

CALIFORNIA HEALTH CARE ALMANAC



California Physicians: Surplus or Scarcity?

MARCH 2014

Introduction

The number of physicians in California has grown steadily over the past 20 years, increasing 39% from 1993 to 2011, and outpacing the state’s 20% growth rate in the general population. Demand for physician services is expected to increase with the aging of the state’s population and the implementation of the Affordable Care Act. Ensuring access to care is also a concern, as close to one-third of California’s physicians are near retirement age.

California Physicians: Surplus or Scarcity? describes the current market landscape for physician services in California.

KEY FINDINGS INCLUDE:

- Physician supply varied by region. The number of physicians in the Inland Empire and San Joaquin Valley fell below the recommended supply of primary care providers and specialists.
- The total number of physicians in California did not accurately reflect their availability to provide care. About 20% of all physicians devoted less than 20 hours a week to patient care.
- Slightly more than 30% of California physicians were over the age of 60 — only New Mexico had a larger proportion of physicians in this age group.
- Latinos were underrepresented among physicians. While 38% of the state’s population was Latino, only 4% of physicians were Latinos.
- More than three-quarters of California physicians attended medical school in other states or in foreign countries.
- Physicians were less likely to serve Medi-Cal, Medicare, and uninsured patients in their practices than privately insured patients.

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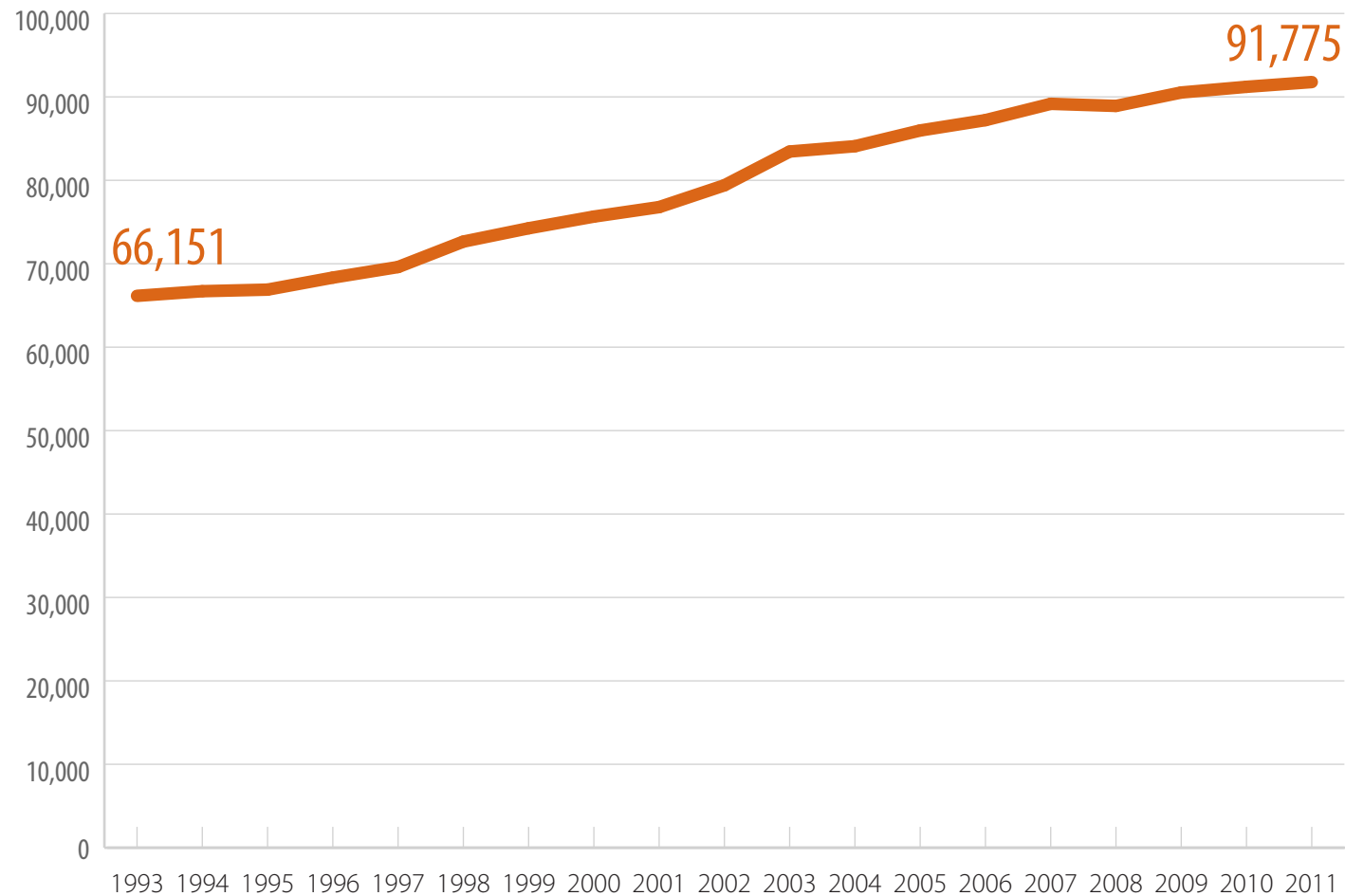
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Active Physician Trend

California, 1993 to 2011

NUMBER OF PHYSICIANS



Note: Data include active MDs and exclude residents, fellows, and MDs who are retired, semi-retired, 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: American Medical Association, Division of Survey and Data Resources, "Physician Characteristics and Distribution in the U.S.," 1993, 1994, 1995–1996, 1996–1997, 1997–1998, 1999, 2000–2001, 2001–2002, 2002–2003, 2003–2004, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013.

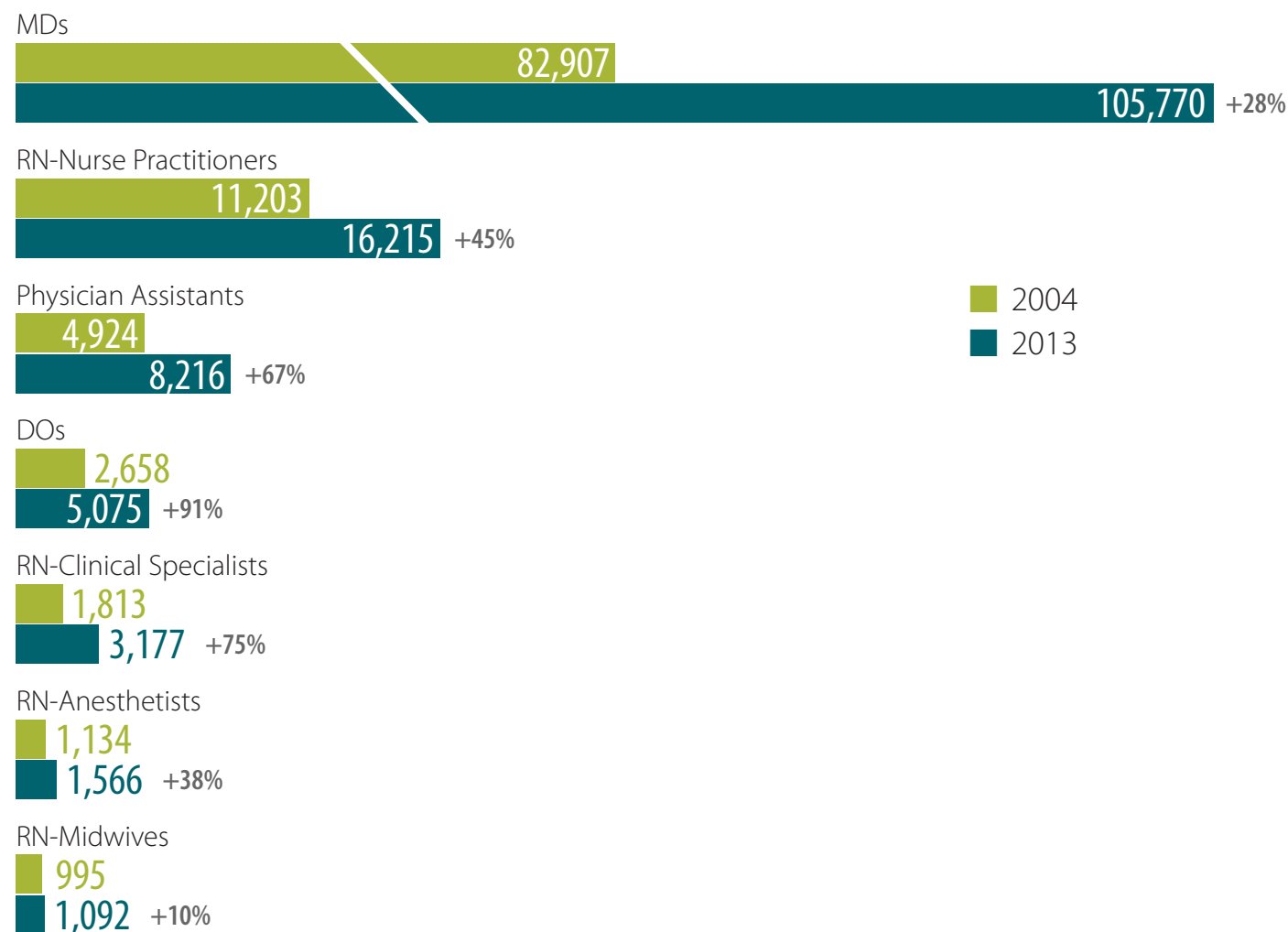
California Physicians

Supply

The number of active physicians practicing in California has grown steadily, increasing 39% from 1993 to 2011. In comparison, the state's general population grew by just 20%.

Supply of Select Providers

California, 2004 and 2013



Notes: Includes all active providers with a California address. The Agency for Healthcare Research and Quality has estimated that 53% of nurse practitioners and 43% of physician assistants are primary care practitioners. See "The Number of Nurse Practitioners and Physician Assistants Practicing Primary Care in the United States: Primary Care Workforce Facts and Stats No. 2," October 2011, Agency for Healthcare Research and Quality, www.ahrq.gov.

Source: California Department of Consumer Affairs, 2013; special request, private tabulation.

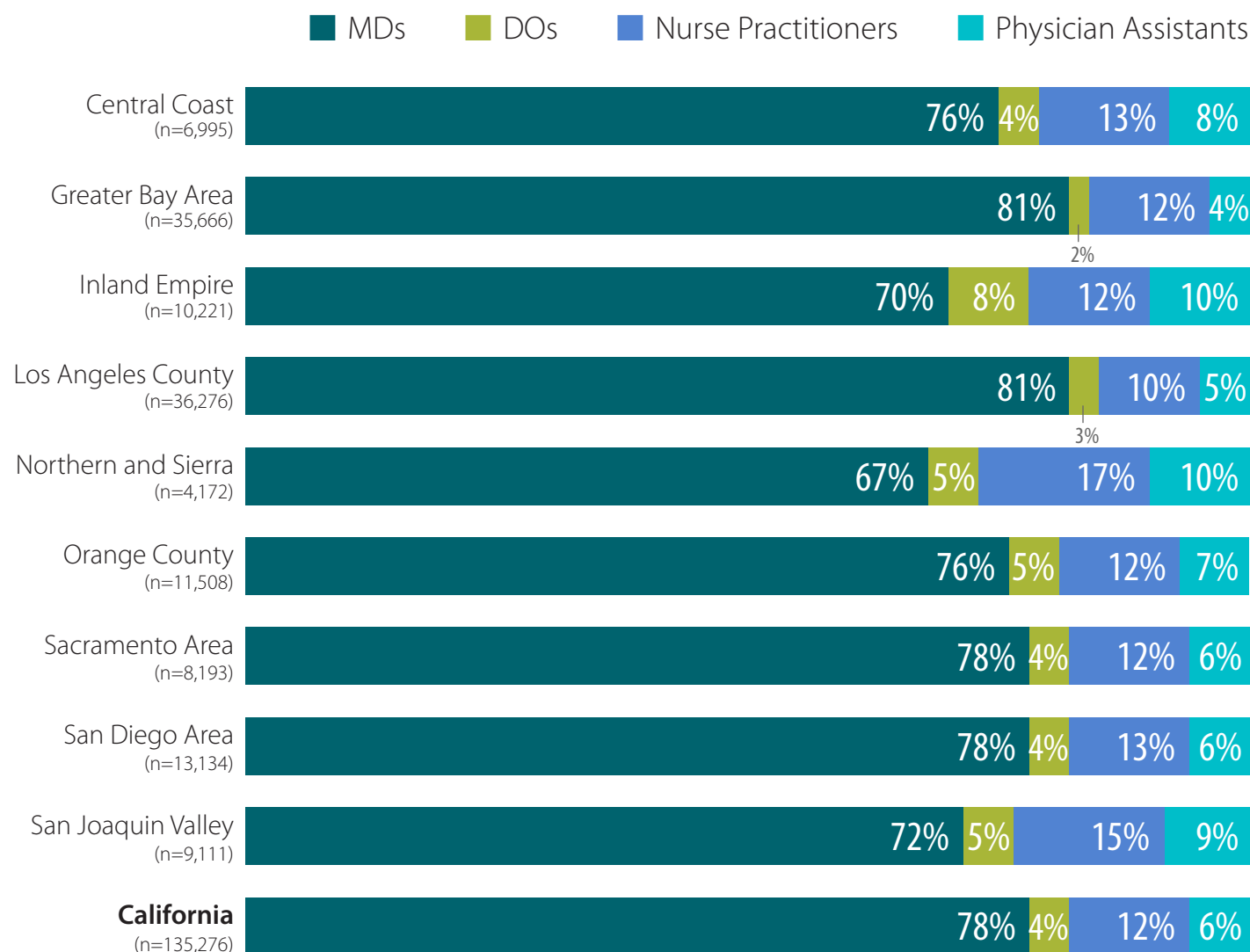
California Physicians

Supply

From 2004 to 2013, the supply of physicians, physician assistants, and advanced practice nurses grew significantly. Doctors of osteopathic medicine (DOs) and RN clinical specialists experienced the greatest percentage growth over the period, while MDs and nurse practitioners experienced the largest absolute growth.

Health Care Providers, by Type and Region

California, 2013



Notes: Includes all active providers with a California address. Segments may not add to 100% due to rounding. See Appendix A for a list of counties within each region.

Source: California Department of Consumer Affairs, 2013; private tabulation.

