CALIFORNIA
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**Policy Brief**

# California's Health Workforce Crisis: The Pipeline for New Psychiatrists Falls Short

October 2020

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## Executive Summary

The current shortage of psychiatrists in California has created a behavioral health workforce crisis that is worsening. The number of psychiatrists in California will decrease by 34% between 2016 and 2028,[1] according to the UCSF Healthforce Center. California's efforts to train or recruit new psychiatrists is failing to keep up despite numerous studies that have documented the growing gap between the supply of and demand for psychiatrists.

This policy brief considers fundamental metrics to help understand the capacity of the workforce pipeline to produce new psychiatrists; how many psychiatrists now practice in California; how many new psychiatrists are licensed annually; how many enter psychiatric residency programs annually and how many are turned away because of insufficient slots. Finally, this brief examines the racial and ethnic composition of both all existing psychiatrists and newly licensed psychiatrists to determine whether the diversity of the new psychiatry workforce is more reflective of the state's demographics.

**Key Findings:**

- In 2019, there were an estimated 7,693 psychiatrists in California.[2] There was no increase from the prior year. In 2017, California added an estimated 338 new licensed psychiatrists, which was a 1% increase in total psychiatrists from 2016.

- Forty-one new categorical psychiatry residency positions were offered in California between 2014 and 2019, an increase in the total number from 137 to 178. All of those residency programs were filled with the exception of one research track position.

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[1] Coffman J, Bates T, Geyn I, Spetz J. California's Current and Future Behavioral Health Workforce. Feb. 12, 2018. Healthforce Center at UCSF.

[2] Medical Board of California Access Database, updated December 2019.

- In September 2020, the Office of Statewide Health Planning and Development (OSHPD) announced awards of one-time funding assistance for 36 new residency positions in California.

- Only 35% of the people training to become psychiatrists in California psychiatry residency programs attended medical school in California.

- The number of United States fourth year medical students applying into psychiatry residency programs increased by 67% from 2013 to 2019. However, new residency programs have not kept pace. For this reason, one out of every 10 medical students applying to psychiatry residency programs nationally was left without a position in 2019.

- 30% of all students applying to psychiatry residency programs in the United States applied to programs in California, despite California ranking only 25$^{th}$ in the country for the number of psychiatry residency positions per 100,000 residents.

- African American and Hispanic psychiatrists make up a small share of all California psychiatrists and the workforce has only become slightly more diverse over the past ten years. The percentage of newly licensed psychiatrists identifying as African American increased from 4% to 10% between 2005 and 2019; the percentage of newly licensed psychiatrists identifying as Hispanic increased from 7% to 11% during the same period.[3] In the 2018 applicant pool, the percentage of underrepresented races and ethnicities was 20%, compared to 46% in the California population. However, the validity of the self-reported MBC data, administered at the time of licensure and renewal every two years, is uncertain without knowing the proportion of psychiatrists responding to the survey and limited due to a high proportion of respondents selecting "decline to state".

**Recommendations:**

In order to address the psychiatry workforce pipeline crisis, the policy-makers and stakeholders must develop an immediate strategy and plan of action. The individual elements and details of this plan, such as sources of funding, are beyond the scope of this policy brief. However, we suggest three recommendations that would begin the process and be a step in the right direction.

1. **Increase the number of residency positions in California.** There are only 178 psychiatry residency positions now offered in California. Qualified applicants are being turned away or redirected to other states. More than three-quarters (about 77%) of residents who graduate from these programs are likely to remain in California. For this reason, increasing the number of residency positions is the most direct strategy to increase the number of psychiatrists who practice in the state.

[3] Medical Board of California Access database, updated January 2020.

2. **Prioritize California students for California psychiatry residency positions to increase retention rates**. Only 35% of those training to become psychiatrists in California psychiatry residency programs attended California medical schools. This contrasts sharply with the composition of medical students studying in California medical schools where 75% are from California. Professionals tend to stay where they have connections and relationships. This may be one reason why 23% of residents who complete California residency programs leave the state to practice elsewhere. A cost-effective strategy for increasing the retention rate of new psychiatrists is increasing the percentage of California psychiatry residents accepted from medical schools in California, or applicants originally from California. California residency programs should develop criteria that provides additional weighting for California applicants or those deemed likely to remain in the state.

3. **Create a public, accurate database on the number and characteristics of currently practicing psychiatrists in California.** The Medical Board of California, the state agency responsible for overseeing California physicians, is unable to provide accurate, publicly accessible data on the number and characteristics of psychiatrists practicing in the state. This information is essential for guiding the state's response to the current psychiatry workforce crisis. The Medical Board or other state entity should develop a database containing reviewed data from physicians' applications to track physicians receiving licenses in a more systematic manner. The Board should also enhance their annual report to include sections for each specialty containing: the number of physicians in the specialty, the demographics of physicians in that specialty (e.g., age, race/ethnicity), physicians in each county, proportion of physicians practicing full and part time, proportion of physicians accepting various forms on insurance, and the portion of physicians in different types of practices (e.g., private vs academic).

