Building the Future Behavioral Health Workforce: Needs Assessment

by Janet Coffman and Margaret Fix, Healthforce Center at UCSF February 2023





Abstract / Overview

The County Behavioral Health Directors Association of California (CBHDA) is developing a 10-year strategic plan for strengthening the county behavioral health safety net workforce, which encompasses personnel who work for county agencies and the community-based organizations (CBOs) with which they contract, to meet the needs of a rapidly evolving safety net delivery system and the people it serves. This report presents major findings and conclusions from a needs assessment that was conducted to inform the development of the strategic plan.

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Key Findings

With the generous support of Kaiser Permanente Southern California, the County Behavioral Health Directors Association of California (CBHDA) is developing a 10-year strategic plan for strengthening the county behavioral health safety net workforce to meet the needs of a rapidly evolving safety net delivery system and the people it serves. This workforce encompasses persons who work for county behavioral health agencies and the community-based organizations (CBOs) with which they contract. Some counties may provide most behavioral health services through contracted CBOs. Others may rely almost entirely on county employees to deliver services, or on a combination of county employees and contract providers. This assessment is meant to reflect the range of potential provider relationships under the county behavioral health umbrella.

The plan includes an assessment of current workforce gaps and challenges, including the impact of the COVID-19 pandemic, as well as policy recommendations to help California build the future workforce for the county behavioral health safety net. The needs assessment encompasses:

- Analysis of existing sources of data about the supply, distribution, and demographic characteristics of California's behavioral health workforce and graduates of behavioral health professions education programs
- A survey of county behavioral health agencies and contracted CBOs
- Key informant interviews with experts on the workforce challenges the county behavioral health safety net faces.

California's Current County Behavioral Health Safety Net Workforce

Data reported through the Medi-Cal Network Adequacy Certification Tool (NACT) indicate that in 2020:

- California's county behavioral health safety net employed at least 28,440 persons who
 provided specialty mental health services to Medi-Cal beneficiaries.
 - The three largest categories of workers providing mental health services in the county behavioral health safety net are "other qualified providers" (30 percent), licensed and associate marriage and family therapists (LMFTs and AMFTs) [24 percent], and licensed and associate clinical social workers (LCSWs and ASWs) [17 percent].

- Counties that participate in the Drug Medi-Cal Organized Delivery System (ODS), which are primarily urban counties, employed at least 5,110 persons who provide substance use disorder (SUD) services to Medi-Cal beneficiaries.
 - Certified and registered SUD counselors constituted the largest share of the safety net SUD workforce in ODS counties (68 percent).
- The county behavioral health safety net's ability to meet the needs of clients whose preferred language is not English differs for mental health and SUD services.
 - The percentages of personnel providing mental health services who speak the
 top three non-English languages preferred by Medi-Cal beneficiaries (i.e., Spanish,
 Chinese, and Vietnamese) are similar to the percentages of Medi-Cal beneficiaries who
 speak these languages (31 percent vs. 28 percent for Spanish, 2 percent vs. 2 percent
 for Chinese languages, 1 percent vs. 2 percent for Vietnamese).
 - The percentages of SUD personnel who speak these languages are significantly lower (17 percent vs. 28 percent for Spanish, <1 percent vs. 2 percent for Chinese languages, <1 percent vs. 2 percent for Vietnamese).

Overall California Behavioral Health Workforce

The needs assessment includes an analysis of data regarding California's overall behavioral health workforce to elucidate the size and characteristics of the workforce from which the safety net behavioral health system draws its staff.

Size of the Behavioral Health Workforce

- California has approximately 111,000 licensed behavioral health professionals, including
 psychiatrists, psychologists, LMFTs, LCSWs, licensed professional clinical counselors (LPCCs),
 psychiatric technicians, and nurse practitioners and registered nurses who serve people with
 behavioral health needs.
- Many unlicensed personnel (e.g., SUD counselors, peer support specialists) also provide behavioral health services, but their numbers cannot be estimated accurately due to lack of publicly available data.

Geographic Distribution

- Supplies of licensed behavioral health professionals per capita vary substantially across California's regions.
- For most licensed professions, the Inland Empire and the San Joaquin Valley have the lowest ratios per capita. Ratios in these areas are substantially lower than the statewide ratios of licensed professionals per capita.

Demographic Characteristics

- In some licensed behavioral health professions, large percentages of licensed professionals are at or near retirement age.
 - 31 percent of psychiatrists who provide patient care one or more hours per week are age 65 years or older.
 - 27 percent of clinical and counseling psychologists and 16 percent of marriage and family therapists who are working are age 65 years or older.
 - In contrast, 51 percent of SUD counselors in the workforce are under age 35 years.
- The race/ethnicity of California's behavioral health professionals does not reflect the diversity of the state's population.
 - Black and Latino(a) providers are substantially underrepresented among psychiatrists and clinical and counseling psychologists.
 - Latino(a)s are better represented among marriage and family therapists, counselors, and social workers but are not represented in the same proportion as they are in the state's population.
 - Asians are underrepresented among all behavioral health professions except psychiatrists.
- The majority of behavioral health professionals speak only English.
 - Percentages of behavioral health professionals speaking Spanish range from 7 percent of clinical and counseling psychologists to 28 percent of SUD counselors.
- In all behavioral health professions except psychiatry, the majority of professionals are women.

California's Behavioral Health Professions Pipeline

Analysis of trends in graduates of degree and certificate programs that prepare people to work in behavioral health professions provides insights into the extent to which new graduates are available to replace professionals who are at or near retirement age.

Number of Graduates

- Master's degree programs that prepare people for licensure as marriage and family therapists, professional clinical counselors, or social workers accounted for more than 70 percent of graduates of behavioral health professions education programs in California in 2020 (6,510 of 9,119 graduates).
- Trends in graduations from 2016 to 2020 vary substantially across types of behavioral health
 professions education programs. For the professions that account for the largest numbers
 of persons working in the county behavioral health safety net, numbers of graduates are
 decreasing or growing too modestly to replace retirees and alleviate unmet needs for
 behavioral health services.
 - Graduates of certificate and associate degree programs for SUD counselors based at colleges and universities have decreased substantially (-21 percent).
 - Graduates of master's degree programs in social work have also decreased (-4 percent).
 - The numbers of graduates of master's degree programs in clinical and counseling psychology have increased modestly (8 percent).
 - The numbers of graduates of doctoral programs in clinical and counseling psychology and residency programs in psychiatry have increased substantially, but they constitute only a small segment of the county behavioral health safety net.

Race/Ethnicity

- Black and Latino(a) students were better represented among 2020 graduates of most types
 of behavioral health professions education programs than they are among behavioral health
 professionals who completed their education prior to 2020, although they remain substantially
 underrepresented among psychiatry residents and graduates of doctoral programs in clinical
 psychology.
- Asians were underrepresented among graduates of all types of behavioral health professions
 education programs in 2020 except residency programs in psychiatry and certificate and
 associate degree programs that train psychiatric technicians.

Recruitment of Behavioral Health Professionals in California's County Behavioral Health Safety Net

A survey of California's 57 county behavioral health agencies and two city behavioral health agencies, hereafter referred to as county behavioral health agencies, was conducted in 2021 to elicit leaders' perceptions of their recruitment and retention needs (response rate = 98 percent). Findings from the survey indicate that:

- More than 70 percent of county behavioral health agencies had difficulty recruiting LCSWs,
 LMFTs, LPCCs, psychiatrists, and registered nurses (RNs) to provide mental health services.
- More than 70 percent had difficulty recruiting LCSWs, LMFTs, and LPCCs to provide SUD services.
- 63 percent had difficultly recruiting certified SUD counselors.
- 82 percent had difficulty recruiting personnel who specialize in treating specific populations, including adolescents, people with eating disorders, people with co-occurring mental health and substance use disorders, and people with criminal justice system involvement.
- 86 percent had difficulty recruiting personnel to staff specific programs, including crisis care programs, full-service partnership programs, and narcotic treatment programs.
- Most county behavioral health agencies had difficulty recruiting sufficient numbers of Native American, Asian, Black, Latino(a), and Native Hawaiian/Pacific Islander behavioral health professionals to match clients' race/ethnicity.
- 79 percent had difficulty recruiting sufficient numbers of Spanish speakers to provide mental health services to Spanish-speaking clients, and 91 percent have difficulty recruiting sufficient numbers of Spanish speakers to provide SUD services to Spanish-speaking clients.
- 54 percent had difficulty recruiting sufficient numbers of lesbian, gay, bisexual, transgender, and queer (LGBTQ) behavioral health professionals to provide mental health services, and 57 percent have difficulty recruiting sufficient numbers to provide SUD services.
- Major barriers to recruiting behavioral health professionals included:
 - · Competition from other employers
 - Inability to offer competitive pay
 - Lengthy hiring process
 - Location perceived as less desirable than other parts of California
 - High cost of living and lack of affordable workforce housing.
- Rural counties were more likely to cite their location as a major barrier to recruitment, and urban counties were more likely to cite the high cost of living as a major barrier.
- CBOs' responses to survey questions about recruitment barriers were similar.

 The county behavioral health safety net also encounters delays in onboarding new graduates because the state Board of Behavioral Sciences does not process applications for AMFTs, ASWs, and associate professional clinical counselors (APCCs) in a timely fashion.

Retention of Behavioral Health Professionals in California's County Behavioral Health Safety Net

The county behavioral health safety net also faces challenges regarding retention of behavioral health professionals.

- County behavioral health agencies report high turnover in staff, which requires them to invest substantial resources in training and supervision of less experienced staff. County behavioral health agencies also find that many new graduates of mental health professions education programs are not well prepared to provide specialty behavioral health services.
- In 2021, more than 65 percent of counties had difficulty retaining LCSWs, LMFTs, psychiatrists, and RNs.
- 54 percent had difficulty retaining certified SUD counselors.
- For both counties and CBOs, major barriers to retaining behavioral health professionals included:
 - Competition from other employers
 - · Inability to offer competitive compensation
 - Requirements for extensive documentation
 - Burnout.

Conclusions

To meet clients' needs, California's county behavioral health safety net must recruit and retain significantly more behavioral health professionals who reflect their clients' racial/ethnic diversity, linguistic diversity, sexual orientations, and gender identities, particularly among SUD providers.

The county behavioral health safety net's ability to meet its workforce needs is constrained by characteristics of California's overall behavioral health workforce and trends in new graduates from behavioral health professions education programs.

- Some regions have small numbers of behavioral health professionals per capita relative to the state overall.
- In some behavioral health professions, many professionals are at or near retirement age. In
 others, most professionals are young because many leave the profession to work outside the
 behavioral health sector.

- The workforce does not reflect the racial/ethnic and linguistic diversity of the state's population.
- Numbers of graduates of educational programs for SUD counselors and LCSWs are decreasing, and modest rates of growth in graduates of programs that prepare LMFTs and LPCCs will not be sufficient to replace professionals who are at or near retirement age nor to meet growing demand for behavioral health services.

Additional factors that hinder the county behavioral health safety net's ability to compete with private employers and other public sector employers (e.g., schools) for experienced behavioral health professionals include inability to offer competitive salaries, lengthy hiring processes, and extensive Medi-Cal documentation requirements.

High staff turnover is compelling counties to invest more resources in training and supervision of less experienced staff.

Existing sources of data are inadequate to fully assess the workforce needs of California's county behavioral health safety net.

- Few data are available about the workforce in behavioral health occupations for which licensure is not required.
- For most occupations requiring licensure, there are:
 - Limited data on age, gender, race/ethnicity, and languages spoken
 - No data on gender identity or sexual orientation
 - No data on practice setting or acceptance of health insurance.

Recommendations

Building a workforce for the county behavioral health safety net that can meet clients' needs should encompass investment at both state and county levels.

- **State government** should invest additional funds in the Department of Health Care Access and Information (HCAI) and higher education institutions to:
 - Increase the number and diversity of persons completing behavioral health professions education programs.

- Develop clinical curricula tailored to preparing students to serve people who receive specialty behavioral health services through the county safety net (where such curricula do not already exist).
- Provide tuition assistance, stipends, and loan repayment to behavioral health
 professionals who commit to working in the county behavioral health safety net to
 help them pay for their education. Stipends are especially helpful to students from
 low-income backgrounds whose families depend on them for financial support and to
 those preparing for entry level positions.
- Provide emergency funds to low-income students so that they can address unanticipated expenses that have potential to derail their education, such as child care and car repair.
- **State government** should also allocate additional funds to the Board of Behavioral Sciences to enable its staff to process applications for AMFTs, APCCs, and ASWs in a timely fashion so that new graduates can begin completing supervised clinical practice and other requirements for licensure as guickly as possible.
- State government should provide the Medi-Cal program with additional resources to:
 - Increase reimbursement to county behavioral health safety net agencies and contracted CBOs so that they can offer competitive compensation and enable their staff to work at the top of their licenses.
 - Reimburse county behavioral health safety net agencies for expenses associated with clinical training of behavioral health professions students and supervision of AMFTs, APCCs, and ASWs.
 - Expand the state's peer support specialists as a statewide Medi-Cal benefit, rather than a self-funded county option.
 - Expand the Medi-Cal community health worker benefit to be a specialty behavioral health benefit under Medi-Cal.
 - Ensure Medi-Cal program requirements encourage all behavioral health professionals working to the top of their license.
 - Continue efforts under the auspices of the California Advancing and Innovating Medi-Cal
 (CalAIM) initiative to streamline Medi-Cal documentation requirements across delivery
 systems and to align the requirements of federal agencies and accrediting bodies with
 CalAIM standards.

- State government should allocate sufficient funds to HCAI's new Health Workforce Research Data Center and to licensing boards to facilitate collection and analysis of robust data on demand, supply, distribution, demographic characteristics, employment patterns, and acceptance of health insurance for all behavioral health occupations, including those for which licensure is not required, and in occupations in which some professionals specialize in behavioral health (e.g., registered nurses, nurse practitioners, physician assistants).
- The **state** should require all licensed behavioral health professionals to provide information
 to licensing boards about characteristics of their practices, such as location, setting, and
 acceptance of health insurance, as well as demographic characteristics, when they renew their
 licenses.
- County behavioral health agencies and the CBOs with which they contract should:
 - Work with county government officials to streamline hiring processes to facilitate more rapid hiring of personnel
 - Maximize hiring of peer providers, community health workers, and other types of paraprofessionals to provide services for which licensure or certification is not required
 - Prioritize recruitment of racially/ethnically diverse, bilingual, and LGBTQ staff
 - Create career ladders for incumbent workers and partner with local higher education institutions to provide education that will enable workers to advance professionally
 - View teaching as a key component of agencies' missions and expand clinical training and supervision for behavioral health professions students
 - Increase hiring of professionals who are not currently well-represented in the county behavioral health safety net who have relevant expertise, such as psychiatric mental health nurse practitioners and occupational therapists
 - Partner with local school districts to expand opportunities for students to learn about career opportunities in behavioral health
 - Work with accreditation bodies to streamline and align documentation requirements with CalAIM standards.

Background

During the 2010s, numbers of deaths from overdoses of opioids and psychostimulants (e.g., cocaine, methamphetamine) and nonfatal emergency department (ED) visits for opioid and psychostimulant use increased rapidly in California and across the United States (Valentine and Brassil, 2022). The prevalence of major depression among youth also rose substantially in both the state and the nation (SAMHSA, 2020). Nationwide, the prevalence of anxiety, depression, and substance use has accelerated since the COVID-19 pandemic began in early 2020 (Breslau et al., 2021; Czeisler et al., 2020; Czeisler et al., 2021; Ettman et al., 2020; Ettman et al., 2022; Vahratian et al., 2021). Unmet need for behavioral health services has also increased during the pandemic (Coley and Baum, 2022; Nagata et al., 2021; Vahratian et al., 2021).