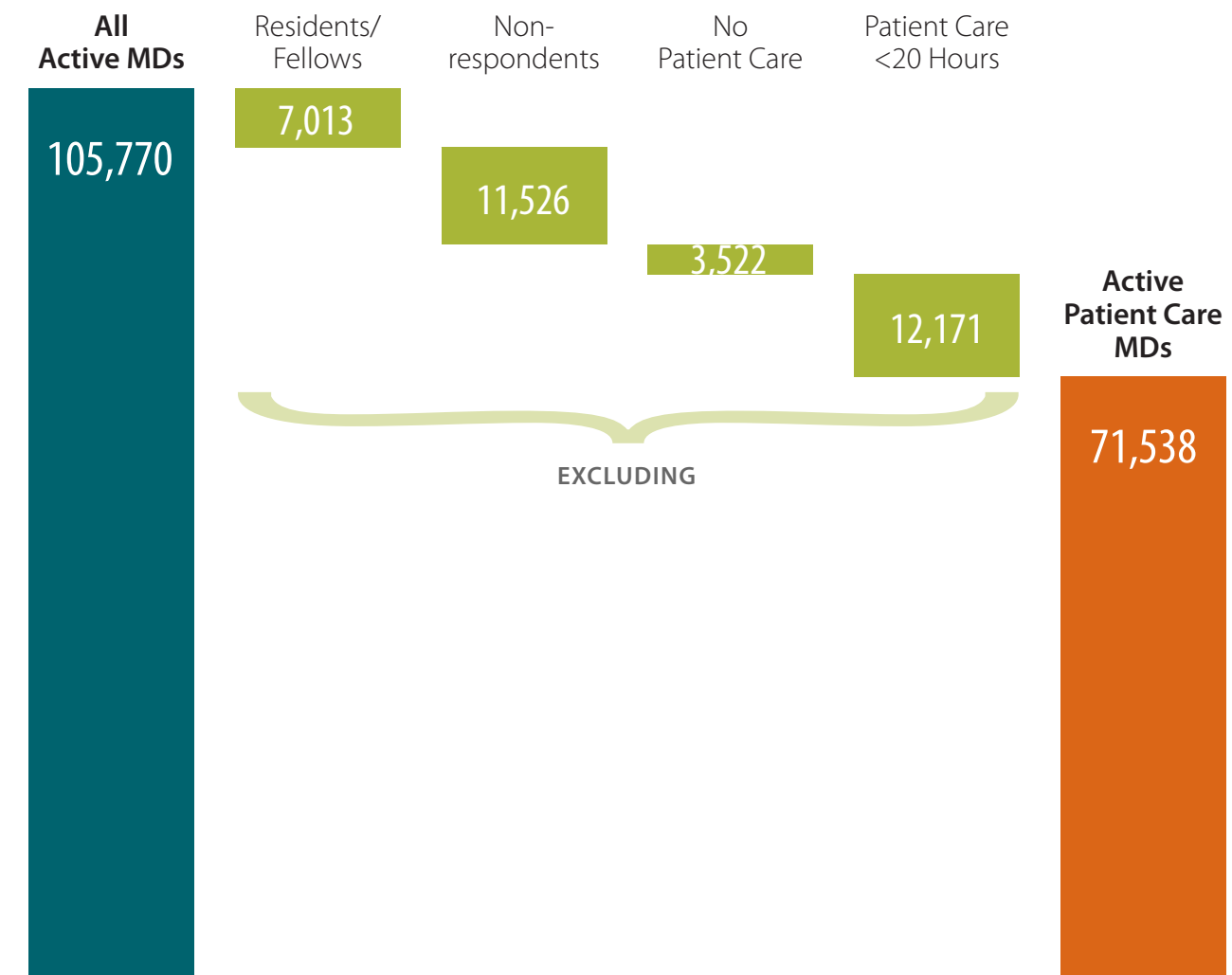
California Physicians

Supply

Medical care can be obtained from health care providers other than physicians. In the Inland Empire, San Joaquin Valley, and Northern and Sierra regions, physicians (all active MDs and DOs) made up less than 80% of health care providers.

Estimating the Number of Active Patient Care Physicians

California, 2013



California Physicians

Supply

Counting physicians in California is not clear-cut. The number varies based on how “physician” is defined. The broad category of “active physicians” includes a number of physicians who would not be considered “active patient care physicians,” including residents, fellows, nonrespondents, and MDs who devote less than 20 hours per week to patient care.

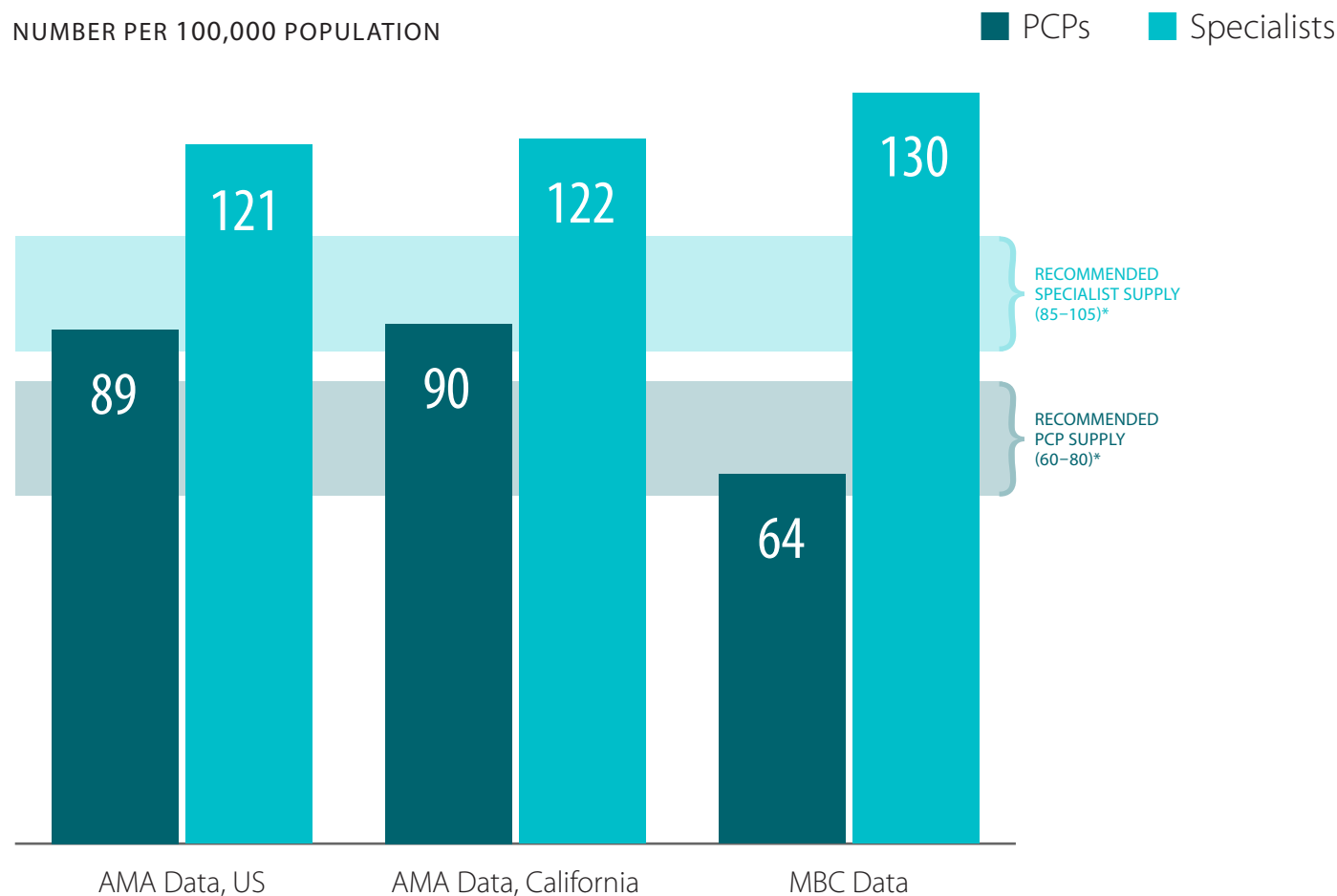
Notes: The Medical Board of California (MBC) surveys MDs when they obtain or renew their licenses. Nonrespondents include MDs who did not complete the survey and those who opted to make their response private.

Sources: Medical Board of California, Survey of Licensees, May 2013; private tabulation. California Department of Consumer Affairs, 2013; special request; private tabulation.

Primary Care Physicians and Specialists

California vs. United States, 2011

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 DOs and are shown as ranges in the chart above.

Notes: Includes only MDs involved in patient care, excluding residents and fellows. The two sources have differing methodologies for identifying primary care, resulting in proportionally more specialists in the MBC data.

Sources: AMA, Division of Survey and Data Resources, "Physician Characteristics and Distribution in the U.S.," 2013 Edition, Tables 1.9 and 3.7. Coffman J.M., Traister L., tabulation of responses to the 2011 supplement to the Medical Board of California (MBC) mandatory survey of physicians, 2013. US Census Bureau, Population Division; 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, 2012; June 2013.

California Physicians

Supply

California and the nation had similar per capita ratios of primary care physicians (PCPs) and specialists, according to data collected by the American Medical Association (AMA). However, the state barely met the nationally recognized standard for supply of PCPs, based on data collected by the Medical Board of California (MBC).

Primary Care Physicians and Specialists

by Region, California, 2011



California Physicians

Supply

Physician supply varied by region. The San Joaquin Valley and the Inland Empire both fell well short of the recommended supply of primary care physicians (PCPs), and were the only areas that did not meet the recommended supply of specialists.

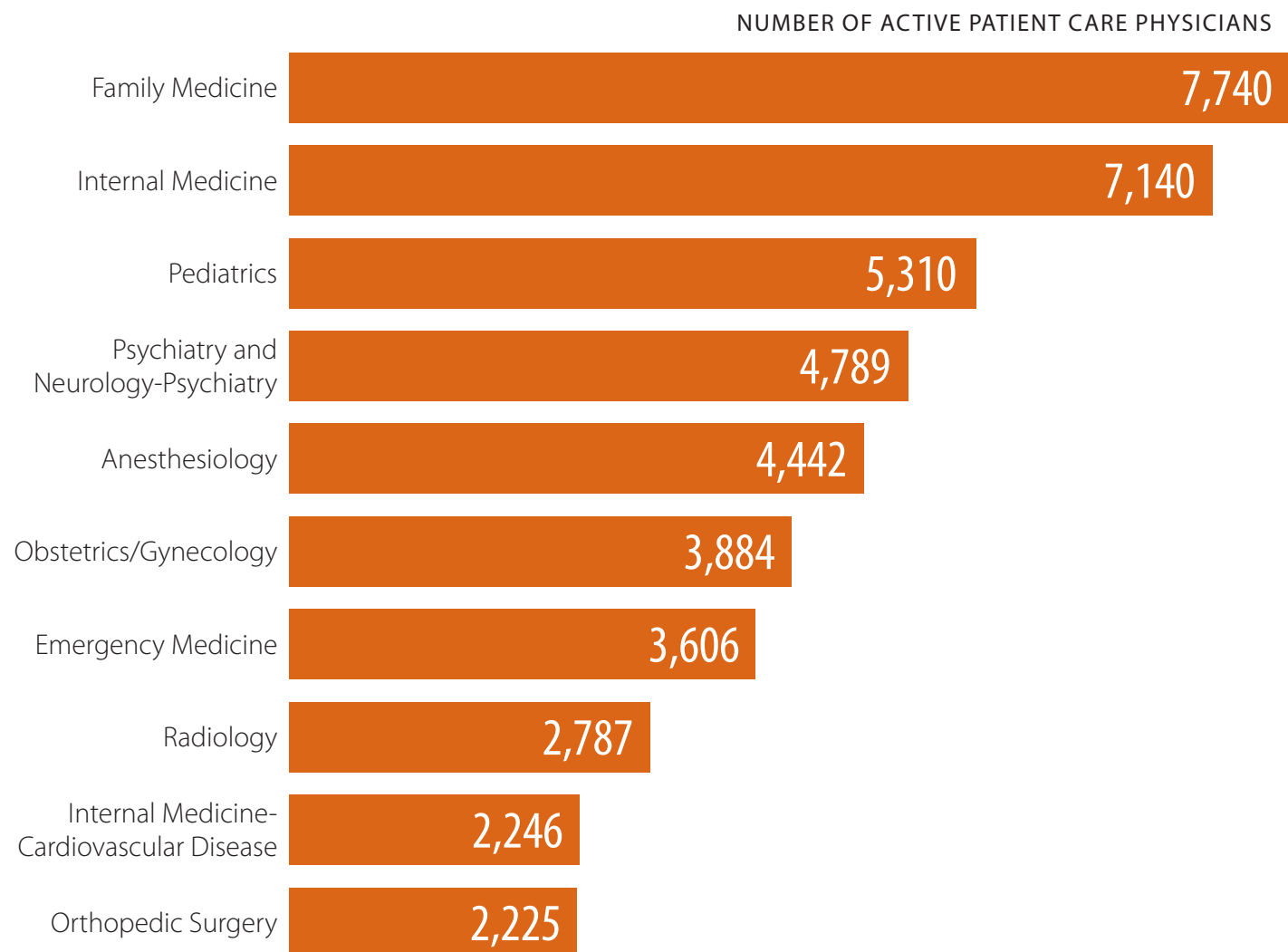
*The Council on Graduate Medical Education (COGME), part of the US Department of Health and Human Services, studies physician workforce trends and needs. COGME ratios include DOs and are shown as ranges in the chart above.

Notes: Data include active MDs working 20 or more hours in patient care per week, excluding residents and fellows. See Appendix A for a list of counties within each region.

Source: Coffman J.M., Traister L., tabulation of responses to the 2011 supplement to the Medical Board of California's mandatory survey of physicians, 2013.

Top Ten Specialties

California, 2013



Notes: Data include active MDs working 20 or more hours in patient care per week, excluding residents, fellows, and nonresponders (i.e., those MDs who did not respond to the survey or opted to make their response private); 11% were nonresponders. 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. 1,425 doctors (1.5%) remained with no specialty assigned.

Source: Medical Board of California, Survey of Licensees, May 2013; private tabulation.

California Physicians

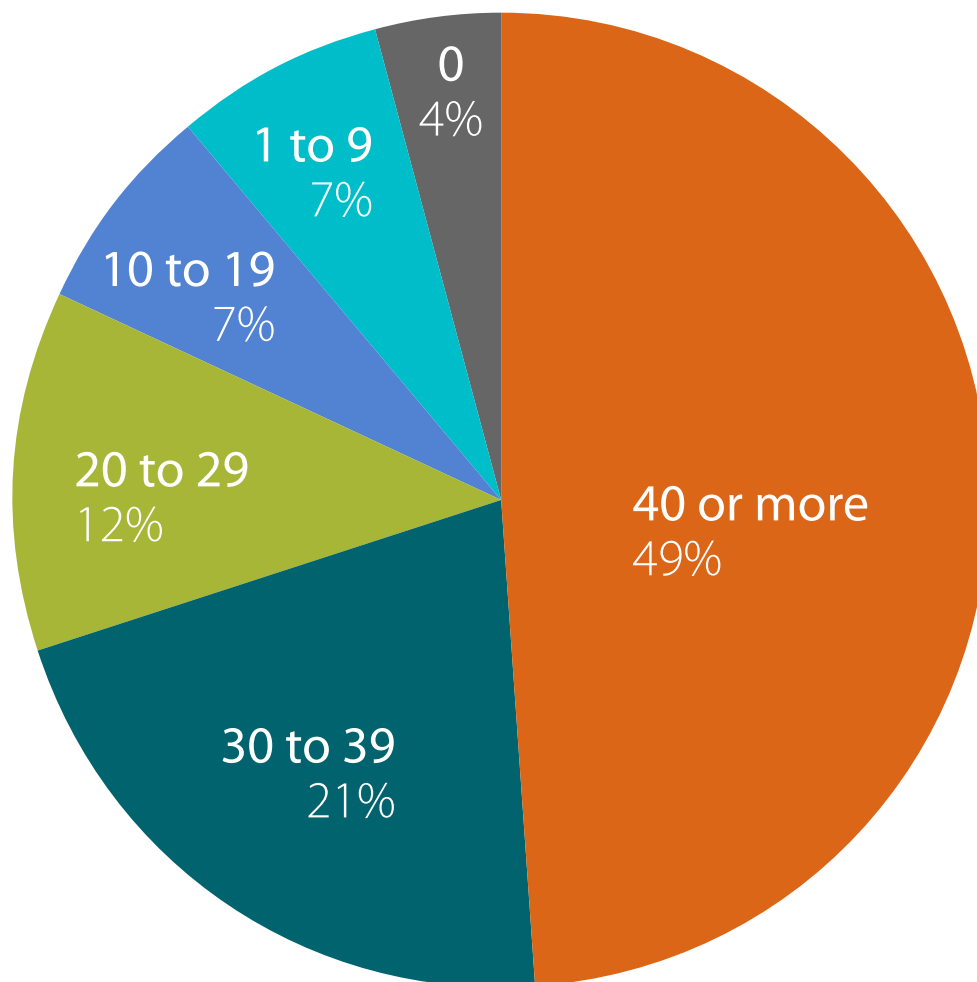
Supply

The three largest specialties in California were primary care specialties. Family medicine and internal medicine together represented one-fifth of all active patient care physicians in the state.

Patient Care Hours Worked

California, 2013

AVERAGE WEEKLY HOURS



Note: Data include active MDs, excluding residents, fellows, and nonresponders (i.e., those MDs who did not respond to the survey or opted to make their response private); 11% were nonresponders.