## I. Background

### A. The psychiatry workforce crisis

The shortage of psychiatrists in California is a crisis. Demand for psychiatric care in California continues to exceed the supply. This gap is expected to worsen over the next several years, as an aging psychiatry workforce retires, and the stigma surrounding seeking help for psychiatric illness decreases.[4] In a 2019 analysis of mental health services in health professional shortage areas (HPSAs), the Kaiser Family Foundation reported that only 29% of mental health care needs are being met. The report studied California's 544 HPSAs, with nearly 8 million individuals living in these areas, and noted a 5% decline in needs met since its 2017 analysis. This places California in 26th place for percent of psychiatric care needs met, barely over the US average of 27%. In these HPSAs alone, the Kaiser Family Foundation estimates an additional 405 psychiatrists are needed to address the gap.[5]

As the need for psychiatrists grows, the supply trend is moving in the opposite direction. According to projections from the UCSF Healthforce Center, the number of psychiatrists in California will decrease by 34% between 2016 and 2028.[6]

Other troubling data points from the Healthforce Center include:

- In 2015, 77% of psychiatrists treated any patients with private health insurance, 55% treated any patients with Medicare, and 46% treated any Medi-Cal patients. The shortage of psychiatrists further restricts access for those who rely on Medicare and Medi-Cal for their coverage.

- By 2028 California will have 41% fewer psychiatrists than needed based on current utilization, and 50% fewer than needed based on future need projections.

- 45% of psychiatrists in 2015 were over 60 years old.

The lack of access to mental health services also impacts the state's ability to meet the needs of those experiencing homelessness. According to the California Policy Lab, 78% of unsheltered individuals reported having a mental health condition and 75% reported having a substance use condition.[7]

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[4] Coffman J, Bates T, Geyn I, Spetz J. California's Current and Future Behavioral Health Workforce. Feb. 12, 2018. Healthforce Center at UCSF

[5] "Mental Health Care Health Professional Shortage Areas (HPSAs)". *The Henry J. Kaiser Family Foundation*, 21 Nov. 2019.

[6] Coffman J, Bates T, Geyn I, Spetz J. California's Current and Future Behavioral Health Workforce. Feb. 12, 2018. Healthforce Center at UCSF

[7] Rountree J, Hess N, Lyke A. Health Conditions Among Unsheltered Adults in the U.S. California Policy Lab. October 2019.

The gap in mental health care is particularly notable for minority populations. In a recent report generated by the California Health Care Foundation, 75% of African American and 57% of Latino respondents reported that they do not feel their community has enough mental health care providers, compared to 49% of white respondents.[8]

### B. Psychiatrists are essential

Psychiatrists play an essential role in the delivery of behavioral health services. They are key diagnosticians and treatment providers for psychiatric illness. Extensive training allows them to provide a spectrum of care otherwise covered by multiple professionals: conduct therapy sessions, diagnose psychiatric illness, rule out medical causes of psychiatric illness, and generate treatment plans. Psychiatrists are also the only behavioral health professionals in California that are allowed to independently prescribe medications.[9]

As required for many other physician specialties, the multi-year process for becoming a psychiatrist involves four years of general medical training in medical school, followed by another four years of psychiatry specialty training as a resident at a hospital or community health center. Additional training through a 1 to 2 year fellowship is required for a psychiatrist to become specialized in the treatment of unique populations (e.g., children, elderly) or conditions (e.g., addiction and substance use disorders).

Although physician assistants, nurse practitioners, licensed clinical social workers and others play a critical role in the delivery of behavioral health care and treatment, the extensive training psychiatrists receive equips them with a unique and specialized understanding of the medicine of the mind and body as a whole.

## II. How many psychiatrists are in California, and how many are new per year?

Knowing how many psychiatrists currently practice in California should be an easy question to answer; however, it is not. We reviewed numerous databases including the Medical Board of California (MBC), the American Board of Medical Specialties (ABMS), the Bureau of Labor Statistics (BLS), and the American Medical Association (AMA). Each used different methodologies and definitions and arrived at a different conclusion. Different collection methods range from surveys to academic records. The estimates for the number of currently licensed psychiatrists vary widely across these datasets and some estimates are more than double others. Details on the various databases and the psychiatry workforce size estimates that are derived from them can be found in Appendix 1.

[8] Boyd-Barrett, Claudia "Californians Want Better Mental Health Care. Can the State Deliver?" *California Health Report*, 12 Mar 2020.

[9] Note: Physician assistants and nurse practitioners may prescribe under the supervision of a psychiatrist. California law specifies that one psychiatrist can supervise no more than four physician assistants or nurse practitioners.

For the purposes of this policy brief, we used the MBC data. While each database has its flaws, the MBC individual values are likely to be the most reflective of the licensed psychiatrists in California. Under California Business and Professions Code section 2425.3, licensed physicians and surgeons are required to complete a survey immediately upon issuance of an initial license and at the time of license renewal. However, there is no penalty if a doctor does not complete this survey.[10] The MBC was unable to provide data on the response rate for any given question, or the response rate for the survey overall. It is therefore challenging to assure the validity of the MBC data.

Since this data is compiled from survey responses and some psychiatrists may not respond, it may undercount the total number of psychiatrists. The reported number of new psychiatrists is completely dependent on the number of responses the MBC receives for this question on their survey. The response rate could have large variations from one year to the next. Since we cannot control for this unknown, it would also be invalid to use this data for the purposes of identifying trends in new psychiatrists.

Acknowledging these caveats, the MBC data for 2019 identifies 7,693 licensed psychiatrists in California. This data includes only psychiatrists with an active license, who identified psychiatry as their primary area of practice. In other words, it excludes retired physicians, and those who may consider psychiatry as a secondary practice area.[11]

**Table 1. Number of psychiatrists and growth in psychiatrists**

| Year | Total Psychiatrists | Net change in Psychiatrists | Percent Growth in Number of Total Psychiatrists |
|---|---|---|---|
| 2015 | 7,268 | 265 | 3.8% |
| 2016 | 7,296 | 28 | 0.4% |
| 2017 | 7,365 | 69 | 1.0% |
| 2018 | 7,693 | 328 | 4.5% |
| 2019 | 7,693 | 0 | 0% |

Source: The Medical Board of California, updated as of December 2019.

[10] Email from MBC staff to author on May 27, 2020.

