



Bed Check: Inpatient Psychiatric Care in Three California Counties

APRIL 2020



AUTHORS

Amanda Lechner, Matthew Niedzwiecki, Megan Dormond,
Jasmine Little, and Melissa Azur, Mathematica

Contents

About the Authors

Amanda Lechner, MPP, is a health researcher at Mathematica. Also with Mathematica are Matthew Niedzwiecki, PhD, health researcher; Megan Dormond, MSW, health analyst; Jasmine Little, MA, health analyst, and Melissa Azur, PhD, associate director of health.

Working at the intersection of strategy, evaluation, and practice, Mathematica helps maximize the impact of foundation investments, ensuring they are evidence-informed and move the needle on complex challenges. We offer learning and evaluation services to strengthen program design and execution across the strategy lifecycle. For more information, visit www.mathematica.org.

About the Foundation

The California Health Care Foundation is dedicated to advancing meaningful, measurable improvements in the way the health care delivery system provides care to the people of California, particularly those with low incomes and those whose needs are not well served by the status quo. We work to ensure that people have access to the care they need, when they need it, at a price they can afford.

CHCF informs policymakers and industry leaders, invests in ideas and innovations, and connects with changemakers to create a more responsive, patient-centered health care system.

For more information, visit www.chcf.org.

3 Introduction and Background

Availability Analysis Spurred by Bed Reductions

Inpatient Psychiatric Beds as Part of a Larger System of Care

Data Sources and Methods

5 Findings: Inpatient Beds and Use

County Differences in Availability and Use Trends

Respondents' Concerns About Inpatient Bed Availability

7 Findings: Factors Affecting Inpatient Beds and Use

Intermediary Care

Routine Outpatient Care

Emergency and Crisis Services

Workforce Availability

County Funding of Mental Health Services

13 Key Takeaways for Stakeholders and Policymakers

15 Appendices

A. Case Studies

B. Methods

28 Endnotes

Introduction and Background

Availability Analysis Spurred by Bed Reductions

In June 2018, San Diego’s Tri-City Medical Center announced it would eliminate 30 inpatient psychiatric beds — including an 18-bed locked behavioral health unit and a 12-person crisis-stabilization unit.¹ This closure is part of a 25-year reduction in California’s supply of inpatient psychiatric beds, during a time when demand for mental health care services across the state has been increasing. In response to these developments, an investigation was conducted on the factors contributing to the availability of and demand for inpatient psychiatric care in the state. The findings are discussed in this report.

The research looked in depth at three California counties — San Diego, Fresno, and Contra Costa Counties — which represent geographically diverse regions of the state and vary in terms of key demographic characteristics (Table 1). For example, Contra Costa County has a relatively low share of residents covered by Medi-Cal and a low share of residents living in poverty compared with the state average. By comparison, Fresno County has a relatively high share of residents

living in poverty and a high percentage of residents covered by Medi-Cal. San Diego County was selected in part because of the urgency generated by the closure of the Tri-County Medical Center’s psychiatric units.

Case studies of each of the three counties, set out in Appendix A, summarize qualitative information gathered through interviews with key stakeholders and quantitative information based on publicly available data.

Inpatient Psychiatric Beds as Part of a Larger System of Care

Assessing the availability of and need for inpatient beds requires an understanding of the system as a whole. Inpatient services represent one modality in a complex, interconnected system of care for mental health conditions. People with mental health needs also engage with providers in emergency settings, as well as in routine outpatient environments such as primary care and mental health clinics. Patients may also use intensive outpatient settings, such as partial hospitalization or assertive community treatment programs, which function as intermediary care between inpatient and routine outpatient care (see “Levels of Psychiatric Care” sidebar on page 4).

Table 1. Demographics of Study Counties, 2017

	CONTRA COSTA COUNTY	FRESNO COUNTY	SAN DIEGO COUNTY	CALIFORNIA
Population (in millions)	1.15	0.99	3.34	39.54
Residents Living in Poverty	9.3%	21.1%	11.8%	15.1%
Medi-Cal Model*	Two Plan	Two Plan	Geographic	NA
Residents with Medi-Cal	18.4%	42.6%	23.5%	29.3%
Uninsured Residents	5.5%	6.5%	6.9%	7.3%

*In California, there are six models of Medi-Cal managed care. Under the Managed Care Two-Plan Model, the Department of Health Care Services contracts with two managed care plans in the county (one private plan and one county-owned public plan) to provide medical services to most Medi-Cal enrollees. Under the Geographic Managed Care Model, the Department of Health Care Services contracts with several commercial plans in the county.

Sources: U.S. Census Bureau, QuickFacts (Washington, DC: U.S. Government Printing Office, 2018); American FactFinder, “Share of Residents Living in Poverty” (2017), *American Community Survey*, U.S. Census Bureau’s American Community Survey Office, accessed March 20, 2019; UCLA Center for Health Policy Research, “Share of Residents with Medi-Cal” and “Share of Uninsured Residents” (2017), accessed March 19, 2019.

Importantly, when patient throughput — or flow across the mental health system — is obstructed by a lack of access at one or more of these different points of care, the effects may be felt throughout the system. For example, a perceived lack of inpatient beds in a community might be rooted in a dearth of intermediary options, such as partial hospitalization services, because providers may not be able to safely discharge patients who no longer need inpatient care but still require intensive support. A perceived lack of inpatient beds might also be the result of a shortage of mental health providers to operate beds rather than an actual shortage of beds. At the same time, gaps in outpatient care and crisis services within a community may contribute to greater use of the inpatient system, since people’s mental health needs may escalate in the absence of accessible community-based care.

The purpose of this research is to provide information on the availability and use of inpatient psychiatric services in the context of related factors.

Levels of Psychiatric Care

Inpatient. 24-hour care provided in psychiatric hospitals or general hospital psychiatric units.

Intermediary. Care that provides more support than routine outpatient care but that is less intensive than inpatient hospitalization. Includes *residential care*, which provides long-term care in settings that are typically more comfortable than hospitals; *partial hospitalization and day programs*, in which individuals regularly receive partial-day mental health services for several hours per day; and *assertive community treatment programs*, through which community-based multidisciplinary teams provide treatment, rehabilitation, recovery, and support services to individuals with serious mental illness.

Routine outpatient. Less than 24-hour care provided in a wide range of care settings, such as community mental health centers, private therapy offices, and primary care clinics. Care is generally provided for less than three hours at a single visit.

Emergency. Care provided in emergency departments and crisis intervention and stabilization centers.

Data Sources and Methods

The case studies presented in Appendix A draw on information from publicly available secondary data sources and from qualitative interviews. The case studies are also based on analysis of secondary data using publicly available information from 2010–2017 (depending on the data source) to create county-level measures of the following:

- ▶ Utilization of outpatient clinics, emergency departments (EDs), and inpatient facilities
- ▶ Supply of hospital psychiatric beds
- ▶ Staffing of outpatient and inpatient psychiatric facilities
- ▶ Mental Health Services Act (MHSA) funding

State psychiatric hospitals are excluded from the analyses. The data sources included the Office of Statewide Health Planning and Development (OSHPD) (clinic and ED utilization and financial summaries), the California Mental Health Services Oversight and Accountability Commission, the US Census Bureau’s US Census and American Community Survey, the Health Resources and Services Administration’s Area Health Resources Files, and the UCLA Center for Health Policy Research’s California Health Interview Survey. Appendix B contains a full description of the outcomes, as well as data sources and years of data included in the analyses.

Interviews were conducted with 23 respondents in San Diego, Fresno, and Contra Costa Counties between April and July 2019. Respondents included executives from hospitals, health clinics, Medi-Cal and commercial health plans, and other local mental health care leaders. Interviews with several associations and government agencies at the state level also informed this report. Interview topics included trends in use and availability of mental health care and county-level funding for mental health care over the preceding five years (2014–2019). Because the qualitative analyses include reflections on trends that extend three years beyond the quantitative analysis, some observations from interview respondents may be based on developments that are not reflected in the quantitative data.

Findings: Inpatient Beds and Use

This section provides an overview of the state of inpatient psychiatric beds in San Diego, Fresno, and Contra Costa Counties during the study period.

County Differences in Availability and Use Trends

From 2010 to 2016, the number of licensed psychiatric inpatient beds per capita in California remained fairly stable, declining by 7%. As of 2016, the most recent year for which OSHPD data are publicly available, there were 170 beds per 1,000,000 people (or about 17 for 100,000 people) in the state. In the absence of definitive information on the “right” number of beds per capita, it is useful to compare California’s inpatient availability to the rest of the country. Analysis from the California Hospital Association indicate that California has 1 bed for every 5,834 people (or about 170 per 1,000,000 people), compared with 1 bed for every 4,383 people (or about 228 per 1,000,000 people) nationwide.²

In the three counties studied, the number of inpatient psychiatric beds per capita moved in different directions (Figure 1).³ For example, the number of beds per capita decreased in San Diego but increased in both Fresno and Contra Costa. Despite the decline in beds in San Diego, the county still had 209 beds per one million persons in 2016, which was substantially more than the other two counties and more than the average statewide. Fresno and Contra Costa Counties, each with approximately 95 beds per one million persons, continued to have substantially fewer beds per capita compared with the state average.

