



**HEALTH WORKFORCE
RESEARCH DATA CENTER
ANNUAL REPORT TO THE LEGISLATURE
JANUARY 2023**



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"A healthier California where all receive equitable, affordable, and quality health care"

State of California

Gavin Newsom, Governor

Health and Human Services Agency

Mark Ghaly MD, MPH, Secretary

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BACKGROUND

Department of Health Care Access and Information

The Department of Health Care Access and Information (HCAI), formerly the Office of Statewide Health Planning and Development (OSHPD), was created in 1978 to provide the state with an enhanced understanding of the structure and function of its healthcare delivery systems. Since that time, HCAI's role has expanded to include delivery of services that promote equitable access to health care for all Californians.

HCAI is a leader in collecting data and disseminating information about California's healthcare infrastructure, promoting an equitably distributed healthcare workforce, and publishing valuable information about healthcare outcomes. HCAI also monitors the construction, renovation, and seismic safety of hospitals and skilled nursing facilities and provides loan insurance to facilitate the capital needs of California's nonprofit healthcare facilities. These programmatic functions are advised by several boards and commissions.

HCAI serves as the building department for hospitals and skilled nursing facilities operating within California. Its primary goal is to promote patient safety by ensuring that each facility remains functional in the event of a natural disaster.

HCAI collects, analyzes, and disseminates information about hospitals, skilled nursing facilities, clinics, and home health agencies licensed within California. Examples of facility information include financial reports, service utilization data, and quality of care data.

To promote a diverse and culturally competent workforce, HCAI analyzes California's healthcare infrastructure and workforce needs. HCAI addresses the state's healthcare workforce needs by providing direct grant funding to medical schools, nursing programs and other healthcare training institutions. HCAI also offers scholarships and loan repayments to students and health professionals who agree to provide patient care in medically underserved areas. Scholarship and loan repayments are offered for allied health, nursing, behavioral health, dental, and other medical professions.

The California Health Facility Construction Loan Insurance Program (known as the Cal-Mortgage Program) offers loan insurance to nonprofit and public health facilities for the development and expansion of healthcare services throughout California.

HCAI is also advancing healthcare affordability across the state. Established in 2022, the Office of Health Care Affordability (OHCA) analyzes California's healthcare market for cost trends and drivers of spending, enforces health care cost targets, and conducts cost and market impact reviews of proposed healthcare consolidations. The Health Care Affordability Board will advise on key activities and approve specific aspects of OHCA's work, with input from an Advisory Committee and the public. To drive toward a high-value system, in addition to cost targets, OHCA will measure and publicly report on quality, equity, adoption of alternative payment models, investment in primary care and behavioral health, and workforce stability.

Additionally, in response to increasing prescription drug prices, the state has established the CalRx Biosimilar Insulin Initiative. HCAI will start by partnering to develop, manufacture, and distribute short- and long-acting types of insulin products.

INTRODUCTION

California Health and Safety Code Section 128050 established the Health Workforce Research Data Center (Center) at HCAI as the state's central source of health care workforce and education data. HCAI is responsible for collecting, analyzing, and distributing information on the educational and employment trends for health care occupations and distribution in the state. The statute requires HCAI to produce an annual report to the legislature that:

- a) Identifies education and employment trends in the health care professions.
- b) Reports the current supply and demand for health care workers in California and gaps in the educational pipeline producing workers in specific occupations and geographic areas.
- c) Recommends state policy to address issues of health workforce shortage and distribution.
- d) Describes the health care workforce program outcomes and effectiveness.

With the establishment of the Center in 2021 (Assembly Bill 133, Committee on Budget, 2021), HCAI began collecting the data necessary to provide comprehensive, timely, and accessible workforce information to ensure that state policies are as informed and effective as possible. While new data collection efforts are in progress, this Report builds the baseline for health professions data by summarizing the available data collected. As HCAI collects more data, reports will include more robust state policy recommendations and analyses of program outcomes and effectiveness. The Next Steps section of this Report summarizes HCAI's ongoing data collection efforts and reporting plans.

There are more than a million licensed health professionals in California across more than 50 professions, each playing a role in delivering health care to Californians. While basic supply data is available for many of these professions in the form of license counts, supply data has lacked the detail necessary for a comprehensive understanding of the workforce. HCAI's ongoing collaboration with the Department of Consumer Affairs (DCA) expanded the breadth and quality of licensure data and overhauled its supplemental workforce survey, which will provide high-quality, high-value data on topics like employment, education, demographics, and language fluency.

While HCAI collects new data on supply, demand, education, and employment, this Report will provide baseline information about the current supply of licensed health professionals using existing data sources. This report groups related professions into five reporting groups:

- **Medicine:** Physicians, Nurse Practitioners (NP), and Physician Assistants (PA)
- **Nursing:** Registered Nurses (RN) and Licensed Vocational Nurses (LVN)
- **Oral health:** Dentists, Registered Dental Assistants (RDA), and Registered Dental Hygienists (RDH)

- **Behavioral health:** Clinical Social Workers (CSW), Marriage and Family Therapists (MFT), Psychologists (PSY), Professional Clinical Counselors (PCC), and Educational Psychologists (EP)
- **Allied health:** Podiatrists (DPM), Optometrists (OPT), Occupational Therapists (OT), Respiratory Care Practitioners (RCP), and Pharmacists (RPH)

For the Allied health section, we aligned with the categories that the Health Resources and Services Administration's (HRSA) Bureau of Health Workforce (BHW) uses. The key findings section of this Report highlights certain figures within each group; the appendices contain all figures for all groups. We will go into more detail in future reports about these professions and other health professions as data becomes available.

DATA

Licensure data, which DCA collects as part of the administrative licensing process, enumerates every license within a given profession and is foundational to accurately describing the health workforce. Licensing data collected includes each licensee's status, issuance date, public address of record, and age. Survey data builds upon the licensure data by adding demographic information about the licensee and detail about their past, present, and future work plans.

Since the establishment of the Center in 2021, HCAI has worked with its partner DCA to update the data it collects. Previously, HCAI received licensure and survey data for only a subset of licensing boards and the workforce survey collected inconsistent data. In July 2022, HCAI began receiving more comprehensive licensure reports from every board and launched a modernized workforce survey that collects a standard set of information and maximizes response rates. The updated survey requires a response to every question but always provides a "decline to state" response option. Business and Professions Code section 502, developed jointly by HCAI and DCA, prescribes the minimum information to be collected in the modernized survey. HCAI receives monthly updates to both licensure and survey data.

Data in this Report

While HCAI continues integrating the modernized data from DCA into a larger data system, this Report relies on the previous licensure reports and survey results from DCA, and supplements data gaps with public licensee lists published on the DCA website. All data presented represents a snapshot of the licensee population on April 1, 2022. Figure 1 summarizes the data used for the health professions highlighted in this Report. In future reports, every licensing board will have a custom licensure file and a standardized survey dataset.

Figure 1. Data Sources

Board	2022 Annual Report Licensure Data	2022 Annual Report Survey Data
Acupuncture Board	Not Included	Unavailable
Behavioral Sciences, Board of	Custom DCA File (Partial)	Available
Board Of Chiropractic Examiners	Not Included	Unavailable
Dental Board of California	Custom DCA File	Available
Dental Hygiene Board of California	Custom DCA File	Available
Medical Board of California	Custom DCA File	Available
Naturopathic Medicine Committee	Not Included	Unavailable
Occupational Therapy, Board of	Custom DCA File	Available

Optometry, California State Board of	Custom DCA File	Unavailable
Osteopathic Medical Board of California	Custom DCA File	Available
Pharmacy, California State Board of	Public Licensee List	Unavailable
Physical Therapy Board of California	Not Included	Unavailable
Physician Assistant Board	Custom DCA File	Too Low to Report
Podiatric Medical Board of California	Public Licensee List	Unavailable
Psychology, Board of	Public Licensee List	Unavailable
Registered Nursing, Board of	Custom DCA File	Available
Respiratory Care Board of California	Custom DCA File	Available
Speech-Language Pathology Audiology, Hearing Aid Dispensers	Not Included	Unavailable
Veterinary Medical Board	Not Included	Unavailable
Vocational Nursing and Psychiatric Technicians, Board of	Custom DCA File	Available

Response rates from the prior survey vary by profession, so HCAI reports use a cell-based weighting methodology to compensate for disproportionate quantity of responses from certain groups. The technical appendix details the response rates and weighting methodology.

Population Data

This Report incorporates data about the general California population. This Report uses population estimates and projections from the Department of Finance, specifically the county population projections (P-2A) and the population by race/ethnicity (P-1D) for the year 2020.¹

Regions

HCAI analyzes data at multiple geographic levels of detail. Statewide numbers alone may mask significant geographic or demographic variation that exists within the state.

¹ <https://dof.ca.gov/forecasting/demographics/projections/>

For ease of comparison with other research, this Report includes both statewide results and results for nine regions that align with other, similar research like the Healthforce Center at the University of California, San Francisco and the California Health Interview Survey from the University of California, Los Angeles. Figure 3 defines the nine regions.

Figure 3. California Regions

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

KEY FINDINGS

Medicine

- The physician workforce is maldistributed. The San Joaquin Valley, Inland Empire, and Northern and Sierra regions have disproportionately small shares of the state's physicians ([figure A-2](#)).
- Licensure data suggests an increase in exits from the workforce in 2021 that coincides with a decrease of new licenses issued, particularly with physicians ([figure A-4](#)).
- Approximately 35 percent of physicians are 60 years old or more. Physicians, NPs, and PAs in the Northern and Sierra region are older than in the rest of the state ([figures A-5, A-6](#)).
- Despite recent improvement, Hispanic/Latino populations are still significantly underrepresented in medicine. With approximately 130,000 total physicians in California, the state is 37,000 Hispanic/Latino physicians short of parity with the population ([figure A-8](#)).
- Black populations are well represented amongst recently licensed physicians but are still underrepresented amongst all physicians ([figure A-8](#)).
- Recent Nurse Practitioner licensees are less representative of Hispanic/Latino populations ([figure A-8](#)).
- Relative to the population, the existing nursing workforce is well distributed throughout the state ([figure B-2](#)). Additional research is necessary to determine if the existing workforce is sufficient.
- Licensure data suggests an increase in exits from the nursing workforce since 2020 that coincides with a decrease of new licenses issued. In 2020, the number of LVNs exiting the workforce surpassed the number of new licenses ([figure B-4](#)).
- Hispanic/Latino populations are well represented amongst LVNs but underrepresented amongst RNs ([figure B-8](#)).

Oral Health

- The dental workforce is maldistributed. The San Joaquin Valley, Inland Empire, and Northern and Sierra regions have disproportionately small shares of the state's dentists. RDAs and RDHs, however, are evenly distributed in these regions ([figure C-2](#)).
- Licensure data suggests an increase in exits from the oral health workforce since 2020 that coincides with a decrease of new licenses issued. Since 2020, the number of dentists exiting the workforce has equaled the number of new licenses. For both RDAs and RDHs, the exits exceed the new licenses during this time period ([figure C-4](#)).
- Approximately 31 percent of dentists are 60 years old or more ([figure C-5](#)).

- Black populations are underrepresented in all oral health professions. Hispanic/Latino populations are underrepresented amongst dentists and RDHs, but well represented amongst RDAs ([figure C-8](#)).

Behavioral Health

- The behavioral health workforce is maldistributed. The San Joaquin Valley and Inland Empire regions have disproportionately small shares of nearly all of the state's behavioral health providers ([figure D-2](#)).
- Approximately 34 percent of educational psychologists and 29 percent of MFTs are 60 years old or more ([figure D-5](#)).
- Asian and Hispanic/Latino populations are underrepresented in all behavioral health professions ([figure D-8](#)).

Allied Health

- The allied health workforce is maldistributed. The Central Coast, Inland Empire, Northern and Sierra, and San Joaquin Valley regions have disproportionately small shares of the state's pharmacists and several other allied health professions ([figure E-2](#)).
- Black and Hispanic/Latino populations are underrepresented amongst OTs ([figure E-8](#)).

NEXT STEPS

HCAI will continue to work with key stakeholders to effectively implement the Health Workforce Research Data Center as the state's central hub of health workforce data and build upon the baseline data displayed in this Report. Over the next year, HCAI will focus on the following data for inclusion:

- Health workforce licensure data.
- Education program data for health professions.
- Health workforce data for certified professions.

HCAI's licensee workforce survey went live in July of 2022. This survey will provide every health workforce licensee in the state the opportunity to submit key demographic and employment information at time of electronic licensure renewal. These data will be critical in helping HCAI better understand the makeup of our health workforce over time. Additionally, HCAI has developed data sharing agreements with key stakeholders to obtain home and community-based services workforce and substance use disorder workforce data. These data include several certified professions, along with important data on the uncertified workforce.

HCAI will also explore public and private education data options to better understand health program educational capacity, throughput, and demographics. The Integrated Postsecondary Education Data System (IPEDS) and collaboration with state higher education entities will be essential inputs for HCAI to leverage in future reports.

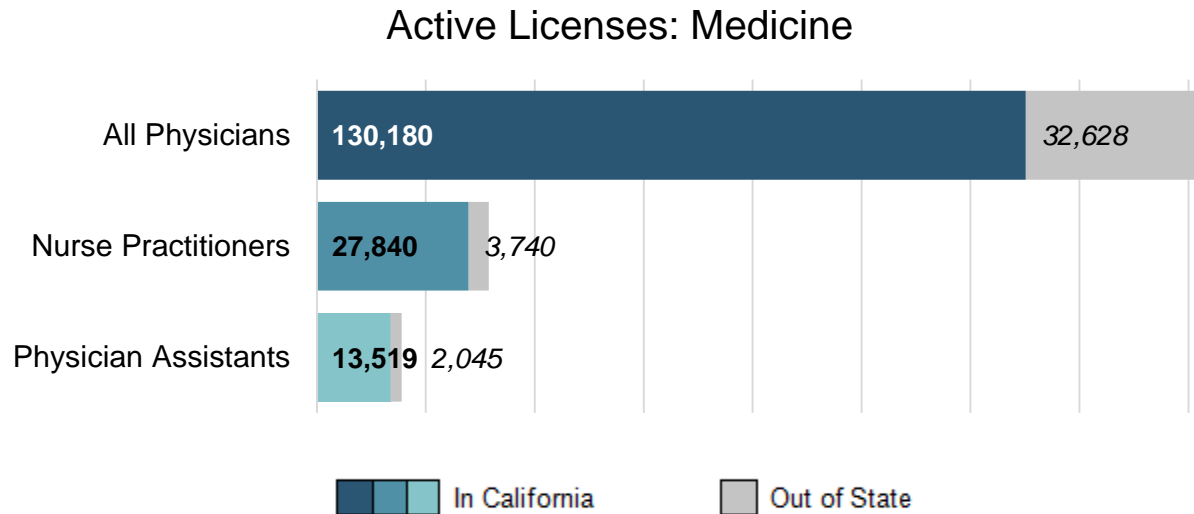
HCAI will integrate these data with additional data sources, such as demand-side data and HCAI's hospital utilization data, to gain key insights on the health workforce. Throughout the year, HCAI will also publish a range of data products on HCAI's [health workforce data page](#) and the California Health and Human Services' [Open Data Portal](#), ranging from one-page infographics (like the [Song-Brown outcomes flyer](#)), to interactive dashboards, profession-specific briefs, and minimally processed aggregate data. We will also publish 'data stories' and visualizations, intended to transform our data into information, with context to make the data more useful and meaningful. Our first such data story is on [Race/Ethnicity Trends in Health Workforce for California](#), showing that Hispanic people represent more than 39% of the population of California but only 19% of 13 key licensed health professionals, despite recent improvements.

For other examples of HCAI data visualizations, see <https://hcai.ca.gov/visualizations/>.

The development of the Research Data Center and its capabilities will be an iterative process. As HCAI builds upon baseline data and collects additional data, the capability and data products will improve and expand.

APPENDIX A: MEDICINE, ALL FIGURES

Figure A-1: Active Licenses: Medicine



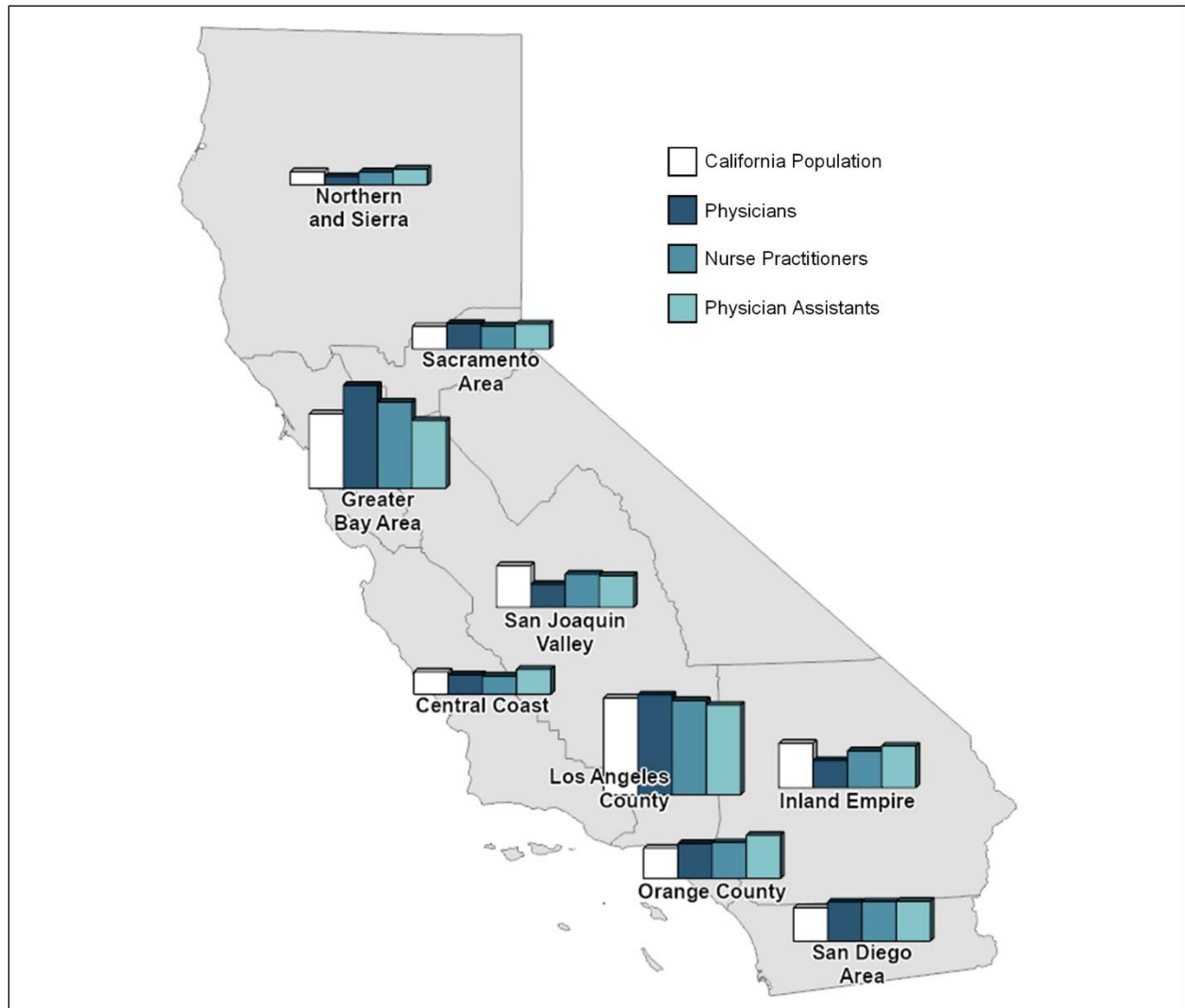
License Type	Active Licenses in CA	Per 100k Population
All Physicians	130,180	325.8
<i>Physician and Surgeon</i>	121,137	
<i>Osteopathic Physician and Surgeon</i>	9,043	
Nurse Practitioners (NP)	27,840	69.7
Physician Assistants (PA)	13,519	33.8

Physicians are the second largest workforce highlighted in this Report, with 162,808 total licenses in active status. Approximately 20% of physician licenses have out-of-state addresses, compared to 12% of NP licenses and 13% of PA licenses.