The growth in need for behavioral health services has heightened concerns about the availability of behavioral health professionals to serve the increasingly diverse population in California and the nation. These concerns are especially acute in California's county behavioral health safety net, which is composed of county behavioral health agencies, city mental health authorities, and community-based organizations (CBOs) with which they contract to provide services. The county behavioral health safety net primarily serves low-income people with serious mental illness, substance use disorders, and dual diagnoses of mental health and substance use disorders who require a range of specialty behavioral health services.

Recognition of workforce challenges that existed prior to the COVID-19 pandemic led the County Behavioral Health Directors Association of California (CBHDA) to obtain funding from Kaiser Permanente Southern California to conduct a needs assessment and develop a 10-year strategic plan for strengthening California's county behavioral health safety net workforce through policy change. The needs assessment encompasses:

- Analysis of existing sources of data about the supply, distribution, and demographic characteristics of California's behavioral health workforce and graduates of behavioral health professions education programs
- A 2021 survey of county behavioral health agencies and CBOs with which they contract
- Key informant interviews with experts on the workforce challenges the county behavioral health safety net faces

- Conversations with members of the project's advisory group and other stakeholders from county behavioral health agencies, CBOs, professional associations, and state government
- Identification of key findings and implications for California's public behavioral health workforce.

The main body of this report is organized into six chapters. The first chapter describes the workforce currently working in California's county behavioral health safety net. The second chapter discusses the overall behavioral health workforce in California from which the county behavioral health safety net draws its workforce. The third chapter examines trends in the pipeline of persons completing behavioral health professions education programs in California. The fourth chapter describes the recruitment and retention challenges faced by the county agencies and CBOs that comprise the behavioral health safety net. The fifth chapter presents conclusions from the needs assessment and their implications for state government and county behavioral health agencies, and the sixth chapter presents recommendations to address these needs. Additional information is presented in several appendices.



California's County Behavioral Health Safety Net Workforce

Data regarding the size and composition of California's county behavioral health safety net workforce were obtained from the Medi-Cal Network Adequacy Certification Tool (NACT). Since 2019, the Department of Health Care Services (DHCS) has required all county behavioral health agencies to use this tool to report information regarding county mental health plans' networks of mental health providers that serve people with serious mental health needs. The 18 counties that participate in the Drug Medi-Cal Organized Delivery System (DMC-ODS) have also been required to use the NACT to report data regarding substance use disorder (SUD) providers since 2020.¹ The tool captures numbers of providers by occupation and numbers of providers who speak languages other than English.

¹ The following counties participate in DMC-ODS: Alameda, Contra Costa, El Dorado, Imperial, Los Angeles, Marin, Merced, Monterey, Napa, Nevada, Placer, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Francisco, and San Joaquin.

The NACT has several important limitations. First, the NACT only captures the numbers of providers in networks and does not indicate the amount of time they devote to serving clients in the county behavioral health safety net. Second, the NACT does not include providers who only provide mental health services in inpatient or residential settings because network adequacy standards currently apply only to outpatient settings. Third, the NACT does not include providers who only provide services that are not eligible for Medi-Cal reimbursement, such as prevention or early intervention services. Fourth, the NACT does not capture important demographic characteristics of the county behavioral health safety net workforce such as age, race/ethnicity, gender identity, and sexual orientation. Fifth, 30 percent of persons providing mental health services are characterized as "Other Qualified Providers," which California's Medicaid State Plan defines as an individual at least 18 years of age with a high school diploma or equivalent degree determined to be qualified to provide the service by the county mental health department." The NACT data do not indicate the types of services these "Other Qualified Providers" furnish. Sixth, DMC-ODS has only existed for five years and is being incrementally phased in throughout the state. No data are available regarding SUD providers in counties that do not participate in DMC-ODS. These counties include rural counties that have among the highest rates of opioid overdoses in the state (Valentine and Brassil, 2022). Despite these limitations, the NACT data provide relatively new and useful information about the size and composition of the county behavioral health safety net workforce serving Medi-Cal beneficiaries.

Numbers and Types of Personnel in the County Behavioral Health Safety Net Workforce

Mental Health Workforce

The 2020 NACT captured data on a subset of 28,440 persons who provided mental health services in California's county behavioral health safety net. Table 1 lists the numbers and percentages of persons by profession. "Other Qualified Providers" account for the largest share of workers (30 percent). Licensed marriage and family therapists (LMFTs) and associate marriage and family therapists (AMFTs) were the second largest group of workers (24 percent) and licensed clinical social workers (LCSWs) and associate clinical social workers (ASW) were the third largest group of workers (17 percent).

² State Plan, Section 3, Supplement 3 to Attachment 3.1-A pages 2m-2p.

Table 1.

Composition of California's Safety Net Mental Health Workforce, 2020

| Occupation(s) | Number | Percentage |
|----------------------------------------------------------------------------------------------------------|--------|------------|
| Other Qualified Providers | 8,441 | 30% |
| LMFTs and AMFTs | 6,810 | 24% |
| LCSWs and ASWs | 4,763 | 17% |
| Mental Health Rehabilitation Specialists | 2,744 | 10% |
| Psychiatrists and other Physicians | 1,651 | 6% |
| Peer Providers | 1,170 | 4% |
| Registered Nurses (RNs) and Licensed Vocational Nurses (LVNs) | 903 | 3% |
| Psychologists | 727 | 3% |
| Advanced Practice RNs and Physician Assistants | 489 | 2% |
| Licensed Professional Clinical Counselors (LPCCs) and Associate Professional Clinical Counselors (APCCs) | 444 | 2% |
| Psychiatric Technicians | 218 | 1% |
| Occupational Therapists | 58 | 0.2% |
| Pharmacists | 22 | 0.1% |
| Total | 28,440 | |

Source: Mental Health Plan NACT reports, 2020.

Substance Use Disorder Workforce

In 2020, the NACT captured data on 5,110 persons who provided SUD services in the county safety net SUD workforce in counties participating in DMC-ODS. Table 2 lists the numbers and percentages of persons by profession. Registered and certified SUD counselors constituted the largest shares of the county safety net SUD workforce in ODS counties (36 percent and 32 percent, respectively). The next largest group consisted of workers for whom no provider type was reported (10 percent).

Table 2.

Composition of the Safety Net SUD Workforce in California Counties Participating in DMC-ODS, 2020

| Occupation(s) | Number | Percentage |
|----------------------------------------------------------------|--------|------------|
| Registered SUD Counselors | 1,905 | 36% |
| Certified SUD Counselors | 1,702 | 32% |
| No Provider Type Reported | 519 | 10% |
| License-Eligible Providers Practicing Under Licensed Providers | 359 | 7% |
| LMFTs | 278 | 5% |
| Physicians | 193 | 4% |
| LCSWs | 133 | 3% |
| RNs and LVNs | 68 | 1% |
| Nurse Practitioners and Physician Assistants | 63 | 1% |
| LPCCs | 40 | 1% |
| Psychologists | 33 | 1% |
| Other Providers | 2 | <1% |
| Total | 5,110 | |

Source: DMC-ODS NACT reports, 2020.

Note: Total numbers of providers by occupation exceed the total number of providers in DMC-ODS networks because the NACT reports classify some providers as having two or more occupations.

Languages Spoken by Personnel in the County Behavioral Health Safety Net

The NACT provides information about the languages spoken by persons working in California's county behavioral health safety net. Table 3 lists the percentages of mental health and SUD providers in the system who speak languages other than English along with the percentages of Medi-Cal beneficiaries whose primary language is one of these languages. Data about Medi-Cal beneficiaries are displayed because the majority of persons served by the county behavioral health safety net are enrolled in Medi-Cal. The NACT data indicate that the percentages of mental health providers in the county behavioral health safety net who speak languages other than English are similar to those of Medi-Cal beneficiaries whose primary language is not English. For example, Spanish is the primary language of 28 percent of Medi-Cal beneficiaries and is spoken by 31 percent of county behavioral health safety net mental health professionals. In contrast, the percentages of SUD professionals in the county behavioral health safety net who speak languages other than English are lower than the percentage of Medi-Cal beneficiaries whose primary

language is not English. Seventeen percent speak Spanish, and less than one percent speak Chinese, Vietnamese, Tagalog, or Korean.

Table 3.

Languages Spoken by Mental Health and SUD Professionals in the County Behavioral Health Safety Net and Medi-Cal Beneficiaries

| Language | Percentage of Mental Health Professionals, 2020 | Percentage of SUD Professionals, 2020 | Percentage of Medi-Cal Beneficiaries, 2020 (Primary Language) |
|-------------|-------------------------------------------------------|------------------------------------------|---------------------------------------------------------------------|
| Spanish | 31% | 17% | 28% |
| All Chinese | 2% | <1% | 2% |
| Vietnamese | 1% | <1% | 2% |
| Armenian | <1% | <1% | 1% |
| All Other | 5% | 3% | 3% |

Source: Mental Health Plan NACT reports, 2020; DMC-ODS NACT reports, 2020; California Department of Health Care Services. Medi-Cal Monthly Enrollment Fast Facts, April 2022.

Notes: "All Chinese" includes Cantonese, Mandarin, and other Chinese languages. "All Other" includes American Sign Language, Arabic, Cambodian, Farsi, French, Hebrew, Hmong, Ilocano, Italian, Japanese, Korean, Lao, Mien, Other Non-English, Other Sign, Polish, Portuguese, Russian, Samoan, Tagalog, Thai, and Turkish.



California's Overall Behavioral Health Workforce

The workforce challenges facing California's county behavioral health safety net need to be considered in the context of the overall behavioral health workforce from which it draws workers. The supply, distribution, and characteristics of California's behavioral health workforce affect the county behavioral health safety net's ability to recruit and retain sufficient numbers of behavioral health providers from diverse backgrounds to meet the needs of the people in serves. This chapter presents data about California's behavioral health workforce from several sources and notes important gaps in the availability of data.

Numbers of Behavioral Health Professionals and Paraprofessionals

Table 4 displays estimates of the total numbers of behavioral health professionals statewide in occupations for which licensure is required. LMFTs account for the largest share of licensed professionals, followed by LCSWs. The number of psychiatrists is small relative to the numbers of LMFTs and LCSWs, but they play a particularly important role because they are one of the few types of clinicians authorized to prescribe medications used to treat mental health conditions and substance use disorders.

Table 4. Licensed Professionals Specializing in Behavioral Health, California, 2019 - 2020

| Profession | Number |
|-------------------------|---------|
| LMFTs | 39,838 |
| LCSWs | 26,055 |
| Psychologists | 17,452 |
| Registered Nurses | 9,689 |
| Psychiatric Technicians | 8,951 |
| Psychiatrists | 6,015 |
| LPCCs | 1,985 |
| Nurse Practitioners | 1,321 |
| Total | 111,306 |

Sources: Medical Board of California Mandatory Survey, 2020, private tabulation; California Department of Consumer Affairs, Public Information Licensee List, 2020; California Health Care Foundation, 2021.

For psychiatrists, these data reflect the numbers of physicians who responded to the Medical Board of California's mandatory survey and practiced in California, indicated that psychiatry is their primary specialty, and provided patient care at least one hour per week. For LCSWs, LMFTs, LPCCs, psychiatric technicians, and psychologists, data encompass all licensees whose mailing address is in California. These data may overestimate the workforce in these occupations because some licensees do not work in these professions or do not provide direct services to clients. In addition, many LCSWs practice in settings outside of behavioral health, such as adult protective services, child welfare, hospitals, and hospices.

The numbers of nurse practitioners (NPs) and registered nurses (RNs) working in behavioral health settings are derived from responses to surveys. Findings from a 2017 survey conducted for the California Board of Registered Nursing (BRN) indicate that 9.5 percent of NPs most frequently provide psychiatric/mental health services in their primary NP position (Spetz et al., 2018). A 2018 survey conducted for the BRN found that 3.2 percent of RNs most frequently provide care to people with psychiatric, mental health, or substance abuse needs (Spetz and Chu, 2020). These percentages were applied to 2019 data on the total numbers of licensed NPs and RNs in California to generate estimates of the numbers of NPs and RNs working in behavioral health. These

estimates suggest that 1,321 NPs primarily provide psychiatric/mental health services and 9,689 RNs primarily care for people with psychiatric, mental health, or substance abuse needs.

The behavioral health workforce also includes associate clinical social workers (ASWs), associate marriage and family therapists (AMFTs), associate professional clinical counselors (APCCs), and registered psychological assistants. These professionals have completed graduate degrees in their respective fields and are completing additional training and examinations required for licensure. They provide behavioral health services to clients under the supervision of licensed professionals in their fields. Table 5 lists the numbers of associate and registered behavioral health professionals in California in 2020 along with ratios of associate professionals to fully licensed professionals. In 2020, there were over 30,000 associates in these four professions, with ASWs and AMFTs accounting for the largest numbers of persons. Ratios of associates or registrants to licensed professionals vary substantially, ranging from 0.08 registered psychological associates per licensed psychologist to 1.77 APCCs per LPCC. The high ratio of associates to licensed professionals among clinical counselors probably reflects the fact that California only began licensing professional clinical counselors in the last decade.

Table 5.
Associate and Registered Behavioral Health Professionals, California, 2020

| Profession | Number | Percentage | Ratio to Licensed Professionals |
|--------------------------------------|--------|------------|------------------------------------|
| ASW | 13,573 | 44% | 0.52 |
| AMFT | 12,701 | 41% | 0.32 |
| APCC | 3,520 | 11% | 1.77 |
| Registered Psychological Associate | 1,332 | 4% | 0.08 |
| Total – All Associate and Registered | 31,126 | 100% | |

Sources: Medical Board of California Mandatory Survey, 2020, private tabulation; California Department of Consumer Affairs, Public Information Licensee List, 2020.

Additional types of licensed professionals, such as physician assistants (PAs), occupational therapists (OTs), and LVNs, work for behavioral health organizations, but their numbers cannot be estimated reliably because their licensing boards do not currently report data on the settings in which they practice. In addition, primary care physicians, PAs, and NPs are often the first point

of contact with the health care system for people with behavioral health conditions and are the main source of treatment for some people with SUD or mild mental health conditions.

California's behavioral health workforce also encompasses certified and registered SUD counselors and large numbers of persons who are neither licensed nor certified. These persons work in jobs with a wide range of titles, including peer support specialists, community mental health workers, care coordinators, case managers, rehabilitation counselors, and social services assistants. Estimates of the numbers of persons working in these types of jobs statewide are not available. The NACT data discussed previously provide partial information about the number of people working in these jobs in the county behavioral health safety net but group them into two broad categories ("mental health rehabilitation specialists" and "other qualified providers") and do not include information on whether or how persons with similar education and experience may be used outside the county safety net.

Geographic Distribution

California's behavioral health professionals are not evenly distributed across the state. Table 6 displays ratios of psychiatrists, psychologists, LCSWs, LMFTs, LPCCs, and psychiatric technicians per 100,000 population by region in 2020. The regions are defined by county and reflect the regions used by the California Health Interview Survey. Ratios per 100,000 population are displayed so that supplies of licensed behavioral health professionals can be compared across regions that have populations of different sizes. Ratios in green indicate the region with the highest ratio per capita and ratios in red indicate the region with the lowest ratio per capita. The Greater Bay Area had the highest ratios per capita for psychiatrists, psychologists, and LCSWs and the second highest ratios for LMFTs and LPCCs. The San Joaquin Valley had the lowest ratios for psychiatrists, psychologists, LCSWs, LMFTs, and LPCCs per capita. The Inland Empire had the second lowest ratios per capita for these professions. Psychiatric technicians were the only exception to this pattern. The highest ratio of psychiatric technicians per capita was in the San Joaquin Valley and the second highest ratio was on the Central Coast. This finding probably reflects the presence of large state corrections and mental health facilities in these regions that employ large numbers of psychiatric technicians.

