

# CALIFORNIA HEALTH CARE ALMANAC



## California Physicians: Who They Are, How They Practice

AUGUST 2017

# Introduction

The number of licensed physicians in California has grown steadily over the past 20 years, increasing 44% between 1993 and 2013, and has outpaced the state’s 23% growth in population. Demand for physicians is expected to increase as the population ages. Ensuring access to care is a concern, as one-third of the state’s physicians are over age 60. *California Physicians: Who They Are, How They Practice* describes the physician market in California.

**KEY FINDINGS INCLUDE:**

- The supply of licensed physicians does not accurately reflect their availability to provide care. Only 80% of physicians with active licenses provided patient care 20 or more hours per week.
- Physician supply varied by region. The Greater Bay Area was the only region that met the recommended supply of primary care physicians (PCPs). The Inland Empire, San Joaquin Valley, and Northern and Sierra counties all fell short of the recommended supply of specialists.
- Latinos were underrepresented among physicians. Latinos represented 38% of California’s population, but only 5% the state’s physicians were Latino.
- Physicians were less likely to have uninsured patients in their practice than patients with any type of health insurance.
- Twenty-seven percent of physicians (35% of PCPs and 23% of specialists) attended medical school in a foreign country.

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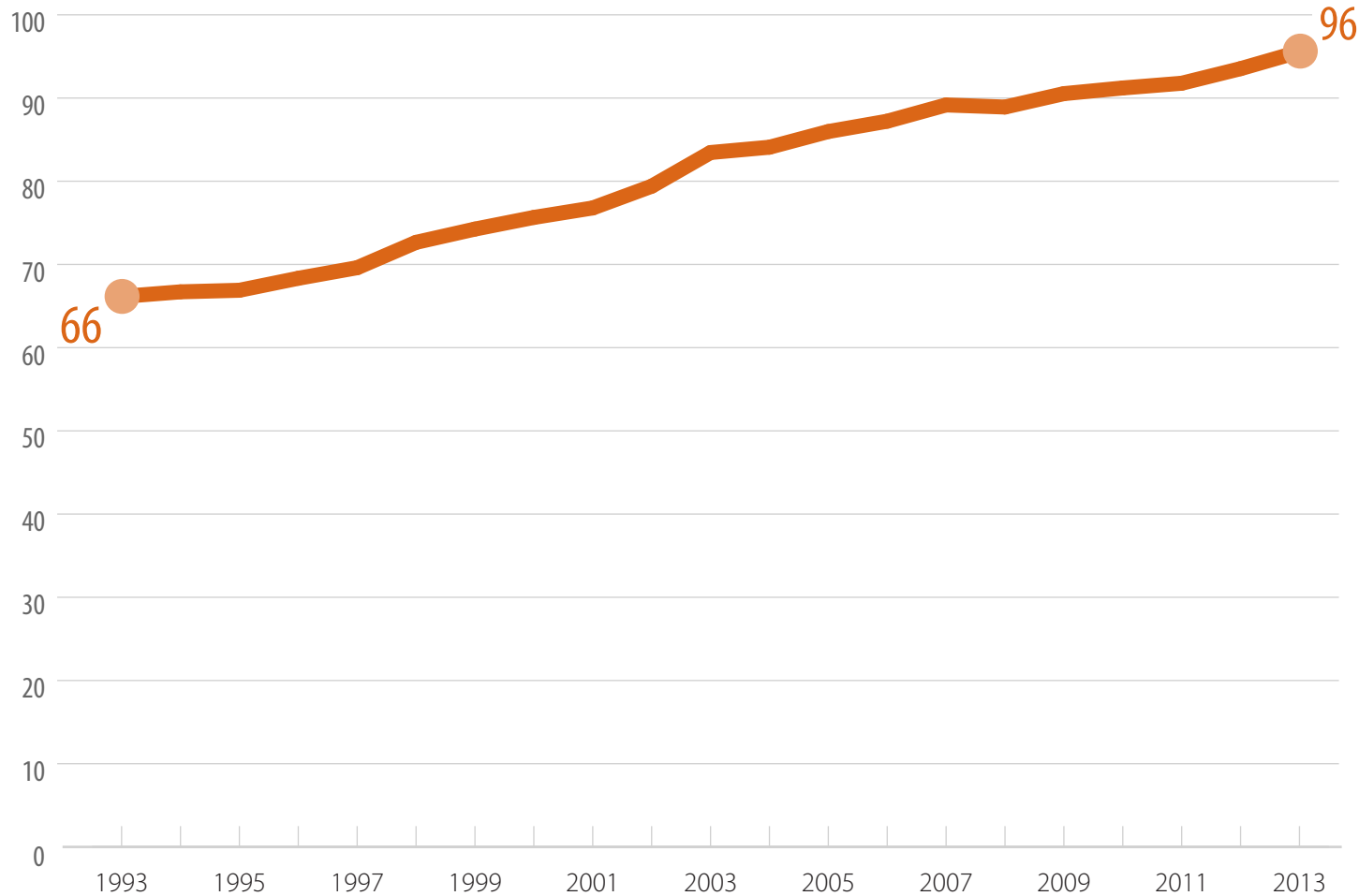
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# Active Physicians

## California, 1993 to 2013

NUMBER OF PHYSICIANS (IN THOUSANDS)



Note: Data include active MDs and exclude residents, fellows, and MDs who are retired, semiretired, working part-time, temporarily not in practice, or not active for other reasons and who indicated they worked 20 hours or less per week.

Source: "Physician Characteristics and Distribution in the U.S.," American Medical Association, 1993-2015.

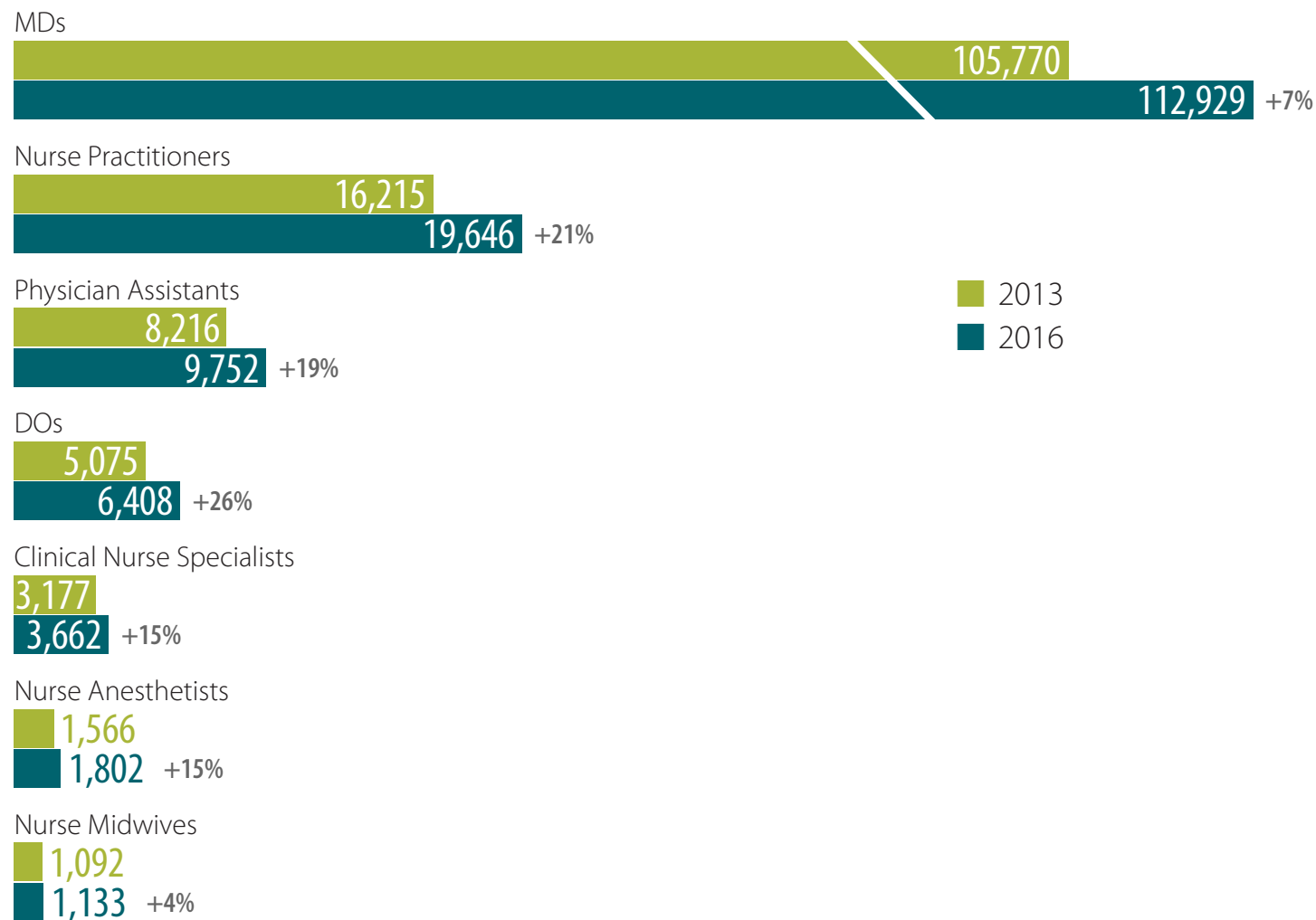
### California Physicians

Supply

The number of active physicians practicing in California has grown steadily, increasing 44% from 1993 to 2013. Growth in the state's supply of physicians exceeded population growth, which grew by 23% (not shown).

# Supply of Select Providers

## California, 2013 and 2016



Notes: Includes all active providers with a California address. The Agency for Healthcare Research and Quality has estimated that 52% of nurse practitioners and 43% of physician assistants are primary care practitioners. See "Primary Care Workforce Facts and Stats No. 2: The Number of Nurse Practitioners and Physician Assistants Practicing Primary Care in the United States," Agency for Healthcare Research and Quality, October 2014, [www.ahrq.gov](http://www.ahrq.gov) (PDF). DO is doctor of osteopathic medicine.

Source: Special request (private tabulation), California Department of Consumer Affairs, 2016.

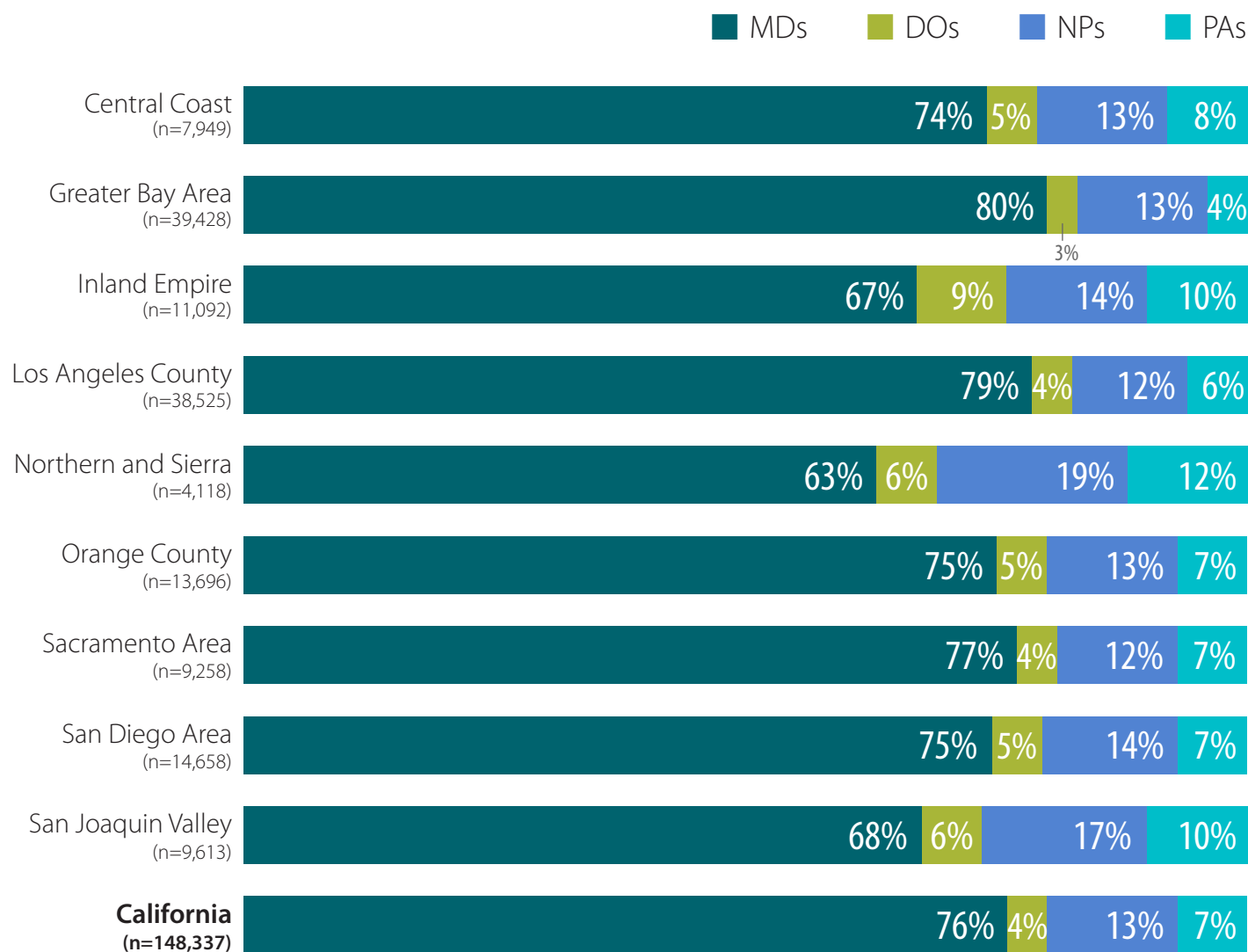
### California Physicians

#### Supply

Supplies of licensed physicians, physician assistants, and advanced practice nurses grew in California between 2013 and 2016. Doctors of osteopathic medicine (DOs) and nurse practitioners had the highest rate of growth while MDs had the largest increase in the number of professionals.

# Health Care Providers, by Type and Region

## California, 2016



### California Physicians

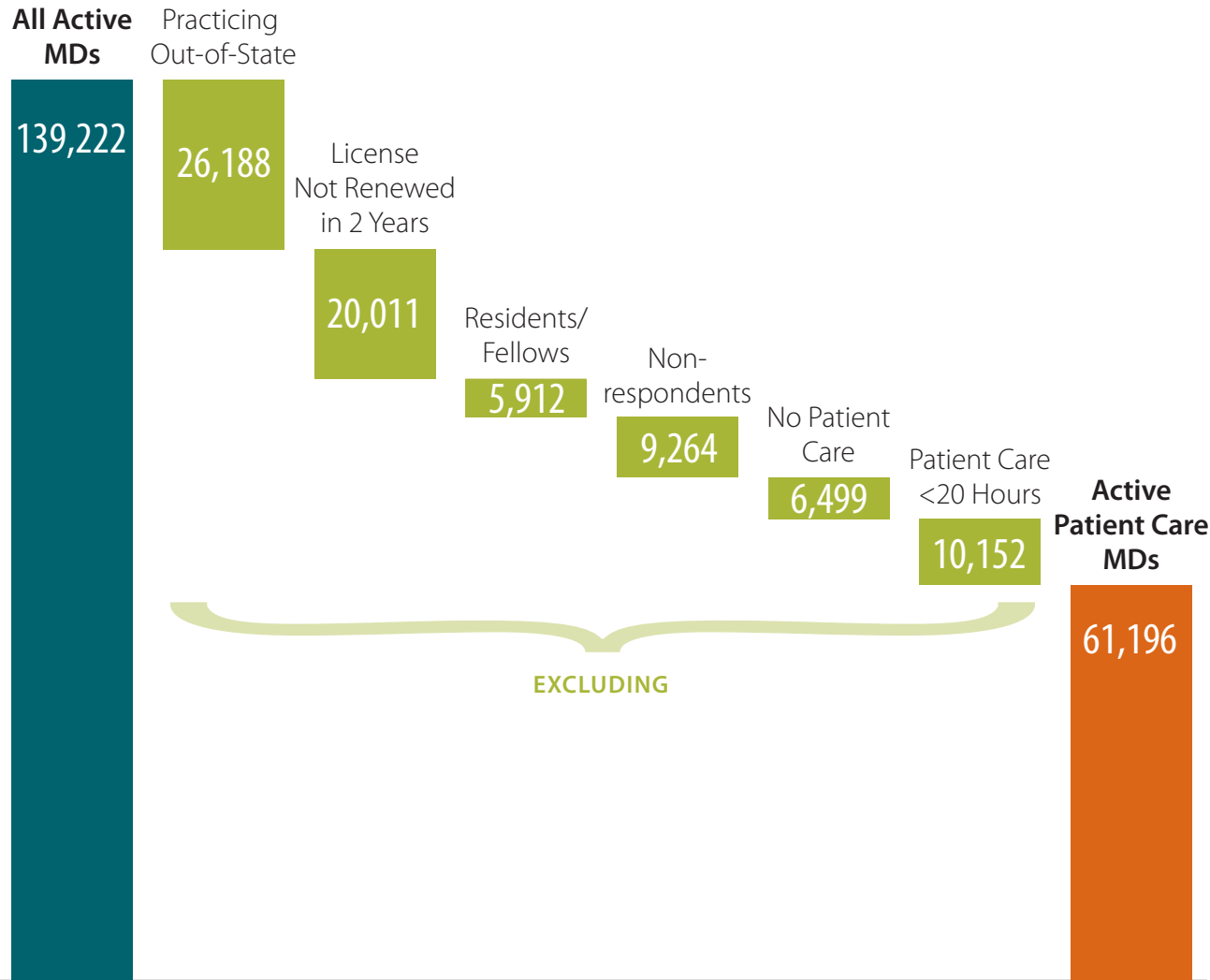
#### Supply

Medical care can be obtained from health care providers other than physicians. In 2016, physicians (active MDs and DOs) comprised 80% of health care providers in California. In the Northern and Sierra region, the percentage was only 69% of health care providers.