HCAI analyzes the distribution of this workforce across the state to identify any potential maldistribution, where providers are disproportionately located in an area relative to the population. Additional data and analysis may reveal why providers are concentrated in these areas.

Figure A-2: Regional Distribution: Medicine

HCAI tracks the geographic distribution of the existing workforce and compares it to the distribution of California's population. While a geographic maldistribution alone does not necessarily indicate a workforce shortage, it may help identify areas where shortages are more likely to exist.



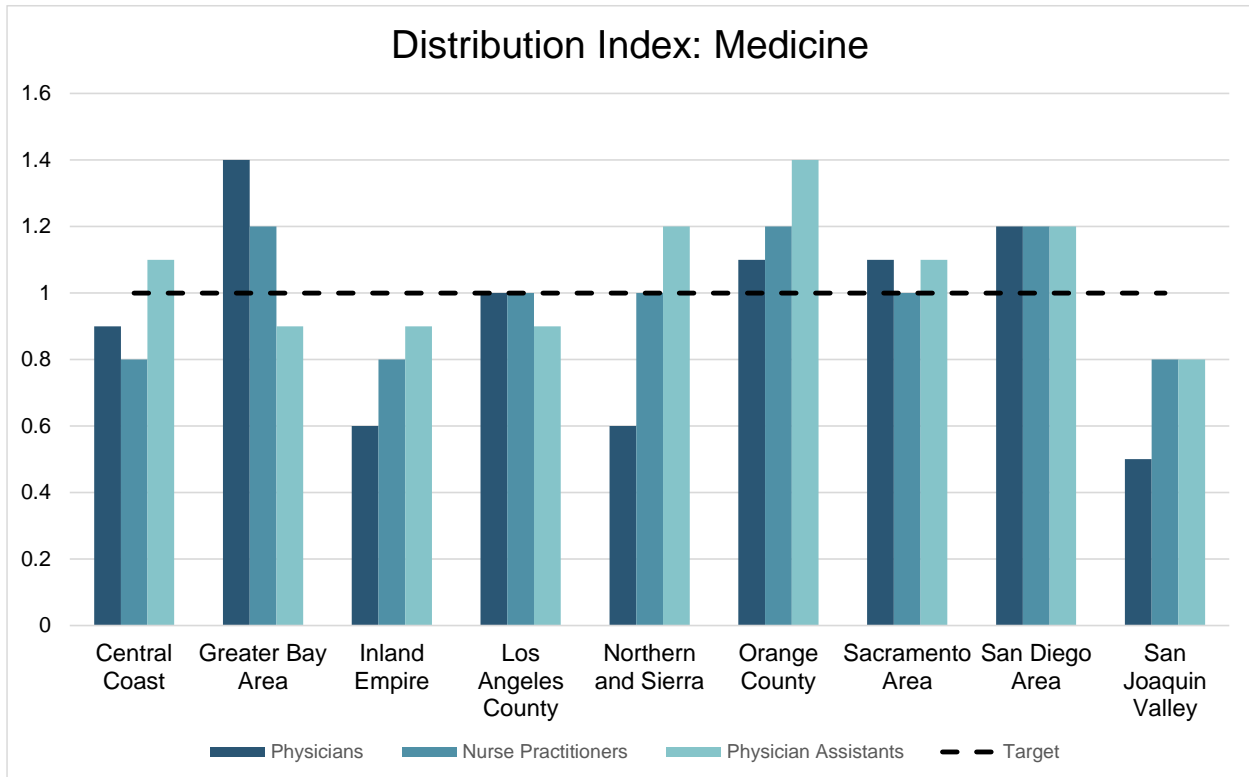
Region	Share of Population	Share of Physicians	Share of NPs	Share of PAs
Central Coast	5.9%	5.1%	4.8%	6.6%
Greater Bay Area	19.6%	27.1%	22.7%	17.8%
Inland Empire	11.7%	7.2%	9.7%	11.0%
Los Angeles County	25.5%	26.3%	24.8%	23.6%
Northern and Sierra	3.5%	2.2%	3.4%	4.2%
Orange County	8.0%	9.2%	9.5%	11.4%

Sacramento Area	5.9%	6.7%	6.0%	6.5%
San Diego Area	8.8%	10.3%	10.4%	10.5%
San Joaquin Valle	10.9%	6.0%	8.7%	8.3%

The map shows variable distribution throughout the state, where some regions show proportionate shares of providers and population, while others show disproportionate shares. Maldistributions are most visible with physicians.

The distribution index describes the magnitude of difference between a region's share of the state's providers and its share of the state's population. A distribution index of 1 indicates the region has an equal share of the state's providers and population (e.g., 10% of the state's providers and 10% of the state's population). A distribution index below 1 indicates a smaller share of providers than population (e.g., 5% of the state's providers and 10% of the state's population), and a distribution index greater than 1 indicates the opposite. The further away the index is from 1, the greater the maldistribution.

Figure A-3: Distribution Index: Medicine

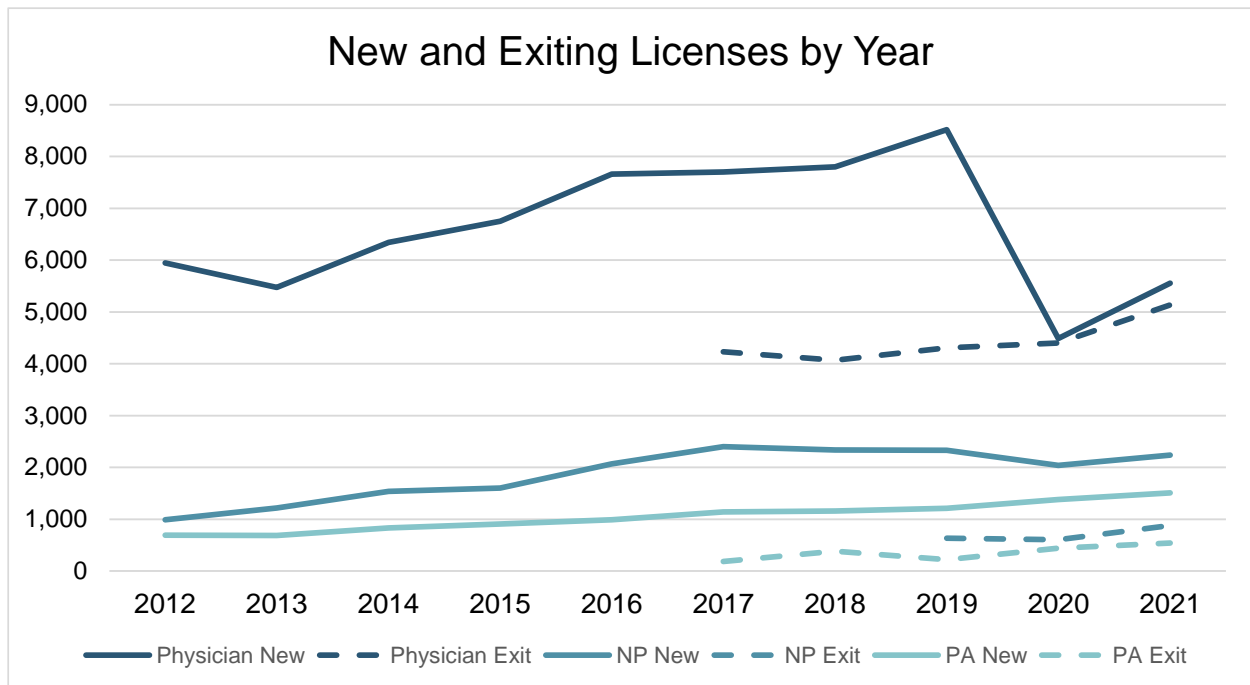


Broadly, the Inland Empire and San Joaquin Valley regions are underrepresented in all three professions, and Orange County and the San Diego Area are overrepresented in all three professions. In the Northern and Sierra region, which are predominantly rural areas, NPs and PAs are significantly more represented than physicians.

Physicians are most overrepresented in the Greater Bay Area, and most underrepresented in the Inland Empire, Northern and Sierra, and San Joaquin Valley regions. The San Joaquin Valley region's physician distribution index of 0.5 indicates that its share of the population is nearly double its share of physicians. NPs are more evenly distributed throughout the state, with a minimum index of 0.8 and a maximum index of 1.2. PAs are overrepresented in Orange County, but otherwise fairly evenly distributed.

HCAI tracks the number of licenses issued each calendar year to approximate new entrants into the workforce and the number of licenses leaving "active" status to approximate exits from the workforce. The Technical Appendix provides information about how HCAI defines a "new license" and an "exiting license".

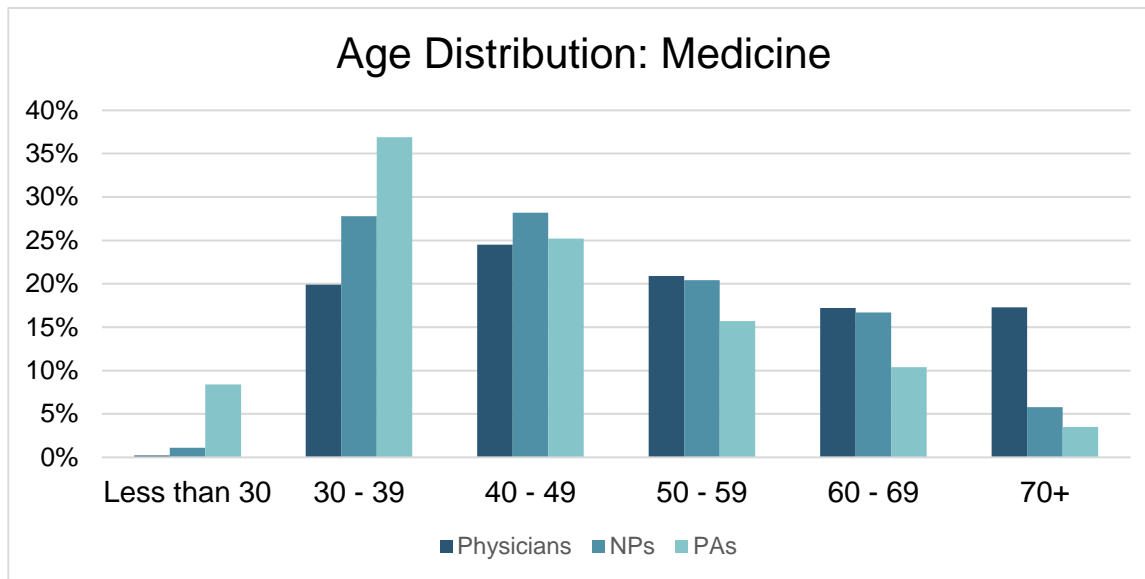
Figure A-4: New and Exiting Licenses: Medicine



According to 2021 data, new physician licenses are approximately 4% of their total, new NP licenses are approximately 8% of their total, and new PA licenses are approximately 11% of their total. Larger percentages indicate more growth.

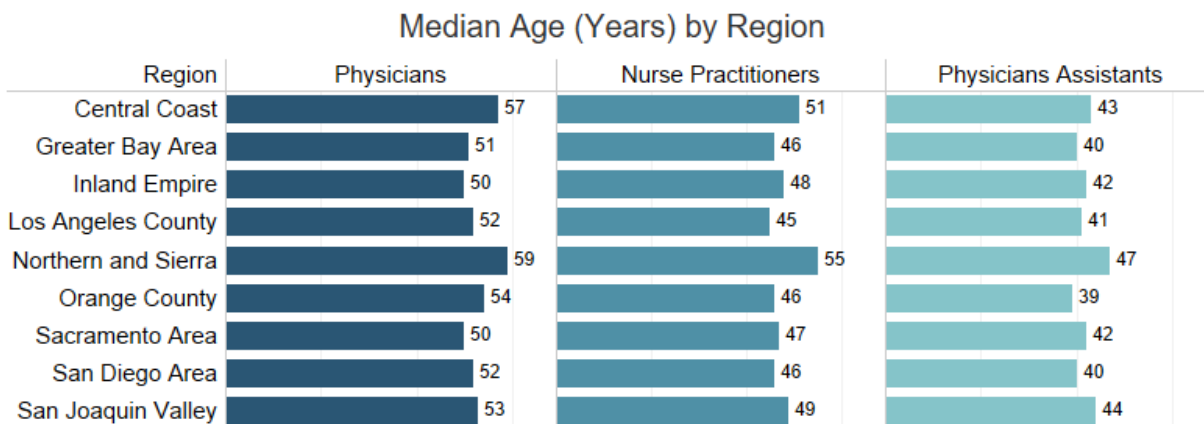
There is a notable drop in the number of new licenses starting in 2020 for physicians and, to a lesser extent, NPs. The data also suggests an increase in the number of exits during the same period. In 2020, the number of exiting physicians nearly equaled the number of new physicians.

Figure A-5: Age Distribution: Medicine



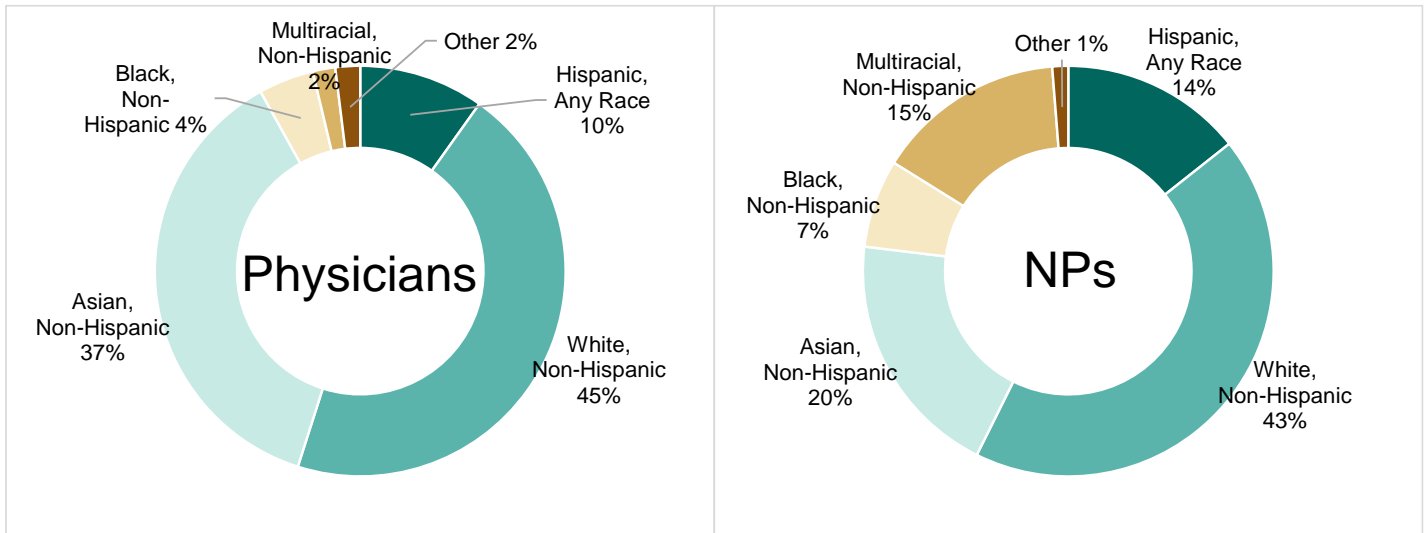
According to 2022 data, 35% of physicians, 23% of NPs, and 14% of PAs are 60 years or older.

Figure A-6: Regional Age Variation: Medicine



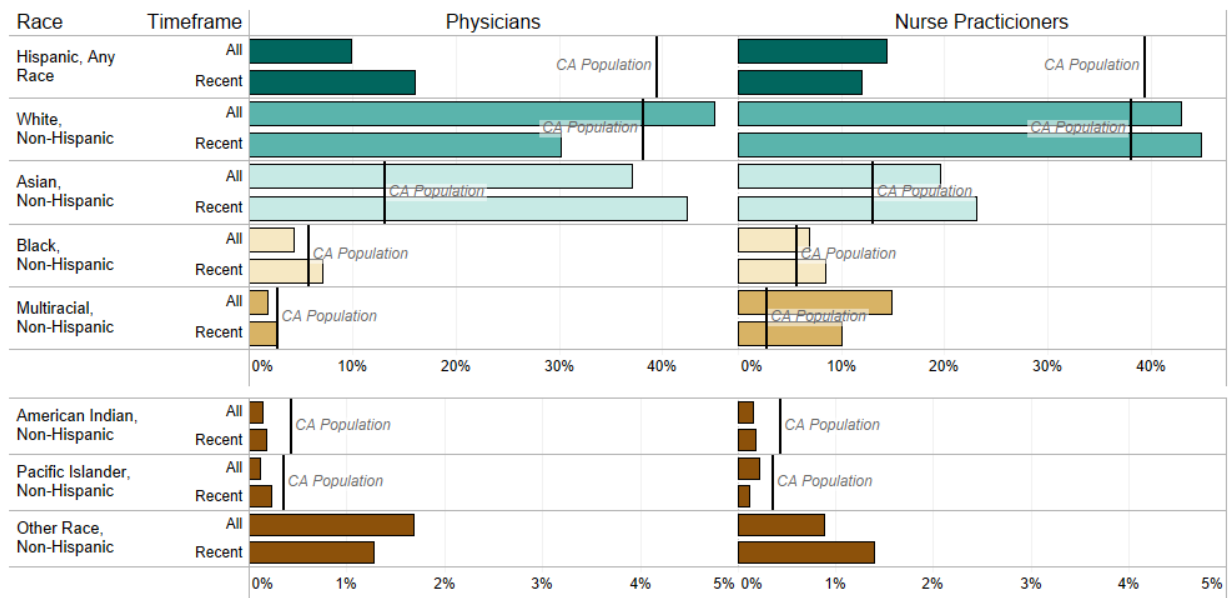
The difference in median age between regions is 9 years for physicians, 10 years for NPs, and 8 years for PAs. A larger range indicates a more imbalanced distribution. Physicians, NPs, and PAs in the Northern and Sierra region are older in age than in the rest of the state.