Table 6.

Actively Licensed Behavioral Health Professionals per 100,000 Population by Region, 2020

| Region | Psychiatrists | Psychologists | LCSWs | LMFTs | LPCCs | Psych Techs |
|--------------------|---------------|---------------|-------|-------|-------|-------------|
| Central Coast | 14.7 | 47.0 | 61.7 | 144.2 | 5.2 | 52.5 |
| Greater Bay Area | 25.2 | 72.4 | 82.6 | 134.9 | 6.8 | 17.8 |
| Inland Empire | 9.4 | 16.1 | 39.4 | 61.5 | 3.8 | 41.3 |
| Los Angeles | 15.6 | 48.8 | 81.3 | 106.5 | 4.0 | 8.8 |
| Northern & Sierra | 7.8 | 21.5 | 64.3 | 98.8 | 5.4 | 12.6 |
| Orange | 11.0 | 40.0 | 56.6 | 105.9 | 5.6 | 15.1 |
| Sacramento Area | 14.9 | 37.1 | 71.6 | 97.0 | 5.6 | 12.3 |
| San Diego Area | 17.1 | 55.6 | 65.6 | 95.2 | 7.4 | 3.1 |
| San Joaquin Valley | 7.0 | 16.0 | 35.1 | 47.7 | 2.5 | 57.7 |
| California | 15.2 | 44.2 | 65.9 | 100.8 | 5.0 | 22.7 |

Sources: Medical Board of California Mandatory Survey, 2020, private tabulation; Department of Consumer Affairs, Public Information Licensee List; U.S. Census Bureau, Annual Estimates of the Resident Population for Counties in California: April 1, 2020 to July 1, 2021.

Acceptance of Health Insurance

Multiple national studies have found that psychiatrists are less likely to participate in health insurance plans' provider networks than physicians in other specialties (Benjenk and Chen, 2020; Benson et al., 2020; Bishop et al., 2014; Zhu et al., 2017). The most recent estimates available indicate that in 2014-2016, 26 percent of psychiatrists nationwide did not bill health plans. Their patients had to pay out-of-pocket and submit their own health insurance claims, if their health plans covered out-of-network psychiatrists (Bocutti and Neuman, 2017). Many psychiatrists also do not accept patients enrolled in Medicare or Medicaid (Anand et al., 2021; Bishop et al., 2014; Bocutti and Neuman, 2017). Limited evidence suggests that many non-physician behavioral health professionals also do not participate in health insurance networks (Zhu et al., 2017).

At present, no entity regularly collects and reports data on participation of California's behavioral health professionals in commercial health insurance, Medicare, or Medi-Cal. A one-time survey of psychiatrists conducted in 2015 found that 77 percent of psychiatrists had patients with commercial health insurance, 55 percent had Medicare patients, and 46 percent had Medi-Cal patients. The survey found that psychiatrists were also less likely to accept Medi-Cal patients

than physicians in other specialties. For example, 46 percent of psychiatrists accepted Medi-Cal patients versus 63 percent of family physicians (Coffman and Fix, 2017). Psychiatrists' low rate of participation in Medi-Cal compounds demand for psychiatrists' services in the county behavioral health safety net.

Demographic Characteristics

The following section provides data from two sources on the demographic characteristics of behavioral health professionals. Data regarding psychiatrists are from a mandatory survey that the Medical Board of California requires physicians (MDs) to complete when they renew their licenses every two years. Psychiatrists were identified based on a survey question that asks MDs to identify their primary specialty. Data for non-prescribing behavioral health professionals are from the American Community Survey (ACS), a survey of the general population administered by the U.S. Census Bureau. ACS data were analyzed because California's licensing boards for these professions do not require licensees to report their demographic characteristics. Licensing boards recently launched surveys that will request this information, but participation is voluntary and data are not yet available for analysis. No estimates are reported for NPs and PAs who provide behavioral health services because the ACS does not collect data on NPs' and PAs' specialties.

Several important caveats must be kept in mind when interpreting the ACS data. First, the terminology the ACS uses to identify behavioral health professionals is not fully consistent with the terminology that California's licensing boards use. Specifically, the ACS does not have a classification labeled "Professional Clinical Counselors." The classification "Mental Health Counselors" was used as a proxy. Second, the ACS asks people to self-report their occupations and does not check whether they have the level of education required for licensure. To address this limitation, analyses were limited to people with the minimum level of education required for licensure in each profession in California (i.e., doctoral degree for psychologists; master's degree for marriage and family therapists, mental health counselors, and social workers; and some college for SUD counselors³). Third, the ACS does not ask respondents to indicate whether they are licensed or certified to practice in their professions. Thus, the estimates capture people who are working in positions in their fields that do not require licensure. For example, estimates for social workers

³ Some SUD counselors have associate degrees but this is not a requirement for certification.

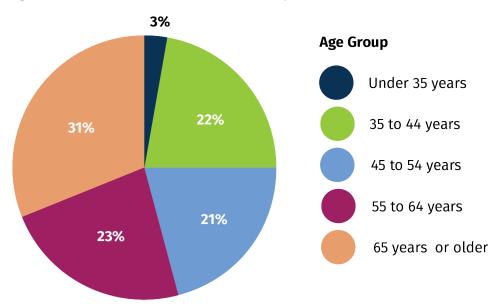
include social workers who do not provide psychotherapy and who work in settings outside of behavioral health, such as those that work in discharge planning for general acute care hospitals.

Age Distribution

The age distribution of behavioral health professionals varies substantially across professions. Figure 1 presents data on the age distribution of psychiatrists who responded to the Medical Board's mandatory survey in 2018 or 2019 and provided at least one hour of patient care per week. These data indicate that 31 percent of psychiatrists who provide patient care in California are age 65 years or older and 23 percent are age 55 to 64 years. Many of these psychiatrists are likely to retire or reduce their work hours within the next decade. Twenty-six percent of psychiatrists who provide at least 20 hours of patient care per week are age 65 years or older (data not shown).

Figure 1.

Age Distribution of Active Patient Care Psychiatrists, California, 2018-2019



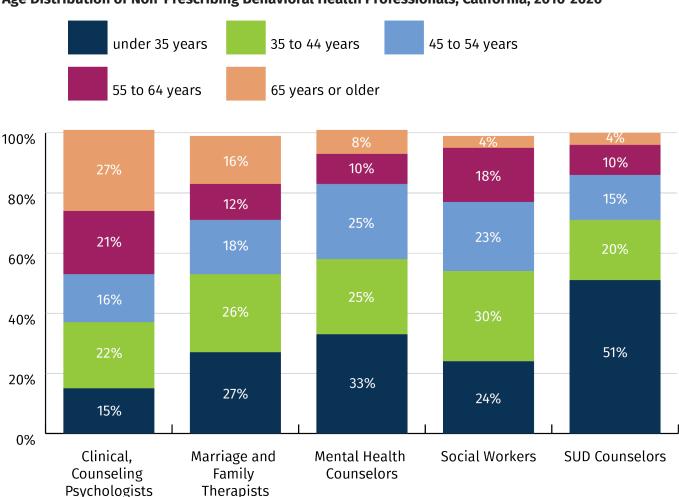
Source: Medical Board of California Mandatory Survey, private tabulation.

Figure 2 displays estimates of the age distribution of psychologists, marriage and family therapists, mental health counselors, social workers, and SUD counselors. Twenty-seven percent of psychologists and 16 percent of marriage and family therapists are age 65 years or older. Like psychiatrists, many of them will probably retire or reduce their work hours within the next decade. In contrast, only four percent of SUD counselors are age 65 years or older. Fifty-one percent of SUD counselors are under age 35 years, which suggests that many leave the profession

or transition to other behavioral health professions (e.g., complete additional education so that they can become an LCSW).

Figure 2.

Age Distribution of Non-Prescribing Behavioral Health Professionals, California, 2016-2020



Note: Percentages may not sum to 100 percent due to rounding.

Source: American Community Survey, 5-Year Estimates, 2016-2020.

Race/Ethnicity

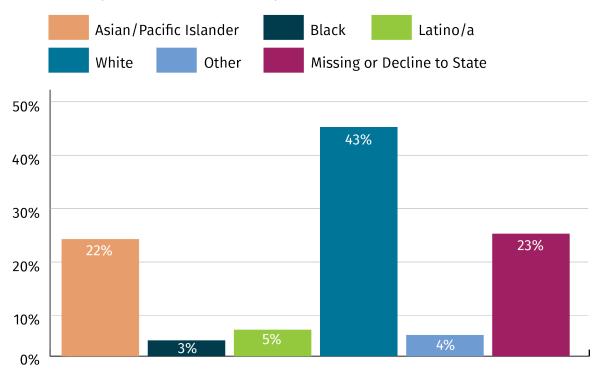
The distribution of California's behavioral health professionals across racial/ethnic groups does not reflect the state's population (see Figures 3 and 4). Latino(a)s are underrepresented in all behavioral health professions except SUD counselors relative to their share of California's population (39 percent) and are most underrepresented among psychiatrists and psychologists where they constitute only five percent and twelve percent of professionals, respectively.

Blacks are also underrepresented among psychiatrists and psychologists but are represented at or above parity among marriage and family therapists, mental health counselors, social workers, and SUD counselors. In contrast, Asians are well-represented among psychiatrists but underrepresented in other behavioral health professions, where they constitute 8 percent to 12 percent of professionals versus 15 percent of the population.

These data have two major limitations. First, 23 percent of psychiatrists did not report their race/ ethnicity to the Medical Board (see Figure 3). Although the Medical Board's survey is mandatory, physicians do not have to answer all questions on the survey. The actual representation of racial/ ethnic groups among physicians may differ from the data presented. In addition, the ACS's sample size for behavioral health professionals in California is small, which prevents disaggregating them into specific Asian ethnic groups or assessing whether there are differences in the racial/ethnic composition of the workforce across California's regions.

Figure 3.

Race/Ethnicity of Active Patient Care Psychiatrists, California, 2018-2019



Source: Medical Board of California Mandatory Survey, private tabulation.

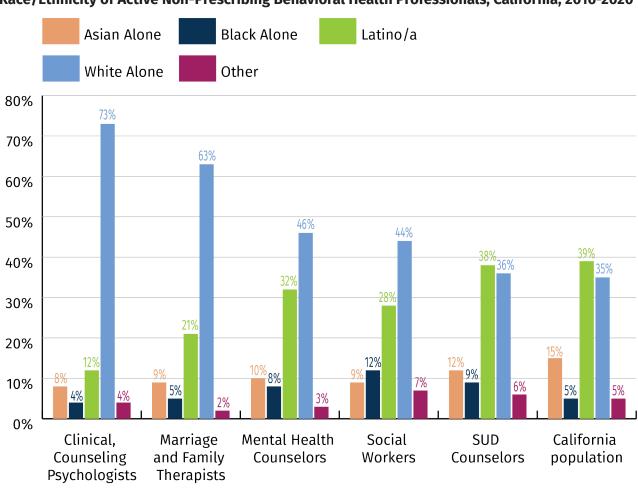


Figure 4.

Race/Ethnicity of Active Non-Prescribing Behavioral Health Professionals, California, 2016-2020

Note: Percentages may not sum to 100 percent due to rounding.

Source: American Community Survey, 5-Year Estimates, 2016-2020. U.S. Census Bureau, Decennial Census, 2020.

Languages Spoken

The linguistic diversity of behavioral health professionals also does not reflect the linguistic diversity of California's population. Figure 5 displays data on the languages spoken by psychiatrists. Forty-one percent only speak English. Twelve percent speak Spanish and eight percent speak one of the four most frequently spoken Asian languages in California (i.e., Cantonese/Mandarin, Vietnamese, Tagalog, and Korean).

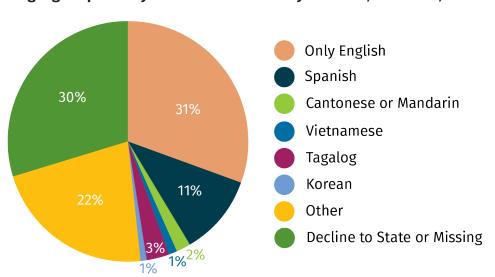


Figure 5.

Languages Spoken by Active Patient Care Psychiatrists, California, 2018-2019

Figure 6 presents data from the ACS indicating that, with the exception of psychologists, the percentage of Spanish speakers is higher among all type of non-prescribing behavioral health professionals than among psychiatrists. Among other professions, the percentage of Spanish speakers ranges from 17 percent of marriage and family therapists to 28 percent of SUD counselors. Percentages of non-prescribing behavioral health professionals that speak any other non-English language range from seven percent of mental health counselors to twelve percent of psychologists.

As with data on race/ethnicity, these data on languages have several major limitations. First, 30 percent of psychiatrists did not respond to the question on the Medical Board's mandatory survey regarding languages spoken. The actual percentage of physicians who speak languages other than English may differ from the data presented. In addition, the sample sizes for California behavioral health professionals in the ACS are small, which prevents disaggregating the percentages that speak a non-English language other than Spanish. Third, the Medical Board and ACS estimates may overstate the percentages of behavioral health professionals who can provide services to clients in languages other than English because both rely on self-reported data and neither asks respondents if they speak the language when interacting with clients.

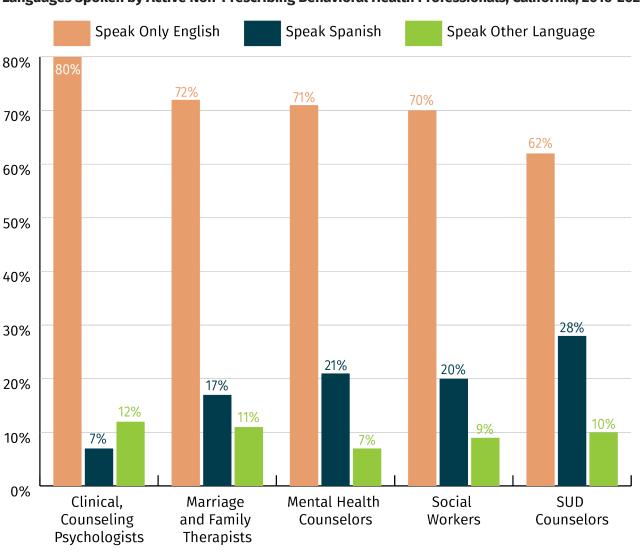


Figure 6.

Languages Spoken by Active Non-Prescribing Behavioral Health Professionals, California, 2016-2020

Note: Percentages may not sum to 100 percent due to rounding.

Source: American Community Survey, 5-Year Estimates, 2016-2020.

Gender

Women constitute over two thirds of persons in all behavioral health professions in California except psychiatry (see Figure 7). The percentage of women was highest among social workers (81 percent). The percentages of behavioral health professionals who are transgender or non-binary is unknown because neither the Medical Board nor the ACS survey instrument provides any response options other than male and female.