[11] Since we are uncertain whether physicians who indicate psychiatry as only a secondary area of practice completed a residency in psychiatry and are actively practicing psychiatrists, we excluded these responses. It is possible these respondents include physicians who completed combined residency programs. However, since the number of physicians identifying psychiatry as their secondary area of practice is not insignificant (1,479 in 2019), and these are only ~6 positions for combined programs in California each year, we suspect this count includes other specialties that prescribe basic psychiatric medications, such as family medicine and internal medicine.

Using the same database and search parameters, we looked at number of new licenses given to psychiatrists each year in California from 2015 to 2019.

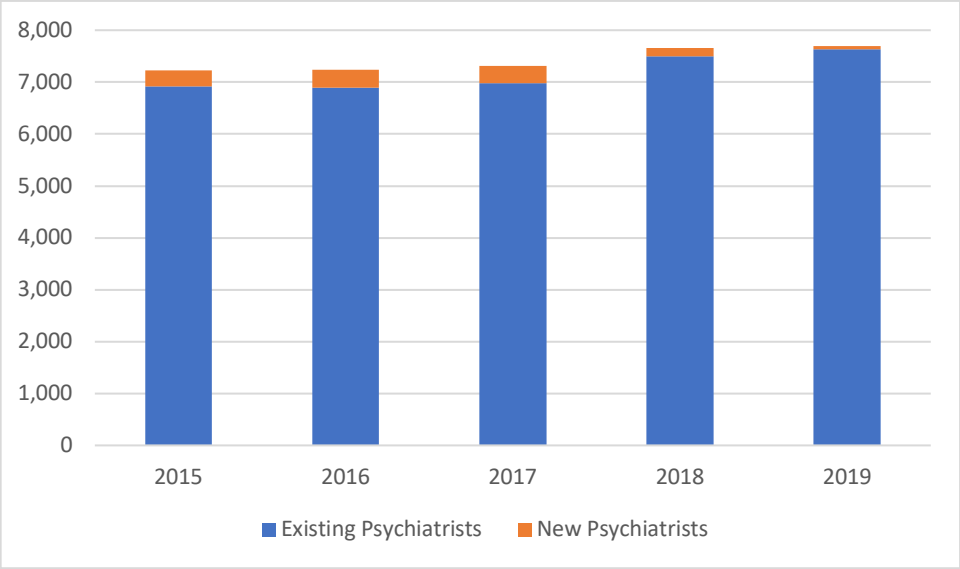
**Table 2. Number of newly licensed psychiatrists in California by year**

| Year | Total New Psychiatrists |
|---|---|
| 2015 | 301 |
| 2016 | 351 |
| 2017 | 338 |
| 2018 | 169* |
| 2019 | 57* |

*Note: The lower number of new psychiatrists for 2018 and 2019 is likely the result of the sampling method employed by the MBC. According to MBC staff, many physicians do not complete the survey until their first license renewal is due two years after initial licensure. Consequently, it is likely that the low number reflects the lack of data for 2020, during which many of the psychiatrists newly licensed in 2018 would be renewing their licenses.

As illustrated in Table 2 and graphically in Figure 1, the new California psychiatrists are having a minimal impact on the overall workforce. Excluding 2018 and 2019, the annual increase in psychiatrists remains relatively constant each year. However, even with 300 to 350 new psychiatrists per year, there may not be enough to replace the psychiatrists leaving the workforce. As shown in Table 1, although new psychiatrists varies minimally between years, the net change in total psychiatrists has larger fluctuations, with only a 0.4% increase in total psychiatrists from 2015 to 2016. This value may continue to decrease as the workforce ages.

**Figure 1. Newly licensed California psychiatrists as share of total existing, practicing psychiatrists**




Source: The Medical Board of California.

The American Medical Association (AMA) estimated that one in four physicians work beyond age 65. They also estimated that more older physicians may be increasingly working past age 65.[12] The AMA report contained suggestions for older physicians who wish to continue to practice, including decreasing patient load and narrowing their scope of practice.

As noted by the UCSF Health Workforce Center, 45% of psychiatrists in 2015 were over 60 years old.[13] This suggests that almost 3,300 of the 7,268 psychiatrists in 2015 should now be over 65 years old. If the AMA findings for physicians pertain to psychiatrists as well, 75% or about 2,500 of these physicians should be retired. If all of these psychiatrists retired, we would expect a larger drop 2015 to 2019. This information is difficult to interpret, but a possible explanation includes what the AMA proposed above: older psychiatrists may maintain their license and continue to practice but decrease their caseload.

As the psychiatry workforce ages, the addition of new licensees is lagging behind. If every psychiatrist who completes residency in California for the next ten years remains in California, we will add approximately 1,780 psychiatrists. There does not appear to be a sufficient number of new psychiatrists to replace those who are leaving the current psychiatry workforce, nor will there be enough to meet increased demand for psychiatric services.

## III. High Residency Position Demand in California: A Critical Bottleneck

The insufficient number of psychiatry residency positions creates a bottleneck that is directly impeding the state's ability to train and retain new psychiatrists. In the 2019 Match, there were 178 intern year categorical psychiatry positions offered in California, an increase of 41 slots since 2014. In a highly competitive selection process, many qualified applicants who wish to become psychiatrists in California are turned away. Moreover, as the state strives to recruit more psychiatrists to meet growing needs, most psychiatry residency positions are filled by student who come from outside of California. In 2018, almost two-thirds of these residency positions were matched with medical school students from outside of California.[14] Although many of these students are likely to remain in California upon completion of their residency program, others are likely to return to their state or country of origin where their personal ties are stronger.