Figure A-7: Race/Ethnicity: Medicine



For physicians, the "Other" group consists of 0.1% American Indian, 0.1% Pacific Islander, and 1.7% Other Race. For NPs, the "Other" group is comprised of 0.1% American Indian, 0.2% Pacific Islander, and 0.9% Other Race. The race/ethnicity response rate for PAs is too low to report. For NPs, the majority of multiracial licensees were a combination of Asian and Pacific Islander.

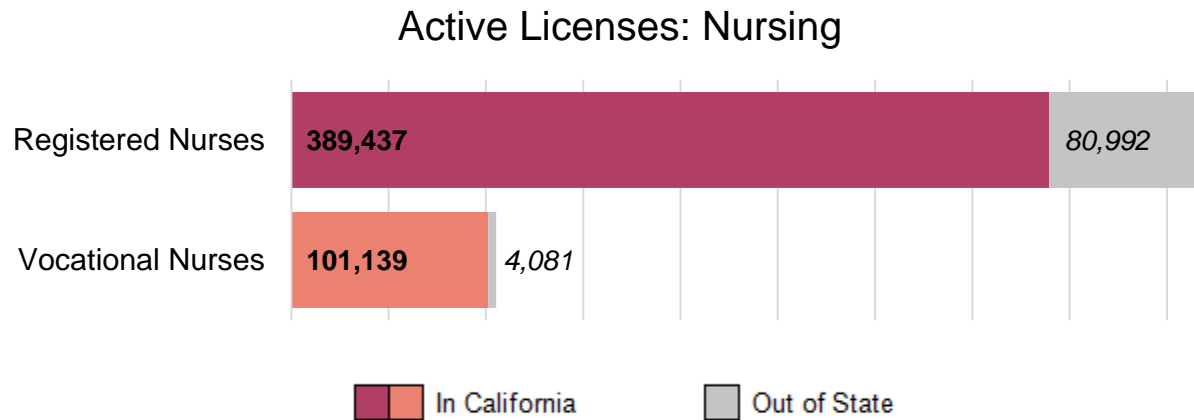
Figure A-8: Race/Ethnicity Trends: Medicine



Amongst recent licensees, defined as a license issued within the last 5 years, physicians show an increase in representation from Hispanic, Asian, Black, American Indian, and Pacific Islander populations. Despite the recent increase, Hispanic populations are still the most significantly underrepresented in medicine compared to other groups.

APPENDIX B: NURSING, ALL FIGURES

Figure B-1. Active Licenses: Nursing



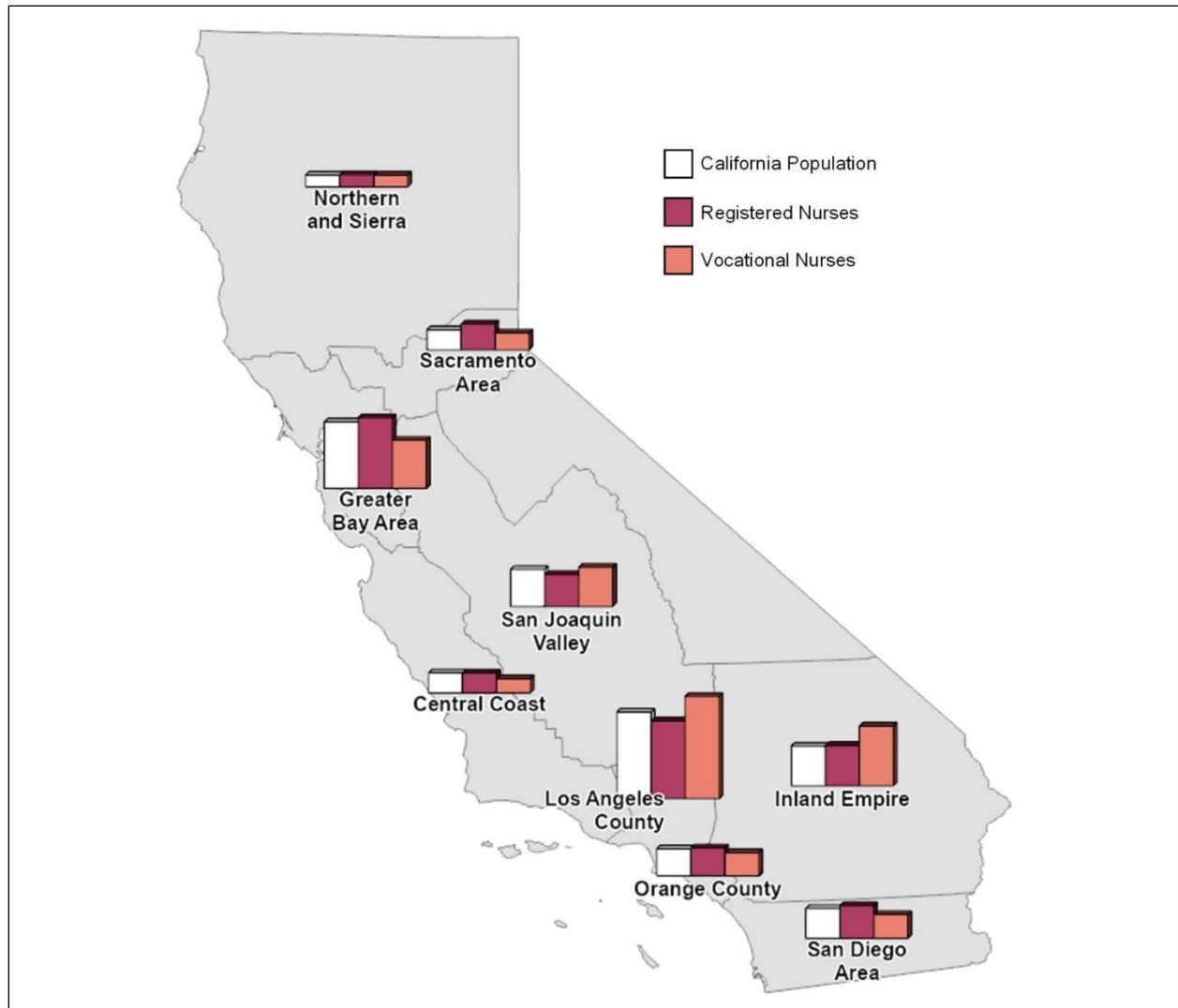
License Type	Active Licenses in CA	Per 100k Population
Registered Nurse (RN)	389,437	974.7
Vocational Nurse (LVN)	101,139	253.1

RNs are the largest workforce highlighted in this Report. Together, RNs and LVNs make up a workforce of nearly a half million. In this section, the RN figures include the approximately 9% of RNs who hold advanced practice certifications (e.g., nurse practitioners and nurse midwives). The Medicine section of this Report provides more detail on nurse practitioners.

HCAI has partnered with the California Department of Public Health to obtain data on the number of active Certified Nurse Assistants. HCAI will share these data in future reports.

Figure B-2. Regional Distribution: Nursing

HCAI tracks the geographic distribution of the existing workforce and compares it to the distribution of California's population. While a geographic maldistribution alone does not necessarily indicate a workforce shortage, it may help identify areas where shortages are more likely to exist.



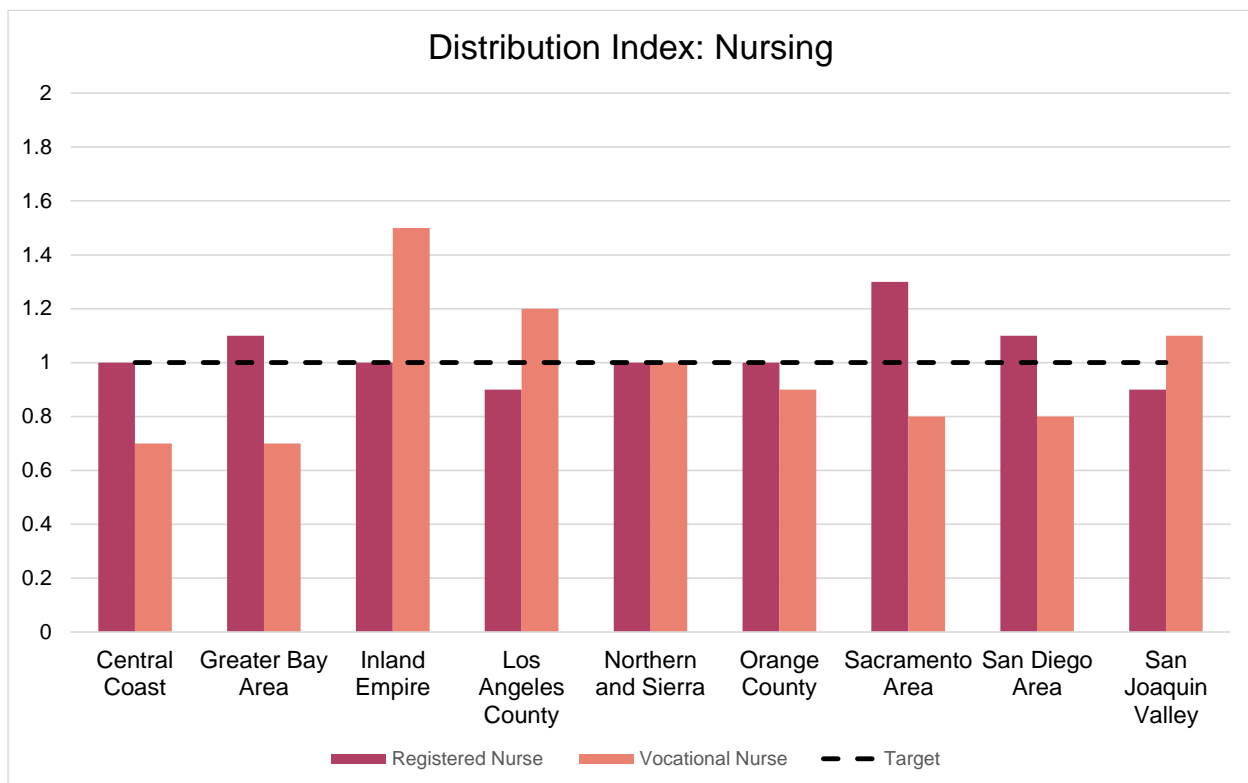
Region	Share of Population	Share of RNs	Share of LVNs
Central Coast	5.9%	5.9%	4.2%
Greater Bay Area	19.6%	20.8%	14.2%
Inland Empire	11.7%	11.9%	17.6%
Los Angeles County	25.5%	22.9%	30.1%
Northern and Sierra	3.5%	3.6%	3.5%

Orange County	8.0%	8.3%	6.9%
Sacramento Area	5.9%	7.6%	5.0%
San Diego Area	8.8%	9.6%	7.0%
San Joaquin Valley	10.9%	9.4%	11.6%

The map shows that most regions have proportionate shares of nurses and population. There is no region in which both RNs and LVNs are overrepresented.

The distribution index describes the magnitude of difference between a region's share of the state's providers and its share of the state's population. A distribution index of 1 indicates the region has an equal share of the state's providers and population (e.g., 10% of the state's providers and 10% of the state's population). A distribution index below 1 indicates a smaller share of providers than population (e.g., 5% of the state's providers and 10% of the state's population), and a distribution index greater than 1 indicates the opposite. The further away the index is from 1, the greater the maldistribution.

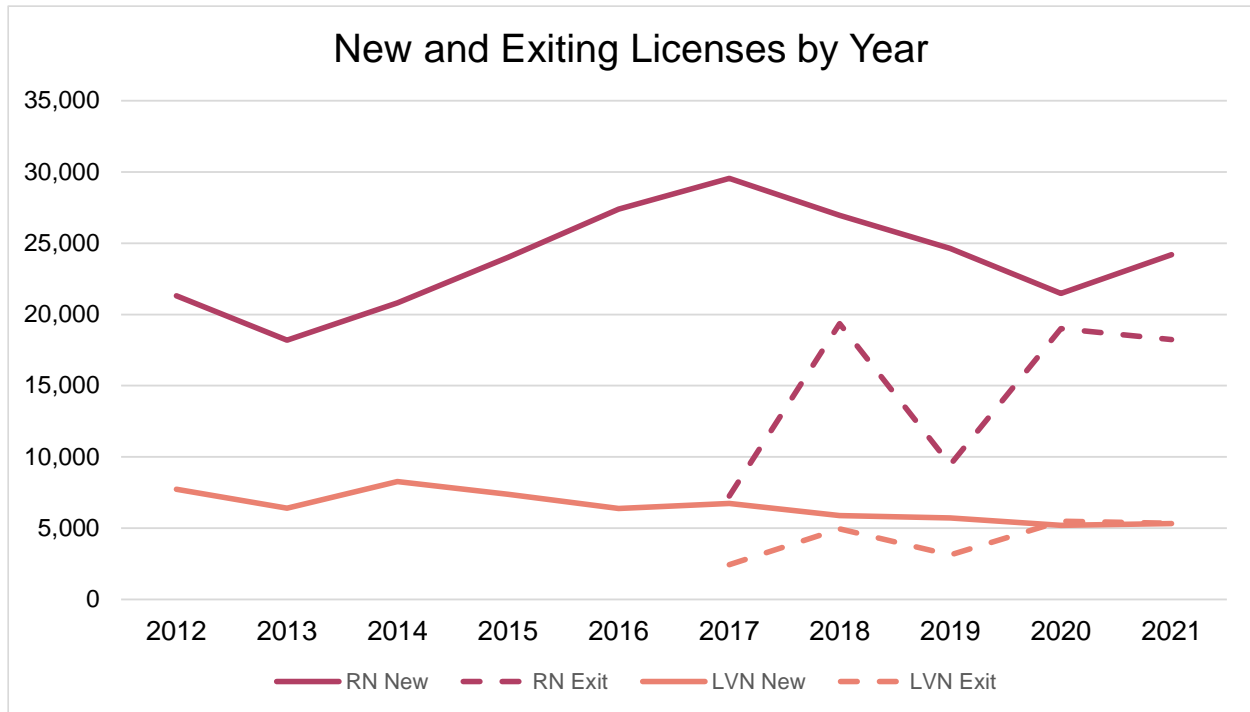
Figure B-3: Distribution Index: Nursing



RNs are evenly distributed throughout the state with the exception of a slightly higher concentration in the Sacramento area. LVNs are also well distributed, except for a concentration in the Inland Empire and slightly lower concentration in the Central Coast and Greater Bay Area regions.

HCAI tracks the number of licenses issued each calendar year to approximate new entrants into the workforce and the number of licenses leaving "active" status to approximate the exits from the workforce. The Technical Appendix provides information about how HCAI defines a "new license" and an "exiting license".

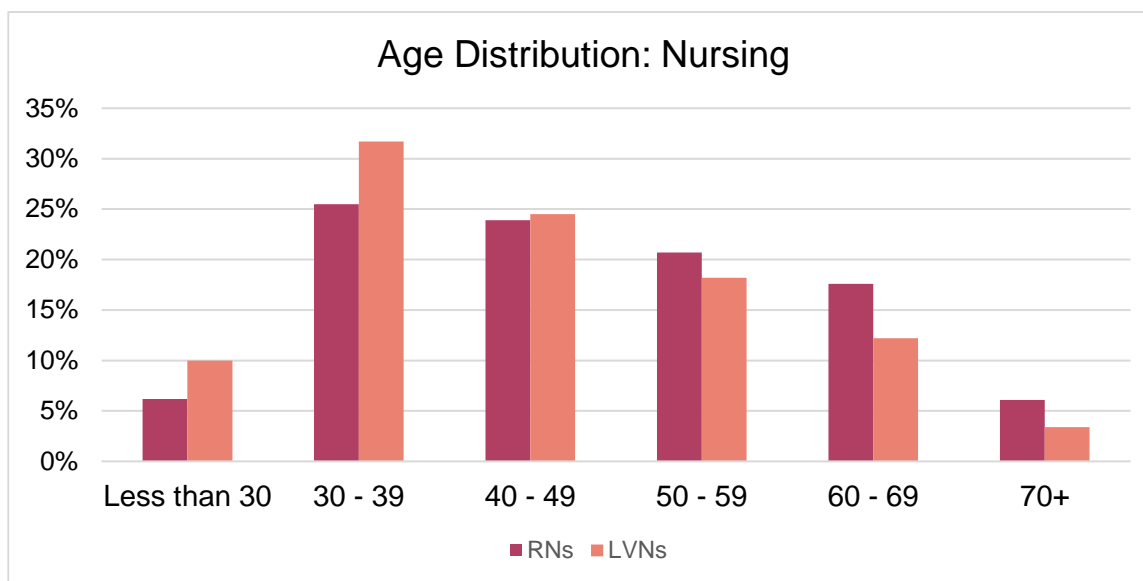
Figure B-4. New and Exiting Licenses: Nursing



According to the 2021 data, new RN licenses are approximately 6% of their total, and new LVN licenses are approximately 5% of their total. Larger percentages indicate more growth.