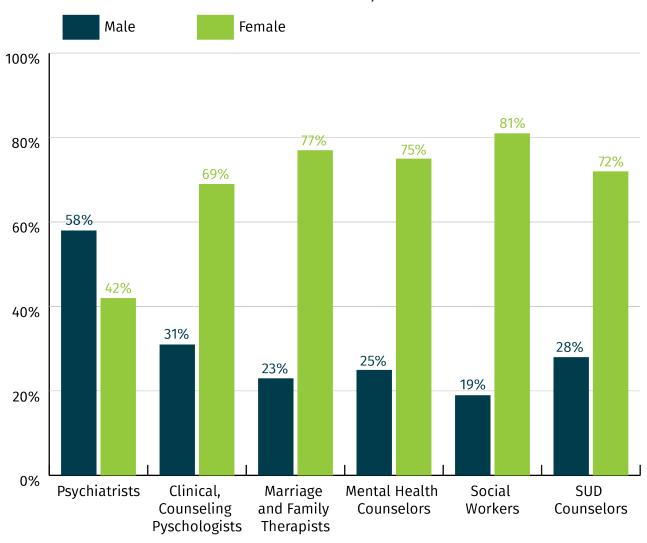


Figure 7.

Gender of Behavioral Health Professionals in California, 2016-2020

Sources: Medical Board of California Mandatory Survey, 2020, private tabulation; American Community Survey, 5-Year Estimates, 2016-2020.

Implications for the County Behavioral Health Safety Net

Findings from this analysis of licensing board and ACS data suggest the following implications for the county behavioral health safety net:

Recruitment and retention of behavioral health professionals in the Inland Empire and San
Joaquin Valley regions will be especially difficult given the competition for low supplies of
licensed professionals relative to the populations of these regions.

- Competition for newly licensed behavioral health professionals, especially psychiatrists, psychologists, and marriage and family therapists, will intensify as many existing licensees are over or near retirement age.
- The pool of licensed behavioral health professionals is overwhelmingly female, with the exception of psychiatry.
- The underrepresentation of Latino(a)s, Blacks, and Asians among currently licensed behavioral
 health professionals and associates in California constrains the county behavioral health
 safety net's ability to recruit and retain a workforce that reflects the racial/ethnic diversity of
 the people it serves.
- Similarly, there is a limited supply of licensed behavioral health professionals who speak languages other than English, which heightens competition for bilingual professionals and limits access to services for people who do not speak English well.



California's Behavioral Health Professions Education Pipeline

The size and characteristics of the pipeline of new graduates of behavioral health professions education programs in California also affect the county behavioral health safety net's ability to recruit and retain workers. As discussed in the previous chapter, many behavioral health professionals in California are at or near retirement age. The degree of difficulty agencies in the county behavioral health safety net face in replacing retiring professionals depends in large part on the number of new graduates available relative to openings at these agencies and other employers. The degree of racial/ethnic and linguistic diversity among new graduates impacts county safety net agencies' ability to increase the racial/ethnic and linguistic diversity of their workforce.

Estimates of trends in the number of graduates of educational programs for licensed behavioral health professionals were obtained from the Accreditation Council for Graduate Medical Education (ACGME) and the Integrated Postsecondary Education Data System (IPEDS). The ACGME

reports data on the numbers of medical school graduates entering general psychiatry residency programs and subspecialty fellowship programs on an annual basis. (All psychiatrists are required to graduate from medical school and complete a residency program; some also complete a fellowship in a sub-specialty of psychiatry.) IPEDS contains information on graduates of degree and certificate programs offered by all colleges and universities that participate in federal financial aid programs. Trends in number of degrees awarded and demographic characteristics were tracked for graduates of the following types of degree programs:

- · Doctoral and master's degrees in clinical, counseling, and applied psychology
- Master's degrees in marriage and family therapy
- Master's degrees in mental health counseling
- Master's and bachelor's degrees in social work
- Associate degree and certificate programs for psychiatric technicians
- Associate degree and certificate programs in SUD counseling
- Associate degree and certificate programs in human services.

To obtain licensure in California, psychologists must complete a doctoral degree and social workers must complete a master's degree. Persons seeking licensure as a marriage and family therapist or professional clinical counselor may complete one of three types of master's degree programs: clinical or counseling psychology, marriage and family therapy, or mental health counseling. Graduates of bachelor's degree programs in social work and associate degree and certificate programs in human services are not eligible for licensure but are included in this analysis because people with these credentials work in the county behavioral health system and provide services for which licensure or certification is not required.

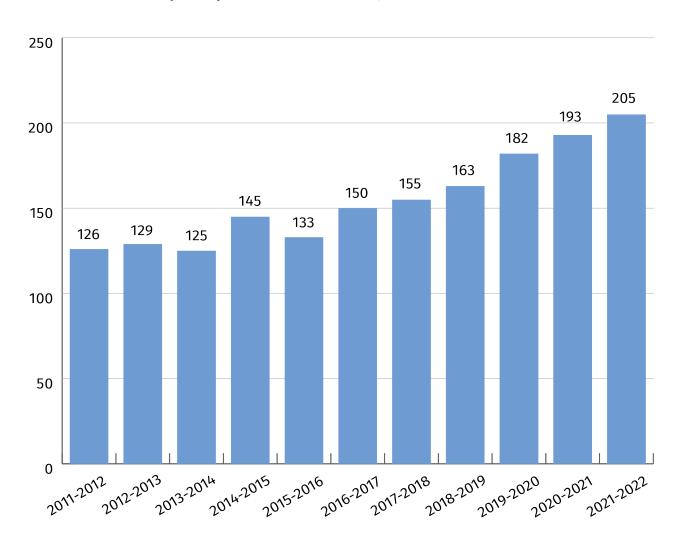
The ACGME and IPEDS data have several important limitations. First, the ACGME does not report data on the gender and race/ethnicity of active residents by specialty at the state level and does not report any data about the languages residents speak. The gender and race/ethnicity of residents in psychiatry programs in California must be inferred from data on psychiatry residents nationwide. Second, IPEDS does not collect data on graduates' age, gender, or ability to speak a language other than English. Third, the IPEDS data only include educational programs at colleges and universities that participate in federal government financial aid programs. They do not include certificate programs offered by entities other than colleges and universities.

Trends in Numbers of Graduates of Behavioral Health Professions Education Programs

Figure 8 plots the trend in the number of first year residents (i.e., Post-Graduate Year 1 residents) in general psychiatry residency programs in California from the 2011-2012 to the 2021-2022 academic year. The number of first year residents increased by 63 percent during this time period, from 126 to 205 residents. While this trend is encouraging, psychiatrists account for only six percent of the mental health workforce in the county behavioral health safety net.

Figure 8.

Number of 1st Year Psychiatry Residents in California, 2011-2012 to 2021-2022



Source: Accreditation Council for Graduate Medical Education, Data Resource Book, 2011-2012 to 2021-2022.

In addition to residency programs in general psychiatry, California has 13 accredited sub-specialty fellowship programs in child and adolescent psychiatry and six in consult-liaison psychiatry. Data from the National Resident Matching Program⁵ show 54 first year positions available in child and adolescent psychiatry fellowship programs in California in 2022.

Figure 9 displays IPEDS data on trends in the numbers of graduates of doctoral and master's degree programs in behavioral health professions in California from 2016 to 2020. Master's degree programs in social work (i.e., MSW programs) account for the largest number of graduates,⁶ followed by master's degree programs in clinical or counseling psychology and master's degree programs in marriage and family therapy or mental health counseling.

Trends in numbers of graduates vary widely across these four types of graduate degree programs. Trends in graduates of master's degree programs are more important for the county behavioral health safety net because licensed and associate clinical social workers, marriage and family therapists, and professional clinical counselors account for 43 percent of personnel who provide mental health services in the safety net, whereas psychologists account for only 3 percent of the workforce (see Chapter 1). The number of graduates of MSW programs decreased by three percent, from 3,380 to 3,290 percent between 2016 to 2020. The total number of graduates of all master's degree programs leading to licensure as a marriage and family therapist or a professional clinical counselor (i.e., master's degree programs in clinical or counseling psychology, marriage and family therapy, or mental health counseling) increased by three percent, from 3,131 to 3,220 persons. In contrast, number of graduates of doctoral programs in clinical psychology increased by 43 percent from 2016 to 2020, rising from 239 to 341 degrees.

The decrease in graduates of MSW programs heightens competition between the county behavioral health safety net and other employers of licensed clinical social workers. The modest increase in graduates of programs for marriage and family therapists and professional clinical counselors probably is not sufficient to replace all persons in these professions who are at or near retirement age.

⁴ Consult/liaison psychiatrists specialize in providing mental health services to people who have physical health needs.

⁵ The National Resident Matching Program is a uniform process by which applicants and residency and fellowship programs can select one another. Applicants and residency and fellowship programs rank one another. "Matches" are made by comparing rank order lists of applicants and residency program directors.

⁶ MSW graduates include graduates of a large online program at the University of Southern California that enrolls persons from across the entire United States, some of whom may not be interested in job opportunities in California.

 Doctorate Clinical Psychology Master Clinical/Counseling Psychology Master MFT or MH Counseling Master Social Work

Figure 9.

Graduates of Doctoral and Master's Degree Programs in Behavioral Health Professions in California, 2016 to 2020

Source: Integrated Postsecondary Education Data System

Figure 10 displays IPEDS data on graduates of certificate, associate degree, and bachelor's degree programs in behavioral health occupations from 2016 to 2020. Graduates of bachelor's degree programs in social work account for the largest number of graduates followed by graduates of SUD counseling and human services programs. As with graduate programs in behavioral health professions, trends in numbers of graduates vary substantially across these programs. The number of graduates of SUD counseling programs decreased by 21 percent, from 1,284 to 1,020, raising concerns about the availability of SUD counselors to meet the demand for SUD counseling. In contrast, the number of graduates of bachelor's degree programs in social work grew by 22 percent, from 1,199 to 1,465 persons.

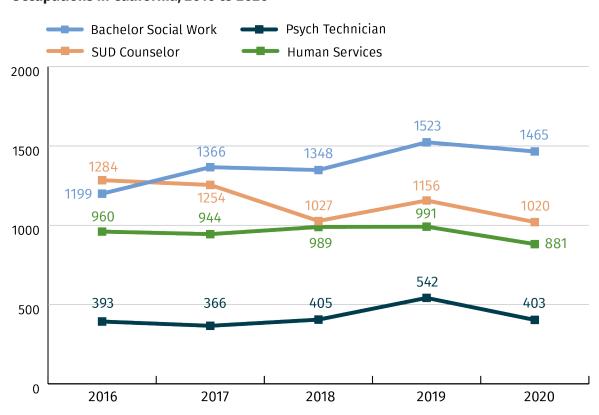


Figure 10.

Graduates of Certificate, Associate Degree, and Bachelor's Degree Programs in Behavioral Health
Occupations in California, 2016 to 2020

Source: Integrated Postsecondary Education Data System

The California Board of Registered Nursing collects data on the numbers of graduates of nurse practitioner (NP) education programs by specialty. Between 2011-2012 and 2020-2021, the number of graduates of master's level psychiatric mental health nurse practitioner (PMHNP) programs increased by 149 percent, from 39 to 136 graduates. An additional 110 persons graduated from doctoral level PMHNP programs in 2020-2021 (Blash and Spetz, 2022).

Demographic Characteristics

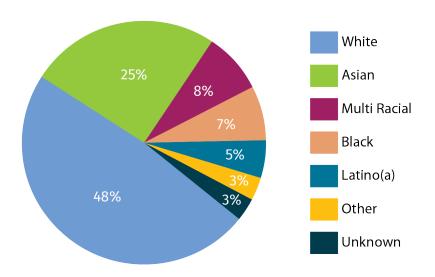
Limited data are available regarding the demographic characteristics of graduates of behavioral health professions education programs. Gender and race/ethnicity are the only demographic characteristics for which data are publicly available at the state level. For psychiatrists, even these characteristics must be inferred from national data because the ACGME does not report state level data on residents' demographic characteristics.

Race/Ethnicity

The racial/ethnic diversity of graduates of behavioral health professions education programs impacts the ability of the county behavioral health safety net to increase the racial/ethnic diversity of its workforce. Figure 11 displays data on the race/ethnicity of psychiatry residents nationwide during the 2020-2021 academic year. Consistent with findings for psychiatrists in California (see previous chapter), Latino(a)s were substantially underrepresented among psychiatry residents nationwide relative to their share of California's population (5 percent versus 39 percent). The percentage of Blacks was slightly higher among psychiatry residents nationwide than in California's population (7 percent versus 5 percent) and similar to the percentage of Blacks served in the county behavioral health safety net (8 percent for adults and 7% for children and youth).

Figure 11.

Psychiatry Residents by Race/Ethnicity, United States, 2020-2021



Source: Accreditation Council for Graduate Medical Education, 2021.

Table 7 presents data on the race/ethnicity of graduates of behavioral health professions education programs in California in 2020. Consistent with findings for practicing professionals, percentages in green indicate the occupation with the highest percentage of graduates from a racial/ethnic group and percentages in red indicate the occupation with the lowest percentage of graduates from a racial/ethnic group. Asians are underrepresented among graduates of all four types of graduate degree programs in behavioral health and all types of certificate, associate,

and bachelor's degree programs except psychiatric technician programs relative to their share of California's population (15 percent). Latino(a)s are underrepresented among graduates of all four types of graduate programs except MSW programs, where they accounted for 48 percent of graduates in 2020. Latino(a)s are also well-represented among graduates of certificate, associate degree, and bachelor's degree programs. Across all types of behavioral health professions education programs, the percentage of graduates who are Black is larger than the percentage of Blacks in California's population.

Table 7.

Graduates of Behavioral Health Professions Educational Programs by Race/Ethnicity, California, 2020

| Type of Education Program | Asian | Black | Latino(a) | White | Two or More Races | Other | Unknown |
|---------------------------------------------------------------------------|-------|-------|-----------|-------|----------------------|-------|---------|
| Doctorate Clinical Psychology | 12% | 7% | 14% | 53% | 5% | 1% | 8% |
| Master's Clinical or Counseling Psychology | 6% | 9% | 20% | 45% | 6% | 1% | 12% |
| Master's Marriage and Family Therapy or Mental Health Counseling | 7% | 11% | 22% | 42% | 6% | 1% | 12% |
| Master's Social Work | 8% | 11% | 47% | 23% | 3% | 1% | 8% |
| Bachelor's Social Work | 9% | 6% | 55% | 19% | 3% | 1% | 8% |
| Certificate or Associate Degree Psychiatric Technician | 19% | 15% | 42% | 19% | 3% | 1% | 1% |
| Certificate or Associate Degree SUD Counseling | 2% | 14% | 40% | 37% | 4% | 1% | 3% |
| Certificate or Associate Degree Human Services | 5% | 14% | 51% | 23% | 4% | 1% | 2% |

Source: Integrated Postsecondary Education Data System

Gender

Graduates of all types of behavioral health professions education programs are predominantly female with the exception of psychiatry. National data on first year psychiatry residents in the 2020-2021 academic year indicate that 49 percent were female and 50 percent were male. The

gender of 1 percent of first year psychiatry residents was unknown. Table 8 displays data on the gender of graduates of educational programs for other behavioral health professions in California in 2020. In all four types of graduate degree programs, 80 percent or more of graduates in 2020 were female. Among undergraduate programs, the percentage of 2020 graduates who were female ranged from 55 percent of graduates of certificate or associate degree programs in SUD counseling to 87 percent of graduates of certificate or associate degree programs in human services.

Table 8.

