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Trends in the Supply of Dentists in California

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SUMMARY: More than 35,000 dentists were licensed to practice in California in 2012, a number higher than in any other state and representing about 15.6 percent of the total number of dentists nationwide.¹ Despite these numbers, concerns over a sufficient supply of dentists in the state have not diminished. These concerns are due in part to the uneven distribution of dentists in areas with the highest level of need, as well as to demographic and practice characteristics that may limit availability of the dental workforce. This policy brief

provides an overview of changes in selected demographic and practice characteristics of California dentists from 2008 to 2012, as well as in the distribution of dentists in California regions. The findings indicate an outward migration of dentists from California, a slowly aging workforce, and low dentist-to-population ratios in some regions of California. These findings highlight the need for the continuation and fine-tuning of policies aimed at both attracting young dentists to areas with low supply and retaining existing dentists in the state.

An estimated 93 percent (29,646) of dentists with a California license were in active practice in the state in 2012 (Exhibit 1). Another 2,222 resided in California but did not actively practice. The remaining 3,179 dentists practiced or resided outside of California. The number of dentists with a California license but an out-of-state practice address increased by 6 percent between 2008 and 2012. The number of actively practicing dentists increased by 4 percent during this time period, and the number of licensed inactive dentists declined by 2 percent. Inactive dentists include those who are continuing their education post-licensure, are employed in a different occupation, or are retired or disabled but still maintain their license.

The increase in the number of California dentists practicing out of state has been noticeable among those licensed within the

past five years: 86 percent actively practiced in California in 2012, significantly less than the 96 percent who did so in 2008 (data not shown).

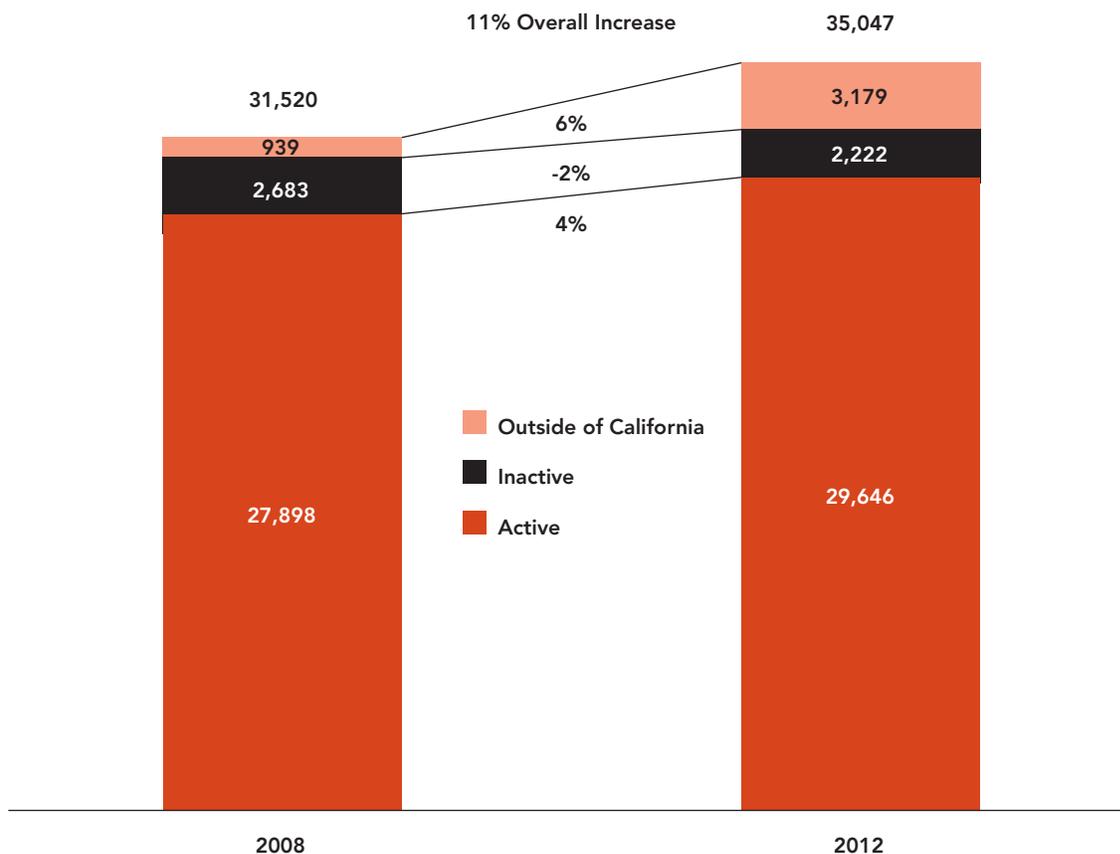
More California Dentists Are Female, and More Are Nearing Retirement

