The Mental Health Workforce in California: Trends in Employment, Education, and Diversity

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UCSF Center for the Health Professions

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The Mental Health Workforce in California: Trends in Employment, Education, and Diversity

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The mission of the Center for the Health Professions is to assist health care professionals, health professions schools, care delivery organizations and public policy makers respond to the challenges of educating and managing a health workforce capable of improving the health and well being of people and their communities.

The Center is committed to the idea that the nation’s health will be improved if the public is better informed about the work of health professionals.

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Views expressed in this report are those of the authors and do not necessarily reflect those of the Center for the Health Professions, UCSF, the supporting foundations or study participants.
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INTRODUCTION

The California public mental health workforce includes a number of health professionals trained in different disciplines. This issue brief utilizes public data sources to present educational data as well as projected workforce needs for selected mental health professions in California. Our primary focus in the mental health workforce is on psychiatrists, psychologists, marriage and family therapists, advanced practitioner nurses in psych/mental health, social workers, psychiatric technicians, and various mental health counselors. We present information on the growth in educational programs, trends in student racial and ethnic diversity, and the future demand and job growth for mental health workers.

BACKGROUND

California’s Current and Projected Population

California is one of the most racially and ethnically diverse states in the country, and is projected to become even more so in the coming decades. In 2000, roughly 53% of California’s population was non-White.\(^1\) By 2006 this proportion had grown to approximately 57%.\(^2\) Population projections suggest that by the year 2030, 66% of the state’s population will be non-White.\(^3\) Over the next 25 years the state’s population is projected to grow by roughly 12 million people. Over 90% of this population growth is projected to occur among California’s Latino (75%) and Asian (17%) populations.\(^3\) These dramatic changes underscore the need to address the lack of racial and ethnic diversity among key mental health professions in the state.

Mental Health Workforce Shortage

Mental health workers provide treatment and services to patients suffering from mental illness. In California, a 2001 report by the Center for Health Statistics indicated that 16.3% or roughly 4 million adults in the state needed mental health care services.\(^4\) Furthermore, a California counties health data report indicated that there were over 600,000 clients receiving county mental health services between 2004 and 2005.\(^5\) A 2008 report found that the vacancy rate for mental health providers in California was 20-25%; these numbers are higher in rural areas.\(^6\)

An influx of new students in the mental health professions will be needed in order to serve a growing number of Californians. In addition, a more diverse mental health workforce is desired in order to better reflect the increasing diversity in California’s population.\(^7\)

A shortage in the mental health workforce can result in service delays and limited accessibility to certain providers. In this report we address the future demand for mental health workers. However, these projections do not necessarily reflect the ideal composition of a mental health workforce to address the increasingly diverse needs of the mentally ill in California. Nor do they address the workforce needed to provide a model of care more focused on wellness, resilience and recovery.\(^5\) Those issues are discussed in a companion brief from The Center for the Health Professions.\(^8\)
DATA COLLECTION AND SOURCES

Data were collected from various sources for analysis of the educational pipeline, current employment, and future projections for the mental health workforce in California. Table 1 describes the major sources of data used for this brief.

Table 1: List of Major Sources Used for Labor and Education Data

<table>
<thead>
<tr>
<th>Data Set</th>
<th>Year(s)</th>
<th>Description and Use in this Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Postsecondary Education Data System (IPEDS): Awards &amp; Degrees Conferred. U.S. Department of Education, National Center for Education Statistics.</td>
<td>1995-2006 ¹</td>
<td>Collection of surveys that describe higher education institutions in the U.S.; used to describe trends for graduates of selected educational programs in California</td>
</tr>
<tr>
<td>American Medical Association (AMA)</td>
<td>2004</td>
<td>Provides demographic information regarding the number, ethnicity, and age of psychiatrists in California and the U.S.</td>
</tr>
<tr>
<td>California Employment Development Department (EDD)</td>
<td>2006-2016</td>
<td>Labor Market Information and Employment Projections provide average wage, job description, and employment data including estimates and projections of job openings by industry and occupation in California; used to measure relative projected growth for selected professions</td>
</tr>
<tr>
<td>California Board of Registered Nursing: 2006 Survey of Registered Nurses</td>
<td>2006</td>
<td>Provides information about the number and types of nurses practicing psychiatric and mental health nursing</td>
</tr>
<tr>
<td>U.S. Department of Labor: Bureau of Labor Statistics (BLS)</td>
<td>2007</td>
<td>Occupational Employment Statistics (OES) provides information on occupational profiles in U.S.; used to measure current employment in California</td>
</tr>
<tr>
<td>California Department of Consumer Affairs</td>
<td>2008</td>
<td>Annual survey provides licensure data for more than 30 bureaus, programs, boards, committees, and commissions governing licensure in California</td>
</tr>
</tbody>
</table>

¹ The number of years of data used for each profession varied due to availability and consistency of coding.
² Multiple reports were needed to describe various demographic characteristics of Psychiatrists.
Selected Mental Health Professionals

The mental health workforce professions included in this analysis are listed in order of the highest current employment in Table 2. The table includes information on California’s most recent employment numbers, average wages, projected growth, and the ratio of health professionals per 100,000 population. There are no BLS data available for advanced practice psychiatric and mental health nurses.

