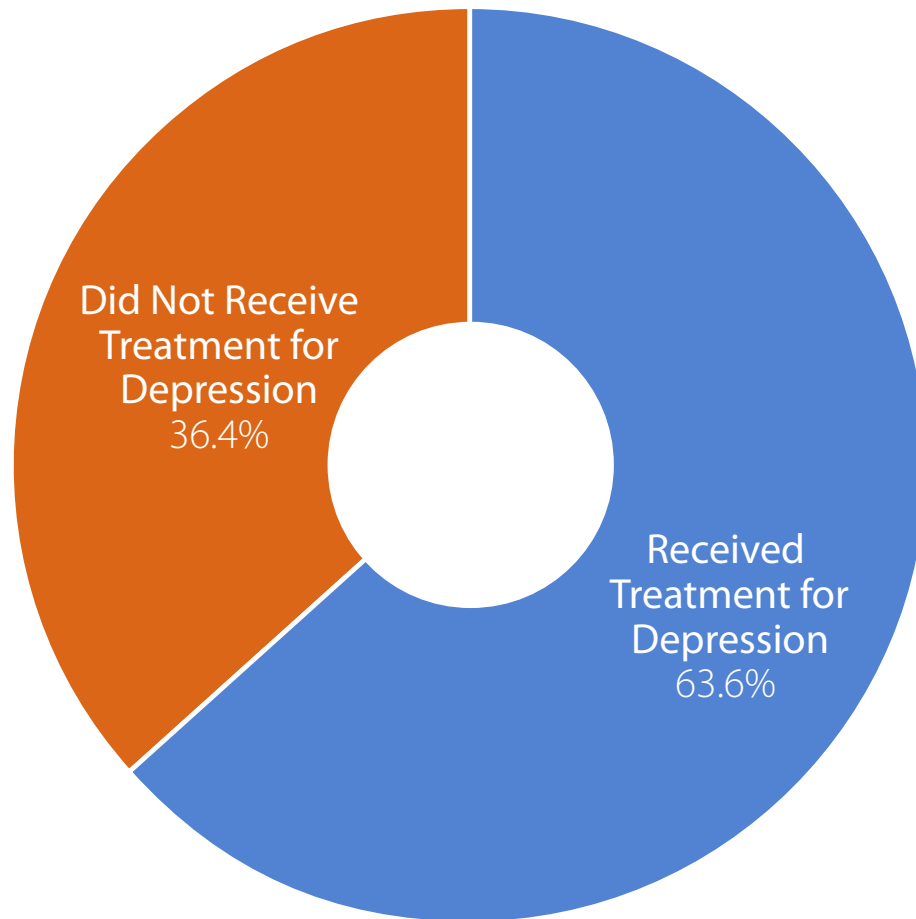
Treatment

Even among California adults with any mental illness who sought treatment, 17% reported that they did not get it. The national rate of unmet need was higher (20%, not shown). Common barriers to accessing services include lack of health insurance, lack of available treatment providers or programs, and inability to pay for treatment.

Treatment for Major Depressive Episode

Adults, California, 2011 to 2014

PERCENTAGE REPORTING MDE IN THE PAST YEAR WHO . . .



Notes: *MDE* is major depressive episode, as determined by survey respondents' self-report of symptoms indicative of this diagnosis. Respondents with unknown past-year MDE or treatment data were excluded.

Sources: *National Survey on Drug Use and Health Model-Based Prevalence Estimates (50 States and the District of Columbia)*, Substance Abuse and Mental Health Services Administration, 2009–2010 to 2014–2015; Jean-Pierre Lépine and Mike Briley, "The Increasing Burden of Depression," *Neuropsychiatric Disease and Treatment* 7, Suppl. 1 (2011): 3–7, [doi.org](https://doi.org/10.1186/1745-0213-7-S1-3).

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Treatment

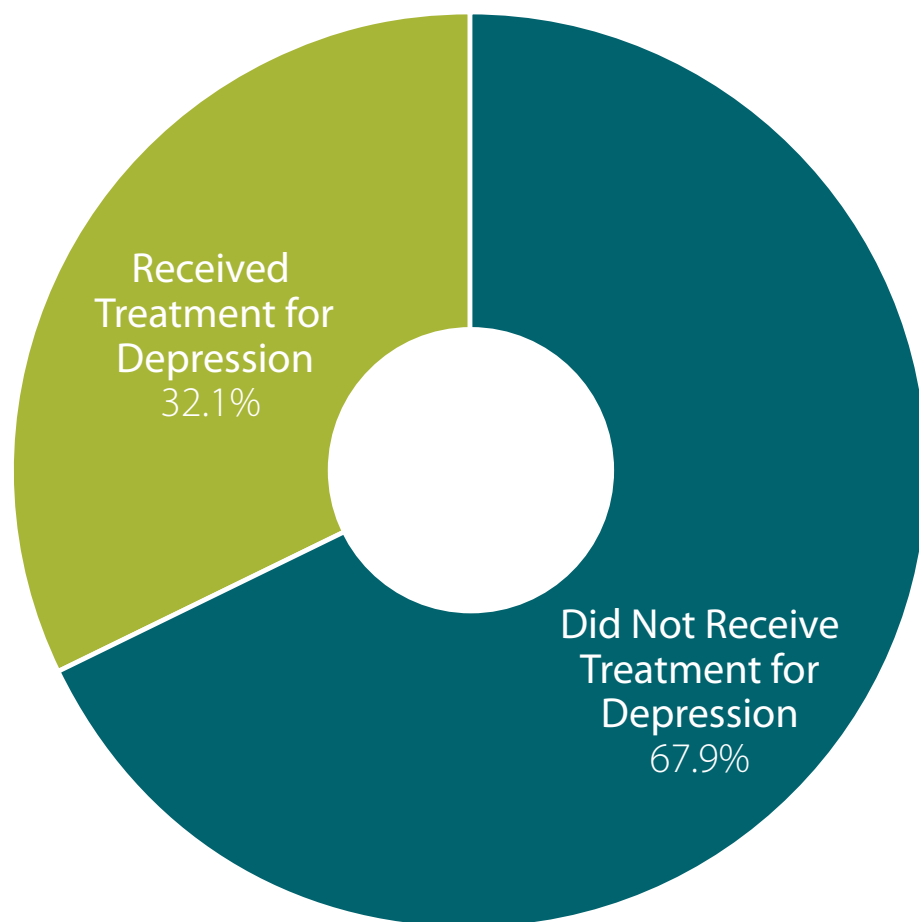
Nearly two-thirds of California adults who report a major depressive episode receive treatment. This is lower than the Healthy People target of 75.9%. *

*Healthy People is a set of goals and objectives with 10-year targets designed to guide national health promotion and disease prevention efforts, www.healthypeople.gov.

Treatment for Major Depressive Episode

Adolescents, California, 2011 to 2015

PERCENTAGE REPORTING MDE IN THE PAST YEAR WHO . . .



Notes: Estimates are annual averages based on combined 2011–2015 NSDUH data. *Adolescents* are age 12 to 17. *MDE* is major depressive episode, as determined by survey respondents' self-report of symptoms indicative of this diagnosis. Respondents with unknown past-year MDE or treatment data were excluded.

Source: *Behavioral Health Barometer: California, Volume 4*, Substance Abuse and Mental Health Services Administration, 2017, www.samhsa.gov (PDF).

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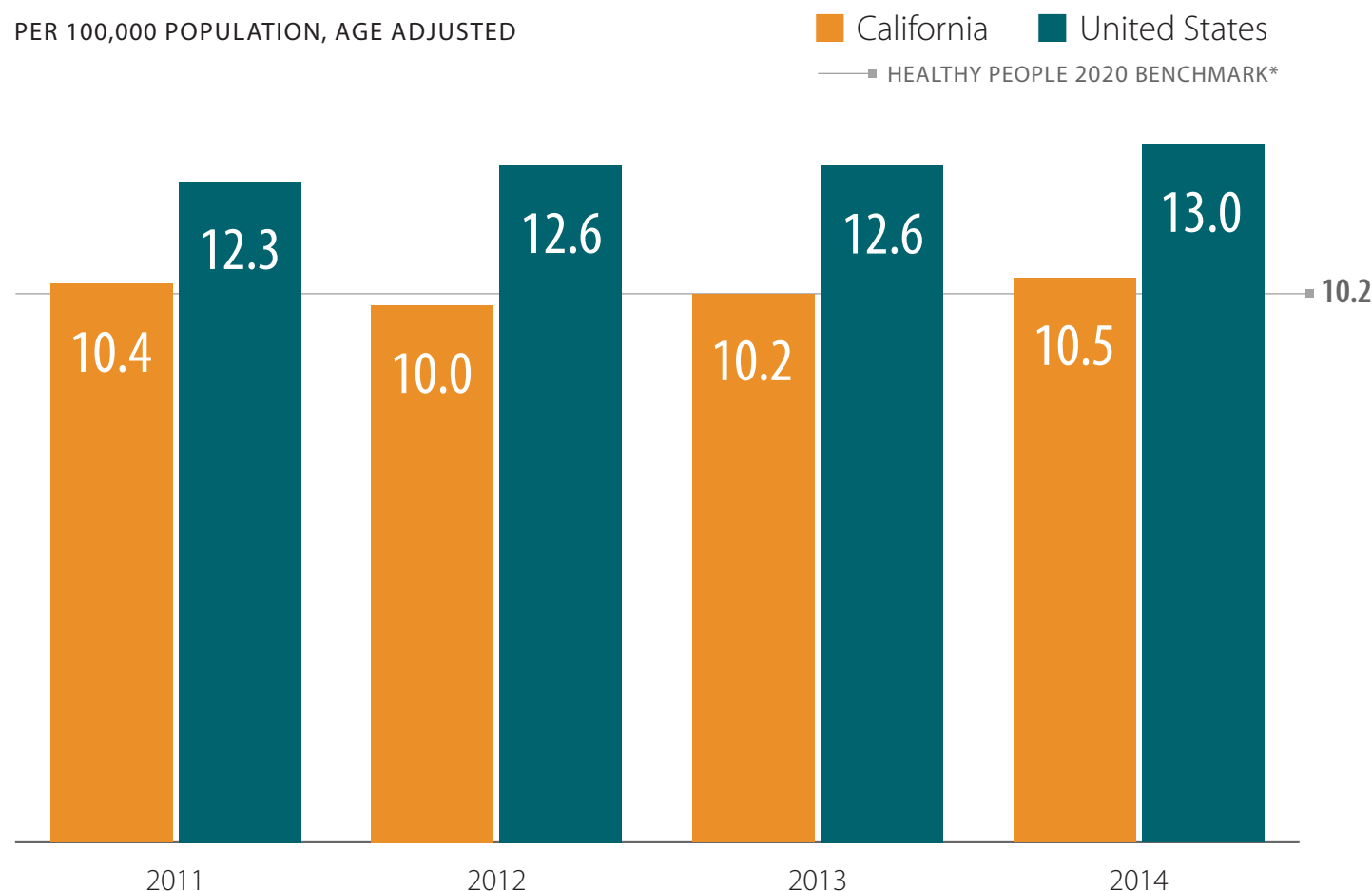
Treatment

A majority of adolescents with a major depressive episode (MDE) did not receive treatment. On average, between 2011 and 2015, about one-third of California adolescents who reported experiencing symptoms of MDE during the past year received treatment. This was lower than the national rate of 38.9% (not shown).

Suicide Rate, Adults and Children

California vs. United States, 2011 to 2014

PER 100,000 POPULATION, AGE ADJUSTED



*Healthy People is a set of goals and objectives with 10-year targets designed to guide national health promotion and disease prevention efforts, www.healthypeople.gov.

Notes: *Suicide* is death from a self-inflicted injury. California data come from registered death certificates. National data are collected from death certificates filed in state registration offices. Statistical information is compiled in a national database through the Vital Statistics Cooperative Program of the Centers for Disease Control and Prevention's National Center for Health Statistics.

Sources: Kenneth Kochanek, Sherry Murphy, and Jiaquan Xu, "Deaths: Final Data for 2011," *National Vital Statistics Reports* 63, no. 3 (July 27, 2015), Centers for Disease Control and Prevention (CDC), www.cdc.gov (PDF); Sherry Murphy et al., "Deaths: Final Data for 2012," *National Vital Statistics Reports*, 63, no. 9 (August 31, 2015), CDC, www.cdc.gov (PDF); Jiaquan Xu et al. "Deaths: Final Data for 2013," *National Vital Statistics Reports*, 64, no. 2 (February 16, 2016), CDC, www.cdc.gov (PDF); Kenneth Kochanek et al., "Deaths: Final Data for 2014," *National Vital Statistics Reports*, 65, no. 4, (June 30, 2016), CDC, www.cdc.gov (PDF).

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Suicide

California's suicide rate remained stable from 2011 to 2014 and was consistently lower than the national rate. Most people who die by suicide have a mental or emotional disorder, with 30% to 70% experiencing depression or bipolar disorder.¹ In addition, people with substance use disorder are six times more likely to commit suicide than those without.²

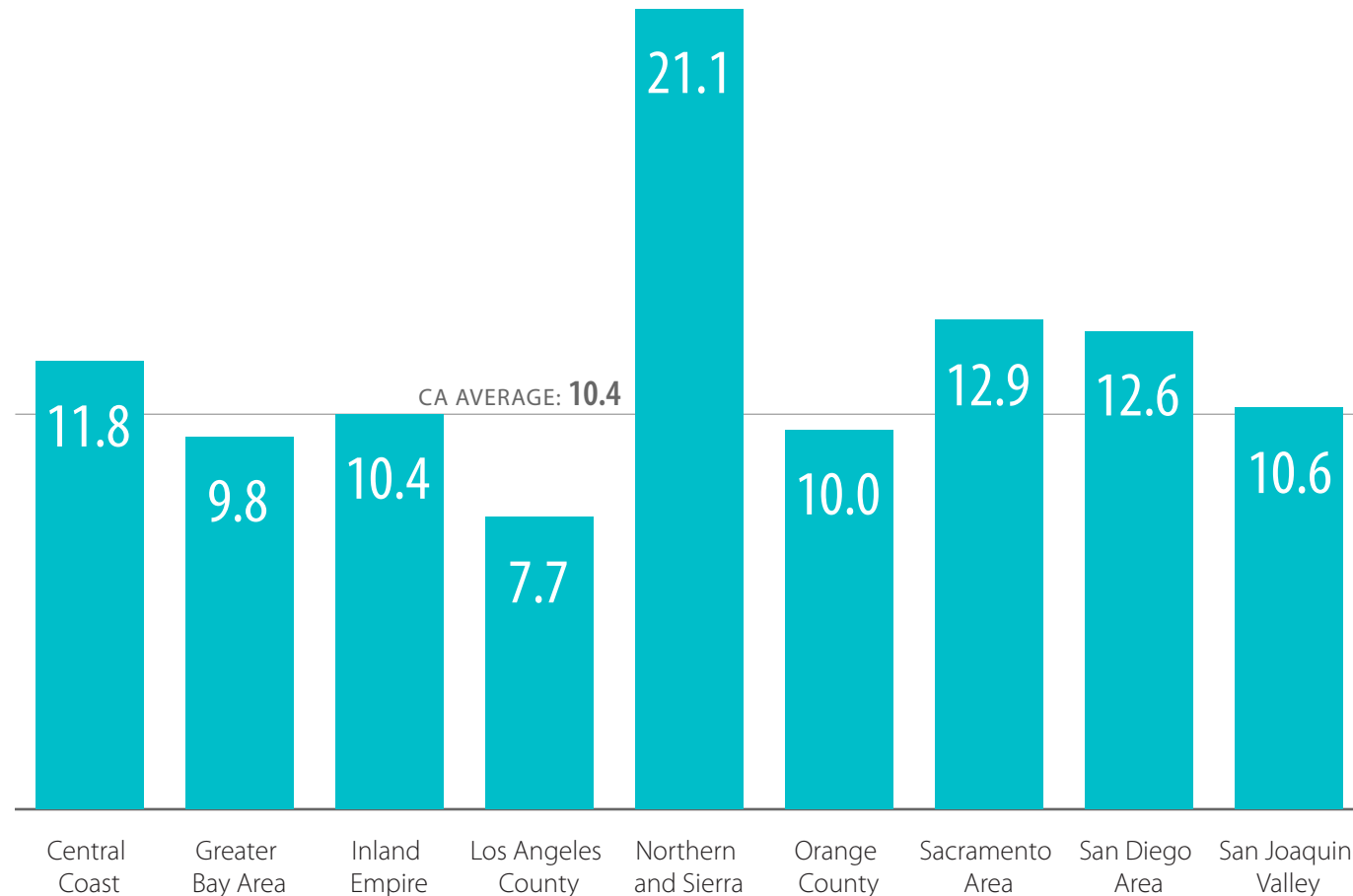
1. Paris Strom and Robert Strom, *Adolescents in the Internet Age, 2nd Edition: Teaching and Learning from Them* (Charlotte: Information Age, 2014).

2. Tatjana Dragisic et al., "Drug Addiction as Risk for Suicide Attempts," *Materia Sociomedica* 27, no. 3 (June 2015): 188–191.

Suicide Rate, by Region

All Ages, California, 2011 to 2013

PER 100,000 POPULATION, 3-YEAR AVERAGE



Notes: *Suicide* is death from self-inflicted injury. Data come from registered death certificates. See Appendix A for a map of the counties included in each region.

Sources: Author calculations based on CDPH Vital Statistics Death Statistical Master Files and *Report P-3: State and County Population Projections by Race/Ethnicity, Detailed Age, and Gender, 2010–2060*, Department of Finance, January 31, 2013, ucdavis.edu. Both reports prepared by California Department of Public Health, Safe and Active Communities Branch and generated from epicenter.cdph.ca.gov. Vital statistics report generated on March 2, 2016; population report generated on October 7, 2016.

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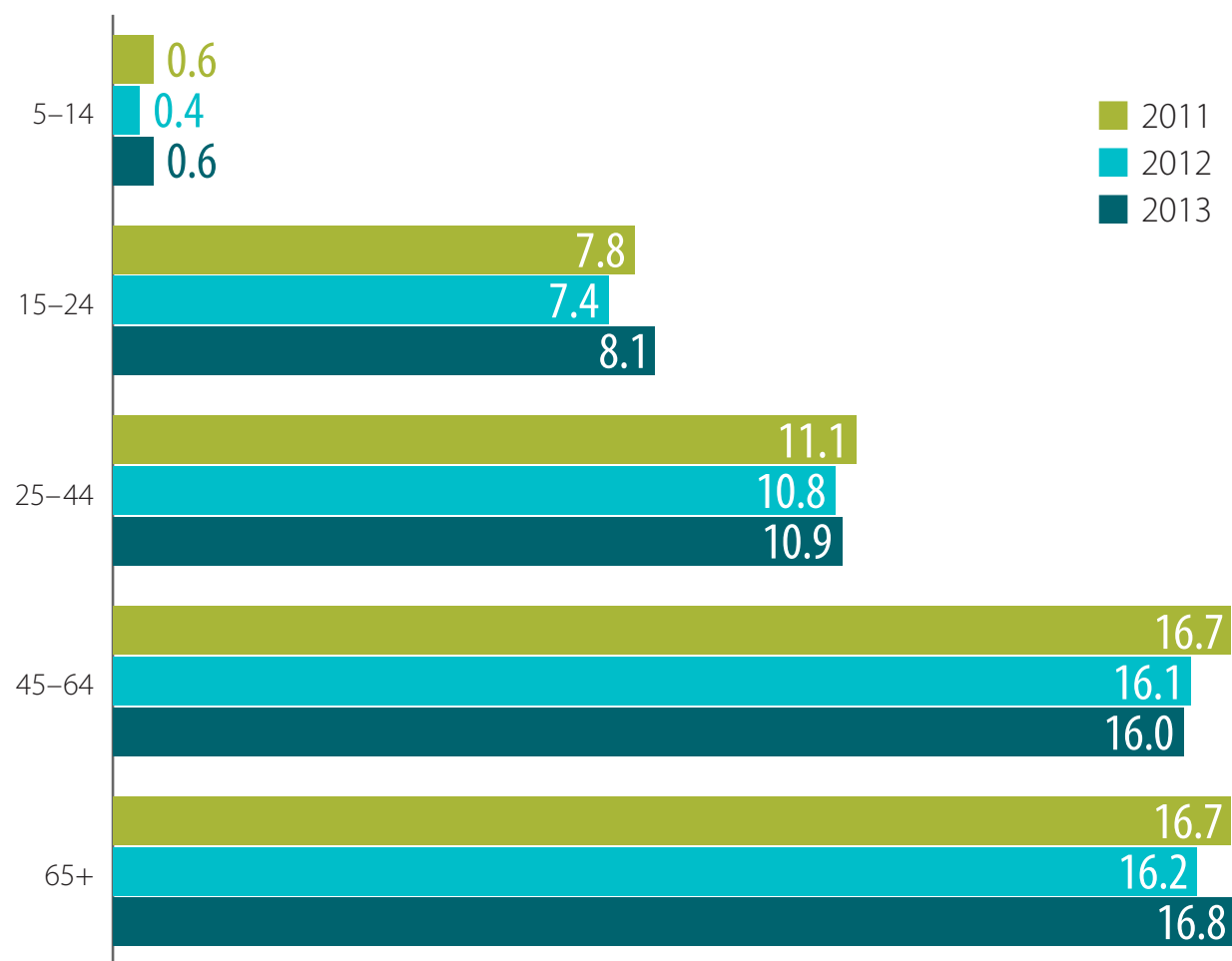
Suicide

Of all California regions, the Northern and Sierra region had the highest suicide rate, at 21.1, twice the state average of 10.4. The Central Coast, Sacramento, and San Diego areas also had higher-than-average rates, while Los Angeles County had the lowest in the state, at 7.7.