Of the actively practicing dentists in California, 23 percent were nearing retirement age—with thirty or more years of practice—in 2012 (Exhibit 2), 3 percent more than in 2008. In contrast, 13 percent were newly licensed dentists (within five years of graduation), a decline of 4 percent from 2008 to 2012.

In addition to the aging of the dentist workforce, the distribution of female dentists has changed. In 2012, the percentage of California dentists who were female was 30 percent, an increase of 1 percent from 2008. Among newly licensed dentists in 2012,

Exhibit 1

Number of Licensed Dentists in California by License Status and Practice Location, 2008-2012



Source: Authors' analysis of licensure data obtained from California Dental Association.

46 percent were female; in contrast, just 8 percent of those nearing retirement age were female (data not shown).

About 13 percent of active dentists reported more than one practice location in 2012, a rate similar to that in 2008.

More Are Specialists

Approximately 17 percent of California dentists were specialists in 2012, a significant increase of 2 percent since 2008 (data not shown). The proportion of young dentists with a specialty grew 6 percent in 2012.

The specialties reported by young dentists in 2012 were most frequently pediatric dentistry (37 percent) and periodontics (18 percent), followed by endodontics (16 percent), orthodontics (14 percent), and prosthodontics (12 percent).

Among those newly licensed and actively practicing in California, 13 percent were specialists in 2012, versus 7 percent in 2008. In addition, 6 percent had more than one office location in 2012 in California, versus 10 percent in 2008.

Supply, Distribution, and Characteristics of Dentists in California, 2012

Exhibit 2

	Number of Dentists		Characteristics of Active Dentists Practicing in California						
	Licensed	In Active Practice	Percent in Active Practice	Population Estimates ³	Ratio of Active Dentists per 5,000	Percent Female	Percent Newly Licensed (5 yrs)	Percent Nearing Retirement (30+)	Percent with More than One Practice Location
California	35,047	29,646	93%	38,041,430	3.9	30%	13%	23%	13%
Northern and Sierra Counties ^a	920	850	92%	1,404,514	3.0	15%	11%	40%	12%
Greater Bay Area Counties ^b	8,112	7,528	93%	7,344,695	5.1	35%	12%	24%	12%
Sacramento Area Counties ^c	1,655	1,533	93%	2,196,482	3.5	33%	12%	24%	16%
San Joaquin Valley Counties ^d	2,042	1,911	94%	4,046,255	2.4	22%	15%	26%	14%
Central Coast Counties ^e	1,833	1,712	93%	2,292,456	3.7	22%	11%	31%	14%
Los Angeles County	8,492	7,928	93%	9,962,789	4.0	32%	13%	22%	12%
Other Southern California Counties ^f	8,837	8,184	93%	10,794,239	3.8	29%	14%	20%	12%
Outside California	3,156	-	86%	-	-	-	-	-	-

a Butte, Modoc, Alpine, Shasta, Trinity, Mono, Humboldt, Del Norte, Mariposa, Siskiyou, Lassen, Inyo, Mendocino, Lake, Amador, Tehama, Glenn, Colusa, Sutter, Yuba, Calaveras, Nevada, Plumas, Sierra, Tuolumne