Table 2: Employment, Projected Growth, and Mean Wages for Selected Professions in California’s Mental Health Workforce

<table>
<thead>
<tr>
<th>Profession</th>
<th>Mean Hourly &amp; Annual Wages</th>
<th>Current Employment 2007</th>
<th>Percentage Growth (%) 2006-2016</th>
<th>Ratio per 100,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health and Substance Abuse Social Workers</td>
<td>$19.44/41,470</td>
<td>14,010</td>
<td>22.8</td>
<td>38.4</td>
</tr>
<tr>
<td>Clinical, Counseling, and School Psychologists</td>
<td>$36.67/78,213</td>
<td>12,560</td>
<td>20.1</td>
<td>34.5</td>
</tr>
<tr>
<td>Psychiatric Technicians</td>
<td>$19.89/42,434</td>
<td>10,390 i</td>
<td>15.1</td>
<td>28.5</td>
</tr>
<tr>
<td>Mental Health Counselors</td>
<td>$21.89/46,700</td>
<td>9,360</td>
<td>20.5</td>
<td>25.7</td>
</tr>
<tr>
<td>Substance Abuse and Behavioral Disorder Counselors</td>
<td>$16.96/36,189</td>
<td>8,300</td>
<td>35.4</td>
<td>22.8</td>
</tr>
<tr>
<td>Rehabilitation Counselors</td>
<td>$20.02/42,711</td>
<td>7,620</td>
<td>13.0</td>
<td>20.9</td>
</tr>
<tr>
<td>Marriage and Family Therapists</td>
<td>$20.50/43,716</td>
<td>6,130</td>
<td>21.9</td>
<td>16.8</td>
</tr>
<tr>
<td>Psychiatrists</td>
<td>$72.92/NA</td>
<td>2,480</td>
<td>16.4</td>
<td>6.8</td>
</tr>
</tbody>
</table>


- There is a wide range of wages in the mental health workforce, from $16.96 per hour for substance abuse and behavioral disorder counselors to $72.92 per hour for psychiatrists.
- Mental health and substance abuse social workers represent the largest sector of providers in California’s mental health workforce with an estimated current employment of 14,010.
- The fastest growing mental health profession in California is substance abuse and behavioral disorder counselors with an expected job growth of 35.4%.

i California LMI Data includes four categories of social workers. Mental Health and Substance Abuse Social Workers were selected for this report.
ii May 2006 estimate
The Department of Consumer Affairs (DCA) provides data on the number of licensed health professionals in California by region (see Appendix A for a detailed list of counties in each region). Table 3 displays DCA data for the number of active licensees in California by region. While these data provide information on the number of licensees or providers, they do not indicate whether they are actively employed in the mental health services sector.

Table 3: Distribution of Selected Licensed Mental Health Professionals in California by Region: 2008

<table>
<thead>
<tr>
<th>California Region</th>
<th>LCSWi</th>
<th>MFTii</th>
<th>Psychologist</th>
<th>Psych Tech</th>
<th>PMHi</th>
<th>Psychiatrist</th>
<th>Total</th>
<th>Regional Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bay Area</td>
<td>4,517</td>
<td>8,501</td>
<td>4,454</td>
<td>1,916</td>
<td>129</td>
<td>2,103</td>
<td>21,620</td>
<td>29.8</td>
</tr>
<tr>
<td>North Valley/Sierra</td>
<td>1,185</td>
<td>1,600</td>
<td>690</td>
<td>330</td>
<td>10</td>
<td>360</td>
<td>4,175</td>
<td>5.8</td>
</tr>
<tr>
<td>Central Valley/Sierra</td>
<td>279</td>
<td>490</td>
<td>167</td>
<td>323</td>
<td>3</td>
<td>93</td>
<td>1,355</td>
<td>1.9</td>
</tr>
<tr>
<td>Inland Empire</td>
<td>908</td>
<td>1,476</td>
<td>579</td>
<td>2,043</td>
<td>20</td>
<td>327</td>
<td>5,353</td>
<td>7.4</td>
</tr>
<tr>
<td>Orange</td>
<td>1,115</td>
<td>2,279</td>
<td>1,141</td>
<td>857</td>
<td>28</td>
<td>496</td>
<td>5,916</td>
<td>8.2</td>
</tr>
<tr>
<td>Central Coast</td>
<td>778</td>
<td>1,998</td>
<td>772</td>
<td>1,285</td>
<td>23</td>
<td>298</td>
<td>5,154</td>
<td>7.1</td>
</tr>
<tr>
<td>North Counties</td>
<td>432</td>
<td>814</td>
<td>210</td>
<td>172</td>
<td>7</td>
<td>69</td>
<td>1,704</td>
<td>2.4</td>
</tr>
<tr>
<td>South Valley/Sierra</td>
<td>630</td>
<td>792</td>
<td>437</td>
<td>1,377</td>
<td>4</td>
<td>205</td>
<td>3,445</td>
<td>4.8</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>4,238</td>
<td>6,798</td>
<td>3,882</td>
<td>1,012</td>
<td>100</td>
<td>1,852</td>
<td>17,882</td>
<td>24.7</td>
</tr>
<tr>
<td>San Diego</td>
<td>1,477</td>
<td>2,022</td>
<td>1,513</td>
<td>137</td>
<td>44</td>
<td>636</td>
<td>5,829</td>
<td>8.0</td>
</tr>
<tr>
<td>Total</td>
<td>15,559</td>
<td>26,770</td>
<td>13,845</td>
<td>9,452</td>
<td>368</td>
<td>6,439</td>
<td>72,433</td>
<td>100.1</td>
</tr>
</tbody>
</table>