Suicide Rate, by Age Group

California, 2011 to 2013

NUMBER OF SUICIDES PER 100,000 POPULATION



Notes: *Suicide* is death from self-inflicted injury. Data come from registered death certificates.

Sources: Author calculations based on CDPH Vital Statistics Death Statistical Master Files and *Report P-3: State and County Population Projections by Race/Ethnicity, Detailed Age, and Gender, 2010-2060*, Department of Finance, January 31, 2013, ucdavis.edu. Both reports prepared by California Department of Public Health, Safe and Active Communities Branch and generated from epicenter.cdph.ca.gov. Vital statistics report generated on March 2, 2016; population report generated on October 7, 2016.

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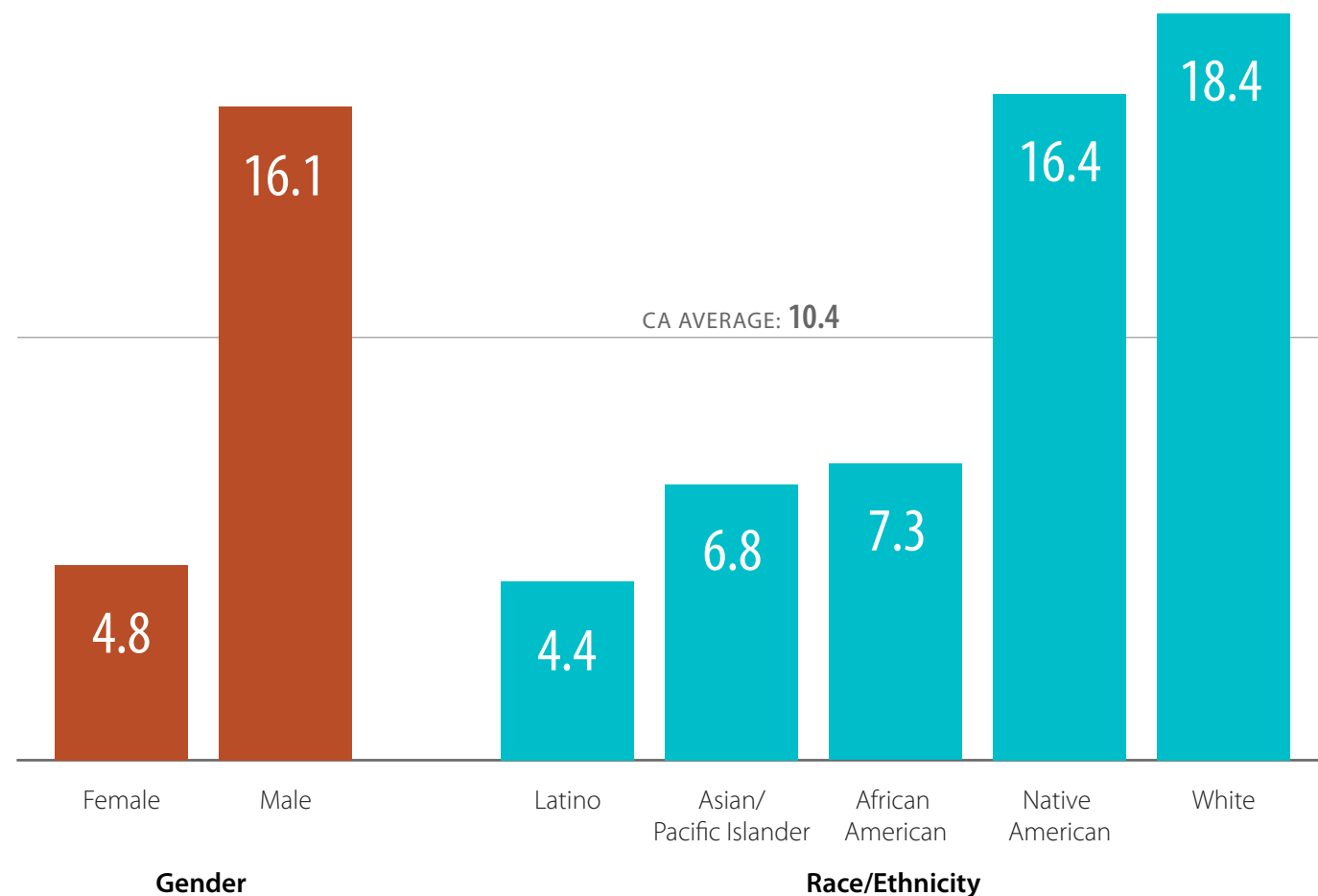
Suicide

Suicide rates for California adults age 45 and over were much higher than rates for younger age groups. For older adults, physical disease is strongly associated with suicide.

Suicide Rates, by Gender and Race/Ethnicity

All Ages, California, 2011 to 2013

PER 100,000 POPULATION, 3-YEAR AVERAGE



Notes: *Suicide* is death from self-inflicted injury. Data come from registered death certificates. Information on the multiracial population was not included in suicide data. These data exclude other/unknown race/ethnicity.

Sources: Author calculations based on CDPH Vital Statistics Death Statistical Master Files and *Report P-3: State and County Population Projections by Race/Ethnicity, Detailed Age, and Gender, 2010–2060*, Department of Finance, January 31, 2013, ucdavis.edu. Both reports prepared by California Department of Public Health, Safe and Active Communities Branch and generated from epicenter.cdph.ca.gov. Vital statistics report generated on March 3, 2016.

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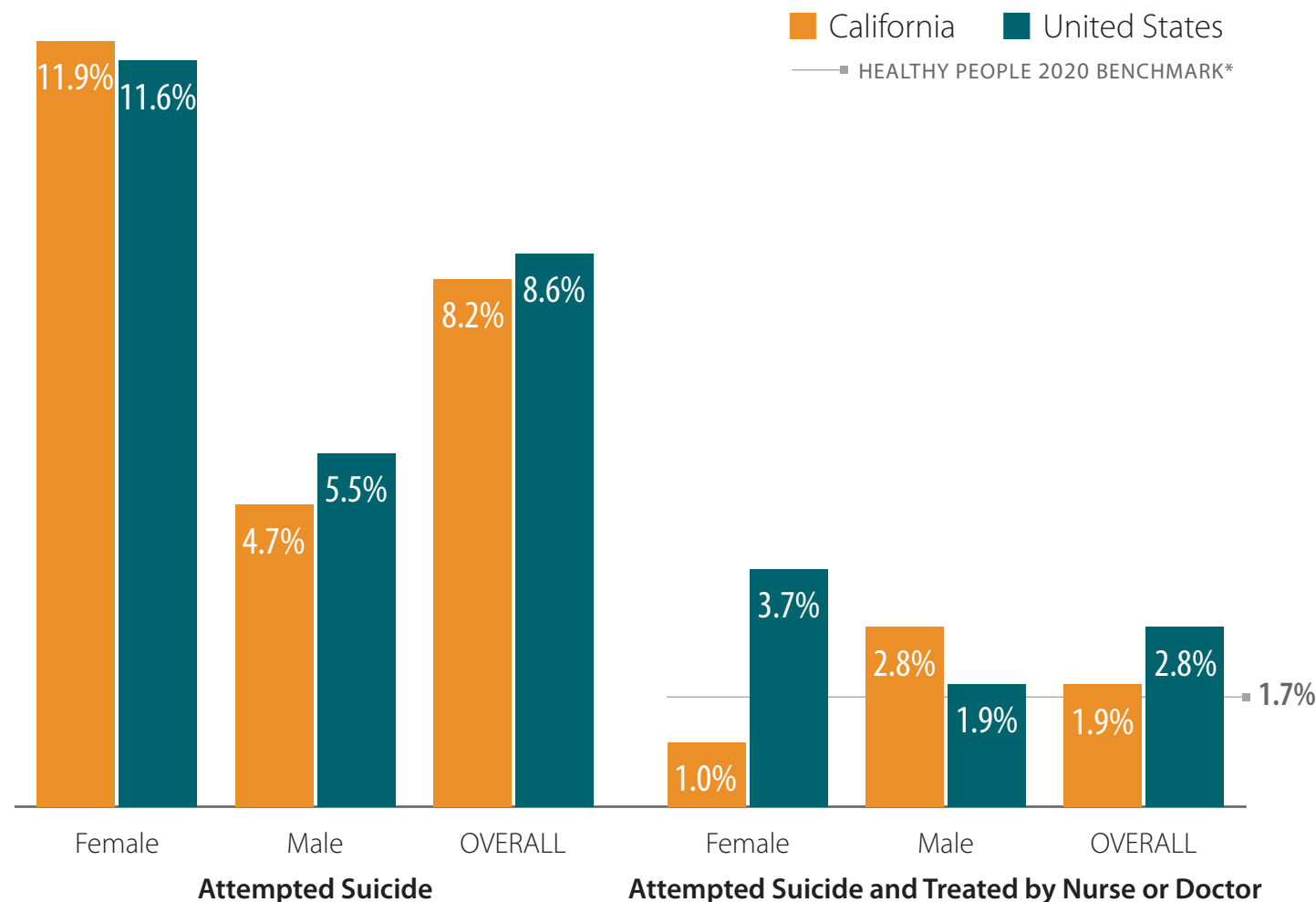
Suicide

Suicide rates differed dramatically by gender and race. Men had rates three times those for women. Rates for whites and Native Americans were considerably higher than average suicide rates, while rates for other racial/ethnic groups were considerably lower than average.

Suicide Attempts Among High School Students

by Gender and Need for Treatment, California vs. United States, 2015

PERCENTAGE OF HIGH SCHOOL STUDENTS



*Healthy People is a set of goals and objectives with 10-year targets designed to guide national health promotion and disease prevention efforts, www.healthypeople.gov.

Source: Laura Kann et al., "Table 27" and "Table 28," in "Youth Risk Behavior Surveillance — United States, 2015," *MMWR Surveillance Summaries* 65, no. 6 (June 10, 2016): 78–79, www.cdc.gov (PDF).

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Suicide

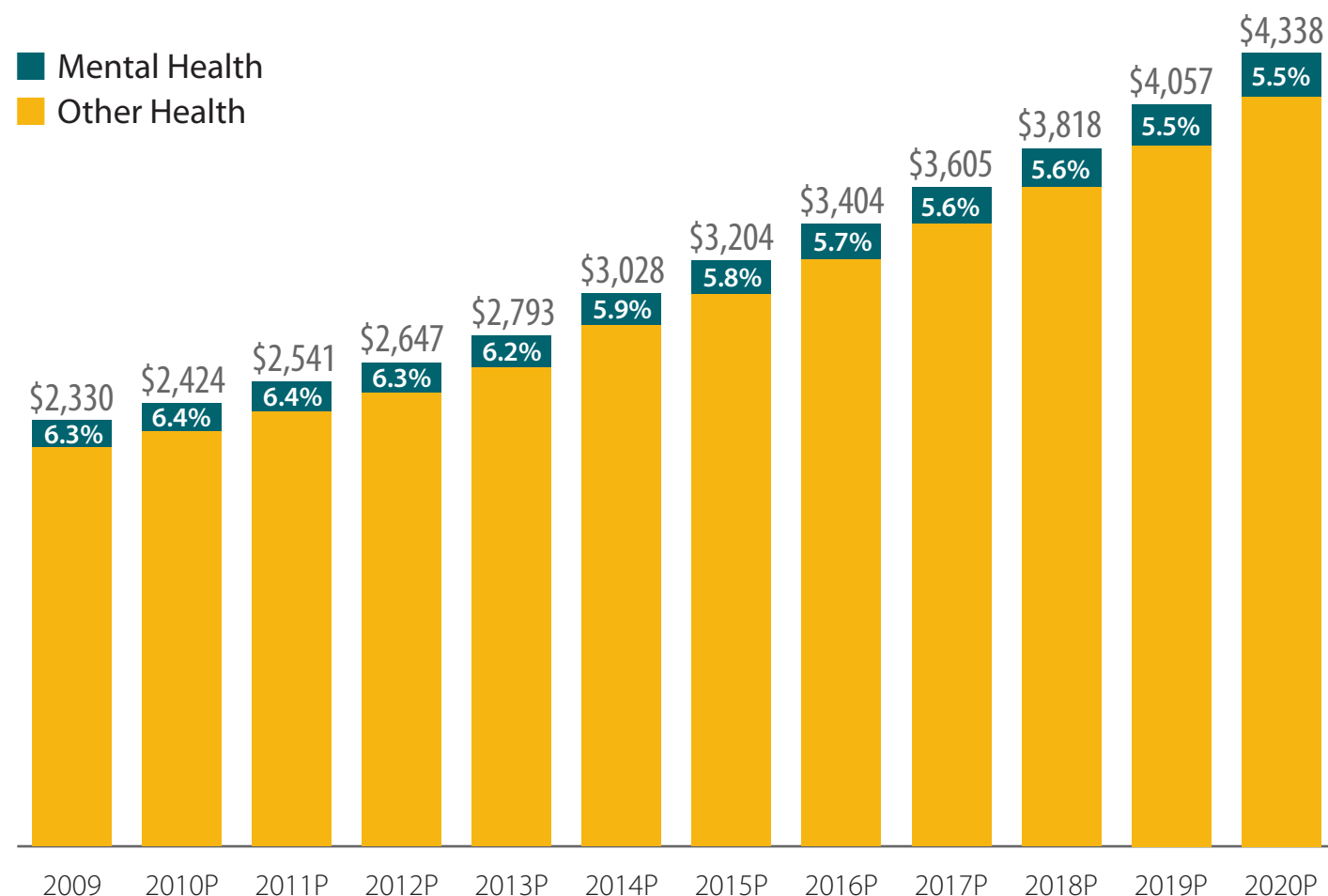
Among high school students, self-reported rates of attempted suicide in the prior year were over twice as high for females as for males nationally and in California. Attempts resulting in an injury, poisoning, or overdose that had to be treated by a doctor or nurse were higher for males than for females in California, but did not show the same pattern nationally.

All Health and Mental Health Expenditures

United States, 2009 to 2020

IN BILLIONS

■ Mental Health
■ Other Health



Notes: Projections (shown with P) of treatment expenditures for mental health compared to the Centers for Medicare & Medicaid Services National Health Expenditure Accounts (NHEA). Spending includes clinical treatment and rehabilitative services and medications and excludes both peer support services for which there is no cost and activities to prevent mental illness. Projections incorporate expansion of coverage through the Affordable Care Act, implementation of the provisions of mental health parity regulations, and expectations about the expiration of patents for certain psychotropic medications.

Source: "Table A.1," in *Projections of National Expenditures for Treatment of Mental and Substance Use Disorders, 2010–2020*, Substance Abuse and Mental Health Services Administration, 2014: A-2, store.samhsa.gov.

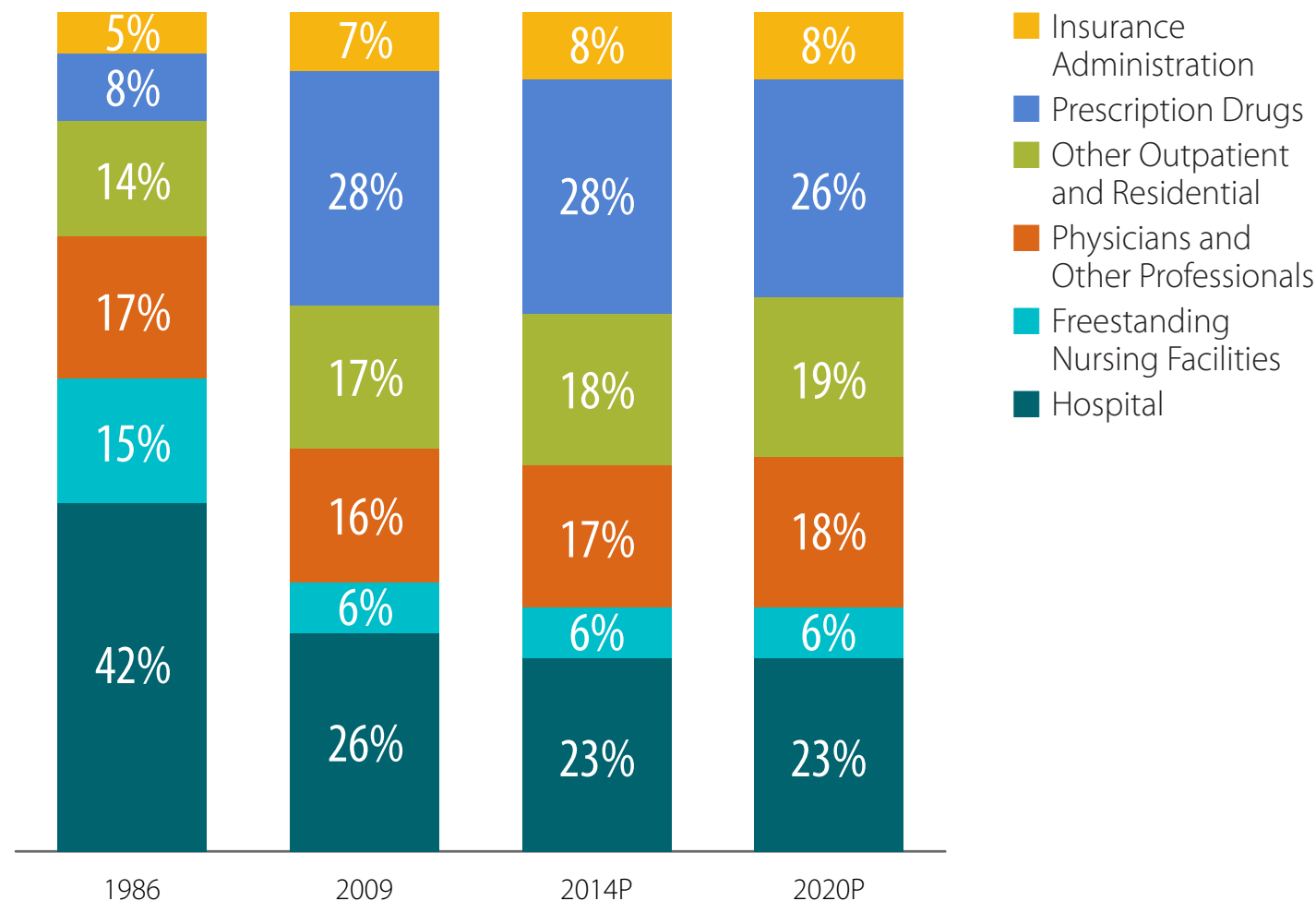
Mental Health

Spending

Spending on mental health in the United States is projected to grow by over 60%, from \$147 billion in 2009 to \$238 billion in 2020. All other health spending is projected to grow by close to 90% during the same time. Mental health's share of total health spending is expected to decrease slightly from 6.3% in 2009 to 5.5% in 2020.