Notes: Includes all active providers with a California address. *DO* is doctor of osteopathic medicine. *NP* is nurse practitioner, and *PA* is physician assistant. Segments may not total 100% due to rounding. See Appendix A for a list of counties within each region.

Source: Special request (private tabulation), California Department of Consumer Affairs, 2016.

# Estimating the Number of Active Patient Care Physicians California, 2015



## California Physicians

### Supply

Counting physicians in California is not clear-cut. The number varies based on how physician is defined. Active physicians include a number of physicians who would not be considered “active patient care.” This includes those who did not renew their license during the most recent biannual renewal cycle, those practicing in other states, residents, fellows, nonrespondents, and MDs that provide patient care less than 20 hours per week.

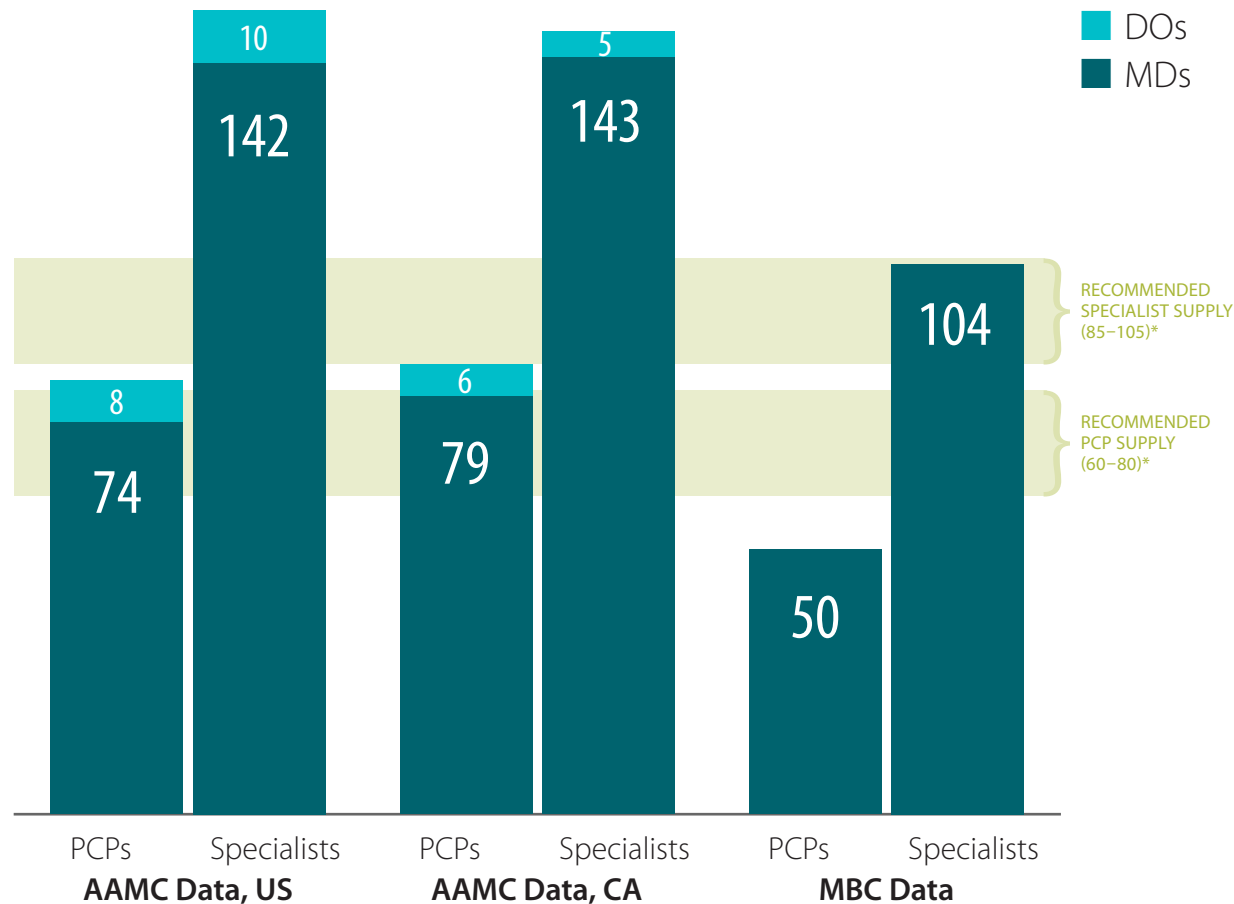
Notes: The Medical Board of California surveys MDs when they obtain or renew their licenses. *Nonrespondents* includes MDs who did not complete the survey and those who did not respond to specific questions. Also excluded were physicians who did not renew their licenses within two years of the survey.

Source: Survey of Licensees (private tabulation), Medical Board of California, 2015.

# Primary Care Physicians and Specialists

## California vs. United States, 2014

NUMBER PER 100,000 POPULATION



### California Physicians

#### Supply

Data collected by the Association of American Medical Colleges (AAMC) for 2014 and by the Medical Board of California (MBC) for 2015 yield different conclusions about the adequacy of supply of primary care physicians (PCPs) and specialists. Based on the AAMC data, California exceeded the recommended supply for PCPs. However, the MBC data suggest that California's supply of PCPs was almost 85% of the recommended per capita ratio.

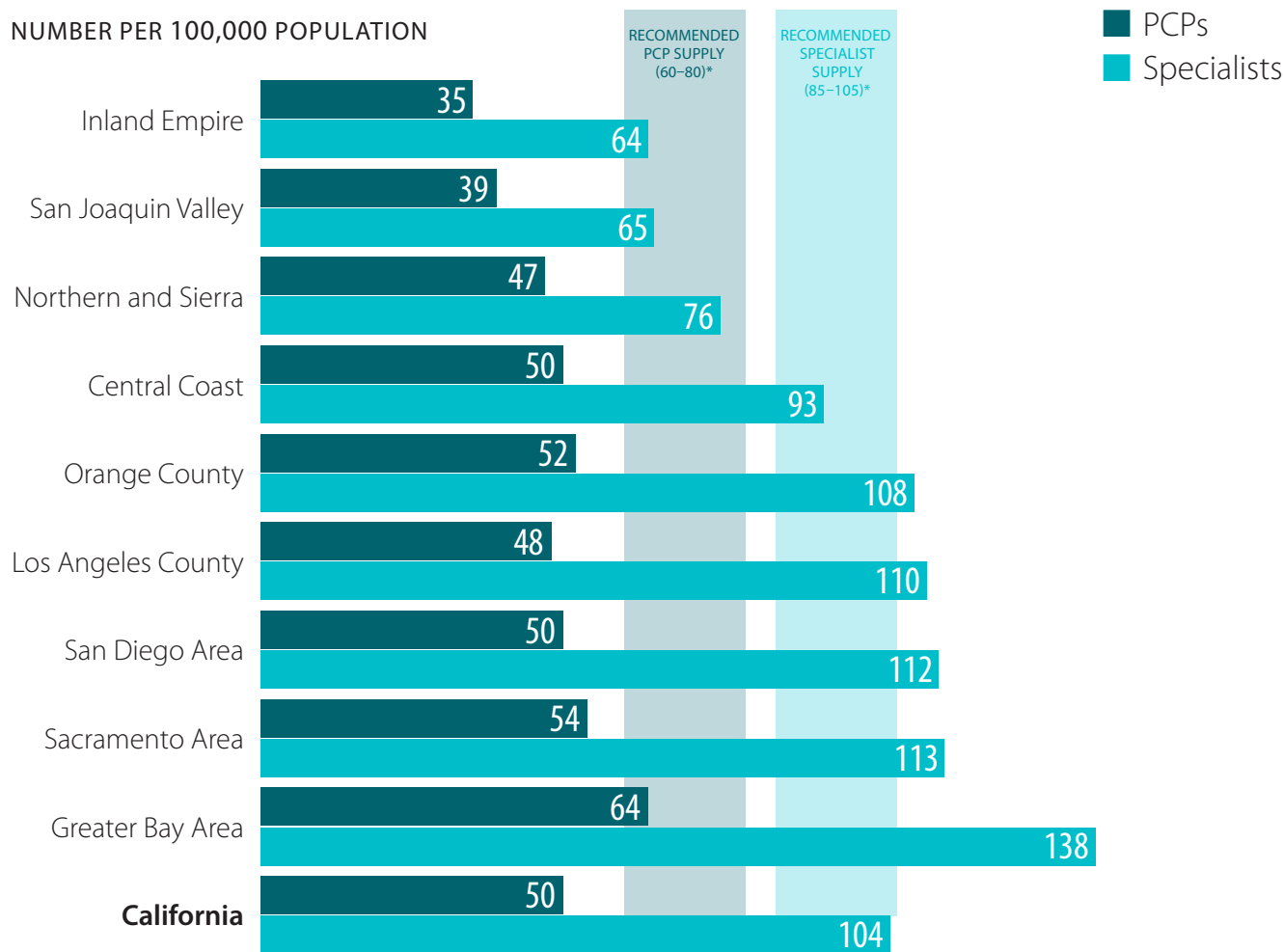
\*The Council on Graduate Medical Education (COGME), part of the US Department of Health and Human Services, studies physician workforce trends and needs. COGME ratios include doctors of osteopathic medicine (DOs) and are shown as ranges in the chart above. MBC data do not include DOs and thus cannot be compared directly to AAMC data.

Notes: The Association of American Medical Colleges (AAMC) data include those physicians who self-reported their type of practice as "direct patient care." The Medical Board of California (MBC) data are 2015 and include active MDs working 20 or more hours in patient care per week, excluding residents and fellows.

Sources: "Table 1.2" and "Table 1.4," in *2015 State Physician Workforce Data Book*, AAMC, November 2015, [members.aamc.org](http://members.aamc.org) (PDF); Survey of Licensees (private tabulation), Medical Board of California, 2015; *Annual Estimates of the Resident Population by Sex, Age, Race, and Hispanic Origin for the United States and States: April 1, 2010 to July 1, 2015*, US Census Bureau, June 2015.

# Primary Care Physicians and Specialists by California Region, 2015

NUMBER PER 100,000 POPULATION



\*The Council on Graduate Medical Education (COGME), part of the US Department of Health and Human Services, studies physician workforce trends and needs. COGME ratios include doctors of osteopathic medicine (DOs) and are shown as ranges in the chart above.

Notes: Data include active MDs working 20 or more hours in patient care per week, excluding residents and fellows. There is a slight difference in regional per population estimates of physicians since not all respondents provided geographic information. See Appendix A for a list of counties within each region.

Sources: Survey of Licensees (private tabulation), Medical Board of California, 2015; *Annual Estimates of the Resident Population by Sex, Age, Race, and Hispanic Origin for the United States and States: April 1, 2010 to July 1, 2015*, US Census Bureau, June 2015.

## California Physicians

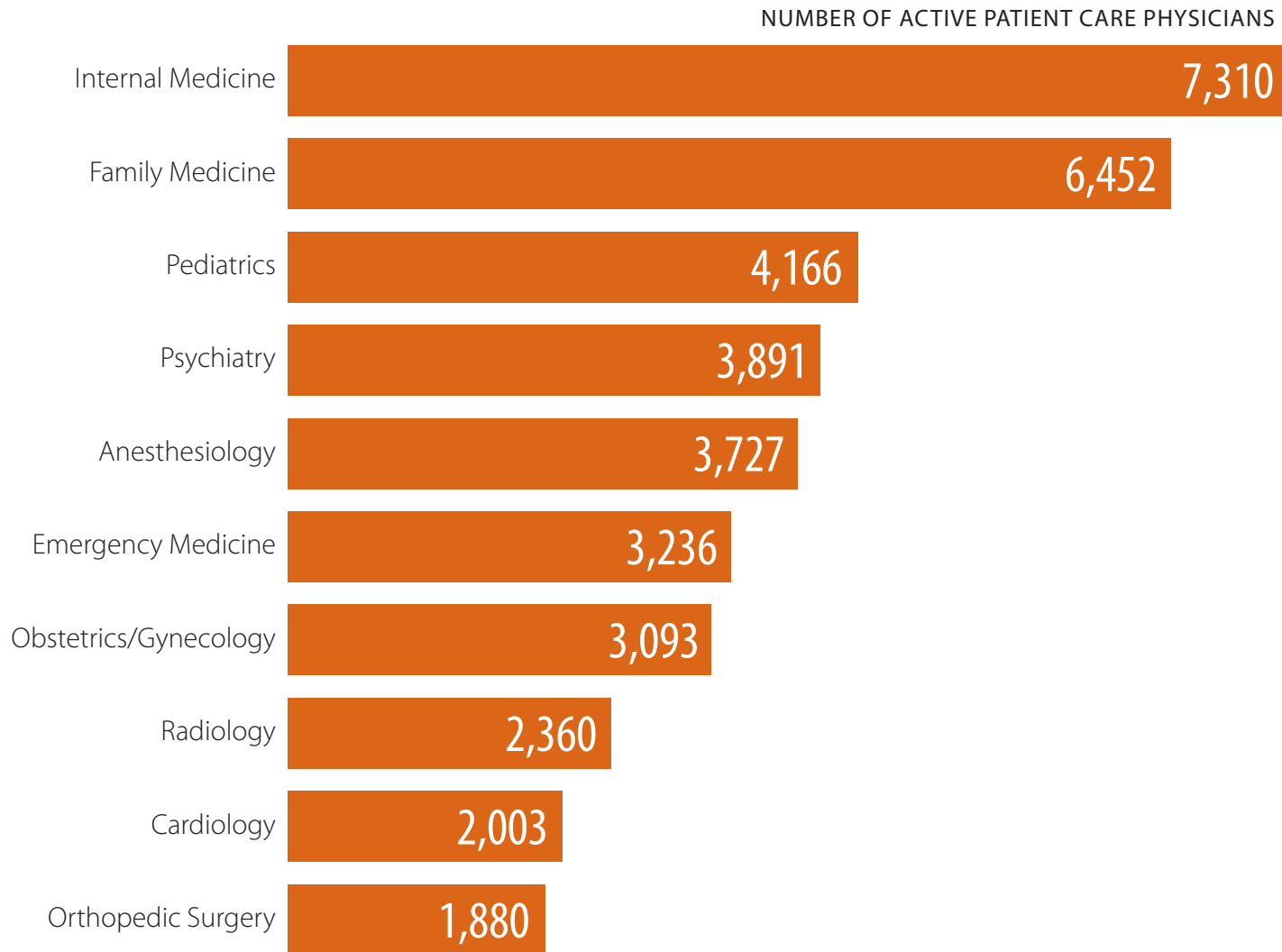
### Supply

Physician supply varied by region. However, all but one region — the Greater Bay Area — fell short of the recommended supply of primary care physicians (PCPs). The Inland Empire and San Joaquin Valley regions had the lowest ratios for PCPs and specialists of all regions in the state. Three regions had supplies of specialists below the recommended supply.



# Top Ten Specialties

## California, 2015



Notes: Data include active MDs working 20 or more hours in patient care per week and exclude residents, fellows, physicians who practice outside California, and nonrespondents (i.e., those MDs who did not respond to the survey or did not answer questions about their specialty). Physicians whose primary specialty was internal medicine and who listed a secondary specialty (e.g., cardiology) were assigned to the secondary specialty. Similarly, pediatricians with a subspecialty were assigned to the secondary specialty.

Source: Survey of Licensees (private tabulation), Medical Board of California, 2015.

### California Physicians

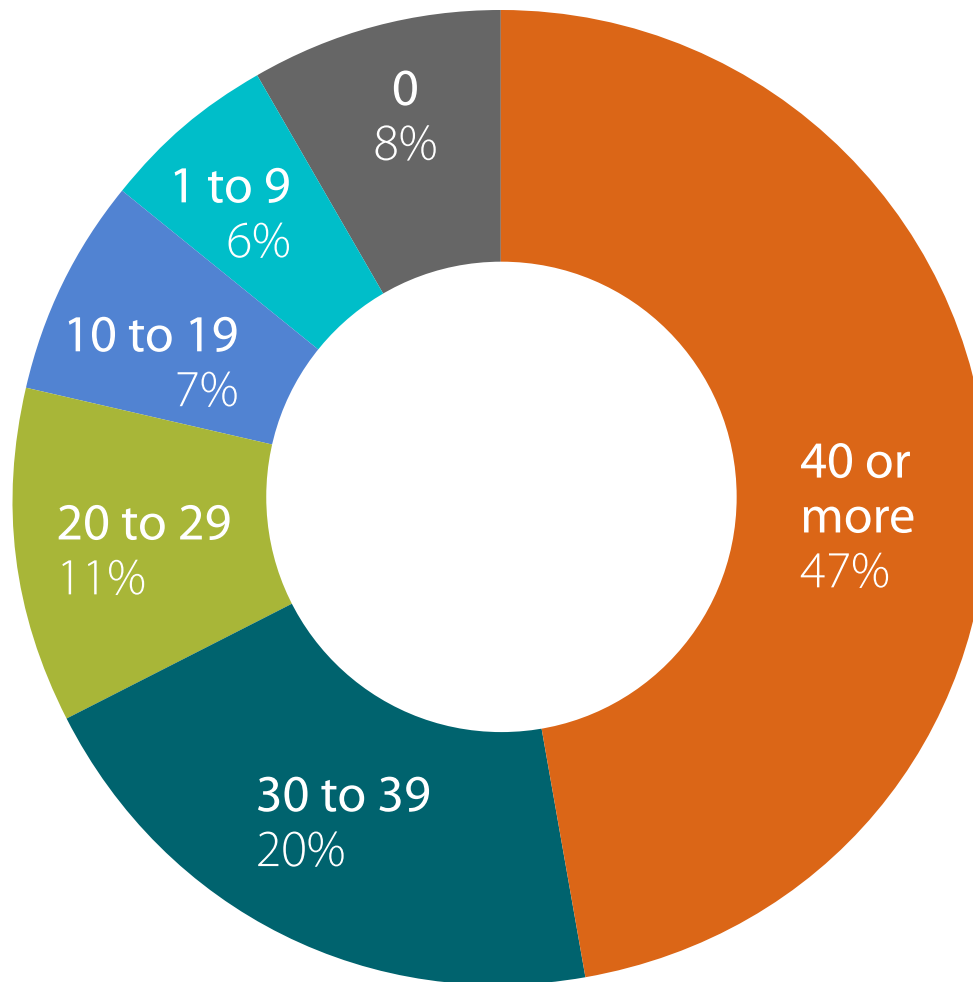
#### Supply

The three largest specialties in California were primary care specialties. Family medicine, internal medicine, and pediatrics together represented 26% of all active patient care physicians in the state.