Source: Medical Board of California, Survey of Licensees, May 2013; private tabulation.

California Physicians

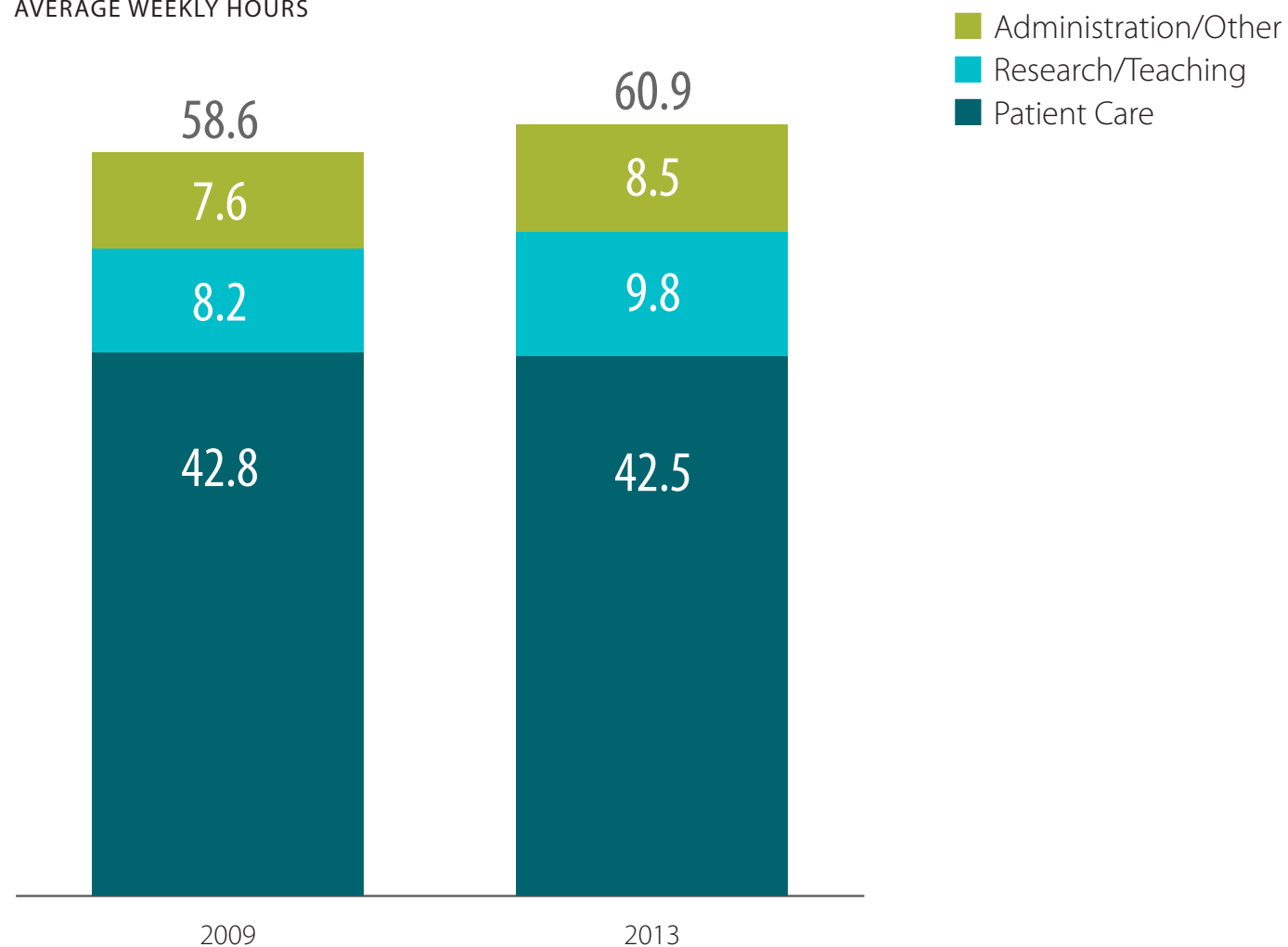
Hours Worked

The total number of physicians does not accurately reflect the availability of physicians to provide care. About half of California physicians devoted 40 hours or more a week to patient care. Physicians also spent time on research, teaching, and administration.

Physician Hours Worked, by Activity

California, 2009 and 2013

AVERAGE WEEKLY HOURS



California Physicians

Hours Worked

The average physician's workweek increased by over two hours from 2009 to 2013, driven by a rise in activities other than patient care.

Note: Data include active MDs, excluding residents, fellows, and nonresponders (i.e., those MDs who did not respond to the survey or opted to make their response private); 11% were nonresponders.

Source: Medical Board of California, Survey of Licensees, May 2013; private tabulation.

Physician Hours Worked, by Activity and Years Since Graduation

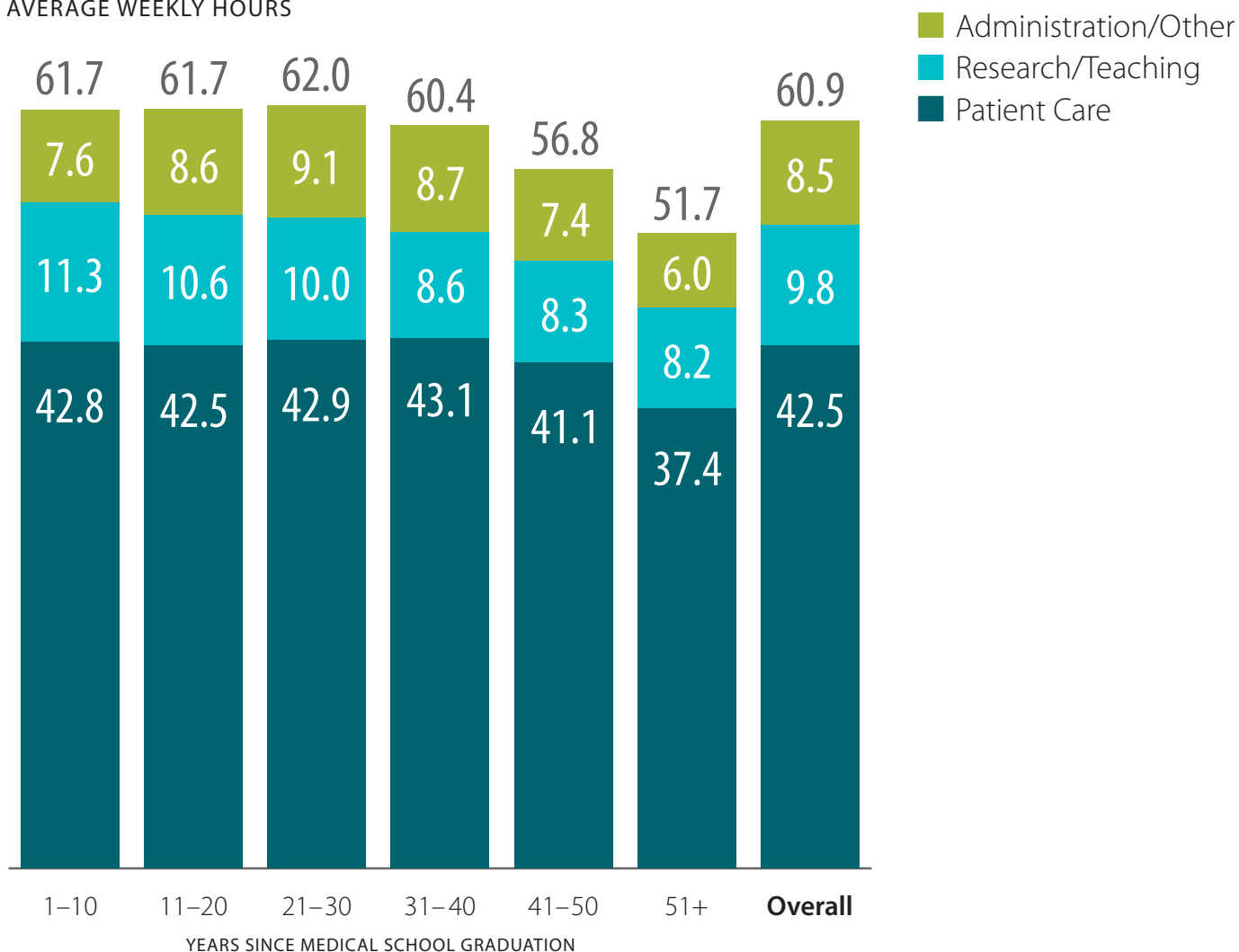
California, 2013

California Physicians

Hours Worked

Later in their careers, physicians tended to work fewer hours a week in all areas, with the largest decline in patient care hours.

AVERAGE WEEKLY HOURS



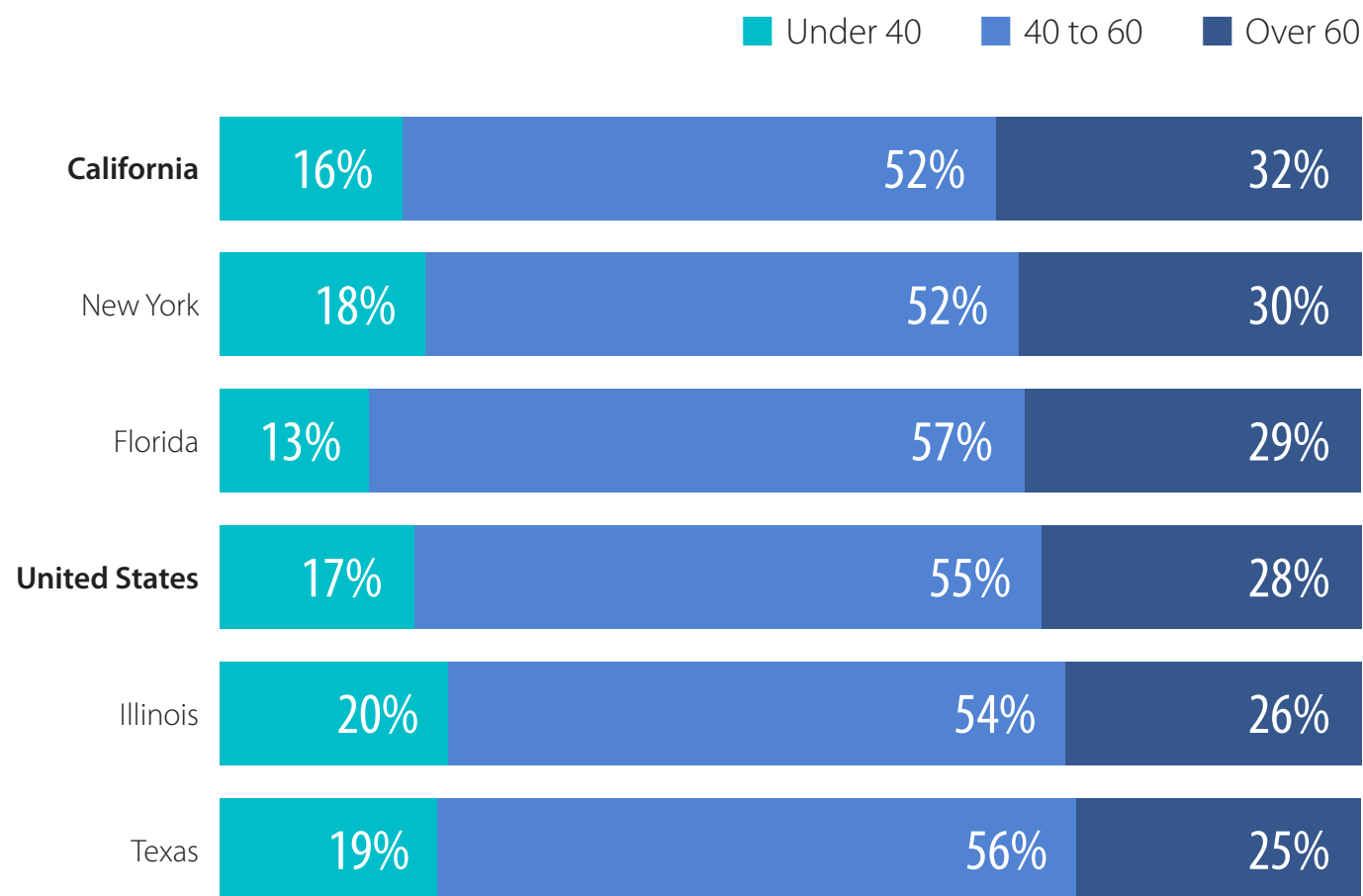
Note: Data include active MDs, excluding residents, fellows, and nonresponders (i.e., those MDs who did not respond to the survey or opted to make their response private); 11% were nonresponders.

Source: Medical Board of California, Survey of Licensees, May 2013; private tabulation.

Age of Physicians

Select States vs. United States, 2012

PERCENTAGE OF TOTAL PHYSICIANS



Notes: Data include all active MDs and DOs. Segments may not add to 100% due to rounding. The five most populous states are shown.

Source: Association of American Medical Colleges, 2013 State Physician Workforce Data Book, Table 7.

California Physicians

Demographics

The California physician workforce was one of the oldest in the nation; only New Mexico (not shown) had a greater proportion of active physicians older than 60. Slightly more than 30% of physicians in California were over 60.

Gender of Medical School Graduates and Physicians

California vs. United States, 2012

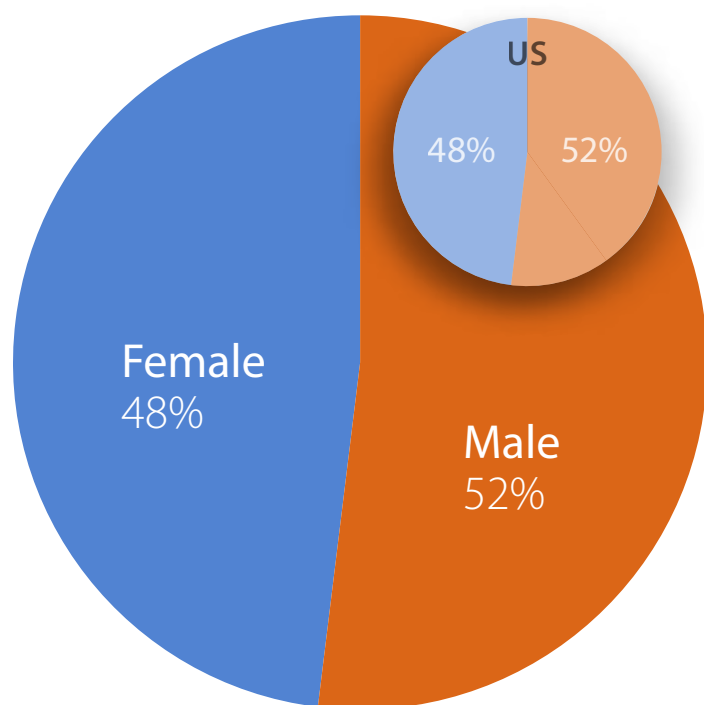
California Physicians

Demographics

The gender split among California medical school graduates was about even. Males, however, still represented the majority of physicians, due largely to a large gender gap in medical school graduates in the past. The female proportion of graduates has grown significantly from 9% in 1966 (not shown) to 48% in 2010.