Graduates of Behavioral Health Professions Educational Programs by Gender, 2020

| Type of Education Program | Total Graduates | Percent Female | Percent Male |
|---------------------------------------------------------------------------|-----------------|----------------|--------------|
| Doctorate Clinical Psychology | 341 | 82% | 18% |
| Master's Clinical or Counseling Psychology | 2,024 | 80% | 20% |
| Master's Marriage and Family Therapy or Mental Health Counseling | 1,196 | 84% | 16% |
| Master's Social Work | 3,290 | 84% | 16% |
| Bachelor's Social Work | 1,465 | 87% | 13% |
| Certificate or Associate Degree Psychiatric Technician | 403 | 67% | 33% |
| Certificate or Associate Degree SUD Counseling | 1,020 | 55% | 45% |
| Certificate or Associate Degree Human Services | 881 | 87% | 13% |

Source: Integrated Postsecondary Education Data System

Preparation of New Graduates for Practice in the County Behavioral Health Safety Net

Multiple stakeholders commented that they do not believe that all new graduates are well prepared to work in the county behavioral health safety net. Some stakeholders stated that some new graduates were not prepared for the field-based work required to serve clients with serious mental illness, especially those who are homeless, justice involved, or dually diagnosed

with mental health conditions and SUD. Others indicated that, aside from SUD counselors, new graduates often do not have sufficient training in SUD to effectively serve people with SUD.

Ownership of Institutions that Educate Behavioral Health Professionals

Information about the ownership of higher education institutions that educate behavioral health professionals is important for identifying which types of institutions have educational programs that could be expanded to meet the needs of the county behavioral health safety net. IPEDS data classify the ownership of higher education institutions into three categories: public institutions, private not-for-profit institutions, and private for-profit institutions.⁷ In California, public higher education institutions encompass community colleges, the California State University (CSU), and the University of California (UC).

The distribution of educational programs and graduates across the three types of higher education institutions varies substantially across different types of behavioral health professions education programs (see Figure 12). Most social work programs and most programs that prepare psychiatric technicians and SUD counselors are in the public sector; most social work programs are at CSU or UC campuses, and most psychiatric technician and SUD counselor programs are at community colleges. In contrast, most doctoral programs in psychology and most master's degree programs that prepare people for licensure as marriage and family therapists or professional clinical counselors are located at private, not-for-profit institutions. With the exception of graduates of MSW programs, the distribution of graduates across the three types of higher education institutions was similar to the distribution of programs. Whereas 80 percent of MSW programs were at public institutions (CSU and UC campuses) in 2020, 58 percent of recipients of MSW degrees graduated from a public institution. This difference is due to a very large online MSW program at the University of Southern California.

⁷ Psychiatry residency programs are not included in these analyses because they are usually sponsored by hospitals and not by universities.

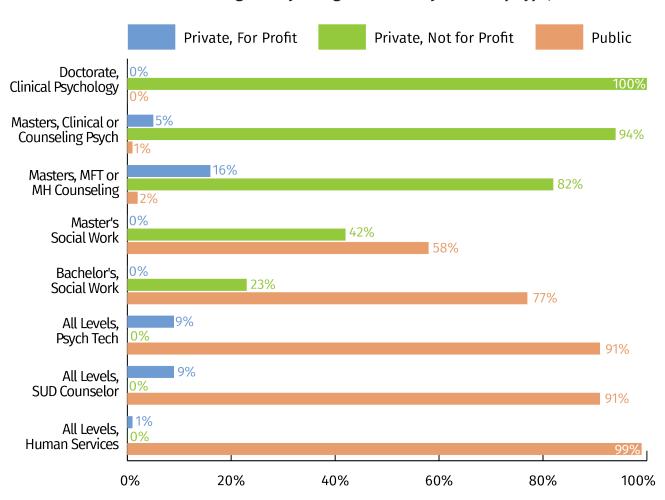


Figure 12.

Behavioral Health Professions Programs by College or University Ownership Type, 2020

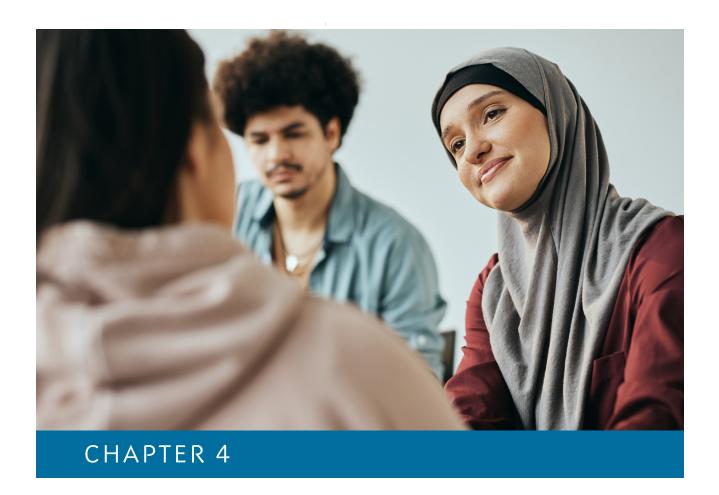
Source: Integrated Postsecondary Education Data System

Implications for the County Behavioral Health Safety Net

Findings from this analysis of ACGME and IPEDS data suggest the following implications for the county behavioral health safety net:

- The numbers of graduates of master's degree programs that prepare people for licensure as
 clinical social workers, marriage and family therapists, and professional clinical counselors are
 not adequate to replace professionals in the county behavioral health safety net who are at or
 near retirement age.
- The decrease in graduates of SUD counseling programs will make it more difficult for the county behavioral health safety net to recruit and retain SUD counselors.

- The underrepresentation of Asians among new graduates except psychiatrists constrains the county behavioral health safety net's ability to recruit and retain Asian behavioral health professionals.
- Improving career ladders for people with undergraduate education in behavioral health
 professions could be an effective strategy for increasing the numbers of Latino(a)s among
 psychiatrists, psychologists, marriage and family therapists, and professional clinical
 counselors, because they are well represented among persons completing undergraduate
 programs that prepare people to work in the behavioral health sector.
- Increasing the number of persons from diverse backgrounds who complete education in the behavioral health professions will necessitate working with different types of higher education institutions (public and private) depending on the profession of interest.



County Behavioral Health Safety Net Recruitment and Retention Challenges

In 2021, a survey was distributed to 57 county and 2 city behavioral health safety net agencies⁸ (hereafter referred to as county behavioral health agencies) and to community-based organizations (CBOs) that contract with county and city agencies to provide behavioral health services to identify their recruitment and retention needs. CBHDA distributed the survey to the county behavioral health agencies. The California Alliance of Child and Family Services, the California Association of Alcohol and Drug Addiction Program Executives, the California Association of Social Rehabilitation Agencies, and the California Council of Community Behavioral Health Agencies distributed the survey to CBOs that are members of their organizations.

⁸ Sutter and Yuba counties provide behavioral health services through a single agency. The City of Berkeley and the Tri-Cities (Claremont, Ontario, Pomona) operate behavioral health agencies that are independent of their counties.

The response rate for county behavioral health agencies was 98 percent. One hundred and twenty CBOs responded to the survey, including 76 that provide mental health services and 28 that provide SUD services. The response rate for the CBOs is unknown.

In addition, key informant interviews were conducted with 23 leaders of county behavioral health agencies, CBOs, and statewide organizations that represent them to obtain qualitative information regarding recruitment and retention challenges. Information was also gathered through meetings with the project's advisory group and other stakeholders from county behavioral health agencies, CBOs, professional associations, and state government.

The survey posed separate questions regarding recruitment and retention of personnel providing mental health and SUD services because these services are typically provided by separate units within agencies or, in the case of Los Angeles, separate departments within a large health agency.

An important limitation of the survey is that respondents were only asked about their perceptions regarding recruitment and retention of behavioral health workers. Respondents in different counties may have faced similar recruitment or retention challenges but had different perceptions about how difficult these challenges were. Data were not collected on vacancy rates or turnover rates, two standardized metrics for assessing recruitment and retention challenges.

Recruitment of Behavioral Health Professionals in California's Public System

Findings from the survey indicate that both county behavioral health agencies and CBOs are facing recruitment challenges and that for the most part they face similar barriers to recruitment.

Occupations

County behavioral health agencies were asked to rate the degree of difficulty they faced in recruiting personnel in specific occupations on a five-point Likert scale ranging from very difficult to very easy. Table 9 indicates the percentages of county behavioral health agencies reporting that they found it difficult or very difficult to recruit personnel in each of the occupations listed. Occupations are ranked by the percentages of county agencies reporting difficulty recruiting personnel to provide mental health services. Some occupations are labeled "n/a" (i.e., "not applicable) for mental health or SUD services because units providing either of these types of services typically do not employ people in these occupations.

With regard to mental health services, 90 percent or more of county behavioral health agencies reported difficulty recruiting LCSWs, psychiatrists, and LMFTs. Between 70 percent and 90 percent had difficulty recruiting registered nurses (RNs), LPCCs, and psychologists. With regard to SUD services, most county behavioral health agencies also experienced difficulty recruiting SUD counselors. Sixty-three percent had difficulty recruiting certified SUD counselors and 57 percent had difficulty recruiting registered SUD counselors. For both mental health and SUD services, county behavioral health agencies were least likely to report difficulty recruiting community health workers and peer providers.

Responses from CBOs indicate that although most found it challenging to recruit psychiatrists, LCSWs, LMFTs, and LPCCs to provide mental health services, the percentages that had difficulty were smaller than the percentages among county behavioral health agencies. In contrast, CBOs were more likely to have had difficulty recruiting certified SUD counselors (86 percent vs. 63 percent). CBOs were also more likely than county agencies to report having difficulty recruiting mental health rehabilitation specialists, care coordinators/case managers, community health workers, and peer providers.

Table 9. Percentage of County Behavioral Health Agencies that Had Difficulty Recruiting Personnel, 2021

| | Mental Heal | th Services | SUD Se | ervices |
|-------------------------------------------------------------|-------------|-------------|----------|---------|
| Occupation | Counties | CB0s | Counties | CBOs |
| LCSWs | 95% | 82% | 78% | 68% |
| Psychiatrists and Other Physicians | 93% | 64% | 61% | 43% |
| LMFTs | 89% | 84% | 80% | 68% |
| Registered Nurses | 77% | 51% | 54% | 32% |
| LPCCs | 73% | 63% | 72% | 54% |
| Psychologists | 70% | 41% | 46% | 39% |
| Psychiatric Mental Health Nurse Practitioners | 68% | 54% | n/a | n/a |
| Other Nurse Practitioners and Physician Assistants | 63% | 41% | 59% | 46% |
| Certified SUD Counselors | n/a | n/a | 63% | 86% |
| Registered SUD Counselors | n/a | n/a | 57% | 61% |
| Licensed Vocational Nurses | 57% | 50% | 52% | 61% |
| Psychiatric Technicians | 47% | 32% | 28% | 25% |
| Case Workers/ Care Coordinators | 46% | 54% | 35% | 46% |
| Mental Health Rehabilitation Specialists | 43% | 51% | n/a | n/a |
| Peer Personnel | 33% | 47% | 24% | 36% |
| Community Health Workers | 18% | 33% | 19% | 29% |

Source: Survey of county behavioral health agencies and CBOs, 2021.

Specialties and Programs

County behavioral health agencies were also asked to indicate whether they faced challenges with recruitment of personnel who specialize in treating clients with specific mental health or SUD needs. Eighty-two percent of county behavioral health agencies had difficulty recruiting personnel with specialized training or experience in treating specific mental health conditions and 50 percent had difficulty recruiting personnel with specialized expertise in specific types of SUD treatment. The most frequently mentioned specialties were treatment of adolescents, people with co-occurring mental health and SUD needs, people with eating disorders, and people engaged in the criminal justice system who need forensic psychology services. Findings for CBOs were similar to findings for county behavioral health agencies.

In addition, county behavioral health agencies reported challenges with recruitment of personnel to work in specific mental health or SUD programs. Eight-six percent of county agencies had difficulty recruiting staff to work in specific mental health programs and 43 percent experienced difficulty with recruitment of staff for specific SUD programs. The most frequently mentioned programs were crisis care (especially 24/7 care), forensic services, full service partnership programs, and narcotics treatment programs. Findings for CBOs were similar to findings for county behavioral health agencies.

Demographic Characteristics

The survey also asked respondents about challenges they faced with regard to recruiting personnel whose demographic characteristics reflect the diversity of clients served by the county behavioral health safety net.

Most county behavioral health agencies had difficulty recruiting sufficient numbers of Native American, Asian, Black, Latino(a), and Native Hawaiian/Pacific Islander behavioral health professionals to match clients' race/ethnicity (see Figure 13). Across all five racial/ethnic groups, 70 percent or more of county agencies indicated that it was difficult or very difficult to recruit sufficient personnel to provide SUD services. For mental health services, the percentage having difficulty ranged from 64 percent for Latino(a)s to 77 percent for Blacks and Native Americans.

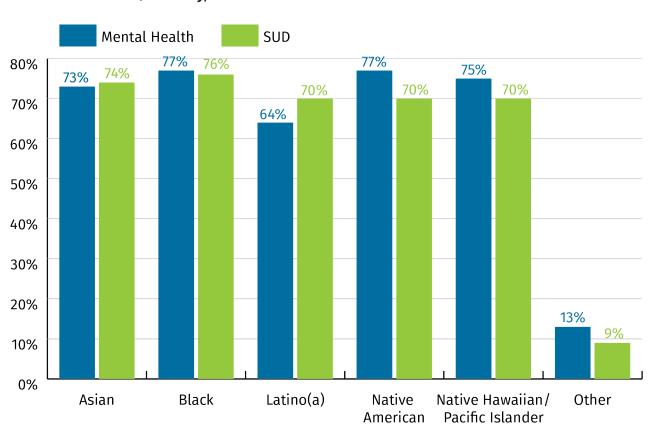


Figure 13.

Percentage of County Behavioral Health Agencies that Had Difficulty Recruiting Personnel who Match Clients' Race/Ethnicity, 2021

Source: Survey of county behavioral health agencies and CBOs, 2021.

Most county behavioral agencies also had difficulty recruiting sufficient numbers of bilingual personnel, especially Spanish speakers (see Figure 14). Seventy-nine percent had difficulty recruiting sufficient numbers of Spanish speakers to provide mental health services to Spanish-speaking clients, and 91 percent had difficulty recruiting sufficient numbers of Spanish speakers to provide SUD services to Spanish-speaking clients. Some county agencies also had difficulty recruiting sufficient personnel who speak Asian languages. Percentages of county agencies having difficulty recruiting personnel who speak Asian languages to provide mental health services ranged from 14 percent (Mandarin) to 23 percent (Hmong and Vietnamese). For SUD services, the range was from 14 percent (Mandarin) to 24 percent (Hmong).

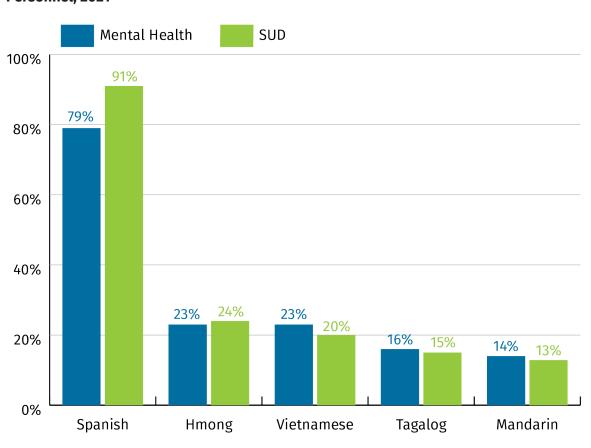


Figure 14.

Percentage of County Behavioral Health Agencies that Had Difficulty Recruiting Bilingual

Personnel, 2021

Source: Survey of county behavioral health agencies and CBOs, 2021.