Percent Total: 21.5% LCSW, 37.0% MFT, 19.1% Psychologist, 13.0% Psych Tech, 0.5% PMH, 8.9% Psychiatrist

Sources: Department of Consumer Affairs, 2008; AMA Physician Professional Data © 2006 by the American Medical Association

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i LCSW – Licensed Clinical Social Worker  
ii MFT – Marriage and Family Therapist  
iii PMH – Includes only Advanced Practice Nurses with Psychiatric and Mental Health Certification from California Board of Registered Nursing
The majority of licensed mental health professionals (54.5%), either reside or practice in the Bay Area and Los Angeles region. Together, these two areas comprise 47.4% of California’s population. About 30% of the professional providers are located in the Bay Area while only 20% of the state’s population resides there.

Marriage and Family Therapists are the largest group of licensed mental health professionals in California comprising 37.0%.

Licensed Clinical Social Workers (LCSWs) are the next largest at 21.5%. LCSW is a licensure category while Mental Health and Substance Abuse Social Worker is an employment category used by the BLS. We cannot assume that these represent the same individuals.

Psychiatric and mental health certified nurses (PMH) in California are likely only a subset of the total number of advanced practice mental health nurses in the workforce. There are national advanced practice certifications in psych/mental health but those data were unavailable for California.

Psychiatrists comprise only 8.9% of licensed mental health professionals in California.

A similar table (not shown) in a previous report displayed 2001 data from the DCA. Comparing the data between 2001 and 2008 with the same DCA categories (excluding psychiatrist), we estimate that the total number of licensed mental health professionals has increased by roughly 8,000. Between 2001 and 2008, LCSWs increased by 13.4%; MFTs increased by 15.1%; licensed psychologists by 22.8%; and psychiatric technicians by 3.0%.

SELECTED HEALTH PROFESSIONS: DEMAND, SUPPLY, AND DIVERSITY

We examined several individual professions in California’s mental health workforce and present data describing the current workforce, educational programs, and the diversity of student graduates from these programs.

Psychiatrist

Psychiatrists work in state psychiatric hospitals, county mental health programs, community clinics, private practice settings, criminal justice and correctional facilities, and other service sites. They are specialty trained physicians who are licensed to “diagnose, treat, and help prevent disorders of the mind.” Psychiatrists must complete medical school and specialize in a psychiatry residency program. They are often the mental health provider most involved with diagnosing and prescribing medications to patients. In 2008, according to the AMA there were 6,570 licensed psychiatrists in California. This number differs greatly from 2,480 identified by the BLS (OES). It may be due to the exclusion of self-employed individuals in the BLS survey or the AMA data including individuals no longer in active practice.
**Race and Ethnicity**

We used data from several different AMA reports and databases, 2004, 2006, 2007, and 2008, to present data on the race and ethnicity, practice setting,\(^1\) age, and gender of psychiatrists in California and the U.S. (when state-specific data was not available).

Figure 1 displays information from 2004 AMA data on the number of psychiatrists by race and ethnicity in California. The figure does not include psychiatrists for whom race and ethnicity are unknown, about 20.2%.

**Figure 1: Psychiatrists in California by Race and Ethnicity: 2004**

![Bar chart showing race and ethnicity distribution of California psychiatrists in 2004](chart.png)

Source: AMA Physician Professional Data © 2004 by the American Medical Association

- The psychiatry profession is predominantly White. In comparison to previously reported AMA data reported, there has not been much change in the race and ethnicity of psychiatrists in California.\(^10\) The largest shift was for Asian/Pacific Islander psychiatrists – an increase from 8.0% to 15.3% (data not shown).