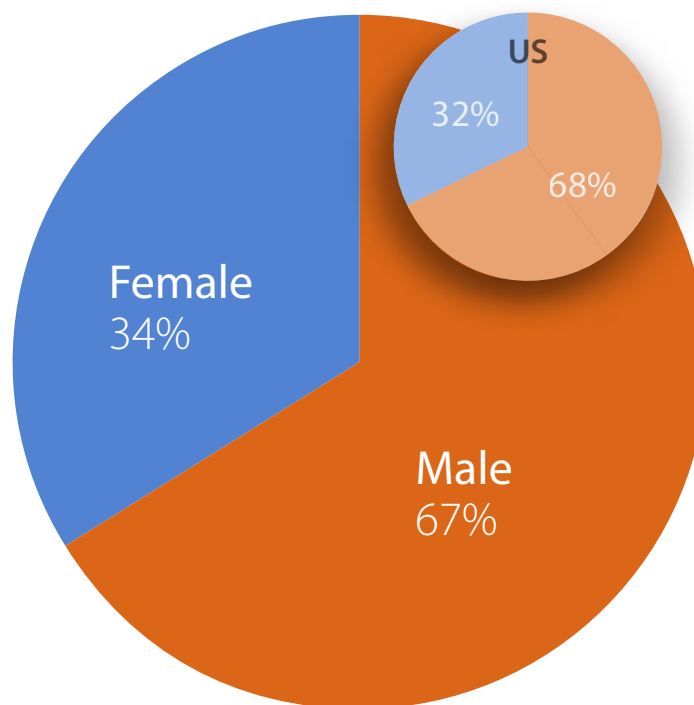
Medical School Graduates

California



Active Physicians

California



Notes: Data include active MDs and DOs. Segments may not add to 100% due to rounding.

Source: Association of American Medical Colleges, 2013 State Physician Workforce Data Book, Table 27: Total Graduates by U.S. Medical School and Sex, 2009–2013, www.aamc.org.

Race/Ethnicity of Physicians and Population

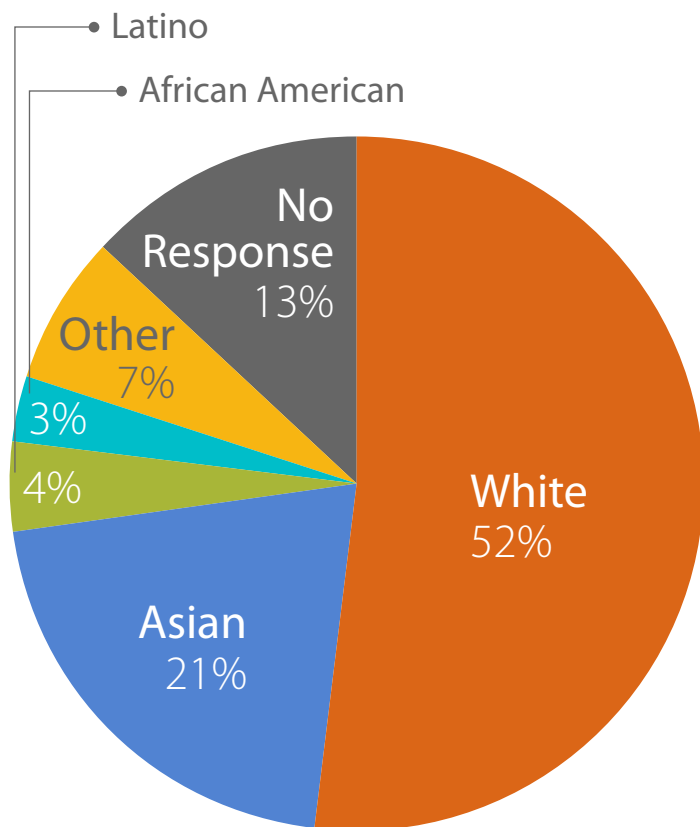
California, 2012

California Physicians

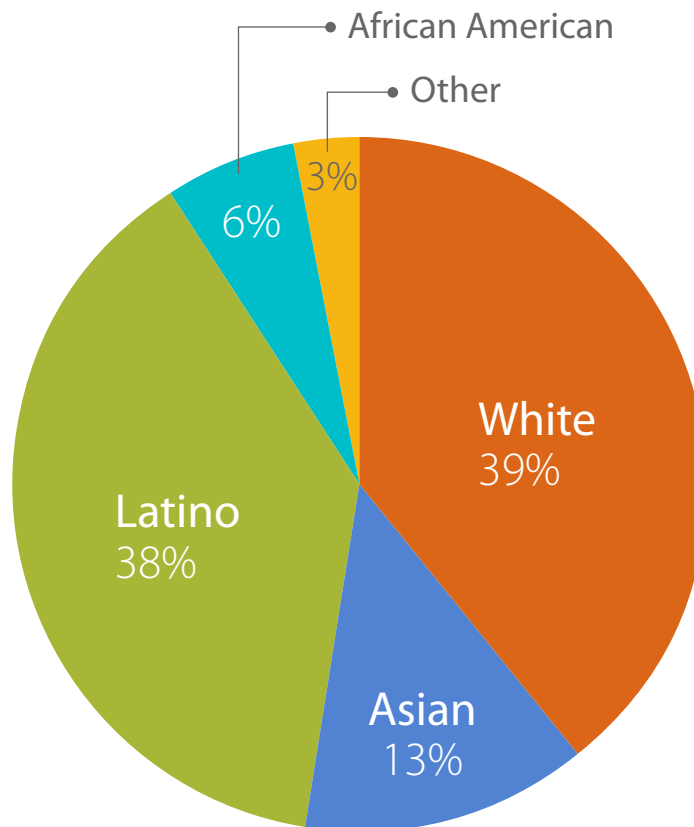
Demographics

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 4% of physicians were Latino.

Active Physicians



California Population

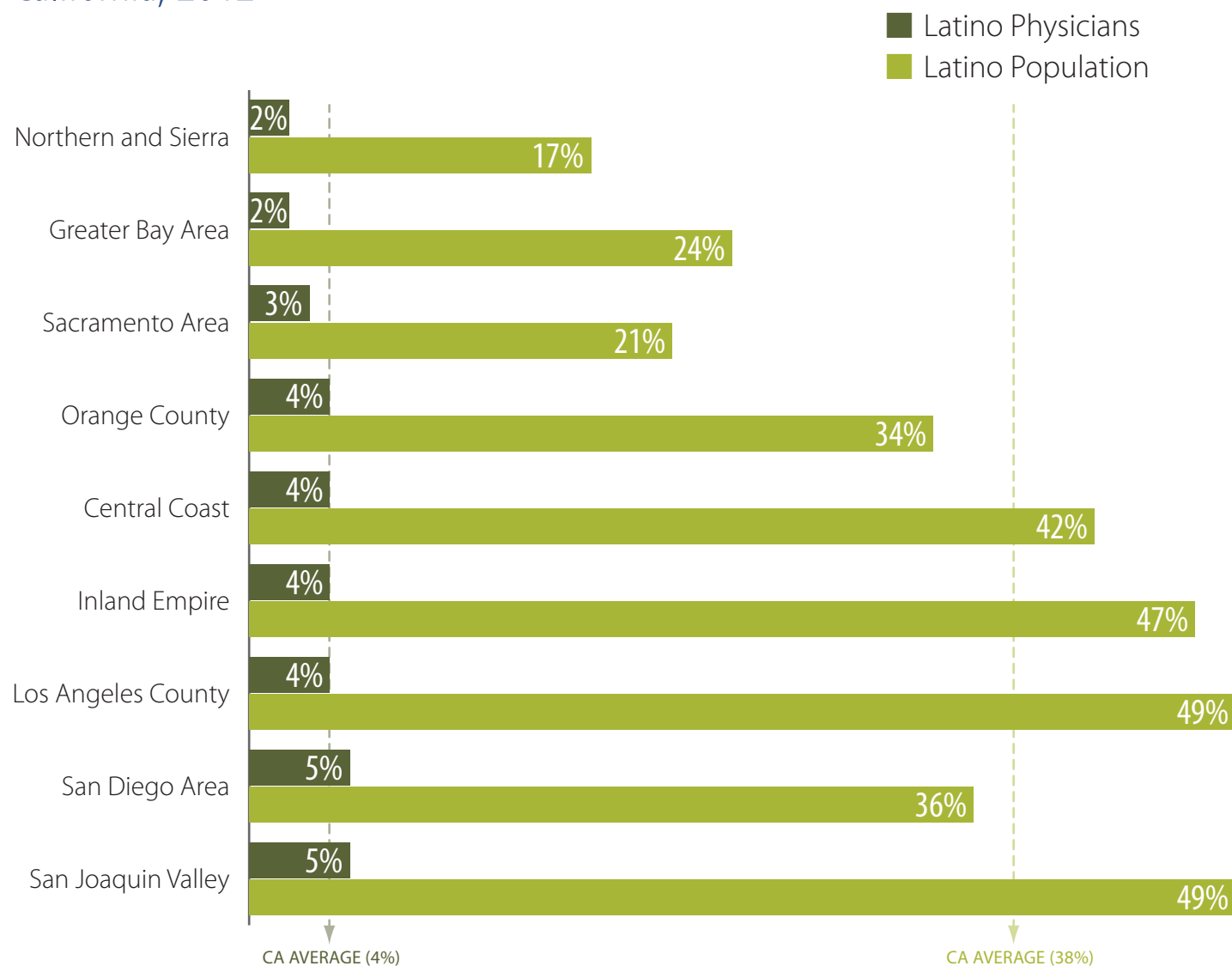


Notes: Data include active MDs. Other includes American Indian/Native American/Alaskan Native, Native Hawaiian, and respondents who chose two or more races/ethnicities. Segments may not add to 100% due to rounding.

Source: Medical Board of California, *Cultural Background Survey Statistics, 2012*; US Census Bureau, Population Division, 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, 2012; June 2013.

Latino Physicians and Population, by Region

California, 2012



California Physicians

Demographics

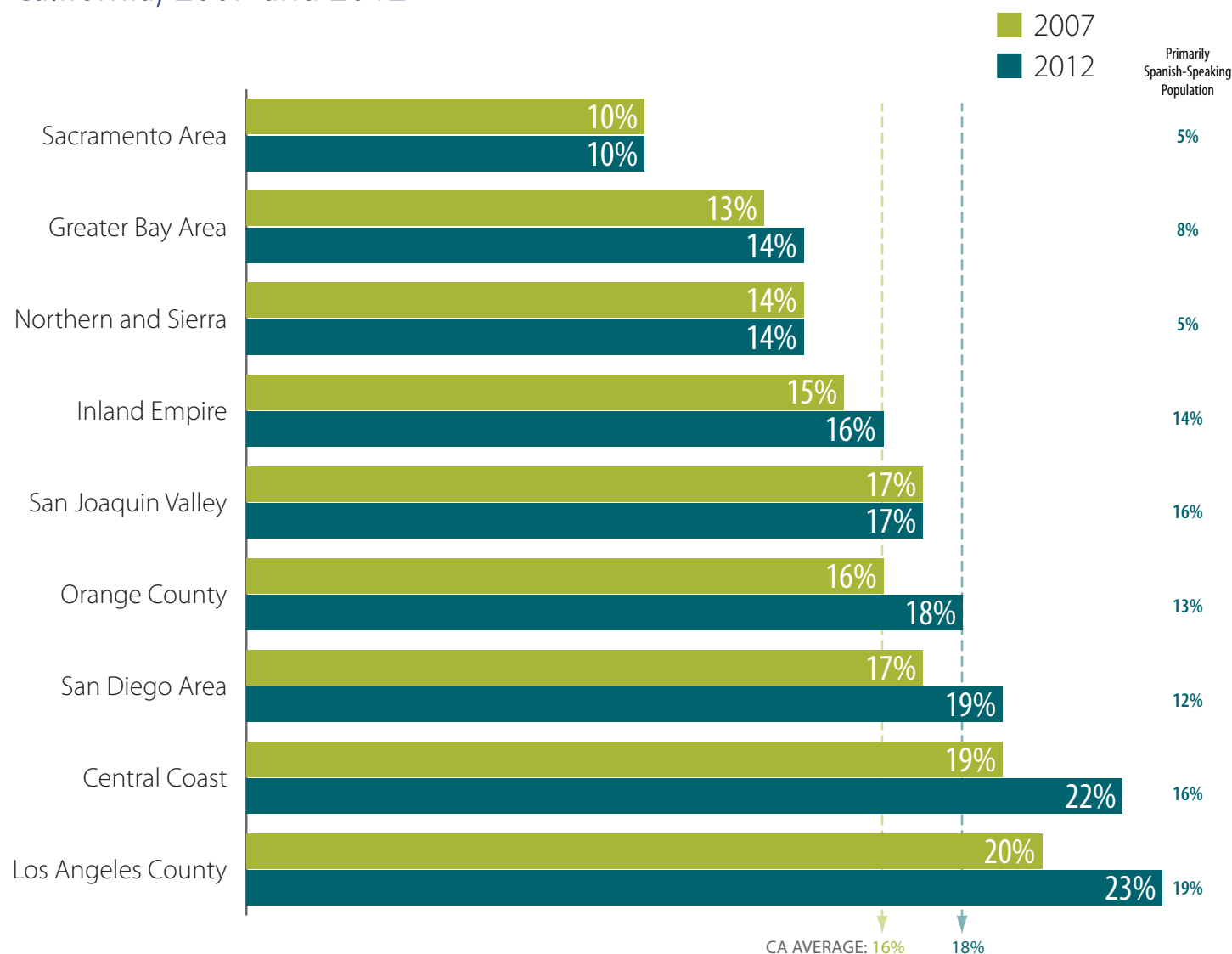
Latinos were underrepresented in the physician population in all regions of California. This underrepresentation was particularly pronounced in the Inland Empire, Los Angeles, and San Joaquin Valley.

Notes: Data include active MDs. See Appendix A for a list of counties within each region.

Source: Medical Board of California, *Cultural Background Survey Statistics, 2012*; US Census Bureau, Population Division, 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, 2012, June 2013.

Spanish-Speaking Physicians, by Region

California, 2007 and 2012



Notes: Data include active MDs. Primarily Spanish-Speaking Population includes all people 5 years old and older who are Spanish speakers and speak English "Less than 'Very Well.'" See Appendix A for a list of counties within each region.

Sources: Medical Board of California, 2007 and 2012 Foreign Language Survey Statistics; US Census Bureau, 2007–2011 American Community Survey 5-Year Estimates, Table S1601: "Language Spoken at Home," www.mbc.ca.gov and www.mbc.ca.gov.

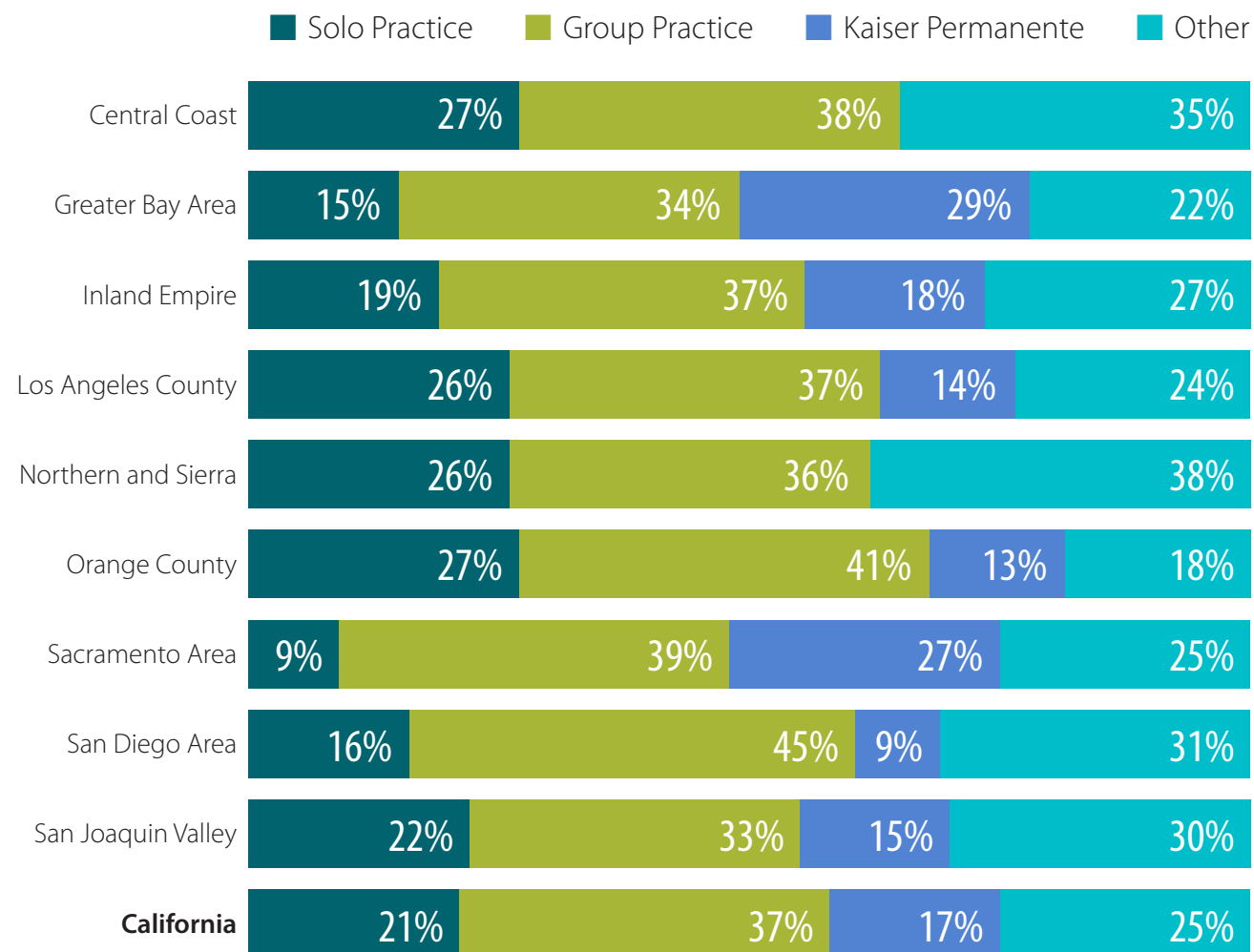
California Physicians

Demographics

The proportion of physicians that speak Spanish increased slightly from 16% in 2007 to 18% in 2012. Six of the nine regions in California had over 10% of their population primarily speaking Spanish.