Mental Health Expenditures, by Service Category

United States, 1986, 2009, 2014, and 2020



Mental Health

Spending

The delivery of mental health services evolved between 1986 and 2009, resulting in significant changes in expenditures for mental health treatment. As a percentage of total expenditures, hospital and nursing facility expenditures declined while the share of expenditures for prescription drugs and outpatient care increased. During this time, many new and expensive psychiatric medications with fewer side effects resulted in more widespread use.

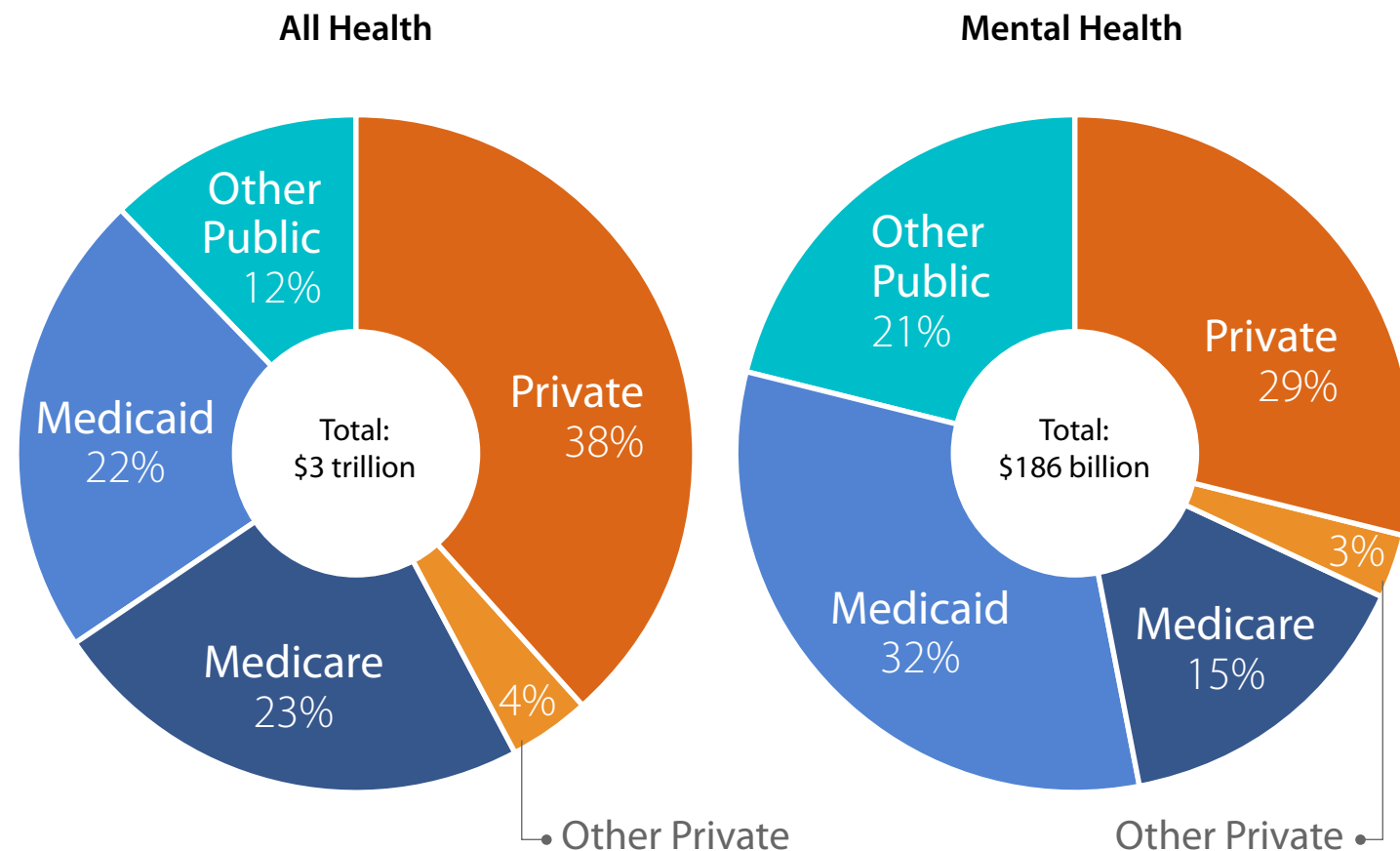
Notes: Projections (shown with *P*) of treatment expenditures for mental health include clinical treatment and rehabilitative services and medications and exclude peer support services and activities to prevent mental illness. *Other outpatient and residential* includes other personal, residential, and public health plus freestanding home health services.

Sources: "Table A.7," in *National Expenditures for Mental Health Services and Substance Abuse Treatment: 1986–2009*, Substance Abuse and Mental Health Services Administration (SAMHSA), 2013: 66, store.samhsa.gov; "Table A.3," in *Projections of National Expenditures for Treatment of Mental and Substance Use Disorders, 2010–2020*, SAMHSA, 2014: A-5, store.samhsa.gov.

All Health vs. Mental Health Expenditures

by Payer, United States, 2015

PERCENTAGE OF TOTAL PROJECTED SPENDING



Notes: *Other public* includes other federal, state, and local payers. May not sum to 100% due to rounding. Spending includes clinical treatment and rehabilitative services and medications and excludes both peer support services for which there is no cost and activities to prevent mental illness. Projections incorporate expansion of coverage through the Affordable Care Act, implementation of the provisions of mental health parity regulations, and expectations about the expiration of patents for certain psychotropic medications.

Source: "Table A.7," in *Projections of National Expenditures for Treatment of Mental and Substance Use Disorders, 2010–2020*, Substance Abuse and Mental Health Services Administration, 2014: A-12 and A-13, store.samhsa.gov.

Mental Health

Spending

Total US mental health expenditures in 2015 are projected to be \$186 billion, or 6% of total health care expenditures. Medicaid and other public programs are projected to pay for slightly more than half (53%) of mental health expenditures, but only one-third of overall health expenditures.

California's Public Mental Health Delivery System

Mental Health

California's Public System

A Complex Delivery System

California counties are responsible for both Medi-Cal specialty mental health services and for safety-net (non-Medi-Cal) community mental health services. While counties have historically provided most Medi-Cal mental health services in the state through county mental health plans, and some are available on a fee-for-service basis, other services (typically for people with less serious mental health conditions) have become available through Medi-Cal managed care health plans since California expanded the scope of mental health benefits available to Medi-Cal beneficiaries in 2014. Coordination among these different delivery systems is a work in progress.

Funding

The most significant sources of funding for public mental health care in California include:

- Federal Medicaid funds
- State sales tax and vehicle license fees distributed to counties (realignment* funds)
- The state's Mental Health Services Act (MHSA), which imposes a 1% surtax on personal income over \$1 million (see page 28)

Available Data

Comprehensive data to permit a full accounting of service use, outcomes, and spending across California's public mental health system is not available. The most complete and timely statewide data is for county Medi-Cal specialty mental health services and these data are presented in the "Medi-Cal" section that follows.

California has a complex public mental health care system. Most services are delivered through county systems that operate separately from other safety-net health care services, and are funded through a number of dedicated revenue streams.

**Realignment* is the transfer of administrative and financial control from the state to counties. California underwent two major mental health system realignments: in 1991 and in 2011.

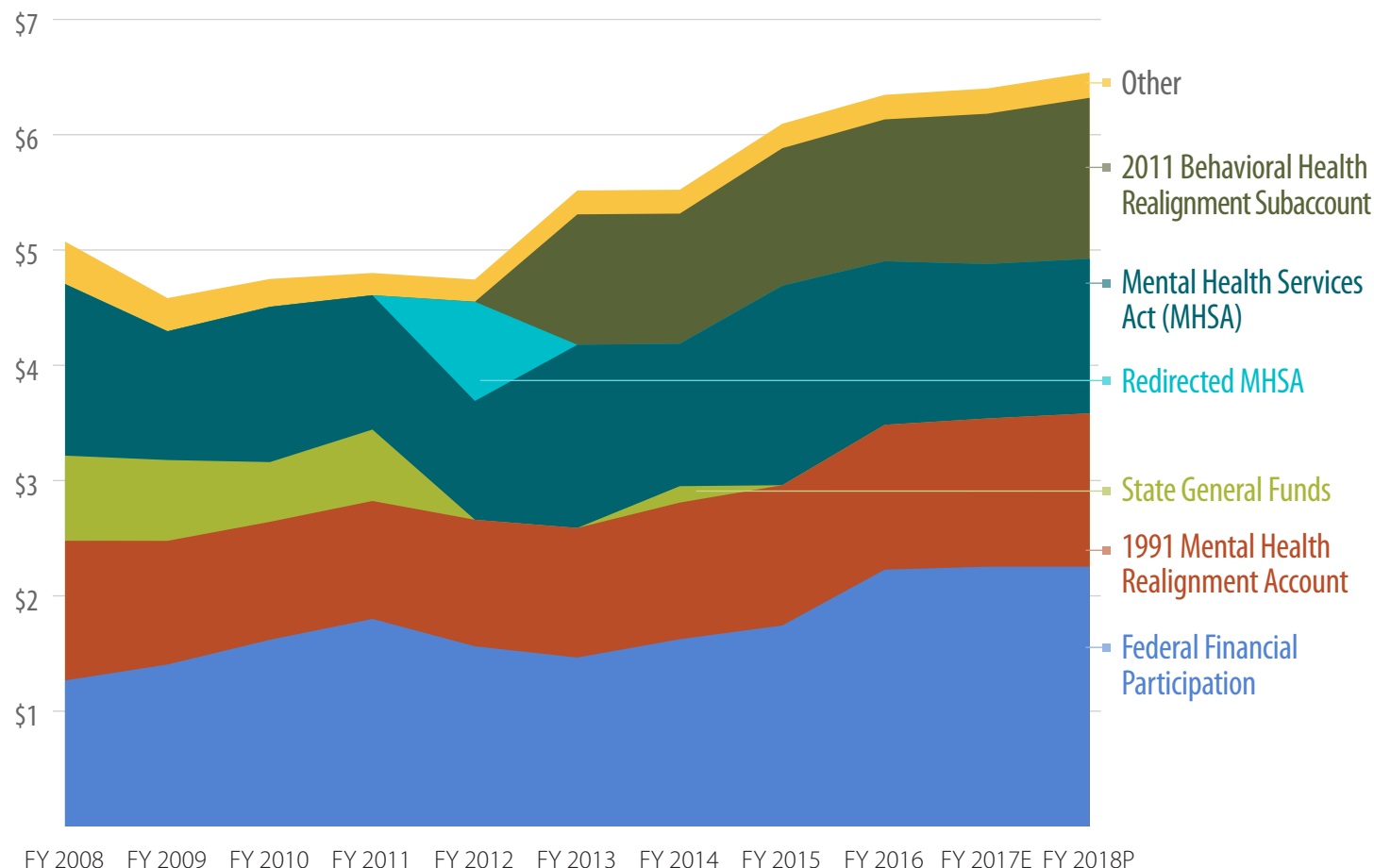
Notes: For more information on the organization and financing of public mental health services in California, see Sarah Arnquist and Peter Harbage, *A Complex Case: Public Mental Health Delivery and Financing in California*, CHCF, July 2013, www.chcf.org; Kim Lewis and Abbi Coursolle, *Mental Health Services in Medi-Cal*, National Health Law Program, January 12, 2017, www.healthlaw.org.

Source: Welfare and Institutions Code sections 5600–5623.5.

California's Public Mental Health System

Financing Trends, FY 2008 to FY 2018

IN BILLIONS



Notes: These figures encompass revenues received, estimated (E), or projected (P) to be received by counties in support of the Medi-Cal and safety-net mental health services they provide. Other public mental health services, such as forensic services in state hospitals and mental health services and medications provided by Medi-Cal managed care plans and Medi-Cal fee-for-service, are not included. Fiscal year (FY) refers to July 1 of previous year through June 30 of stated year. See Appendix D for definitions.

Source: *Financial Report*, Mental Health Services Oversight and Accountability Commission, January 26, 2017, www.mhsoac.ca.gov (PDF).

Mental Health

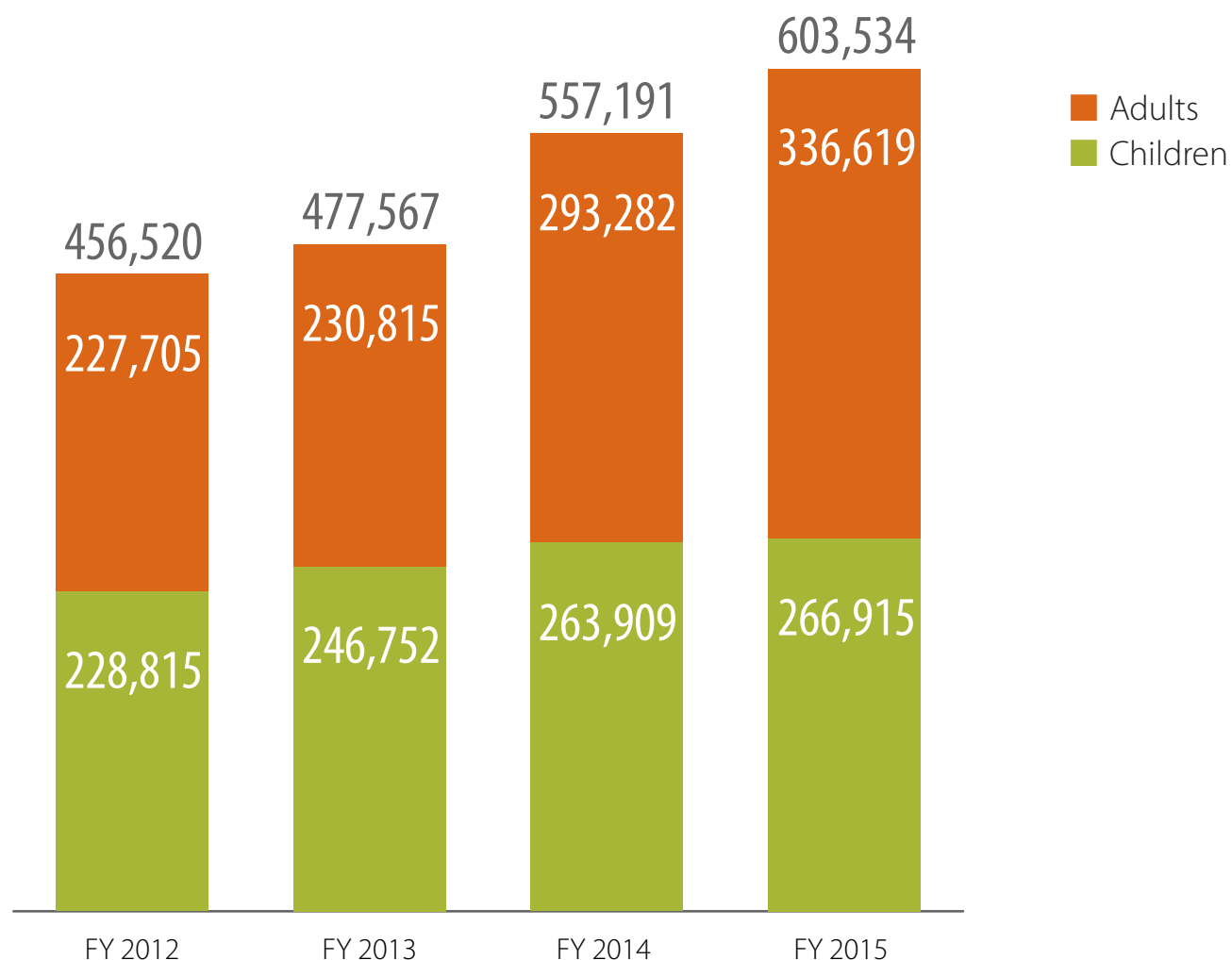
California's Public System

Funding of California's county-based mental health system more than doubled and the federal share of Medicaid mental health services almost tripled, from FY 2008 to FY 2017. Mental Health Services Act (MHSA) funds are projected to approach \$1.3 billion in fiscal year 2018.

Use of Medi-Cal Specialty Mental Health Services

Adults and Children, California, FY 2012 to FY 2015

UNDUPLICATED NUMBER OF SERVICE USERS



Notes: Fiscal year (FY) refers to July 1 of previous year through June 30 of stated year. *Specialty mental health services* are Medi-Cal entitlement services for adults and children that meet medical necessity criteria, which consist of having a specific covered diagnosis, functional impairment, and meeting intervention criteria. *Children* are age 0–20; *adults* are age 21 and older.

Source: *Statewide Aggregate Specialty Mental Health Services Performance Dashboard*, California Department of Healthcare Services, 2016, www.dhcs.ca.gov (PDF).

Mental Health

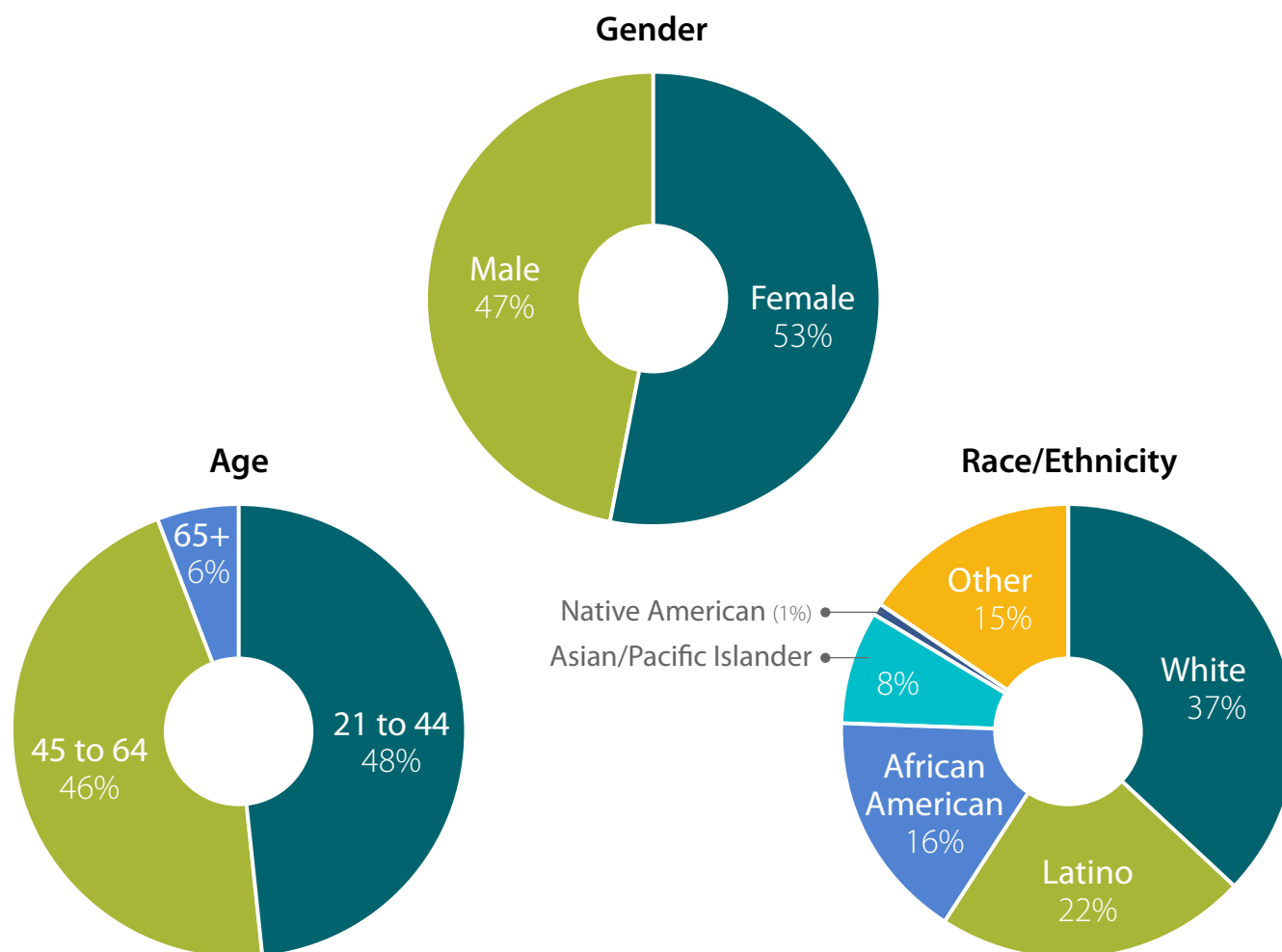
Medi-Cal

In 2012, similar numbers of children and adults used Medi-Cal specialty mental health services. By 2015, both groups had grown, but the number of adults grew considerably faster (48% growth from 2012 to 2015), compared to 17% for children. Expansion of Medi-Cal eligibility to additional adults in 2014, and the transition of children with Healthy Families coverage into Medi-Cal in 2013, contributed to this growth.