b Alameda, Contra Costa, Marin, Napa, Santa Clara, San Francisco, San Mateo, Solano, Sonoma

c El Dorado, Placer, Sacramento, Yolo

d Fresno, Kern, San Joaquin, Stanislaus, Tulare, Merced, Kings, Madera

e Ventura, Santa Barbara, Santa Cruz, San Luis Obispo, Monterey, San Benito

f Orange, San Diego, San Bernardino, Riverside, Imperial

Source: Authors' analysis of licensure data from California Dental Association and U.S. Census Bureau population estimates.³

The Supply of Dentists Varies Across California Regions

There were 3.9 actively practicing dentists per 5,000 population in 2012, or one dentist per 1,282 persons in California (Exhibit 2). This ratio is higher than the national estimate of 3.1 dentists per 5,000, or a dentist for every 1,602 persons,² and it is also higher than the 3.5 figure in 2008 in California.² The Greater Bay Area counties had the highest dentist-to-population ratio (5.1), while the San Joaquin Valley counties had the lowest (2.4). The characteristics of dentists also varied by California region, including notable differences in age and

gender. There were more dentists nearing retirement practicing in the Northern and Sierra counties (40 percent) than in other regions, and more female dentists practicing in the Greater Bay Area counties (35 percent) than elsewhere.

Policy Implications

The decline in the number of California licensed dentists practicing in the state, particularly among newly graduated dentists, coincides with the recent recession. The impact of the recession, as measured by unemployment and income in 2009, was greater in the San Joaquin Valley counties

and Northern and Sierra counties than in other regions in California.⁴ The migration of dentists also coincides with the elimination of Medicaid dental benefits in California and a potential decline in employment opportunities in the safety net.⁵

While the economic conditions in California are likely to improve, attracting young dentists to areas with the lowest supply of dentists is still a challenge. Efforts to attract young dentists to shortage areas have included loan repayment, favorable small business loans, tax incentives, higher Medicaid reimbursement rates, and prorated loan repayment based on the number of Medicaid patients. However, these solutions have had variable success.⁶ The shortcomings of these strategies should be addressed so that their effectiveness can be improved.

The increasing number of female dentists may result in some changes in practice patterns, since past data indicate that female dentists frequently have had shorter hours of work and a higher rate of provision of preventive care.⁷ However, more recent data are needed to determine whether those patterns are still relevant.

The higher rate of specialization, particularly among younger dentists, may reduce access to general oral health care, although some specialists provide general care in addition to specialty care. Still, higher rates of specialization could lead to increased provision of specialty services overall and changes in the mix of services provided by general dentists.

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Data and Methods

The list of all licensed dentists in California in 2008 and 2012 was provided by the California Dental Association (CDA; available from Dental Board of California). These data included information on membership status, date of licensure, and practice addresses. Active status was indicated for CDA members (58 percent) and was assumed for nonmembers with a practice address. Active status was estimated for the 15 percent (5,315) who did not have a practice address. Active status was estimated through modeling using characteristics of members with known active status. Data on dentists practicing in more than one location were limited to dentists who reported any office addresses. Specialty was captured from the degree reported by dentists and may be subject to underreporting.

The population of each county was obtained from the U.S. Census Bureau. Most differences reported between 2008 and 2012 are stated in relative percentages rather than as absolute differences. Differences that were significant at $p < 0.05$ or lower are reported.

The data in this policy brief present a snapshot of licensed and actively practicing dentists in California in the third quarter of 2008 and the second quarter of 2012. Discrepancies with other estimates and time periods can occur due to continuous changes in licensure, practice status, and reported practice location of dentists. Small discrepancies in the number of active dentists with data previously published in 2009 are due to refinements in modeling this characteristic. The estimated supply of dentists may not accurately depict access in a given county, as dentists in neighboring counties may be within a short driving distance.

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Endnotes

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