Physicians, by Practice Setting and Region

California, 2011



Notes: Data include active MDs working 20 or more hours in patient care per week, excluding residents and fellows. Point estimates should be interpreted with caution because the confidence intervals around them are large. Percentages are of physicians who reported a practice type. Across the nine regions, 5% to 11% of active patient care physicians did not respond to the question about practice type. Group practice encompasses all physicians in practices with two or more MDs other than the Permanente Medical Group. Other includes community clinics, public clinics, rural clinics, military facilities, VA medical centers, and other settings. In the Central Coast and Northern/Sierra regions, physicians who practiced in Kaiser Permanente facilities were combined with Other physicians due to small numbers of observations. Segments may not add to 100% due to rounding. See Appendix A for a list of counties within each region.

Source: Coffman J.M., Traister L., tabulation of responses to the 2011 supplement to the Medical Board of California's mandatory survey of physicians, 2013.

California Physicians

Practice Organization

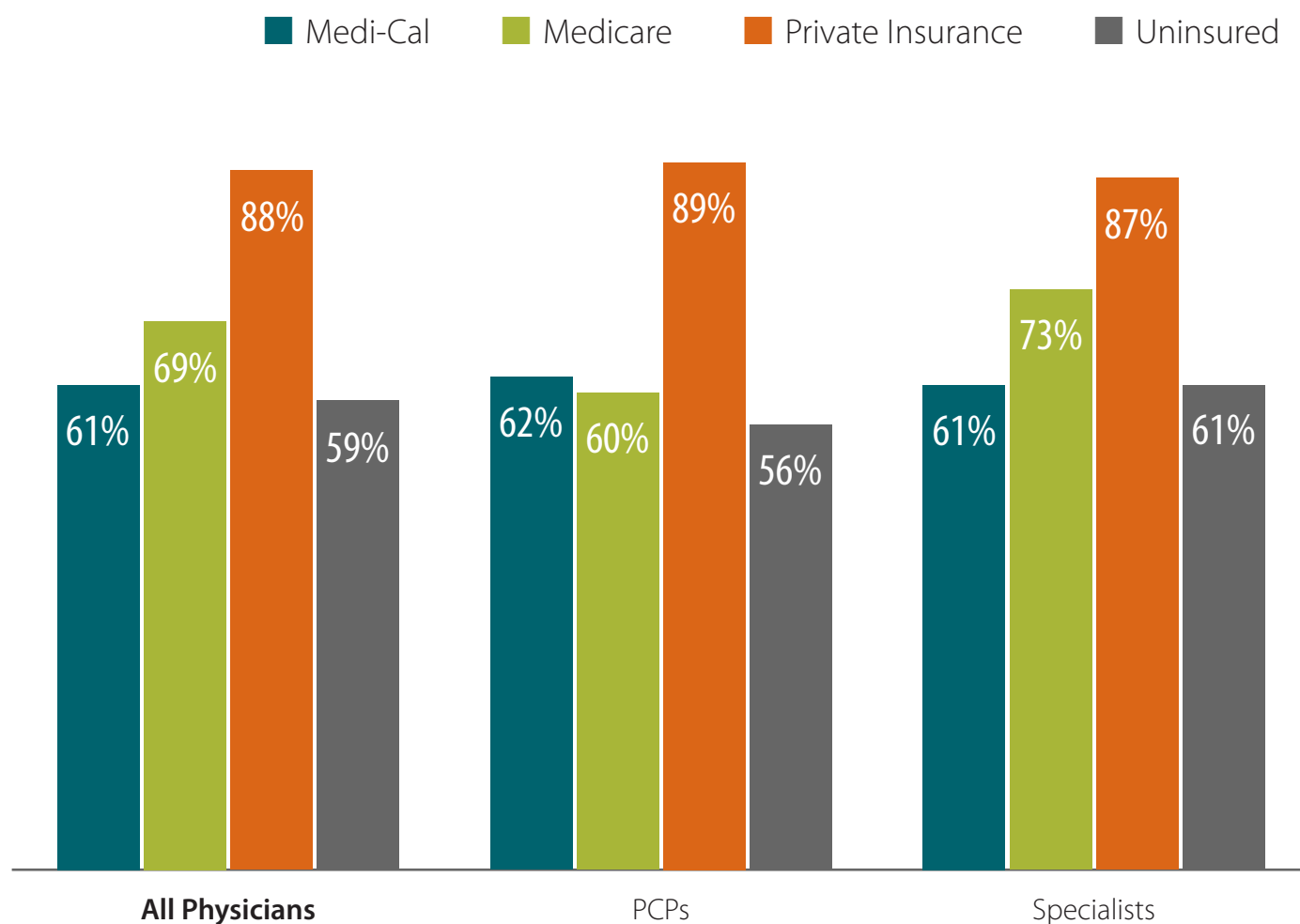
In all California regions, group practices were the most common setting in which physicians worked. Kaiser, the largest group practice in the state, had a significant presence in the Bay Area and Sacramento regions.

Physicians with Patients in Practice, by Coverage Type

California, 2011

California Physicians

Practice Organization



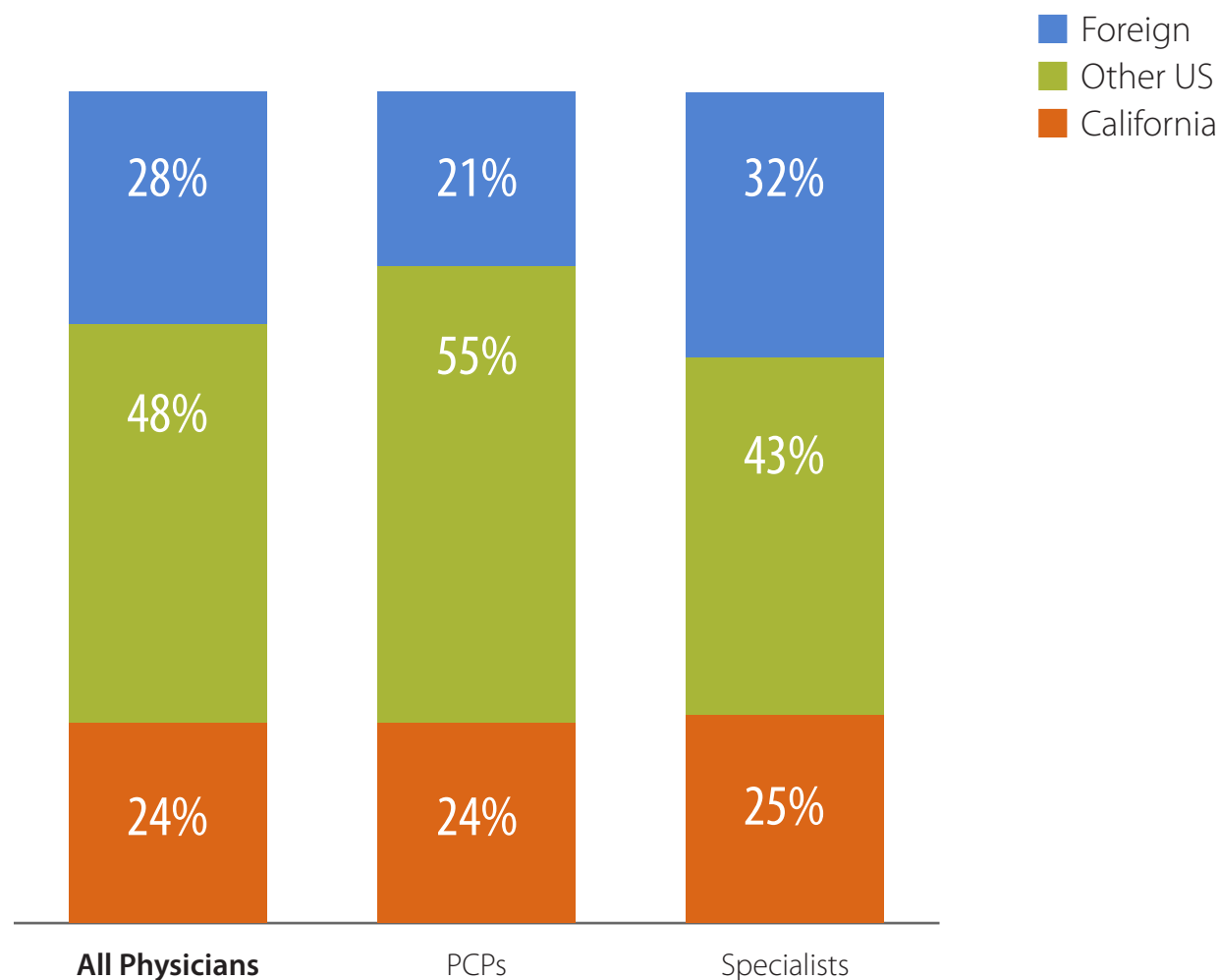
PCPs and specialists were less likely to have Medi-Cal, Medicare, or uninsured patients than privately insured patients. While 73% of specialists had Medicare patients, only 60% of PCPs did. About 60% of PCPs and specialists had Medi-Cal patients. As the Affordable Care Act implementation and an aging population lead to more Medi-Cal and Medicare patients, access to care for these patients may become a challenge.

Notes: Data include active MDs working 20 or more hours in patient care per week, excluding residents and fellows. If a physician reported that they had any patients in a payer category, they were included.

Source: Coffman J.M., Traister L., tabulation of responses to the 2011 supplement to the Medical Board of California's mandatory survey of physicians, 2013.

Physicians, by Medical School Location and Specialty

California, 2013



California Physicians

Education and Training

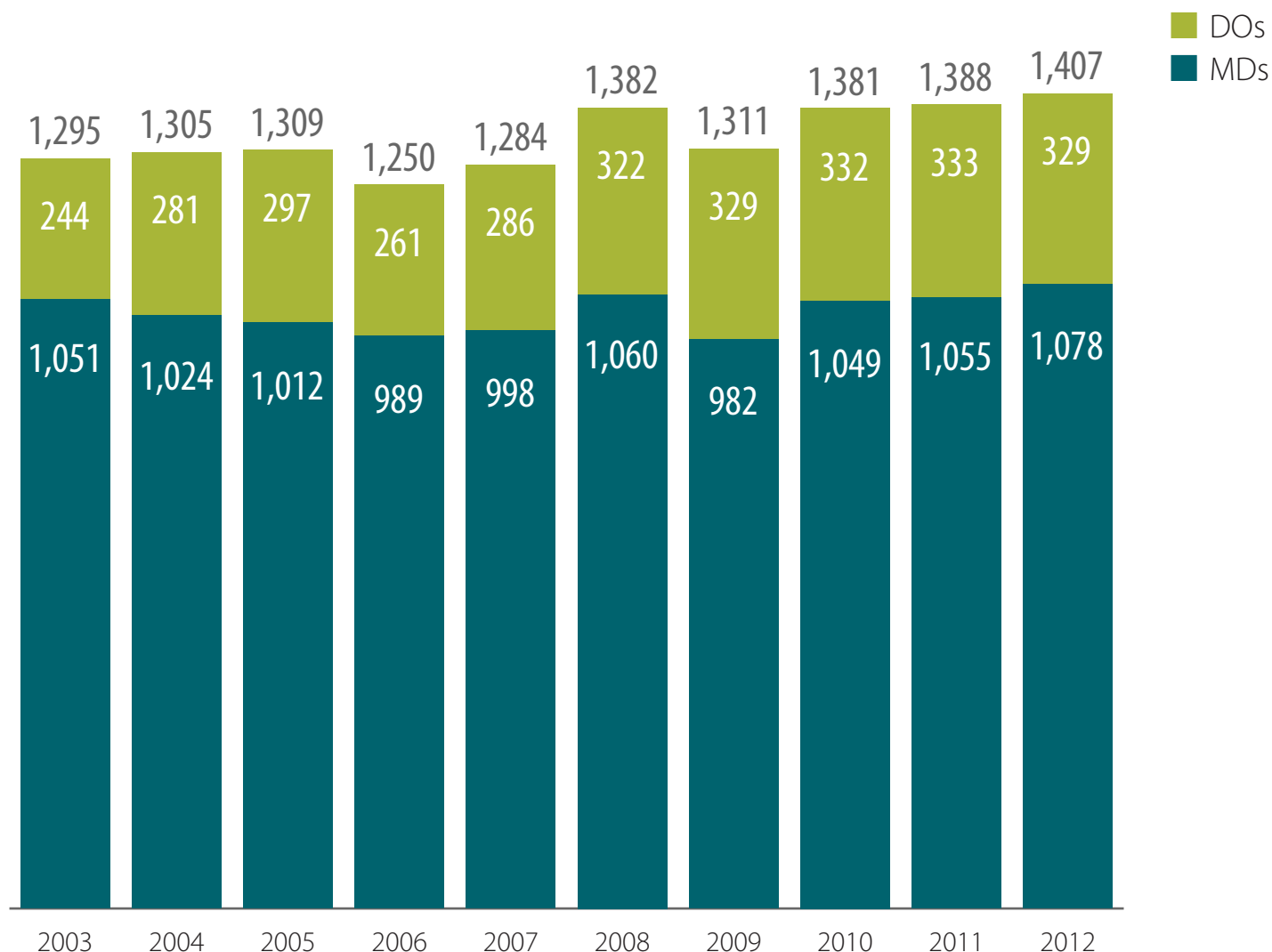
Only one-quarter of California's physicians attended medical school in the state. Nearly one-third of specialists were trained in a foreign medical school.

Note: Data include active MDs, excluding residents, fellows, and nonresponders (i.e., those MDs who did not respond to the MBC survey or opted to make their response private); 11% were nonresponders.

Source: Medical Board of California Survey, May 2013; private tabulation.

Medical School Graduates

California, 2003 to 2012



Note: Data include medical school and osteopathic school graduates.

Sources: American Association of Colleges of Osteopathic Medicine, Graduates by Osteopathic Medical College and Gender 2000–2012, Annual Osteopathic Medical School Questionnaires, 2000–2001 through 2012–2013 academic years, March 23, 2013, www.aacom.org. Association of American Medical Colleges, FACTS Table 27: Total Graduates by US Medical School and Sex, December 17, 2012, www.aamc.org and www.aamc.org, accessed July 14, 2013.