# Patient Care Hours Worked

## California, 2015

### AVERAGE WEEKLY HOURS



Notes: Data include active MDs, excluding residents, fellows, physicians who practice outside California, and nonrespondents (i.e., those MDs who did not respond to the survey or did not answer the question about patient care hours — 11% in 2015). Segments may not total 100% due to rounding.

Source: Survey of Licensees (private tabulation), Medical Board of California, 2015.

### California Physicians

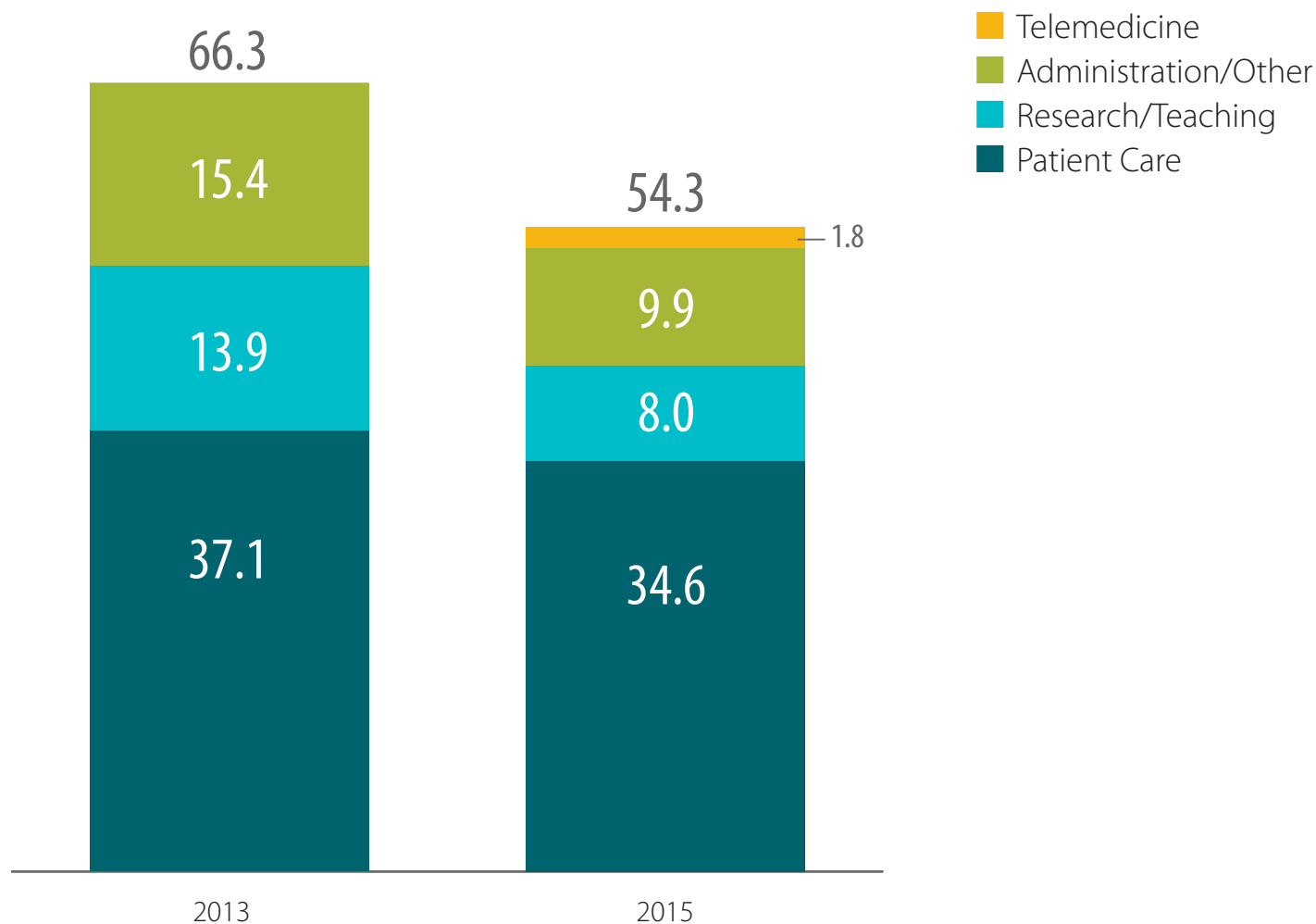
#### Hours Worked

The number of physicians with active licenses does not accurately reflect the availability of physicians to provide care. Slightly less than half of California physicians devoted 40 hours or more to patient care. Physicians also spent time on research, teaching, telemedicine, and administration.

# Physician Hours Worked, by Activity

## California, 2013 and 2015

AVERAGE WEEKLY HOURS



### California Physicians

Hours Worked

The average physician's work-week decreased by 12 hours from 2013 to 2015, primarily driven by a decline in activities other than patient care. Average time per week spent on patient care declined by more than two hours, a change of approximately 7%.

Notes: Data include active MDs, excluding residents, fellows, physicians who practice outside California, and nonrespondents (i.e., those MDs who did not respond to the survey or did not answer questions about hours worked). The Medical Board added telemedicine to the mandatory survey in 2015.

Source: Survey of Licensees (private tabulation), Medical Board of California, 2013 and 2015.

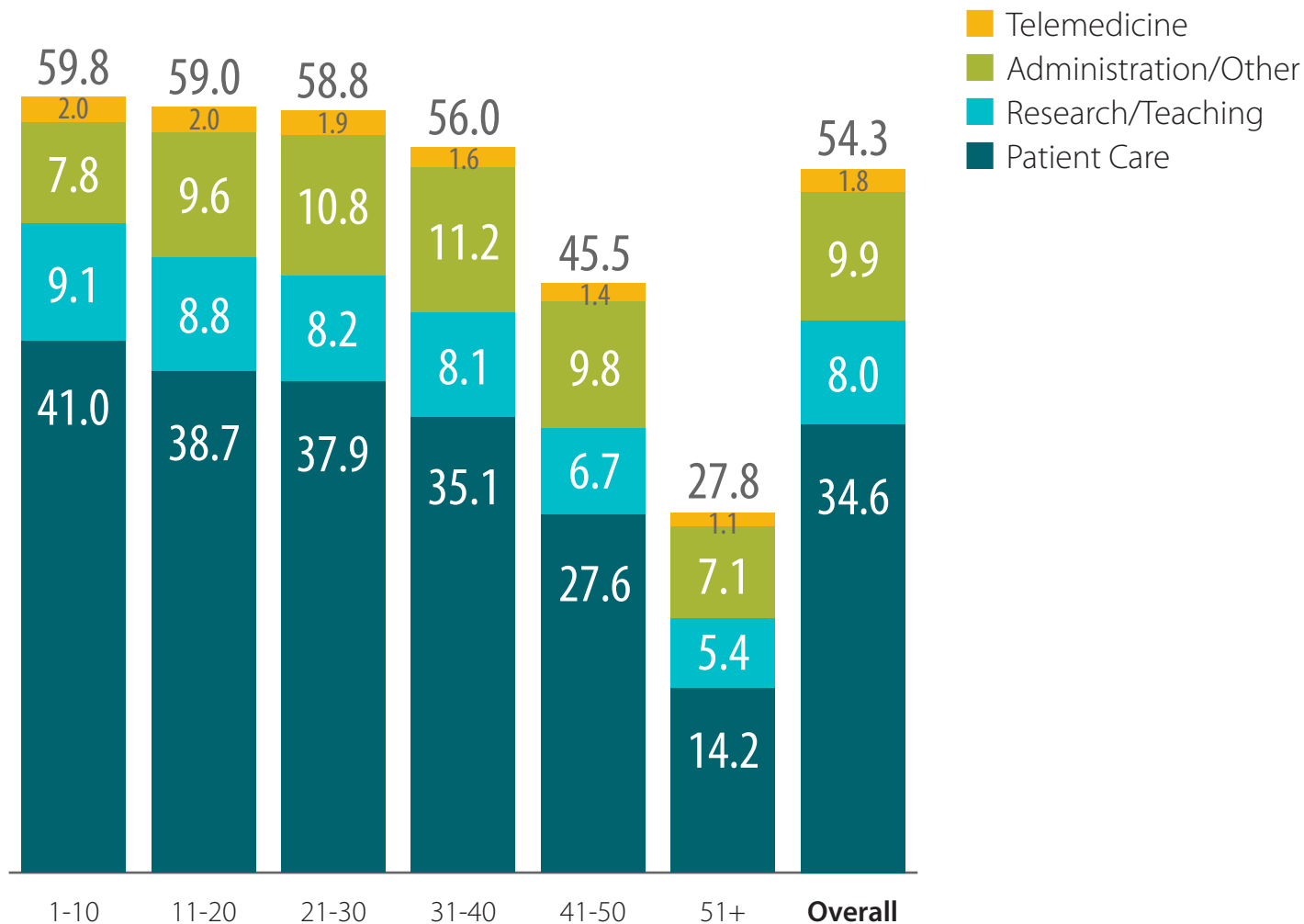
# Physician Hours Worked, by Activity and Years Since Graduation

## California, 2015

### California Physicians

#### Hours Worked

#### AVERAGE WEEKLY HOURS



Later in their careers, physicians worked fewer hours a week, with the largest decline in hours spent providing patient care.

Notes: Data include active MDs, excluding residents, fellows, physicians who practice outside California, and nonrespondents (i.e., those MDs who did not respond to the survey or did not answer questions about hours worked).

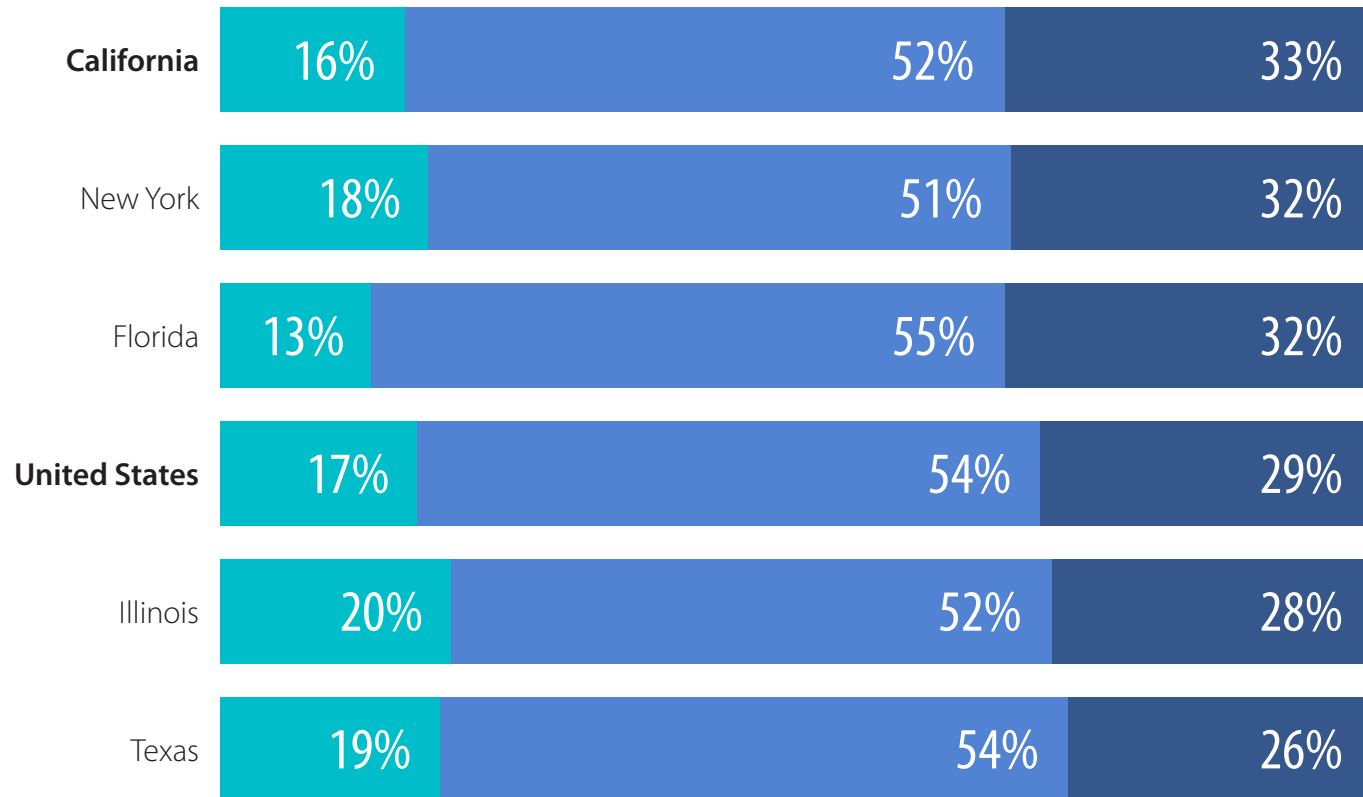
Source: Survey of Licensees (private tabulation), Medical Board of California, 2015.

# Age of Physicians

## Select States vs. United States, 2014

PERCENTAGE OF TOTAL PHYSICIANS

■ Under 40   ■ 40 to 60   ■ Over 60



Note: Includes all active MDs and doctors of osteopathic medicine.

Source: "Table 1.9" in *2015 State Physician Workforce Data Book*, Association of American Medical Colleges, 2015, [members.aamc.org](http://members.aamc.org) (PDF).

### California Physicians

Demographics

The California physician workforce was among the oldest in the nation in 2014. One-third of physicians in California were over age 60.

# Gender of Medical School Graduates and Physicians

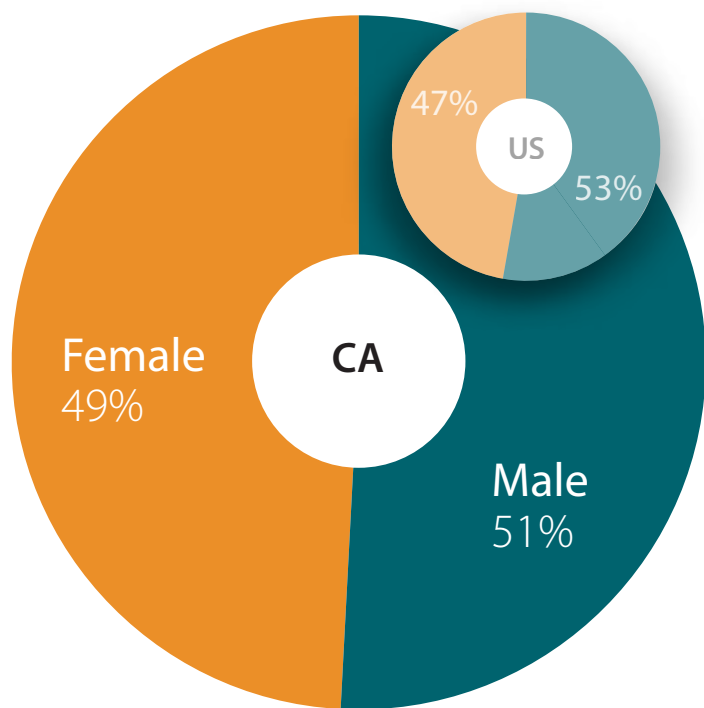
California vs. United States, 2014

## California Physicians

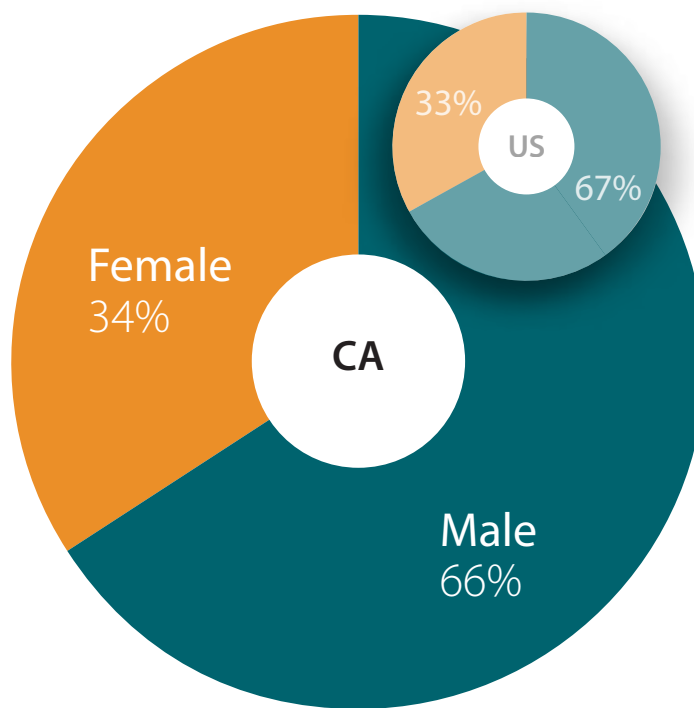
Demographics

The proportions of male and female medical school graduates in California were nearly equal. The share of female graduates has grown significantly, from 9% in 1966 (not shown) to 49% in 2014. Males still represented the majority of physicians in California and nationwide, due primarily to the legacy of large gender gaps in medical school graduates in the past.

### Medical School Graduates



### Active Physicians



Notes: Data include active MDs and doctors of osteopathic medicine. Segments may not total 100% due to rounding.

Sources: "Table 1.7," in *2015 State Physician Workforce Data Book*, Association of American Medical Colleges, 2015, [members.aamc.org](http://members.aamc.org) (PDF); "Table B-2.2," in *FACTS: Applicants, Matriculants, Enrollment, Graduates, M.D.-Ph.D., and Residency Applicants Data*, 2016, [www.aamc.org](http://www.aamc.org) (PDF).