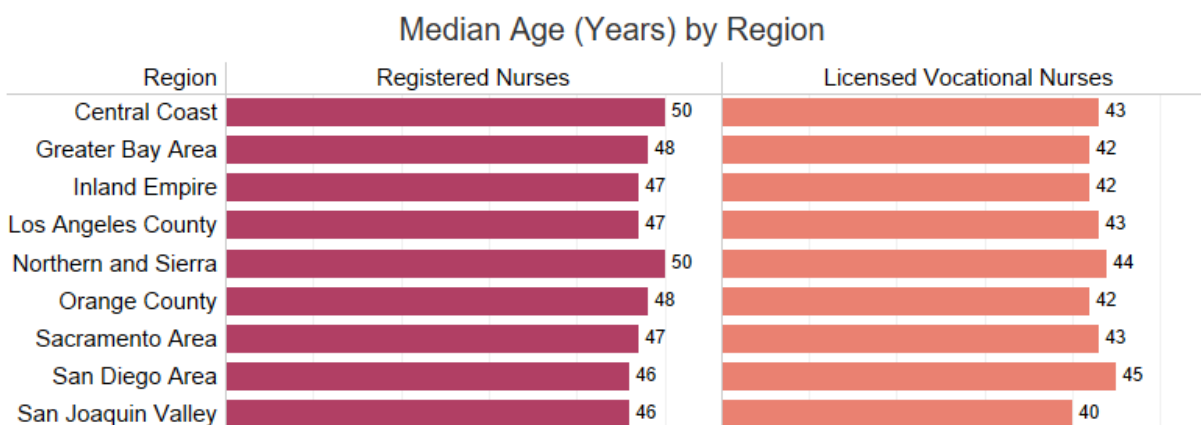
In 2020, RNs saw decrease in new licenses at the same time as an increase in workforce exits. In this timeframe, the number of workforce exits approached the number of new licenses.

Figure B-5. Age Distribution: Nursing



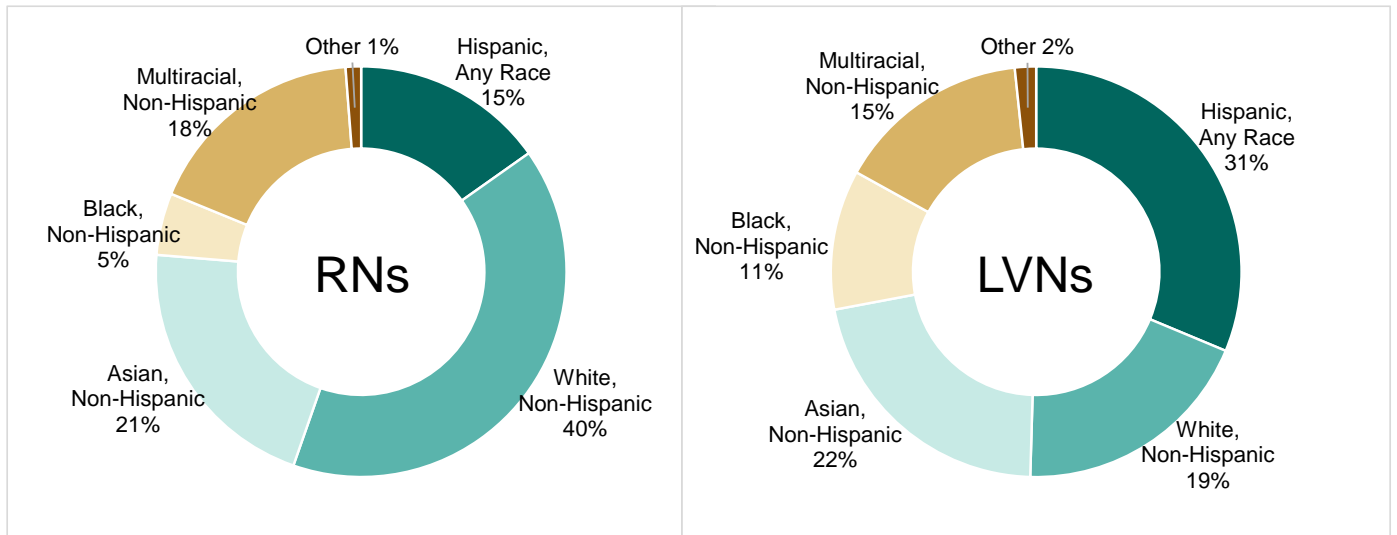
According to 2022 data, 23% of RNs and 16% of LVNs are 60 years or older.

Figure B-6. Regional Age Variation: Nursing



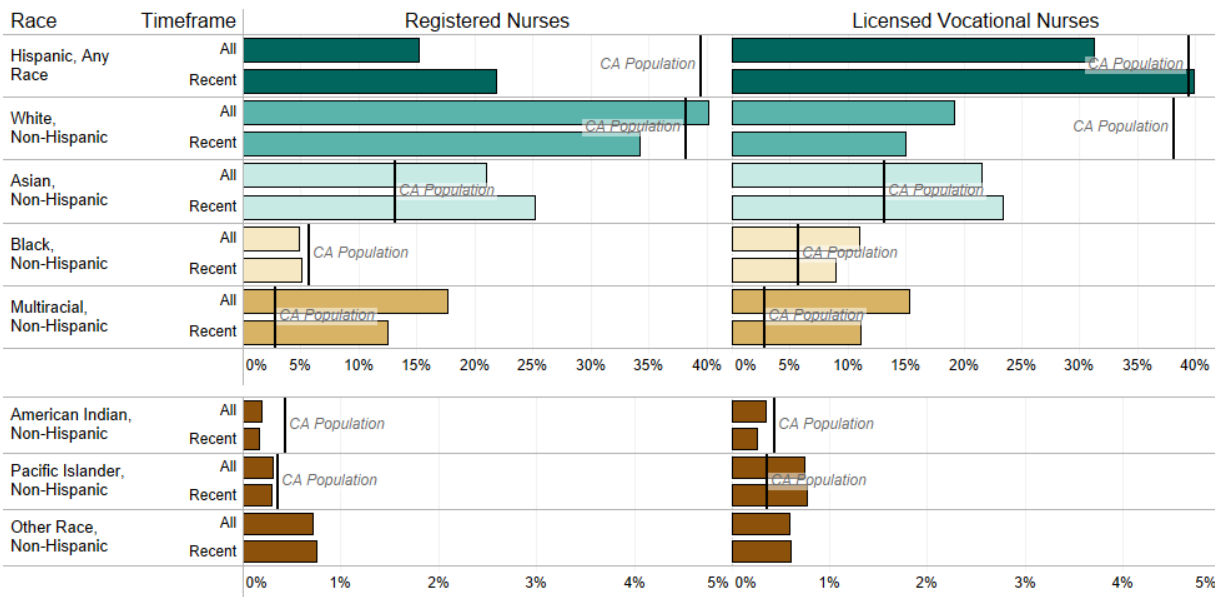
The difference in median age between regions is 4 years for RNs, and 5 years for LVNs. A larger range indicates a more imbalanced distribution. The median ages for both RNs and LVNs are relatively uniform across the state.

Figure B-7. Race/Ethnicity: Nursing



For RNs, the "Other" group consists of 0.2% American Indian, 0.3% Pacific Islander, and 0.7% Other Race. For LVNs, the "Other" group consists of 0.3% American Indian, 0.7% Pacific Islander, and 0.6% Other Race. Within multiracial licensees, the majority were a combination of Asian and Pacific Islander.

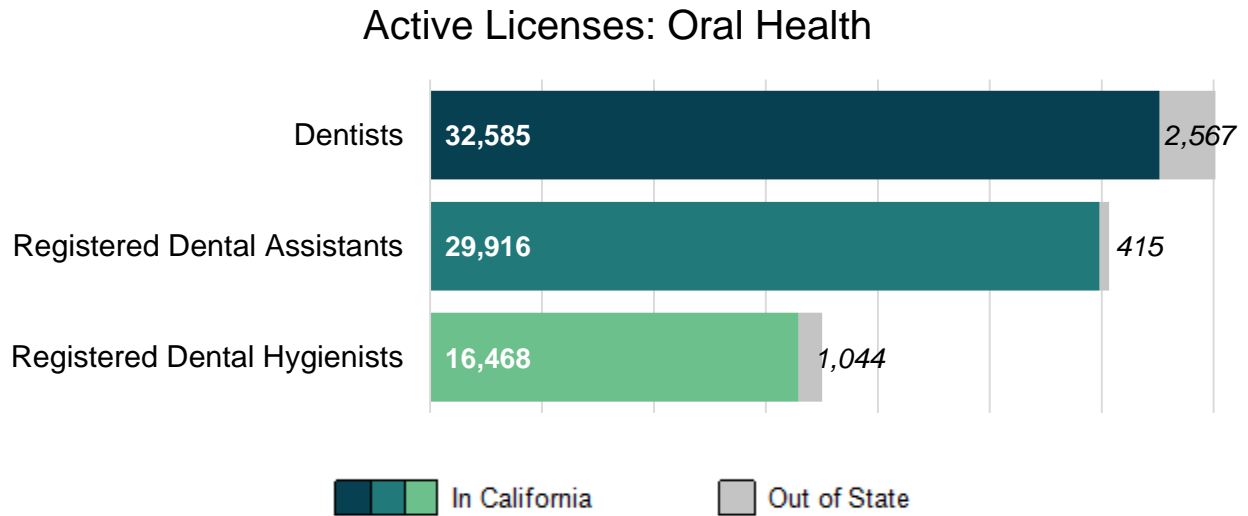
Figure B-8. Race/Ethnicity Trends: Nursing



Recent licensees are those that were issued in the last 5 years. RNs are relatively representative of the overall California population, except for an underrepresentation of Hispanic/Latino populations and an overrepresentation of Asian populations. LVNs underrepresent white populations and overrepresent nearly all other race/ethnicity groups.

APPENDIX C: ORAL HEALTH, ALL FIGURES

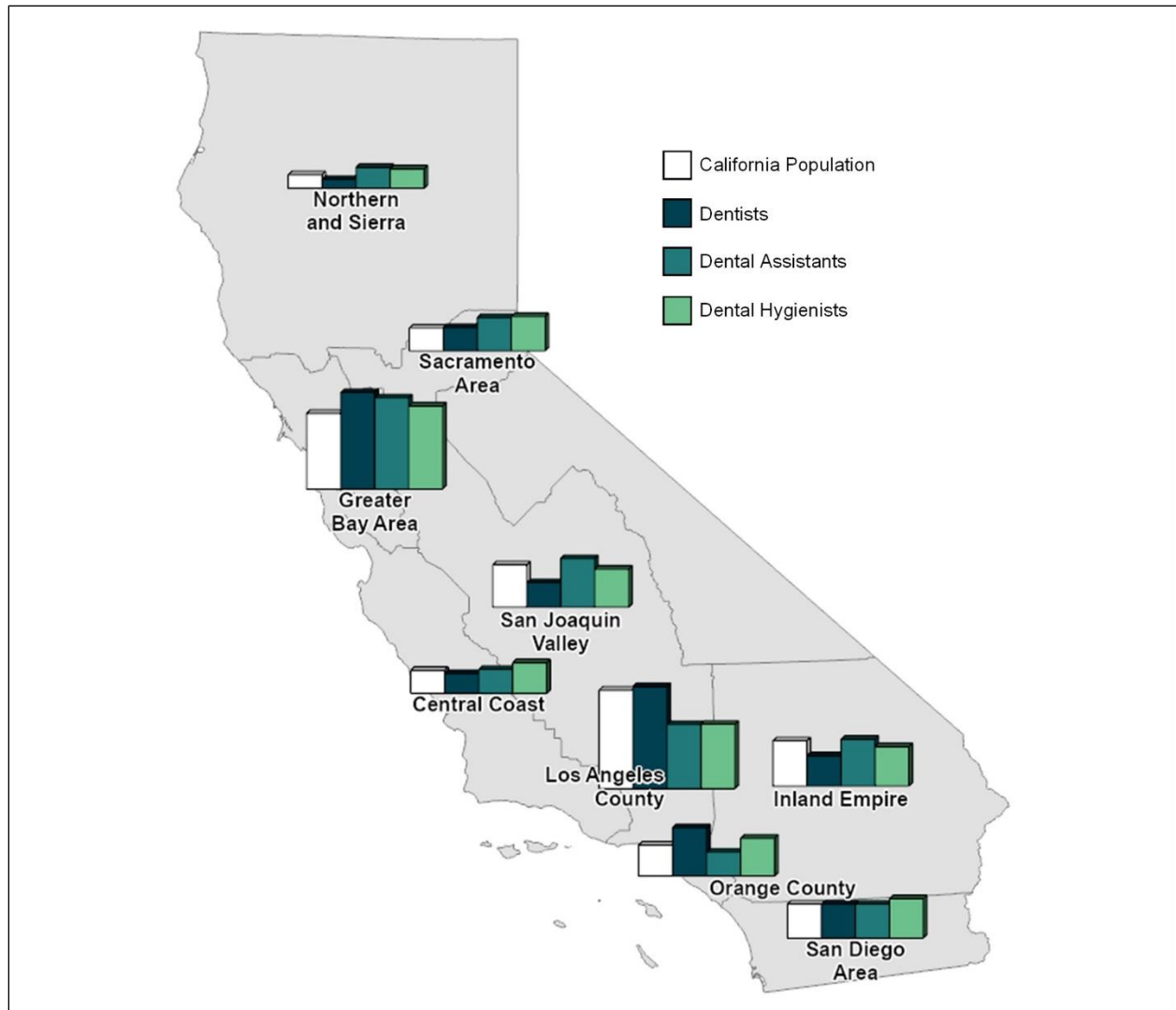
Figure C-1: Active Licenses



License Type	Active Licenses in CA	Per 100k Population
Dentists	32,585	81.6
Registered Dental Assistants (RDA)	29,916	74.9
Registered Dental Hygienists (RDH)	16,468	41.2

Figure C-2: Regional Distribution: Oral health

HCAI tracks the geographic distribution of the existing workforce and compares it to the distribution of California's population. While a geographic maldistribution alone does not necessarily indicate a workforce shortage, it may help identify areas where shortages are more likely to exist.



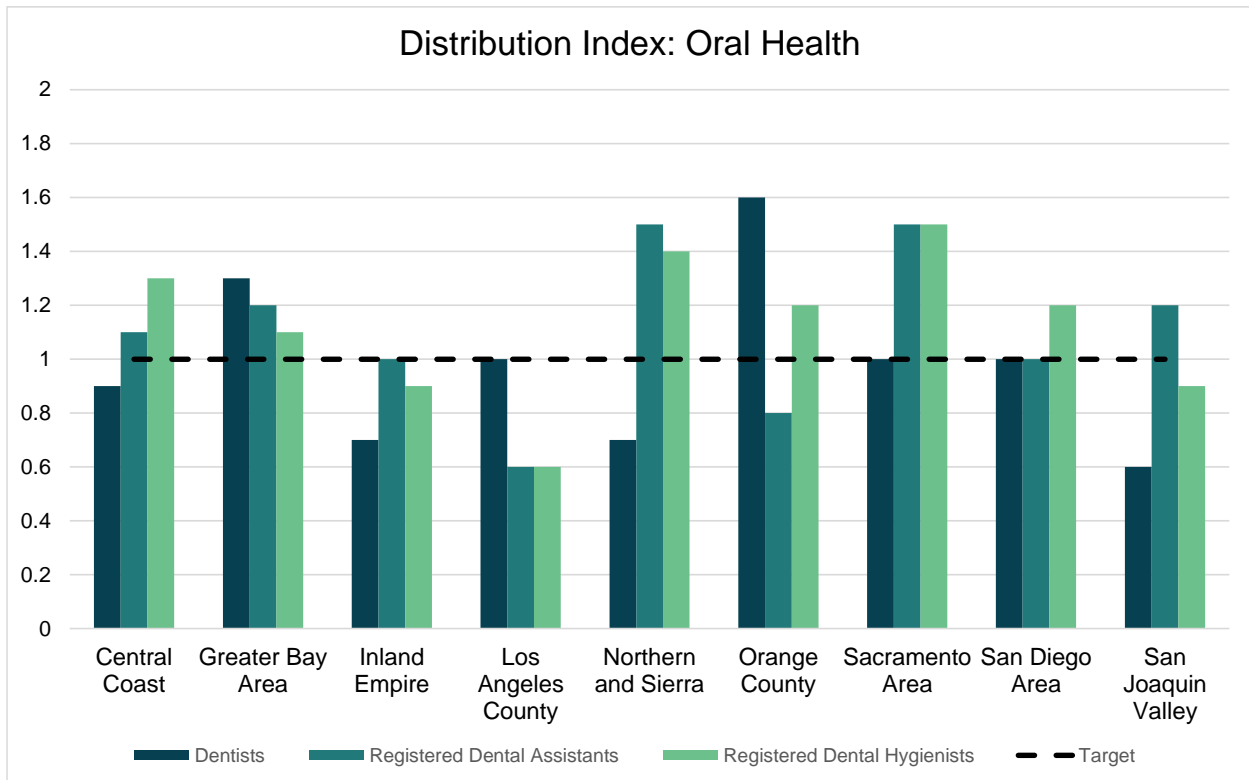
Region	Share of Population	Share of Dentists	Share of RDAs	Share of RDHs
Central Coast	5.9%	5.1%	6.3%	8.0%
Greater Bay Area	19.6%	24.9%	23.0%	21.6%
Inland Empire	11.7%	7.8%	12.3%	10.2%
Los Angeles County	25.5%	26.3%	15.8%	16.2%
Northern and Sierra	3.5%	2.4%	5.5%	5.1%

Orange County	8.0%	12.5%	6.0%	9.8%
Sacramento Area	5.9%	5.9%	8.8%	9.2%
San Diego Area	8.8%	8.8%	9.2%	10.2%
San Joaquin Valley	10.9%	6.2%	13.2%	9.7%

The map shows variable distribution throughout the state; most regions show disproportionate shares of providers and population. Maldistributions are visible in every oral health profession highlighted in this Report.