Use of beds remained fairly stable statewide over the analysis period. The number of admissions to psychiatric hospitals, as measured by discharges, decreased only slightly across the state as whole and in each of the three counties (Figure 2). The average length of stay, or number of days that admitted patients remained in the hospital, was fairly stable statewide

Figure 1. Available Psychiatric Inpatient Beds Per One Million Persons, by Study County, 2010–2016

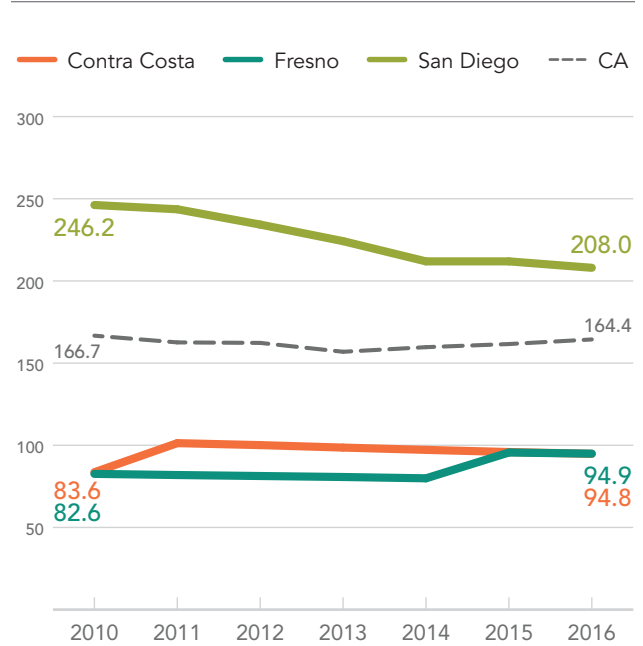
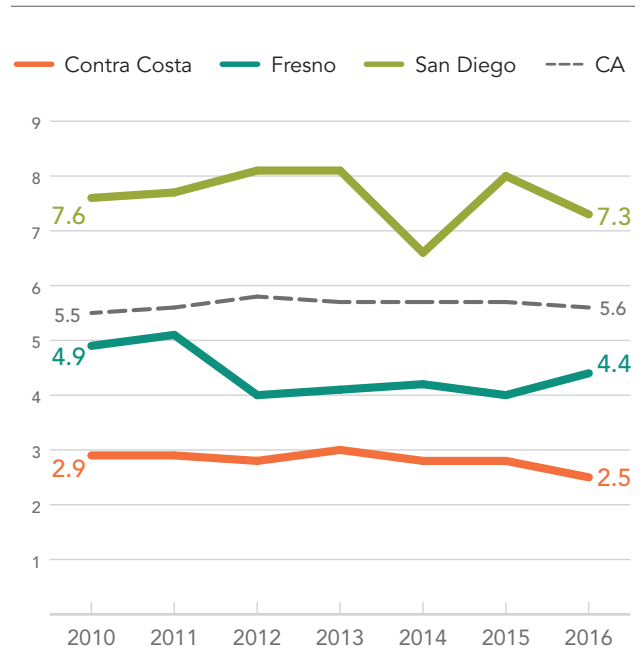


Figure 2. Psychiatric Inpatient Discharges Per 1,000 Persons, by Study County, 2010–2016



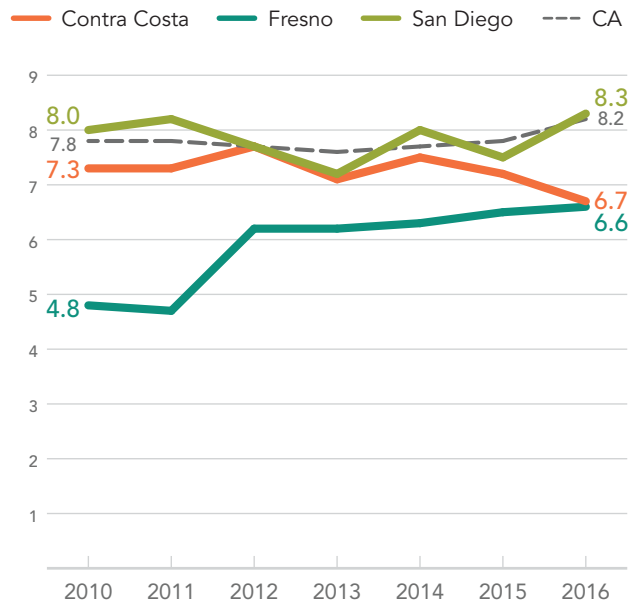
FIGURES 1 and 2:

Notes: State hospitals are excluded from the analysis. Count of psychiatric inpatient discharges to hospitals in each county. Outcomes are scaled to 1,000 persons based on county population from Census data. Data from 2017 are not reported because a significant number of hospital reporting periods for FY 2016–2017 (the most recent data) did not include 2017.

Source: Data are from the Office of Statewide Health Planning and Development “Hospital Annual Financial Disclosure Report – Complete Data Set” and “Hospital Annual Financial Data – Selected Data & Pivot Tables” financial databases for fiscal years 2009–2010 through 2016–2017.

and in both San Diego and Contra Costa Counties. However, Fresno County saw a 38% increase in average length of stay (Figure 3).

Figure 3. Average Length of Stay for Inpatients, by Study County, 2010–2016



Notes: State hospitals are excluded from the analysis. Average length of stay as calculated by total inpatient psychiatric census days divided by total discharges. Data from 2017 are not reported because a significant number of hospital reporting periods for FY 2016–2017 (the most recent data) did not include 2017.

Source: Data are from the Office of Statewide Health Planning and Development “Hospital Annual Financial Disclosure Report – Complete Data Set” and “Hospital Annual Financial Data – Selected Data & Pivot Tables” financial databases for fiscal years 2009–2010 through 2016–2017.

Respondents’ Concerns About Inpatient Bed Availability

While stakeholders across counties expressed similar concerns about the availability of inpatient beds in their counties, county trends differed in ways that may suggest the need for county-specific responses:

- ▶ In San Diego County, the number of beds declined, while the use of beds remained fairly stable. As a result, more beds were filled more of the time, indicating a decrease in available capacity relative to need. This raised concerns among respondents that additional hospital closures in the future could cause substantial strain on the inpatient system. If that happens, it might suggest a need for additional inpatient beds.
- ▶ In Fresno County, both the number and use of beds increased. Respondents in the county expressed concerns that the increased use of inpatient care is outpacing the growth in capacity. The major health system in the county is reportedly adding beds to help keep up with the need.
- ▶ In Contra Costa County, the number of beds increased, while the use of beds decreased slightly, suggesting an increase in available beds relative to the need for them. Nevertheless, respondents in the county expressed concern about a lack of available beds, which may reflect observations more recent than the trends captured in the quantitative data. Analysis of more recent quantitative data, available either from the county or when more recent years of OSHPD data are released, could shed insight into respondents’ concerns.

Findings: Factors Affecting Inpatient Beds and Use

This section delves into the different factors identified by respondents as affecting inpatient beds and use: access to intermediary care, access to routine outpatient care, access to emergency and crisis services, workforce availability, and how counties use mental health funding.

Intermediary Care

More partial hospitalization and assertive community treatment programs are needed across all three counties.

Respondents in the three counties emphasized the need for additional intermediary care, such as partial hospitalization and assertive community treatment programs (see sidebar on page 4 for definitions). Such services are needed for patients exiting acute inpatient psychiatric care as well as for individuals who may not need to be hospitalized but who require more intensive services than can be provided in routine outpatient visits.

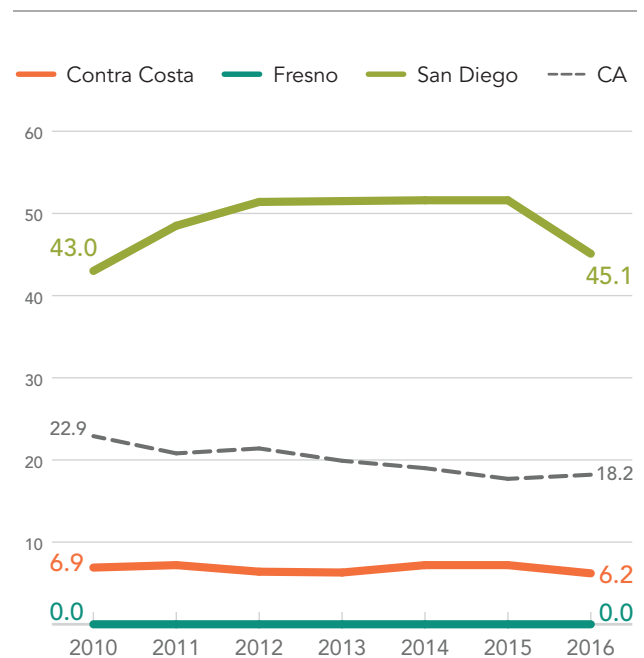
Over the analysis period, the number of partial hospitalization days per capita remained fairly stable statewide and within each county but varied widely across the three studied counties (Figure 4). For example, San Diego County had many more partial hospitalization days per capita than the state average, with 45 days per 1,000 persons in 2016, compared with the statewide average of 18 days. Contra Costa County had approximately six partial hospitalization days per 1,000 persons. Of particular note, Fresno County had no partial hospitalization services available during the analysis period.

While quantitative data on availability of intermediary care is limited to data on partial hospitalization services, across all three counties respondents described a need for other types of intermediary care services, including assertive community treatment.

We don't have a lot of intensive outpatient or mental health outpatient services. . . . It's difficult to find intermediate levels of care. So it's not easy to step somebody down from inpatient to intensive outpatient or partial hospitalization, because that really doesn't exist.

— Psychiatrist at an outpatient clinic

Figure 4. Partial Hospitalization Days Per 1,000 Persons, by Study County, 2010–2016



Notes: State hospitals are excluded from the analysis. Count of partial hospitalization days at hospitals in each county. Outcomes are scaled to 1,000 persons based on county population from Census data. Data from 2017 not reported because a significant number of hospital reporting periods for FY 2016–2017 (the most recent data) did not include 2017.