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\(^{1}\) Location of psychiatrists is determined by preferred mailing addresses submitted to the AMA. This can be either a home or work address; in this report, we infer it as practice setting.
**Practice Settings**

Figure 2 displays information from 2006 AMA data on the location of psychiatrists by region in California (Appendix B defines the counties in each region).

**Figure 2: Percentage of Psychiatrists Located in Each Region of California: 2006**

![Pie chart showing percentage of psychiatrists by region in California]

Source: AMA Physician Professional Data © 2006 by the American Medical Association

- Only 1.4% and 8.8% of psychiatrists in California are located in the Northern and Central Counties regions, respectively. A third of psychiatrists are located in the Greater Bay Area; in comparison, only 20% of the population resides in the Bay Area.\(^\text{13}\)

**Age and Gender**

Figure 3 displays national 2007 AMA data on psychiatrists by age group and gender.\(^\text{14}\)

**Figure 3: Psychiatrists in the United States by Age and Gender: 2007**

![Bar chart showing number of psychiatrists by age and gender in the United States]

Source: 2007 AMA Physician Characteristics and Distribution in the U.S.
The overall trend in the U.S. shows a greater portion of psychiatrists approaching retirement age and a smaller proportion of psychiatrists in the younger age groups.

National data indicates that while psychiatrists over age 45 are predominantly male, younger psychiatrists show more gender balance. Psychiatrists age 35 and under are nearly equal in gender representation.

Clinical, Counseling, and General Psychologist

According to 2007 BLS (OES) data, psychologists currently represent the second largest number of employed health professionals in the California mental health workforce. They work in schools, private practice settings, county mental health programs, and other institutions. Psychologists are trained to “diagnose and treat mental disorders; learning disabilities; and cognitive, behavioral, and emotional problems using individual, child, family, and group therapies.” In order to become a licensed psychologist in California, a student must complete a doctoral program.

Psychology programs are offered at the bachelors, master’s, and doctoral level, and also have a variety of foci – clinical, counseling, and general. This analysis includes data only for the master’s and doctoral level programs. While psychology is a common undergraduate degree, it does not necessarily identify individuals who will pursue work in mental health. IPEDS data includes graduates from programs of clinical, counseling, and general programs in psychology. This differs slightly from the categories BLS uses to track the workforce.

Educational Pipeline

The following figures and analysis focus on educational data provided by post-secondary programs. Figure 4 displays the number of graduates from clinical, counseling, and general psychology programs at the doctoral level between 2000 and 2006. Figure 5 presents the same data at the master’s level.

Figure 4: Number of Reported Graduates of Doctorate-Level Clinical, Counseling, and General Psychologist Programs in California: 2000 – 2006


BLS categorizes psychologists by clinical, counseling, and school.
In 2006, there were 777 doctorates awarded in psychology from 37 programs in California.

The number of programs ranged from 30 (in 2002) to 37 (in 2006). In 2006, those programs included: 17 clinical, 4 counseling, and 16 general psychology.

Between 2000 and 2002, there were two fewer doctorate programs in California; this is a possible reason for the decrease in the number of graduates.

In 2003, three new doctorate level counseling psychology programs opened in California. Their impact on increasing the number of graduates appeared a few years later.

Figure 5: Number of Reported Graduates of Master’s-Level Clinical, Counseling, and General Psychology Programs in California: 2000 – 2006

There are more than three times as many graduates from master’s degree programs in psychology than doctoral students. This is the highest reported number of graduates from our overview of selected educational programs in California.

In 2006, there were 2,593 graduates from 83 clinical, counseling, and general programs at the master’s level.

Between 2000 and 2003, there was a slight decrease in the number of graduates although the number of programs remained at 76.

After 2003, the number of programs and master’s level graduates began to increase. By 2006, there were 83 master level programs in psychology.
**Race and Ethnicity**

Figure 6 displays the race and ethnicity of graduates from both doctoral and master’s level programs. This figure includes only students for whom race and ethnicity has been identified. Between 2000 and 2006, the percent of graduates who did not report race and ethnicity ranged from 9.0% to 14.1%. This is due either to students not self-identifying a race and ethnicity category or the school not reporting that data. In addition, foreign born students composed from 2.4% to 3.8% of the graduates.