Many county behavioral health agencies also had difficulty recruiting sufficient numbers of lesbian, gay, bisexual, transgender, and queer (LGBTQ) behavioral health professionals. Fifty-four percent had difficulty recruiting sufficient numbers of LGBTQ personnel to provide mental health services and 57 percent had difficulty recruiting enough LGBTQ personnel to provide SUD services.

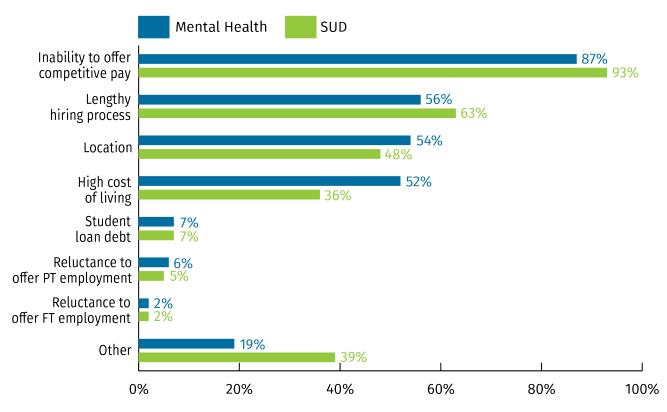
Barriers to Recruitment

The survey also asked county behavioral health agencies to identify the three most important barriers to recruitment of personnel from a list of eight possible response options. The response options were based on input from the project's advisory committee, directors of county behavioral health agencies, representatives of CBOs, and other stakeholders. These barriers are in addition to challenges associated with the limited growth in numbers of graduates of behavioral

health professions education programs. Figure 15 shows the percentages of county behavioral health agencies indicating that a particular factor was one of their agency's top three barriers to recruiting personnel to provide mental health or SUD services.

Figure 15.

Percentages of County Behavioral Health Agencies Identifying Barriers to Recruitment, 2021



Source: Survey of county behavioral health agencies and CBOs, 2021.

Almost all county behavioral health agencies reported that inability to offer competitive pay was one of the three most important barriers to recruiting mental health personnel (87 percent) and SUD personnel (93 percent). Over 50 percent of county agencies also cited lengthy hiring process, location (i.e., perceived their county as a less desirable place to live than other parts of California), and high cost of living as one of the top three barriers to recruiting mental health and/or SUD personnel. Shortage of housing in the community and lack of flexible schedules or remote work options were also cited as recruitment barriers. Respondents also indicated that they compete with other public sector employers, such as school districts and surrounding counties, as well as private employers for behavioral health personnel.

Findings for CBOs were similar except that CBOs were less likely to report that a lengthy hiring process was one of the top three barriers to recruitment (30 percent vs. 63 percent for mental health services and 25 percent vs. 56 percent for SUD services). CBOs are not bound by the same civil service hiring processes as county agencies and are less likely to be unionized and, therefore, can move more quickly to offer positions to qualified candidates.

Key informants interviewed for the needs assessment also identified lack of competitive compensation as a major barrier to recruitment. They attributed county behavioral health agencies' and CBOs' inability to offer competitive compensation to the reimbursement rates paid by Medi-Cal, which are lower than rates paid by commercial health plans.

Geographic Differences in Recruitment

Counties were grouped by Mental Health Services Act Workforce, Education, and Training (WET) regions (See Appendix A) to assess whether the degree of difficulty recruiting personnel and recruitment barriers differed substantially across regions.

Aside from a few exceptions, the percentages of counties that found it difficult or very difficult to recruit personnel were similar across WET regions. Los Angeles County and county behavioral health agencies in the Southern WET region were more likely to report difficulty recruiting PMHNPs than county agencies in other regions. They were also more likely to have difficulty recruiting LCSWs, LMFTs, LPCCs, and NPs and PAs to provide SUD services. In addition, Los Angeles County had more difficulty recruiting certified SUD counselors, peer personnel, and community health workers. County behavioral health agencies in the Superior region were also more likely to have difficulty recruiting certified SUD counselors.

Recruitment barriers were similar across WET regions, except that Los Angeles County and county behavioral health agencies in the Greater Bay Area region were more likely to cite high cost of living as one of the three most important barriers to recruitment, and county agencies in the Superior region were more likely to cite location as one of the top three barriers.

Retention of Behavioral Health Professionals in California's County Behavioral Health Safety Net
County behavioral health agencies and CBOs also faced challenges with regard to retention
of behavioral health professionals. The survey asked respondents to use a five-point Likert

scale ranging from very difficult to very easy to indicate the level of difficulty they experience with retention of behavioral health professionals. Table 10 indicates the percentages of county behavioral health agencies and CBOs reporting that they found it difficult or very difficult to retain personnel in each of the occupations listed. Professions are ranked by the percentages of county agencies reporting difficulty retaining personnel to provide mental health services. Some professions are labeled "n/a" (i.e., "not applicable) for mental health or SUD services because units providing either of these types of services typically do not employ people in these professions.

Occupations

Seventy percent or more of counties had difficulty retaining LCSWs, LMFTs, and RNs providing mental health services. Two-thirds of counties struggled to retain LCSWs and LMFTs providing SUD services. Two-thirds had difficulty retaining psychiatrists or other physicians to provide mental health services, and 57 percent had difficulty retaining them to provide SUD services. Fifty-four percent of counties had difficulty retaining certified SUD counselors and 50 percent had difficulty retaining registered SUD counselors. As was the case with recruitment, county agencies were least likely to report difficulty retaining peer personnel and community health workers.

Table 10.

Percentage of County Behavioral Health Agencies that Had Difficulty Retaining Personnel, 2021

| | Mental Hea | lth Services | SUD Services | | |
|--------------------------------------------------------|------------|--------------|--------------|------|--|
| Profession | Counties | CBOs | Counties | CBOs | |
| Psychiatrists or Other Physicians | 93% | 33% | 57% | 29% | |
| LCSWs | 73% | 72% | 69% | 50% | |
| LMFTs | 70% | 75% | 67% | 50% | |
| Registered Nurses | 70% | 39% | 52% | 18% | |
| LPCCs | 59% | 57% | 54% | 39% | |
| Psychiatric Mental Health Nurse Practitioners | 59% | 28% | n/a | n/a | |

(chart continued on next page)

| | Mental Heal | th Services | SUD Services | | | |
|------------------------------------------------------------|-------------|-------------|--------------|------|--|--|
| Profession | Counties | CBOs | Counties | CBOs | | |
| Psychologists | 54% | 20% | 44% | 25% | | |
| Certified SUD Counselors | n/a | n/a | 54% | 61% | | |
| Other Nurse Practitioners or Physician Assistants | 52% | 25% | 46% | 29% | | |
| Registered SUD Counselors | n/a | n/a | 50% | 57% | | |
| Licensed Vocational Nurses | 43% | 41% | 43% | 46% | | |
| Case Workers/ Care Coordinators | 36% | 51% | 35% | 39% | | |
| Psychiatric Technicians | 32% | 22% | 28% | 21% | | |
| Mental Health Rehabilitation Specialists | 27% | 49% | n/a | n/a | | |
| Peer Personnel | 30% | 41% | 28% | 36% | | |
| Community Health Workers | 20% | 28% | 22% | 29% | | |

Source: Survey of county behavioral health agencies and CBOs, 2021.

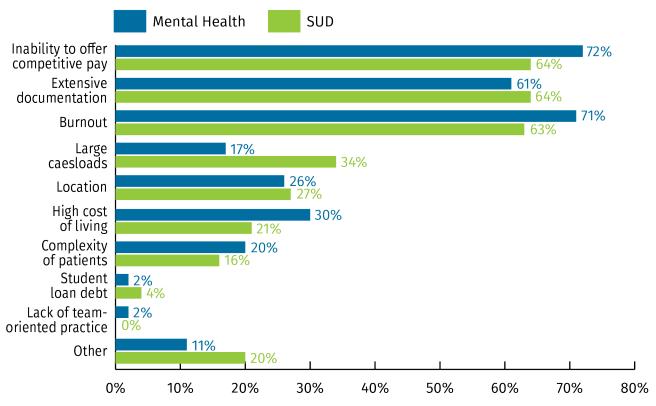
Most CBOs, similar to county agencies, had difficulty retaining LCSWs and LMFTs to provide mental health services (72 percent vs. 74 percent for LCSWs and 75 percent vs. 70 percent for LMFTs). CBOs were more likely than county behavioral health agencies to have difficulty retaining case workers/care coordinators, mental health rehabilitation specialists, peer personnel, and community health workers. They were also somewhat more likely to have difficulty retaining certified SUD counselors (61 percent vs. 54 percent) and registered SUD counselors (57 percent vs. 50 percent.)

Barriers to Retention

County behavioral health agencies and CBOs were also asked to identify the three most important barriers to retention of personnel from a list of eight possible response options. Figure 16 shows the percentages of respondents who indicated that a particular factor was one of the top three barriers to retaining personnel to provide mental health or SUD services. The response options

were based on input from the project's advisory committee, directors of county behavioral health agencies, representatives of CBOs, and other stakeholders.

Figure 16.
Percentages of County Behavioral Health Agencies Identifying Barriers to Retention, 2021



Source: Survey of county behavioral health agencies and CBOs, 2021.

Consistent with findings for barriers to recruitment, inability to offer competitive pay was the most frequently cited barrier to retention (72% for mental health personnel, 64 percent for SUD personnel). Over 60 percent of county agencies cited extensive documentation requirements and burnout as one of the top three barriers to retention. Seventeen percent cited large caseloads as one of the top three retention barriers for mental health personnel and 34 percent cited it as a top three barrier to retention of SUD personnel. Some county behavioral health agencies identified high cost of living and less desirable location as among the three most important barriers to retention, but the percentages were lower than the percentages of county agencies that perceived these factors to be among the three top barriers to recruitment (see Figure 15). Findings for CBOs were similar to findings for county behavioral health agencies.

Key informants interviewed for the needs assessment also identified lack of competitive compensation, extensive documentation requirements, and burnout as major barriers to retention. They stated that the high acuity of clients served by the county behavioral health safety net, limited flexibility regarding work hours, and limited opportunities for remote work contributed to burnout. Key informants further stated that burnout is exacerbated by Medi-Cal's documentation requirements, which some respondents perceived to be greater than those of commercial health plans.

Other barriers to retention identified by key informants relate to training and supervision. They noted that new graduates often have little exposure to the county behavioral health safety net during their education and are not always adequately prepared to care for persons with serious mental illness. In addition, some stated that licensed behavioral health professionals who work in the county behavioral health safety net have insufficient training to effectively supervise new graduates. Others observed that licensed behavioral health professionals are not trained to collaborate effectively with SUD counselors, peer providers, and other unlicensed personnel. Key informants also cited lack of career ladders as a barrier to retention for SUD counselors and peer providers.

Geographic Differences in Retention

Comparisons across WET regions identified regional differences in the severity of retention challenges. Los Angeles County reported that retention was difficult or very difficult for almost all professions and for both mental health and SUD services. County behavioral health agencies in the Southern WET region were more likely to report difficulty retaining RNs, NPs, and PAs to provide mental health and SUD services, and LCSWs and physicians to provide SUD services. Counties in the Greater Bay Area had more difficulty retaining peer providers, and counties in the Superior region had more difficulty retaining certified SUD counselors. County behavioral health agencies in the Greater Bay Area were less likely to have difficulty retaining LCSWs, LMFTs, LPCCs, RNs, and LVNs.

Barriers to retention were similar across regions except that county behavioral health agencies in Los Angeles County and counties in the Greater Bay Area were more likely to cite the high cost of living as was one of the three most important barriers to retention. Los Angeles County and counties in the Southern region were more likely to cite large caseloads as one of the top three barriers.

CHAPTER 5

Conclusions

The findings presented in the preceding sections of this report indicate that the county behavioral health safety net is having difficulty recruiting and retaining sufficient numbers of diverse behavioral health professionals to serve Californians who need specialty behavioral health services. The COVID-19 pandemic has exacerbated these challenges because it has increased overall demand for behavioral health services and created new job opportunities outside the county behavioral health safety net. This has increased staff turnover, which in turn compels counties to invest more resources in the training and supervision of less experienced staff. To meet clients' needs, California's county behavioral health safety net also must recruit and retain significantly more behavioral health professional staff who reflect their clients' racial/ethnic diversity, linguistic diversity, sexual orientations, and gender identities.

The county behavioral health safety net's ability to meet its workforce needs is constrained by the supply, distribution, and characteristics of California's overall behavioral health workforce and the pipeline of new graduates from behavioral health professions education programs. The state's behavioral health workforce is maldistributed relative to its population. The Inland Empire and San Joaquin Valley have small numbers of behavioral health professionals per capita relative to other regions of the state, especially the Greater Bay Area. County behavioral health agencies and CBOs in regions with small numbers of behavioral health professionals per capita find it especially challenging to recruit and retain behavioral health professionals because they face stiff competition from other employers for limited supplies of professionals.

The demographic characteristics of California's overall behavioral health workforce make it difficult for county behavioral health safety net agencies to recruit and retain sufficient numbers of behavioral health professionals who reflect the racial/ethnic and linguistic diversity of their clients. Asians are underrepresented in all behavioral health professions except psychiatry, Latino(a)s are underrepresented in most professions that require either a master's degree or a doctoral degree, and Blacks are underrepresented in professions that require a doctoral degree. Insufficient numbers of behavioral health professionals speak languages other than English.

In addition, many practicing psychiatrists and psychologists are age 65 years or older and are likely to retire or reduce their work hours in the near future. Although the county behavioral health safety net does not employ many psychiatrists and psychologists relative to other types of behavioral health professionals, psychiatrists play a critical role in the safety net because they are among the few types of health professionals who are authorized to prescribe mediations to treat mental health conditions and substance use disorders.

Data on the pipeline of new graduates suggest that the existing pipeline is not adequate to meet the county behavioral health safety net's needs. Numbers of graduates of master's degree programs in social work and associate degree and certificate programs in SUD counseling are decreasing. Modest rates of growth in graduates of programs that prepare people for licensure as marriage and family therapists or professional clinical counselors (i.e., master's degree programs in clinical psychology, counseling psychology, marriage and family therapy, and mental health counseling) will not be sufficient to replace professionals who are at or near retirement age nor to meet growing demand for behavioral health services.

The existing pipeline is also not adequate to enable the county behavioral health safety net to diversity its workforce. Asians are underrepresented among new graduates in all professions except psychiatry and psychiatric technicians, and Latino(a)s are underrepresented among new recipients of doctoral or master's degrees, except among recipients of master's degrees in social work. In addition, representatives of county behavioral health agencies and CBOs are concerned that some graduates are not prepared to serve clients who need specialty behavioral health services.

The county behavioral health safety net's ability to recruit and retain behavioral health professionals is also constrained by its financing and administration. Most county behavioral health agencies perceive inability to provide competitive compensation as a major barrier to recruitment and retention. Medi-Cal reimbursement rates are low relative to reimbursement paid by other insurers, which limits the resources that county behavioral health agencies have to pay their staff or contract with CBOs to provide services. The lack of a statewide Medi-Cal benefit for peer provider services and the lack of a community health worker services benefit for specialty behavioral health services constrain the county behavioral health system's ability to employ these types of paraprofessionals to complement licensed professionals. Many county behavioral

health agencies also report that county policies and procedures regarding hiring result in lengthy hiring processes that prevent them from giving applicants timely offers of employment, further limiting their ability to compete with other employers. In addition, many county behavioral health agencies report that Medi-Cal's historical requirements for extensive documentation have affected retention of behavioral health professionals because they can open private practices that do not accept health insurance or serve patients with other types of health insurance that may require less extensive documentation.