Source: Data are from the Office of Statewide Health Planning and Development “Hospital Annual Financial Disclosure Report – Complete Data Set” and “Hospital Annual Financial Data – Selected Data & Pivot Tables” financial databases for fiscal years 2009–2010 through 2016–2017.

Many respondents emphasized that the shortage of intermediary care has hindered the ability of inpatient units to discharge patients since they cannot develop a clinically appropriate plan for referring patients to community providers. The result has been longer stays than would otherwise be medically necessary, more frequent readmissions, and reduced inpatient bed availability for those who need it. All of these have significant implications for patients with mental illnesses and their families.

The lack of intermediary care is especially acute for people covered through Medi-Cal. Across the three counties, intensive outpatient services are limited for people on Medi-Cal, and partial hospitalization services are reportedly nonexistent. Access to intermediary care appears to be complicated by the state’s divided coverage of mild-to-moderate mental health conditions under Medi-Cal managed care plans and coverage of severe conditions under the county mental health plans. While many types of intermediary care fall under coverage of specialty mental health services by county mental health plans,⁴ across counties, some providers, payers, and other stakeholders expressed uncertainty as to whether partial hospitalization services are covered by county mental health plans. This confusion may contribute to limited provision of intermediary services for people with Medi-Cal coverage.

There aren’t enough crisis houses available in the county. The patients end up staying [longer] in the hospital in the acute-care site. The patients that are coming in to the hospital that need acute treatment aren’t getting it because those beds are being held up by patients that are waiting for placement into a crisis home.

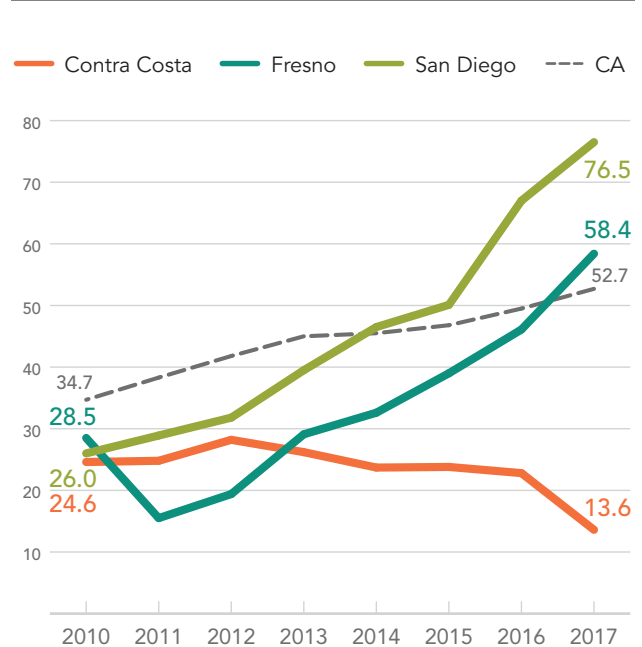
— Behavioral health director at an inpatient hospital

Routine Outpatient Care

Large increases in use in San Diego and Fresno Counties did not appear to offset inpatient use.

The use of routine outpatient care varied substantially across and within counties over the analysis period (Figure 5) but did not appear to have a major impact on use of inpatient beds. Across the state, the number of outpatient visits to licensed community and free clinics for mental health needs (including both visits to primary care and psychology specialty clinics) per capita increased by 43%. The number of visits rose substantially in Fresno County (by 62%) and in San Diego County (by 157%).

Figure 5. Mental Health Visits Per 1,000 Persons to Outpatient Clinics, by Study County, 2010–2017



Notes: Visits to primary care clinics for mental health care need and specialty psychology clinics. Outcomes are scaled to 1,000 persons based on county population from Census data.

Source: Data are from the Office of Statewide Health Planning and Development “Primary Care Clinic Annual Utilization Data” databases for the years 2010–2017.

In contrast to statewide trends, the number of visits per capita remained fairly stable in Contra Costa County (decreasing, but only slightly). In both Fresno and San Diego Counties, respondents attributed the increase to growth in the number of people with Medi-Cal coverage following the state's 2014 Medi-Cal expansion. The increased use of routine outpatient care in these two counties did not appear to offset the need for inpatient care, since neither county saw a meaningful reduction in use of inpatient care; in fact, inpatient use increased in Fresno County during the analysis period.

Across counties respondents described a continued need for more access to outpatient services.

FQHC [Federally Qualified Health Center] primary care providers are screening more and more for mental health needs and thus referring more patients to mental health providers than ever before, which is affecting the wait times and frequency of appointments. This isn't necessarily a bad thing. We are working on meeting the demand.

— Director of an FQHC

I think we are continuing to see increased challenges with anxiety, stress, substance, alcohol, drug disorders. . . . We have had volume increases in general, especially in the Medi-Cal population for all of our services. I'd probably say outpatient services had the greatest increase.

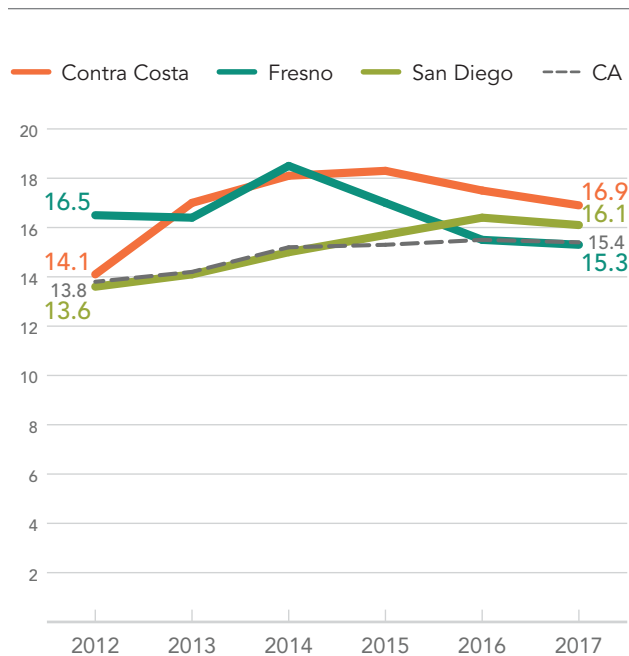
— Health system behavioral health director

Emergency and Crisis Services

ED use rose in Contra Costa and San Diego Counties while inpatient use remained stable.

The number of people seeking care in EDs for mental health needs increased statewide from 2012 through 2017, growing by 12%. While the use of the ED for mental health needs rose in both San Diego and Contra Costa Counties, it remained fairly stable in Fresno County, decreasing slightly over the analysis period (Figure 6, page 10). The increased use of EDs in San Diego and Contra Costa Counties was not associated with a larger number of admissions to the hospital, as the numbers of admissions in those counties remained fairly stable over the analysis period. In San Diego County, a couple of respondents attributed the rise in ED use to problems accessing outpatient care and to increased use of methamphetamine among county residents. The county has added emergency and crisis services to alleviate the pressures on EDs, but respondents emphasized that the community still needs additional services. In Contra Costa County, people may be using the ED as a source of outpatient treatment, possibly because of access challenges in certain areas of the county or wait times for outpatient care.

Figure 6. Emergency Department Visits for Mental Health Diagnoses Per 1,000 Persons, by Study County, 2012–2017



Notes: Outcomes are scaled to 1,000 persons based on county population from Census data. Data report total emergency department visits (discharged outpatient and admitted) that have an associated diagnosis related to mental health (ICD-9-CM codes 290–319, “psychoses and neurosis,” and ICD-10-CM codes F01–F99, “mental disorders”).

Source: Data are from the Office of Statewide Health Planning and Development “Hospital Emergency Department – Characteristics by Facility (Pivot Profile)” databases for the years 2012–2017.

Workforce Availability

Shortages of mental health care providers creating problems across care settings.

Many California counties have a shortage of mental health providers, and respondents highlighted workforce shortages as substantial problems impacting access to mental health care across inpatient and outpatient settings. During the analysis period, the number of psychiatrists per capita remained fairly stable within the three counties and the state as a whole. However, the numbers varied widely across counties, ranging from 99 psychiatrists per one million persons in Fresno County to 156 in San Diego County.

Respondents in all three counties described a need for more psychiatrists to serve county residents, though respondents in Fresno County emphasized the need as especially severe. In addition to the shortage of psychiatrists, there is a need for other types of mental health clinicians — such as psychologists, clinical social workers, and marriage and family therapists — particularly in Fresno County and other counties in the San Joaquin Valley.⁵ All three study counties are pursuing a range of strategies to bolster the workforce, including ramping up efforts to recruit more psychiatrists and using telehealth where there are not enough local providers to meet the mental health care needs of the population.

The biggest challenge really lies within psychiatry. We indeed have had challenges, in terms of recruiting, to meet our population’s needs.