**Figure 6: Racial and Ethnic Composition for Reported Graduates of Doctorate and Master’s-Level Clinical, Counseling, and General Psychology Programs in California: 2000 – 2006**

![Racial and Ethnic Composition](image)


- This figure clearly portrays the lack of diversity in psychology graduates in California. Psychology degrees at both the doctoral and master’s level are heavily composed of White graduates. There has been a slight reduction since 2000; the percentage of White graduates dropped from 77.8% to 70.7%.
- Between 2000 and 2006, Hispanic/Latino graduates increased by 3.1% from 8.8% to 11.9%, and Asian/Pacific Islander graduates increased by 2.2% from 7.5% to 9.7%.

**Marriage and Family Therapist (MFT)**

Marriage and family therapists “diagnose and treat mental and emotional disorders, whether cognitive, affective, or behavioral, within the context of marriage and family systems.” Students typically attend a doctoral or masters program that prepares them for a licensure examination from the California Board of Behavioral Sciences. Licensure also requires satisfying the requirement of at least 3,000 supervised training hours and completing additional coursework. Before 1999, marriage and family therapists were sometimes known as marriage, family, and child counselors.
**Educational Pipeline**

The majority of marriage and family therapists graduate from master’s level programs. There are a small number of doctoral students, however this analysis includes data only for students from master’s programs. While there are 13 dedicated educational programs for MFT, other clinical or counseling psychology master’s level programs also offer training and preparation for MFT licensure. In fact, nearly all the master’s programs for clinical or counseling psychology also prepare students for the MFT state licensure examination. This is likely one reason for the discrepancy between licensure and graduation data on MFT dedicated programs. Figure 7 displays the number of graduates from dedicated Marriage and Family Therapy master’s level programs between 1995 and 2006 in California.

**Figure 7: Number of Reported Graduates of Master’s-Level Marriage and Family Therapy Programs in California: 1995 – 2006**

![Number of Reported Graduates of Master’s-Level Marriage and Family Therapy Programs in California: 1995 – 2006](image)


- There were 428 graduates from 13 dedicated MFT programs in 2006.
- The decrease in the number of MFT graduates between 1995 and 2002 reflects the fluctuation in the number of programs in California. In 1995, there were 13 MFT programs. By 2002, the number of programs decreased to 9, but returned to 13 in 2006.

**Race and Ethnicity**

Figure 8 displays the number of MFT graduates by race and ethnicity in California between 1995 and 2006. This figure includes only students for whom race and ethnicity has been identified. Between 1995 and 2006, the percent of graduates who did not report a race and ethnicity ranged from 1.0% to 15.8%. In addition, foreign born students composed 3.3% to 8.2% of the graduates.
Figure 8: Racial and Ethnic Composition for Reported Graduates of Master’s Level Marriage and Family Therapy Programs in California: 1995 - 2006

There is a lack of diversity in MFT graduates although the picture is changing slightly. The percent of graduates who were White ranged from a high of 84.9% in 1996 to 61.7% in 2000.

There has been a gradual shift in the percentage of non-White graduates in the last decade. Hispanic/Latino graduates made the largest gain from 7.1% in 1997 to 21.3% in 2006.

Advanced Practice Psychiatric and Mental Health Nurse

Advanced practice psychiatric and mental health nurses are trained to “assess, diagnose, and treat individuals or families with psychiatric problems/disorders or the potential for such disorders.”

Advanced practice nurses in mental health may be trained as Nurse Practitioners (NP), Clinical Nurse Specialists (CNS), or in other programs awarding a master’s degree in nursing. Certification in these specialties is primarily awarded by a national exam process through the American Nurse Credentialing Center (ANCC). We were not able to obtain data on the number of nurses possessing mental health advanced practice certifications in California. In addition, the California Board of Registered Nurses (BRN) awards a certificate to advanced practice psychiatric and mental health nurses. The requirements include a master’s degree in psychiatric and mental health nursing and two years of supervised experience providing services in a psychiatric and mental health setting.

The 2008 DCA data identified 368 advanced practice nurses who received psychiatric and mental health certification from the Board of Registered Nursing (BRN) in California. However, this number likely represents only a portion of RNs who have advanced practice certification in psychiatric and mental health in California. In a 2006 BRN survey of active RNs, about 3.4%...
reported advanced practice certification in psych and mental health, which would represent about 7,651 active registered nurses residing in California. This is a self-reported survey, and it is possible that nurses certified by national organizations may have identified themselves as state certified.

In addition to the advanced practice nurses, in a recent survey, about 6.0% (13,501) of active RNs identified psychiatric and mental health clinical areas as the setting in which they most frequently provided care. This figure represents about 13,000 RNs who work in mental health but who may not have advanced practice training in this area.

Of the 27 advanced practice programs in California that offer either clinical nurse specialist and/or nurse practitioner programs, only three nursing programs offer a specialty in psychiatric and mental health care. They are California State University at Long Beach, University of California at Los Angeles (a subspecialty only), and the University of California, San Francisco. A few other programs are reported to be planning to add psych/mental health advanced practice training in the future.