Finally, existing sources of data on California's behavioral health workforce are inadequate to fully assess the workforce needs of California's county behavioral health safety net. Few data are available about the workforce in behavioral health occupations for which licensure is not required, such as peer providers, community health workers, and SUD counselors. With the exception of the Medical Board, licensing boards for professionals who practice in the county behavioral health safety net have not routinely collected data on licensees' participation in the labor force or their demographic characteristics at the time of licensure renewal. No licensing boards routinely collect data regarding the acceptance of Medi-Cal, Medicare, or commercial health insurance by licensees who are authorized to bill directly for their services. The Department of Health Care Access and Information's (HCAI) new Health Workforce Research Data Center is partnering with licensing boards to administer voluntary surveys to collect these data, but these surveys were just launched in July 2022. This effort holds great promise but as of this writing, it is too soon to know whether sufficient numbers of licensees will respond to generate useful data.

Findings from this needs assessment suggest that strategies to address the county behavioral health safety net's current and future workforce needs should encompass actions at both state and county levels.

CHAPTER 6

Recommendations

State Government

Targeted investment of additional state funds is necessary to ensure that behavioral health professions education programs, behavioral health professions students, state agencies, and agencies in the county behavioral health safety net have sufficient resources to increase the number and diversity of behavioral health professionals working in the safety net.

Behavioral Health Professions Education

- Funding for higher education institutions to hire additional faculty and make other investments that are necessary to enable them to increase the number of students they educate and develop more alternatives to traditional modes of providing education, such as online programs and accelerated master's degree programs (e.g., "4 plus 1" BSW/MSW programs).
- Funding for community colleges to expand existing efforts to develop stackable credentials so
 courses that students complete for certificate programs in behavioral health professions also
 count toward requirements for associate degrees for transfer that, in turn, enable students to
 transfer to bachelor's degree programs with advanced standing.
- Funding for behavioral health professions education programs that do not already have didactic and clinical curricula tailored to preparing students to serve people with serious mental illness and substance use disorders to develop such curricula.

Behavioral Health Professions Students

Tuition assistance, stipends, and loan repayment to behavioral health professionals who
commit to working in the county behavioral health safety net. For most behavioral health
professions, stipends are a better alternative than loan repayment because they provide
financial assistance while students are in school and provide them with resources to cover
educational and living expenses. Stipends are especially helpful to students from low-income
backgrounds whose families depend on them for financial support and to those preparing for

- entry level positions. All financial assistance should be contingent on practicing in the county behavioral health safety net after graduation.
- Emergency funds for low-income students so that they can address unanticipated expenses that have potential to derail their education, such as child care and car repair.

Licensing Boards

- Additional resources to enable the Board of Behavioral Sciences and other licensing boards
 to process applications for associate marriage and family therapists, associate professional
 clinical counselors, and associate social workers in a timely fashion so that new graduates can
 begin completing supervised clinical practice and other requirements for licensure as quickly
 as possible.
- Additional resources to licensing boards to facilitate collection and analysis of robust data on the supply, distribution, demographic characteristics, and employment patterns of licensed behavioral health professionals and their acceptance of health insurance.
- Require all licensed behavioral health professionals to provide information to licensing boards about characteristics of their practices, such as location, setting, and acceptance of health insurance, as well as demographic characteristics, when they renew their licenses to improve knowledge about California's behavioral health workforce.

Department of Health Care Access and Information (HCAI)

Allocate sufficient resources to the Department of Health Care Access and Information's (HCAI)
new Health Workforce Research Data Center to enable it to partner effectively with licensing
boards to facilitate collection and analysis of robust data on demand, supply, distribution,
demographic characteristics, and employment patterns of the behavioral health workforce.
These data should encompass all behavioral health occupations, including those for which
licensure is not required and occupations in which some professionals specialize in behavioral
health (e.g., registered nurses, nurse practitioners, physician assistants).

Department of Health Care Services (DHCS)

• Increase Medi-Cal reimbursement to enable county behavioral health safety net agencies and contracted CBOs to offer competitive compensation.

- Provide funds to agencies in the county behavioral health safety net to offset costs associated
 with providing clinical training to students in behavioral health professions education
 programs and supervision of associate marriage and family therapists, professional clinical
 counselors, and social workers.
- Continue efforts under the auspices of CalAIM to streamline Medi-Cal documentation requirements across delivery systems and to align the requirements of federal agencies and accrediting bodies with CalAIM standards.
- Expand the state's peer support specialists as a statewide Medi-Cal benefit, rather than a self-funded county option.
- Expand the Medi-Cal community health worker benefit to be a specialty behavioral health benefit under Medi-Cal.
- Ensure Medi-Cal program requirements encourage all behavioral health professionals working to the top of their license.

County Behavioral Health Agencies and CBOs

Building the future behavioral health workforce for the county behavioral health safety net will also require county behavioral health agencies and the CBOs with which they contract to make sustained commitments to workforce development and partner with other local entities as needed to achieve change.

- Work with county government officials (locally and statewide) to streamline hiring processes to facilitate more rapid hiring of behavioral health professionals to enable county behavioral health agencies to compete more effectively with other employers.
- Prioritize recruitment of racially/ethnically diverse, bilingual, and LGBTQ staff to improve ability to meet the needs of the diverse clients the county behavioral health safety net serves.
- Maximize hiring of peer providers, community health workers, and other paraprofessionals to provide services for which licensure or certification is not required.
- Increase hiring of professionals who are not currently well-represented in the county behavioral health safety net who have relevant expertise, such as psychiatric mental health nurse practitioners and occupational therapists.
- Create career ladders for incumbent workers and partner with local higher education institutions to provide education that will enable workers to advance professionally within the county behavioral health safety net.

- Partner with local school districts to expand opportunities for K-12 students to learn about career opportunities in behavioral health.
- · View teaching as a key component of agencies' missions and expand clinical training and supervision for behavioral health professions students.
- Work with accreditation bodies to streamline and align documentation requirements with CalAIM standards.

References

- Anand, P., Ben-Shalom, Y., & Schone E. (2021). Factors associated with the acceptance of new TRICARE and Medicare patients by health Care providers. *Medical Care Research and Review*. 78(5):627-37.
- Benjenk, I. and Chen, J. (2020). Trends in self-payment for outpatient psychiatrist visits. JAMA Psychiatry. 77(12):1305-7.
- Benson, N.M., Myong, C., Newhouse, J.P., Fung, V., & Hsu, J. (2020). Psychiatrist participation in private health insurance markets: Paucity in the land of plenty. *Psychiatric Services*. 71(12):1232-8.
- Bishop, T.F., Press, M.J., Keyhani, S., & Pincus, H.A. (2014). Acceptance of insurance by psychiatrists and the implications for access to mental health care. *JAMA Psychiatry*. 71(2):176-81.
- Blash, L. and Spetz, J. (2022). California Board of Registered Nursing 2020-2021 Annual School Report: Post-licensure Nursing Education Programs. San Francisco, CA: Healthforce Center. https://www.rn.ca.gov/pdfs/education/postlicensure2021.pdf. Accessed September 30, 2022.
- Bocutti, C. and Neuman, P. (2017). Private contracts between doctors and Medicare patients: key questions and implications of proposed policy changes. Kaiser Family Foundation. https://files.kff.org/attachment/Issue-Brief-Private-Contracts-Between-Doctors-and-Medicare-Patients. Accessed September 30, 2022.
- Breslau, J., Finucane, M., Locker, A.R., et al. (2021). A longitudinal study of psychological distress in the United States before and during the COVID-19 pandemic. *Preventive Medicine*. 143:106362.
- Coffman JM, Fix M. (2017). Physician Participation in Medi-Cal: Is Supply Meeting Demand. Oakland, CA: California Health Care Foundation. https://www.chcf.org/wp-content/uploads/2017/12/PDF-PhysicianParticipationMediCal2017. <a href="https://pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/pdf.accessed/p
- Coley RL, and Baum CF. (2022). Trends in mental health symptoms, service use, and unmet need for services among US adults through the first 8 months of the COVID-19 pandemic (Retraction and republication of 2021;11(10):1947-1956). Translational Behavioral Medicine. 12:2(2)73-283.
- Czeisler, M.E., Lane, R.I., Petrosky, E., Wiley, J.F., Christensen, A., et al. (2020). Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic United States, June 24–30, 2020. Morbidity and Mortality Weekly Report. 69(32):1049-1057.
- Czeisler, M.E., Lane, R.I., Wiley, J.F., Czeisler, C.A., Howard, M.E., & Rajaratnam, S.M. (2021). Follow-up Survey of US Adult Reports of Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic, September 2020. *JAMA Network Open.* 4(2): e2037665. doi:10.1001/jamanetworkopen.2020.37665.
- Ettman, C.K., Abdalla, S.M., Cohen, G.H., Sampson, L., Vivier, P.M., & Galea, S. (2020). Prevalence of depression symptoms in US adults before and during the COVID-19 pandemic. *JAMA Network Open.* 3(9):e2019686.
- Ettman, C.K., Cohen, G.H., Abdalla, S.M., Sampson, L., Trinquart, L., Castrucci, B.C., et al. (2022). Persistent depressive symptoms during COVID-19: a national, population-representative, longitudinal study of U.S. adults. *The Lancet Regional Health Americas*. 5:100091. https://doi.org/10.1016/j.lana.2021.100091.
- Nagata, J.M., Ganson, K.T., Bonin, S.L., Twadell, K.L., Garcia, M.E., et al. (2021). Prevalence and sociodemographic correlates of unmet need for mental health counseling among adults during the COVID-19 pandemic. *Psychiatric Services*. doi: 10.1176/appi.ps.202100111.
- Spetz, J., Blash, L., Jura, M., Chu, L. (2018). 2017 Survey of Nurse Practitioners and Certified Nurse Midwives. San Francisco, CA: Healthforce Center. https://www.rn.ca.gov/pdfs/forms/survey2017npcnm-final.pdf. Accessed September 30, 2022.
- Spetz, J., and Chu, L. (2020). Survey of Registered Nurses in California, 2018. San Francisco, CA: Healthforce Center. https://www.rn.ca.gov/pdfs/forms/survey2018.pdf. Accessed September 30, 2022.
- Substance Abuse and Mental Health Services Administration (SAMHSA). (2020). Behavioral Health Barometer: California, Volume 6: Indicators as measured through the 2019 National Survey on Drug Use and Health and the National Survey of Substance Abuse Treatment Services. HHS Publication No. SMA-20-Baro-19-CA. Rockville, MD: SAM-HSA, 2020. https://www.samhsa.gov/data/sites/default/files/reports/rpt32821/California-BH-Barometer_Volume6.pdf. Accessed September 30, 2022.
- Vahratian, A., Blumberg, S.J., Terlizzi, E.P., & Schiller, J.S. (2021). Symptoms of anxiety or depressive disorder and use of mental health care among adults during the COVID-19 pandemic—United States, August 2020–February 2021. *Morbidity and Mortality Weekly Report*. 70(13):490.

- Valentine, A., & Brassil, M. (2022). Substance Use in California: Prevalence and Treatment. Oakland, CA: California Health Care Foundation. https://www.chcf.org/wp-content/uploads/2022/01/SubstanceUseDisorderAlmanac2022.pdf Accessed September 30, 2022.
- Zhu, J.M., Zhang, Y., & Polsky, D. (2017). Networks in ACA marketplaces are narrower for mental health care than for primary care. *Health Affairs*. 36(9):1624-31.

Appendix A. Mental Health Services Act Regions

Figure A

Mental Health Services Act Workforce Education and Training Regions



Source: Department of Health Care Access and Information

Appendix B. Supplies of Licensed Behavioral Health Professionals by County

Table B.1 Number of Licensed Behavioral Health Professionals by County, California, 2020

| County | Psychiatrists | Psychologists | Licensed Clinical Social Workers | Licensed Marriage and Family Therapists | Licensed Professional Clinical Counselors | Psychiatric Technicians |
|--------------|---------------|---------------|----------------------------------------|--------------------------------------------------|----------------------------------------------------|----------------------------|
| Alameda | 327 | 1391 | 1827 | 2350 | 113 | 64 |
| Alpine | 0 | 0 | 1 | 1 | 0 | 0 |
| Amador | 13 | 22 | 23 | 26 | 1 | 14 |
| Butte | 22 | 37 | 199 | 271 | 13 | 12 |
| Calaveras | 1 | 8 | 27 | 30 | 2 | 12 |
| Colusa | 1 | 1 | 8 | 4 | 1 | 1 |
| Contra Costa | 171 | 564 | 658 | 1365 | 66 | 81 |
| Del Norte | 2 | 15 | 18 | 16 | 2 | 14 |
| El Dorado | 12 | 61 | 87 | 221 | 10 | 22 |
| Fresno | 93 | 252 | 485 | 676 | 34 | 505 |
| Glenn | 0 | 0 | 11 | 8 | 0 | 1 |
| Humboldt | 14 | 30 | 170 | 178 | 7 | 8 |
| Imperial | 12 | 7 | 40 | 40 | 1 | 10 |
| Inyo | 2 | 8 | 7 | 13 | 0 | 0 |
| Kern | 56 | 116 | 266 | 386 | 15 | 77 |
| Kings | 16 | 35 | 42 | 50 | 2 | 382 |
| Lake | 3 | 11 | 22 | 38 | 1 | 16 |
| Lassen | 1 | 14 | 13 | 12 | 1 | 10 |
| Los Angeles | 1564 | 4890 | 8145 | 10661 | 404 | 881 |
| Madera | 9 | 38 | 44 | 43 | 8 | 15 |
| Marin | 146 | 449 | 320 | 885 | 30 | 8 |
| Mariposa | 1 | 2 | 13 | 9 | 2 | 0 |
| Mendocino | 9 | 26 | 74 | 125 | 8 | 3 |
| Merced | 8 | 22 | 87 | 64 | 7 | 15 |
| Modoc | 0 | 2 | 5 | 3 | 1 | 0 |
| Mono | 0 | 3 | 5 | 13 | 1 | 0 |
| Monterey | 60 | 130 | 230 | 338 | 18 | 50 |
| Napa | 61 | 124 | 159 | 160 | 14 | 214 |
| Nevada | 8 | 41 | 85 | 195 | 12 | 9 |

(chart continued on next page)

| County | Psychiatrists | Psychologists | Licensed Clinical Social Workers | Licensed Marriage and Family Therapists | Licensed Professional Clinical Counselors | Psychiatric Technicians |
|-----------------|---------------|---------------|----------------------------------------|--------------------------------------------------|----------------------------------------------------|----------------------------|
| Orange | 350 | 1275 | 1804 | 3376 | 178 | 482 |
| Placer | 51 | 139 | 263 | 532 | 24 | 24 |
| Plumas | 1 | 5 | 8 | 16 | 2 | 0 |
| Riverside | 189 | 347 | 841 | 1546 | 96 | 468 |
| Sacramento | 260 | 597 | 1221 | 1358 | 89 | 226 |
| San Benito | 1 | 4 | 14 | 30 | 1 | 2 |
| San Bernardino | 244 | 394 | 971 | 1281 | 77 | 1432 |
| San Diego | 583 | 1928 | 2241 | 3273 | 257 | 99 |
| San Francisco | 445 | 1162 | 1147 | 1609 | 96 | 16 |
| San Joaquin | 66 | 105 | 226 | 297 | 14 | 583 |
| San Luis Obispo | 89 | 271 | 234 | 484 | 24 | 1015 |
| San Mateo | 198 | 486 | 517 | 859 | 45 | 13 |
| Santa Barbara | 56 | 248 | 185 | 772 | 18 | 67 |
| Santa Clara | 454 | 921 | 1078 | 1865 | 114 | 163 |
| Santa Cruz | 52 | 137 | 330 | 652 | 23 | 13 |
| Shasta | 13 | 45 | 97 | 235 | 8 | 4 |
| Sierra | 0 | 0 | 1 | 0 | 0 | 0 |
| Siskiyou | 1 | 11 | 19 | 45 | 6 | 0 |
| Solano | 67 | 173 | 283 | 327 | 15 | 625 |
| Sonoma | 86 | 351 | 422 | 1055 | 37 | 199 |
| Stanislaus | 38 | 48 | 202 | 307 | 17 | 85 |
| Sutter | 13 | 8 | 45 | 51 | 2 | 44 |
| Tehama | 2 | 2 | 25 | 33 | 2 | 5 |
| Trinity | 1 | 0 | 2 | 16 | 2 | 0 |
| Tulare | 16 | 73 | 161 | 233 | 9 | 825 |
| Tuolumne | 4 | 14 | 24 | 51 | 3 | 3 |
| Ventura | 88 | 314 | 457 | 1111 | 39 | 87 |
| Yolo | 35 | 92 | 145 | 215 | 12 | 22 |
| Yuba | 0 | 3 | 21 | 28 | 1 | 25 |

Sources: Medical Board of California Mandatory Survey, 2020, private tabulation; Department of Consumer Affairs, Public Information Licensee List.