— Health system behavioral health director

County Funding of Mental Health Services

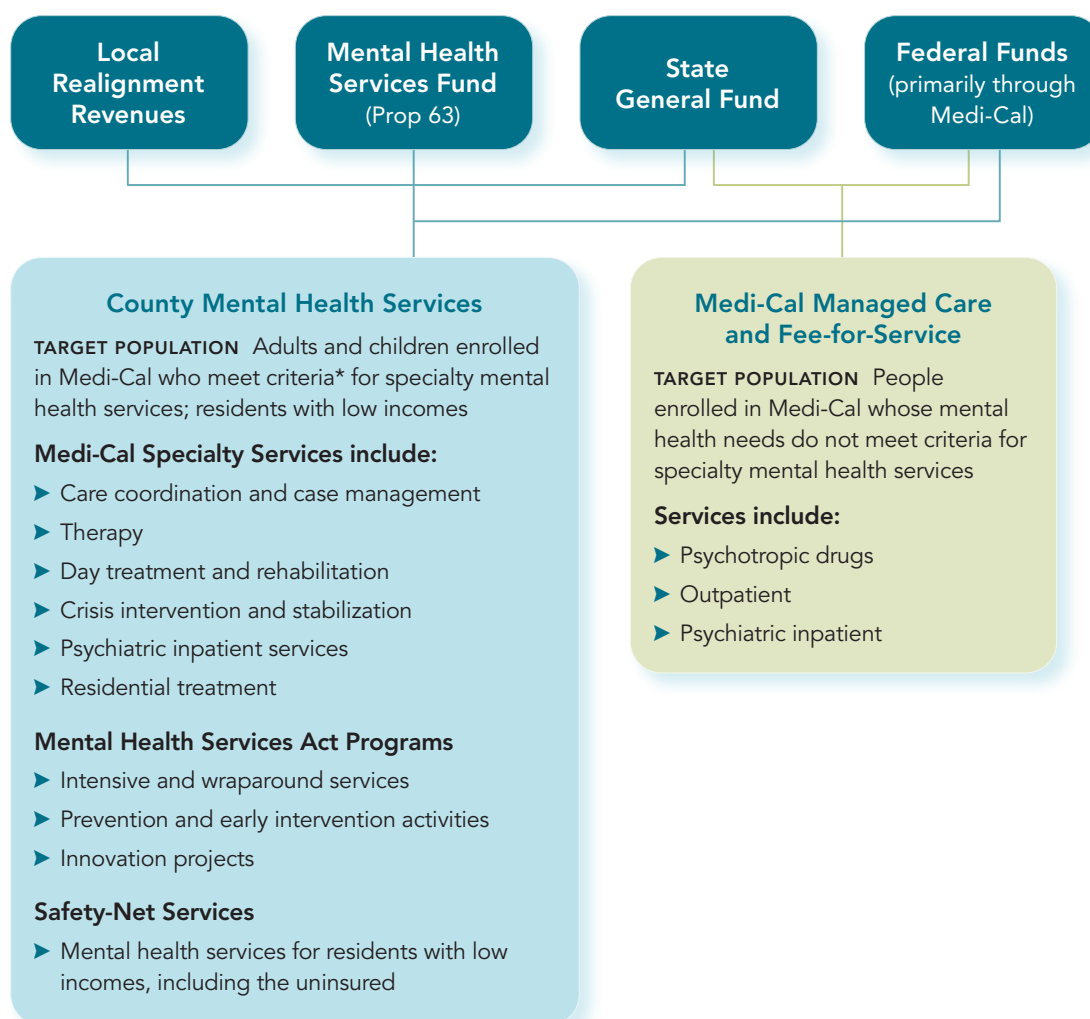
Counties used Mental Health Services Act (MHSA) funds in different ways to alleviate pressure on inpatient beds.

California has a complex funding structure for public mental health services that includes local realignment revenues, MHSA funds (Proposition 63), state general funds, and federal funds.⁶ These resources fund County Mental Health Services (CMHS) for care provided to

Medi-Cal enrollees with severe mental health service needs and California residents with low income.

Individual counties have substantial discretion in how they allocate their resources to meet the specific needs for these mental health services in their counties (Figure 7). This report presents quantitative analyses of MHSA expenditures and qualitative results of perceptions of broader mental health services funding. MHSA funds composed approximately 22% of county behavioral health funding during California’s 2019–2020 budget year.⁷

Figure 7. Public Funding for Mental Health Services



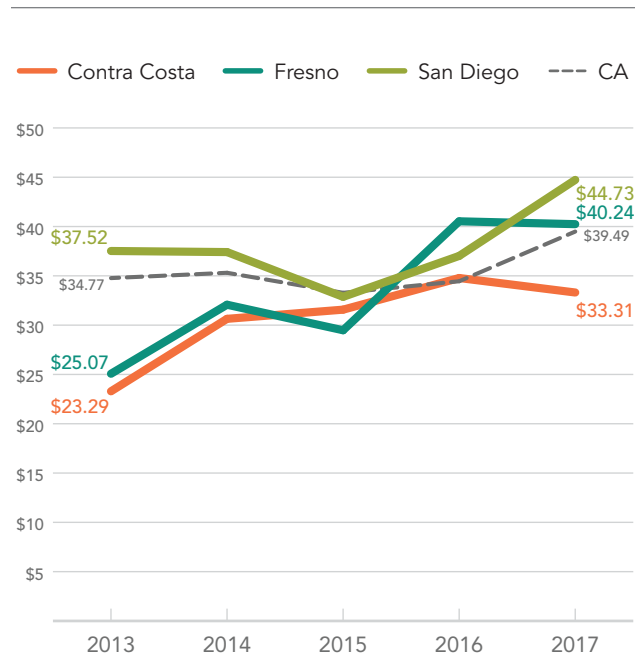
*Criteria for children under 21 are less restrictive than those for adults.

Source: Figure is adapted from two sources: (1) Deborah Reidy Kelch, *Locally Sourced: The Crucial Role of Counties in the Health of Californians* (Sacramento: California Health Care Foundation, October 2015); (2) Legislative Analyst’s Office, *Overview of Funding for Medi-Cal Mental Health Services* (PDF) presented to Assembly Committee on Health and Senate Committee on Health, February 26, 2019.

During the analysis period, MHSAs expenditures varied across study counties. For example, in 2017, MHSAs spending ranged from \$33 per capita in Contra Costa County to \$45 per capita in San Diego County (Figure 8). To alleviate pressures on inpatient systems and to provide care for county residents with mental health conditions, study counties are using available MHSAs funding in a variety of ways:

- ▶ San Diego County reported using MHSAs dollars to fund crisis services, assertive community treatment programs, housing programs for people with mental illness, and psychiatry residency training programs. The county has also been allocating MHSAs funds for housing and homelessness programs, including permanent supportive housing for individuals with serious mental illness and temporary rental assistance housing support.
- ▶ Fresno County reported using MHSAs dollars to fund several full-service partnerships with community organizations that provide an array of services for people with serious mental illness or emotional disorders. Services include individual and group therapy, medication, case management, and housing support. Full-service partnership programs also reserve some slots specifically for individuals who are being discharged from inpatient settings.
- ▶ Contra Costa County reported using MHSAs funds to operate and contract with mental health service providers to support full-service partnerships in order to provide clients with the full spectrum of mental health and social services. MHSAs funds have been used to add a new mobile crisis response team to serve adults and to expand the hours during which the child mobile crisis response team is able to operate.

Figure 8. MHSAs Spending Per Capita, by Study County, 2013–2017



Notes: Spending does not include other funding outside of the Mental Health Services Act (MHSAs).

Source: Data are from the [California Mental Health Services Oversight and Accountability Commission](#) for fiscal years 2012–2013 through 2016–2017.

Key Takeaways for Stakeholders and Policymakers

Expansion of intermediary, routine outpatient, and crisis services should be the priority.

Across the three studied counties, respondents described high need for mental health services in inpatient and other care settings and insufficient resources to serve the need. Although the trends in availability and use of inpatient care differed, stakeholders in all three counties expressed concerns about bed availability. In Fresno County, use of beds increased and appears to be outpacing recently added capacity. In San Diego County, use of beds remained relatively stable as bed capacity declined — raising concerns about the potential for shortages in the future. In Contra Costa County, respondents' perceptions of the need for more bed availability may reflect changes that have occurred more recently than publicly available data show.

Across counties, many respondents emphasized that the need for inpatient beds is contingent on the availability of other levels of mental health care; to the degree that community-based care is available, the need for inpatient care may decrease. For this reason, many respondents prioritized expansion of other levels of care, including intermediary care, routine outpatient care, and crisis services.

Several related themes emerged from this study for policymakers, providers, and mental health care stakeholders to consider.

Limited access to intermediary services contributes to use of the inpatient system.

While it is difficult to quantify the extent to which expanded intermediary care could offset inpatient use, many respondents reported that enhanced intermediary care would reduce inpatient admissions and lengths of stay. They also said that intermediary care could more appropriately serve the needs of many people with mental health conditions.

Respondents emphasized that people with Medi-Cal coverage, in particular, lack sufficient access to intermediary care. As one partial solution, Federally Qualified Health Centers (FQHCs) in San Diego County are partnering with hospitals to care for patients recently discharged from inpatient psychiatric units. The large increase in utilization of FQHCs and other community clinics in San Diego from 2010 to 2016 reflects this growing partnership to meet the needs of people leaving inpatient care, especially those covered by Medi-Cal. However, although FQHCs may be able to provide some intermediary care, it may not be feasible for them to offer more intensive intermediary services, such as partial hospitalization programs.

Within counties, payers and providers could consider developing collaborative strategies for increasing availability of partial hospitalization services or other intensive intermediary care, especially for people covered through Medi-Cal.

Use of outpatient clinics increased substantially statewide and in Fresno and San Diego Counties over the analysis period; however, challenges in accessing outpatient services persist.

Respondents attributed the large increase in volume of people seeking outpatient mental health care during the analysis period to a rise in the number of people with health care coverage following the 2014 Medi-Cal expansion. Despite the large increase in the volume of outpatient visits to licensed community and free clinics for mental health needs, many respondents emphasized that access to outpatient care remains challenging for certain populations, especially those

with Medi-Cal coverage, and in certain geographic areas within the counties. While it is unclear whether expanded access to routine care would alleviate pressures on the inpatient system, addressing the need for outpatient care is nonetheless important. Counties are pursuing a range of strategies to increase access to outpatient care, including relying on FQHCs to provide some mental health services. Going forward, FQHCs may be able to expand their roles as providers of outpatient mental health care, but they may need more support to do so.