California Physicians

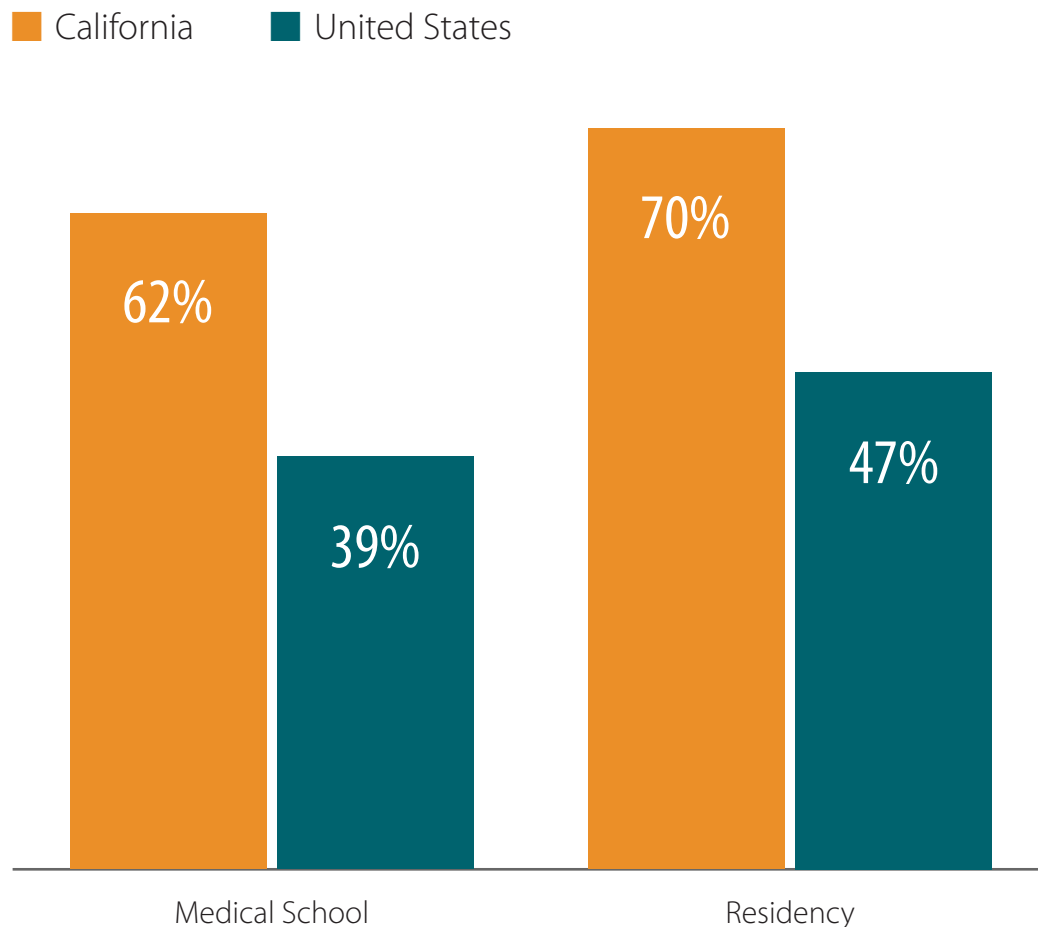
Education and Training

The number of graduates from California's eight MD-granting universities has remained flat over the past 10 years. During the same time, doctor of osteopathic medicine graduates increased by 35%. By 2020, the number of graduates from MD-granting schools should increase: University of California, Riverside, enrolled its first class in 2013, and California Northstate Medical School is projected to begin enrolling students in 2014.

Retention of Medical Students and Residents

California vs. United States, 2012

PERCENTAGE OF PHYSICIANS PRACTICING IN SAME STATE WHERE EDUCATED



Note: Data include medical school and osteopathic school graduates.

Source: Association of American Medical Colleges, 2013 State Physician Workforce Data Book, Tables 17 and 19.

California Physicians

Education and Training

California retained a high proportion of medical students who completed their education and residency in the state. California ranked first in the nation for medical school retention, and second (behind Alaska) in resident retention.

Medical School Debt

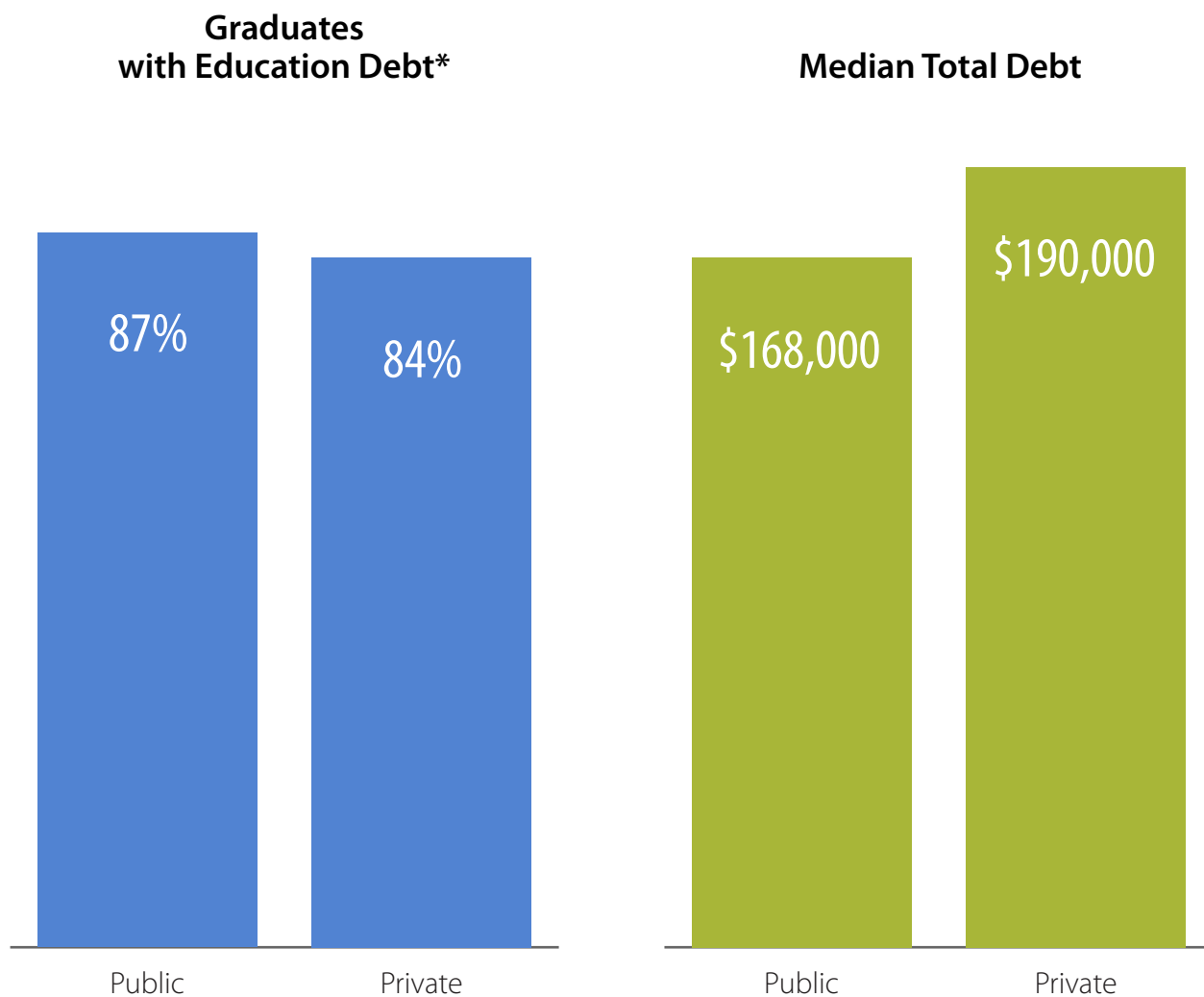
United States, 2013

California Physicians

Education and Training

Over 80% of all medical school graduates had education debt.

The median debt for private medical school graduates was \$22,000 higher than the public medical school median.



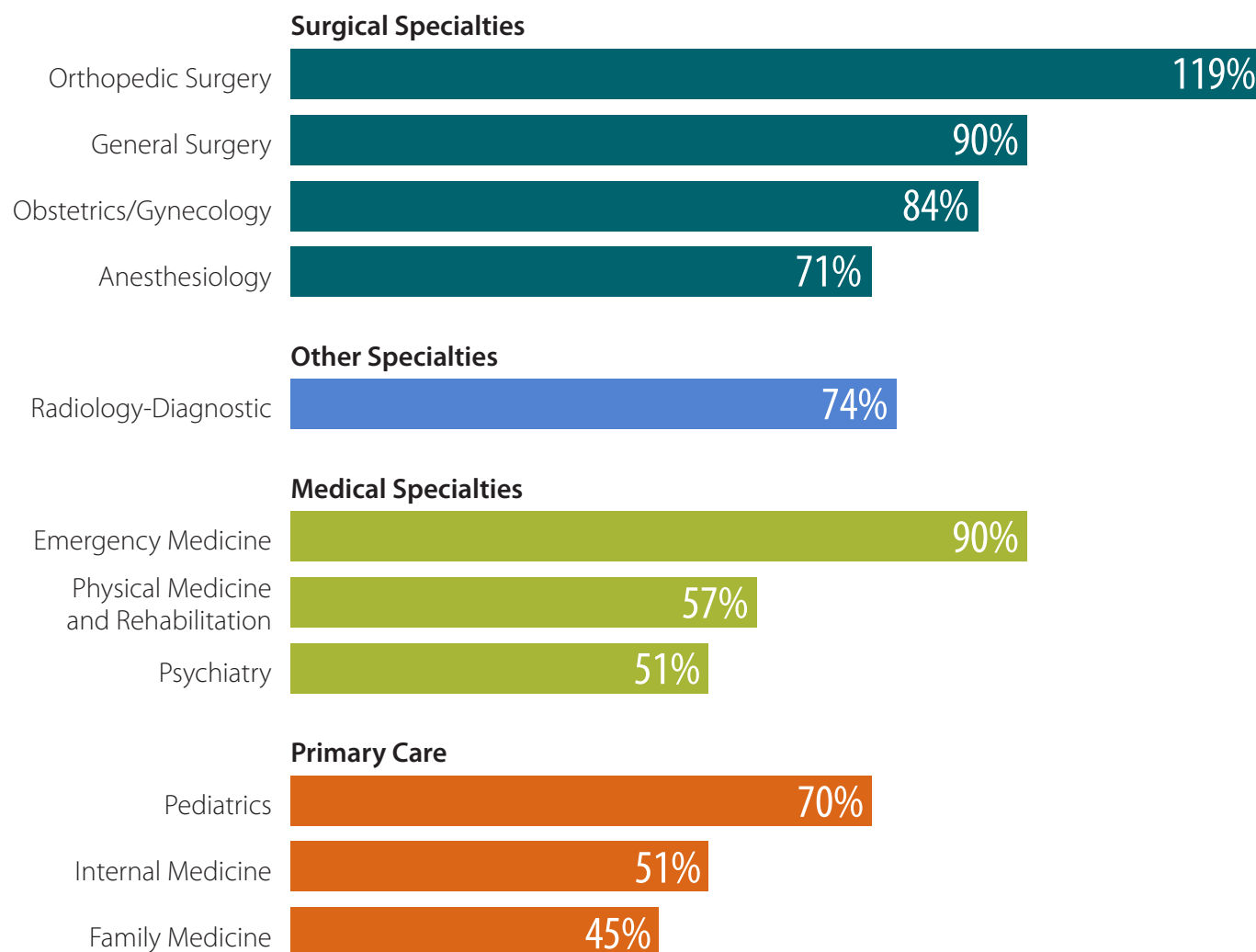
*Education debt figures include premedical education debt.

Source: Association of American Medical Colleges, "Medical Student Education: Debt, Costs, and Loan Repayment Fact Card," www.aamc.org, accessed December 18, 2013.

Medical Student Specialty Choices Compared to Available Slots

United States, 2013

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



Source: National Resident Matching Program, Results and Data: 2013 Main Residency Match®, Washington, DC, 2013.

California Physicians

Education and Training

Among US medical school seniors ranking residency choices, surgical specialties were more popular than primary care specialties. Seniors choosing family medicine as their first or only choice filled just 45% of the available slots.

Employed Physician Earnings, Selected Specialties

California, 2004 to 2012, Selected Years

	AVERAGE ANNUAL INCOME			% CHANGE
	2004	2008	2012	2004 TO 2012
Primary Care				
Family and General Practitioners	\$119,010	\$142,620	\$182,200	53.1%
Internists, General	\$168,820	\$172,560	\$201,140	19.1%
Pediatricians, General	\$139,020	\$156,830	\$167,650	20.6%
Specialists				
Anesthesiologists	\$196,250	\$209,900	\$216,850	10.5%
Obstetricians/Gynecologists	\$181,070	\$181,520	\$220,940	22.0%
Psychiatrists	\$180,550	\$155,190	\$179,270	−0.7%
Surgeons	\$168,220	\$202,940	\$209,880	24.8%
Consumer Price Index (2004=\$100,000 base)	\$100,000	\$112,529	\$120,618	20.6%

California Physicians

Income

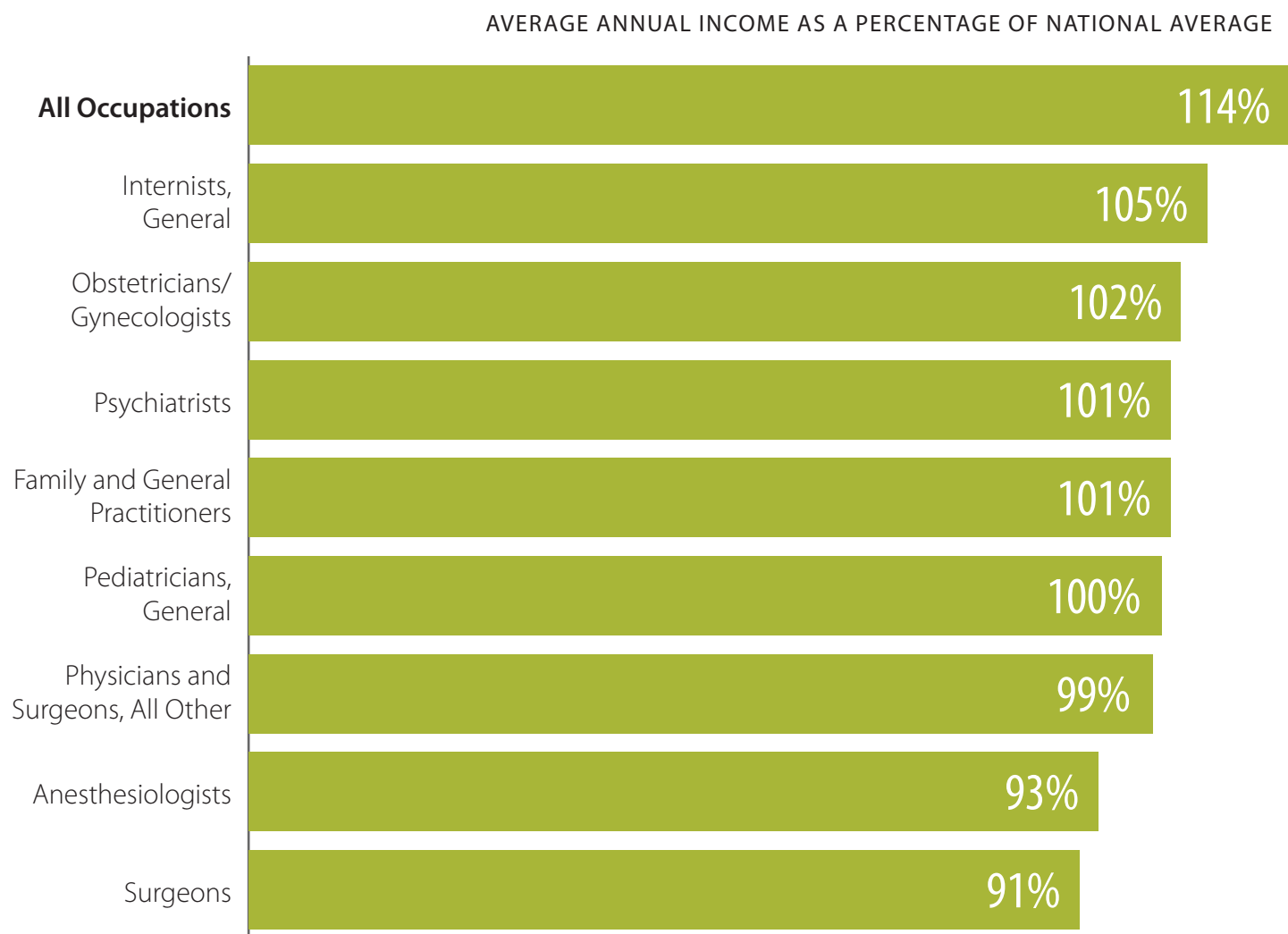
Incomes for family and general practitioners have risen sharply over the past eight years, compared to other physician incomes and to the consumer price index. Other PCPs and specialists have seen a growth in income that roughly matches that of overall price increases, except for psychiatrist salaries, which remained relatively flat, and anesthesiologist salaries, which have increased by only 10%.