# Race/Ethnicity of Physicians and Population

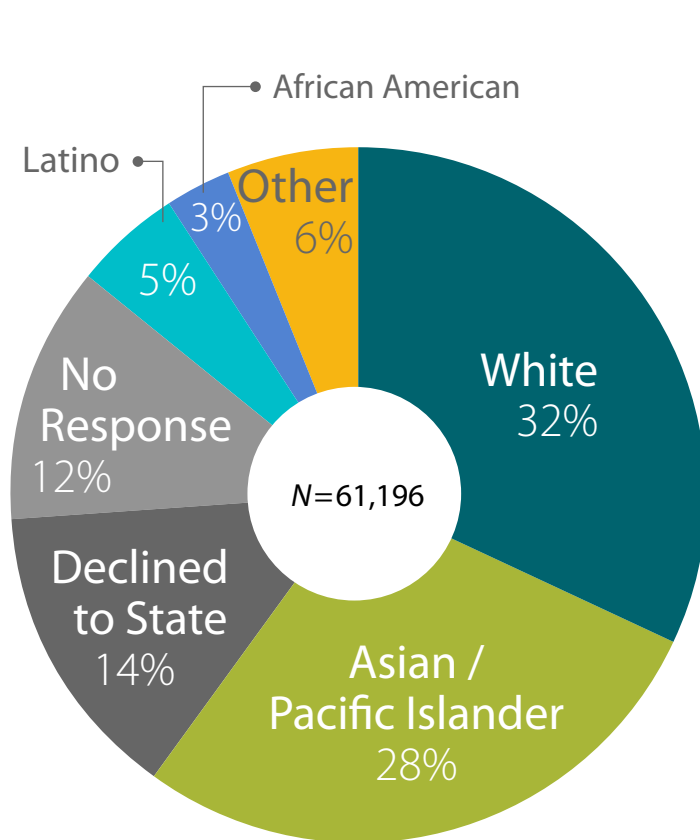
## California, 2015

### California Physicians

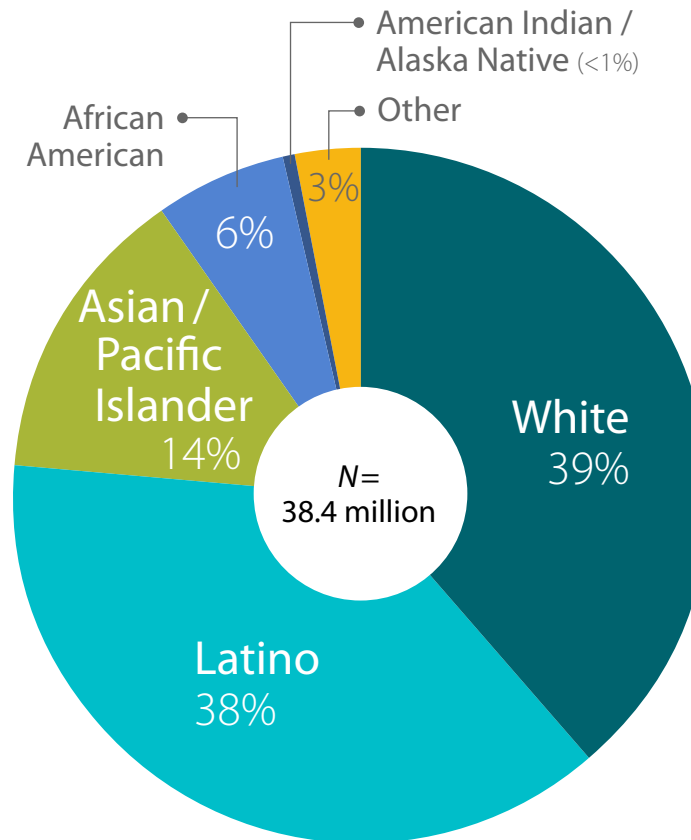
#### Demographics

The racial/ethnic breakdown of California physicians was not representative of the state's diverse population. In particular, California's Latino population was significantly underrepresented in the physician population: 38% of the population was Latino, while only 5% of active patient care physicians were Latino.

#### Active Patient Care Physicians



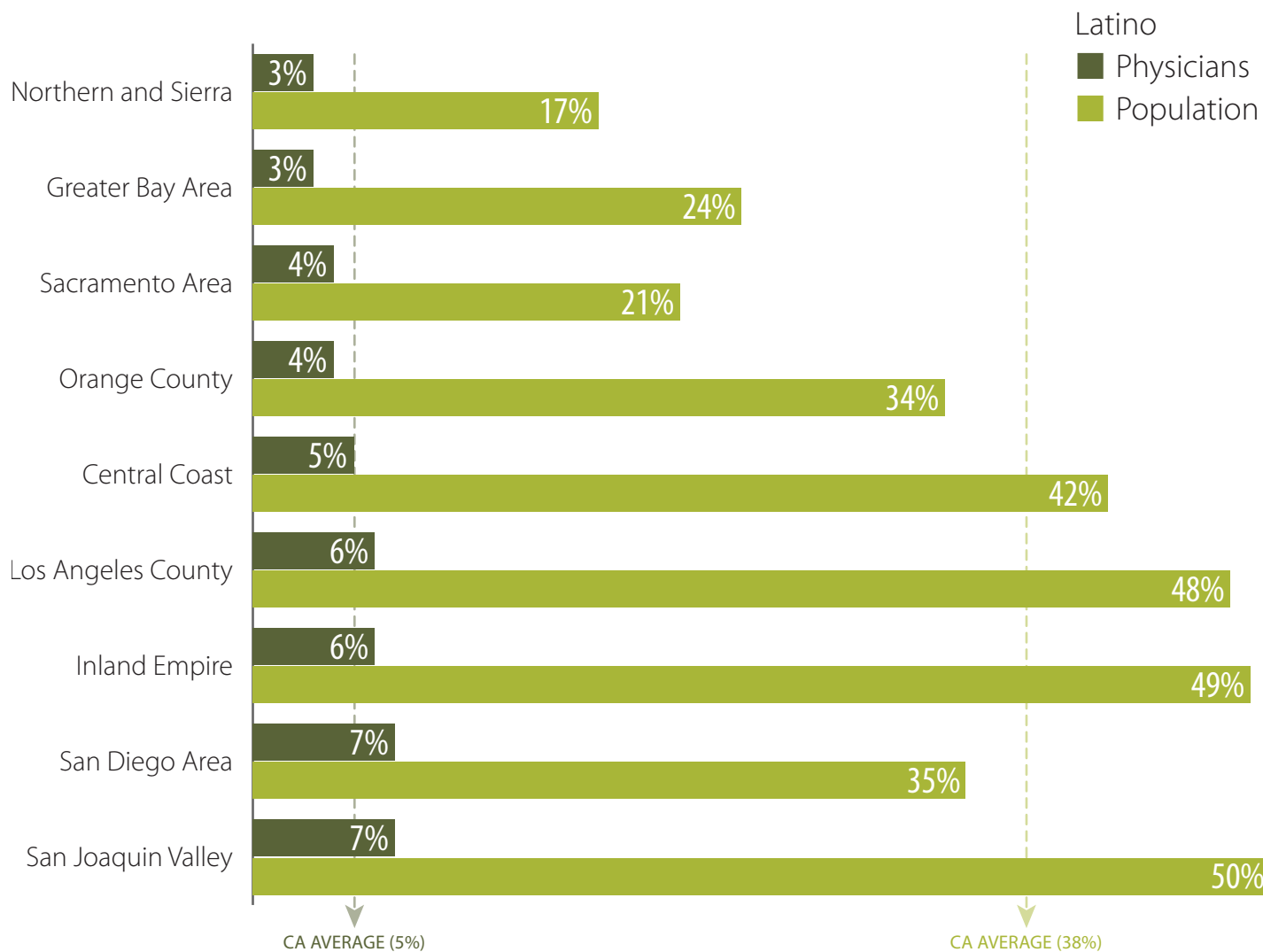
#### California Population



Notes: Data include active MDs, except residents and fellows, who practice in California providing at least 20 hours of patient care per week. *Other* includes American Indian, Native American, Alaskan Native, Native Hawaiian, those of two or more races, and those of unknown race/ethnicity. Segments may not total 100% due to rounding.

Sources: Survey of Licensees (private tabulation), Medical Board of California, 2015; 2015 American Community Survey, US Census Bureau.

# Latino Physicians and Population by California Region, 2015



## California Physicians

### Demographics

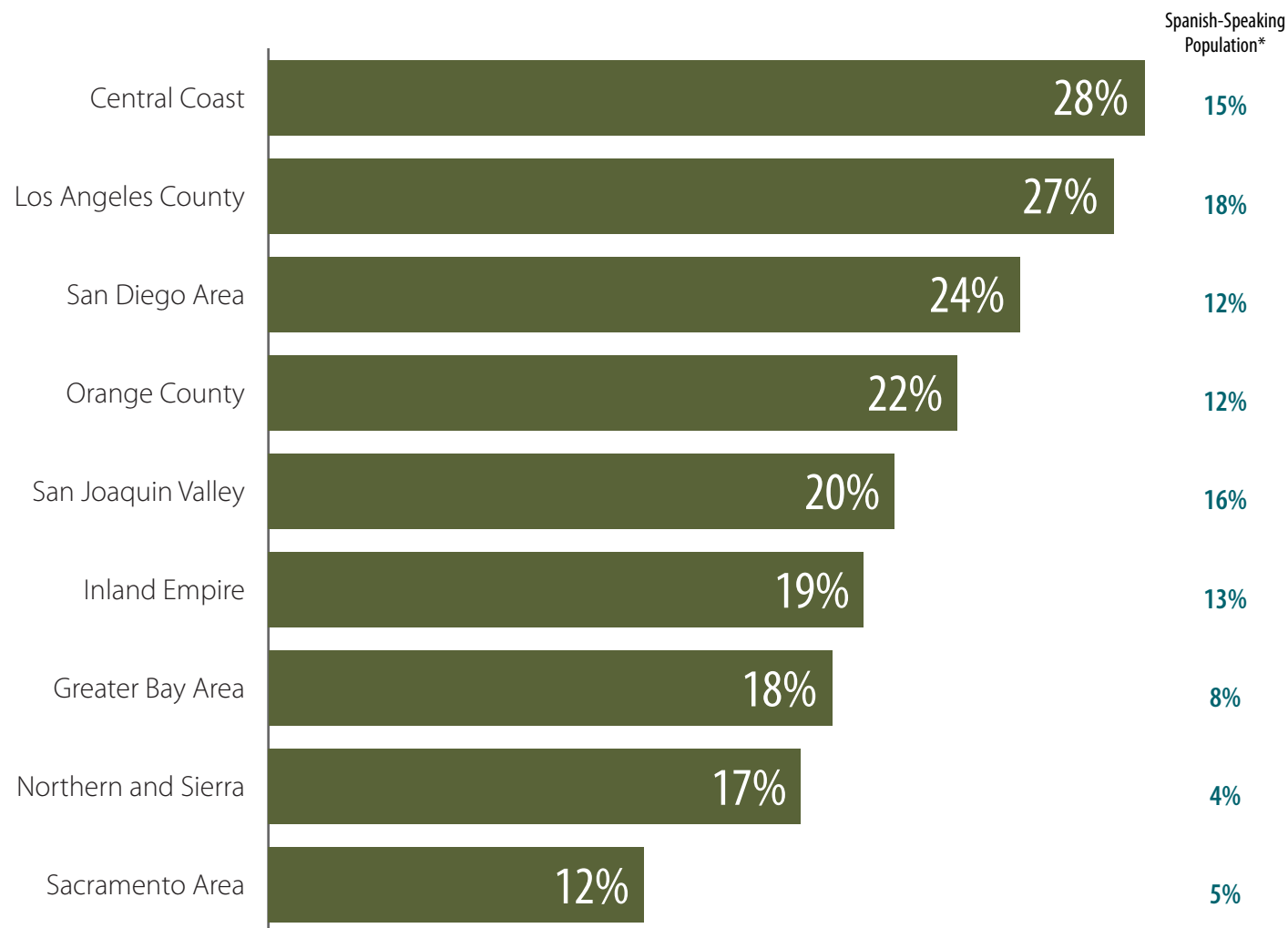
Latinos were underrepresented in the physician population in all regions of California, particularly in regions with the highest proportions of Latinos in the population: Inland Empire, Los Angeles, and San Joaquin Valley.

Note: Data include all active MDs, except residents and fellows, working 20 or more hours in patient care per week.

Sources: Survey of Licensees (private tabulation), Medical Board of California, 2015; 2015 American Community Survey, US Census Bureau.



# Spanish-Speaking Physicians by California Region, 2015



\*2014 data.

Notes: Data include active MDs, except residents and fellows, providing at least 20 hours of patient care per week. Primarily Spanish-Speaking Population includes all people 5 years and older who are Spanish speakers and speak English "Less Than Very Well." Overall, 22% of physicians did not respond. That percentage varies by region. See Appendix A for a list of counties within each region.

Sources: Survey of Licensees (private tabulation), Medical Board of California, 2015; "Table S1601," in American Community Survey 5-Year Estimates, US Census Bureau, 2010-2014.

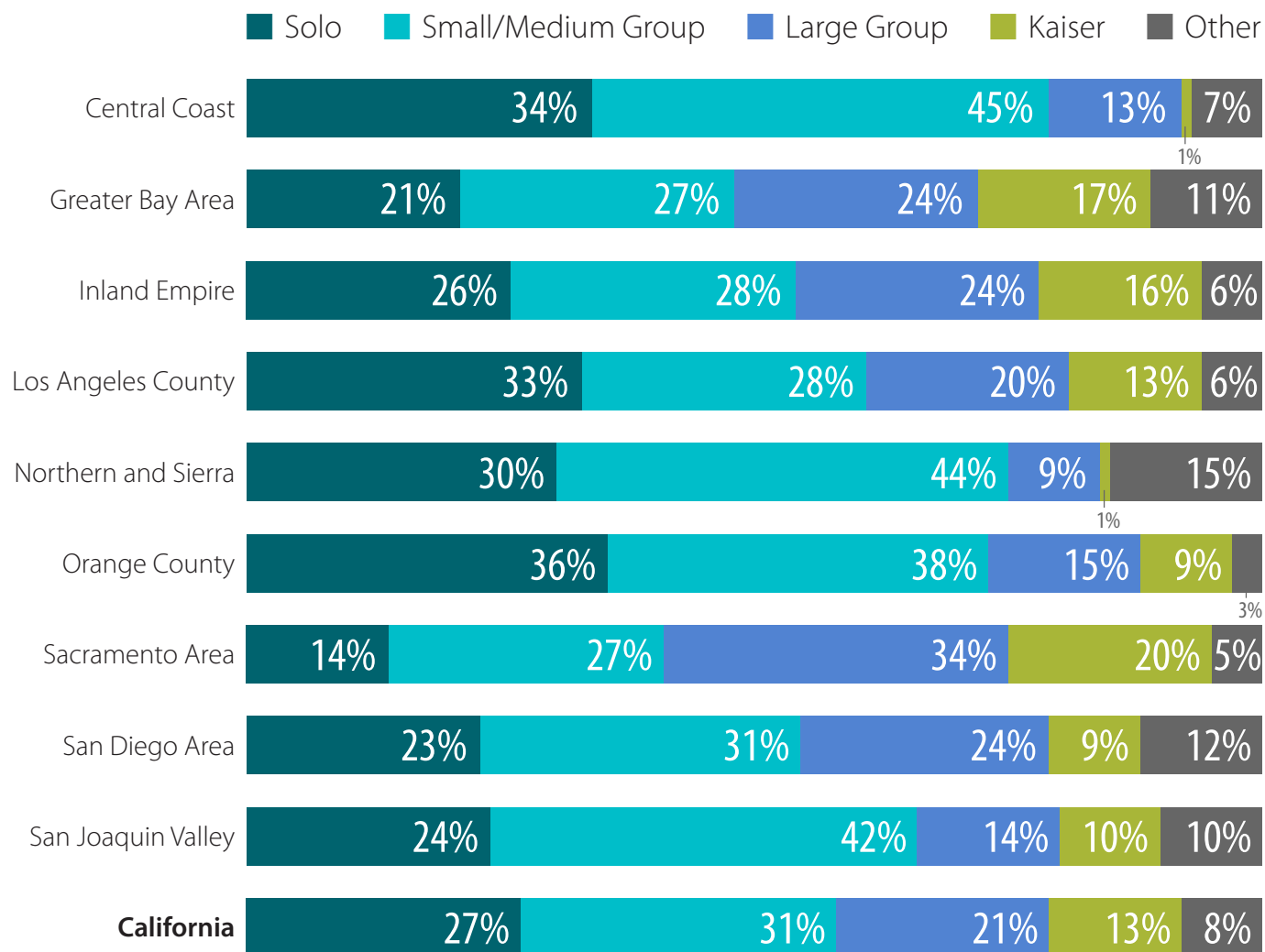
## California Physicians

### Demographics

In six of nine regions of California, over 10% of the population primarily spoke Spanish. In all nine regions the percentage of physicians who reported that they spoke Spanish exceeded the percentage of the population that primarily spoke Spanish.