Crisis services are important for serving the needs of county residents and for alleviating use of EDs for mental health needs.

The number of people seeking care in EDs for mental health needs increased across the state and in San Diego and Contra Costa Counties during the analysis period. Some respondents in San Diego County reported increased use of methamphetamine as a contributing factor. Given the volume of people experiencing mental health crises, respondents across counties described the importance of crisis services, such as mobile crisis response teams and crisis stabilization units, in serving their communities. While all three study counties have expanded crisis resources over the last few years, respondents still described high volumes of people seeking care in EDs. Further expansion of crisis services may provide an alternative to better serve people experiencing mental health emergencies.

Provider shortages, particularly in psychiatry, are a major challenge that limits expansion of mental health services.

Respondents in all three counties described a need for more psychiatrists to serve county residents, as well as a less dire need for other types of clinicians, including psychologists, social workers, and marriage and family therapists. The magnitude of provider shortages is especially acute in Fresno County and neighboring counties, although provider shortages appear to be present across counties. Each of the studied counties is working to expand its mental health workforce, but some respondents suggested that state-level initiatives to increase the supply of mental health providers may also be needed. State policies intended to bolster the mental health workforce should consider the stark disparities in provider supply in different areas of the state when deciding how to allocate resources.

Appendix A. Case Studies

SAN DIEGO COUNTY Decline in Beds Leads to Concern About Capacity

San Diego County saw a decline in the number of inpatient psychiatric beds from 2010 to 2016 but relatively stable admissions and lengths of stay. As a result, inpatient facilities have been operating at or near full capacity most of the time. Some respondents expressed concern that additional bed closures would result in substantial capacity constraints, as some parts of the county are reportedly on the brink of bed shortages. Respondents pointed to a need for more intermediary services to facilitate discharges once patients are stable, to alleviate pressures on the inpatient system.

The county has seen an increase in use of emergency services and a very large increase in use of outpatient services for mental health needs. These may be driven by the increase in Medi-Cal enrollment following the state's 2014 Medi-Cal expansion and by an increase in mental health needs among county residents. Respondents emphasized a need for more outpatient services to prevent mental health crises and to serve people already in crisis. To address these needs, health systems and hospitals are partnering with Federally Qualified Health Centers (FQHCs) to provide intensive outpatient programs. The county has also been adding assertive community treatment programs and expanding crisis services.

Decrease in Beds and Stable Utilization

In line with statewide trends from 2010 to 2016, the number of psychiatric beds in San Diego County declined 16% (Table A1). As of 2016, San Diego had 12 hospitals with a total of 694 licensed psychiatric beds. Yet the county still had substantially more licensed inpatient psychiatric beds per capita than California as a whole (209.2 beds per one million population in 2016 versus 170.1 statewide). According to interview respondents, since 2016, there have been both additions and closures of beds. For example, interviewees reported that some hospitals in the county have added bed capacity. However, Tri-City

Hospital, located in the northern portion of the county, closed its 18-bed psychiatric unit, and other hospitals are reportedly reducing bed availability temporarily to make the renovations required for compliance with the state's seismic standards and federal ligature requirements.^{8,9} Other hospitals may close units if they determine these requirements are too costly to meet.

While the number of beds declined, the volume of admissions and the average length of stay remained fairly stable from 2010 to 2016, and therefore, more inpatient beds were occupied more of the time. For example, utilization of psychiatric beds increased by 17%, with the average bed filled 78.5% of the time in 2016, up from 66.9% in 2010.¹⁰ Also, although the volume of admissions remained fairly stable from 2010 to 2016 — decreasing by about 5% — respondents from major hospitals in the county said that their inpatient units have been operating at full capacity. Two respondents observed that volumes have increased over the past few years, possibly reflecting trends that have been occurring more recently than quantitative data show.

Table A1. Inpatient Psychiatric Bed Capacity and Utilization, San Diego County, 2010 and 2016

	2010	2016	CHANGE
Licensed Psychiatric Inpatient Beds (per one million persons)	249.4	209.2	-16%
Percentage of Licensed Bed Days Filled	66.9%	78.5%	+17%
Psychiatric Discharges (per 1,000 persons)	7.6	7.3	-5%
Average Length of Stay (days)	8.0	8.3	+3%

With the decline in beds in recent years, several respondents expressed concerns about bed shortages, noting that patients can wait up to a few days in EDs for inpatient beds to become available. Bed shortages in the northern portion of the county were of particular concern because of recent and anticipated closures there.

Concerns About Long-Term Care Bed Availability

Several respondents expressed concern about a need for additional long-term care beds, including more skilled nursing facilities to serve individuals with serious mental illness. They reported that the lack of long-term beds contributes to pressures on the acute inpatient system, because some individuals remain in acute care beds for several months or even years. The county is considering adding more long-term beds to help address the need for this level of care.

In addition, there may be one-to-two-year wait times for placements in state psychiatric hospitals, which, in California, provide mental health services to individuals referred by a prison, parole board, or county court. In 2017, almost 90% of patients admitted to these hospitals were forensic commitments.¹¹

Bottlenecks Created by Gaps in Intermediary Care

Insufficient availability of intermediary care impacts inpatient bed availability in San Diego County. Several respondents explained that there are not enough intermediary outpatient programs for patients being discharged from the hospital and therefore patients are held in inpatient beds longer than clinically necessary. Wait times for intermediary care programs are typically several days. This delay contributes to high volumes of “administrative days,” when patients remain in the hospital after they are fully stabilized. This problem occurs across the county.

For people with Medi-Cal coverage and for those who are homeless, the lack of intermediary care is a particular problem. For example, partial hospitalization programs are unavailable for Medi-Cal enrollees, although the county does provide some other intermediary services such as assertive community treatment. Two respondents explained that there are not enough supportive housing programs for homeless individuals with serious mental illness, which leads to longer stays in inpatient beds as well as frequent readmissions among this population.

To help fill the gap in intermediary care, hospitals and FQHCs are partnering to provide post-hospitalization outpatient services. Family Health Centers, the largest FQHC organization in the county, with eight mental health clinics, partners with 10 hospitals to provide care for patients who are coming out of the hospital. The FQHC created an electronic system to coordinate discharge planning with the hospitals and to schedule outpatient appointments with patients following discharge. Medication management and individual and group therapy are provided for children, adolescents, and adults.

Services Needed to Prevent Crises and Care for Those in Crisis

There has been a dramatic increase in use of outpatient mental health care in San Diego County over the past few years, and many respondents mentioned being overwhelmed by the volume and severity of needs. The number of visits to outpatient primary care and psychiatric clinics was two and half times higher in 2016 than in 2010 (Table A2).

Table A2. Mental Health Visits at Community and Outpatient Mental Health Clinics, San Diego County, 2010 and 2016

	2010	2016	CHANGE
Total Clinic Visits for Mental Health Diagnoses (per 1,000 persons)	26.0	67.0	+157%
Visits to Outpatient Clinics for Mental Health Services (per 1,000 persons, primary care)	24.7	65.9	+167%
Visits to Psychiatric Outpatient Clinics (per 1,000 persons)	1.3	1.0	-24%

Two respondents attributed the large increase to growth in the number of people with Medi-Cal coverage seeking mental health care following coverage expansions under the Affordable Care Act and to an overall increase in the prevalence of mental health conditions. FQHCs in the county, some of which have long provided integrated behavioral health care,¹²

continue to offer a large share of the county's outpatient mental health care. For example, Family Health Centers provides more than 2,300 mental health visits per week and continues to expand the volume of services it provides each year. Also, a major health system in the county has reportedly been expanding outpatient services as a result of the increased demand.

Respondents emphasized the need for more outpatient care to prevent crises, especially for the Medi-Cal population and in certain regions of the county. For example, wait times for outpatient appointments for the Medi-Cal population have been increasing, and some attribute use of emergency services to a lack of timely access to outpatient care. While the northern and central regions of the county have dedicated walk-in centers for behavioral health, helping to fill a gap in care and prevent unnecessary ED use, other portions of the county lack these services.

Use of the ED for mental health needs in San Diego County increased from 2012 to 2017 (Table A3). Consistent with observations reported by respondents, the prevalence of ED use for mental health needs grew by 18% in the county, compared with 12% statewide. Two respondents attributed the rise in ED use to problems accessing outpatient care and to increased use of methamphetamine in the county.

Table A3. Emergency Services Utilization for Mental Health Diagnosis, San Diego County, Selected Years

	2010	2016	CHANGE
Visits to Psychiatric EDs (per 1,000 persons)	4.5	7.2	+58%
	2012	2017	CHANGE
Total ED Visits for Mental Health Diagnosis (per 1,000 persons)	13.6	16.1	+18%
Admitted ED Visits for Mental Health Diagnosis (per 1,000 persons)	2.7	2.9	+6%
ED Discharges to Psychiatric Care (per 1,000 persons)	1.9	2.6	+36%

The county behavioral health agency and hospitals have expanded emergency and crisis services to alleviate the pressures on EDs, but respondents emphasized that the community still needs additional services. For example, over the past several years, the county has invested in creating additional Psychiatric Emergency Response Teams (PERTs), which have grown from approximately 50 to 75 teams. These teams consist of licensed mental health clinicians and uniformed law enforcement officers who work together to provide emergency assessment and referral for individuals experiencing behavioral health crises. San Diego also has seven Short Term Acute Residential Treatment (START) programs for adult crisis stabilization. In 2014, Rady Children's Hospital opened a crisis stabilization unit for children and adolescents, and more recently, the county expanded its youth emergency screening unit from 4 to 12 beds.