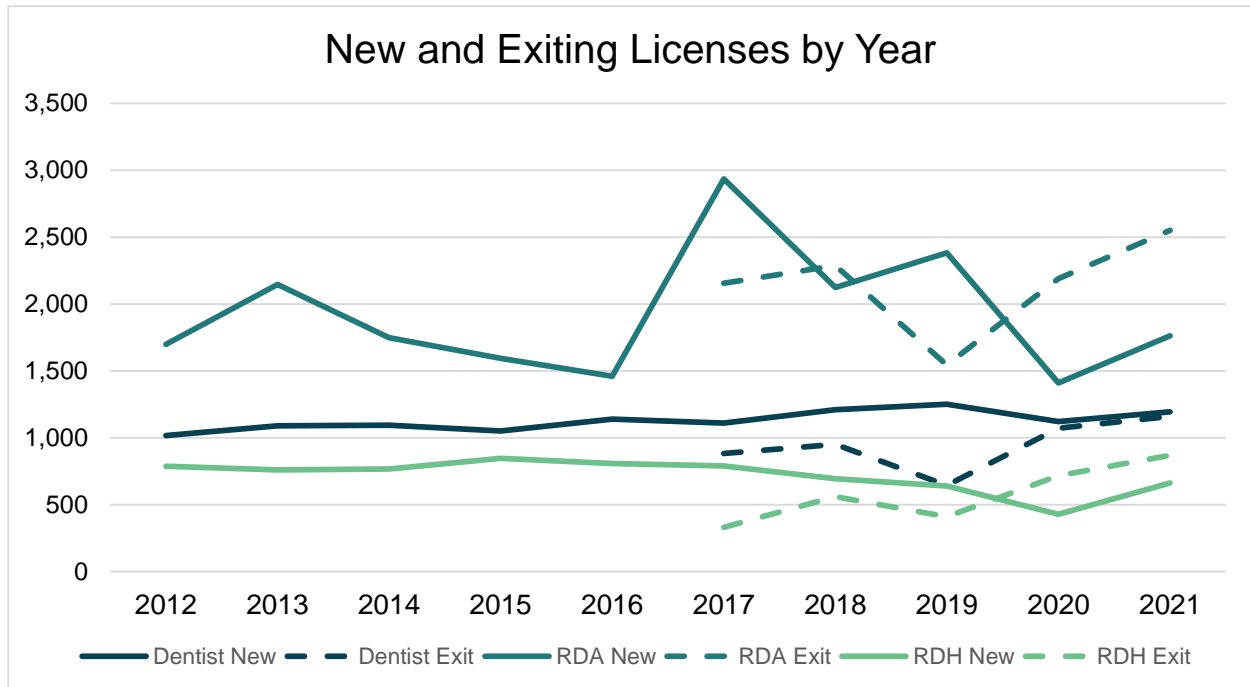
The distribution index describes the magnitude of difference between a region's share of the state's providers and its share of the state's population. A distribution index of 1 indicates the region has an equal share of the state's providers and population (e.g., 10% of the state's providers and 10% of the state's population). A distribution index below 1 indicates a smaller share of providers than population (e.g., 5% of the state's providers and 10% of the state's population), and a distribution index greater than 1 indicates the opposite. The further away the index is from 1, the greater the maldistribution.

Figure C-3. Distribution Index: Oral health



HCAI tracks the number of licenses issued each calendar year to approximate new entrants into the workforce and the number of licenses leaving "active" status to approximate exits from the workforce. The Technical Appendix provides information about how HCAI defines a "new license" and an "exiting license".

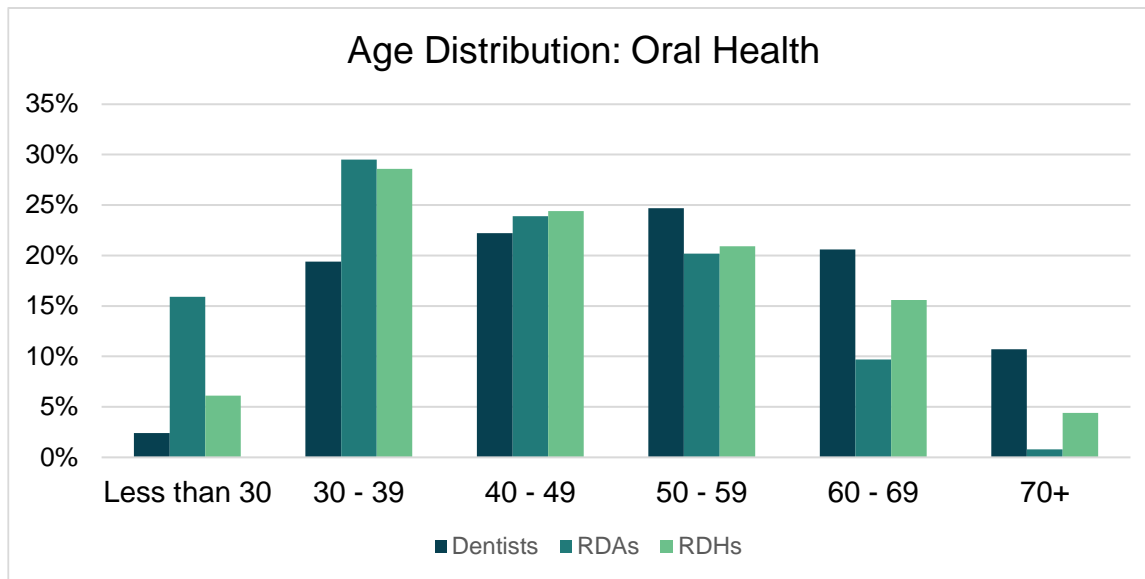
Figure C-4. New and Exiting Licenses: Oral health



According to the 2021 data, new dentist licenses are approximately 4% of their total, new RDA licenses are approximately 9% of their total, and new RDH licenses are approximately 5% of their total. Larger percentages indicate more growth.

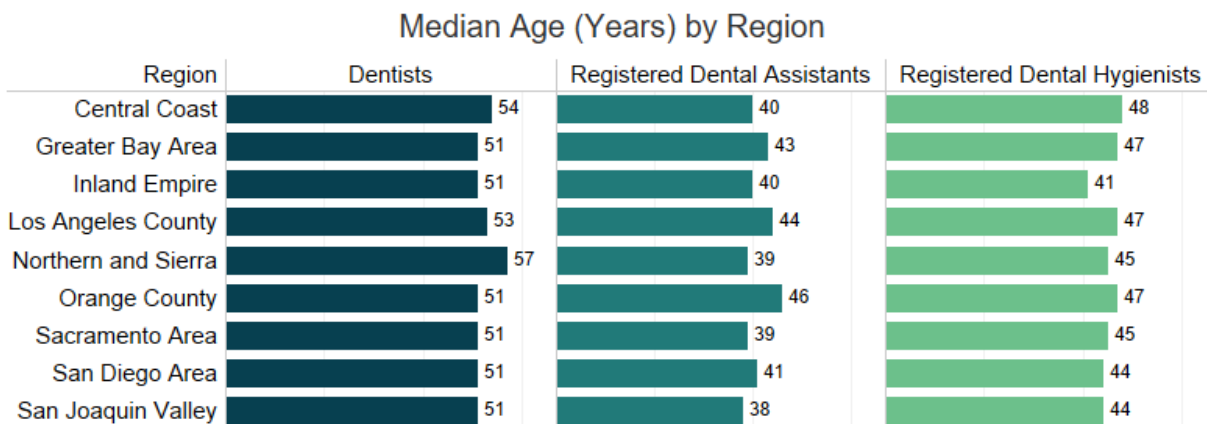
In recent years, exits for dentists are about equal to the number of new licenses. The exits for dental assistants and hygienists exceed the number of new licenses, suggesting a net loss of dental providers.

Figure C-5. Age Distribution: Oral health



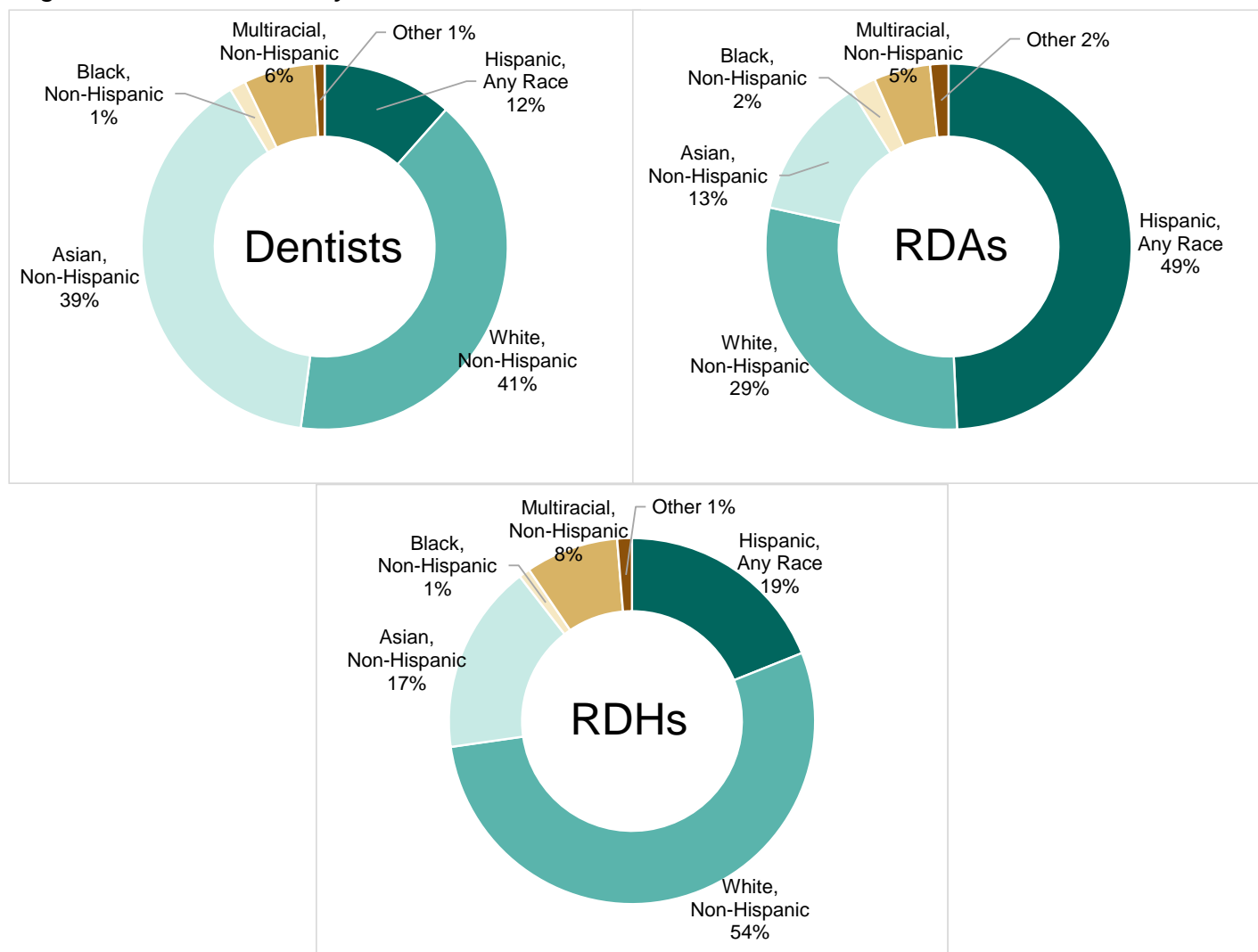
According to 2022 data, 31% of dentists, 11% of RDAs, and 20% of RDHs are 60 years or older.

Figure C-6. Regional Age Variation: Oral health



The difference in median age between regions is 6 years for dentists, 8 years for RDAs, and 7 years for RDHs. A larger range indicates a more imbalanced distribution.

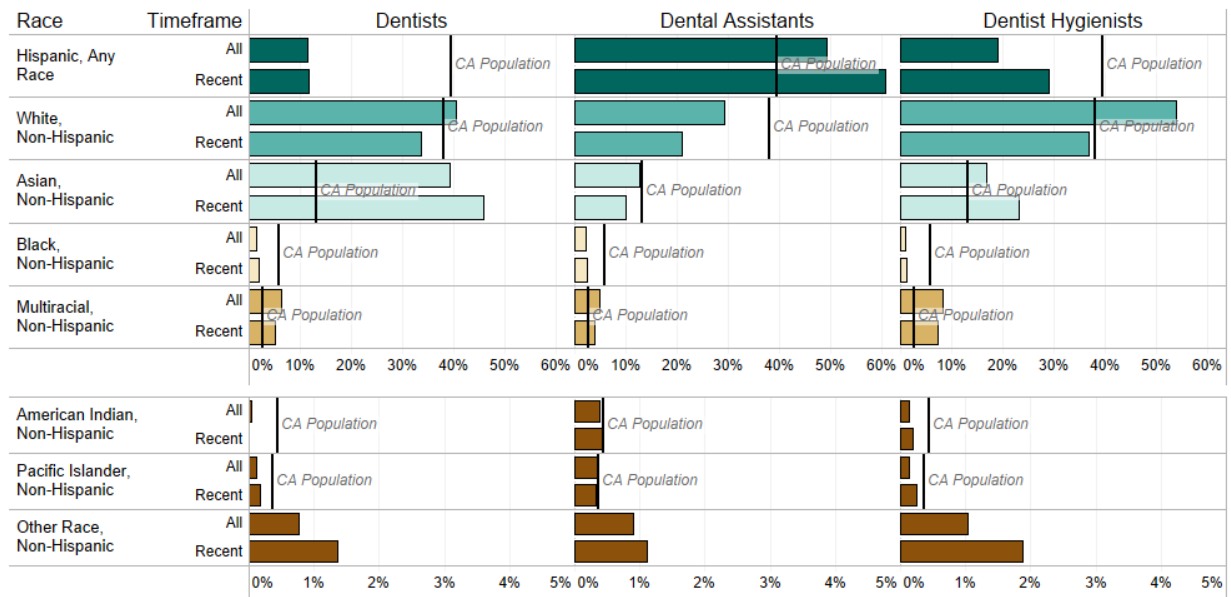
Figure C-7. Race/Ethnicity: Oral health



For Dentists, the "Other" group consists of 0.0% American Indian, 0.1% Pacific Islander, and 0.8% Other Race. For RDAs, the "Other" group consists of 0.4% American Indian, 0.3% Pacific Islander, and 0.9% Other Race. For RDHs, the "Other" group consists of 0.1% American Indian, 0.1% Pacific Islander, and 0.9% Other Race.

Oral health professions have the lowest representation of Black populations out of all professions highlighted in this Report.

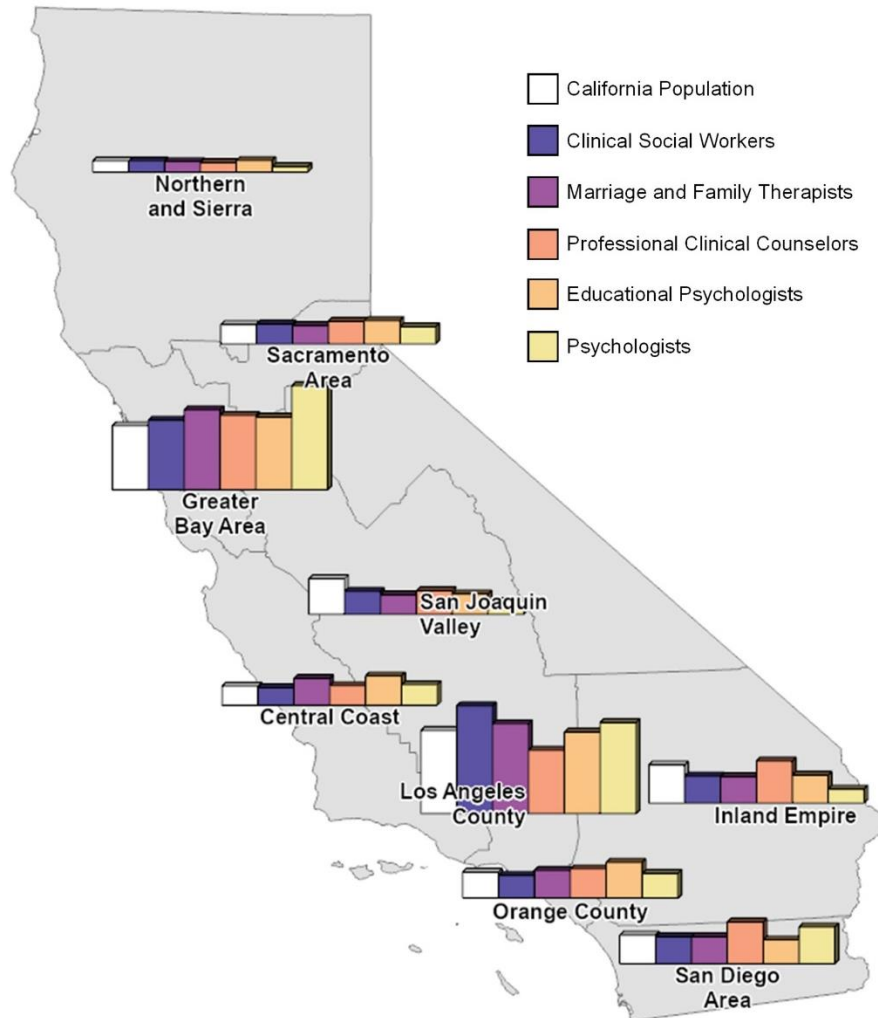
Figure C-8. Race/Ethnicity Trends: Oral health



Recent licensees are those that were issued in the last 5 years. The data shows little difference between the demographics of all dentists and recent dentists. Recent RDA and RDH licensees have increased Hispanic/Latino representation.

Figure D-2. Regional Distribution: Behavioral Health

HCAI tracks the geographic distribution of the existing workforce and compares it to the distribution of California's population. While a geographic maldistribution alone does not necessarily indicate a workforce shortage, it may help identify areas where shortages are more likely to exist.



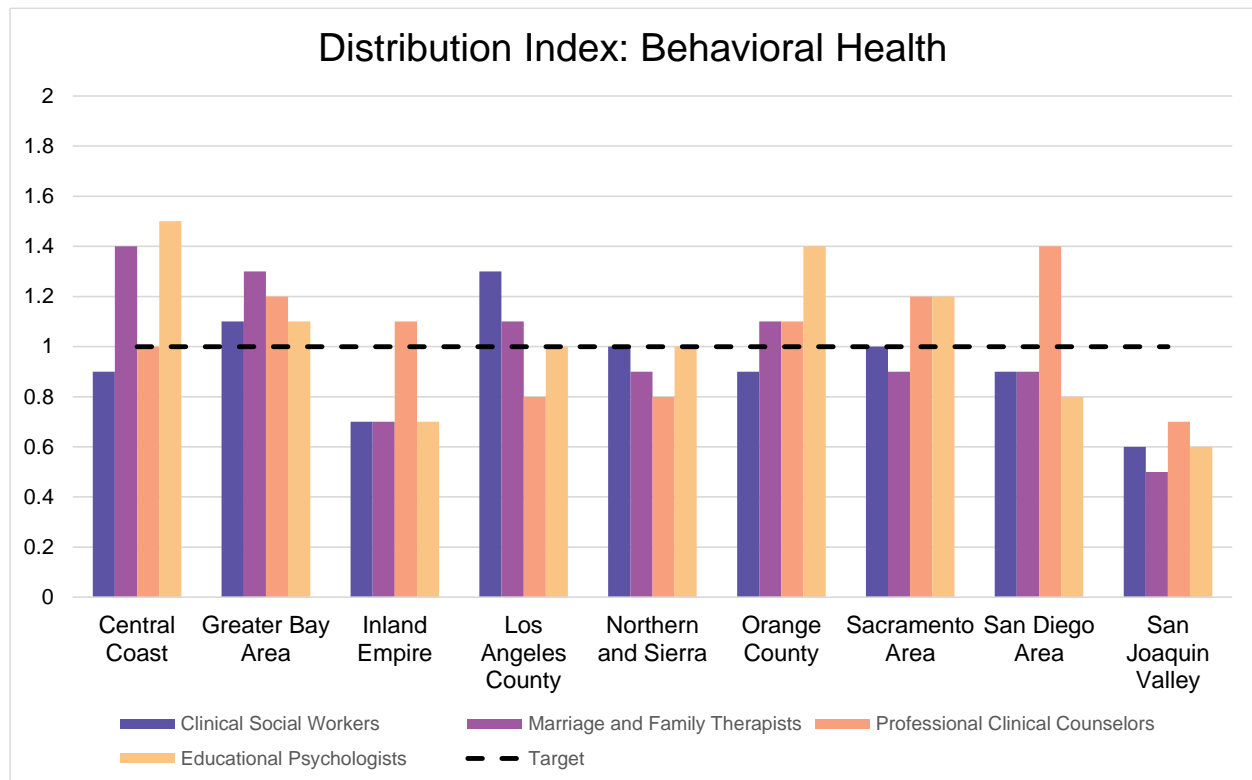
Region	Share of Population	Share of CSWs	Share of MFTs	Share of PCCs	Share of EPs	Share of PSYs
Central Coast	5.9%	5.4%	8.2%	6.0%	9.0%	6.3%
Greater Bay Area	19.6%	21.3%	24.5%	22.8%	22.2%	31.9%
Inland Empire	11.7%	8.3%	8.1%	12.9%	8.6%	4.3%
Los Angeles County	25.5%	33.0%	27.5%	19.4%	25.0%	27.9%

Northern and Sierra	3.5%	3.5%	3.3%	2.9%	3.6%	1.7%
Orange County	8.0%	7.0%	8.5%	9.0%	11.0%	7.6%
Sacramento Area	5.9%	6.1%	5.6%	6.9%	7.1%	5.2%
San Diego Area	8.8%	8.3%	8.3%	12.8%	7.3%	11.3%
San Joaquin Valley	10.9%	7.0%	5.9%	7.2%	6.2%	3.8%

The map shows variable distribution throughout the state; some regions show proportionate shares of providers and population, while others show disproportionate shares.