# Physicians, by Practice Setting and Region

## California, 2015



### California Physicians

#### Practice Organization

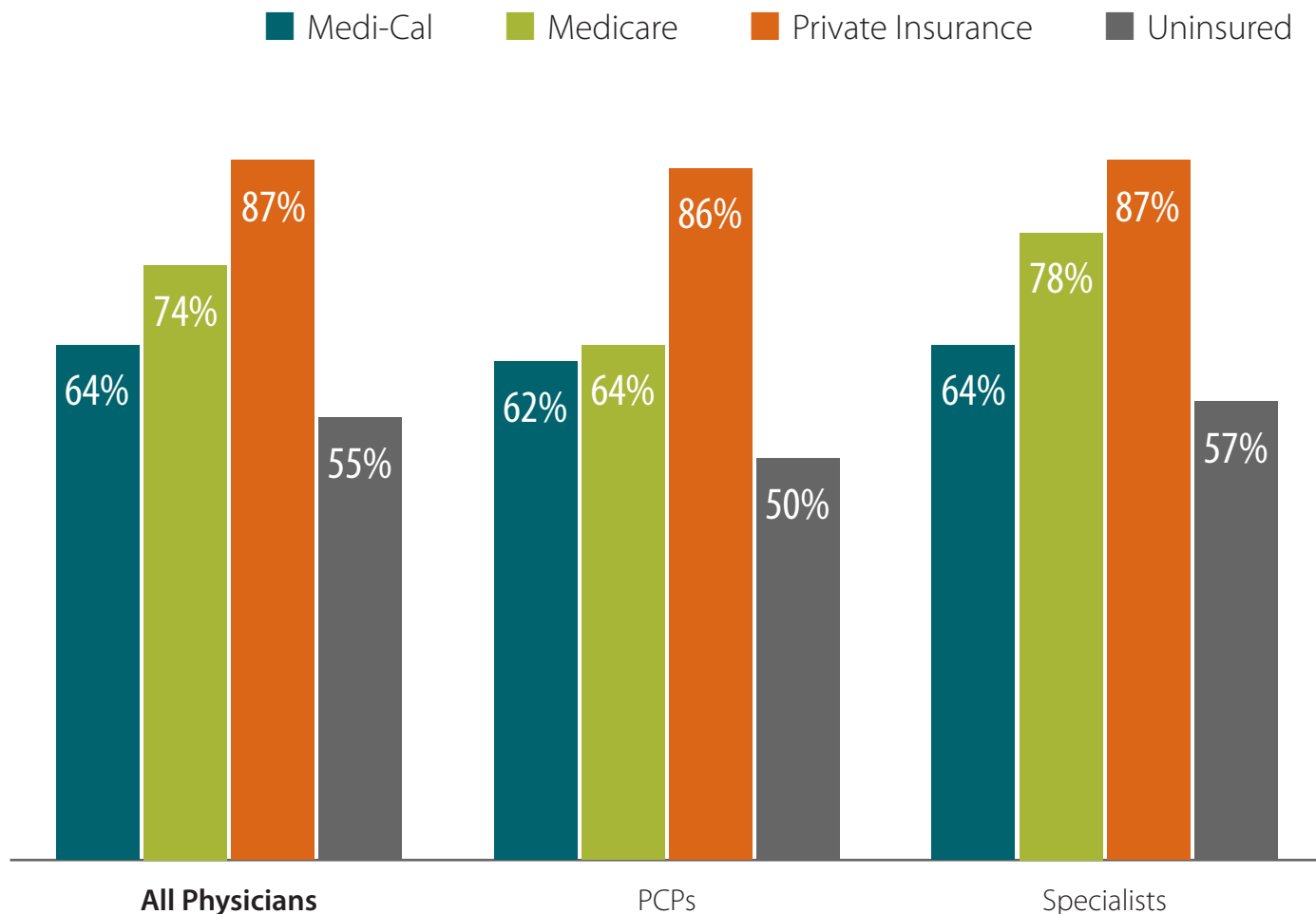
Most California physicians practice in a group setting. The Kaiser Permanente medical groups, the largest group practices in the state, accounted for over 10% of physicians in four of the nine regions. Solo practices were most prevalent in the Central Coast, Orange, and Los Angeles regions.

Notes: Data include active MDs providing at least 20 hours of patient care per week, and are based on a supplemental survey that elicited responses from 18% (approximately 11,000) of the active patient care physicians whose licenses were due for renewal between March 2015 and December 2015. Percentages are percentages of physicians who reported a practice type. *Small/Medium Group* consists of practices with no more than 49 physicians, excluding Kaiser Permanente. *Other* includes community clinics, public clinics, rural clinics, military facilities, VA medical centers, and other settings. One percent of respondents to the supplemental survey did not provide a practice setting.

Source: Voluntary Supplemental Survey (private tabulation), Medical Board of California, 2015.

# Physicians with Patients in Practice, by Coverage Type

## California, 2015



PCPs and specialists were less likely to have uninsured patients in their practice than patients with any type of health insurance. About 60% of PCPs and specialists had Medi-Cal patients.

Notes: Data based on a supplemental survey that elicited responses from 18% of active MDs providing at least 20 hours of patient care per week whose licenses were due for renewal between March 2015 and December 2015. If a physician reported they had any patients in a payer category, they were included in the reported percentage. All differences are statistically significant at  $p < 0.05$  except for the difference between Medi-Cal and Medicare for primary care physicians.

Source: Voluntary Supplemental Survey (private tabulation), Medical Board of California, 2015.

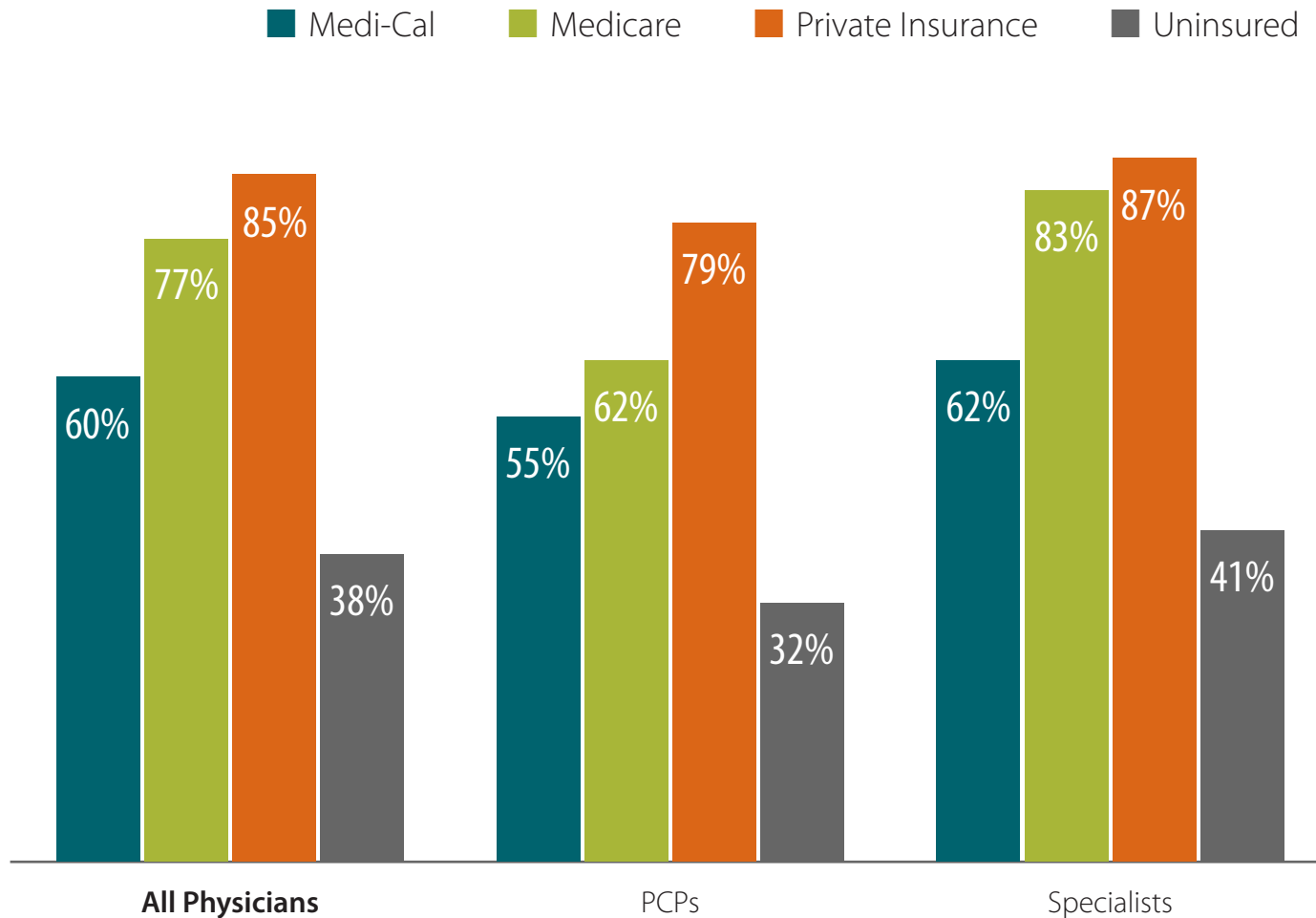
# Physicians Accepting New Patients, by Payer

## California, 2015

### California Physicians

Practice Organization

Physicians were less likely to accept new uninsured patients than patients with any type of health insurance, including Medi-Cal.



Notes: Data based on a supplemental survey that elicited responses from 18% of active MDs providing at least 20 hours of patient care per week whose licenses were due for renewal between March 2015 and December 2015. If a physician reported they accepted new patients in a payer category, they were included in the reported percentage. All differences across insurance types are statistically significant at  $p < 0.05$ .

Source: Voluntary Supplemental Survey (private tabulation), Medical Board of California, 2015.

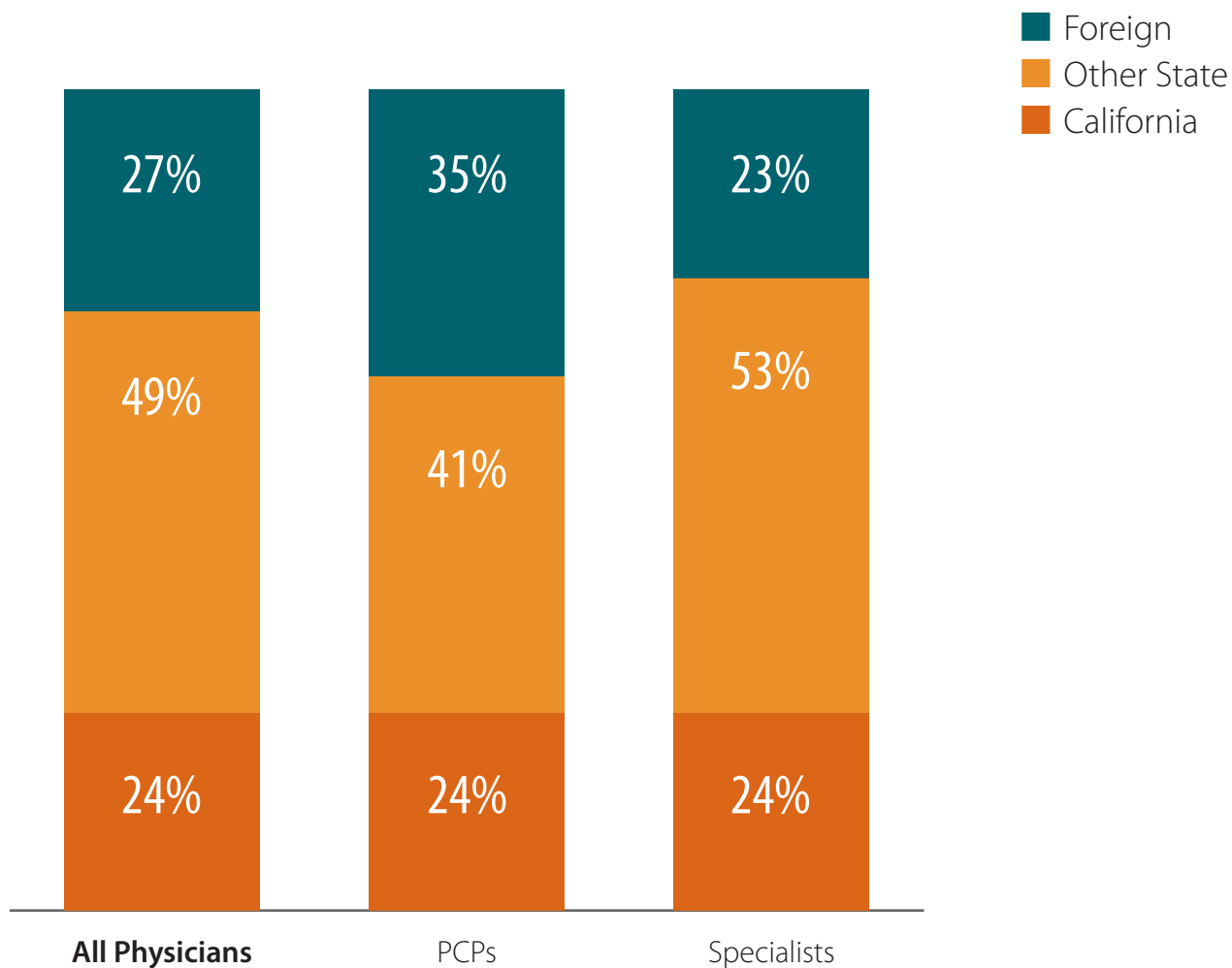
# Physicians, by Medical School Location and Specialty

## California, 2015

### California Physicians

Education and Training

About one-quarter of California's physicians attended medical school in the state. Over one-third of the state's primary care physicians graduated from a foreign medical school.

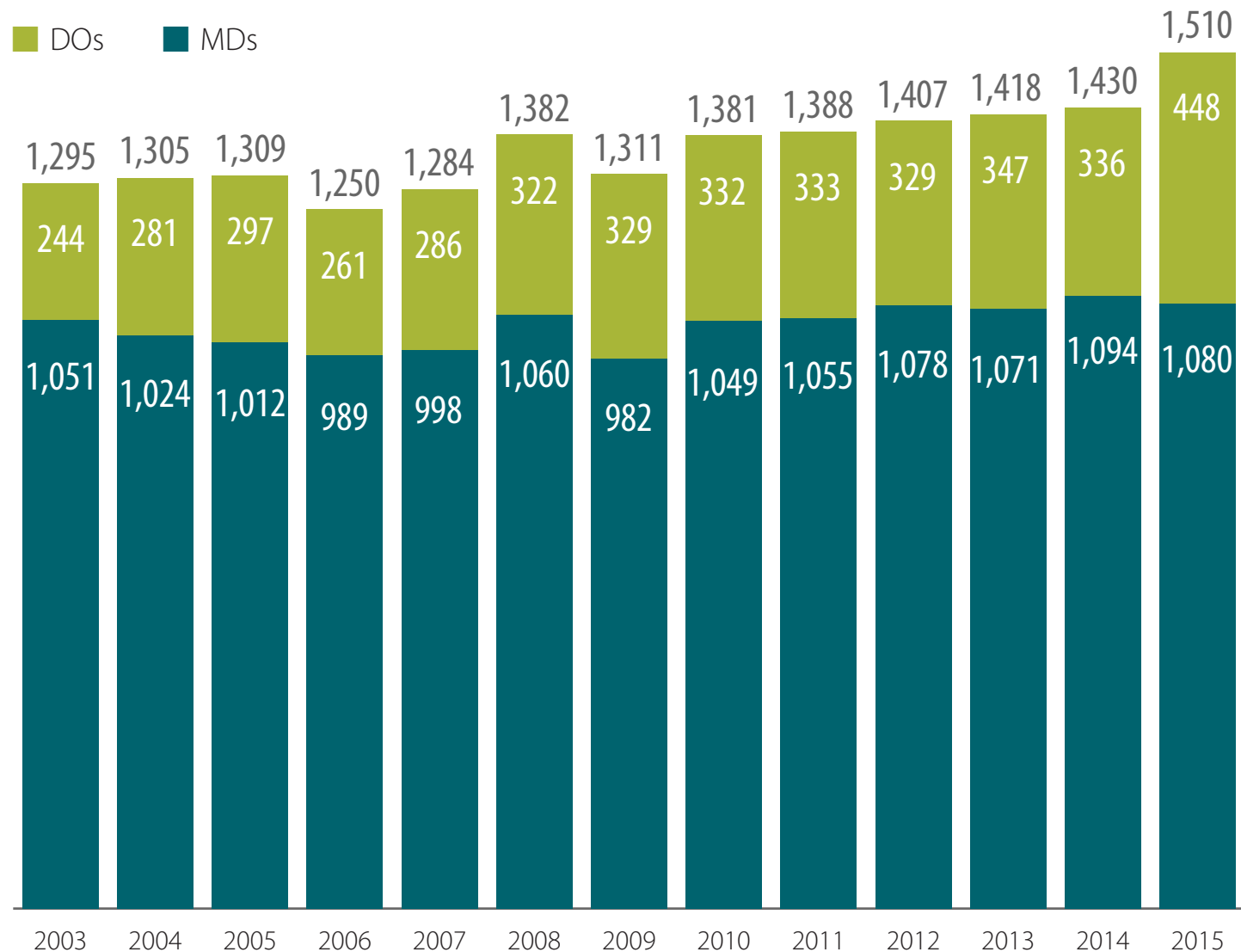


Note: Data include active MDs, excluding residents, fellows, and nonresponders (i.e., those MDs who did not respond to the MBC survey).

Source: Survey of Licensees (private tabulation), Medical Board of California, 2015.

# Medical School Graduates, by Degree

## California, 2003 to 2015



Note: Data include graduates of both allopathic (MD) and osteopathic (DO) medical schools.

Sources: *Graduates by Osteopathic Medical College and Gender 2000-2016*, American Association of Colleges of Osteopathic Medicine, [www.aacom.org](http://www.aacom.org); *FACTS Table B-2.2: Total Graduates by U.S. Medical School, Sex, and Year, 2010-2011 Through 2014-2015*, Association of American Medical Colleges, [www.aamc.org](http://www.aamc.org) (PDF).