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

Source: Bureau of Labor Statistics, Occupational Employment Statistics Survey, www.bls.gov, accessed August 7, 2013.

Employed Physician Earnings, Selected Specialties

California vs. United States, 2012



California Physicians

Income

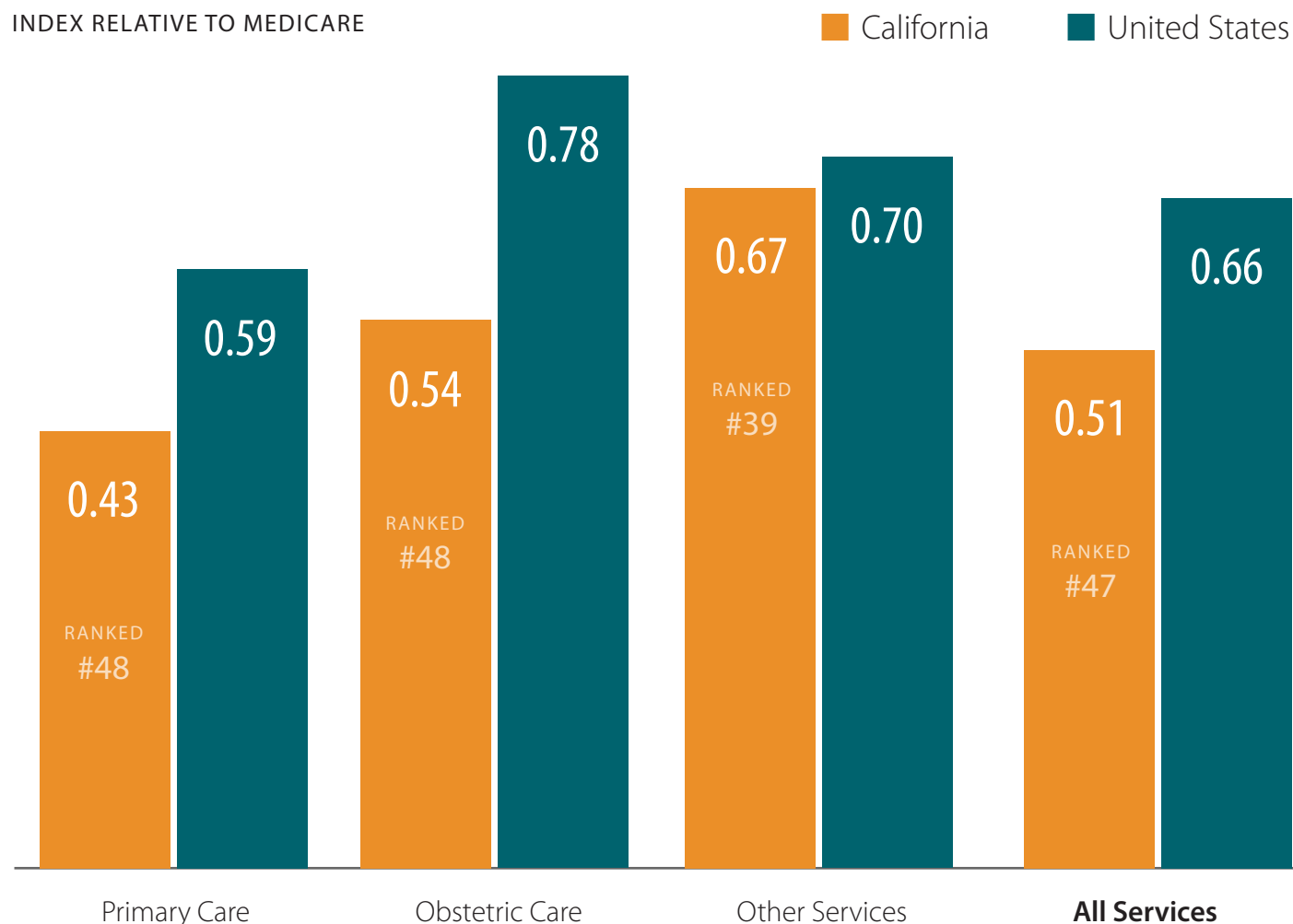
California physician incomes hovered around the national averages, without adjusting for California's higher cost of living. Compared to all occupations, California physician incomes were relatively lower than the national average.

Source: Bureau of Labor Statistics, Department of Labor, Occupational Employment Statistics Survey, stats.bls.gov/oes, accessed July 30, 2013.

Medicaid-Medicare Fee Index

California vs. United States, 2012

INDEX RELATIVE TO MEDICARE



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.

Sources: Kaiser Family Foundation, Medicaid-to-Medicare Fee Index, kff.org, accessed July 26, 2013. Estimated Medi-Cal beneficiary increase of 1.7 million obtained from the May 6, 2011 Medical Board of California Board meeting, www.mbc.ca.gov.

California Physicians

Income

Medi-Cal, California's Medicaid program, is a poor payer relative to other states' Medicaid programs. For primary care and obstetric care, California ranked 48th amongst all states, and overall it compensated physicians at only 51% of Medicare levels.

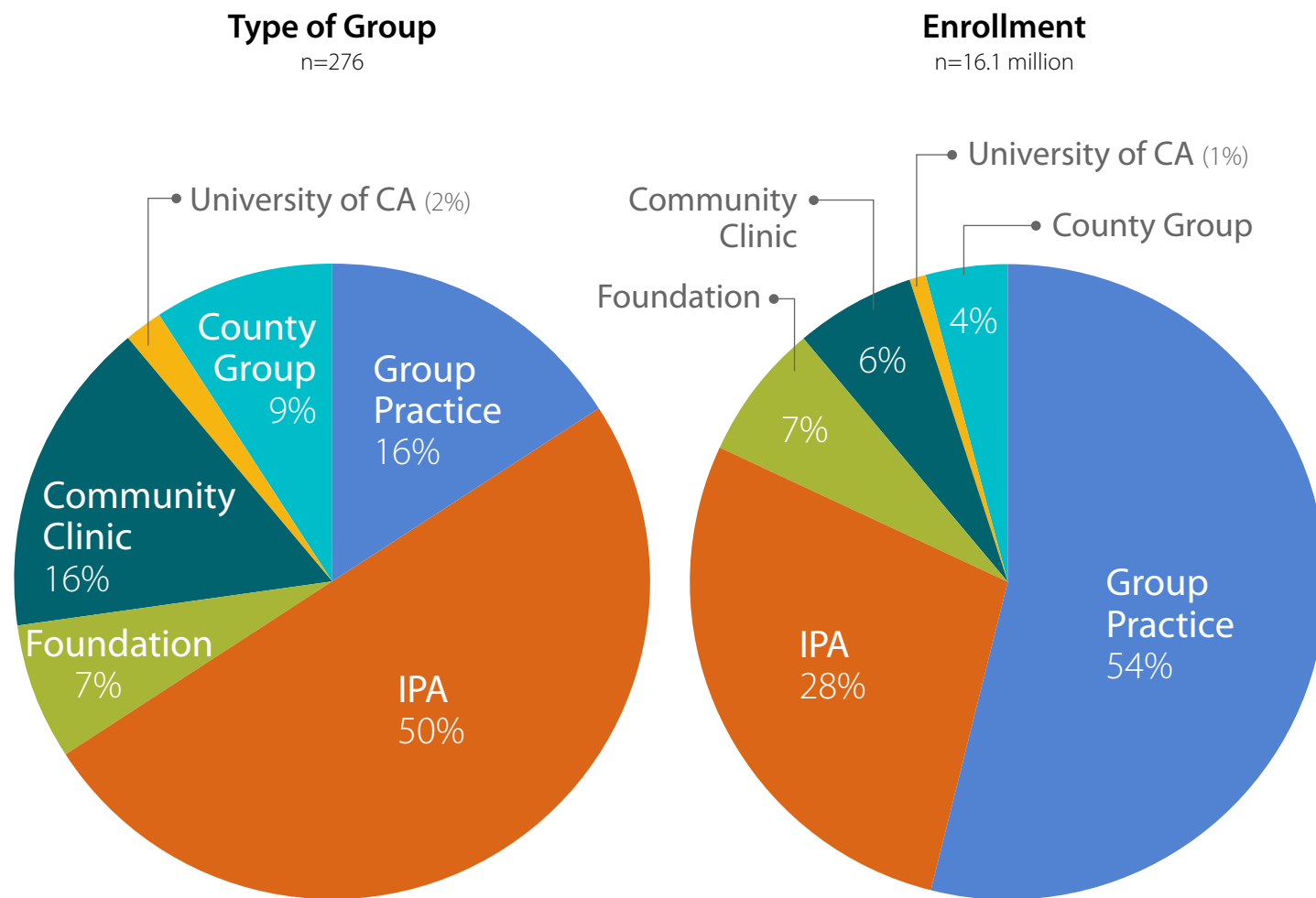
Medical Groups, by Type and Enrollment

California, 2013

California Physicians

Medical Groups

Nearly 280 medical groups provided care to 16 million health maintenance organization (HMO) enrollees in California. While half of these groups were independent practice associations (IPAs), they accounted for only 28% of enrollment. Group practices, in contrast, represented only 16% of medical groups but 54% of enrollment; the disproportionate enrollment served by these groups was largely due to the Permanente medical groups.

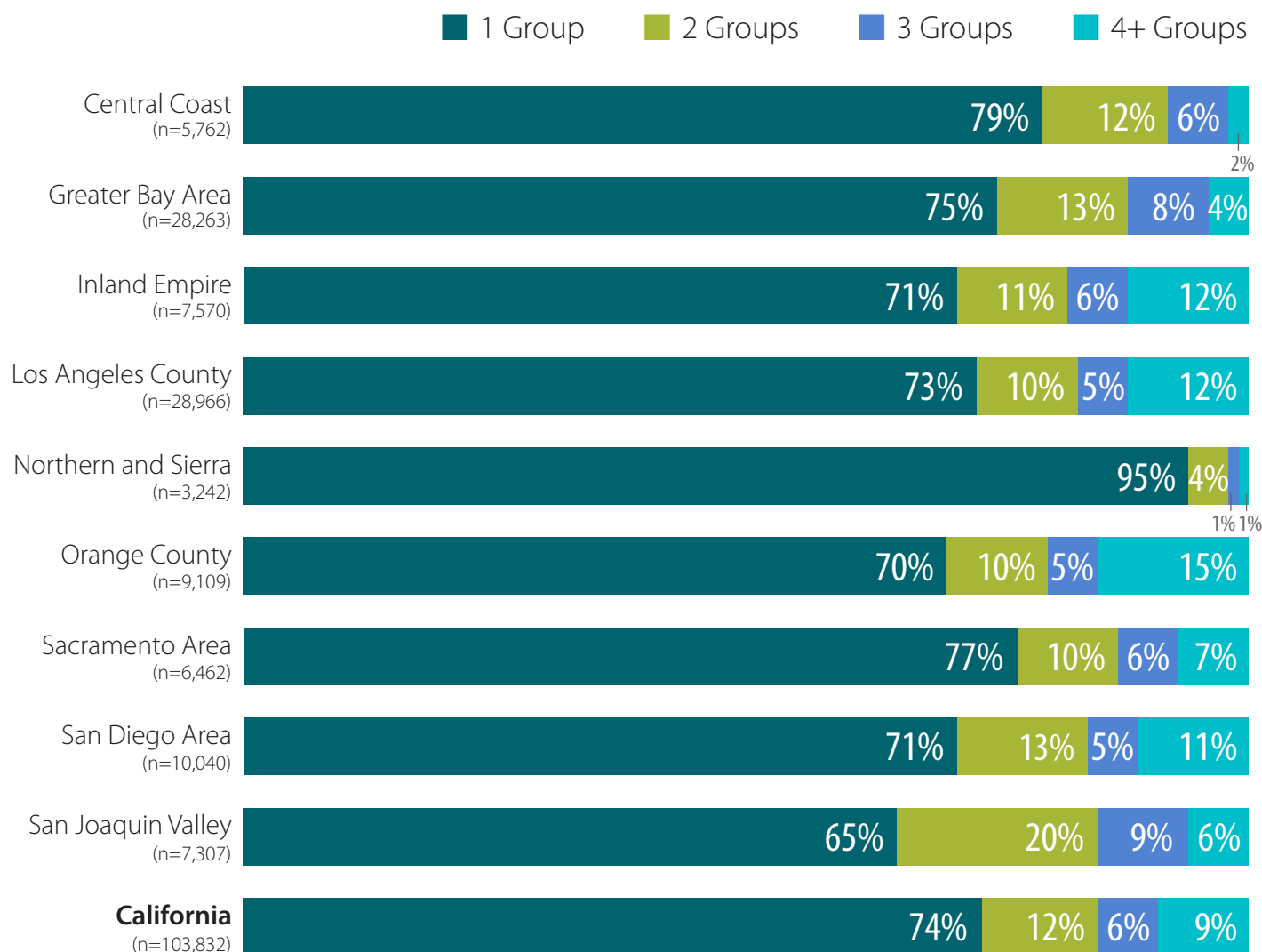


Notes: Data include medical groups with at least six primary care physicians and that accept contracts directly from HMOs. Physicians frequently participate in more than one independent practice association (IPA). See Appendix B for definitions of medical groups. Segments may not add to 100% due to rounding.

Source: Cattaneo & Stroud, 2013 Medical Group Survey, July 2013, www.cattaneostroud.com, accessed July 30, 2013.

HMO Physician Participation in Medical Groups, by Region

California, 2012



Notes: Excludes solo practices. Segments may not add to 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, 2012; private tabulation.

California Physicians

Medical Groups

Of physicians that contracted with a health maintenance organization (HMO) (some 70% of all active physicians), Southern California's physicians were more likely to participate in multiple independent practice associations (IPAs), which are often not exclusive and allow for greater access to HMO contracts.