Despite this added capacity, respondents said there is a need for more services and that crisis beds are often full. A few hospitals are also considering or in the process of expanding their crisis stabilization units, and Rady Children's plans to open the county's first pediatric psychiatric emergency department later this year. These developments may help address the reported gaps.

Despite Strength of Workforce, Some Concern About Shortages

According to a recent workforce study, the San Diego region, which encompasses both San Diego County and adjacent Imperial County, had ratios of psychologists, marriage and family therapists, and clinical social workers comparable to the state average in 2016.¹³ San Diego County has more psychiatrists per capita than other parts of the state — 156.2 psychiatrists per one million persons in 2016, which is substantially higher than the numbers in Contra Costa and Fresno Counties; it is also higher than the state average (Table A4, page 18). Still, respondents expressed concern about an inadequate supply of clinicians to serve county residents, especially people with Medi-Cal.

Table A4. Mental Health Staff, San Diego County, 2010 and 2016

	2010	2016	CHANGE
Active Psychiatric Hospital and Non-hospital Staff (per million persons)	165.0	209.2	+27%
Psychiatrists (per million persons)	155.9	156.2	0%

Despite the county's relatively strong workforce, respondents universally commented on shortages as a problem. While the county has more psychiatrists than the state average, and the number of psychiatrists in the county remained stable from 2010 to 2016, most respondents described provider shortages as most acute in psychiatry.

Also, some respondents noted that across provider types, the number who are willing to serve people enrolled in Medi-Cal is very small because of low reimbursement rates. To help expand the available workforce, San Diego County has partnered with the University of California, San Diego, to place three psychiatry fellows and two nurse practitioners in community settings. However, respondents cited a need for additional funding to create more residency and workforce training programs and particularly for a larger pipeline of clinicians willing to serve people enrolled in Medi-Cal.

MHSA Funding

MHSA funding is higher per capita in San Diego than in Contra Costa and Fresno Counties, and above the California average. The county has used MHSA dollars to fund crisis services, assertive community treatment programs, housing programs for people with mental illness, and psychiatry residency training programs. The county also allocates MHSA funds for housing and homelessness programs, including permanent supportive housing for individuals with serious mental illness and temporary rental assistance housing support. The San Diego County Department of Health and Human Services is conducting a study on current needs in the county's behavioral health delivery system.

Conclusion

San Diego County has more inpatient psychiatric beds per capita than the California average, but the number of beds decreased over the analysis period. While use of inpatient care has remained fairly stable, the decline in beds has raised concerns about capacity, especially in areas where more hospital closures are expected. Lack of intermediary and long-term care in the county creates pressure on the inpatient system, because patients may be held in acute inpatient settings longer than they would be if intermediary levels of care were available. While San Diego has a relatively strong mental health workforce compared with other parts of the state, the county has seen a large increase in use of outpatient care, which respondents described as outpacing their capacity. The county has been working to increase crisis and emergency services, but respondents reported a need for more capacity in outpatient settings and more resources to serve people in crisis.

FRESNO COUNTY

Increased use of services outpaces growth in capacity

Fresno County has ongoing capacity issues with the inpatient psychiatric system. While the county has expanded the number of psychiatric beds over the past few years, an increase in use of beds is outpacing the newly added capacity. Admissions and ED visits for mental health needs have remained fairly stable, but higher lengths of stay have placed additional pressure on bed availability.

The relatively stable use of the ED for mental health needs could be related to the addition of alternative crisis services and other community-based care in the county over the past few years. However, respondents emphasized the need for more intermediary services for individuals released from the hospital. The county is expanding access points for outpatient care as well as adding inpatient beds.

Chronic workforce shortages in the county are a challenge in addressing mental health needs, and the county is working to increase the workforce by investing resources into recruiting more psychiatrists and using telehealth.

Growth in Number and Use of Inpatient Beds

While the number of inpatient psychiatric beds per capita decreased statewide from 2010 to 2016, the number of beds per capita in Fresno County increased from 82.6 to 94.9 per one million persons (Table A5). As of 2016, the most recent year for which data are publicly available, the county had three inpatient psychiatric facilities with a total of 93 licensed beds. Despite the addition of new beds, the number of beds per capita in 2016 remained substantially lower in Fresno County than in the state as a whole. Since then, Fresno has added several beds to existing facilities and opened additional facilities, including a mental health rehabilitation center, a crisis residential unit, and an inpatient crisis unit for adolescents.¹⁴

Despite the addition of beds, use of inpatient psychiatric services increased at a faster rate, placing pressure on the inpatient system. Over the analysis period, use of beds rose by 8%, with the average bed filled 84.1% of the time in 2016, up from 77.8% in 2010. The greater use of beds was driven by an increase in the number of days that individuals stayed in the hospital rather than by growth in the number of people being admitted. For example, average length of stay increased by 38%, with individuals staying in the hospital 6.6 days on average in 2016, up from 4.8 days in 2010. The number of admissions to the hospital remained stable.

Table A5. Inpatient Bed Capacity and Utilization, Fresno County, 2010 and 2016

	2010	2016	CHANGE
Licensed Psychiatric Inpatient Beds (per million persons)	82.6	94.9	+15%
Percentage of Licensed Bed Days Filled	77.8%	84.1%	+8%
Psychiatric Discharges (per 1,000 persons)	4.9	4.4	-10%
Average Length of Stay (days)	4.8	6.6	+38%

Respondents pointed to a need for additional beds overall and for certain populations in particular. For example, one hospital executive explained that it is very common for people to have to wait in the ED for a psychiatric bed to become available; these wait times are approximately two or three times those of patients with medical needs. Some respondents highlighted the need for more beds specifically for adolescents, although others perceived that there are enough in the county with the recent addition of an adolescent inpatient crisis unit.

A need for beds for people with both medical and psychiatric conditions was also highlighted as a gap. To help address the need, the county's dominant health system is in the process of adding another 12 to 24 beds to its inpatient behavioral health facility

over the next year or two. Respondents were uncertain whether these additional beds will be enough to meet the demand; they pointed out that quantifying the need for beds is challenging because it depends on the availability of other services such as intermediary care and crisis services.

Need for More Intermediary Care to Reduce Inpatient Use

Almost all respondents expressed a need for more intermediary services for patients being discharged from inpatient settings and to serve people who require intensive services but not necessarily hospitalization. No partial hospitalization services were available in the county during the study period, a gap that appears to place pressure on the inpatient psychiatric system.

The lack of intermediary care strains the inpatient system because patients occupy beds longer than needed or when other settings could better serve their needs. Individuals are sometimes inappropriately hospitalized because they require more intensive care than can be provided in routine outpatient visits. Several respondents noted that patients can be discharged when they no longer meet the clinical criteria for hospitalization, but they are not always connected to appropriate step-down services to meet their needs. In some cases patients are provided with instructions or connections to step-down services but may be unable to follow through on them. As a result, patients can be readmitted to the hospital soon after discharge.

A few respondents pointed to a need for more supportive housing for individuals with serious mental illness who are homeless, both to alleviate use of inpatient beds and to more appropriately serve the needs of that population.

To address the need for more intermediary care, the county behavioral health department has expanded services over the last few years, including adding a mental health rehabilitation center and a new contract for residential care. The county also has teams in place to help coordinate discharge planning from inpatient

settings for both adults and adolescents. These efforts have helped with care transitions from inpatient to intermediary settings.

Stable Use of ED Services

Use of the ED for mental health needs in Fresno County remained fairly stable from 2012 to 2017, and the share of people being admitted from the ED to facilities in the county with inpatient psychiatric beds also remained fairly stable — declining, but only slightly (Table A6). The county has expanded crisis services over the past few years, adding beds to its crisis stabilization units for both adults and children and pairing clinicians with police officers who are responding to crises in the community. These newly added crisis services may be helping to divert use of EDs. An executive from a major hospital system felt that the county’s crisis stabilization services have been somewhat helpful in decreasing the number of patients in its ED.

Table A6. Emergency Services Utilization for Mental Health Diagnosis, Fresno County, Selected Years

	2010	2016	CHANGE
Visits to Psychiatric EDs (per 1,000 persons)	0*	0*	NA
	2012	2017	CHANGE
Total ED Visits for Mental Health Diagnosis (per 1,000 persons)	16.5	15.3	-7%
Admitted ED Visits for Mental Health Diagnosis (per 1,000 persons)	1.9	0.9	-54%
ED Discharges to Psychiatric Care (per 1,000 persons)	3.7	2.6	-30%

*Fresno County does not have a psychiatric emergency department.

Large Growth in Use of Outpatient Care

The county saw a large increase in the use of outpatient services during the analysis period, although utilization per capita remained below the state average. For example, the number of visits to outpatient clinics for mental health diagnoses grew by 62%, rising from 28.5 per 1,000 persons in 2011 to 46.1 in

2016 (Table A7). This increase and the overall rate are in line with statewide trends. Consistent with trends reflected in quantitative data, respondents reported seeing higher volumes for outpatient mental health services over the past few years. Some respondents attributed the increased use to 2014 coverage expansions under the Affordable Care Act and “pent-up” demand for mental health care.