### California Physicians

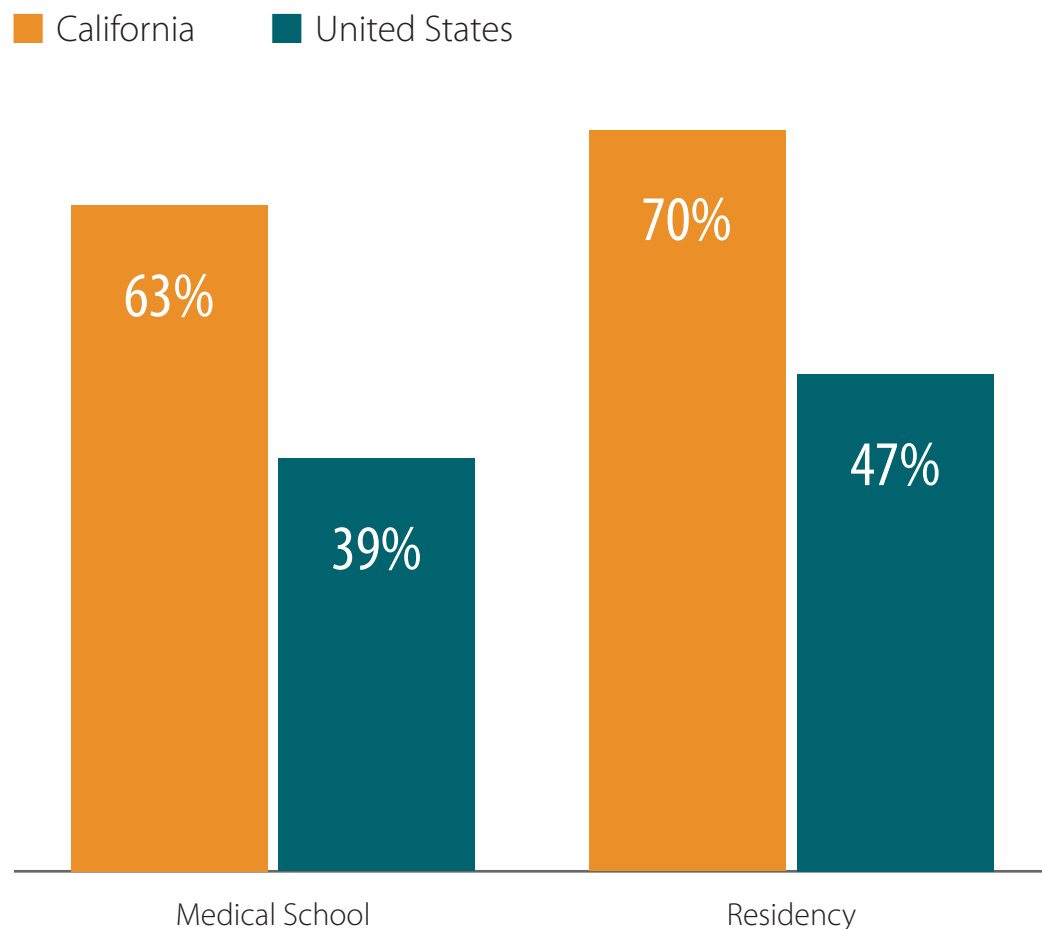
Education and Training

The number of graduates from California's eight MD-granting universities stayed relatively flat between 2003 and 2015. During the same period, the number of doctor of osteopathic medicine (DO) graduates nearly doubled. By 2018, the number of graduates from MD-granting schools should increase: University of California, Riverside, enrolled its first class in 2013, and California Northstate University College of Medicine began enrolling students in 2014.

# Retention of Medical Students and Residents

## California vs. United States, 2014

PERCENTAGE OF PHYSICIANS PRACTICING IN SAME STATE WHERE EDUCATED



Note: Data include graduates of allopathic (MD) and osteopathic (DO) medical schools.

Source: "Table 4.1" and "Table 4.3" in *2015 State Physician Workforce Data Book*, Association of American Medical Colleges, 2015, [members.aamc.org](http://members.aamc.org) (PDF).

### California Physicians

Education and Training

California retained a relatively high proportion of physicians who completed medical school or residency in the state. California ranked first in the nation for the percentages of both medical students and residents who remain in the state to practice.

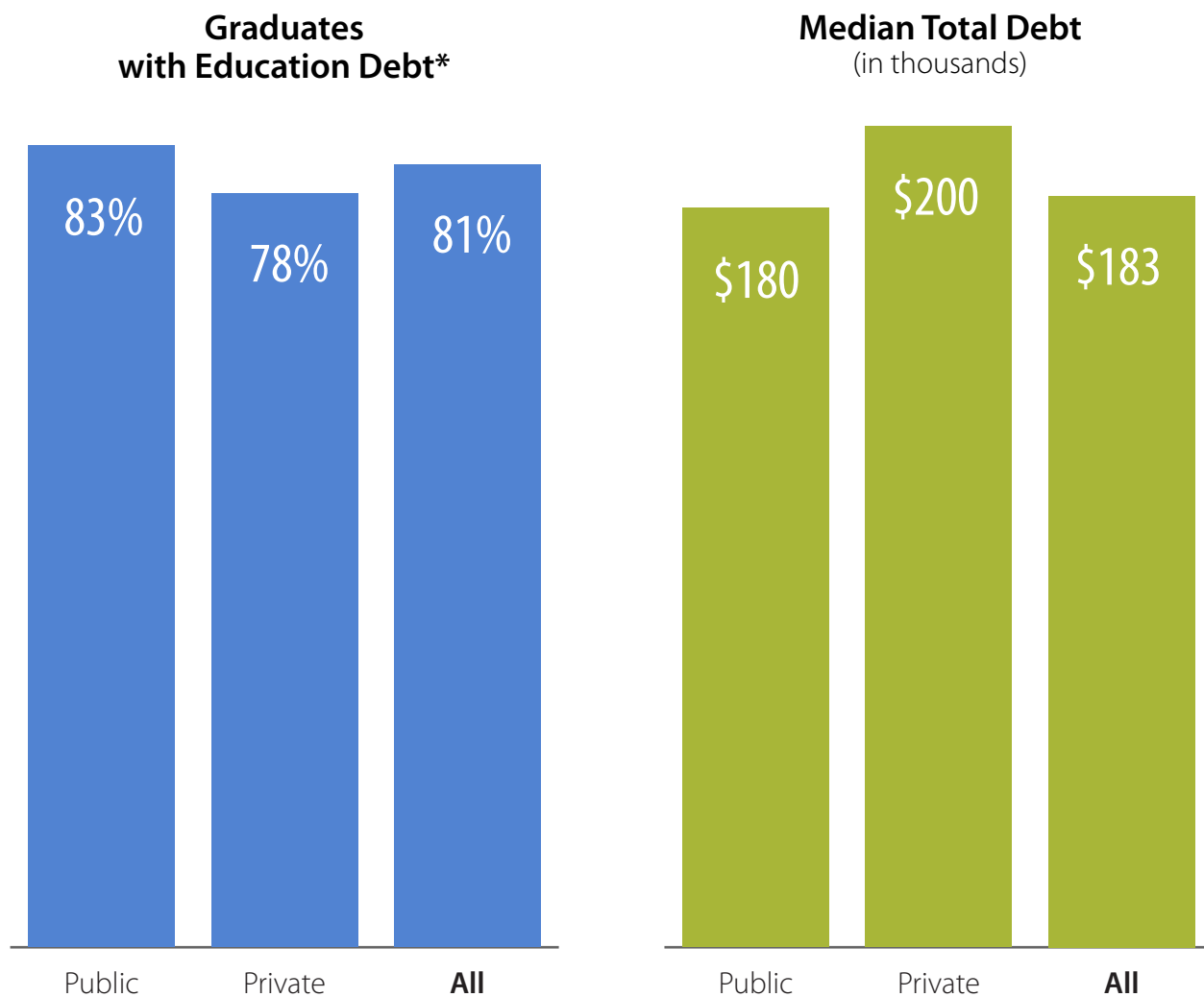
# Medical School Debt, Public vs. Private

United States, 2015

## California Physicians

Education and Training

Overall, 81% of medical school graduates had education debt. A higher proportion of public medical school graduates had debt than private medical school graduates. However, the median debt for graduates of private medical schools was \$20,000 higher than the median debt for graduates of public medical schools.



\*Education debt figures include premedical education debt.

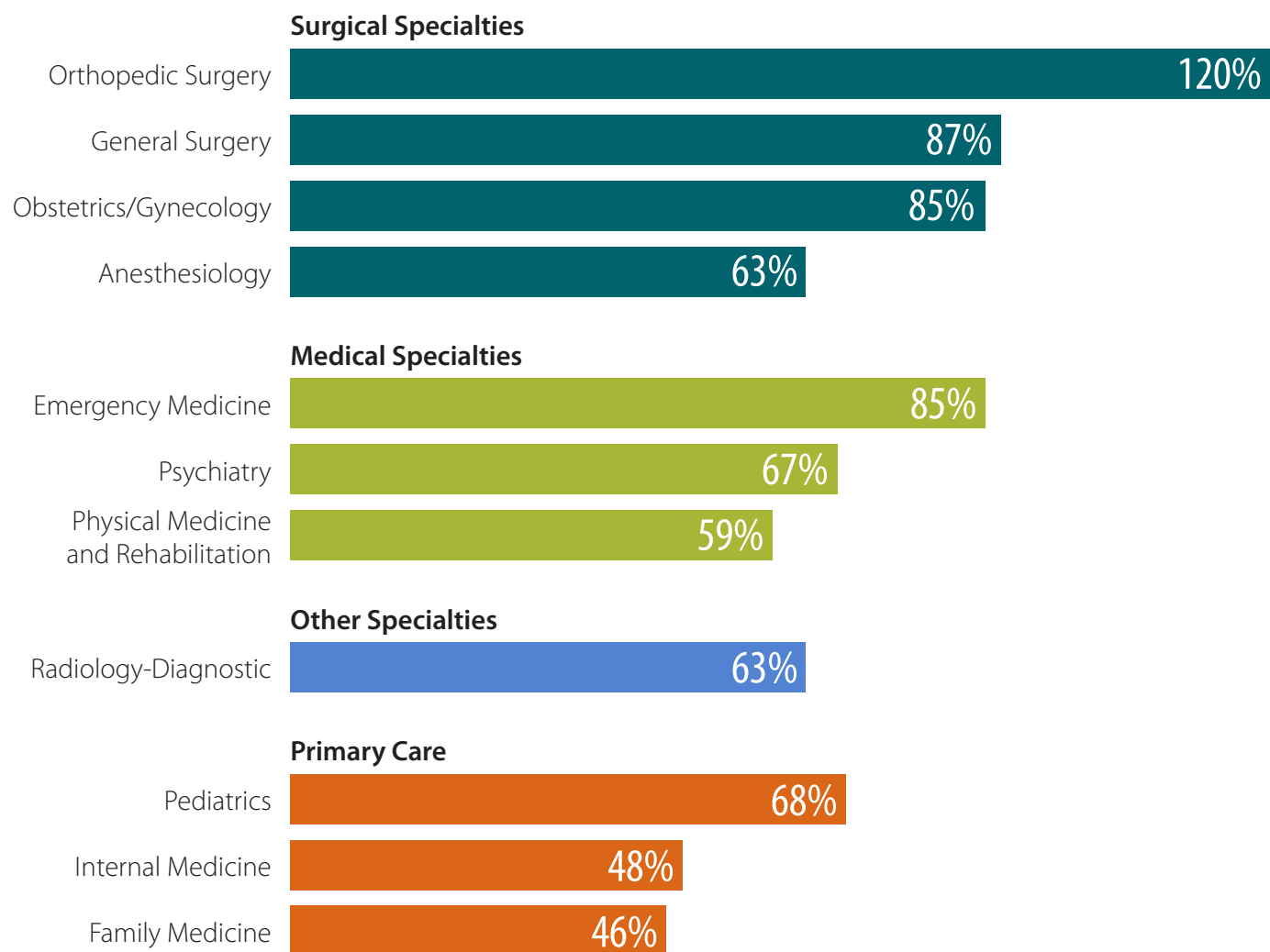
Source: *Medical Student Education: Debt, Costs, and Repayment Fact Card*, Association of American Medical Colleges, October 2015, [members.aamc.org](http://members.aamc.org) (PDF).



# Medical Student Specialty Choices Compared to Available Slots

## United States, 2016

PERCENTAGE OF SENIORS RANKING THIS SPECIALTY ONLY OR FIRST COMPARED TO AVAILABLE SLOTS



Source: Results and Data: 2016 Main Residency Match, National Resident Matching Program, 2016, [www.nrmp.org](http://www.nrmp.org) (PDF).

### California Physicians

Education and Training

Surgical specialties and emergency medicine were the most popular choices among US medical school seniors ranking residency options. Seniors choosing family medicine or internal medicine as their first or only choice filled just 46% and 48% of the available slots, respectively, while the number of seniors ranking orthopedic surgery as their first or only choice exceeded available slots by 20%.

# Employed Physician Earnings, Selected Specialties

## California, 2011 to 2015, Selected Years

### California Physicians

#### Income

Incomes for physicians in most specialties have risen at least 10% greater than the change in the Consumer Price Index over the past 10 years. Across all specialties, only general internists and obstetricians/gynecologists experienced a decline in real wages. Of the primary care specialties, general pediatricians saw the biggest relative increase (13%).

	AVERAGE ANNUAL INCOME			% CHANGE 2011 TO 2015
	2011	2013	2015	
<b>Primary Care</b>				
Family and General Practitioners	\$183,901	\$198,175	\$198,380	8%
Internists, General	\$202,899	\$200,494	\$199,200	-2%
Pediatricians, General	\$175,440	\$174,560	\$197,800	13%
<b>Specialists</b>				
Anesthesiologists	\$233,910	\$219,062	\$264,040	13%
Obstetricians/Gynecologists	\$234,932	\$198,867	\$209,100	-11%
Psychiatrists	\$202,615	\$194,797	\$250,090	23%
Surgeons	\$227,967	\$226,429	\$238,440	5%
<b>Consumer Price Index</b> (2011=\$100,000 base)	\$100,000	\$101,743	\$105,369	5%

Notes: Wages were adjusted for inflation. Does not include self-employed or physicians employed by government. Does not include ancillary income from sources such as directorships or call coverage.

Source: Occupation and Employment Statistics Survey, Bureau of Labor Statistics, 2011, 2013, and 2015, [www.bls.gov/oes](http://www.bls.gov/oes).

# Employed Physician Earnings, Selected Specialties

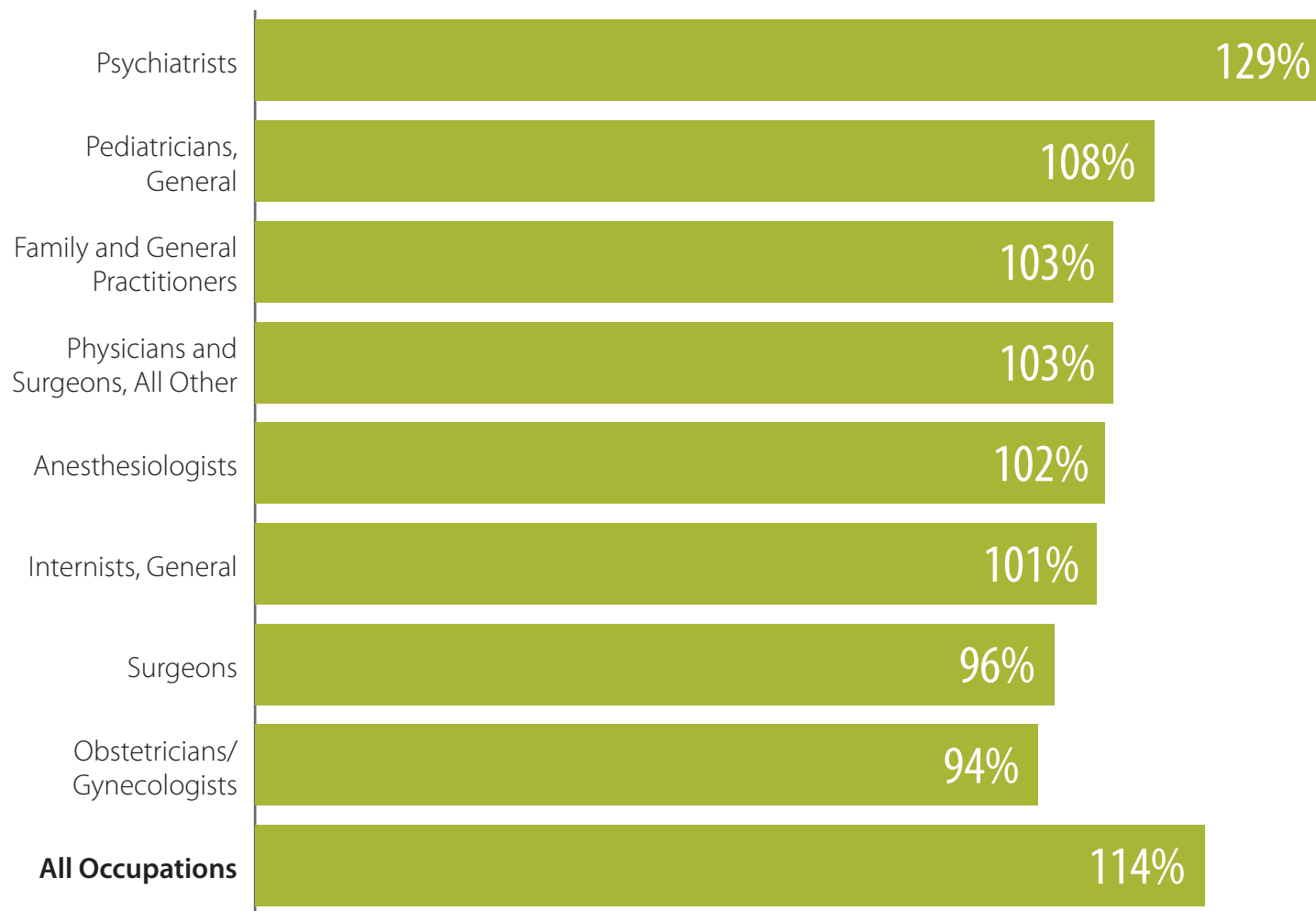
## California vs. United States, 2015

### California Physicians

Income

With the exception of psychiatrists, California physician incomes were near the national averages for their specialties despite California's higher cost of living.