Use of Medi-Cal Specialty Mental Health Services

Adults, by Demographic, California, FY 2015

PERCENTAGE OF ADULT (21+) SERVICE USERS WHO ARE...



Notes: *Specialty mental health services* are Medi-Cal entitlement services for adults and children that meet medical necessity criteria, which consist of having a specific covered diagnosis, functional impairment, and meeting intervention criteria. Fiscal year (FY) refers to July 1 of previous year through June 30 of stated year. Segments may not sum to 100% due to rounding.

Source: *Statewide Aggregate Specialty Mental Health Services Performance Dashboard*, California Department of Healthcare Services, 2016, www.dhcs.ca.gov (PDF).

Mental Health

Medi-Cal

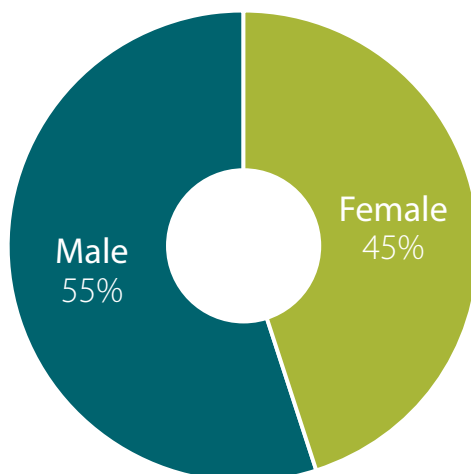
Slightly more women than men used Medi-Cal specialty mental health services. Few adults over age 65 used services, while adults age 21 to 44 and those 45 to 64 were equally likely to use services. African Americans and Native Americans were overrepresented among service users in comparison to their percentage of the adult population (not shown), while Latinos and Asian/Pacific Islanders were underrepresented.

Use of Medi-Cal Specialty Mental Health Services

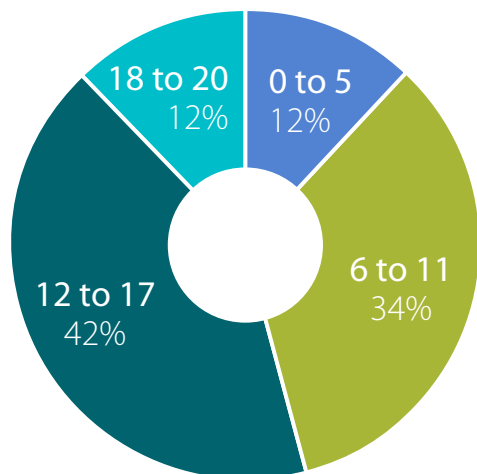
Children/Adolescents, by Demographic, California, FY 2015

PERCENTAGE OF CHILD/ADOLESCENT (0-20) SERVICE USERS WHO ARE...

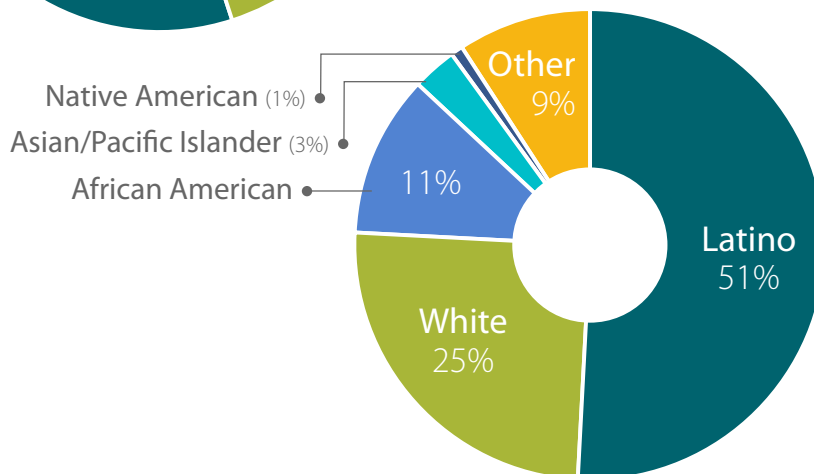
Gender



Age



Race/Ethnicity



Notes: *Specialty mental health services* are Medi-Cal entitlement services for adults and children that meet medical necessity criteria, which consists of having a specific covered diagnosis, functional impairment, and meeting intervention criteria. Fiscal year (FY) refers to July 1 of previous year through June 30 of stated year.

Source: *Statewide Aggregate Specialty Mental Health Services Performance Dashboard*, California Department of Healthcare Services, 2016, www.dhcs.ca.gov (PDF).

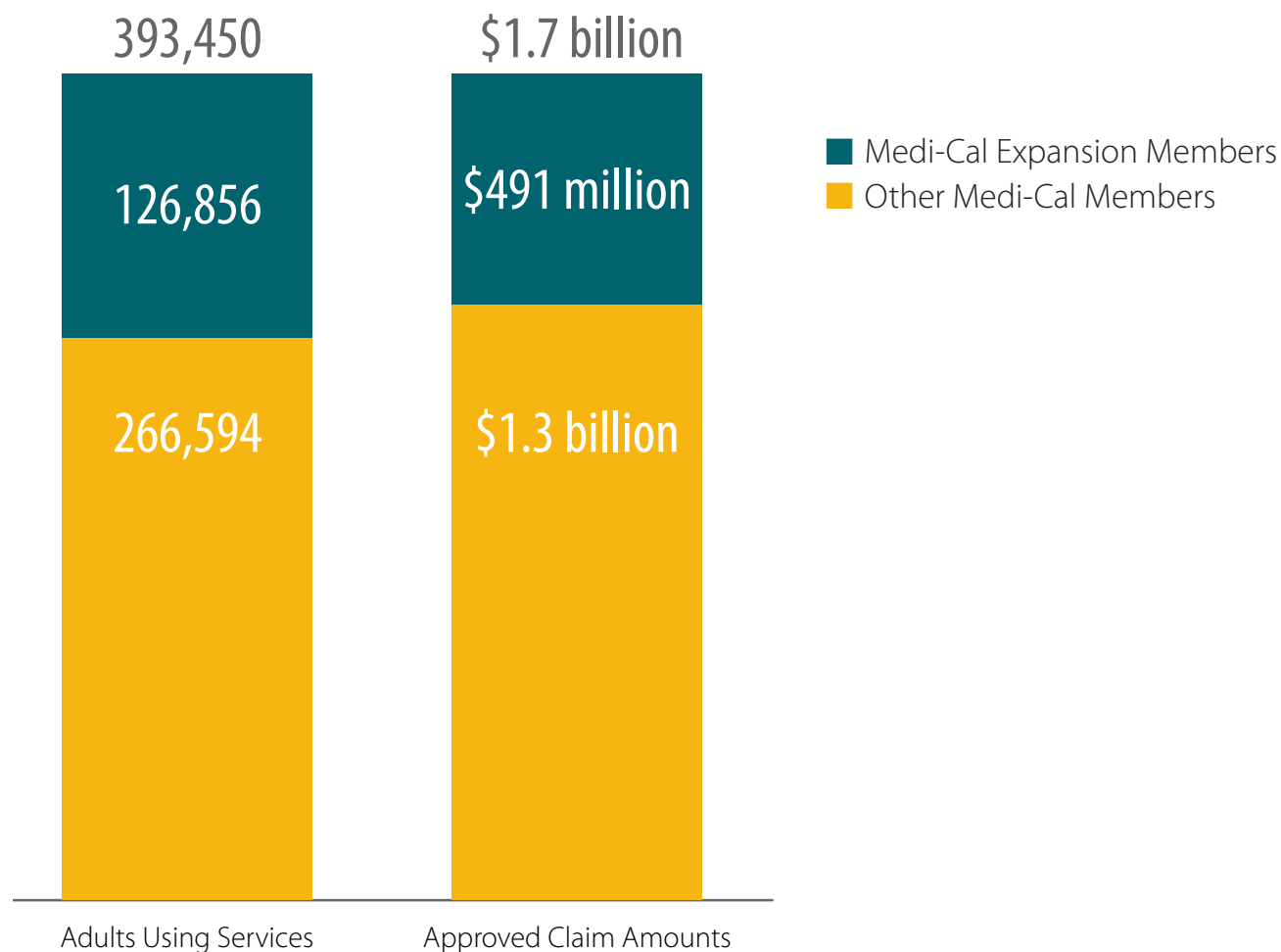
Mental Health

Medi-Cal

A higher percentage of male than female children and adolescents used Medi-Cal specialty mental health services. Those age 6 to 17 constituted 76% of child and adolescent service users. African American children represented 11% of users but 5% of the population (not shown). In contrast, Asian/Pacific Islander children were 3% of mental health service users, but 11% of the child population (not shown).

Medi-Cal Specialty MH Service Users and Approved Claims

Adults, by Medi-Cal Member Type, FY 2015



Notes: Under the ACA expansion, individuals age 18 and older can apply for Medi-Cal. Specialty mental health services defines adults as individuals who are 21 or older. As such, ACA expansion clients and non-ACA adults currently receiving SMHS cannot be directly compared. *MH* is mental health. *Specialty mental health services* are Medi-Cal entitlement services for adults and children that meet medical necessity criteria, which consist of having a specific covered diagnosis, functional impairment, and meeting intervention criteria. Based on approved claims received through June 30, 2016. Includes both Short-Doyle and fee-for-service claims. Fiscal year (*FY*) refers to July 1 of previous year through June 30 of stated year. Segments may not sum to total due to rounding.

Source: *Medi-Cal Specialty Mental Health Services, November Estimate, Policy Change Supplement for Fiscal Years 2016–17 and 2017–18*, Department of Health Care Services: 22–23, www.dhcs.ca.gov (PDF).

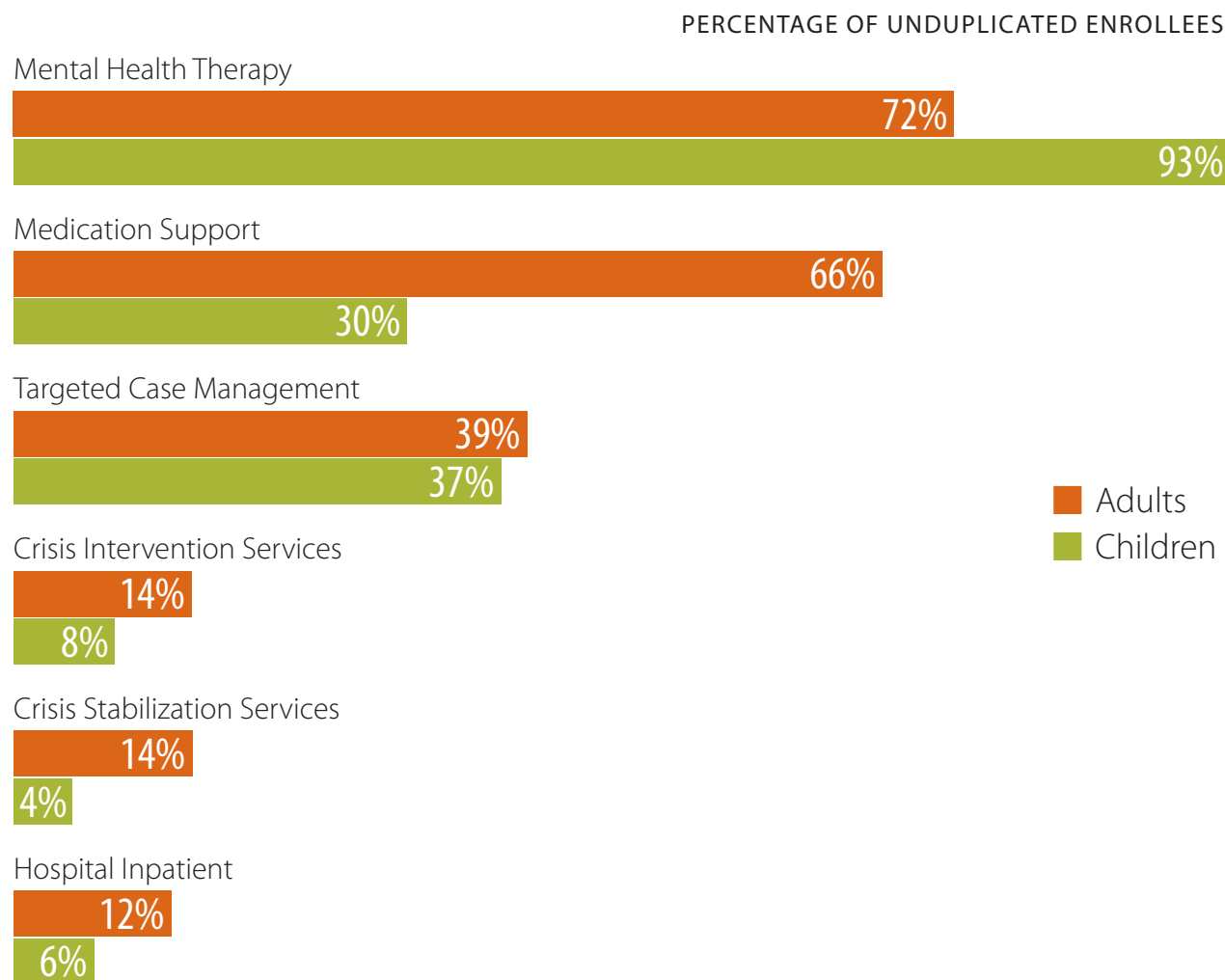
Mental Health

Medi-Cal

In January 2014, the Affordable Care Act raised adult income limits for Medi-Cal eligibility. From July 2014 through June 2015, 127,000 Medi-Cal expansion clients used \$491 million in Medi-Cal specialty mental health services. This group of new beneficiaries represented a third of all adult users of services.

Use of Medi-Cal Specialty Mental Health Services

by Age Group and Service Category, California, FY 2015



Notes: *Specialty mental health services* are Medi-Cal entitlement services for adults and children that meet medical necessity criteria, which consist of having a specific covered diagnosis, functional impairment, and meeting intervention criteria. *Mental health therapy* includes therapy and other service activities; *hospital inpatient* includes psychiatric health facility and administrative days, managed care and fee-for-service psychiatric inpatient hospital days. If Medi-Cal enrollees used more than one type of hospital care, they will be counted twice. *Children* are age 0 through 20; *adults* are age 21 and older. Fiscal year (FY) refers to July 1 of previous year through June 30 of stated year.

Source: *Statewide Aggregate Specialty Mental Health Services Performance Dashboard*, California Department of Healthcare Services, 2016, www.dhcs.ca.gov (PDF).

Mental Health

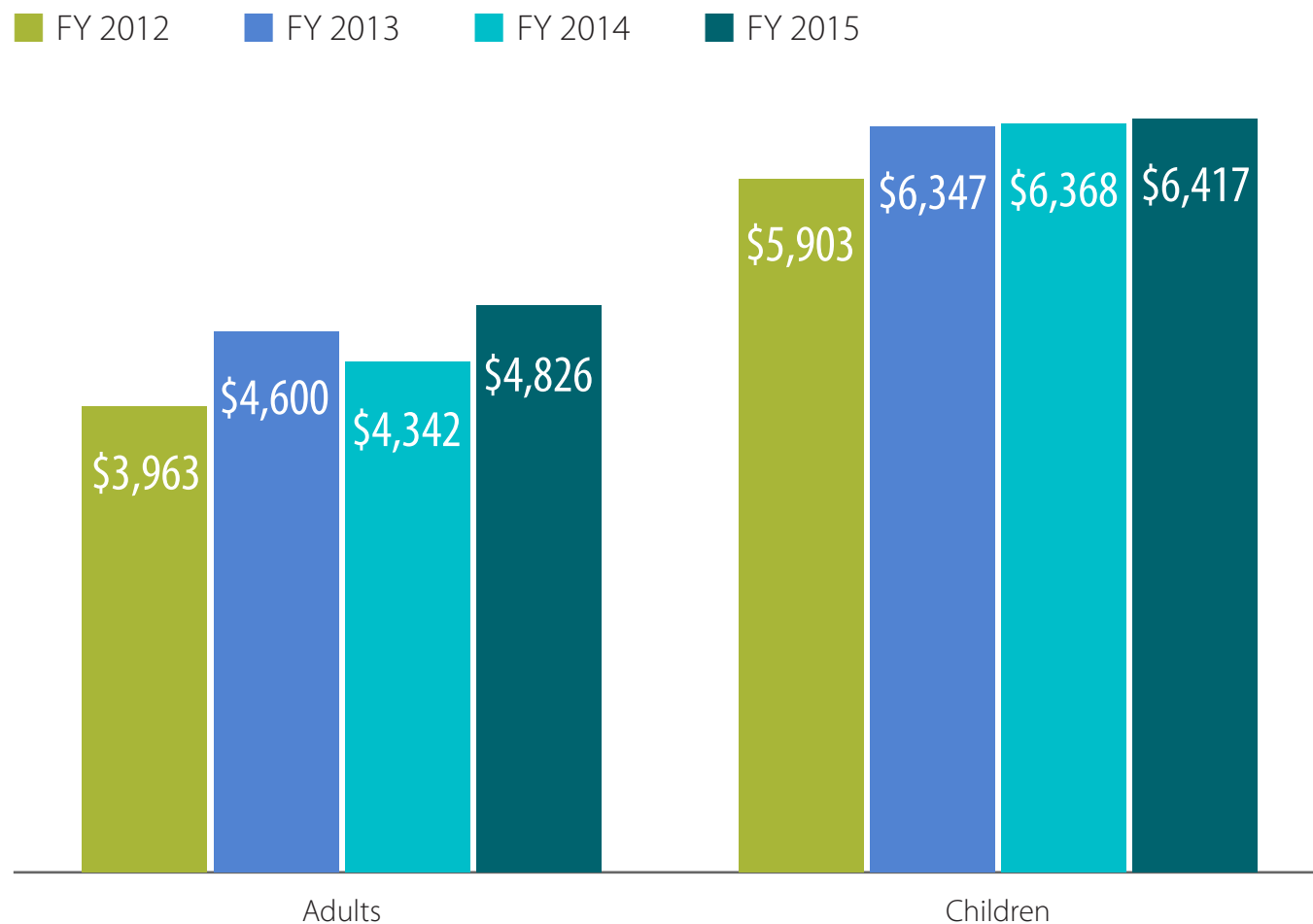
Medi-Cal

Of those people receiving county specialty mental health services, similar percentages of adults used mental health therapy as used medication, while children were much more likely to use therapy than a psychotropic medication. Approximately 40% of children and adults used targeted case management for assistance in accessing community services. Smaller percentages of adults and children used inpatient and crisis services.

Medi-Cal Specialty Mental Health Services Expenditures

Adults and Children, California, FY 2012 to FY 2015

APPROVED CLAIMS PER SERVICE USER



Notes: *Specialty mental health services* are Medi-Cal entitlement services for adults and children that meet medical necessity criteria, which consist of having a specific covered diagnosis, functional impairment, and meeting intervention criteria. *Children* are age 0–20; *adults* are age 21 and older. Approved claims for specialty mental health as of August 3, 2016. Fiscal year (FY) refers to July 1 of previous year through June 30 of stated year.