Table A7. Mental Health Visits at Community and Outpatient Mental Health Clinics, Fresno County, 2010 and 2016

	2010	2016	CHANGE
Total Clinic Visits for Mental Health Diagnoses (per 1,000 persons)	28.5	46.1	+62%
Visits to Outpatient Clinics for Mental Health Services (per 1,000 persons, primary care)	14.1	30.3	+114%
Visits to Psychiatric Outpatient Clinics (per 1,000 persons)	14.3	15.8	+10%

While use of outpatient care has increased in the county, some access challenges persist, particularly in the outlying areas where the geographic distance to providers is large. This creates a barrier to care, particularly for people with low incomes who lack transportation. The county behavioral health department is pursuing a wide range of strategies to expand access to outpatient services, including placing clinics in remote areas and adding access points for outpatient services in school settings, faith-based organizations, and libraries. Respondents also described an Urgent Care Wellness Center in the county as an important resource that provides mental health screenings and assessments and expedites access to community providers across the continuum of care.

Workforce Shortages Contributing to Capacity Constraints

Like other counties in the San Joaquin Valley, Fresno County continues to experience a major shortage of mental health providers. In 2016, the county had a much lower number of psychiatrists per capita than the California average, with 99.0 psychiatrists per one

million persons, versus 140.5 statewide (Table A8). The San Joaquin Valley region as a whole has some of the lowest ratios in California of other behavioral health professionals, including psychologists, marriage and family therapists, and clinical social workers.¹⁵ Interviewees noted workforce gaps that are especially severe, including the shortage of psychiatrists, mental health specialists for children, and Spanish-speaking providers.

One respondent said that the number of psychiatrists employed by the county declined over the past 15 to 20 years as the result of several factors, including psychiatrists relocating away from the county, and the building of prisons around the Fresno area, which may compensate psychiatrists at a higher salary. Respondents explained that the supply of licensed marriage and family therapists, licensed clinical social workers, case managers, community mental health specialists, and peer specialists is somewhat better, although more of these types of providers are also needed in the county.

Table A8. Mental Health Staff, Fresno County, 2010 and 2016

	2010	2016	CHANGE
Active Psychiatric Hospital and Non-hospital Staff (per million persons)	149.1	89.8	-40%
Psychiatrists (per million persons)	91.2	99.0	+9%

Fresno County has been pursuing several strategies to increase the available workforce, including using social workers and tele-psychiatry to serve EDs and some inpatient units and using locums — physicians serving on temporary assignments that last between three and six months. The county is working to recruit more psychiatrists to the area, which is challenging because of the region’s generally poor payer mix and certain quality-of-life factors. Several respondents described the limited cultural offerings and less desirable weather in Fresno County relative to the Bay Area and Southern California as major recruitment barriers without obvious solutions.

MHSA Funding of Full-Service Partnerships for Community-Based Services

MHSA spending is higher per capita in Fresno County than in Contra Costa County but lower than in San Diego County. Fresno uses MHSA dollars to fund several full-service partnerships with community organizations that provide an array of services for people with serious mental illness or emotional disorders; these include individual and group therapy, medication, case management, and housing support. Full-service partnership programs also reserve some slots specifically for individuals who are being discharged from inpatient settings, though several respondents emphasized the need for additional capacity for such individuals.

Conclusion

Despite additions of beds during the analysis period, increased utilization, driven by longer lengths of stay, has placed added pressure on the inpatient system in Fresno County. The major hospital system in the county is planning to add more inpatient beds, but it remains to be seen whether these will be enough to address needs. Use of the ED for mental health needs has remained fairly stable, possibly because the county has added more community-based resources and access points. Many respondents speculated that the availability of intermediary services to discharge patients from the hospital could alleviate some pressure on the inpatient bed capacity. Workforce shortages, which are worse in Fresno than in many parts of California, remain a fundamental problem across the continuum of care.

CONTRA COSTA COUNTY Bed Capacity Generally Adequate but Some Concerns About Outpatient Access

Contra Costa County saw a 13% increase in the number of inpatient psychiatric beds per capita from 2010 to 2016. Despite this increase, respondents said more inpatient beds are needed. Interviewees also emphasized that more intermediary services are needed for people exiting the inpatient system, especially for people enrolled in Medi-Cal. Over the analysis period, the number of overall visits to outpatient clinics decreased slightly, and more outpatient care was provided in primary care settings. At the same time, use of EDs for mental health needs rose substantially, though this did not lead to an increase in psychiatric admissions. The findings may indicate that individuals are using the ED as a result of challenges accessing care in outpatient settings. Like other parts of California, Contra Costa County is experiencing a shortage of mental health providers. The county is implementing telepsychiatry and working to recruit additional providers to expand its workforce.

Increase in Beds but Concerns About Capacity for Select Populations

The number of inpatient psychiatric beds per capita in Contra Costa County increased 13% between 2010 and 2016, growing from 83.6 to 94.8 per one million persons (Table A9, page 23). As of 2016, the most recent year for which data are publicly available, the county had two hospitals that provided inpatient psychiatric services with a total of 108 beds. As the number of beds increased, utilization, as measured by the percentage of days throughout the year that beds are filled, decreased from approximately 70% in 2010 to 48% in 2016. The number of discharges for mental health conditions also decreased over this time period, while the length of stay remained fairly stable. Taken together, these findings suggest that, overall, the county may have sufficient inpatient beds to meet the needs of residents.

However, despite the appearance of sufficient bed capacity reflected in quantitative data, a few respondents commented that Contra Costa County needs more inpatient beds. Two respondents cited

substantial wait times in EDs for patients in need of inpatient psychiatric beds. It is possible that since 2016, inpatient bed use has increased and created new pressures on capacity. Also, while the availability of inpatient psychiatric beds grew overall in the county from 2010 to 2016, the number of beds (per capita) for children and adolescents decreased by 8%. A respondent from a major health system in the county noted that use of inpatient care among the adolescent population has increased in that system over the past few years. A couple of respondents said that finding beds for adolescents is an ongoing challenge, and another respondent explained that many adolescents are placed in facilities outside county lines, such as in neighboring Alameda or Solano Counties.

Table A9. Inpatient Bed Capacity and Utilization, Contra Costa County, 2010 and 2016

	2010	2016	CHANGE
Licensed Psychiatric Inpatient Beds (per one million persons)	83.6	94.8	+13%
Percentage of Licensed Bed Days Filled	69.6%	48.2%	-31%
Psychiatric Discharges (per 1,000 persons)	2.9	2.5	-14%
Average Length of Stay (days)	7.3	6.7	-9%

Need for More Intermediary Care, Especially for Medi-Cal Enrollees

Intermediary care is reportedly a gap in Contra Costa County, especially for individuals enrolled in Medi-Cal. According to respondents, partial hospitalization services are not available for people with Medi-Cal coverage. Respondents had differing views about whether coverage of partial hospitalization services falls under the purview of county mental health plans. This uncertainty may contribute to the gaps in care. According to one respondent, individuals without access to partial hospitalization are often discharged to a crisis residential facility, where they may receive care for up to one month. While these services partly fill the intermediary care gap, respondents said that partial hospitalization services, if available, could better serve the needs of some individuals. Respondents

also mentioned that there are typically wait lists for crisis residential beds as well as for board-and-care facilities, where individuals can receive less intensive services for up to 18 months in smaller, privately owned houses.

Outpatient Care Access Challenges and Increased ED Use

Contra Costa County saw a slight decrease in the overall use of outpatient services from 2010 to 2016 and a shift in the settings where individuals received outpatient care. For example, in 2010, 88% of outpatient visits to licensed community and free clinics occurred in specialty mental health clinics, and 12% of outpatient clinic visits occurred in physical health clinics (Table A10). In 2016, the percentage of visits to specialty mental health clinics decreased to 75% and the percentage of visits to physical health clinics increased to 25%. This shift could reflect initiatives to integrate physical and behavioral health care whereby primary care providers are taking a more active role in treating mental health problems.

Table A10. Mental Health Visits at Community and Outpatient Mental Health Clinics, Contra Costa County, 2010 and 2016

	2010	2016	CHANGE
Total Clinic Visits for Mental Health Diagnoses (per 1,000 persons)	24.6	22.8	-7%
Visits to Outpatient Clinics for Mental Health Services (per 1,000 persons, primary care)	2.9	5.6	+93%
Visits to Psychiatric Outpatient Clinics (per 1,000 persons)	21.7	17.3	-20%

Although use of outpatient mental health services decreased from 2010 to 2016, some respondents noted an increase in use in recent years, especially among the Medi-Cal population. Respondents from two major health systems in the county noted increased use of outpatient services at their systems. Some respondents also described long wait times to see psychiatrists and other mental health providers.

The county has been making efforts to expand outpatient capacity. For example, to help reduce wait times for psychiatry appointments, the County Behavioral Health Department hired additional psychiatrists and implemented tele-psychiatry within the county-funded system of outpatient clinics. Also, in 2018, a major health system in the county moved its outpatient mental health services to a larger building, which allowed the system to expand capacity for outpatient services and provide new service offerings, such as smoking cessation programs and educational programs related to co-occurring conditions. The system's outpatient mental health services primarily serve people with commercial insurance.

The county saw a 19% increase in use of EDs for mental health issues from 2012 to 2017, which may be related to challenges with access to outpatient services (Table A11). In addition, visits to the county's designated psychiatric ED at Contra Costa Regional Medical Center increased by 32% over the analysis period. Despite increased use of the ED, data indicate that the share of people being admitted from the ED to inpatient facilities declined slightly. Taken together, these findings suggest that people in the county may be using the ED as a source of outpatient treatment, possibly as a result of gaps in access in certain areas of the county or because of wait times for outpatient care. It is also possible that people are being transferred from the ED to other facilities outside the county or to crisis facilities.