The distribution index describes the magnitude of difference between a region's share of the state's providers and its share of the state's population. A distribution index of 1 indicates the region has an equal share of the state's providers and population (e.g., 10% of the state's providers and 10% of the state's population). A distribution index below 1 indicates a smaller share of providers than population (e.g., 5% of the state's providers and 10% of the state's population), and a distribution index greater than 1 indicates the opposite. The further away the index is from 1, the greater the maldistribution.

Figure D-3. Distribution Index: Behavioral Health

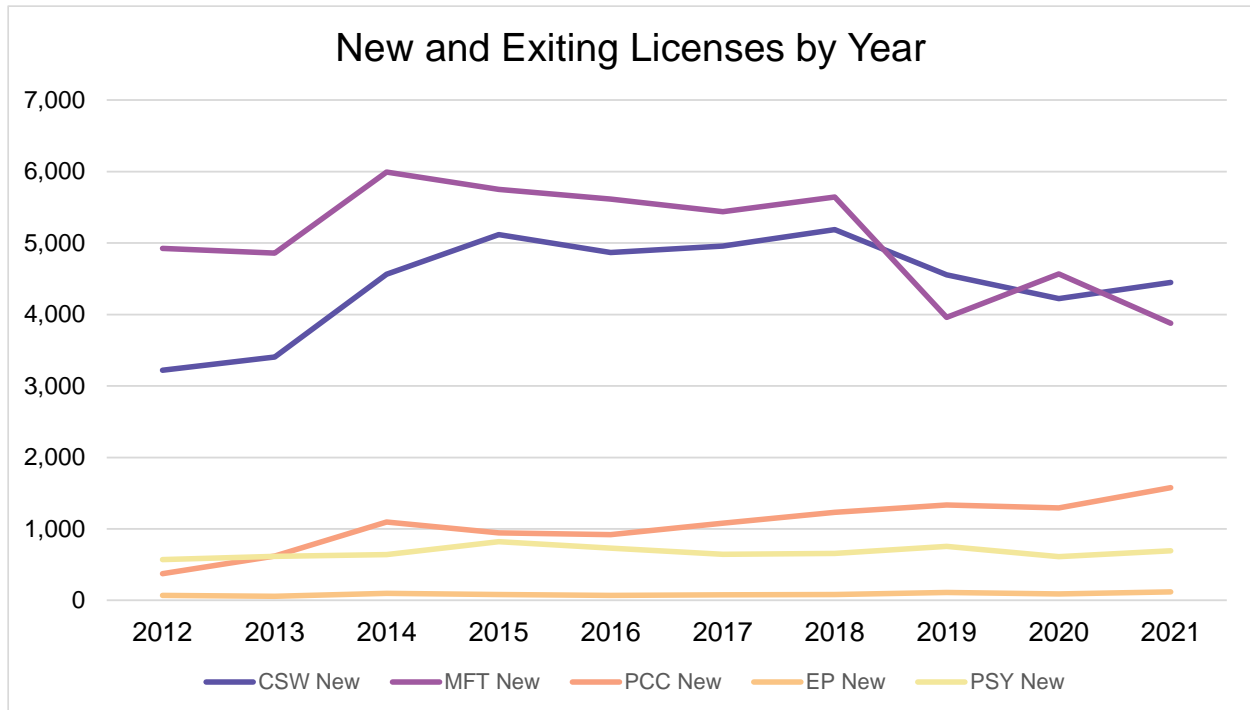


Notably, the San Joaquin Valley has a disproportionately small proportion of all five behavioral health professions highlighted in this Report. The region's distribution index of 0.4 for psychologists indicates that its share of the state's psychologists is less than

half of its share of the population. Data for the Inland Empire region shows a similar maldistribution, with the exception of clinical counselors.

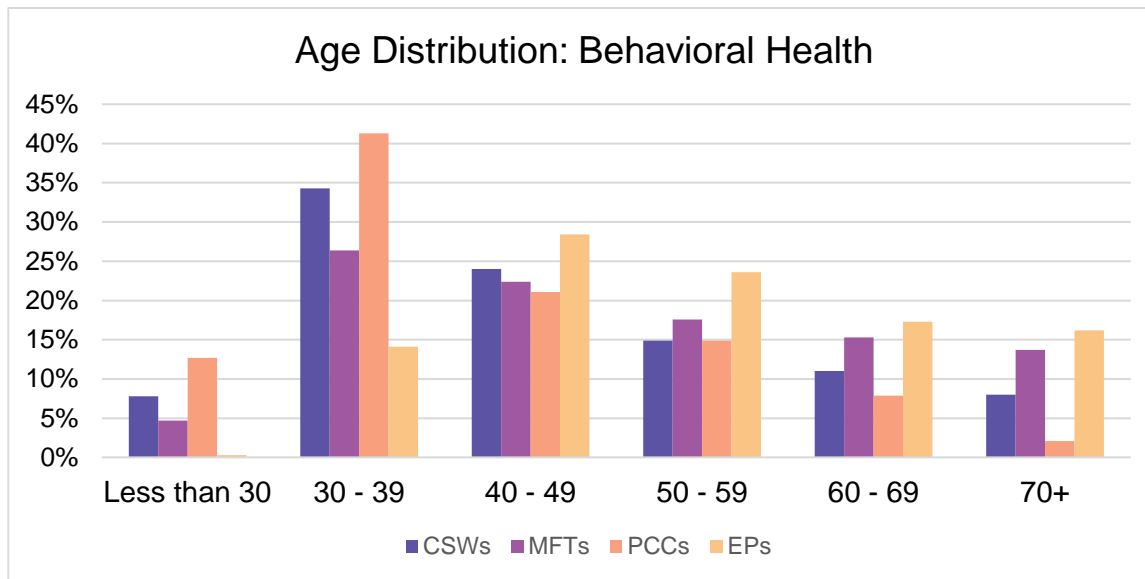
HCAI tracks the number of licenses issued each calendar year to approximate new entrants into the workforce and the number of licenses leaving "active" status to approximate exits from the workforce. The Technical Appendix provides information about how HCAI defines a "new license" and an "exiting license".

Figure D-4. New and Exiting Licenses: Behavioral Health



At the time of publication, license exit data for behavioral health professions was unavailable. According to the 2021 data, new PCC licenses are approximately 24% of their total, the highest of the professions highlighted in this Report. New CSW licenses are approximately 11% of their total, new MFT licenses are approximately 7% of their total, new EP licenses are approximately 8% of their total, and new psychologist licenses are approximately 4% of their total. Larger percentages indicate more growth.

Figure D-5. Age Distribution: Behavioral Health



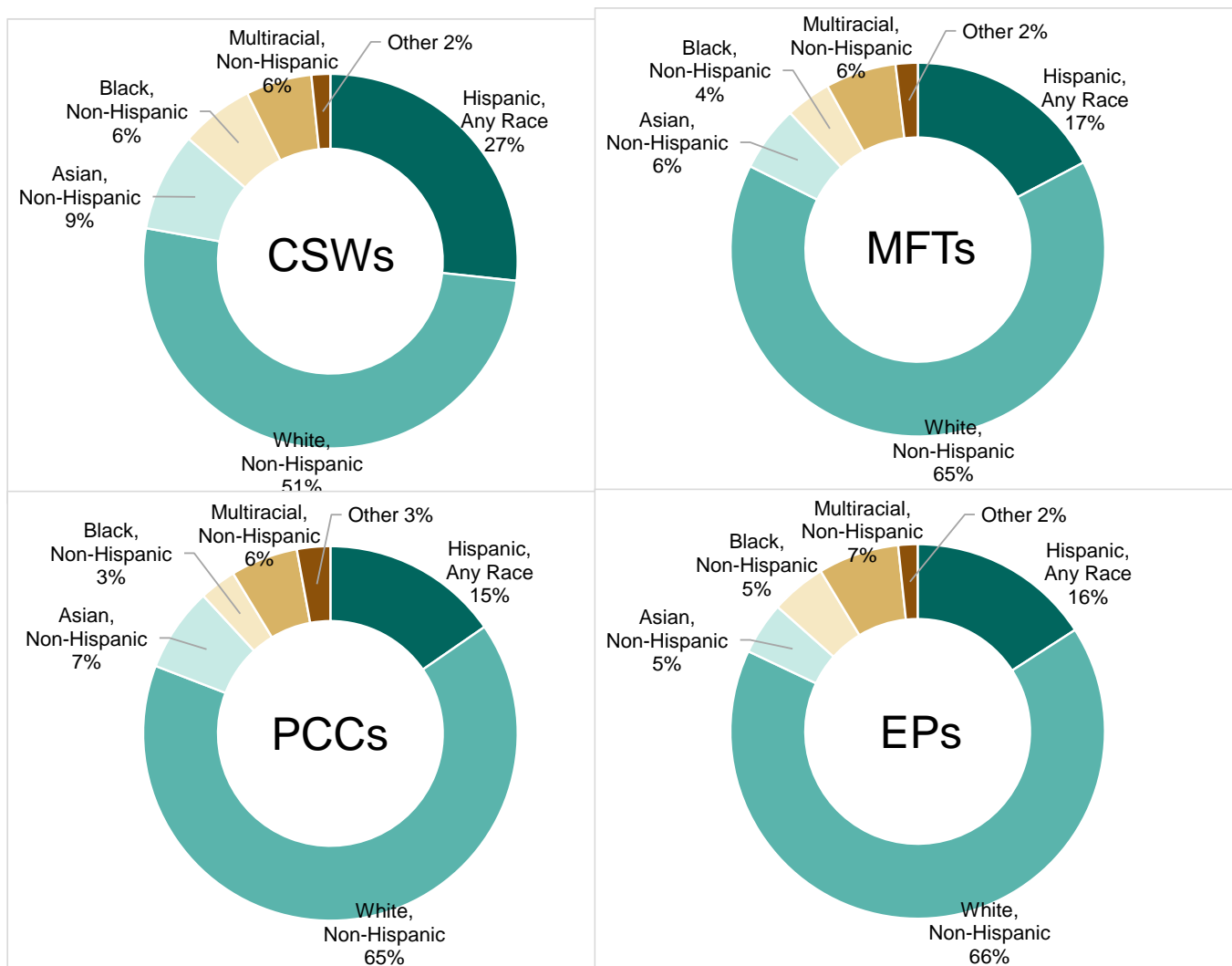
According to 2022 data, 19% of CSWs, 29% of MFTs, 10% of PCCs, and 34% of educational psychologists are 60 years or older. Age data on psychologists was unavailable at the time of publication.

Figure D-6. Regional Age Variation: Behavioral Health

Region	Clinical Social Workers	Marriage and Family Therapists	Professional Clinical Counselors	Educational Psychologists
Central Coast	45	52	40	54
Greater Bay Area	45	50	40	50
Inland Empire	41	44	37	51
Los Angeles County	40	46	38	52
Northern and Sierra	48	55	45	58
Orange County	41	47	37	50
Sacramento Area	45	48	40	53
San Diego Area	43	45	36	50
San Joaquin Valley	41	44	37	51

The difference in median age between regions is 8 years for CSWs, 11 years for MFTs, 9 years for PCCs, and 8 years for EPs. A larger range indicates a more imbalanced distribution.

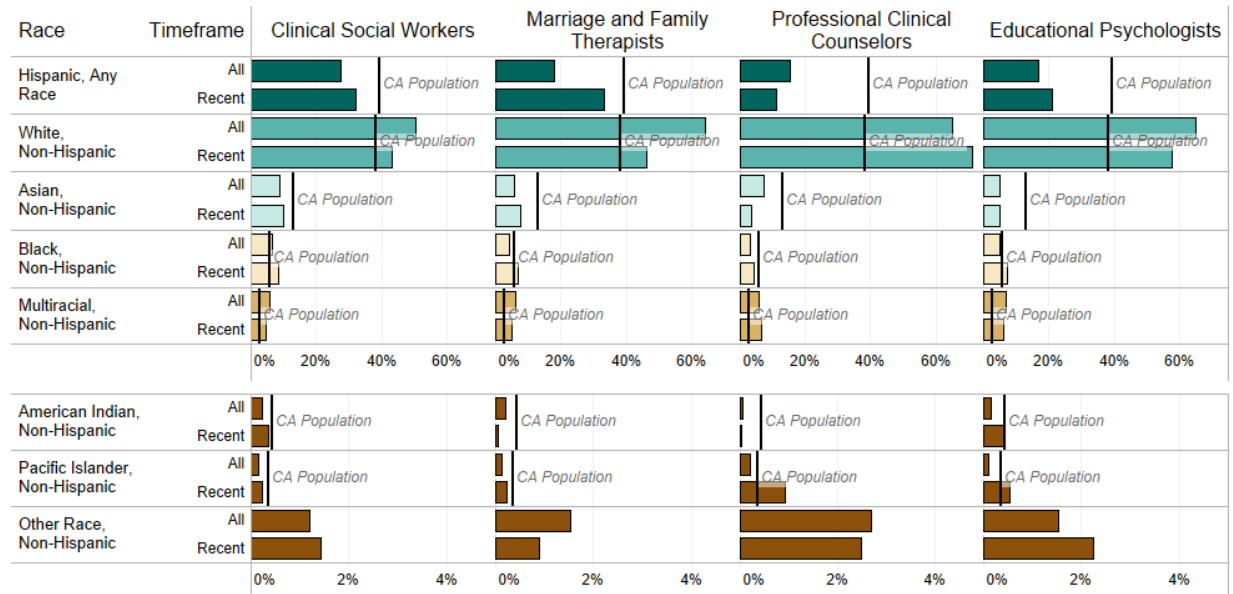
Figure D-7. Race/Ethnicity: Behavioral Health



For CSWs, the "Other" group consists of 0.2% American Indian, 0.1% Pacific Islander, and 1.2% Other Race. For MFTs, the "Other" group consists of 0.2% American Indian, 0.1% Pacific Islander, and 1.6% Other Race. For PCCs, the "Other" group consists of 0.1% American Indian, 0.2% Pacific Islander, and 2.6% Other Race. For EPs, the "Other" group consists of 0.1% American Indian, 0.1% Pacific Islander, and 1.4% Other Race.

Race/Ethnicity data for psychologists was unavailable at the time of this Report. Behavioral health professions have the lowest representation of Asian populations, less than 10%, out of all professions highlighted in this Report.

Figure D-8. Race/Ethnicity Trends: Behavioral Health

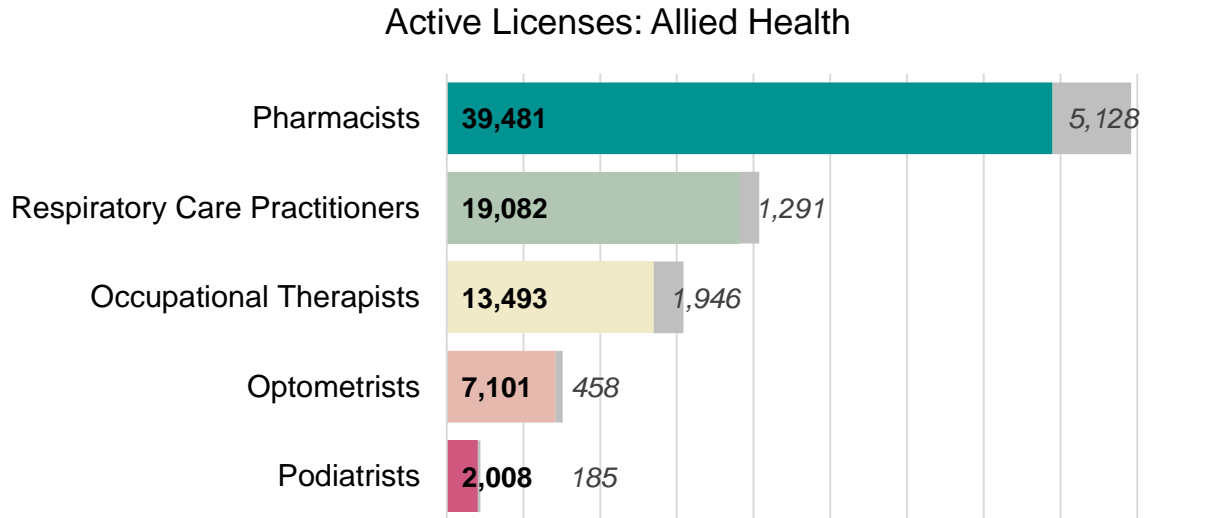


Recent licensees are those that were issued in the last 5 years. Recent licensees for CSWs and MFTs are relatively representative of the California population. White populations are overrepresented in all behavioral health professions.

APPENDIX E: ALLIED HEALTH, ALL FIGURES

The professions included in the allied health section align with the publications from the Health Resources and Services Administration's (HRSA) Bureau of Health Workforce (BHW).