Source: *Statewide Aggregate Specialty Mental Health Services Performance Dashboard*, California Department of Healthcare Services, 2016, www.dhcs.ca.gov (PDF).

Mental Health

Medi-Cal

Average expenditures per Medi-Cal specialty mental health service user were at least 33% higher for children than for adults. Expenditures for adults grew at a faster rate (22%) than expenditures for children (9%) between fiscal years 2012 and 2015.

Diseases Treated, Most Costly 5% of Medi-Cal Enrollees

All Ages, California, 2011

PERCENTAGE OF ENROLLEES TREATED FOR . . .

Any Mental Health

59%

Hypertension

27%

Diabetes

21%

Mental Health

Medi-Cal

Mental health disorders are associated with high costs in the Medi-Cal program, which provided \$26 billion in health care services in 2011.

Among the 5% of the 7.9 million Medi-Cal service users with the highest total costs of care in 2011, more than twice as many were treated for mental illness as for hypertension or diabetes.

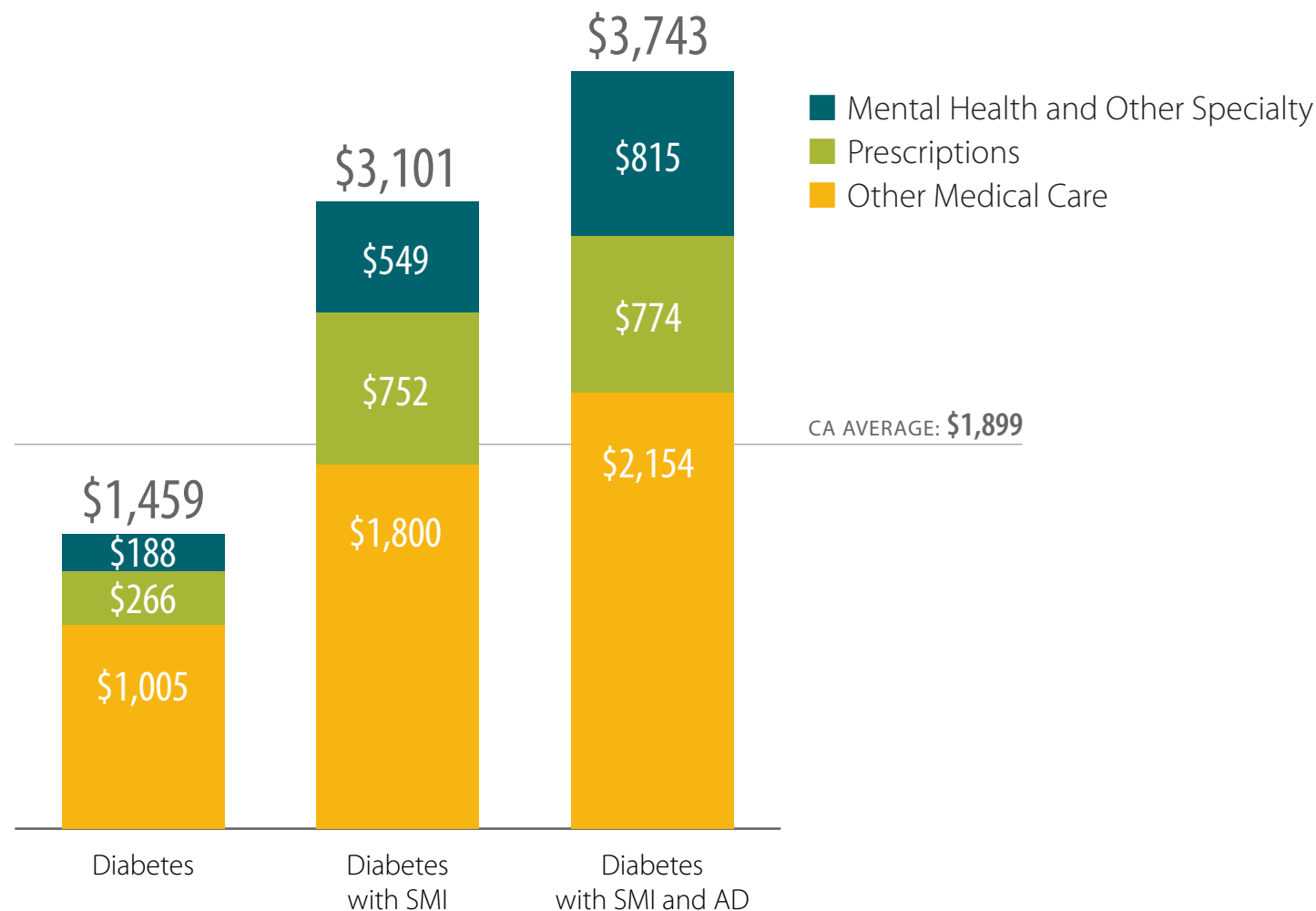
Notes: Includes Medi-Cal members participating in fee-for-service, managed care, or both. Excludes Medi-Cal members also enrolled in Medicare. The condition categories used are based on the Clinical Classification Software (CCS) for the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) and were originally developed as a part of the Healthcare Cost and Utilization Project under the Agency for Healthcare Research and Quality.

Source: *Understanding Medi-Cal's High-Cost Populations*, Department of Health Care Services, June 2015, www.dhcs.ca.gov (PDF).

Medi-Cal Spending on Diabetes, by Service Category

With and Without SMI or AD, California, 2011

PER MEMBER PER MONTH SPENDING



Notes: Fee-for-service expenditures for adults with Medi-Cal coverage only. *SMI* is serious mental illness. *AD* is alcohol and drug treatment. *Mental health and other specialty* includes mental health, in-home support services, dental, home- and community-based services for developmental disabilities, and other. *Other medical care* includes outpatient services, hospital inpatient services, and nursing facility and emergency medical transportation.

Source: *Understanding Medi-Cal's High-Cost Populations*, Department of Health Care Services, June 2015, www.dhcs.ca.gov (PDF).

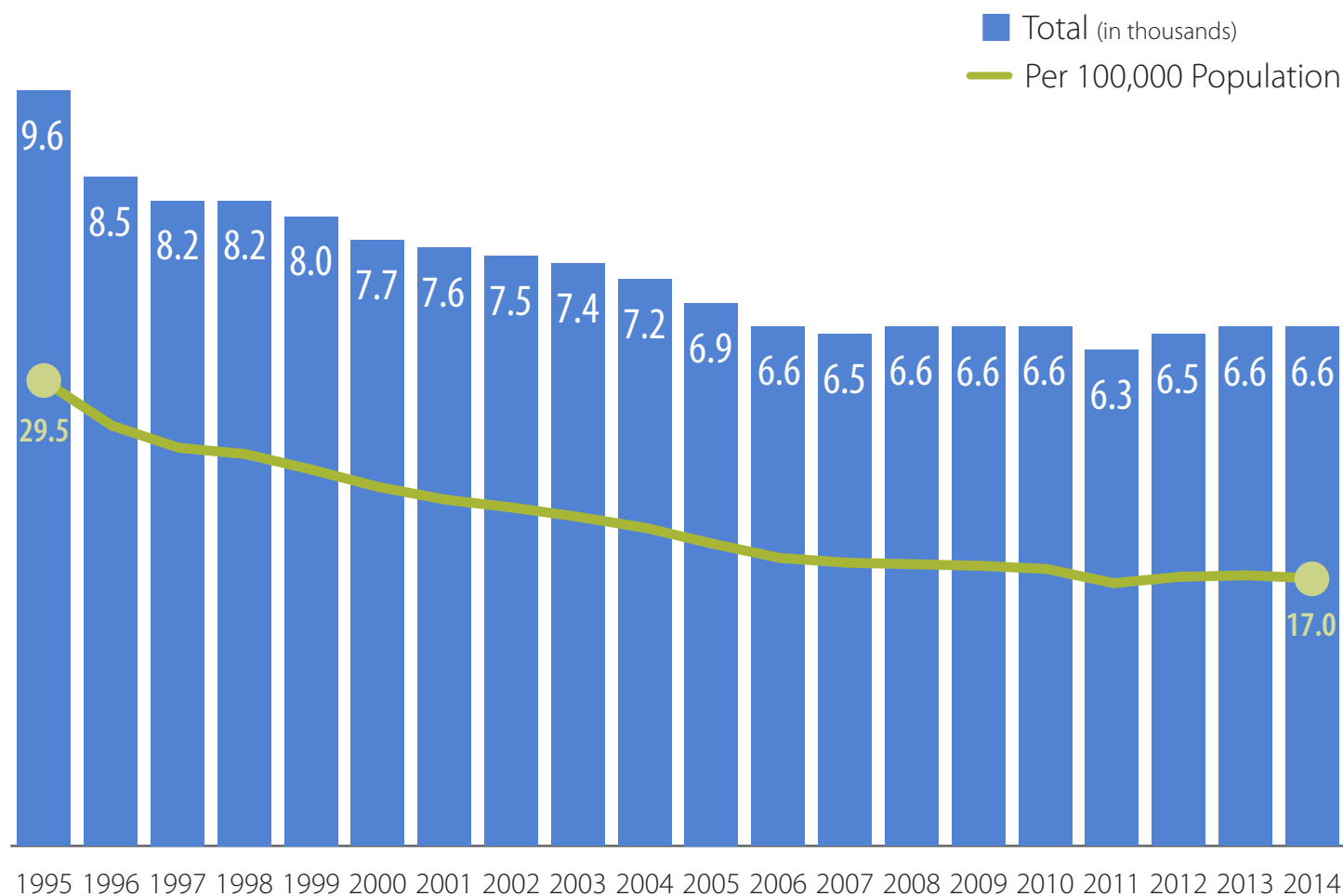
Mental Health

Medi-Cal

Diabetes is one of the most common chronic conditions in the adult Medi-Cal population. Total costs of care for members with diabetes and no behavioral health condition averaged \$1,459 per month. Average monthly costs for those with a co-occurring SMI were more than double that amount, and more than two and a half times higher if an alcohol or drug problem was also present.

Acute Psychiatric Inpatient Beds

California, 1995 to 2014



Notes: *Acute psychiatric inpatient beds* excludes beds in California state hospitals. It includes beds in psychiatric units in general acute care hospitals (including city and county hospitals), acute psychiatric hospitals, and psychiatric health facilities. These beds are licensed to provide one of the following types of psychiatric service: adult, child/adolescent, geriatric-psychiatry, psychiatric intensive care, or chemical dependency. Bed counts for 2009 and 2010 differ from those reported in an earlier CHA report.

Source: *California's Acute Psychiatric Bed Loss*, California Hospital Association, October 25, 2016.

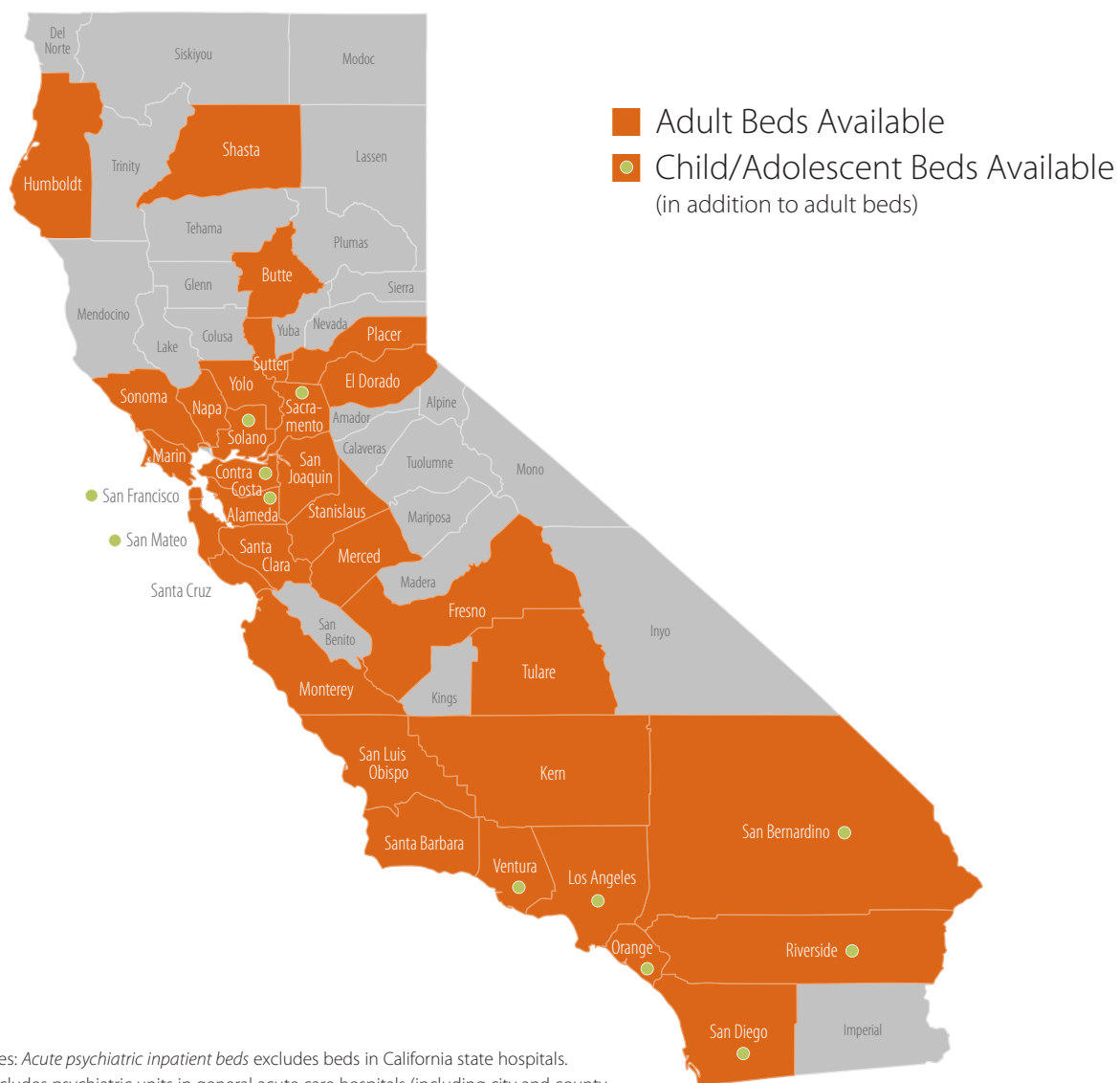
Mental Health

Facilities

California has acute psychiatric beds in general acute and specialized psychiatric hospitals that provide short-term care for people who experience a psychiatric crisis and require 24-hour care. Acute psychiatric beds per 100,000 population decreased 42% from 1995 through 2014. During this time, 44 facilities either eliminated inpatient psychiatric care or closed completely. California would need an additional 1,158 beds to reach the national average of 20 beds per 100,000 population.

Adult and Child/Adolescent Acute Psychiatric Inpatient Beds

by California County, 2015



Notes: *Acute psychiatric inpatient beds* excludes beds in California state hospitals. It includes psychiatric units in general acute care hospitals (including city and county hospitals), beds in acute psychiatric hospitals, and beds in psychiatric health facilities.

Source: *California's Acute Psychiatric Bed Loss*, California Hospital Association, October 25, 2016.

Mental Health

Facilities

There was significant geographic variation in the availability of acute psychiatric inpatient beds in California: 25 counties had no adult acute psychiatric beds, and 46 counties had no psychiatric beds for children, in 2015. When inpatient facilities are far from where people live, it is more difficult for families to participate in treatment and for facilities to plan post-discharge care.

Psychiatric Inpatient Beds

by Type, California, 2014

Acute Care

NUMBER OF BEDS

Acute Psychiatric

6,104

State Hospital, Acute

1,998

Psychiatric Health Facility (PHF)

484

Intermediate and Long-Term Care

State Hospital Intermediate

4,578

Special Treatment Program (SNF)

2,178

Mental Health Rehabilitation Centers*

1,369

*List from DHCS Licensing and Certification, www.dhcs.ca.gov (PDF). Years are not listed on this source.

Notes: *Acute psychiatric* includes general acute care hospital psychiatric units and acute psychiatric hospitals. *State hospitals* offer acute care and intermediate care, primarily for forensic patients. *Special treatment programs* are beds in skilled nursing facilities, licensed by the Department of Public Health to provide intermediate and long-term inpatient care. *Mental health rehabilitation centers* are licensed by the Department of Health Care Services (DHCS) and provide intermediate and long-term care.

Sources: 2014 *Pivot Table*, Office of Statewide Health Planning and Development (OSHPD), www.oshpd.ca.gov; Automated Licensing Information and Report Tracking System (ALIRTS) for listing of open Skilled Nursing Facilities with Special Treatment Programs, OSHPD, accessed October 10, 2016; any additional SNFs in *Facilities and Programs Defined as Institutions for Mental Disease (IMDs): 2014*, Department of Health Care Services, September 17, 2014, www.dhcs.ca.gov (PDF).

Mental Health

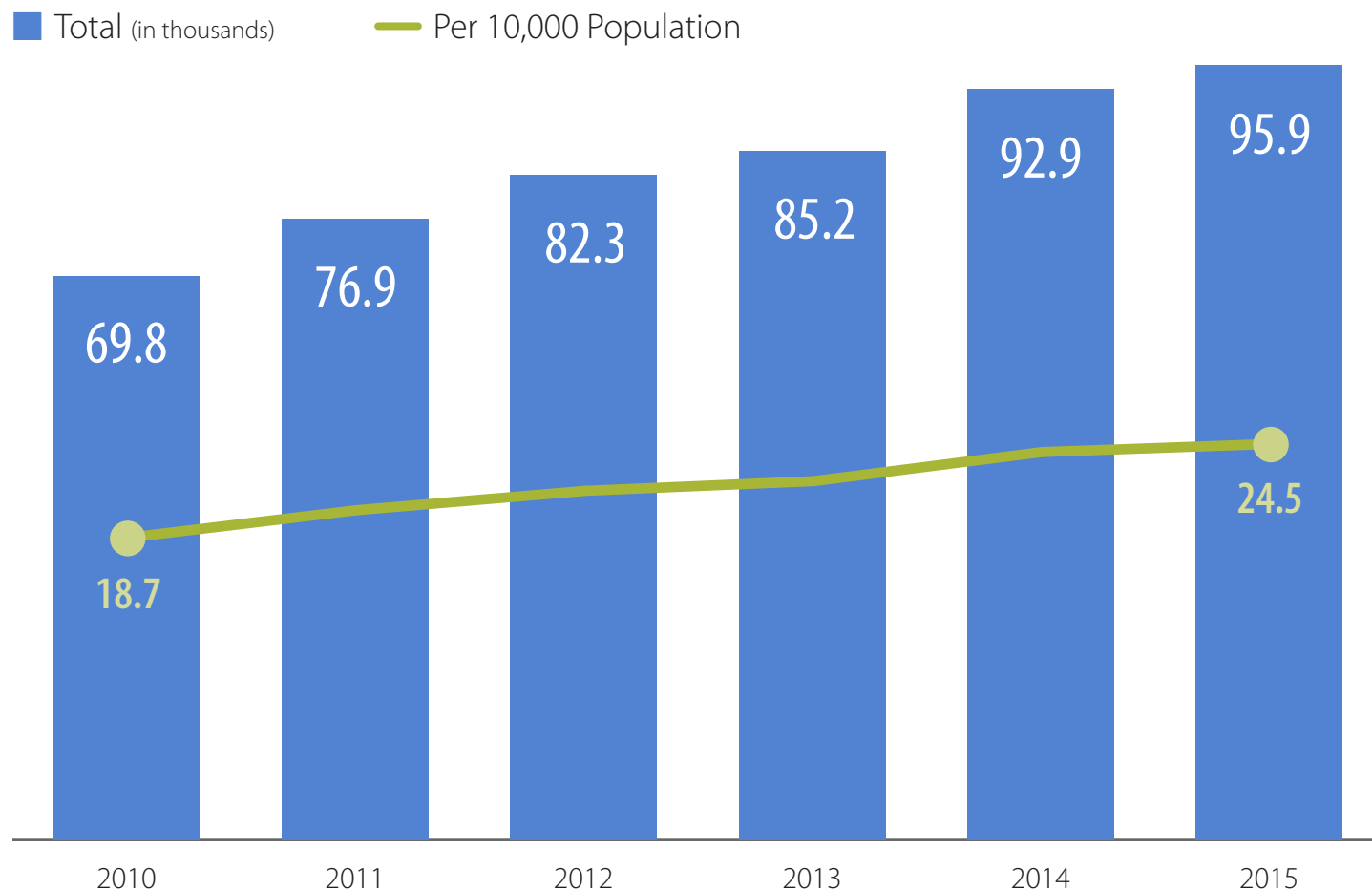
Facilities

Inpatient psychiatric care provides stabilization for mental health crises that can make patients dangerous to themselves or to others. Acute care facilities provided 70% of beds for acute psychiatric care in California. State hospitals also offered both acute care and intermediate care beds that were used primarily to treat incarcerated patients with mental illness.