Social Worker

In 2008, the BLS identified 14,010 mental health and substance abuse social workers employed in California. These social workers “assess and treat individuals with mental, emotional, or substance abuse problems, including abuse of alcohol, tobacco, and/or other drugs. Activities may include individual and group therapy, crisis intervention, case management, client advocacy, prevention, and education.” The BLS also identified three other groups of social workers: 1) medical and public health social workers; 2) child, family, and school social workers; and 3) all other social workers. Some of the social workers from these categories may also work in mental health settings but we did not include them in this analysis. Because the various categories of social workers vary across data sets we cannot compare the data between employment, licensure, and program graduates.

According to the DCA, in 2008 there were 15,559 actively licensed clinical social workers (LCSW) located in California; this group comprises 21.5% of the licensed health professionals presented in Table 3. It is not known how many of these LCSWs work in mental health. In a study by the National Association of Social Workers (NASW) that included 349 survey respondents from California, 264 respondents (46.6%) stated that mental health was their area of social work practice in their primary employment. About 4.6% and 9.2% of these respondents stated that their primary work setting was a psychiatric hospital and behavioral clinic/outpatient facility, respectively.
**Educational Pipeline**

Social Work program graduates may work in a wide range of occupational settings. We focus on the master in social work degree (MSW) because it is a pre-requisite to take the Licensed Clinical Social Worker exam in California. Figure 9 displays the number of graduates from MSW programs in California between 2000 and 2006.

**Figure 9: Number of Reported Graduates of Master’s-Level Social Work Programs in California: 2000 – 2006**

The number of MSW graduates has been steadily increasing since 2002; roughly a 36.1% increase. This is likely due to an increase in the number of graduate programs from 13 in 2000 to 17 in 2006.

**Race and Ethnicity**

Figure 10 displays information on the race and ethnicity of MSW graduates in California from 2000 to 2006. This figure includes only students for whom race and ethnicity has been identified. Between 2000 and 2006, 7.6% to 12.7% of graduates did not report a race and ethnicity. In addition, foreign born students comprised 1.2% to 1.8% of the graduates.
While the majority of graduates from MSW programs are White, there has been a gradual decline from 51.9% to 43.1% between 2000 and 2006.

Hispanic/Latino graduates increased by 7.3% during the same time period.

The change within African-American (-0.3%), American Indian (0.0%), and Asian/Pacific Islander (+1.8%) graduates has essentially been flat between 2000 and 2006.

Psychiatric Technician

Psychiatric technicians “care for mentally impaired or emotionally disturbed individuals, following physician instructions and hospital procedures.” In addition, they may monitor and report to staff about patients’ physical and mental health, aid in rehabilitation and treatment programs, help with personal hygiene, and administer oral medications and hypodermic injections. Many psychiatric technicians in California are employed in state hospitals, developmental centers, correctional facilities, and other care centers.27

A license from the Board of Vocational Nursing and Psychiatric Technicians is required.28 In 2008, the DCA reported 9,452 actively licensed psychiatric technicians in California.
Educational Pipeline

The majority of students complete a psychiatric technician program in 1 – 2 years, earning a certificate of completion. Education data indicate that a small percentage of these students take additional units to complete the requirements for an Associate's degree (if offered by their program). For example, in 2006 only 10.5% of graduates received an associate degree. Both types of programs prepare students for the state licensure examination. Figure 11 displays information on graduates from both associate degree and 1-2 year certificate of completion programs for psychiatric technicians between 1995 and 2006. Figure 12 displays information on the race and ethnicity of those graduates.

Figure 11: Number of Reported Graduates of Associate Degree and 1 – 2 year Certificate Psychiatric Technician Programs in California: 1995 - 2006

The most recent education data reported 430 graduates from 11 psychiatric technician programs in California including associate degree and 1 – 2 year certificate of completion programs.

There has been a steady increase in the number of graduates from psychiatric technician programs between 1995 and 2006 in California with the exception of a slight drop in 2004. In 2006, programs in California were graduating around 400 more students than in 1995.

The number of programs has been fairly steady during that time – ranging from 9 to 12 programs in the state. Educational institutions are fairly equally divided between northern and southern California with a few in the central area. All but one program in 2006 were at community colleges.

Race and Ethnicity

Figure 12 includes only students for whom race and ethnicity has been identified. Between 1995 and 2006, 0.5% to 4.7% of graduates did not report a race and ethnicity. In addition, foreign born students comprised between 0.0% to 1.6% of the graduates.
Psychiatric technician graduates are a fairly diverse group. In 2006, there were an equal percentage of White and Hispanic/Latino graduates (29.6%).

In recent years, Hispanic/Latinos have emerged as the largest represented racial and ethnic group of psychiatric technician graduates.