Table B.2
Ratio of Licensed Behavioral Health Professionals per 100,000 Population by County, California, 2020

| County | Psychiatrists | Psychologists | Licensed Clinical Social Workers | Licensed Marriage and Family Therapists | Licensed Professional Clinical Counselors | Psychiatric Technicians |
|--------------|---------------|---------------|----------------------------------------|--------------------------------------------------|----------------------------------------------------|----------------------------|
| Alameda | 19 | 83 | 109 | 140 | 7 | 4 |
| Alpine | 0 | 0 | 83 | 83 | 0 | 0 |
| Amador | 32 | 54 | 57 | 64 | 2 | 35 |
| Butte | 10 | 17 | 94 | 128 | 6 | 6 |
| Calaveras | 2 | 18 | 60 | 66 | 4 | 26 |
| Colusa | 5 | 5 | 37 | 18 | 5 | 5 |
| Contra Costa | 15 | 48 | 56 | 117 | 6 | 7 |
| Del Norte | 7 | 54 | 65 | 58 | 7 | 50 |
| El Dorado | 6 | 32 | 46 | 116 | 5 | 12 |
| Fresno | 9 | 25 | 48 | 67 | 3 | 50 |
| Glenn | 0 | 0 | 38 | 28 | 0 | 3 |
| Humboldt | 10 | 22 | 125 | 130 | 5 | 6 |
| Imperial | 7 | 4 | 22 | 22 | 1 | 6 |
| Inyo | 11 | 42 | 37 | 68 | 0 | 0 |
| Kern | 6 | 13 | 29 | 42 | 2 | 8 |
| Kings | 10 | 23 | 28 | 33 | 1 | 251 |
| Lake | 4 | 16 | 32 | 56 | 1 | 23 |
| Lassen | 3 | 43 | 40 | 37 | 3 | 31 |
| Los Angeles | 16 | 49 | 81 | 106 | 4 | 9 |
| Madera | 6 | 24 | 28 | 28 | 5 | 10 |
| Marin | 56 | 171 | 122 | 337 | 11 | 3 |
| Mariposa | 6 | 12 | 76 | 53 | 12 | 0 |
| Mendocino | 10 | 28 | 81 | 136 | 9 | 3 |
| Merced | 3 | 8 | 31 | 23 | 2 | 5 |
| Modoc | 0 | 23 | 57 | 34 | 11 | 0 |
| Mono | 0 | 23 | 38 | 99 | 8 | 0 |
| Monterey | 14 | 30 | 52 | 77 | 4 | 11 |
| Napa | 44 | 90 | 115 | 116 | 10 | 155 |
| Nevada | 8 | 40 | 83 | 191 | 12 | 9 |

(chart continued on next page)

| County | Psychiatrists | Psychologists | Licensed Clinical Social Workers | Licensed Marriage and Family Therapists | Licensed Professional Clinical Counselors | Psychiatric Technicians |
|-----------------|---------------|---------------|----------------------------------------|--------------------------------------------------|----------------------------------------------------|----------------------------|
| Orange | 11 | 40 | 57 | 106 | 6 | 15 |
| Placer | 13 | 34 | 65 | 131 | 6 | 6 |
| Plumas | 5 | 25 | 40 | 81 | 10 | 0 |
| Riverside | 8 | 14 | 35 | 64 | 4 | 19 |
| Sacramento | 16 | 38 | 77 | 86 | 6 | 14 |
| San Benito | 2 | 6 | 22 | 47 | 2 | 3 |
| San Bernardino | 11 | 18 | 45 | 59 | 4 | 66 |
| San Diego | 18 | 58 | 68 | 99 | 8 | 3 |
| San Francisco | 51 | 133 | 131 | 184 | 11 | 2 |
| San Joaquin | 8 | 13 | 29 | 38 | 2 | 75 |
| San Luis Obispo | 32 | 96 | 83 | 171 | 8 | 359 |
| San Mateo | 26 | 64 | 68 | 112 | 6 | 2 |
| Santa Barbara | 12 | 55 | 41 | 172 | 4 | 15 |
| Santa Clara | 23 | 48 | 56 | 96 | 6 | 8 |
| Santa Cruz | 19 | 51 | 122 | 241 | 8 | 5 |
| Shasta | 7 | 25 | 53 | 129 | 4 | 2 |
| Sierra | 0 | 0 | 31 | 0 | 0 | 0 |
| Siskiyou | 2 | 25 | 43 | 102 | 14 | 0 |
| Solano | 15 | 38 | 62 | 72 | 3 | 138 |
| Sonoma | 18 | 72 | 86 | 216 | 8 | 41 |
| Stanislaus | 7 | 9 | 37 | 56 | 3 | 15 |
| Sutter | 13 | 8 | 45 | 51 | 2 | 44 |
| Tehama | 3 | 3 | 38 | 50 | 3 | 8 |
| Trinity | 6 | 0 | 12 | 99 | 12 | 0 |
| Tulare | 3 | 15 | 34 | 49 | 2 | 174 |
| Tuolumne | 7 | 25 | 43 | 92 | 5 | 5 |
| Ventura | 10 | 37 | 54 | 132 | 5 | 10 |
| Yolo | 16 | 43 | 67 | 99 | 6 | 10 |
| Yuba | 0 | 4 | 26 | 34 | 1 | 31 |

Sources: Medical Board of California Mandatory Survey, 2020, private tabulation; Department of Consumer Affairs, Public Information Licensee List; U.S. Census Bureau, Annual Estimates of the Resident Population for Counties in California: April 1, 2020 to July 1, 2021.

Appendix C. Data Sources

National Data Sources

U.S. Census Bureau

Annual Estimates of the Resident Population

California population estimates at the state and regional levels were obtained from the U.S. Census Bureau of the Economic and Statistics Administration Population Estimates Program (PEP). The estimates generated by PEP are benchmarked to the most recent decennial census (2020) and are reflective of currently available data on births, deaths, and migration. County-level population estimates sourced from the Annual Estimates of the Resident Population were aggregated into the nine California Health Interview Survey regions described above and were used to calculate ratios of behavioral health professionals per 100,000 population. Information about the methodology the Census Bureau uses to generate these estimates can be found here.

American Community Survey

Several components of analysis presented in this report were conducted using data from the 2016-2020 5-year American Community Survey (ACS) Public Use Microdata Sample (PUMS) file. PUMS data allow researchers to describe a range of population characteristics. Additional technical information about PUMS can be found on the "PUMS" page here as well as in the Design and Methodology Report here.

The ACS is not designed specifically for analysis of the health professions workforce. However, because PUMS data describe population characteristics at the individual person-level (i.e., each observation in the dataset represents one person's responses to the survey questions), the team conducting the needs assessment was able to limit the analysis to only those individuals most likely to be working in the occupations that are the focus of this report. For example, persons who were not employed or out of the labor force for some other reason at the time of the survey were excluded. Persons whose reported level of educational attainment was not sufficient to meet the requirements for professional licensure in California also were excluded. Finally, it should be acknowledged that regional analysis of individual health professions was possible only by using the 5-year ACS PUMS file, which aggregates responses from survey participants over a five-year period. This file was used to ensure a sufficient number of sample cases from which to generate

statistically valid estimates. The findings presented in this report sourced from the 5-year ACS PUMS file should be interpreted as a five-year average over the period 2016-2020.

National Center for Education Statistics (NCES)

The U.S. Department of Education's National Center for Education Statistics (NCES) utilizes a system of annual surveys known as the Integrated Postsecondary Education Data System (IPEDS) to collect data on enrollments, completions, and other characteristics from every institution that participates in federal student aid programs. More than 7,500 liberal arts colleges, research universities, community colleges, technical schools, and other programs participate in IPEDS data collection each year. Datasets for 2016 through 2020 were analyzed to identify trends in numbers of graduates from certificate and degree programs that educate behavioral health professionals. Additional information about IPEDS can be found here.

ACGME

The Accreditation Council for Graduate Medical Education (ACGME) establishes standards for graduate medical education programs (i.e., residency and fellowship programs) in the United States, oversees their accreditation, and monitors their performance. In addition, the ACGME collects information regarding the numbers and characteristics of residency and fellowship programs, their entrants, and graduates. Data on numbers of psychiatry residents cited in this report were obtained from the ACGME's annual Data Resource Book for academic years 2011-2012 to 2021-2022.

National Residency Match Program (NRMP)

The National Residency Match Program (NRMP) is a nonprofit organization that matches graduates of U.S. and international medical schools with residency positions in the United States. The Match also performs this function for fellowship programs available to physicians wishing to subspecialize. Information regarding the number of sub-specialty fellowship programs in psychiatry and the numbers of first year positions in these programs were obtained from "NRMP Program Results 2018-2022 Specialties Matching Service."

State Data Sources

California Department of Consumer Affairs Licensee Masterfile

The Department of Consumer Affairs (DCA) maintains a database of over 150 professional license types for the various licensing boards it oversees. All counts of licensed professionals presented in this report (based on DCA data) reflect individuals whose record indicated an "active" license as of 2020 (records marked "inactive", "expired" or "delinquent" were excluded). In addition, individuals whose address of record was in a state outside of California were omitted from these counts under the assumption they are not currently practicing in California.

It is important to note that DCA data do not indicate whether licensed individuals practice in the profession for which they are licensed or whether they are employed at the time of data collection (e.g., someone with an active Licensed Clinical Social Worker (LCSW) license may be employed in an unrelated profession/industry or unemployed/out of the labor force altogether). As a result, the DCA data do not provide any information describing practice/employment activities. There is no way to know the extent to which a licensed individual is engaged in direct patient care versus other activities such as teaching, administration, or research. Thus, counts of licensed professionals presented in this report may overstate the actual supply of licensees providing behavioral health services.

California Board of Registered Nursing

The California Board of Registered Nursing (BRN) periodically contracts with the UCSF Healthforce Center to administer surveys of its licensees regarding their education, labor force participation, employment settings, income, and demographic characteristics. The most recent survey of registered nurses (RNs) was conducted in 2018. The most recent surveys of clinical nurse specialists (CNSs) and nurse practitioners (NPs) were conducted in 2017.

The BRN also conducts annual surveys of pre-licensure and post-licensure nursing education programs regarding admissions, enrollment, and completions. For nurse practitioner education programs, the percentages of completions by specialty are reported. The most recent report was published in May 2022 and presented findings from the 2011-2012 to the 2020-2021 academic year.

Medical Board of California Mandatory and Supplemental Surveys

The Medical Board of California (MBC) is the regulatory body that oversees the licensing of allopathic physicians (MDs) in California. California law requires the MBC to administer a survey to MDs every two years as part of the licensure renewal process. The survey asks about licensees professional activities in medicine, the number of hours they work, their medical specialty, the zip code of their practice, training status (i.e., whether a licensee is a resident or fellow), race/ethnicity, and languages spoken other than English.

For counts of actively licensed psychiatrists, MDs were excluded based on the following criteria:

- "Not in 2-Year Cohort": This criterion removes respondents who did not renew an existing license or establish a new license (in the case of recent medical school graduates) within two years of the survey's distribution.
- "Practicing Out-of-State": This criterion removes respondents who report that their primary practice location is outside the state of California regardless of their residence address. For example, physicians living on the California side of Lake Tahoe who primarily practice in the state of Nevada would be omitted from this analysis.

Additionally, MDs' training status was used to identify the number of licensed psychiatrists in the educational pipeline per the following criterion:

"Residents/Fellows": This criterion flags respondents who identify as either residents or
fellows to ensure they are counted as trainees rather than active primary care physicians.
These psychiatrists are considered trainees for purposes of this report because they have not
completed all training required to practice in their chosen specialties.

The MBC mandatory survey asks respondents to identify their primary and secondary specialties from among 55 "Areas of Practice" (e.g., Allergy and Immunology, Internal Medicine).

⁹ Business & Professions Code sections 803.1, 2425.1 and 2425.3.

Medi-Cal Network Adequacy Certification Tool

Data regarding the size and composition of California's county behavioral health safety net workforce were obtained from the Medi-Cal Network Adequacy Certification Tool (NACT). Since 2019, the Department of Health Care Services (DHCS) has required all county behavioral health agencies to use this tool to report information regarding county mental health plans' networks of mental health providers that serve people with serious mental health needs. The 18 counties that participate in the Drug Medi-Cal Organized Delivery System (DMC-ODS) have also been required to use the NACT to report data regarding SUD providers since 2020. The tool captures numbers of providers by occupation and numbers of providers who speak languages other than English.

Data for mental health providers were obtained from tabulations of NACT data prepared by staff of the Department of Health Care Access and Information (HCAI) and from individual counties that had not shared data with HCAI. NACT data on SUD providers were obtained from counties participating in DMC-ODS.

Primary Data Collection

Survey

In 2021, a survey was distributed to 57 county and 2 city behavioral health safety net agencies¹¹ (hereafter referred to as county behavioral health agencies) and to community-based organizations (CBOs) that contract with county and city agencies to provide behavioral health services to identify their recruitment and retention needs. The California Behavioral Health Directors Association (CBHDA) distributed the survey to the county behavioral health agencies. The California Alliance of Child and Family Services, the California Association of Alcohol and Drug Addiction Program Executives, California Association of Social Rehabilitation Agencies, and the California Council of Community Behavioral Health Agencies distributed the survey to CBOs that are members of their organizations.

¹⁰ The following counties participate in DMC-ODS: Alameda, Contra Costa, El Dorado, Imperial, Los Angeles, Marin, Merced, Monterey, Napa, Nevada, Placer, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Francisco, and San Joaquin.

¹¹ Sutter and Yuba counties provide behavioral health services through a single agency. The City of Berkeley and the Tri-Cities (Claremont, Ontario, Pomona) operate behavioral health agencies that are independent of their counties.

The survey encompasses questions about the degree of difficulty that county behavioral health agencies and CBOs experience with regard to recruitment and retention of behavioral health providers and major barriers to recruitment and retention.

Ninety-eight percent of county behavioral health agencies responded to the survey. The response rate for CBOs is unknown.

Key Informant Interviews

Key informant interviews were conducted with 23 leaders of county behavioral health agencies, CBOs, and statewide organizations that represent them to obtain qualitative information regarding recruitment and retention challenges.

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1303 J Street, Suite 300, Sacramento, CA, 95814 916.556.3477 info@cbhda.org www.cbhda.org