Medicare Physicians Participating in Quality Initiatives

California vs. United States, 2013

California Physicians

Quality of Care

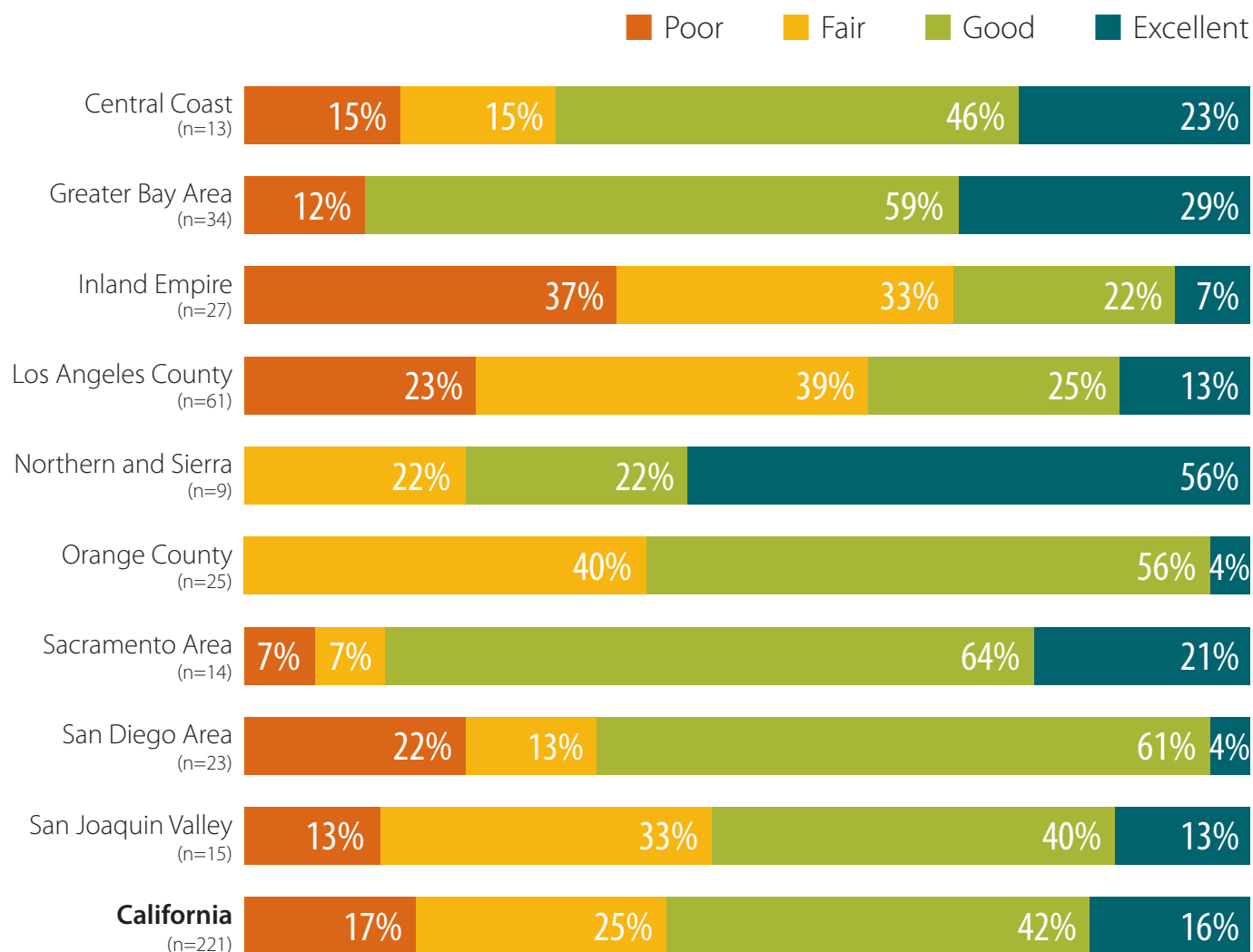
California physicians were less likely to participate in major Centers for Medicare & Medicaid Services quality initiatives relative to physicians nationwide.

	CALIFORNIA			UNITED STATES		
	PCPs	SPECIALISTS	TOTAL	PCPs	SPECIALISTS	TOTAL
Electronic Prescribing (eRx) Incentive Program A pay-for-reporting program that encourages physicians and other healthcare professionals to use electronic prescribing to improve communication, increase accuracy, and reduce errors.	18.2%	12.1%	14.2%	23.6%	16.5%	18.9%
Physician Quality Reporting System (PQRS) A pay-for-reporting program that gives eligible professionals incentives and payment adjustments if they report quality measures satisfactorily.	16.7%	23.5%	21.1%	24.4%	30.4%	28.4%
Electronic Health Record (EHR) Incentive Program A Medicare program that provides incentives and payment adjustments to eligible professionals who use certified EHR technology in ways that may improve healthcare.	14.4%	10.5%	11.8%	20.6%	14.9%	16.8%

Notes: Beginning in 2014, CMS Physician Compare will also include quality of care ratings for group practices. Ratings for individuals will be added in the future.

Source: Centers for Medicare & Medicaid Services (CMS) Physician Compare database, updated July 25, 2013, data.medicare.gov/data/physician-compare, accessed August 12, 2013; private tabulation.

Medical Groups Meeting National Standards of Care by Region, California, 2011



Notes: Each medical group's patient records are compared to a set of national standards for quality of care on an annual basis. Quality measures such as immunizations for children, cholesterol tests for people with heart disease and diabetes, and Pap smears for women are evaluated. Each group is awarded an aggregate quality score of Excellent, Good, Fair, or Poor. Segments may not add to 100% due to rounding. See Appendix A for a list of counties within each region.

Source: Integrated Healthcare Association Pay-for-Performance (P4P) data from Office of the Patient Advocate, Medical Group Ratings, 2011 ratings based on 2010 data, www.opa.ca.gov, accessed August 21, 2013.

California Physicians

Quality of Care

The Northern and Sierra region had the highest portion of physician groups meeting national standards of care. Inland Empire in particular trailed other regions, with 70% of these medical groups rated Fair or Poor.

Accountable Care Organizations and Participants, by Region

California, 2013

California Physicians

Health Care Reform

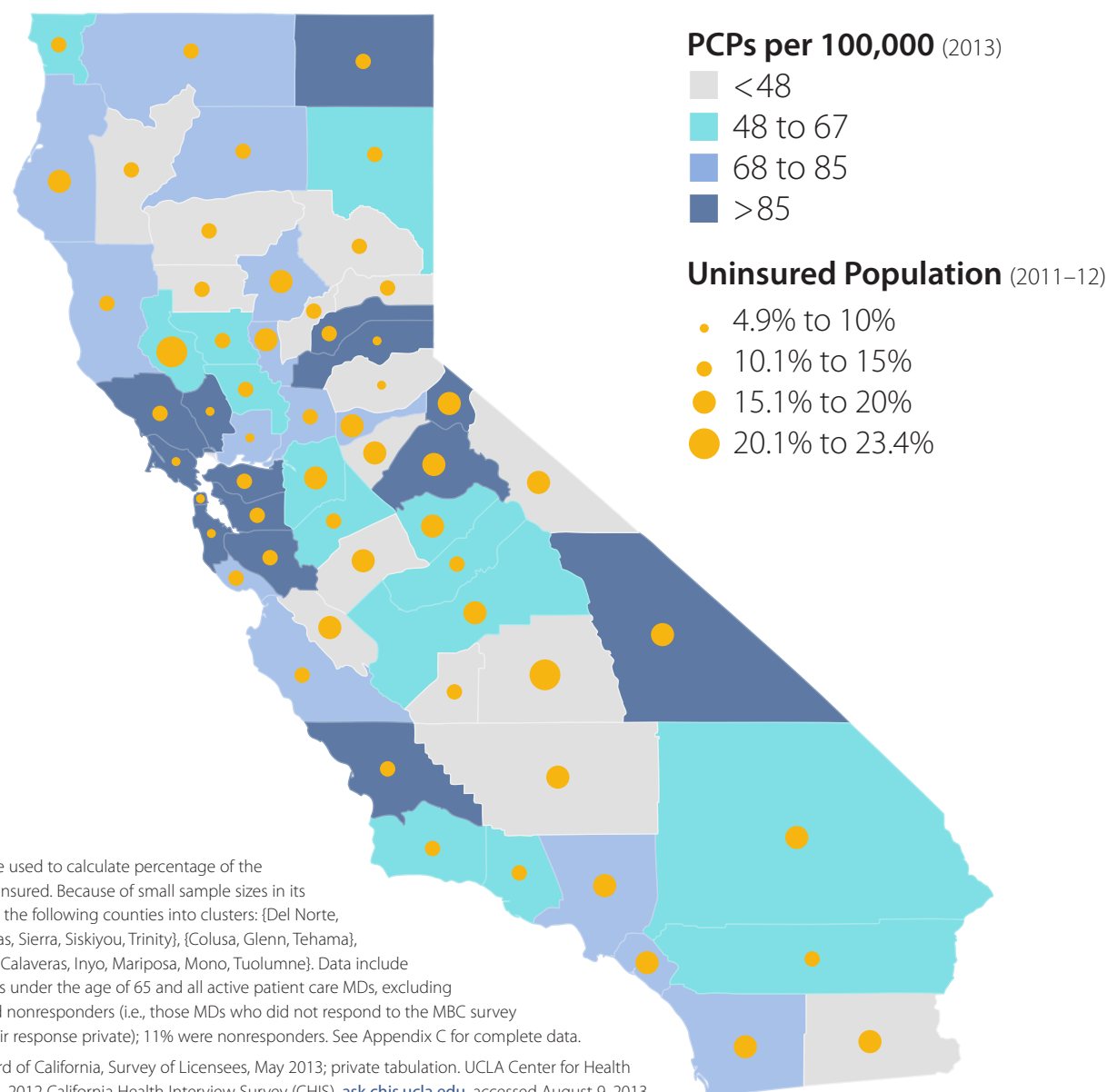
As of 2013, 48 accountable care organizations (ACOs) were operating in California. Slightly more than half of the state's primary care physicians and a quarter of acute care hospitals participated in at least one ACO.

	NUMBER OF...					
	ACOs	LIVES COVERED	CLINIC SITES	PCPs	SPECIALISTS	HOSPITALS
Los Angeles County	20	235,600	180	6,778	20,974	24
Greater Bay Area	12	154,900	82	2,621	6,155	32
Orange County	12	97,300	51	3,092	5,995	11
Central Coast	5	21,400	23	560	954	2
San Diego Area	5	46,000	78	1,677	3,513	9
San Joaquin Valley	4	37,200	23	1,063	1,826	4
Inland Empire	4	20,100	23	1,644	5,388	0
Sacramento Area	3	50,900	26	587	1,351	13
Northern and Sierra	1	2,100	5	14	0	1
California	48	665,500	491	18,036	46,156	96

Notes: Accountable care organizations (ACOs) are groups of physicians, hospitals, and other health care providers who share responsibility for the cost and quality of care for a defined patient population. Individual ACOs may operate in more than one region. PCPs are primary care physicians. See Appendix A for a list of counties within each region.

Source: Cattaneo & Stroud, 2013 Medical Group Survey, July 2013, www.cattaneostroud.com, accessed July 30, 2013.

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



California Physicians

Health Care Reform

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

Data Resources

American Medical Association

Physician Characteristics and Distribution in the US,
editions 1993–2011

American Association of Colleges of Osteopathic Medicine

Annual Osteopathic Medical School Questionnaires, 2000–01 through
2012–13 academic years
www.aacom.org (accessed March 23, 2013)

Association of American Medical Colleges

2013 State Physician Workforce Data Book

Medical Student Education: Debt, Costs, and Loan Repayment Fact Card
www.aamc.org (accessed April 30, 2013)

FACTS Table 27: Total Graduates by U.S. Medical School and Sex,
2009–2013
www.aamc.org (accessed July 14, 2013)

Bureau of Labor Statistics

Occupational Employment Statistics Survey
www.bls.gov (accessed August 7, 2013)

California Department of Consumer Affairs

Licensee List Masterfile, April 20, 2013

Cattaneo & Stroud

2013 Medical Group Survey
www.cattaneostroud.com (accessed July 30, 2013)

Centers for Medicare & Medicaid Services

Physician Compare database
data.medicare.gov/data/physician-compare (accessed August 12, 2013)

The Dartmouth Institute for Health Policy and Clinical Practice Center for Health Policy Research

Medicare Claims-based Reimbursement Measures:
Price, Age, Sex and Race-adjusted
www.dartmouthatlas.org (accessed June 4, 2013)

Department of Managed Health Care

Timely Access Public Records request, 2012 submissions

Integrated Healthcare Association

Pay-for-Performance data from Office of the Patient Advocate-Medical
Group Ratings, 2011 ratings based on 2010 data
www.opa.ca.gov (accessed August 21, 2013)

Kaiser Family Foundation; Urban Institute and Kaiser Commission on Medicaid and the Uninsured

"How Much Will Medicaid Physician Fees for Primary Care Rise in 2013?
Evidence from a 2012 Survey of Medicaid Physician Fees," Zuckerman,
Stephen, and Dana Goin
www.kff.org (accessed July 26, 2013)

Medical Board of California

Cultural Background Survey Statistics
www.mbc.ca.gov (accessed June 21, 2013)

Foreign Language Survey Statistics, 2007 and 2012
www.mbc.ca.gov and www.mbc.ca.gov (accessed June 21, 2013)

Survey of Licensees, May 21, 2013

National Resident Matching Program

Results and Data 2013 Main Residency Match
www.nrmp.org (accessed October 10, 2013)

Sacramento Business Journal

"Northstate Medical School Taps Local Doctors for Expertise,"
Robertson, Kathy
www.bizjournals.com/sacramento (accessed September 12, 2013)

US Census Bureau

American Community Survey, 2007–2011
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, 2012, June 2013

UCSF

"2011 Electronic Health Record Survey: Tabulation of Responses to the
2011 Supplement to the Medical Board of California's Mandatory
Survey of Physicians," Coffman, J.M., and L. Traister, 2013

California Physicians

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FOR MORE INFORMATION



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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.
- **County group.** A county-formed group of physicians that typically provides services through the county health department.
- **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 ten 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)
- Currently licensed. (MBC)

Active patient care physicians are active physicians who:

- Identify their major professional activity as direct patient care. (AMA)
- 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)
- 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 (2013)	UNINSURED POPULATION (2011–12)		PCPs PER 100K (2013)	UNINSURED POPULATION (2011–12)		PCPs PER 100K (2013)	UNINSURED POPULATION (2011–12)
Alameda	97.6	10.3%	Marin	120.1	5.5%*	San Mateo	87.4	5.2%
Alpine	177.0	17.1%	Mariposa	50.6	17.1%	Santa Barbara	64.0	14.0%
Amador	76.1	17.1%	Mendocino	83.4	12.7%	Santa Clara	106.8	10.2%
Butte	73.1	17.7%	Merced	47.5	15.4%	Santa Cruz	74.8	12.7%
Calaveras	40.0	17.1%	Modoc	94.6	13.6%	Shasta	75.9	14.3%
Colusa	50.4	14.0%	Mono	41.8	17.1%	Sierra	0	13.6%
Contra Costa	86.5	11.4%	Monterey	68.9	18.3%	Siskiyou	71.8	13.6%
Del Norte	66.8	13.6%	Napa	151.4	4.9%	Solano	75.5	7.7%
El Dorado	44.7	6.9%	Nevada	86.7	12.4%	Sonoma	89.9	11.2%
Fresno	63.2	15.7%	Orange	78.6	15.2%	Stanislaus	66.2	14.2%
Glenn	35.2	14.0%	Placer	104.4	9.9%	Sutter	81.0	16.2%
Humboldt	73.3	15.9%	Plumas	46.0	13.6%	Tehama	40.7	14.0%
Imperial	36.8	17.5%	Riverside	48.8	14.9%	Trinity	44.6	13.6%
Inyo	85.9	17.1%	Sacramento	78.4	14.8%	Tulare	38.7	20.4%
Kern	46.7	17.4%	San Benito	26.3	16.7%	Tuolumne	86.6	17.1%
Kings	44.5	12.3%	San Bernardino	51.4	16.3%	Ventura	62.0	14.1%
Lake	55.8	23.4%	San Diego	77.9	15.8%	Yolo	61.7	11.9%
Lassen	53.4	13.6%	San Francisco	162.7	8.9%	Yuba	8.2	14.5%
Los Angeles	73.4	17.4%	San Joaquin	51.8	15.7%			
Madera	51.4	12.4%	San Luis Obispo	89.8	11.0%			

*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 the following counties into clusters: ■ {Del Norte, Lassen, Modoc, Plumas, Sierra, Siskiyou, Trinity}, ■ {Colusa, Glenn, Tehama}, and ■ {Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, Tuolumne}. 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); 11% were nonresponders.

Sources: Medical Board of California, Survey of Licensees, May 2013, private tabulation. UCLA Center for Health Policy Research, 2011–2012 California Health Interview Survey (CHIS), ask.chis.ucla.edu, accessed August 9, 2013.