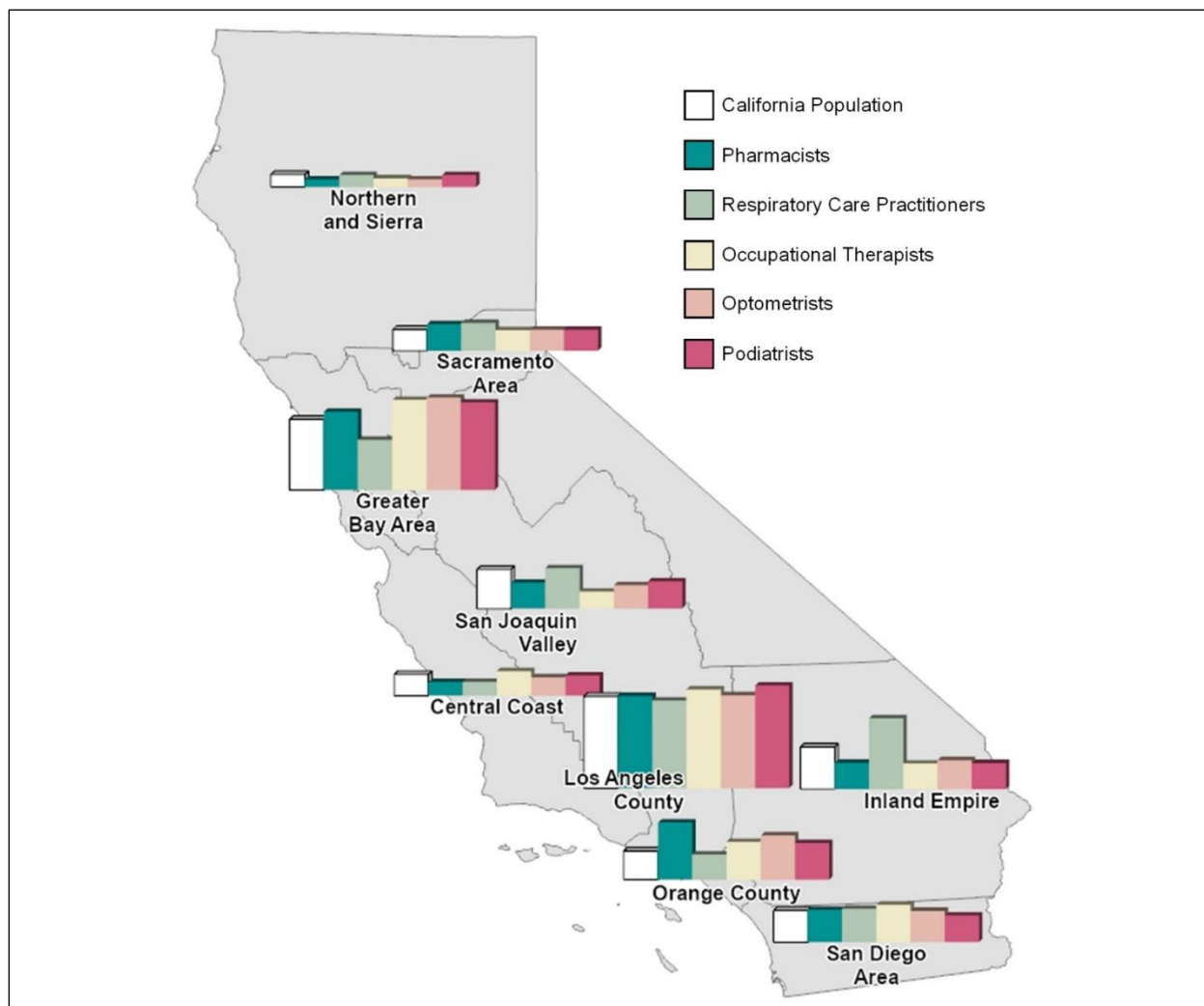
Figure E-1: Active Licenses: Allied Health



License Type	Active Licenses in CA	Per 100k Population
Pharmacist (RPH)	39,481	98.8
Respiratory Care Practitioner (RCP)	19,082	47.8
Occupational Therapist (OT)	13,493	33.8
Optometrist (OPT)	7,101	17.8
Podiatrist (DPM)	2,008	5

Figure E-2: Regional Distribution: Allied Health

HCAI tracks the geographic distribution of the existing workforce and compares it to the distribution of California's population. While a geographic maldistribution alone does not necessarily indicate a workforce shortage, it may help identify areas where shortages are more likely to exist.



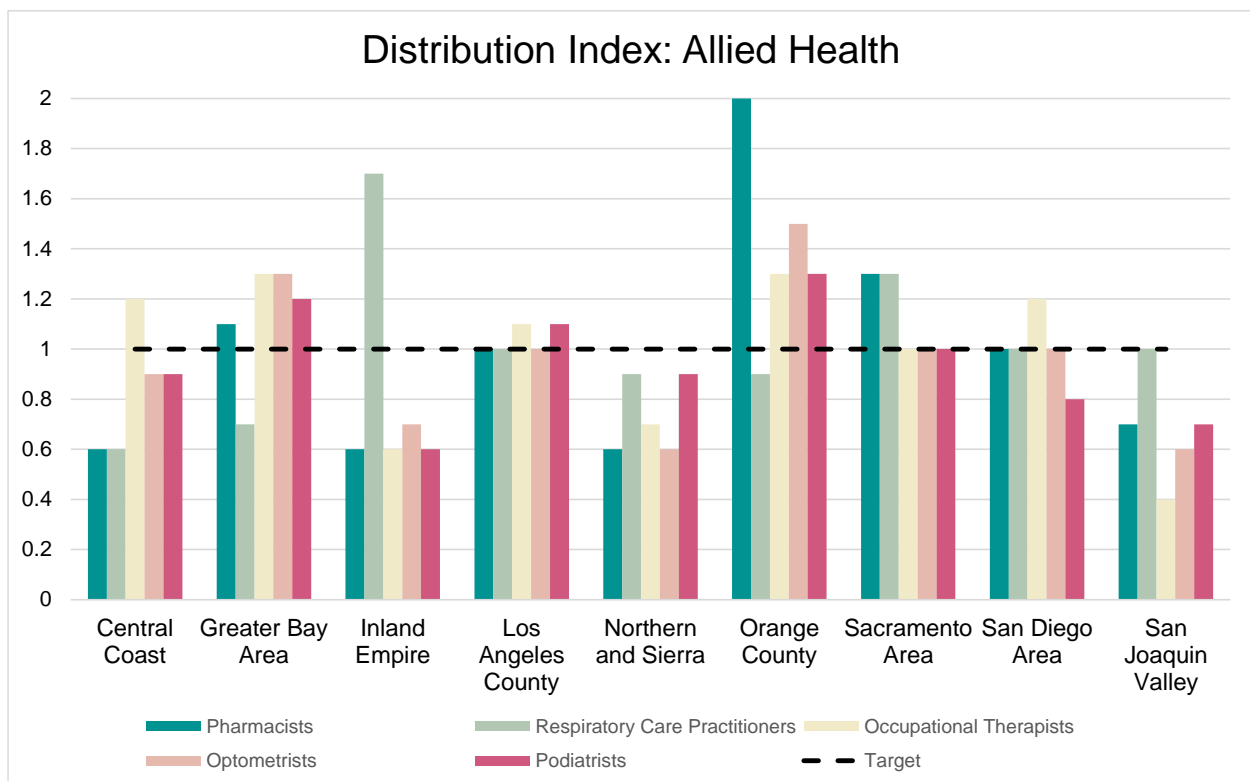
Region	Share of Population	Share of RPHs	Share of RCPs	Share of OTs	Share of OPTs	Share of DPMs
Central Coast	5.9%	3.8%	3.8%	6.8%	5.1%	5.6%
Greater Bay Area	19.6%	21.7%	13.9%	25.0%	25.6%	24.3%
Inland Empire	11.7%	7.3%	19.6%	7.1%	8.0%	7.2%
Los Angeles County	25.5%	25.6%	24.3%	27.4%	25.8%	28.5%
Northern and Sierra	3.5%	2.1%	3.3%	2.4%	2.1%	3.3%
Orange County	8.0%	15.9%	7.0%	10.5%	12.3%	10.2%

Sacramento Area	5.9%	7.4%	7.7%	5.7%	5.8%	5.8%
San Diego Area	8.8%	9.0%	9.3%	10.4%	8.7%	7.4%
San Joaquin Valley	10.9%	7.2%	11.2%	4.7%	6.5%	7.6%

The map shows variable distribution throughout the state; some regions show proportionate shares of providers and population, while others show disproportionate shares. Maldistributions are visible in every allied health profession highlighted in this Report.

The distribution index describes the magnitude of difference between a region's share of the state's providers and its share of the state's population. A distribution index of 1 indicates the region has an equal share of the state's providers and population (e.g., 10% of the state's providers and 10% of the state's population). A distribution index below 1 indicates a smaller share of providers than population (e.g., 5% of the state's providers and 10% of the state's population), and a distribution index greater than 1 indicates the opposite. The further away the index is from 1, the greater the maldistribution.

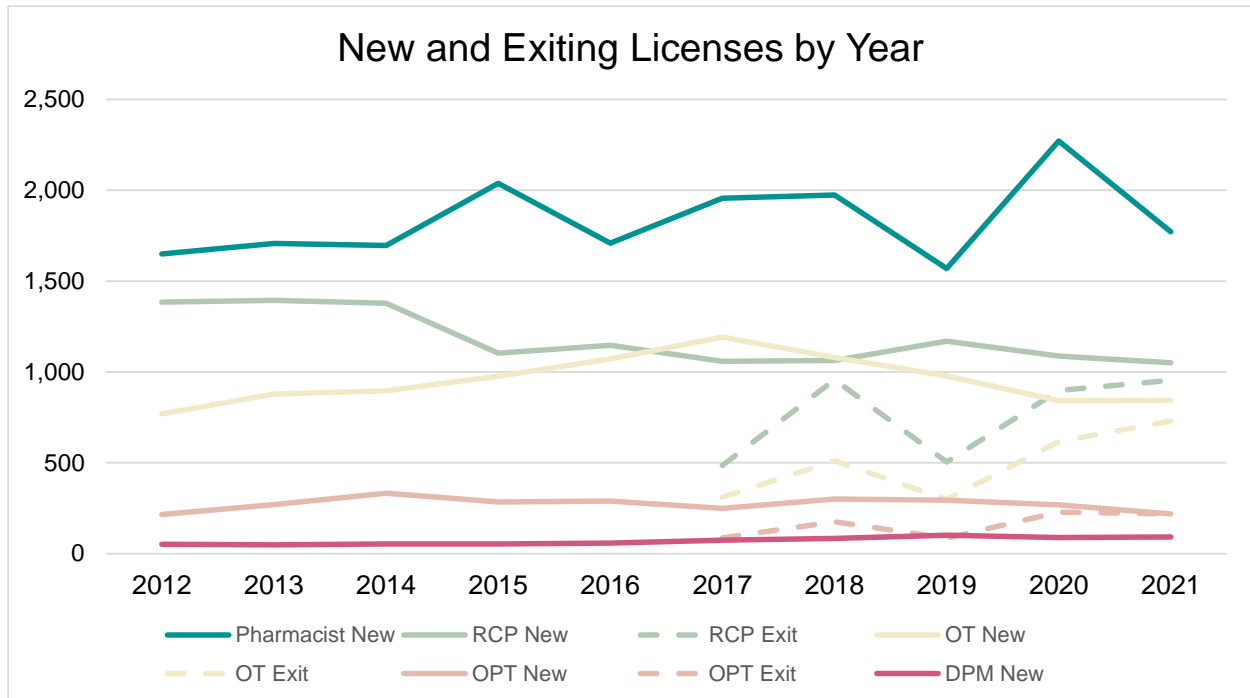
Figure E-3: Distribution Index: Allied Health



The data shows a marked concentration of pharmacists in Orange County and respiratory care practitioners in the Inland Empire region. The San Joaquin Valley, Inland Empire, and Northern and Sierra regions exhibit disproportionately small numbers of pharmacists, occupational therapists, and optometrists.

HCAI tracks the number of licenses issued each calendar year to approximate new entrants into the workforce and the number of licenses leaving "active" status to approximate the number of exits from the workforce. The Technical Appendix provides information about how HCAI defines a "new license" and an "exiting license".

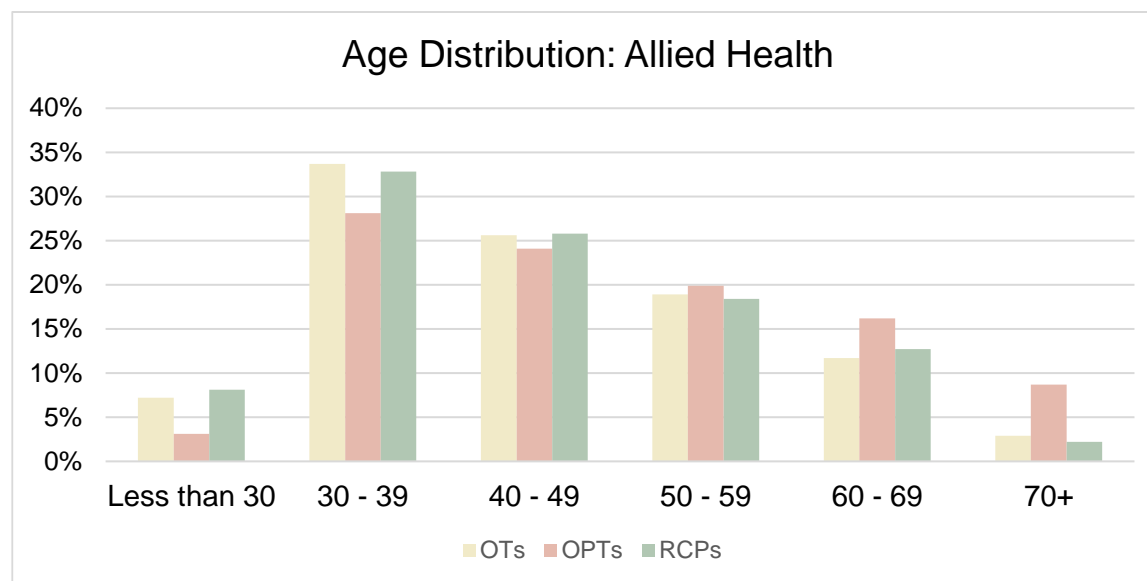
Figure E-4: New and Exiting Licenses: Allied Health



At the time of publication, license exit data for pharmacists and podiatrists was unavailable. According to the 2021 data, new optometrist licenses are approximately 3% of their total, the lowest of the professions highlighted in this Report. New pharmacist licenses are approximately 4% of their total, new respiratory care practitioner licenses are approximately 6% of their total, new occupational therapist licenses are approximately 6% of their total, new podiatrist licenses are approximately 5% of their total. Larger percentages indicate more growth.

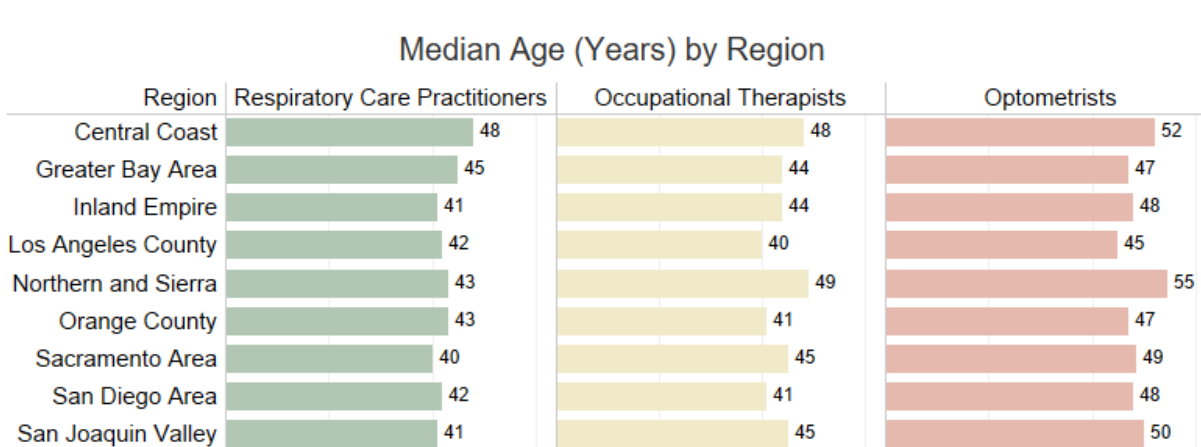
For respiratory care practitioners, occupational therapists, and optometrists, the number of workforce exits approaches the number of new licenses.

Figure E-5: Age Distribution: Allied Health



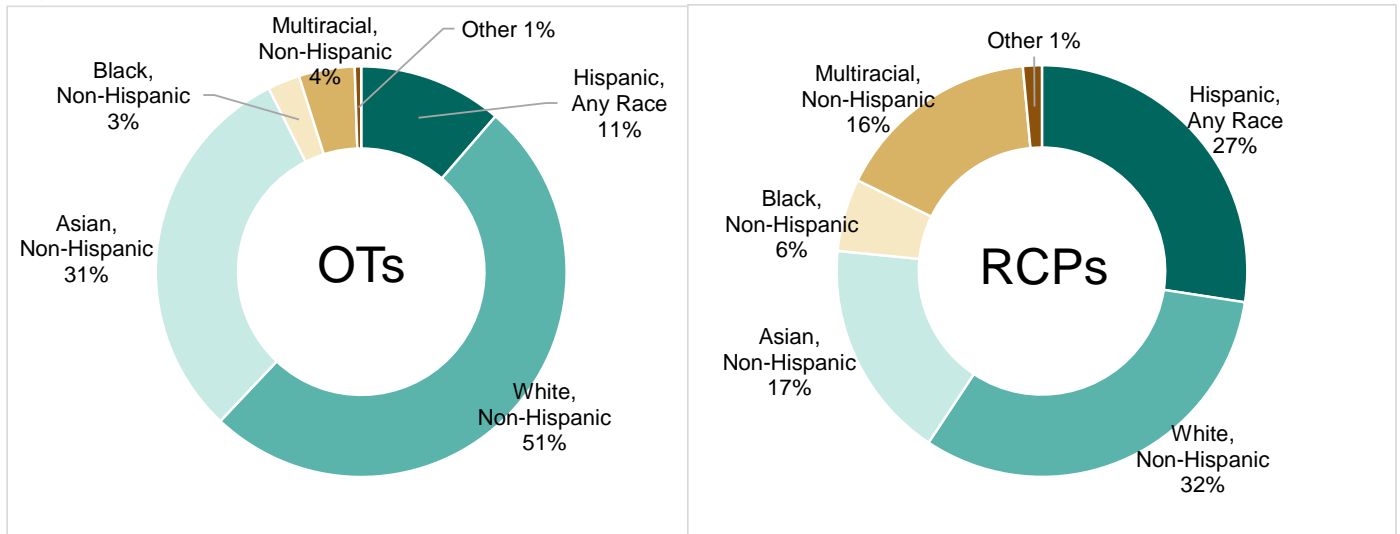
According to 2022 data, 15% of OTs, 25% of Optometrists, and 15% of Respiratory Care Practitioners are 60 years or older. Age data on pharmacists and podiatrists was unavailable at the time of publication.