### A. Background on Psychiatric Residency Programs

All residency programs are accredited by the Accreditation Council for Graduate Medical Education (ACGME) and must fulfill their specified requirements. ACGME requires all psychiatry residency program to contain four years of training, with a combination of general medicine

[12] AMA. Competency and Retirement: evaluating the senior physician. AMA wire. 2015. http://www.ama-assn.org/ama/ama-wire/post/competency-retirement-evaluating-senior-physician. Accessed 26 July 2016.
[13] Coffman J, Bates T, Geyn I, Spetz J. California's Current and Future Behavioral Health Workforce. Feb. 12, 2018. Healthforce Center at UCSF
[14] AAMC special report. ERAS applications to Psychiatry 2015-2018.

and psychiatry in the first year. Training facilities can be a combination of academic and county hospitals, community health centers, and private clinics as long as the program is able to provide access to all required components of training (inpatient and outpatient psychiatry care for both adults and children, in areas including substance use disorders, as well as general medicine in the first year) with appropriate supervision from board certified physicians. Currently, the vast majority of residency programs are academic hospital residency programs (e.g., University of California programs).

Funding for residencies comes from a combination of sources, including some funding from Medicare, Veterans Affairs, county funds, and private hospital funds. We were not able to develop an estimate on average costs for residency programs for psychiatry. However, psychiatry residents themselves represent a small proportion of these costs. They are paid employees, with the majority of California first year resident salaries ranging from $46,000-$73,000 depending on cost of living in the program's geographic region.[15,16] However, services provided by residents can be billed and contribute to hospital revenue. It therefore appears that most of the costs for psychiatry residencies reflect faculty and other institutional expenses.

### B. Nationwide Competition for Psychiatry Residencies Growing as Applications Increase

Based on reports from the National Resident Matching Program (NRMP), the national organization responsible for conducting the Match that pairs fourth year medical students with a residency program for all specialties, there has been a steady increase in applicants to the field of categorical psychiatry.[17] While the total number of applicants to any physician specialty increased by only 11% from 2013 to 2019, the total number of applicants to psychiatry, including international medical graduates and US medical graduates, increased by 17%. In addition, the number of United States fourth year medical students applying into psychiatry residency programs increased by 67% from 2013 to 2019. The percentage of these applicants applying to programs in California steadily increased as well from 23% in 2015 to 30% in 2018. Based on this national data, roughly 375 potential psychiatrists graduating from United States medical schools were unable to find training positions in psychiatry in 2018. This is reflective of a 13% unmatched rate, more than twice as high as the average for all specialties. The large increase in unmatched psychiatry applicants indicates that there is an untapped pool that could be used to increase the number of psychiatrists in California if more positions were available.

### C. California Residency Positions

As noted earlier, there were only 178 categorical psychiatry positions offered in California in 2019. This number includes programs that are research, community, or child and adolescent

[15] https://psych.ucsf.edu/rtp/benefits
[16] https://www.kernmedical.com/health-professionals/residency-programs/psychiatry-residency/residents/curriculum/
[17] http://www.nrmp.org/main-residency-match-data/

track psychiatry programs, but excludes the six combination programs, including internal medicine/psychiatry, family medicine/psychiatry, and neurology/psychiatry programs.

California's largest expansion of new residency programs occurred between 2018 and 2019. In 2019, Kaiser Permanente opened two new residency programs, producing 12 new positions. Between 2017 and 2019 the UCLA-San Fernando Valley psychiatry residency program divided into two new programs: UCLA-Olive View and UCLA-VA. Neither offered positions in the 2018 Match, which resulted in a loss of 10 positions that year. However, in 2019 they each offered seven positions, resulting in a gain of 14 positions from the 2018 Match to the 2019 Match. Other large increases occurred in 2018, with the opening of 6 positions at the new Arrowhead Regional Medical Center program in San Bernardino County, and 6 positions at the new Charles R. Drew program in Los Angeles County.

Despite the increase in the number of psychiatry residency programs, there is still an insufficient number to accommodate the medical students seeking them. Since 2015, there has been only one unfilled spot in psychiatry residencies in California, and this position was a research track position. When looking at psychiatry residency positions offered per 100,000 population, California ranks 25$^{th}$ in the nation in the 2019 Match (see Appendix 3).[18]

In response to the growing mental health workforce gap, one-time general funds were appropriated in the state's 2019-20 Budget Act to address the need. In September 2020, the Office of Statewide Health Planning and Development (OSHPD) announced a one-time allocation of $11.7 million towards the expansion of psychiatry residency programs, and the development of new programs. This will open a combined 36 new psychiatry residency positions.[19] An additional $5.6 million was awarded to fund 336 psychiatric mental health nurse practitioner slots.

These Workforce Education and Training (WET) grant funds will help create the Butte County psychiatric residency program ($1.8 million); and the United Advocated for Children and Families Psychiatry: Real Life residency program ($4.4 million). The grant award ($5.5 million) will also be used to expand the Charles R. Drew psychiatry residency program.

### D. How Many Psychiatry Residents in California Come from California?

California medical students are contributing to the increasing competition for psychiatry residency positions. Over the past few years, the number of graduating medical students from California, including Doctors of Osteopathic Medicine (DO) and Medical Doctors (MD), applying to psychiatry has steadily grown (Table 3). Each year there have been enough applicants from California alone to fill all the available positions in California.