African American graduates were the second largest group until 1999, whereupon a steady decline occurred until 2003 (-14.5%). Asian/Pacific Islander graduates became the second largest group within the following year (+13.1%).

Other Mental Health Providers

The following professions do not require licensure to work in the mental health field in California. This group includes counselors focusing on mental health and substance abuse related problems, rehabilitation, and mental health. In this analysis, we provide educational data that best correlates to each of these mental health workforce categories except for mental health counselors. Mental health counselor is a broad group including individuals who are trained in a variety of programs at the master’s degree level. However, education data are difficult to link to this specific occupation title. Mental health counselors comprise a large proportion of the mental health workforce in the state. According to the BLS, there were 9,360 mental health counselors employed in California in 2007.
Substance Abuse and Behavioral Disorder Counselors

In 2007, the BLS reported 8,300 substance abuse and behavioral disorder counselors employed in California. These specialized counselors, primarily educated at the certificate (non-degree) level, focus on substance abuse counseling. California employment projections by the EDD indicate they are the fastest growing group in the mental health workforce with an expected 35.4% growth rate. Substance abuse and behavioral disorder counselors “counsel and advise individuals with alcohol, tobacco, drug, or other problems, such as gambling and eating disorders.” Education data from IPEDS identify substance abuse and behavioral disorder counselors as substance abuse and addiction counselors. Prior to 2003 in IPEDS, the occupation code was different; thus we include education data only from 2003 forward.

Educational Pipeline

The majority of graduates are from educational programs that award an associate degree and/or 1 – 2 year certificate of completion. Many schools offer both options, however data suggests that the majority of students choose the certificate of completion. In 2006, 20.8% of graduates earned an associate degree. Both program tracks prepare students for voluntary certification by the California Certification Board of Alcohol and Drug Counselors (CCBADC). Certification denotes that an individual has met either state or nationwide credentials, but does not equate to a state license.

Because there were relatively fewer associate degrees awarded in comparison to certificates, we have combined the education data. Figure 13 shows the number of graduates from associate degree and 1 – 2 year certificate of completion programs for substance abuse and addiction counseling.

Figure 13: Number of Reported Graduates of Associate Degree and 1 – 2 year Certificate Substance Abuse and Addiction Counseling Programs in California: 2003 – 2006

Between 2003 and 2006, the number of programs increased, from 40 to 42. The decrease in 2005 reflects a drop off in the number of graduates from four of the programs, about a 50% reduction in reported class enrollment.
**Race and Ethnicity**

Figure 14 displays data on the race and ethnicity of graduates from substance abuse and addiction counseling programs. This figure includes only students for whom race and ethnicity has been identified. Between 2003 and 2006, 4.3% to 7.3% of graduates did not report a race and ethnicity. In addition, foreign born students comprised from 0.1% to 0.4% of the graduates.

**Figure 14: Racial and Ethnic Composition for Reported Graduates of Associate Degree and 1 – 2 year Certificate Substance Abuse and Addiction Counseling Programs in California: 2003 – 2006**

- In 2003, White (52.9%) and African-American (25.0%) graduates were the two largest racial and ethnic groups.
- During the period between 2003 and 2006, both Whites and African-Americans had slight reductions in the number of graduates (-1.6% for Whites and -3.8% for African Americans).
- In 2006, Hispanic/Latino students were 22.2% of the total percentage of the graduates.

Rehabilitation Counselors

According to the BLS, in 2006 there were 9,280 rehabilitation counselors employed in California. This is not a licensed profession in California, although most graduates obtain professional certification. Rehabilitation counselors “counsel individuals to maximize the independence and employability of persons coping with personal, social, and vocational difficulties that result from birth defects, illness, disease, accidents, or the stress of daily life.”

Educational Pipeline

The education data combines vocational and rehabilitation counselors. In California, the rehabilitation counseling degree is awarded at the bachelors and master’s level. Education data for this degree became available in 2003. The number of programs has been stable since then with one bachelor’s level and four master’s level programs. In 2006, 80% of graduates received a master’s degree. Because there were relatively few graduates from bachelors level programs, figure 15 includes only master’s level graduates from vocational and rehabilitation counseling programs between 2003 and 2006. Figure 16 displays the number of these graduates by race and ethnicity.

Figure 15: Number of Master’s-Level Vocational and Rehabilitation Counseling Graduates in California: 2003 – 2006

This field produces a small number of graduates in California. The number fluctuates greatly because one institution also has an online program that provides additional graduates every three years (other programs produce graduates every two years).

In 2006, there were 64 graduates from the four master’s level programs in California.
**Race and Ethnicity**

Figure 16 includes only students for whom race and ethnicity has been identified. Between 2003 and 2006, 14.3% to 25.4% of graduates did not report a race/ethnicity. In addition, foreign born students comprised anywhere from 1.5% to 3.1% of the graduates. Due to the large number of unreported race and ethnicity and the small number of students, these data can only be viewed as possible trends.