ED Discharges to Inpatient Psychiatric Facilities

California, 2010 to 2015

ED VISITS WITH DISPOSITION TO PSYCHIATRIC CARE



Notes: ED is emergency department. *Disposition to psychiatric care* includes discharges or transfers to a psychiatric hospital or distinct psychiatric unit of a hospital, including those that are a planned inpatient readmission.

Source: Author calculations based on *Emergency Department Outpatient and Inpatient Data Pivot Profile*, Office of Statewide Health Planning and Development, 2010–2014, www.oshpd.ca.gov and *Report P-1: State Population Projections (2010–2060): Total Population by County*, Department of Finance, www.dof.ca.gov.

Mental Health

Facilities

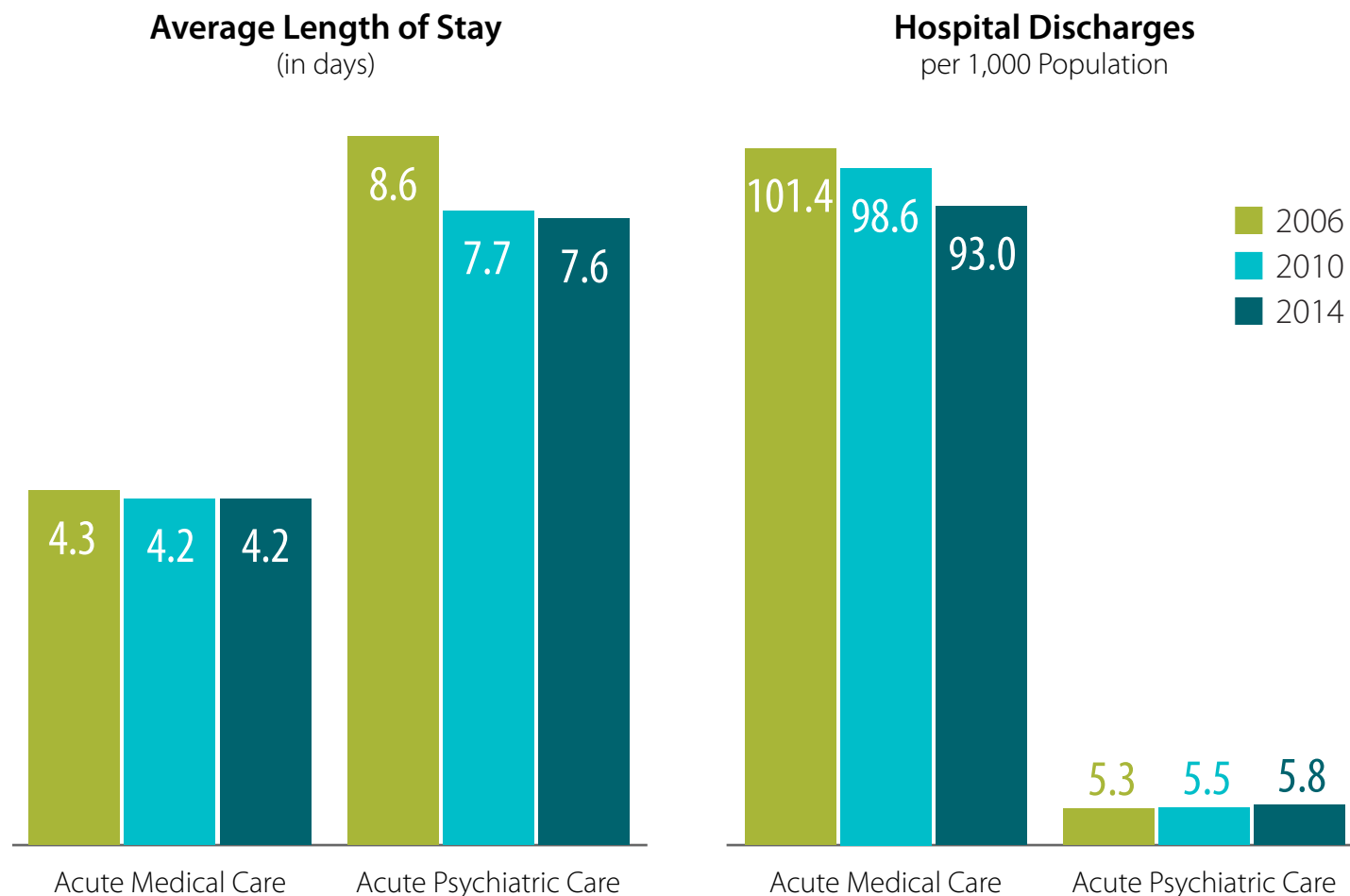
People experiencing mental health crises frequently go to hospital emergency departments for help. Many people can be stabilized by the emergency department or by referral for outpatient care. However, an increasing number of emergency visits resulted in discharges to inpatient psychiatric care. Recent studies have suggested more timely access to outpatient treatment and specialized psychiatric crisis services could reduce the need for inpatient care.^{1,2}

1. Larry Baraff, Nicole Janowicz, and Joan Asarnow, "Survey of California Emergency Departments About Practices for Management of Suicidal Patients and Resources Available for Their Care," *Annals of Emergency Medicine* 48, no. 4 (2006): 452–8.

2. Vidhya Alakeson, Nalini Pande, and Michael Ludwig, "A Plan to Reduce Emergency Room 'Boarding' of Psychiatric Patients," *Health Affairs* 29, no. 9 (2010): 1637–42.

Hospital Length of Stay / Discharges

Acute Medical vs. Acute Psychiatric, California, 2006, 2010, and 2014



Notes: Includes discharges from general acute hospitals, acute psychiatric facilities, and psychiatric health facilities (PHFs). Discharges from chemical dependency recovery care, physical rehabilitation care, and skilled nursing / intermediate care are not shown. PHFs were designed as a cost-effective way to deliver acute psychiatric inpatient care. They do not have to meet the same facility regulations as hospitals, and provide medical care through arrangements with other providers.

Sources: "Type of Care by County of Residence," in "Hospital Inpatient Discharge Rates — County Frequencies," Office of Statewide Health Planning and Development, 2006, 2010, and 2014, www.oshpd.ca.gov; population estimates from American Community Survey, US Census Bureau, 2006, 2010, and 2014, www.census.gov.

Mental Health

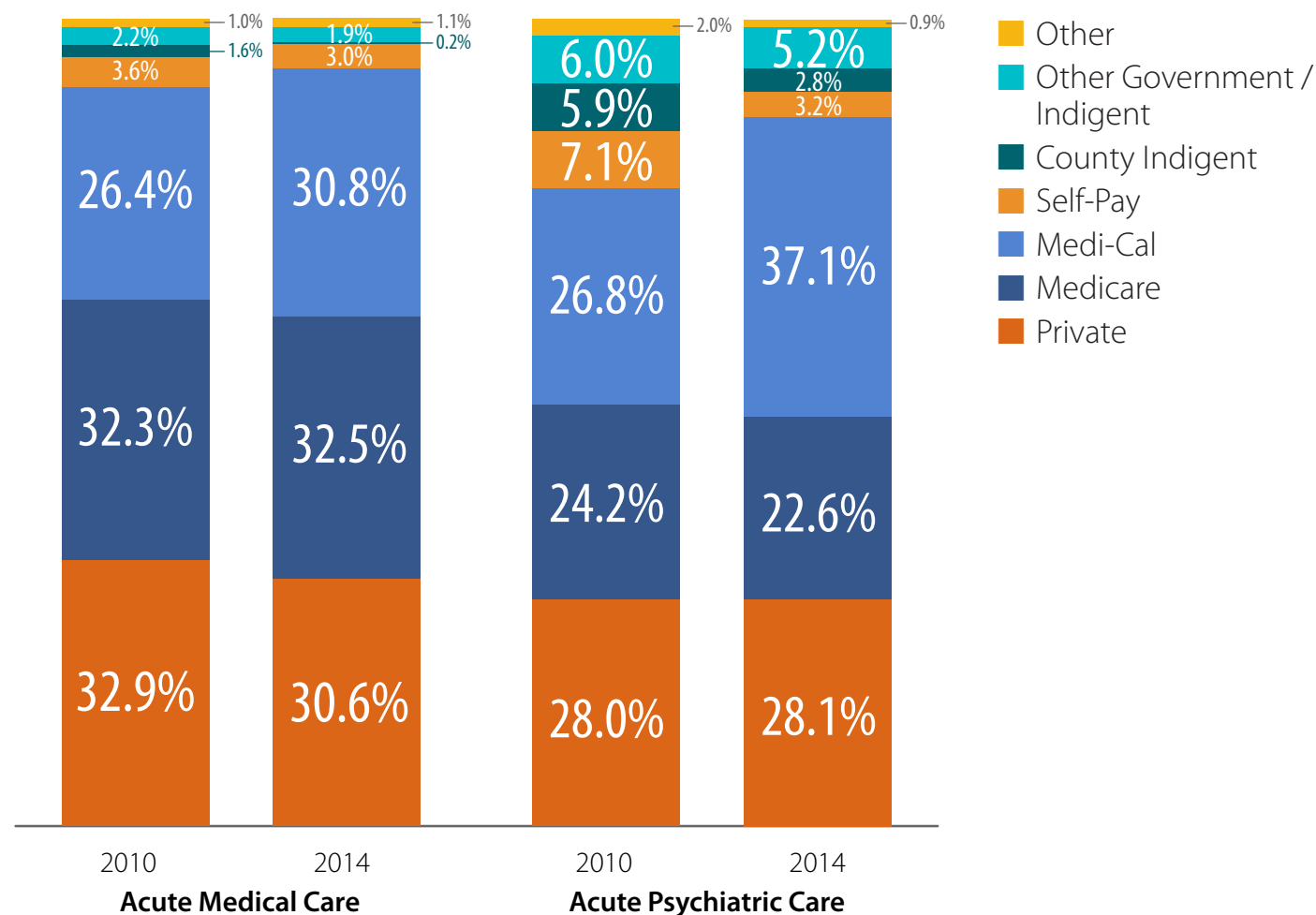
Facilities

Acute psychiatric hospital stays are far less frequent than acute medical stays. Between 2006 and 2014, acute medical care discharges per population decreased by 8.3%, while acute psychiatric discharge rates rose by a similar rate. Average lengths of stay for acute psychiatric care were considerably longer than average stays for acute medical care, but shortened between 2006 and 2010.

Hospital Discharges, by Payer

Acute Medical vs. Acute Psychiatric, California, 2010 and 2014

PERCENTAGE OF DISCHARGES



Notes: Includes discharges from general acute hospitals, acute psychiatric facilities, and psychiatric health facilities (PHFs). Discharges from chemical dependency recovery care, physical rehabilitation care, and skilled nursing/intermediate care are not shown. *Other* includes worker's compensation and other payers.

Source: "Expected Payer by County of Residence and Type of Care," in "Hospital Inpatient Discharge Reports — County Frequencies," Office of Statewide Health Planning and Development, 2010 and 2014, www.oshpd.ca.gov.

Mental Health

Facilities

In 2010, Medi-Cal paid for 26% of California medical and psychiatric discharges. In 2014, Medi-Cal's share increased to 31% of medical and 37% of psychiatric discharges. The increase was offset by decreased shares of self-pay and county indigent programs. Medicare paid for 33% of medical discharges but only 23% of psychiatric discharges in 2014.

Mental Health Professions

California, 2016

Marriage and Family Therapists

31,349

Licensed Clinical Social Workers

18,974

Psychologists

16,683

Psychiatrists

5,806

Counselors

1,207

Psychiatric Nurses

306

Mental Health

Care Providers

California had about 75,000 licensed behavioral health professionals in 2016. Marriage and family therapists comprised the greatest share, almost double the number of licensed psychologists. This workforce does not reflect the racial and ethnic diversity of the state, and many professionals, particularly psychiatrists and psychologists, will reach retirement age within the next decade (not shown).

Note: For more information on current and projected behavioral health workforce needs, see Janet Coffman et al., *California's Current and Future Behavioral Health Workforce*, Healthforce Center at UCSF, February 2018, healthforce.ucsf.edu/BHWorkforce.

Source: UCSF analysis of Department of Consumer Affairs, Professional Licensee Masterfile, June 2016.

Licensed Mental Health Professionals, by Region

California, 2016

PER 100,000 POPULATION

■ LOWER THAN STATE AVERAGE

	COUNSELORS	LICENSED CLINICAL SOCIAL WORKERS	MARRIAGE AND FAMILY THERAPISTS	PSYCHIATRIC NURSES	PSYCHIATRISTS	PSYCHOLOGISTS
Central Coast	3.6	45	120	0.9	15	45
Greater Bay Area	4.6	66	118	1.3	25	71
Inland Empire	1.9	26	41	0.3	8	16
Los Angeles County	2.4	56	80	0.9	15	46
Northern and Sierra	3.3	46	86	0.9	9	23
Orange County	3.7	42	82	0.5	10	39
Sacramento Area	3.7	57	76	0.3	15	35
San Diego Area	3.8	48	71	1.1	16	52
San Joaquin Valley	1.4	25	35	0.1	7	16
State Average	3.1	48	80	0.8	15	43

Notes: *Psychiatrists* includes those who designate psychiatry as their primary specialty. County is determined by location of psychiatrist's primary practice. County of psychologists is the county of personal residence. County of licensed clinical social workers and licensed marriage and family therapists is determined by each licensee's chosen address of record. See Appendix A for map of counties included in each region.

Sources: UCSF analysis of Department of Consumer Affairs, Professional Licensee Masterfile, June 2016; Healthforce Center at UCSF; "Annual Estimates of the Resident Population April 1, 2010 to July 1, 2016," US Census Bureau, factfinder.census.gov.

Mental Health

Care Providers

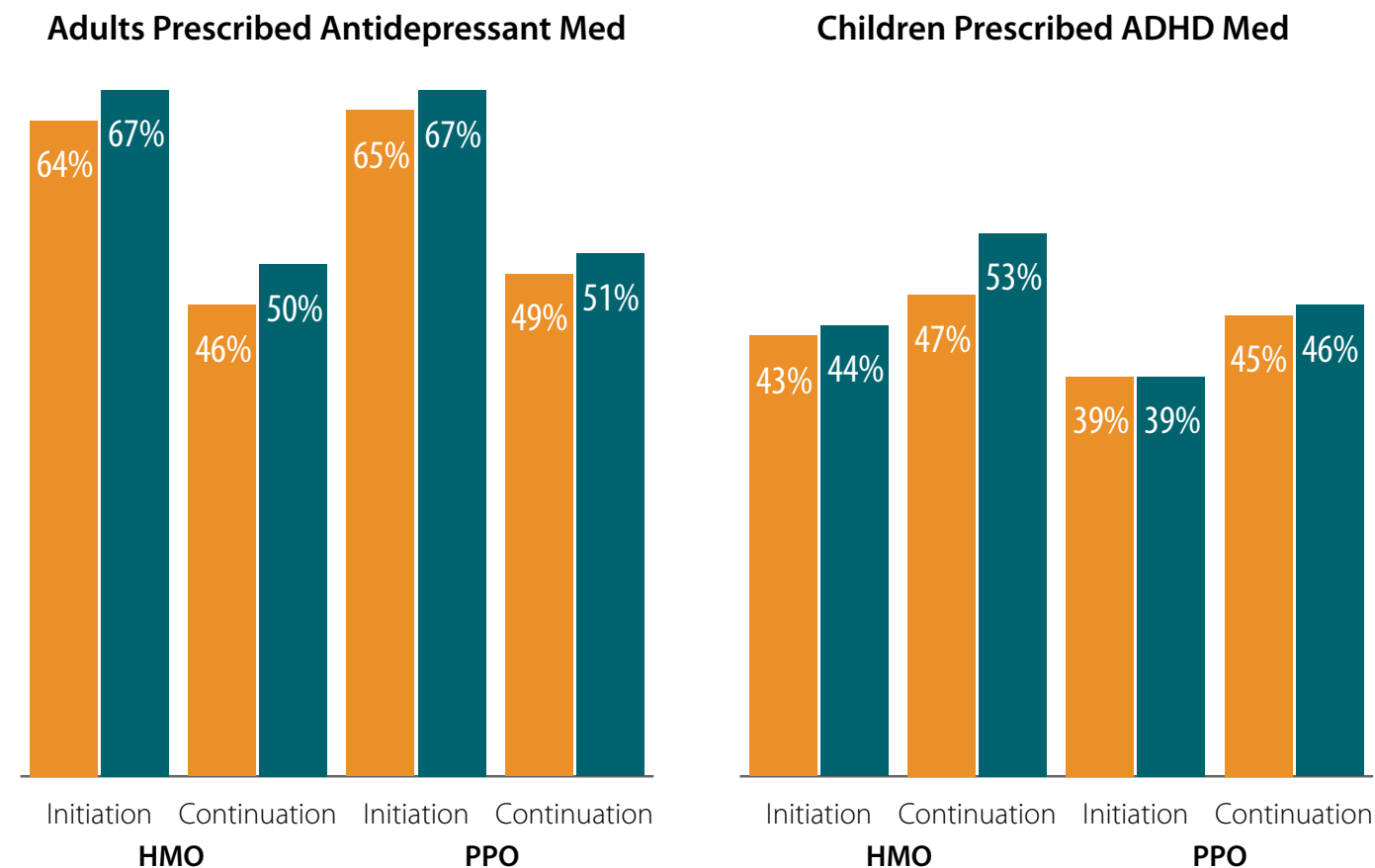
The per population rates of behavioral health professionals varied considerably by region in California. The Greater Bay Area's rates were 38% to 67% greater than the state average for the professions shown, while the Inland Empire and San Joaquin Valley regions had rates that were 39% to 88% lower than average. The Northern and Sierra region had rates of psychiatry and psychology professionals that were at least 40% lower than average.

Medication Treatment for Selected MH Conditions

HMO and PPO Plans, California vs. United States, 2015

PERCENTAGE WHOSE TREATMENT MET STANDARD OF CARE

California United States



Notes: A widely accepted standard for effective medication management of adults who initiate treatment with an antidepressant medication calls for them to remain on the medication for six months. An accepted measure of the appropriateness of continued care for children (age 6 to 12) prescribed attention deficit hyperactivity disorder (ADHD) medication and remain on it for at least 210 days is to have at least two practitioner visits between the second month and the ninth month on the medication. California scores are the average of the state's largest HMOs and six of the largest California PPOs. Nationwide results were calculated giving equal weight to reporting plans throughout the country regardless of its number of enrollees. *HMO* is health maintenance organization; *PPO* is preferred provider organization. Read more: "Strategies and Tactics in the Treatment of Depression: Continuation-Phase Treatment," Armenian Medical Network, March 6, 2006, www.health.am.

Sources: Office of the Patient Advocate, accessed June 13, 2017, HMO data (reportcard.opa.ca.gov) and PPO data (reportcard.opa.ca.gov).