[18] National Residency Matching Program and State Census Data from 2019

[19] OSHPD Awards $17.3 Million to Increase Access to Mental Health Professionals in California. September 15, 2020. https://oshpd.ca.gov/oshpd-awards-17-3-million-to-increase-access-to-mental-health-professionals-in-california/

**Table 3. Applicants for psychiatry residency programs in California**

| Year | Number of CA Medical School Graduates Applying to Psychiatry | Psychiatry Residency Positions Available in CA | Percent of CA Positions Held by CA Medical School Graduates |
|---|---|---|---|
| 2015 | 116 | 141 | 32% |
| 2016 | 139 | 139 | 31% |
| 2017 | 150 | 138 | 33% |
| 2018 | 156 | 152 | 35% |
| 2019 | 186 | 178 | -* |

Source: The American Medical Association.

*Data provided from the American Medical Association included only 2015-2018.

### E. Retention of Residents Graduating from California Residency Programs

The majority of the psychiatry residents in California graduated from medical schools in a state other than California, which has remained largely unchanged from 2014 to 2018. With the current shortage of psychiatrists, it is important to maximize the chance of retaining residency graduates. While California has 77% retention rate for residents graduating from any specialty, the highest rate in the country, there are still 23% of residents leaving the state after graduation. Many doctors settle not only where they complete residency training, but also where they have local ties.[20]

## IV. Diversity of Psychiatry Residents and Licensed Psychiatrists in California

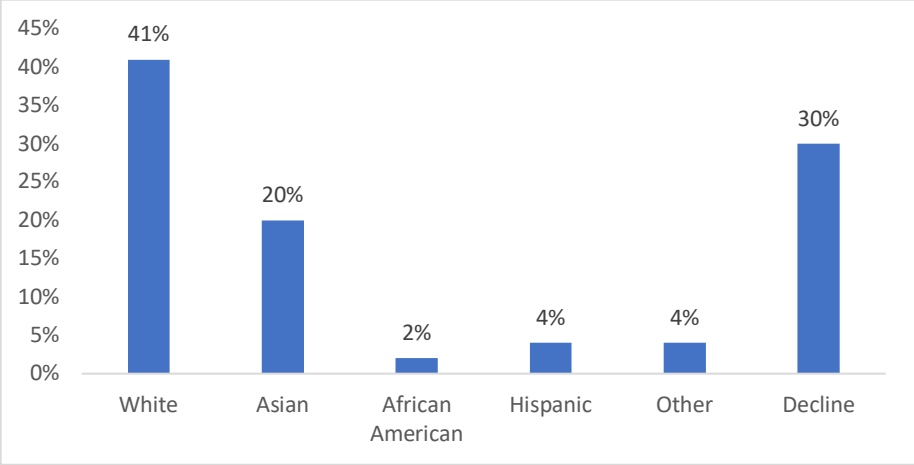
Racial and ethnic diversity among physicians is low across all specialties.[21] This lack of diversity in psychiatry, as illustrated in Figure 2, is notable. Data from the MBC indicates that the racial diversity of the current psychiatry workforce in California does not match the diversity of the state. The population of California being served by these physicians is composed of 48% of underrepresented minority groups, including Hispanic, Native American and Pacific Islander, American Indian and Alaskan Native, and Black or African American.[22] While racial and ethnic diversity is not the only component of diversity important in medicine, it is important for physicians to understand the cultural backgrounds impacting their patients' perspectives.

[20] Robbins, R. and Bronshtein T. "Explore: How many young doctors does your state retain after residency?" *Health.* November 9, 2017.

[21] Diversity in Medicine: Facts and Figures 2019. AAMC.

[22] Quick Facts: California. United States Census Bureau.

**Figure 2. Self-reported race of all licensed psychiatrists in California, 2015**




Source: The Medical Board of California, as cited in UCSF Psychiatry Workforce Report[23]

Data on the diversity of psychiatrists is collected in the MBC mandatory survey. The MBC does not publicly report aggregated race and ethnicity data for all licensed psychiatrists in California. Upon request, the MBC will provide data in two forms: an Access database, or a deidentified excel sheet with additional physicians included who did not wish to have their data public. The structure of the survey allows a physician to enter decline to state or multiple ethnicities, and the MBC does not employ a methodology for categorizing respondents who select multiple ethnicities. Prior to 2015, the overall diversity of the licensed psychiatrists in California was lower than the respondents for any given year. There are two significant limitations with this data. One limitation is that both the survey and question non-response rate is unknown. Another limitation is that a large proportion of psychiatrists select "decline to state" in response to the question about their race/ethnicity.

Are new psychiatrists entering the workforce improving diversity? In a direct analysis of the MBC Access database, the diversity of the psychiatry workforce in California has not changed drastically over the past 15 years (Table 4). However, there was an increase in the underrepresented groups of African American and Hispanic respondents in recent years. Due to limited data and few responses in these categories, other underrepresented races including Native American, were included in "Other."

The Electronic Residency Application Service (ERAS) reports on all applicants who applied to a psychiatry program each year, including race/ethnicity data. The diversity in the pipeline for new psychiatrists minimally improved between 2014 and 2018. Applicants self-identifying as White and Asian remain consistently high, and underrepresented race and ethnicities remained consistently low with 19% identifying as an underrepresented ethnicity in 2014 and 20% in 2018. One exception is a small yet steady increase in applicants self-identifying as Hispanic from 7% to 9%.

[23] Coffman J, Bates T, Geyn I, Spetz J. California's Current and Future Behavioral Health Workforce. Feb. 12, 2018. Healthforce Center at UCSF

**Table 4. Self-reported race of newly licensed psychiatrists in California over time**

| | 2005-2009 | | 2010-2014 | | 2015-2019 | |
|---|---|---|---|---|---|---|
| | Count | Percent of Respondents | Count | Percent of Respondents | Count | Percent of Respondents |
| **White** | 135 | 47 | 122 | 45 | 102 | 40 |
| **Asian** | 102 | 36 | 85 | 31 | 89 | 35 |
| **African American** | 13 | 4 | 21 | 8 | 25 | 10 |
| **Hispanic** | 20 | 7 | 30 | 11 | 28 | 11 |
| **Other** | 11 | 4 | 7 | 3 | 6 | 2 |
| **Decline** | 5 | 2 | 6 | 2 | 5 | 2 |
| **Total** | 286 | 100 | 271 | 100 | 255 | 100 |

Source: The Medical Board of California.