Table A11. Emergency Services Utilization for Mental Health Diagnosis, Contra Costa County, Selected Years

	2010	2016	CHANGE
Visits to Psychiatric EDs (per 1,000 persons)	7.0	9.2	+32%
	2012	2017	CHANGE
Total ED Visits for Mental Health Diagnosis (per 1,000 persons)	14.1	16.9	+19%
Admitted ED Visits for Mental Health Diagnosis (per 1,000 persons)	1.4	1.3	-3%
ED Discharges to Psychiatric Care (per 1,000 persons)	2.2	2.0	-8%

Growing Workforce Shortages

Like other California counties, Contra Costa has a mental health workforce shortage. The number of psychiatrists in the county declined slightly from 122.5 psychiatrists per one million persons in 2010 to 120.3 in 2016 and remains lower than the statewide number of 140.5 psychiatrists per one million persons (Table A12). Consistent with these findings, all the respondents in Contra Costa County commented on a need for more psychiatrists, nurse practitioners, psychologists, and social workers. One respondent said provider shortages are getting worse over time, particularly in areas of the county where the population is growing.

Table A12. Mental Health Staff, Contra Costa County, 2010 and 2016

	2010	2016	CHANGE
Active Psychiatric Hospital and Non-hospital Staff (per one million persons)	134.9	190.6	+41%
Psychiatrists (per one million persons)	122.5	120.3	-2%

Contra Costa has been pursuing several strategies to increase its mental health workforce, including using tele-psychiatry, providing salary raises to psychiatrists, integrating mental health into primary care, and collaborating with medical schools to provide residency placements to students. In addition, a mental health clinic in the county reported that it hires unlicensed social workers, marriage and family therapists, and professional counselors to provide services because of the difficulty recruiting licensed professionals. The clinic provides the required supervision hours for each provider type so they are eligible for licensing. The county is also using MHSA funds to provide paid internships to mental health providers and is implementing a student loan repayment program as an incentive to recruit qualifying professionals to work in the public mental health system.¹⁶

MHSA Funding Used to Expand Intermediary Care and Crisis Services

Overall, MHSA spending increased 43% in Contra Costa County from 2013 to 2017. The county reportedly uses these funds to operate and contract with mental health service providers to support full-service partnerships in an effort to provide clients with the full spectrum of mental health and social services. MHSA funds have been used to add a new mobile crisis response team to serve adults, and to expand the hours during which the child mobile crisis response team operates. Additionally, Contra Costa Behavioral Health Services is funding an assertive community treatment program for transition-age youth (ages 15 to 26) and is considering adding a short-term residential treatment program.¹⁷ These services will be available in the fall of 2020 and may help fill gaps in care for this population.

Conclusion

Although quantitative analyses suggest that, overall, Contra Costa County had sufficient beds to meet its needs as of 2016, respondents pointed to a need for more beds, particularly for adolescents and individuals involved in the criminal justice system. From 2010 to 2016, inpatient care decreased, but use of ED services rose, suggesting that barriers to accessing outpatient services exist. Respondents identified intermediary care and especially partial hospitalization and assertive treatment services as key gaps in the county's mental health delivery system. Efforts to increase the mental health workforce may increase capacity to provide outpatient care and reduce wait times for outpatient appointments.

Appendix B. Methods

The quantitative component of this study uses publicly available data for 2010–2017 (where available) from the California Office of Statewide Health Planning and Development (OSHPD), Mental Health Services Oversight and Accountability Commission, the US Census Bureau’s US Census and American Community Survey, the Health Resources and Services Administration’s Area Health Resources Files, and the UCLA Center for Health Policy Research’s California Health Interview Survey. All data are aggregated to the county level for each of the three counties in the study — San Diego, Fresno, and Contra Costa — as well as to the statewide level for purposes of comparison to each county trend. State psychiatric hospitals are excluded from the analyses.

DATA TYPE	YEARS	VARIABLES	SOURCE(S)
OSHPD Financial Data	2010–2016	▶ Psych ED visits per 1,000 persons	FY 2012–2013 through FY 2016–2017 FY 2009–2010 through FY 2011–2012
		▶ Licensed psychiatric inpatient beds per one million persons	
		▶ Available psychiatric inpatient beds per one million persons	
		▶ Psych discharges per 1,000 persons	
		▶ Psych inpatient days per 1,000 persons	
		▶ Average length of stay for psych inpatient stays*	
		▶ Percentage of licensed bed days filled*	
		▶ Active psychiatric hospital and non-hospital staff per one million persons	
		▶ Licensed acute care children’s psychiatric inpatient beds per one million persons	
		▶ Available acute care children’s psychiatric inpatient beds per one million persons	
		▶ Percentage of licensed children’s bed days filled*	
		▶ Active acute care children’s psychiatric hospital staff per one million persons	
		▶ Partial hospitalization days per 1,000 persons	
		▶ Acute care children’s psych discharges for per 1,000 persons	
▶ Acute care children’s psych inpatient days per 1,000 persons			
▶ Average length of stay for acute care children’s psychiatric inpatient stays*			
OSHPD Clinic Data	2010–2016	▶ Primary care clinic mental health patients per 1,000 persons	2012–2017 Primary Care Clinic Utilization Data 2010–2012 Primary Care Clinic Utilization Data 2012–2017 Specialty Care Clinic Utilization Data 2010–2012 Specialty Care Clinic Utilization Data
		▶ Specialty care clinic psych patients per 1,000 persons	
		▶ Total clinic visits for mental health (primary care and specialty) per 1,000 persons*	
		▶ Psych clinicians in primary care clinics per one million persons	
OSHPD Emergency Department Data	2012–2017	▶ Total ED visits for mental health diagnoses per 1,000 persons	2012–2017 Emergency Department Utilization
		▶ Admitted ED visits for mental health diagnoses per 1,000 persons	
Mental Health Services Oversight and Accountability Commission	2013–2017	▶ Total mental health expenditures per capita	FY 2012–2013 through FY 2016–2017
		▶ Total MHSA expenditures per capita	

DATA TYPE	YEARS	VARIABLES	SOURCE(S)
US Census	2010–2017	▶ County and state population	Population Totals Percent Rural Population
American Community Survey	2010–2017	▶ Percentage of population below the poverty line	factfinder.census.gov
Area Health Resources Files	2010, 2015, 2016	▶ Psychiatrists (MDs) per one million persons	Health Resources & Services Administration “ Data Downloads: Area Health Resources Files ” (county level)
California Health Interview Survey	2011–2017	▶ Likely has had serious psychological distress during past month ▶ Ever seriously thought about committing suicide	AskCHIS

*Calculated from variables in the data.

Endnotes

1. Paul Sisson, "Is San Diego Headed for a Psych Bed Crisis?," *San Diego Union-Tribune*, July 23, 2018.
2. California Hospital Association, [California's Acute Psychiatric Bed Loss](#) (PDF) (Sacramento: California Hospital Association, March 28, 2018), accessed August 31, 2018.
3. For a map of inpatient psychiatric facilities in the state, please see the [Substance Abuse and Mental Health Services Administration's Behavioral Health Treatment Services Locator](#).
4. Margaret Tatar and Richard Chambers, [Medi-Cal and Behavioral Health Services](#) (Oakland: California Health Care Foundation, February 2019).
5. Janet Coffman, Tim Bates, Igor Geyn, and Joanne Spetz, [California's Current and Future Behavioral Health Workforce](#) (San Francisco: Healthforce Center at UCSF, February 12, 2018).
6. For a detailed explanation of these funding sources, see Deborah Reidy Kelch, [Locally Sourced: The Crucial Role of Counties in the Health of Californians](#) (Oakland: California Health Care Foundation, October 2015), accessed October 13, 2019.
7. Logan Kelly, Allison Hamblin, and Steve Kaplan, [Behavioral Health Integration in Medi-Cal: A Blueprint for California](#) (Oakland: California Health Care Foundation, February 2019).
8. David Wright, "Clarification of Ligature Risk Policy," memorandum to State Survey Agency directors, Centers for Medicare & Medicaid Services, December 8, 2017.
9. The Centers for Medicare and Medicaid Services defines ligature risk as anything that could be used to attach a cord, rope, or other material for the purpose of hanging or strangulation, such as shower rails, coat hooks, pipes, bedsteads, ceiling fittings, and hinges. The focus on a "ligature resistant" or "ligature free" environment is primarily intended for psychiatric units/hospitals.
10. These metrics may overstate the actual bed capacity across the county because they reflect the proportion of licensed acute inpatient psychiatric beds that are occupied. Some physical beds may not have available psychiatric staff, such as psychiatrists or other mental health professionals, and therefore may not be operational.
11. California Department of State Hospitals, [2018 Annual Report](#) (PDF) (Sacramento: California Department of State Hospitals, 2018), accessed October 10, 2019.
12. Ha Tu, Lara Converse, Annie Doubleday, and Paul Ginsburg, [San Diego: Major Providers Pursue Countywide Networks and New Patient Care Models](#) (Oakland: California Health Care Foundation, June 2016).
13. Coffman et al., [California's Current and Future Behavioral Health Workforce](#).
14. Lynne Ashbeck, "Fresno County Is Transforming How It Helps People with Mental Illness," *Fresno Bee*, September 26, 2018, accessed July 19, 2019.
15. Coffman et al., [California's Current and Future Behavioral Health Workforce](#).
16. Contra Costa Health Services, *Contra Costa County: Mental Health Services Act Three Year Program and Expenditure Plan Update, Fiscal Year 2019–2020* (Martinez, CA: March 2019).
17. Contra Costa Health Services, *Contra Costa County: Mental Health Services Act Three Year Program and Expenditure Plan Update, Fiscal Year 2019–2020* (Martinez, CA: March 2019).