AVERAGE ANNUAL INCOME AS A PERCENTAGE OF NATIONAL AVERAGE

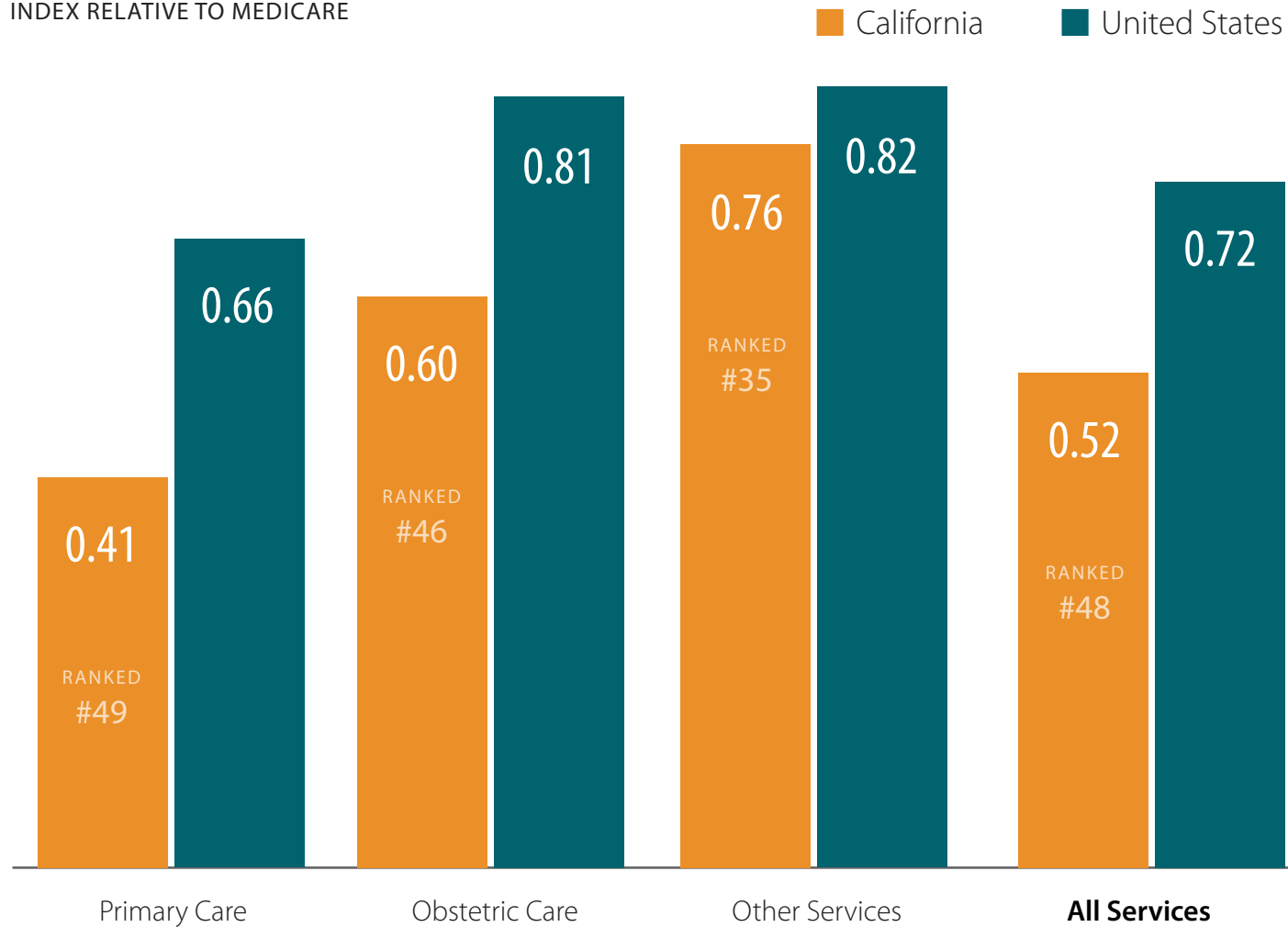


Source: Occupational Employment Statistics Survey, Bureau of Labor Statistics, 2015, [www.bls.gov/oes](http://www.bls.gov/oes).

# Medicaid-Medicare Fee Index

## California vs. United States, 2016

INDEX RELATIVE TO MEDICARE



### California Physicians

Income

Medi-Cal, California's Medicaid program, pays less than almost all other states' Medicaid programs. Among all states surveyed by the Urban Institute, California ranked 49th for primary care and 48th for obstetric care. Overall, it compensated physicians at only 52% of Medicare levels.

Notes: The *Medicaid-to-Medicare fee index* measures each state's physician fees relative to Medicare fees in each state. The Medicaid data are based on surveys sent by the Urban Institute to the 49 states and the District of Columbia that have a fee-for-service (FFS) component in their Medicaid programs (only Tennessee does not). These fees represent only those payments made under FFS Medicaid.

Source: "Medicaid-to-Medicare Fee Index," Kaiser Family Foundation, [kff.org/medicaid/state-indicator/medicaid-to-medicare-fee-index](http://kff.org/medicaid/state-indicator/medicaid-to-medicare-fee-index).

# Medical Groups, by Type and Enrollment

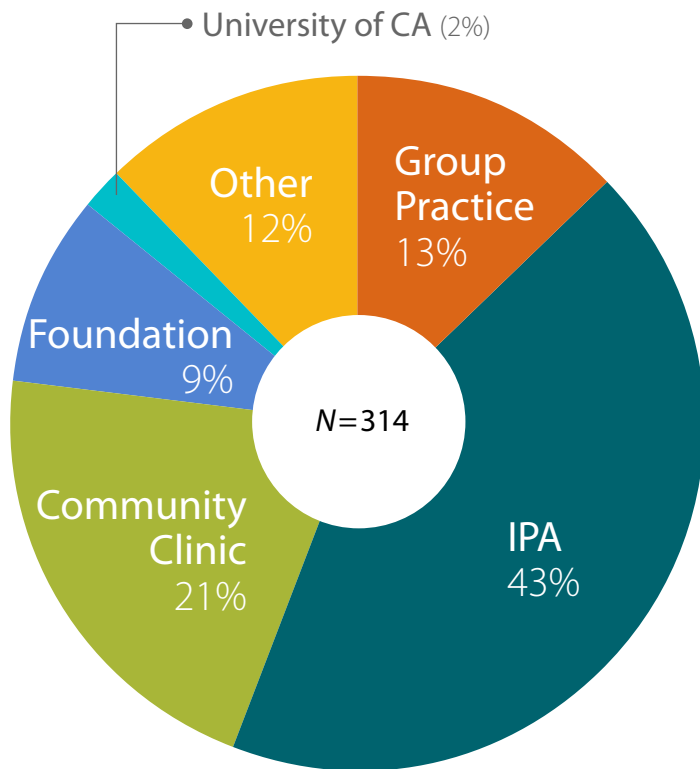
## California, 2016

### California Physicians

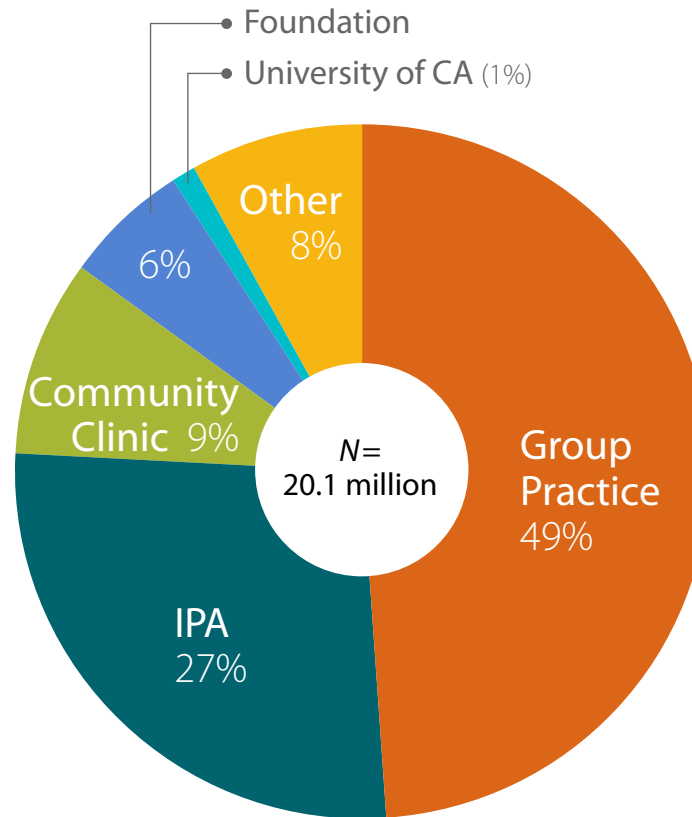
#### Medical Groups

Over 300 medical groups provided care to 20 million health maintenance organization (HMO) enrollees in California. While 43% of these groups were independent practice associations (IPAs), they accounted for only 27% of enrollment. In contrast, group practices, including The Permanente Medical Groups, represented only 13% of medical groups but 49% of enrollment.

**Type of Group**



**Enrollment**

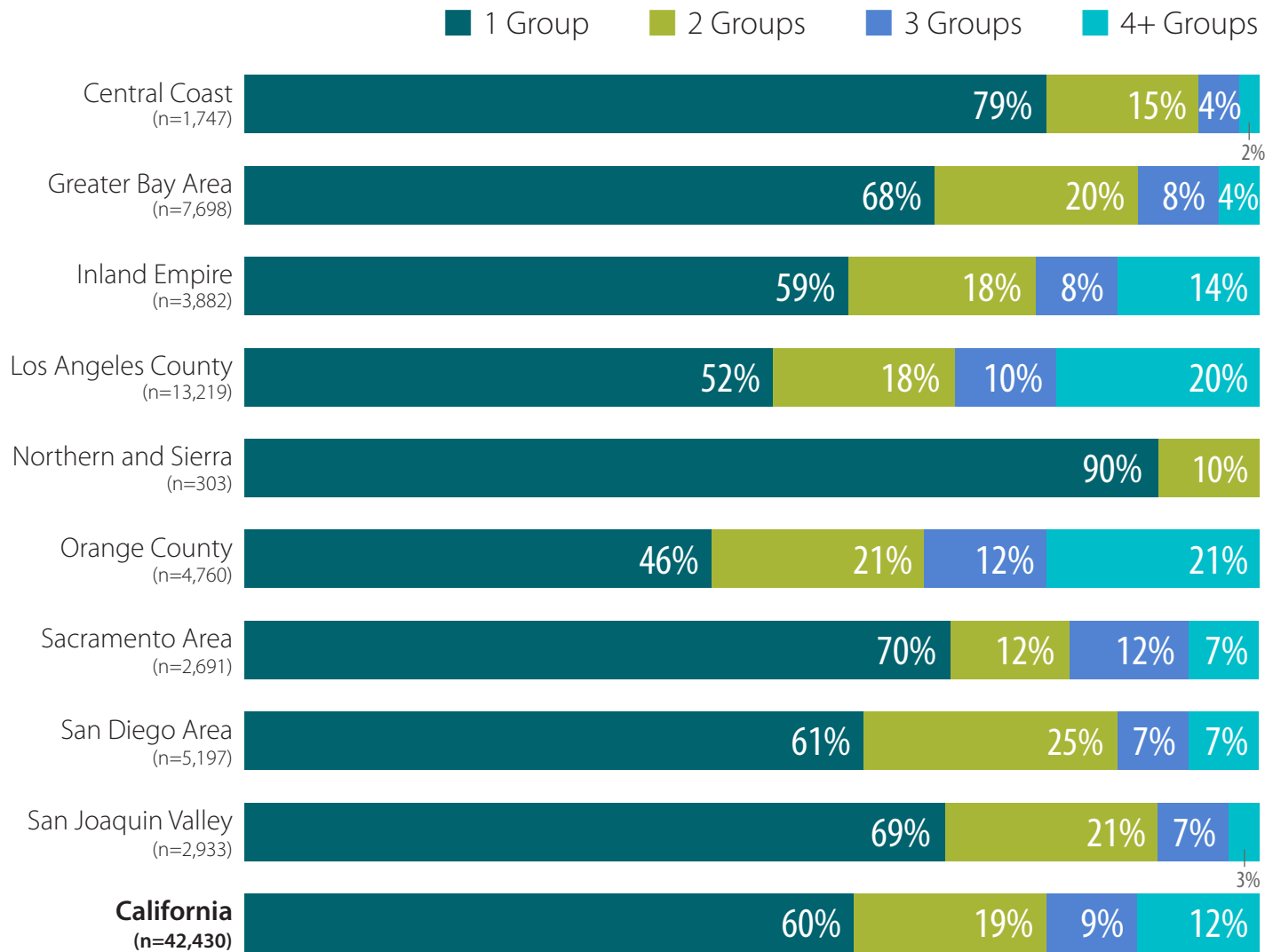


Notes: Data include medical groups with at least six primary care physicians (PCPs) and that accept contracts directly from HMOs. Physicians frequently participate in more than one independent practice association (IPA). *Other* includes state and county groups and groups organized under California Health and Safety code. See Appendix B for definitions of medical groups. Segments may not total 100% due to rounding.

Source: Report #19: Active California Medical Groups by Common and Legal Names Sorted by Organizational Type (private data request), Cattaneo & Stroud, 2016.

# HMO Physician Participation in Medical Groups

## by California Region, 2014



### California Physicians

#### Medical Groups

Among California physicians who contract with HMOs, physicians in Los Angeles and Orange Counties were more likely to participate in multiple groups than physicians in other parts of the state. Participating in multiple groups may improve access to HMO contracts for physicians.

Notes: Excludes solo practices and The Permanente Medical Groups. Data include physicians who reported California licenses and valid medical groups. Segments may not total 100% due to rounding. See Appendix A for a list of counties within each region.

Source: Department of Managed Health Care, Timely Access Public Records request, 2016.

# Medicare Physicians Participating in Quality Initiatives

California vs. United States, 2016

	CALIFORNIA			UNITED STATES		
	PCPs	SPECIALISTS	TOTAL	PCPs	SPECIALISTS	TOTAL
<b>Physician Quality Reporting System (PQRS)</b> A pay-for-reporting program that gives eligible professionals incentives and payment adjustments if they report quality measures satisfactorily.	44.6%	33.1%	35.4%	53.1%	39.3%	41.8%
<b>Electronic Health Record (EHR) Incentive Program</b> A Medicare program that provides incentives and payment adjustments to eligible professionals who use certified EHR technology in ways that may improve health care.	30.8%	12.6%	16.4%	38.6%	20.5%	23.9%

## California Physicians

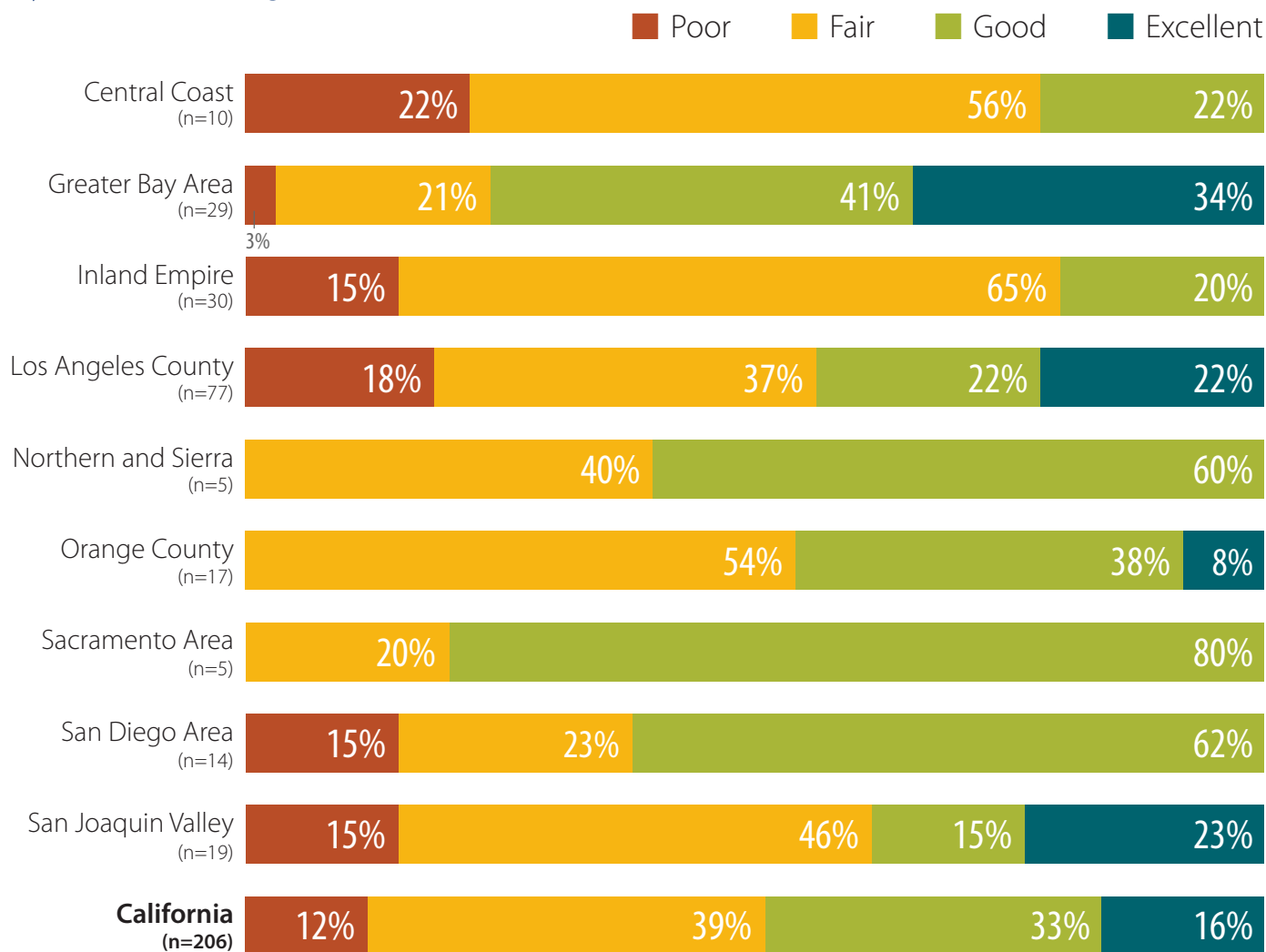
Quality of Care

California physicians were less likely to participate in major Centers for Medicare & Medicaid Services quality initiatives relative to physicians nationwide.