## V. Recommendations:

### 1. Create New Psychiatry Residency Positions in California

The most immediate bottleneck to increasing the psychiatry workforce in California is the number of residency positions now available. Since 2013, the percentage of US medical school 4th year students applying to psychiatry has increased by 67%. In 2019, one out of every ten applicants applying to psychiatry residency does not match into a residency position, which means they do not enter the workforce pipeline and do not have the opportunity to increase the supply of psychiatrists.

Accepting more applicants into residency programs guarantees the production of new psychiatrists within four years. California needs to develop a plan for evaluating and implementing the steps required to increase residency positions, either through creation of new residency programs or expansion of existing programs. With 178 positions offered in the Match, and 186 students from California alone applying to these programs, positions will be filled if opened.[24]

The recent announcement by OSHPD of grants to fund an additional 36 new psychiatry residency programs significantly increases the state's capacity. If fully implemented and funded on an on-going basis, it would represent a 20% increase in the number of residency slots. It is a good start, but more capacity is required to meet growing demand.

### 2. Increase the Percentage of Psychiatry Residents from California

People prefer to stay where they have roots; young medical professional are no exception. To meet the high demand for psychiatric care, California depends on graduating psychiatrists remaining in California. For California medical school graduating seeking to remain in a

California psychiatry residency programs, the opportunities are very limited. Only 35% of the residency programs in 2018 were filled with California medical school graduates. Future psychiatrists are being funneled to other states, where they may decide to reside permanently, which is a loss for the California psychiatry workforce. With the aging workforce of psychiatrists, we need more people entering the pipeline if we have any hope for meeting the growing demand for psychiatric care.

An estimated 23% of physicians who complete their residency in California leave the state to practice elsewhere. This rate is low compared to the rest of the country, most likely because of the strong demand for the quality of life in California. However, our psychiatry workforce could be enhanced if more psychiatrists remained in the state. One approach to increase the retention rate of graduating psychiatrists would be to increase the number of graduating medical students who are matched with residency programs within the state. Utilizing a similar strategy to that of California medical schools, California residency programs can identify those with connections to the area through an additional survey and use this information for screening purposes.

California needs to increase the ties that new psychiatrists have to California to increase the chance that residents graduating in California will stay and serve Californians. To do so, California residency programs should be encouraged to provide additional weight to applicants from California or who are likely to remain in the state.

### 3. Improve Data on Psychiatrists in California

The MBC data reporting system is problematic. There is overwhelming evidence that we have a significant deficit in our supply of psychiatrists, and yet there is no clear plan for how to address the escalating gap between the demand for psychiatry services and the psychiatry workforce. We have identified numerous points in this policy brief that need to be more thoroughly understood. Clear, concise data is crucial to do so. Accurate data is essential for state policymakers and stakeholders to develop strategies that will bolster the psychiatry workforce in California. MBC should be directed to provide public reports that assess the current psychiatry workforce in a manner that reliably identifies trends, gaps and measurement of progress.

The psychiatry workforce crisis cannot be addressed without a clear data-driven dashboard. One approach suggested by UCSF Healthforce Center Researchers Janet Coffman and Joanne Spetz is a health workforce data system. The minimum components of such a data system, as recommended by the federal Health Resources and Services Administration (HRSA) include gender, race/ethnicity, professional education, specialty, hours worked, or practice setting, as well as education information for the state.[25]

[25] Coffman J., Spetz J. “Envisioning an Ideal Health Workforce Data System for California”. Healthforce Center at UCSF. July 24, 2019.

### a. Gather Accurate Data for Psychiatrists in California

The MBC distributes a mandatory survey to all physicians at initial licensure and renewal every two years, but there is no penalty for those who do not respond. The validity of the data derived from the survey cannot be validated because the MBC is unable to report on the proportion of psychiatrists who respond to individual questions in the survey or the survey as a whole.

The MBC, for example, can provide data on the number of physicians who responded to their, survey, and listed psychiatry as their specialty. However, MBC is not able to report on the percentage of licensed psychiatrists who completed the survey. For a fee, MBC offered to organize data from the license application, which requires physicians to identify their area of practice. While this information would provide an accurate value for the number of psychiatrists practicing in California, data from these forms have never been reviewed or aggregated. MBC staff indicated that there are over 40,000 forms that need to be individually reviewed before this data can be shared with the public.

The MBC should chose a method to provide accurate data for the number of psychiatrists currently practicing in California, and the number of newly licensed psychiatrists in California each year, whether this be data from applications or from the mandatory survey with a plan to ensure survey completion.

### b. Diversity Data

While the MBC was able to provide an excel sheet with all recorded survey responses that contain ethnicity or race, they were unable to provide aggregate data. The MBC should design a standardized system for categorizing survey responses for race/ethnicity and aggregate these responses. It is crucial that policy makers and researchers are able to track changes in this important metric.

### c. Public Reporting of Key Data

The MBC is able to provide survey data to the public through an Access database, following approval and assignment of a username and login. One option to enhance data communication to the public is publishing data in a user-friendly interface that could be used by anyone wanting to access this information. This database should contain both aggregated responses to the forms previously mentioned, or complete, de-identified survey results from all licensed physicians. Since Access is a very complicated piece of software, and only specifically trained individuals can use it, this should not be the software used to share data with researchers, policy makers, or the public.