Mental Health

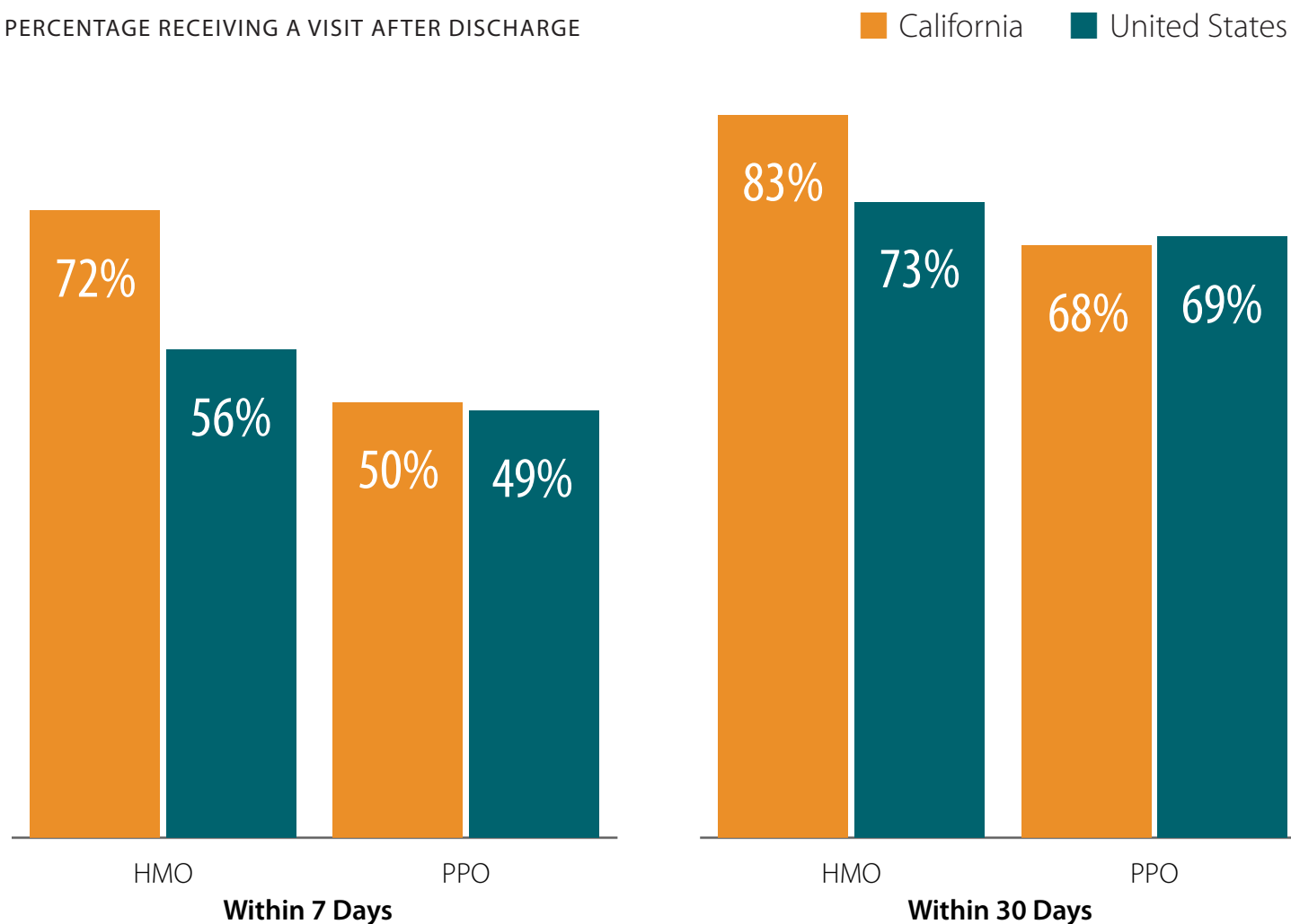
Quality of Care

Nearly two-thirds of California adults prescribed antidepressant medication met standards for effective initiation of treatment, but less than half met standards for continuing treatment. Less than half of California children prescribed medication for attention deficit hyperactivity disorder in California HMOs and PPOs met standards for effective initiation and continuation phase treatment.

Follow-Up After Hospitalization for Mental Illness

Commercial HMO and PPO Plans, California vs. United States, 2015

PERCENTAGE RECEIVING A VISIT AFTER DISCHARGE



Notes: Includes HMO and PPO members age six and older. *HMO* is health maintenance organization; *PPO* is preferred provider organization. California HMO scores are the average of the state's largest HMO. California PPO scores are the average across six of the largest California PPOs. The nationwide results are from PPO health plans located throughout the US and were calculated giving equal weight to each plan's score regardless of its enrollment.

Sources: Office of the Patient Advocate, accessed June 13, 2017, HMO data (reportcard.opa.ca.gov) and PPO data (reportcard.opa.ca.gov).

Mental Health

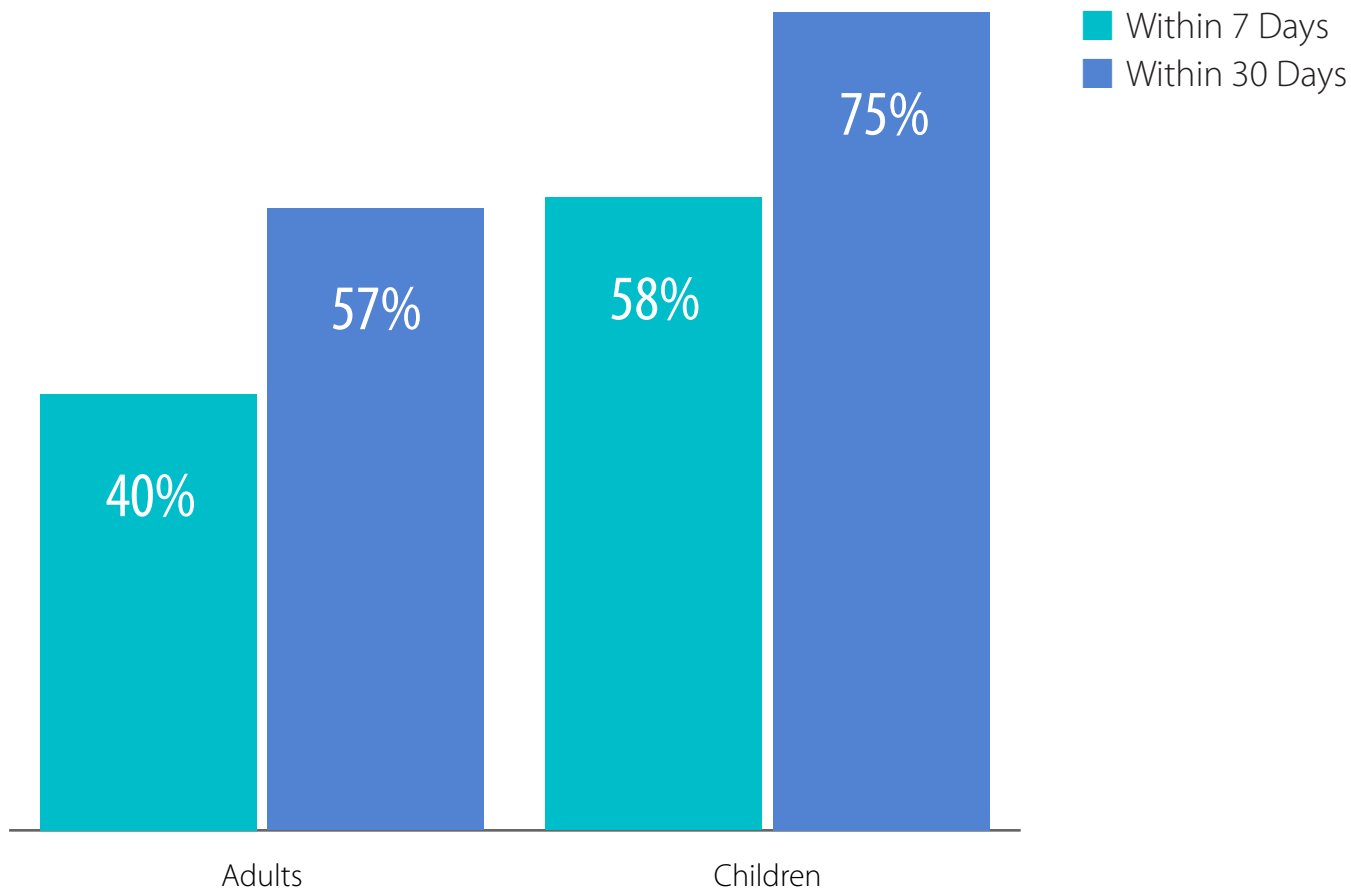
Quality of Care

Prompt follow-up with an outpatient mental health provider after discharge from a psychiatric hospitalization helps maintain continuity of care and prevent rehospitalization. California commercial HMOs exceeded their national counterparts on outpatient appointments within 7 and 30 days of discharge.

Follow-Up After Hospitalization

Adults and Children Using Medi-Cal SMHS, California, FY 2015

PERCENTAGE OF PSYCHIATRIC INPATIENT HOSPITAL DISCHARGES RECEIVING OUTPATIENT SERVICES



Notes: SMHS is specialty mental health services. SMHS are Medi-Cal entitlement services for adults and children that meet medical necessity criteria, which consists of having a specific covered diagnosis, functional impairment, and meeting intervention criteria. Excludes data on beneficiaries that received follow-up services from a non-Medi-Cal community-based program or in jail or prison. Children are age 0 to 20, and adults are age 21 and older. Fiscal year (FY) refers to July 1 of previous year through June 30 of stated year.

Source: *Statewide Aggregate Specialty Mental Health Services Performance Dashboard*, California Department of Healthcare Services, 2016, www.dhcs.ca.gov (PDF).

Mental Health

Quality of Care

Adults using Medi-Cal specialty mental health services are substantially less likely than children to get a timely follow-up visit. Close to 60% of child psychiatric discharges and 40% of adults psychiatric discharges accessed outpatient services within seven days. One-quarter of child discharges and 43% of adult discharges had not accessed outpatient services within a month.

Mental Health Among Jail Inmates

California, 2016

PERCENTAGE OF AVERAGE DAILY JAIL POPULATION, BY TYPE OF SERVICE

Active Mental Health Cases



Inmates Receiving Psychiatric Medication



Inmates Assigned to Mental Health Beds



Notes: *Active mental health cases* are inmates identified as having a psychological disorder and who are actively in need of and receiving mental health services. The number of mental health cases and the number of inmates getting other mental health services are counted on December 31, and so represent a point-in-time count. *Average daily jail population* is the monthly average excluding people on holding status. Only jails that reported all indicators are included in the calculations. Excludes the following jails that did not report any of the measures: Marin, Mono, San Joaquin, and Sutter.

Source: "Jail Profile Survey," Board of State and Community Corrections, accessed December 18, 2017, www.bscs.ca.gov.

Mental Health

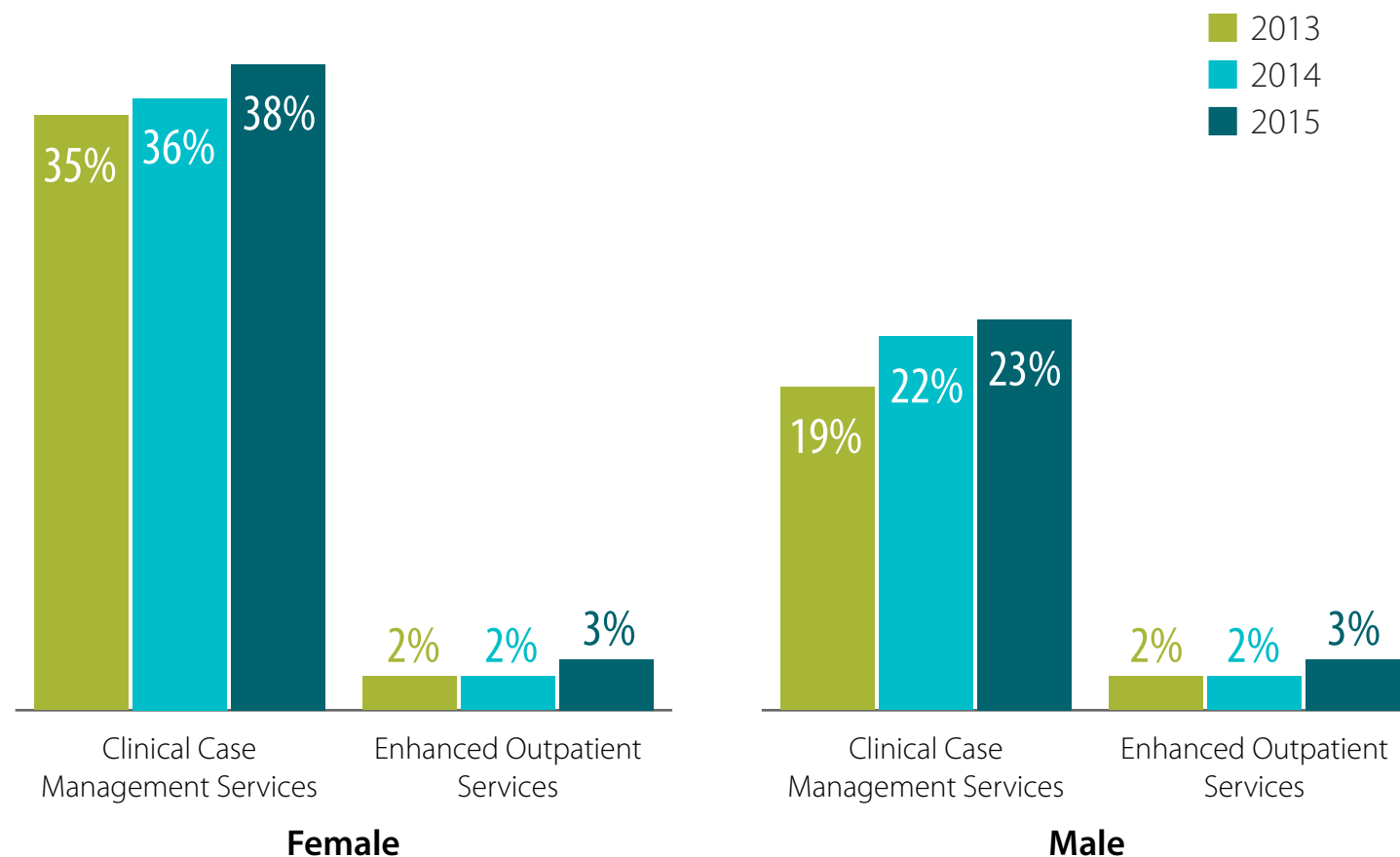
Criminal Justice System

On the last day of 2016, over 17,000 inmates, representing 23% of the average daily population of reporting California jails, were identified as having a mental health issue. Twenty percent of inmates were using psychotropic medications, while 6% were in beds for people with mental health conditions.

Prison Inmates' Use of Mental Health Services, by Gender

California, January 2013 to January 2015

PERCENTAGE OF FEMALE AND MALE INMATE POPULATIONS



Notes: *Clinical case management services* are provided by a clinician who assists the inmate to access prison services, provides individual and group treatment, and monitors and tracks how the inmate is progressing. *Enhanced outpatient services* are housed in a dedicated unit structured to manage serious mental illness with functional problems. These services often help transition an inmate from a hospital or crisis program. Male inmates includes those in the general population, and excludes those in high-security and reception facilities.

Source: By special request COMPSTAT DAI Statistical Report - 13 Month for Females and for General Population - Males, Department of Corrections and Rehabilitation, received May 12, 2016.

Mental Health

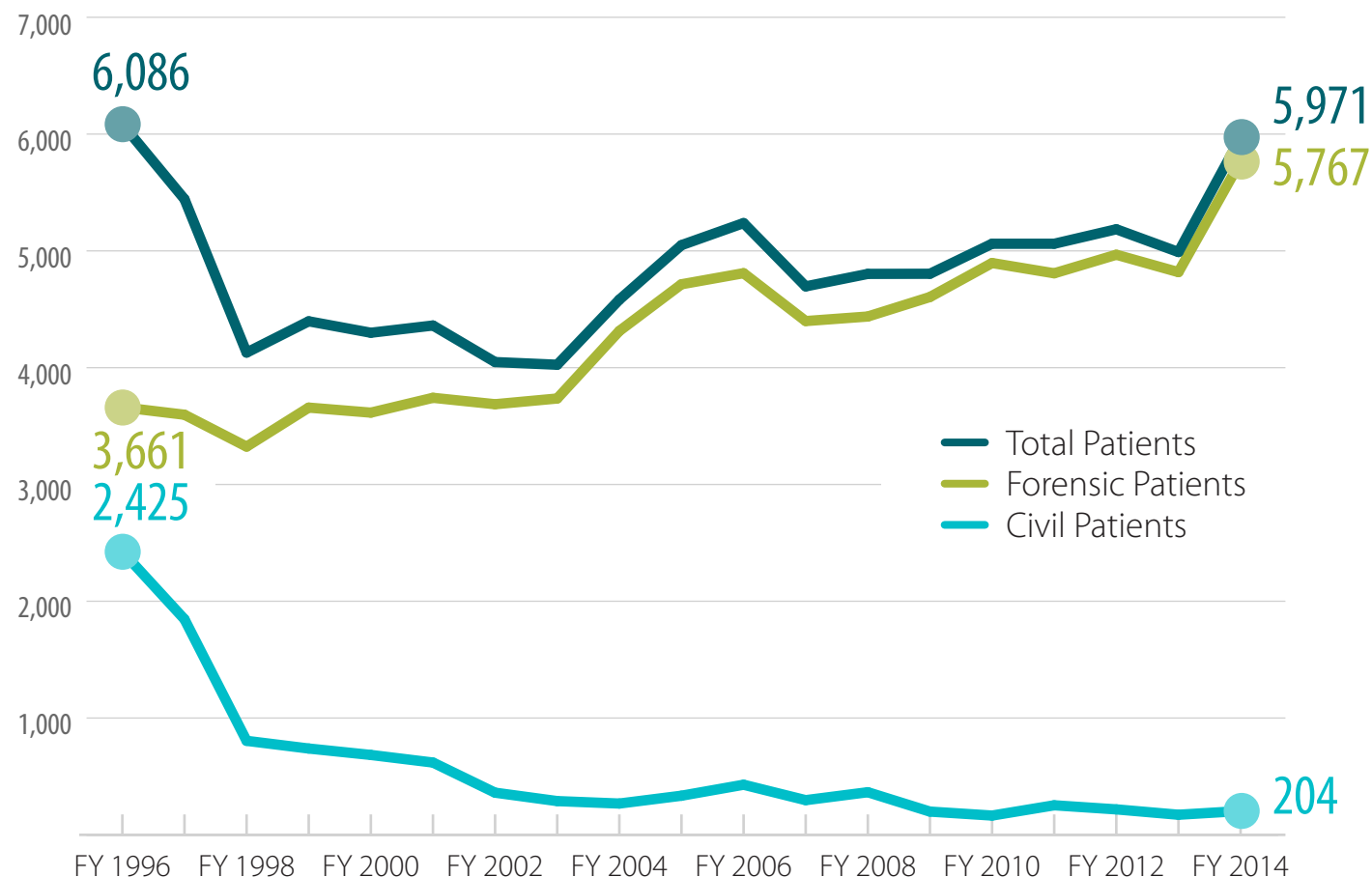
Criminal Justice System

From January 2013 to January 2015, a growing share of California's female and male prison populations received clinical case management services in general prison settings. A smaller percentage of female and male inmates received enhanced outpatient treatment in a dedicated unit for prisoners with mental illness.

State Hospital Patients, by Type

California, FY 1996 to FY 2014

NUMBER OF PATIENTS



Notes: Data are a count of patients admitted to California state hospitals during fiscal years (FY) 1996–2014. *Forensic patients* are those sent to the Department of State Hospitals (DSH) through the criminal court system, who have been committed or have been accused of committing a crime linked to their mental illness. *Civil patients* are involuntarily committed to DSH from civil courts because they are a danger to themselves or others.

Source: Department of State Hospitals Forensic vs. Civil Commitment Population, California Health and Human Services Open Data Portal, chhs.data.ca.gov.