**Figure 16: Racial and Ethnic Composition for Reported Graduates of Master’s-Level Rehabilitation Counseling Programs in California: 2003-2006**

The master’s level vocational and rehabilitation counseling programs are composed primarily of White students.

The past four years have seen a slight shift. There has been a reduction of White graduates (-14.0%) between 2003 and 2006, an increase in Hispanic/Latino (+6.1%), American Indians (+4.6%), Asian/Pacific Islanders (+2.6%), and African American (+0.7%) graduates. However, because the total number of graduates each year is small, these changes translate to relatively few students.
SUMMARY AND CRITICAL POLICY ISSUES

Several key mental health workforce issues emerge from this data. Data indicate that additional mental health workers will be needed to care for California’s population, which is growing in size and diversity. While there have been increases in the supply of certain professions, there are shortages in others. There is unequal access to mental health providers throughout the state. There is also a general lack of diversity in the mental health workforce, particularly in higher paid professions with greater education requirements.

Projected job growth and employment opportunity in the mental health professions

The professions studied had ten year growth rates between 13.0-35.4%. Many new positions will be available in the mental health workforce with a variety of educational requirements. The challenge will be to increase awareness of these careers among young students and older workers seeking new careers. However, state budget constraints may limit funding available to hire mental health workers needed for the public mental health sector and may reduce the number of positions open.

Educational programs need to reach out to new groups of students

Most educational degree and non-degree programs reported an increase in either the number of school programs or number of graduates. However, it is not clear whether the increased number of graduates will translate to more mental health providers, particularly in settings such as public mental health or in underserved areas. In addition, it is important that educational programs include clinical training experiences in the public mental health sector.

Lack of diversity in the mental health professions

Increasing the diversity of the mental health workforce is one of the major goals of the California Mental Health Service Act (MHSA). In most of the mental health professions examined in this study, the data repeatedly indicates a lack of diversity in the workforce. Although, there have been small shifts in demographic diversity in many mental health professions, there is less diversity in higher paying professions with greater education requirements. Continued efforts are needed to continue to increase diversity in all types of mental health professionals in California.
## APPENDICES

### Appendix A: Counties in California Regions as defined by the Department of Consumer Affairs

<table>
<thead>
<tr>
<th>Region</th>
<th>Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bay Area</td>
<td>Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma, Santa Cruz</td>
</tr>
<tr>
<td>North Valley/Sierra</td>
<td>El Dorado, Nevada, Placer, Sacramento, Sierra, Sutter, Yolo, Yuba</td>
</tr>
<tr>
<td>Central Valley/Sierra</td>
<td>Alpine, Amador, Calaveras, San Joaquin, Stanislaus, Tuolumne</td>
</tr>
<tr>
<td>Inland Empire</td>
<td>Inyo, Mono, Riverside, San Bernardino</td>
</tr>
<tr>
<td>Orange</td>
<td>Orange</td>
</tr>
<tr>
<td>Central Coast</td>
<td>Monterey, San Benito, San Luis Obispo, Santa Barbara, Ventura</td>
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<tr>
<td>North Counties</td>
<td>Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Plumas, Shasta, Siskiyou, Tehama, Trinity</td>
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<tr>
<td>South Valley/Sierra</td>
<td>Merced, Fresno, Kern, Kings, Madera, Mariposa, Tulare</td>
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<td>Los Angeles</td>
<td>Los Angeles</td>
</tr>
<tr>
<td>San Diego</td>
<td>Imperial, San Diego</td>
</tr>
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### Appendix B: Counties in California Regions as defined by the American Medical Association

<table>
<thead>
<tr>
<th>Region</th>
<th>Counties</th>
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</thead>
<tbody>
<tr>
<td>Greater Bay Area</td>
<td>Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Solano, Sonoma</td>
</tr>
<tr>
<td>Southern</td>
<td>Imperial, Kern, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Ventura</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>Los Angeles</td>
</tr>
<tr>
<td>Central</td>
<td>Alpine, Amador, Calaveras, El Dorado, Fresno, Inyo, Kings, Madera, Mariposa, Merced, Mono, Placer, Sacramento, San Joaquin, Stanislaus, Sutter, Tulare, Yolo, Yuba</td>
</tr>
<tr>
<td>Northern (Superior)</td>
<td>Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Tuolumne</td>
</tr>
</tbody>
</table>
REFERENCES

1 Census 2000 Summary File 1 (SF1) 100-Percent Data, Table P4. Hispanic or Latino, and Not Hispanic or Latino by Race (Total Population).

2 2006 American Community Survey, Public Use Microdata Sample for California.


12 AMA Physician Professional Data © 2008 by the American Medical Association