In addition to the information currently obtained on the survey, shared information should include the medical school and residency the physician attended, the physician's age, the specialty in which the physician was trained, whether the physician is full or part time, the type

of practice in which the physicians practices, and the type of insurance accepted in their practice. This should be available through the shared database, as well as in an aggregate form on the annual report.

**Appendix 1.** Additional Estimates for the Number of Psychiatrists Practicing in California

Estimates for the number of psychiatrists in California varies depending on the source of data. The sources for the following information include the Medical Board of California (MBC), the Bureau of Labor Statistics (BLS), the American Medical Association (AMA) Masterfile, and the American Board of Medical Specialties (ABMS). This section includes workforce estimates from each of these sources, as well as the limitations of each source.

The BLS database's main strength is the accessibility of data. Their data is publicly available on their website, with clear descriptions of their collection method. However, since they are a large organization collecting information on numerous occupations across the country, their methods are less focused towards psychiatrists, and appropriately labeled as estimates. Each May and November, a set number of employers receive the Occupation Employment Statistics (OES) survey, with the employers who are surveyed changing every time. The list of employers is derived from the State Workforce Agencies (SWAs). The estimates produced by the BLS is based on the survey results from the past 3 years, or 6 survey periods. With this methodology, the BLS estimates their annual data reflects 1.2 million establishments and 82.6 million of the 143 million individuals employed. While there is not an outside analysis of the accuracy of the employment estimate, there was a published analysis of the reliability of the wage estimates, which determined the data is adequate for approximately 90% of both metropolitan and non-metropolitan areas.

The Medical Board of California (MBC) collects data on Medical Doctors (MD), but not Doctors of Osteopathic Medicine (DO), currently licensed in the state of California. The data is collected in the form of a survey. While this survey is mandatory, there is no incentive or punishment associated with survey completion or lack thereof. At this time, the MBC does not know what proportion of newly licensed psychiatrists are completing the survey. However, they exclude physicians who identify themselves as retired in their database.

Many of the newly licensed psychiatrists listed their primary address as outside of California. It is unclear if these psychiatrists are currently practicing in California. Based on the data for the past two years, it appears as though the number of newly licensed psychiatrists has drastically decreased; however, due to the nature of the data collection method, it is possible that psychiatrists simply did not respond to the survey in recent years. It is clear that many did not respond, as the number of newly licensed psychiatrists in 2019 with California addresses was lower than the known number of psychiatric residents receiving their license that year. It is unclear what may have caused the shift, and if it is true or sampling error. Although the value listed for 2018 and 2019 are the same, the number of physicians listing psychiatry as their primary compared to listing it as both their primary and secondary changed. Therefore, we do not think this value was listed in error.

Another source of untapped data from the MBC is the information collected on the license application forms. These forms are rich with information: age, medical school, gender,

residency training program, and specialty. At this time, the data has not been recorded in a centralized location or aggregated for public use.

In addition, recent changes to the licensure of psychiatry residents in California may have a modest impact on the supply of psychiatrists. While resident physicians could previously apply for and receive a license after completion of post graduate year 1 (PGY-1) and receipt of a passing score on the United States Medical Licensing Examination Step 3, the law SB 798 that went into effect January 1, 2020 delays licensing until after the PGY-3 year. Once licensed, residents can begin moonlighting, or working as an independent physician, outside of the residency program.

An additional database is the AMA Masterfile. This database draws from multiple sources, but the Masterfile is private and expensive to access. Each time an individual enters an LCME accredited medical school or an ACGME accredited residency program, or obtains a license, a record is created in the AMA database. Their primary sources of data include medical schools, post-graduate training programs, state licensing agencies, state disciplinary actions and federal sanctions, the Educational Commission for Foreign Medical Graduates, ABMS, and the Federal Drug Enforcement Administration. An individual's data is continually updated as they transition through different phases of their career. Physicians are also asked to submit updates to their profile. Since receiving state specific information for psychiatrists is expensive, we have values only for 2017 and 2018, during which the AMA Masterfile data reported 5,935 psychiatrists in California in 2017, and 4,535 in 2018.

The final database is the ABMS annual publications. The ABMS is subdivided into different medical specialties which provide board certification for physicians. Board certification is not a requirement for medical professionals, and the ABMS estimates that approximately 80% of graduating residents apply for, and receive, board certification. For the past few years, the ABMS has released an annual report specifying the number of board-certified physicians in each specialty and each state. Assuming that the approximation of 80% remains consistent, this value may be reliable in identifying a trend in medical professionals. As shown in Table A, based on the ABMS values, there has been a steady increase in the number of psychiatrists in California since 2016. However, the numbers presented by the ABMS include certified physicians who are retired, but exclude those who are deceased, and may over-estimate the current number of practicing psychiatrists.

The estimates published by each of these institutions vary widely (Table A). Some of the possible explanations for the variation are described in the respective descriptions above.

**Table A.** Estimated number of psychiatrists in California by year and data source

| | Data Source | | | |
|---|---|---|---|---|
| **Year** | **BLS** | **MBC** | **AMA** | **ABMS** |
| 2014 | 4,100 | 7,003 | – | 7,407 |
| 2015 | 3,160 | 7,268 | – | – |
| 2016 | 3,370 | 7,296 | – | 7,900 |
| 2017 | 3,040 | 7,365 | 5,935 | 8,164 |
| 2018 | 3,480 | 7,693 | 4,535 | 8,248 |
| 2019 | – | 7,693 | – | 8,430 |

Data sources: Bureau of Labor Statistics website, Medical Board of California Access Database, American Board of Medical Specialties annual report, Addition articles citing American Medical Association estimates

**Appendix 2. How the match works**

In order to understand the changes occurring in the field of psychiatry residencies, it is important to understand the residency Match.