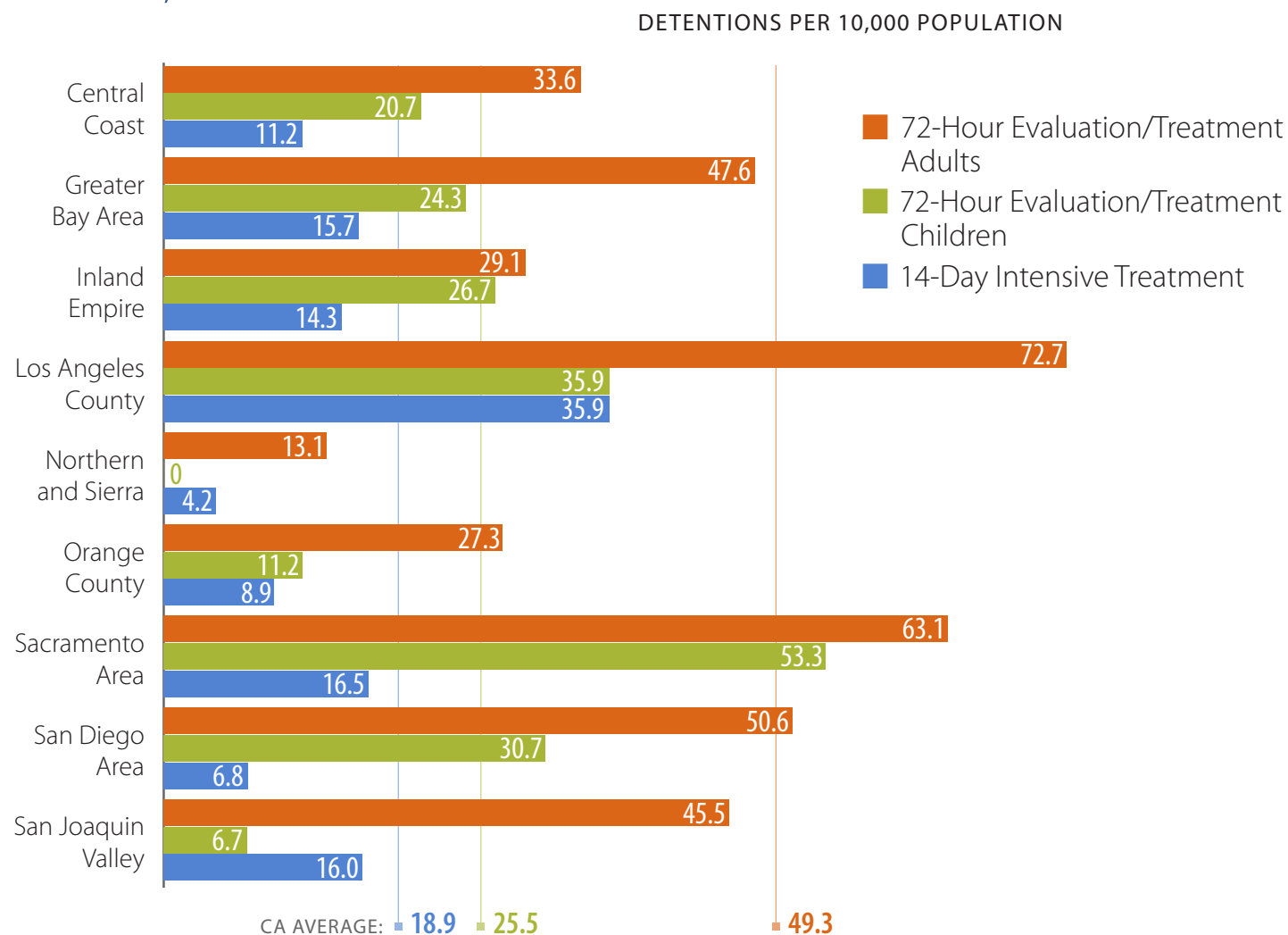
Mental Health

Criminal Justice System

California's state-operated hospitals admit people who have been committed for involuntary treatment by civil courts because they are a danger to themselves or to others, and people committed to hospital care by criminal courts (forensic patients). In the mid-1990s, similar numbers of people were committed by civil and criminal courts. Since then, commitments from criminal courts have increased to account for over 95% of all commitments.

Involuntary Detention, by Category and Region

California, FY 2014



Notes: If a person becomes a danger to self, a danger to others, or gravely disabled due to a mental disorder, a court may order that person to undergo up to 72 hours of evaluation and treatment in an inpatient psychiatric unit. If the person remains dangerous at the end of 72 hours, an additional 14 days of intensive inpatient psychiatric treatment may be ordered by the court. Population was an average of 2013 and 2014 projections to correspond to DHCS methodology and the reporting year, which included both 2013 and 2014. Fiscal year (FY) refers to July 1 of previous year through June 30 of stated year.

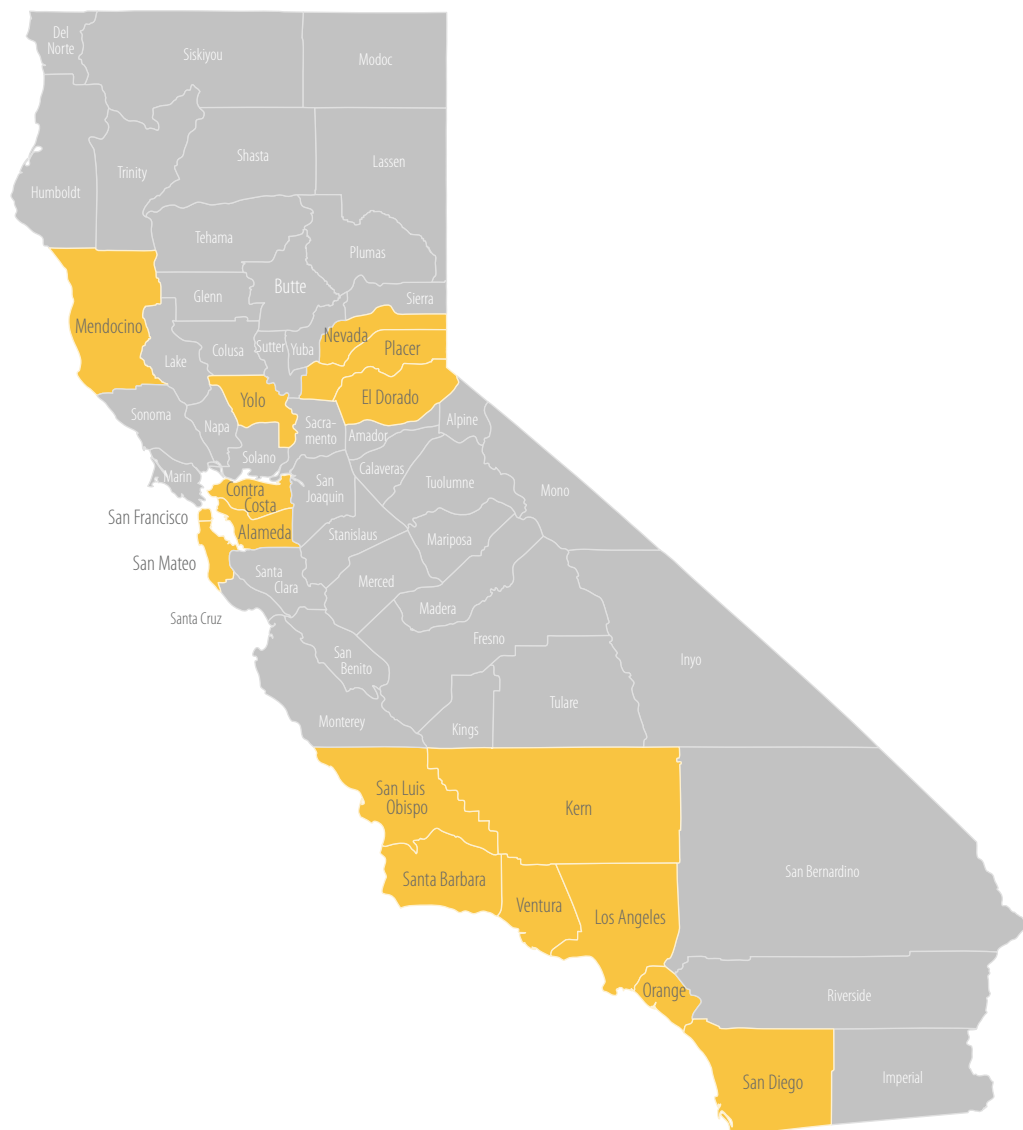
Sources: Author calculations based on *California Involuntary Detentions Data Report, Fiscal Year (FY) 2013–14*, Department of Health Care Services, and “Report P-3: State and County Total Population Projections by Race/Ethnicity and Detailed Age 2010 through 2060 (as of July 1),” in P-3: *State and County Projections Dataset*, Department of Finance, www.crf.ucdavis.edu.

Mental Health

Criminal Justice System

Courts can order involuntary inpatient hospital treatment for people in mental health crises who are a danger to themselves or others, but do not agree to treatment. California regions used this option very differently, with Los Angeles County and the Sacramento region using it at high rates, while Northern and Sierra, Orange County, and San Joaquin Valley using it at the lowest rates.

Counties Implementing Laura's Law (as of June 30, 2017)



Mental Health

Criminal Justice System

“Laura’s Law” established the option for California counties to adopt assisted outpatient treatment (AOT). AOT provides court-ordered treatment in the community for people with severe untreated mental illness and a history of violence or repeated hospitalization. It has been used as an alternative to court-ordered hospitalization and as a bridge to maintain psychiatric stability after discharge from hospitalization.

Sources: Mental Illness Policy Org, “County by County Information,” accessed on October 11, 2016, mentalillnesspolicy.org. Further detail obtained from various newspaper sources.

Methodology for Estimates of Prevalence of SED and SMI

Prevalence estimates for serious mental illness and serious emotional disturbance were developed by Dr. Charles Holzer using a sociodemographic risk model. Serious mental illness (SMI) is defined as a composite variable including diagnosis of a mental disorder excluding schizophrenia/psychosis and at least 120 days of impairment in the past year. When days of impairment are not available, a score of 7 on the Sheehan Scale, which measures the extent to which a mental disorder interferes with home management (like cleaning, shopping, and taking care of the house); a person's ability to work, form or maintain close relationships with other people, and/or have a social life; or by the number of days that activities are limited due to the disorder, is used.

The National Institute of Mental Health's Collaborative Psychiatric Epidemiology Surveys (CPES) are the basis for estimating risk of serious mental illness. CPES combines three nationally representative surveys:

- National Comorbidity Survey Replication (NCS-R)
- National Survey of American Life (NSAL)
- National Latino and Asian American Study (NLAAS)

CPES provides data on the distributions, correlates, and risk factors of mental disorders among the general population, with special emphasis on minority groups. Analyses of these data sets results in estimates of the risk of mental disorder associated with seven demographic characteristics: race, ethnicity, age, marital status, education, residential status, and poverty. Resulting risk factors are applied to the demographic characteristics of each California county using American Community Survey (ACS) 2015.

An additional adjustment was made to account for population size as estimated by the California Department of Finance.

Dr. Holzer's estimates of serious emotional disturbance (SED) in children are based on studies commissioned by Substance Abuse and Mental Health Services' Center for Mental Health Services and published in the Federal Register. The Center for Mental Health Services' definition of SED is "persons from birth up to age 18, who currently or at any time during the past year have had a diagnosable mental, behavioral, or emotional disorder of sufficient duration to meet diagnostic criteria specified within DSM-IVR that resulted in functional impairment which substantially interferes with or limits the child's role or functioning in family, school, or community activities. . . . Functional impairment is defined as 'difficulties that substantially interfere with or limit a child or adolescent from achieving or maintaining one or more developmentally appropriate social, behavioral, cognitive, communicative, or adaptive skill.'"

Dr. Holzer's estimates are based on estimated rates of SED prevalence for children in families above and below the federal poverty level applied to the poverty and nonpoverty populations in each county using the 2015 ACS adjusted to the population estimates of the California Department of Finance, excluding children living in institutional or group living settings.

Dr. Holzer's estimates were used by the former California Department of Mental Health to allocate Mental Health Services Act revenue based on prevalence and by the California Department of Health Care Services in its *California Mental Health and Substance Use Needs Assessment Final Report*.

Mental Health

ABOUT THIS SERIES

The California Health Care Almanac is an online clearinghouse for data and analysis examining the state's health care system. It focuses on issues of quality, affordability, insurance coverage and the uninsured, and the financial health of the system with the goal of supporting thoughtful planning and effective decisionmaking. Learn more at www.chcf.org/almanac.

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Appendix A: California Counties Included in Regions



REGION	COUNTIES
Central Coast	Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura
Greater Bay Area	Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma
Inland Empire	Riverside, San Bernardino
Los Angeles County	Los Angeles
Northern and Sierra	Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Tuolumne, Yuba
Orange County	Orange
Sacramento Area	El Dorado, Placer, Sacramento, Yolo
San Diego Area	Imperial, San Diego
San Joaquin Valley	Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare

Appendix B: Continuum of Mental Health Care, California

TYPE OF PROVIDER / LEVEL OF CARE	OUTPATIENT MENTAL HEALTH SERVICES	COMMUNITY SERVICES INTERMEDIATE/INTENSIVE	24-HOUR SERVICES		
			ACUTE INPATIENT CARE HOSPITAL/NONHOSPITAL	INPATIENT CARE INTERMEDIATE/LONG-TERM	RESIDENTIAL
Therapists and Psychiatrists in Independent and Group Practice	✓				
Mental Health Clinics	✓	✓			
Community Mental Health Centers	✓	✓			✓
Specialized Community Providers (e.g., Assertive Community Treatment)		✓	✓		✓
Psychiatric Units in General Hospitals		✓	✓		
Acute Psychiatric Hospitals		✓	✓		
Psychiatric Health Facilities			✓		
Nursing Home Specialized Treatment Programs				✓	
Mental Health Rehabilitation Centers				✓	✓
State Hospitals			✓	✓	

Source: Welfare and Institutions Code sections 5670–5676.5; California Community Care Facilities Act (Health & Saf. Code, div. 2, chap. 3, § 1500 et seq); and Business and Professions Code chapters 5, 6, 13, 14.

Appendix C: Credentials, Qualifications, and Customary Practices of Mental Health Practitioners, by Profession

	CREDENTIALS, QUALIFICATIONS, AND CUSTOMARY PRACTICE	PSYCHOTROPIC MEDICATIONS	PSYCHOLOGICAL TESTING	TREATMENT PLANNING	THERAPY	CASE MANAGEMENT	REHABILITATION AND SUPPORT
Physicians	MD/DO with general licensure as physician and surgeon	✓		✓			
Psychiatrists	MD/DO with a specialty in psychiatry, some with a second specialty in child and adolescent psychiatry	✓		✓	✓		
Psychiatric Clinical Nurse Specialists (CNS)	Advanced practice nurses, with a master's or doctoral degree, who specialize in psychiatry	✓		✓	✓		
Nurses	RNs and LVNs with and without specialty psychiatric training, plus licensed psychiatric technicians	✓ administer/ monitor only		✓		✓	✓
Psychologists	Clinical psychologists licensed at the doctoral level, perhaps specializing in psychological or neuropsychological assessment, including diagnostic test administration, assessment, and treatment recommendations		✓	✓	✓		
Licensed Independent Clinical Social Workers (LICSW), Mental Health Counselors (LMHC), and Marriage and Family Therapists (MFT)	Master's level clinicians licensed by the state LICSWs and LMFTs are eligible for reimbursement under Medi-Cal and Medicare as independent practitioners outside of a clinic.			✓	✓	✓	✓
Occupational Therapists (OT)	Licensed OT			✓		✓	✓
Unlicensed Mental Health Workers Qualified Under the California Medi-Cal Rehabilitant Option	Mental health workers with high school, associate's, or bachelor's degrees providing (under supervision) care management, rehabilitation, behavior management, mentoring, milieu support, respite, and other supportive roles			✓		✓	✓

Appendix D: County-Based Public Mental Health System, Financing Detail, FY 2008 to FY 2018 (in millions)

	FEDERAL FINANCIAL PARTICIPATION ¹	1991 REALIGNMENT ²	STATE GENERAL FUNDS ³	MHSA ⁴	REDIRECTED MHSA ⁴	2011 BH SUBACCOUNT ⁵	OTHER REVENUE ⁶	TOTAL
FY 2008	\$1,266.4	\$1,211.5	\$738.5	\$1,488.2	n/a	n/a	\$368.4	\$5,073.0
FY 2009	\$1,404.6	\$1,072.4	\$701.0	\$1,117.0	n/a	n/a	\$287.6	\$4,582.6
FY 2010	\$1,619.2	\$1,023.0	\$518.0	\$1,347.0	n/a	n/a	\$241.6	\$4,748.8
FY 2011	\$1,799.9	\$1,023.0	\$619.4	\$1,165.1	n/a	n/a	\$193.1	\$4,800.5
FY 2012	\$1,562.5	\$1,097.6	\$0.0	\$1,029.9	\$861.2	n/a	\$192.5	\$4,743.8
FY 2013	\$1,465.0	\$1,124.0	\$0.1	\$1,589.0	\$0.0	\$1,131.0	\$207.4	\$5,516.4
FY 2014	\$1,624.0	\$1,185.0	\$0.0	\$1,235.0	\$0.0	\$1,129.0	\$207.4	\$5,522.9
FY 2015	\$1,743.0	\$1,216.7	\$142.5	\$1,730.0	\$0.0	\$1,193.0	\$212.2	\$6,094.9
FY 2016	\$2,227.6	\$1,256.1	\$0.0	\$1,418.8	\$0.0	\$1,230.3	\$213.1	\$6,395.9
Estimated FY 2017	\$2,252.9	\$1,285.5	\$0.0	\$1,340.0	\$0.0	\$1,303.4	\$219.2	\$6,401.0
Projected FY 2018	\$2,252.9	\$1,330.5	\$0.0	\$1,340.0	\$0.0	\$1,396.6	\$220.2	\$6,540.2
Change FY 2008 to FY 2018	77.9%	9.8%	n/a	-10.0%	n/a	n/a	-40.2%	28.9%

Notes: These figures encompass revenues received or projected to be received by counties in support of the Medicaid and safety-net mental health services they provide. Other public mental health services, such as forensic services in state hospitals and mental health services and medications provided by Medicaid health plans and Medi-Cal fee-for-service, are not included.

1. *Federal Financial Participation* (FFP) is the federal reimbursement that counties receive for providing specialty mental health treatment to Medi-Cal and Healthy Families Program beneficiaries. The amount of federal reimbursement received by counties is based on a percentage established for California called the Federal Medical Assistance Percentage (FMAP). Managed care and Early and Periodic Screening Diagnosis Treatment (EPSDT) share of 2011 Behavioral Health Subaccount only.

2. *1991 realignment* is the shift of funding and responsibility from the state to the counties to provide mental health services, social services, and public health, primarily to individuals who are a danger to themselves and/or others or who are unable to provide for their immediate needs. Three revenue sources fund realignment: 1/2 cent of state sales tax and a portion of state vehicle license fees and vehicle fee collections. Realignment is the primary funding source for community-based mental health services, state hospital services for civil commitments, and institutions for mental disease, which provide long-term care services.

3. The *State General Fund* includes revenues from personal income tax, sales and use tax, corporation tax, and other revenue and transfers. Prior to the governor's FY 2012 Budget Proposal and Realignment II, these funds primarily supported specialty mental health benefits of entitlement programs including Medi-Cal managed care, EPSDT, and Mental Health Services to Special Education Pupils (AB 3632).

4. The *MHSA* (Proposition 63) is funded by a 1% tax on personal income in excess of \$1 million. The primary obligations of the MHSA are for counties to expand recovery-based mental health services; to provide prevention, early intervention services, and innovative programs; and to educate, train, and retain mental health professionals.

5. 2011 realignment, initiated in 2011, gives counties the funding responsibility for Medicaid EPSDT and mental health managed care. It is funded by 1.0625% of the sales tax. In FY 2011–12, MHSA funded realigned mental health services.

6. *Other revenue* is from county property taxes, patient fees and insurance, the Substance Abuse and Mental Health Services Mental Health Block Grant, other grants, etc. The primary obligation of counties is to fund mental health services sufficiently to meet maintenance-of-effort requirements to qualify to receive realignment funds.

Sources: *Financial Report*, Mental Health Services Oversight and Accountability Commission, January 26, 2017, mhsoac.ca.gov.