Notes: Beginning in 2014, CMS Physician Compare also included quality-of-care ratings for group practices. Ratings for individuals will be added in the future. Electronic prescribing (eRX) incentive payments were last earned in 2013 and last incurred in 2014.

Source: Physician Compare Database (private tabulation), Centers for Medicare & Medicaid Services, updated June 30, 2016, [data.medicare.gov/data/physician-compare](http://data.medicare.gov/data/physician-compare).

# Medical Groups Meeting National Standards of Care by California Region, 2015



## California Physicians

### Quality of Care

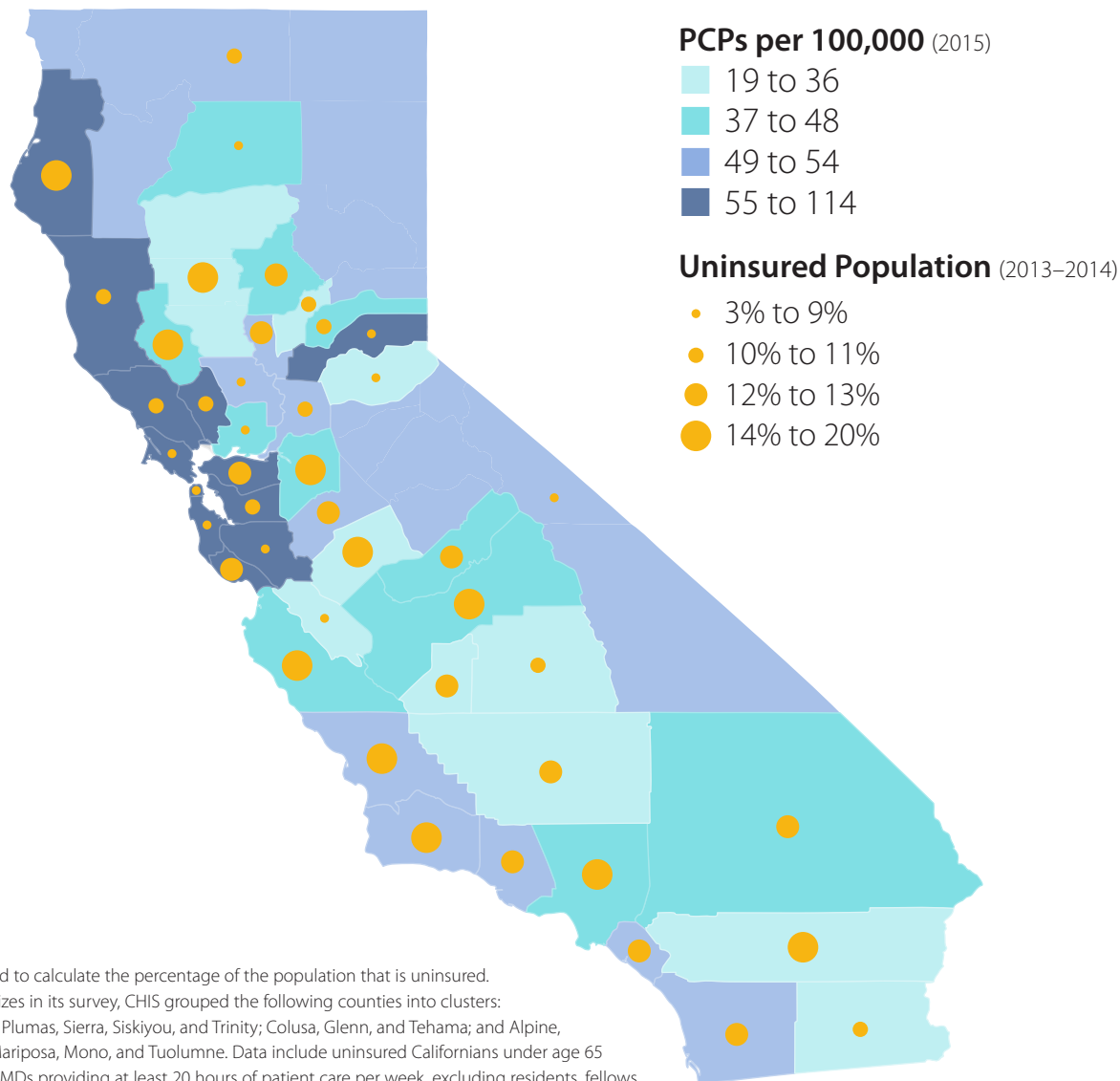
The Greater Bay Area and Sacramento Area had the highest percentages of medical groups whose quality of care was rated good or excellent.

Notes: Performance results are reported for 206 physician organizations with commercial HMO plan members that participate in the Integrated Healthcare Association (IHA) Pay for Performance (P4P) Initiative. Each medical group's patient records were compared to a set of national standards for quality of care to make sure that medical groups are offering quality preventive care and service to members. Quality measures include immunizations for children, diabetes care, and cancer screening. Each group is awarded an aggregate quality score of excellent, good, fair, or poor. Segments may not total 100% due to rounding. Medical groups that were not willing to report or had too few patients to report were omitted from the analysis. See Appendix A for a list of counties within each region.

Source: Integrated Healthcare Association Pay-for-Performance (P4P) Medical Group Ratings Data, Office of the Patient Advocate, accessed August 3, 2016, [www.opa.ca.gov](http://www.opa.ca.gov).



# Primary Care Physicians Per 100,000 and Uninsured Population by California County



Primary care physicians (PCPs) were concentrated along the California coast, and in counties with relatively low percentages of uninsured adults. While the ACA has expanded health coverage among people who were previously uninsured, these populations are more likely to live in areas where PCPs are less concentrated.

Notes: CHIS data were used to calculate the percentage of the population that is uninsured. Because of small sample sizes in its survey, CHIS grouped the following counties into clusters: Del Norte, Lassen, Modoc, Plumas, Sierra, Siskiyou, and Trinity; Colusa, Glenn, and Tehama; and Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne. Data include uninsured Californians under age 65 and all active patient care MDs providing at least 20 hours of patient care per week, excluding residents, fellows, and nonrespondents (i.e., those MDs who did not respond to the MBC survey or opted to make their response private). No MDs selected Alpine County as their practice region, so Alpine's PCPs per 100,000 rate is not represented in this map. See Appendix C for complete data.

Sources: Survey of Licensees (private tabulation), Medical Board of California, 2015; 2013-14 California Health Interview Survey (CHIS), UCLA Center for Health Policy Research, [ask.chis.ucla.edu](http://ask.chis.ucla.edu).

# Data Resources

## American Medical Association

*Physician Characteristics and Distribution in the US*,  
editions 1993 – 2015

## American Association of Colleges of Osteopathic Medicine

*Graduates by Osteopathic Medical College and Gender, 2000-2016*  
[www.aacom.org](http://www.aacom.org)

## Association of American Medical Colleges

*2015 State Physician Workforce Data Book*

*Medical Student Education: Debt, Costs, and Loan Repayment Fact Card*  
[www.aamc.org](http://www.aamc.org) (PDF)

*FACTS Table B-2.2: Applicants, Matriculants, Enrollment, Graduates,  
M.D.-Ph.D., and Residency Applicants Data*  
[www.aamc.org](http://www.aamc.org) (PDF)

## Bureau of Labor Statistics

Occupational Employment Statistics Survey, 2011, 2013, and 2015  
[www.bls.gov](http://www.bls.gov)

## California Department of Consumer Affairs

Licensee List Masterfile, June 16, 2016

## Cattaneo & Stroud

*Report #19: Active California Medical Groups by Common and  
Legal Names Sorted by Organizational Type*  
[www.cattaneostroud.com](http://www.cattaneostroud.com)

## Center for Health Policy Research, UCLA

California Health Interview Survey (CHIS), 2013-14

## Centers for Medicare & Medicaid Services

Physician Compare database  
[data.medicare.gov/data/physician-compare](http://data.medicare.gov/data/physician-compare)

## Department of Managed Health Care

Timely Access Public Records request, 2014 submissions

## Integrated Healthcare Association

Pay-for-Performance data from Office of the Patient Advocate-  
Medical Group Ratings, Measurement Year (MY) 2014  
[www.opa.ca.gov](http://www.opa.ca.gov)

## Kaiser Family Foundation

"Medicaid-to-Medicare Fee Index"  
[www.kff.org](http://www.kff.org)

## Medical Board of California

Mandatory Survey of Licensees, 2013 and 2015  
Voluntary Supplemental Survey, June 2015 to December 2015

## National Resident Matching Program

"Results and Data 2016 Main Residency Match"  
[www.nrmp.org](http://www.nrmp.org) (PDF)

## US Census Bureau

American Community Survey, Public Use Microdata Samples (PUMS),  
2011-2015 5-year estimates

American Community Survey, 2010-2014  
Table S1601: "Language Spoken at Home"

"Annual Estimates of the Resident Population by Sex, Age,  
Race and Hispanic Origin for the United States and States,"  
April 1, 2010 to July 1, 2015

## California Physicians

### ABOUT THIS SERIES

The California Health Care Almanac is an online clearinghouse for data and analysis examining the state's health care system. It focuses on issues of quality, affordability, insurance coverage and the uninsured, and the financial health of the system with the goal of supporting thoughtful planning and effective decisionmaking. Learn more at [www.chcf.org/almanac](http://www.chcf.org/almanac).

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California Health Care Foundation

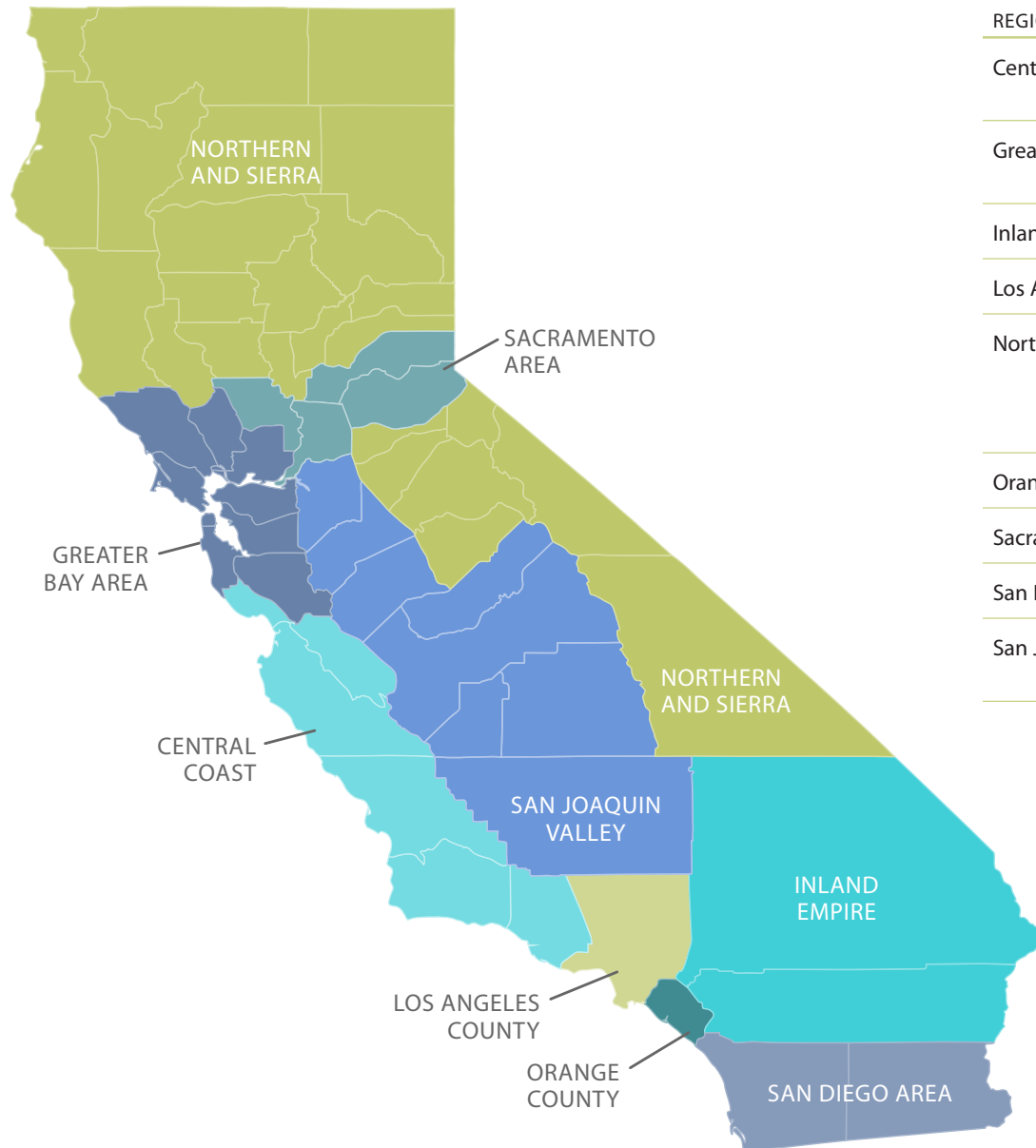
1438 Webster Street, Suite 400

Oakland, CA 94612

510.238.1040

[www.chcf.org](http://www.chcf.org)

# Appendix A: California Counties Included in 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

# Appendix B: Definitions

## Medical Groups

Medical groups are organized and managed differently:

- **Community clinic.** A clinic that operates under California Health and Safety Code 1204(a), which requires that it provide care to low-income and underserved populations, and charge fees based on patients' ability to pay. A community clinic is operated by a tax-exempt nonprofit corporation and is supported by either public or private donations and contributions.
- **Foundation.** A type of group practice under California Health and Safety Code 1206(l), which stipulates that a medical foundation must operate a nonprofit, tax-exempt clinic, conducting research as well as providing patient care and health education. The foundation must have at least 40 physicians, at least 10 of whom must be board-certified, and at least two-thirds of all physicians must practice on a full-time basis at the clinic. The physicians are independent contractors to the foundation, but the foundation owns the facilities, equipment, and supplies, and employs all nonphysician personnel.
- **Group practice.** A corporation, foundation, partnership, or other type of organization formed for the purpose of providing patient care. Group practices are more regulated than IPAs. To be recognized by the Centers for Medicare & Medicaid Services as a group practice, the organization must direct the majority of its physicians' bills through the organization, pay for its own overhead, and follow other regulations specified under California Health and Safety Code 1206(l).
- **Independent practice association (IPA).** An association that contracts with independent physician practices so that they may work together as one when contracting with HMOs and other payers.
- **University of California Medical Center.** A medical group operated by the University of California as part of one of its medical schools.

## Physicians

Physician classifications can differ between organizations. This report relies on two different organizations for physician counts: the American Medical Association (AMA) and the Medical Board of California (MBC).

**Active physicians** are licensed physicians who are:

- Not retired, semi-retired, working part-time, temporarily not in practice, or not active for other reasons and who work 20 or more hours per week (AMA) or
- Currently licensed (MBC)

**Active patient care physicians** are active physicians who:

- Identify their major professional activity as direct patient care (AMA) or
- Provide patient care at least 20 hours per week (MBC)

**Primary care physicians (PCPs)** are those physicians whose primary specialty is:

- Family medicine/general practice, internal medicine, or pediatrics, including the respective sub-specialties (AMA) or
- Family medicine, general pediatrics, geriatrics, or internal medicine and do not have a secondary specialty that suggests they may provide specialty care (MBC)

**Specialists** are those physicians whose primary specialty is not considered primary care. (MBC)

## Appendix C: Primary Care Physicians Per 100,000 and Uninsured Population, by California County

	PCPs PER 100K (2015)	UNINSURED POPULATION (2013–2014)		PCPs PER 100K (2015)	UNINSURED POPULATION (2013–2014)
Alameda	61	10.7%	Placer	79	7.7%
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, Tuolumne	50	9.5%	Riverside	31	18.8%
Butte	45	11.7%	Sacramento	50	10.8%
Colusa, Glenn, Tehama	30	17.2%	San Benito	19	6.9%
Contra Costa	59	12.2%	San Bernardino	38	12.0%
Del Norte, Lassen, Modoc, Plumas, Sierra, Siskiyou, Trinity	49	12.4%	San Diego	51	13.0%
El Dorado	34	12.9%	San Francisco	80	6.6%
Fresno	41	14.9%	San Joaquin	39	15.0%
Humboldt	54	17.8%	San Luis Obispo	54	14.0%
Imperial	21	11.1%	San Mateo	60	6.3%*
Kern	36	13.3%	Santa Barbara	52	15.0%
Kings	33	13.3%	Santa Clara	66	8.0%
Lake	42	18.0%	Santa Cruz	55	13.8%
Los Angeles	48	14.5%	Shasta	47	9.2%
Madera	40	12.9%	Solano	42	3.8%*
Marin	70	8.2%*	Sonoma	62	10.1%
Mendocino	60	11.1%	Stanislaus	52	13.5%
Merced	33	14.5%	Sutter	53	10.8%
Monterey	43	20.2%	Tulare	33	10.8%
Napa	114	10.0%	Ventura	50	13.1%
Nevada	49	12.8%	Yolo	51	9.5%
Orange	52	13.0%	Yuba	30	12.0%

\*Statistically unstable.

Notes: CHIS data were used to calculate percentage of the population that is uninsured. Because of small sample sizes in its survey, CHIS grouped some of the counties into clusters. Data include uninsured Californians under the age of 65 and all active patient care MDs, excluding residents, fellows, and nonresponders (i.e., those MDs who did not respond to the MBC survey or opted to make their response private), who provide patient care at least 20 hours per week.

Sources: Survey of Licensees (private tabulation), Medical Board of California, 2015; 2013-2014 California Health Interview Survey (CHIS), UCLA Center for Health Policy Research, [ask.chis.ucla.edu](http://ask.chis.ucla.edu).