Residency applicants submit applications on September 15th and attend interviews that are offered between October and February. In mid-February, the rank order list is due for submission to the National Residency Match Program (NRMP) system. Rank order lists are created by both the applicant and the residency programs. Both lists are created in order of preference; programs rank students in order of most desirable to least desirable, and students rank the programs from their most preferred to least preferred. Once these lists are submitted, the NRMP computer algorithm matches applicants with programs. While the algorithm is designed to optimize both applicant and program satisfaction, it favors applicants.

The algorithm starts by attempting to match applicants to their first-ranked program. If this program ranked the applicant within the number of residency positions they have available, for example the applicant was ranked number five in a program with eight positions, the applicant matches at this program. If the program ranked the applicant lower than the spots available, the applicant will not match there unless higher-ranked applicants match elsewhere. The algorithm continues down the applicants list, attempting to match them with programs in order of their ranking. If all programs listed on the applicants rank list are filled with other applicants, the applicant does not match.

All applicants receive news of the match at the same time during the third week of March. There are not multiple offers extended to the applicants, but simply one match. Applicants who did not match with a program are eligible for participation in the Supplemental Offer and Acceptance Program (SOAP). The SOAP contains unfilled residency positions of all specialties, which programs decide to open to unmatched applicants.

New residents start between the last week of June and the beginning of July each year.

**Appendix 3. Number of psychiatry residents (including combined programs) per 100,000 population**

| Rank | State | Population | Residency Positions | Positions per 100,000 State Residents |
|---|---|---|---|---|
| 1 | District of Columbia | 705,749 | 25 | 35.42 |
| 2 | New York | 19,453,561 | 241 | 12.39 |
| 3 | Massachusetts | 6,949,503 | 86 | 12.37 |
| 4 | Connecticut | 3,565,287 | 44 | 12.34 |
| 5 | Rhode Island | 1,059,361 | 12 | 11.33 |
| 6 | West Virginia | 1,787,147 | 17 | 9.51 |
| 7 | Louisiana | 4,648,794 | 37 | 7.96 |
| 8 | South Dakota | 884,659 | 7 | 7.91 |
| 9 | North Dakota | 762,062 | 6 | 7.87 |
| 10 | Pennsylvania | 12,801,379 | 94 | 7.34 |
| 11 | Michigan | 9,986,857 | 69 | 6.91 |
| 12 | Missouri | 6,137,428 | 40 | 6.52 |
| 13 | New Hampshire | 1,359,711 | 8 | 5.88 |
| 14 | South Carolina | 5,148,714 | 30 | 5.83 |
| 15 | New Mexico | 2,096,829 | 12 | 5.72 |
| 16 | Hawaii | 1,415,872 | 8 | 5.65 |
| 17 | Oklahoma | 3,956,971 | 22 | 5.56 |
| 18 | Ohio | 11,689,100 | 63 | 5.39 |
| 19 | Iowa | 3,155,070 | 17 | 5.39 |
| 20 | North Carolina | 10,488,084 | 55 | 5.24 |
| 21 | Nevada | 3,080,156 | 16 | 5.19 |
| 22 | Illinois | 12,830,632 | 62 | 4.83 |
| 23 | Tennessee | 6,833,174 | 33 | 4.83 |
| 24 | Vermont | 623,989 | 3 | 4.81 |
| **25** | **California** | **39,512,223** | **184** | **4.66** |
| 26 | Nebraska | 1,934,408 | 9 | 4.65 |
| 27 | Maryland | 6,045,680 | 28 | 4.63 |
| 28 | New Jersey | 8,882,190 | 40 | 4.50 |
| 29 | Minnesota | 5,639,632 | 25 | 4.43 |
| 30 | Florida | 21,477,737 | 95 | 4.42 |
| 31 | Wisconsin | 5,822,434 | 25 | 4.29 |
| 32 | Texas | 28,995,881 | 120 | 4.14 |
| 33 | Kansas | 2,913,314 | 12 | 4.12 |
| 34 | Delaware | 973,764 | 4 | 4.11 |
| 35 | Kentucky | 4,467,673 | 18 | 4.03 |
| 36 | Arkansas | 3,017,825 | 12 | 3.98 |
| 37 | Virginia | 8,535,519 | 33 | 3.87 |

| | | | | |
|---|---|---|---|---|
| 38 | Puerto Rico | 3,193,694 | 12 | 3.76 |
| 39 | Maine | 1,344,212 | 5 | 3.72 |
| 40 | Mississippi | 2,976,149 | 10 | 3.36 |
| 41 | Arizona | 7,278,717 | 24 | 3.30 |
| 42 | Georgia | 10,617,423 | 34 | 3.20 |
| 43 | Washington | 7,614,893 | 23 | 3.02 |
| 44 | Oregon | 4,217,737 | 12 | 2.85 |
| 45 | Utah | 3,205,958 | 9 | 2.81 |
| 46 | Alabama | 4,903,185 | 13 | 2.65 |
| 47 | Indiana | 6,732,219 | 16 | 2.38 |
| 48 | Colorado | 5,758,736 | 13 | 2.26 |
| 49 | Montana | 1,068,778 | 0 | 0.00 |
| 50 | Idaho | 1,792,065 | 0 | 0.00 |
| 51 | Alaska | 731,545 | 0 | 0.00 |

Data source: the National Residency Match Program

## About the Author

- **Dr. Alanna Dubrovsky** graduated from UC Davis, School of Medicine, and is completing psychiatry residency training at Oregon Health and Sciences University.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## About California Health Policy Strategies (CalHPS), LLC

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