Figure E-6: Regional Age Variation: Allied Health



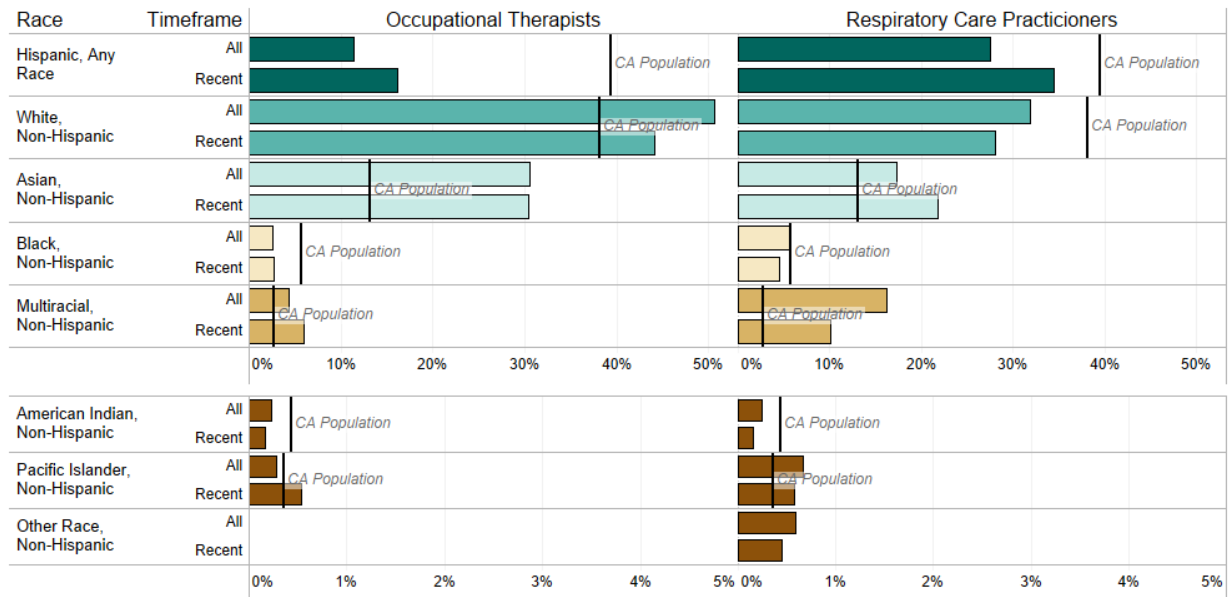
The difference in median age between regions is 8 for respiratory care practitioners, 9 for occupational therapists, and 10 for optometrists. A larger range indicates a more imbalanced distribution.

Figure E-7: Race/Ethnicity: Allied Health



For OTs, the "Other" group consists of 0.2% American Indian, and 0.3% Pacific Islander. For RCPs, the "Other" group consists of 0.2% American Indian, 0.7% Pacific Islander, and 0.6% Other Race.

Figure E-8: Race/Ethnicity Trends: Allied Health



Recent licensees are those that were issued in the last 5 years. Recent licensees for occupational therapists and respiratory care practitioners show increased representation of Hispanic populations.

TECHNICAL APPENDIX

Active Licenses: Counts for "active" licenses include those in "current" or "active" status on April 1, 2022. Licenses in "delinquent" or "inactive" status are excluded.

California vs. Out of State: HCAI considers licenses Out of State when the state field in the licensee's public address of record is not California.

Region: Each licensee is associated with the county entered into their public address of record. Addresses that were missing the county field were geocoded and spatially joined with California County boundaries available from the U.S. Census Bureau's geography program ([link](#)). The center groups counties into nine regions:

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

Please note that the address of record is not necessarily the same as a practice location, though preliminary survey data estimates that the address of record county matches the primary practice county 75% of the time and the regions match approximately 90% of the time.

California Population: This Report uses population estimates and projections from the Department of Finance, specifically the county population projections (P-2A) for the year 2020.

CHIS Region	Population (2021)	Percent of Total
Central Coast	2,364,049	5.9%
Greater Bay Are	7,823,826	19.6%

Inland Empire	4,678,311	11.7%
Los Angeles County	10,198,389	25.5%
Northern and Sierra	1,410,808	3.5%
Orange County	3,209,272	8.0%
Sacramento Area	2,369,896	5.9%
San Diego Area	3,535,446	8.8%
San Joaquin Valley	4,363,272	10.9%
Total	39,953,269	100%

New licenses: The count of licenses with issue dates in each calendar year, regardless of current license status.

Exiting licenses: An exiting license is a license that was in "active" status at the beginning (January or February) of the calendar year and not at the end (November or December) of that year.

Age: DCA provides HCAI with the birth year of licensees in their custom report. For this Report, age is calculated as the difference between the current year (2022) and the licensee's birth year.

Survey Response Rates: The prior workforce survey was administered at the time of electronic licensure renewal. Licensees can skip questions, so the response rates vary by license type and by question. The response rates to the Race/Ethnicity questions are listed in the following table:

License Type	Active CA Licenses	Responses	Response Rate
Physician	121,137	45,937	38%
NP	27,840	22,853	82%
PA	13,519	547	4%
RN	389,437	290,856	75%
LVN	101,139	70,949	70%
Dentist	32,585	28,418	87%
RDA	29,916	28,071	94%
RDH	16,468	15,293	93%
ACSW	13,909	8,274	59%
LCSW	28,355	18,988	67%
AMFT	12,419	7,507	60%

LMFT	41,861	29,124	70%
EP	1,485	1,172	79%
PCC	6,577	1,251	19%
OT	13,493	5,240	39%
RCP	19,082	15,117	79%

Survey Response Weighting: HCAI uses a cell-based weighting methodology to adjust for any difference between the respondents (sample) and the complete universe of licenses (population). HCAI compares the distribution of each license type by region and decade of birth (e.g., 7% of all licenses are in the Region X and born in the 1980s) to the distribution of the sample (e.g., 10% of responses are in the Region X and born in the 1980s). Dividing the population by the sample (e.g., 7/10) creates the group weight (0.7), which is used to adjust the weight of responses from licensees in that group. A weight below one indicates that the group is overrepresented in the sample compared to the population. Conversely, a weight above one indicates that the group is underrepresented in the sample. The group weights for each license type highlighted in the Report are shown in the following tables:

Group Weights: Medicine
(Physician / NP)

	Before 1960	1960's	1970's	1980's	1990 or later
Central Coast	0.9 / 0.9	1.0 / 1.0	1.2 / 1.0	1.6 / 1.1	2.4 / 1.2
Greater Bay Area	0.9 / 1.0	0.9 / 1.0	1.1 / 1.0	1.7 / 1.1	3.6 / 1.3
Inland Empire	0.7 / 1.0	0.8 / 0.9	0.9 / 0.9	1.5 / 1.0	3.8 / 1.1
Los Angeles County	0.7 / 0.9	0.8 / 0.9	1.0 / 1.0	1.5 / 1.0	3.1 / 1.1
Northern and Sierra	0.8 / 1.0	0.9 / 1.0	1.2 / 1.0	1.8 / 1.0	1.4 / 1.2
Orange County	0.7 / 1.0	0.8 / 1.0	1.0 / 1.0	1.4 / 1.0	4.2 / 1.1
Sacramento Area	0.9 / 1.0	0.9 / 1.0	1.1 / 1.0	1.5 / 1.0	2.8 / 1.4
San Diego Area	0.8 / 1.0	0.9 / 1.0	1.1 / 1.0	1.6 / 1.0	3.8 / 1.1
San Joaquin Valley	0.7 / 0.9	0.8 / 1.0	1.0 / 1.0	1.4 / 0.9	5.3 / 1.1

Group Weights: Nursing
(RN / LVN)

	Before 1960	1960's	1970's	1980's	1990 or later
Central Coast	1.0 / 1.1	0.9 / 0.9	0.9 / 0.9	1.0 / 1.0	1.4 / 1.3
Greater Bay Area	1.0 / 1.0	0.9 / 0.9	0.9 / 0.9	1.0 / 1.0	1.4 / 1.3
Inland Empire	0.9 / 1.0	0.9 / 0.9	0.9 / 0.9	1.0 / 1.0	1.4 / 1.1
Los Angeles County	1.0 / 1.0	0.9 / 0.9	0.9 / 0.9	1.0 / 1.0	1.4 / 1.2
Northern and Sierra	1.0 / 1.0	0.9 / 1.0	1.0 / 1.0	1.1 / 1.1	1.4 / 1.3
Orange County	0.9 / 1.0	0.9 / 0.9	0.9 / 0.9	1.0 / 1.0	1.4 / 1.2
Sacramento Area	1.0 / 1.0	0.9 / 1.0	0.9 / 0.9	1.0 / 1.0	1.4 / 1.3
San Diego Area	1.0 / 1.0	0.9 / 0.9	0.9 / 0.9	1.0 / 1.0	1.3 / 1.3
San Joaquin Valley	1.0 / 1.0	0.9 / 0.9	0.9 / 0.9	1.0 / 1.0	1.4 / 1.3

Group Weights: Dental Health
(Dentist / RDA / RDH)

	Before 1960	1960's	1970's	1980's	1990 or later
Central Coast	1.0 / 1.0 / 1	1.0 / 0.9 / 1	1.0 / 1.0 / 1	1.0 / 1.0 / 1.0	1.4 / 1.2 / 1.1
Greater Bay Area	1.0 / 1.0 / 1	0.9 / 0.9 / 1	1.0 / 0.9 / 1	1.0 / 1.0 / 1.0	1.3 / 1.1 / 1.2
Inland Empire	1.0 / 1.0 / 1	0.9 / 0.9 / 1	1.0 / 0.9 / 0	1.0 / 1.0 / 1.0	1.3 / 1.2 / 1.2
Los Angeles County	1.0 / 1.0 / 1	0.9 / 0.9 / 1	1.0 / 0.9 / 1	1.0 / 1.0 / 1.0	1.3 / 1.1 / 1.2
Northern and Sierra	1.0 / 1.0 / 1	1.0 / 0.9 / 1	1.0 / 1.0 / 1	1.1 / 1.0 / 1.0	1.1 / 1.1 / 1.1
Orange County	1.0 / 1.0 / 1	0.9 / 0.9 / 0	1.0 / 0.9 / 0	1.0 / 1.0 / 1.0	1.3 / 1.1 / 1.1

Sacramento Area	1.0 / 1.0 / 1.0	1.0 / 1.0 / 1.0	1.0 / 1.0 / 1.0	1.1 / 1.0 / 1.0	1.3 / 1.1 / 1.2
San Diego Area	1.0 / 1.0 / 1.0	0.9 / 1.0 / 1.0	1.0 / 0.9 / 1.0	1.1 / 1.0 / 1.0	1.4 / 1.2 / 1.2
San Joaquin Valley	1.0 / 1.0 / 1.0	1.0 / 0.9 / 1.0	1.0 / 1.0 / 1.0	1.0 / 1.0 / 1.0	1.3 / 1.1 / 1.1

Group Weights: Behavioral Health
(ACSW / LCSW / AMFT / LMFT)

	Before 1960	1960's	1970's	1980's	1990 or later
Central Coast	1.0 / 0.8 / 0.9 / 0.8	0.8 / 0.9 / 0.8 / 0.9	1.0 / 0.9 / 0.9 / 0.9	0.9 / 1.2 / 0.9 / 1.1	1.2 / 4.1 / 1.3 / 2.4
Greater Bay Area	0.8 / 0.8 / 0.8 / 0.8	0.9 / 0.8 / 1.0 / 0.9	1.0 / 0.9 / 1.1 / 0.9	1.0 / 1.1 / 1.0 / 1.2	1.1 / 2.7 / 1.2 / 3.2
Inland Empire	0.9 / 0.8 / 0.8 / 0.8	0.9 / 0.9 / 0.8 / 0.9	1.0 / 0.9 / 0.9 / 0.9	1.0 / 1.1 / 0.9 / 1.1	1.1 / 2.6 / 1.0 / 2.5
Los Angeles County	0.8 / 0.8 / 0.8 / 0.8	0.9 / 0.8 / 0.9 / 0.9	0.9 / 0.9 / 0.9 / 0.9	0.9 / 1.2 / 1.0 / 1.2	1.1 / 2.7 / 1.1 / 2.7
Northern and Sierra	0.8 / 0.8 / 1.0 / 0.8	0.9 / 0.9 / 1.0 / 0.9	0.9 / 1.0 / 0.9 / 0.9	1.0 / 1.2 / 0.9 / 1.2	1.2 / 1.9 / 1.2 / 2.8
Orange County	0.7 / 0.8 / 0.7 / 0.8	1.0 / 0.8 / 0.9 / 0.9	1.0 / 0.9 / 0.9 / 0.9	0.9 / 1.1 / 1.0 / 1.1	1.1 / 3.3 / 1.3 / 3.2
Sacramento Area	1.0 / 0.9 / 0.9 / 0.8	1.1 / 0.8 / 0.9 / 0.9	0.9 / 0.9 / 1.0 / 1.0	1.1 / 1.1 / 1.1 / 1.1	1.1 / 2.7 / 1.4 / 2.2
San Diego Area	0.8 / 0.8 / 0.9 / 0.8	0.8 / 0.8 / 0.9 / 0.9	0.8 / 0.9 / 1.0 / 0.9	1.0 / 1.2 / 1.0 / 1.1	1.2 / 2.7 / 1.1 / 3.6
San Joaquin Valley	1.0 / 0.8 / 0.7 / 0.8	0.8 / 0.8 / 0.8 / 0.9	1.0 / 0.9 / 0.9 / 0.9	1.0 / 1.1 / 0.9 / 1.1	1.2 / 2.4 / 1.0 / 2.4

Group Weights: Behavioral Health (continued)
(EP / PCC)

	Before 1960	1960's	1970's	1980's	1990 or later
Central Coast	0.9 / 0.7	0.7 / 0.7	1.2 / 0.7	0.9 / 1.7	. / 2.3
Greater Bay Area	0.8 / 0.7	0.8 / 0.8	0.9 / 0.9	1.1 / 1.2	5.1 / 2.4

Inland Empire	0.9 / 0.8	1.1 / 0.9	1.0 / 1.0	1.3 / 1.2	. / 3.0
Los Angeles County	0.8 / 0.8	0.8 / 0.8	0.8 / 0.9	1.0 / 1.2	1.5 / 2.6
Northern and Sierra	0.7 / 0.7	1.2 / 1.7	1.0 / 1.1	1.4 / 1.0	. / .
Orange County	0.8 / 0.7	1.0 / 0.9	0.9 / 0.9	1.3 / 1.4	. / 1.8
Sacramento Area	0.8 / 0.8	0.8 / 0.8	0.7 / 0.8	1.1 / 1.2	1.7 / 2.8
San Diego Area	0.8 / 0.7	0.6 / 1.0	0.9 / 1.0	1.1 / 1.0	0.6 / 2.8
San Joaquin Valley	0.7 / 0.6	1.1 / 0.8	1.0 / 0.8	1.3 / 1.5	. / 2.3

Group Weights: Allied Health
(OT / RCP)

	Before 1960	1960's	1970's	1980's	1990 or later
Central Coast	1.8 / 1.0	1.2 / 1.0	1.1 / 0.9	1.0 / 1.0	0.7 / 1.3
Greater Bay Area	1.3 / 1.0	1.1 / 1.0	1.0 / 1.0	1.0 / 1.0	0.7 / 1.3
Inland Empire	1.7 / 1.0	1.0 / 0.9	1.2 / 0.9	0.9 / 0.9	0.7 / 1.3
Los Angeles County	1.6 / 1.0	1.1 / 1.0	1.0 / 0.9	1.1 / 1.0	0.8 / 1.3
Northern and Sierra	1.3 / 1.0	1.1 / 1.0	1.3 / 0.9	1.0 / 1.0	0.7 / 1.3
Orange County	1.5 / 1.0	1.5 / 1.0	1.2 / 0.9	1.2 / 0.9	0.7 / 1.5
Sacramento Area	1.1 / 1.1	1.1 / 1.0	1.0 / 0.9	1.0 / 1.0	0.8 / 1.2
San Diego Area	1.3 / 1.0	0.9 / 0.9	1.0 / 0.9	1.0 / 1.0	0.8 / 1.2
San Joaquin Valley	1.4 / 1.1	1.0 / 1.0	0.9 / 0.9	1.1 / 1.0	0.6 / 1.3

Race/Ethnicity Categories: HCAI collects detailed race and ethnicity information through the workforce survey but summarizes the data using high-level groups that maximize compatibility with other demographic data. The following table summarizes the top-level combination of race and ethnicity used in this Report. To improve readability, HCAI will occasionally truncate the "Non-Hispanic" portion of the categories (e.g., "Asian, Non-Hispanic" may be referred to as "Asian").

		Ethnicity	
		Hispanic	Non-Hispanic
Race	Multiple Races	Hispanic, Any Race	Multiracial, Non-Hispanic
	White	Hispanic, Any Race	White, Non-Hispanic
	Asian	Hispanic, Any Race	Asian, Non-Hispanic
	Black	Hispanic, Any Race	Black, Non-Hispanic
	American Indian	Hispanic, Any Race	American Indian, Non-Hispanic
	Pacific Islander	Hispanic, Any Race	Pacific Islander, Non-Hispanic
	Other	Hispanic, Any Race	Other Race, Non-Hispanic

Race/Ethnicity of the California Population: This Report uses population estimates and projections from the Department of Finance, specifically the population by race/ethnicity (P-1D) for the year 2020.

Race/Ethnicity	Population (2020)	Percent of Total
White Non-Hispanic	15,187,246	38.2%
Black Non-Hispanic	2,283,480	5.7%
American Indian or Alaska Native Non-Hispanic	173,029	0.4%
Asian Non-Hispanic	5,216,606	13.1%
Native Hawaiian or Pacific Islander Non-Hispanic	143,420	0.4%
Multiracial Non-Hispanic	1,097,117	2.8%
Hispanic Any Race	15,681,521	39.4%
Total	39,782,419	100%