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Better Together: Co-Location of Dental and Primary Care Provides Opportunities to Improve Oral Health

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SUMMARY: Community Health Centers (CHCs) are one of the principal safety-net providers of health care for low-income and uninsured populations. Co-locating dental services in primary care settings provides an opportunity to improve access to dental care. Yet this study of California CHCs that provide primary care services shows that only about one-third of them co-located primary and dental care services on-site. An additional one-third were members of multisite organizations in which at least one other site provided dental care. The remaining one-third of CHC sites had no dental care capacity.

Policy options to promote co-location include requiring on-site availability of dental services, providing infrastructure funding to build and equip dental facilities, and offering financial incentives to provide dental care and recruit dental providers.

Access to oral health care for low-income populations is a challenge for multiple reasons. Among the contributing factors are relatively low rates of dental insurance coverage and low participation by private dentists in Medicaid (Medi-Cal/Denti-Cal in California), the primary source of coverage for low-income populations.[1] Community Health Centers (CHCs) are major safety-net providers for uninsured residents and Medicaid enrollees in California.

Many California CHCs are licensed as Federally Qualified Health Centers (FQHCs) and FQHC Look-Alikes, which are required under Section 330 of the Public Health Service Act to provide comprehensive primary health services at their facilities to all individuals who seek care, regardless of ability to pay. FQHC organizations are required to provide preventive[2] (rather than comprehensive) dental services either on-site or through arrangements with other providers. The Health Resources and Services Administration (HRSA) has encouraged FQHCs and FQHC Look-Alikes to provide oral health care on-site to improve access to oral health care for underserved populations.[3]

The co-location of medical and dental providers on-site increases the ease of use of dental care and enhances the opportunity to provide whole-person and integrated care.[2] Co-location facilitates timely delivery of diagnostic, preventive, and therapeutic services to improve patient health and reduce inefficiency in care delivery, embracing the underpinnings of the Triple Aim of better care, better health, and lower costs emphasized by the Affordable Care Act. Emerging evidence linking poor oral health to poor outcomes for chronic conditions such as diabetes and heart disease further underscores the potential value of integrating oral health care and primary care services to provide highly accessible, comprehensive, and whole-person care to populations most in need.

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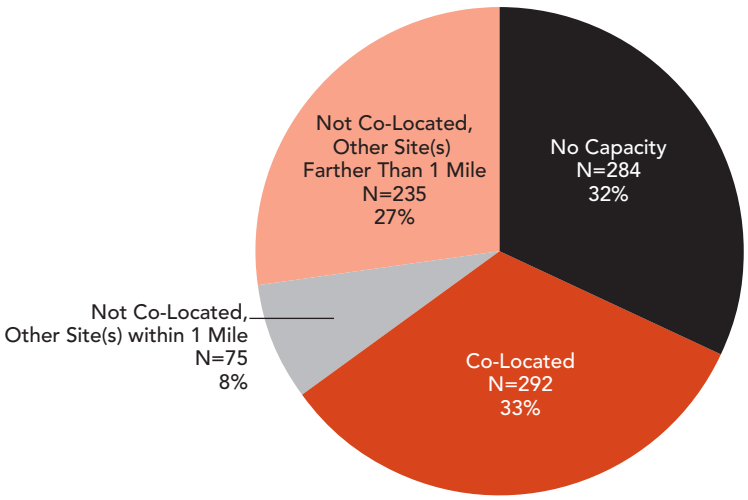
Funding for this policy brief was provided by a grant from First 5 LA.

Exhibit 1 **Capacity for Provision of Dental Care in California Community Health Centers, 2013**



Source: UCLA Center for Health Policy Research analysis of 2013 OSHPD data.

National data indicate that approximately 80 percent of FQHC single or multisite HRSA grantee organizations provided on-site dental services in at least one clinic site within their organization in 2008.[4] In 2014, these FQHC organizations provided dental services to 21 percent of their patients nationally, and to 20 percent in California.[5]

To assess the status of dental care capacity in California CHCs, we examined 2013 data from the California Office of Statewide Health Planning and Development (OSHPD) for CHCs that provided primary care.[6] Of the 1,136 licensed CHC clinic sites that provided data to OSHPD and were in operation in 2013, 886 (78 percent) were included in this study. These included FQHC (589) and FQHC Look-Alike (68) clinic sites, as well as 229 community clinics that provided primary care.[7] Dental capacity was defined either as clinics' having dentists or alternative practice dental hygienists on staff or reporting dentist encounters in the absence of having such providers.

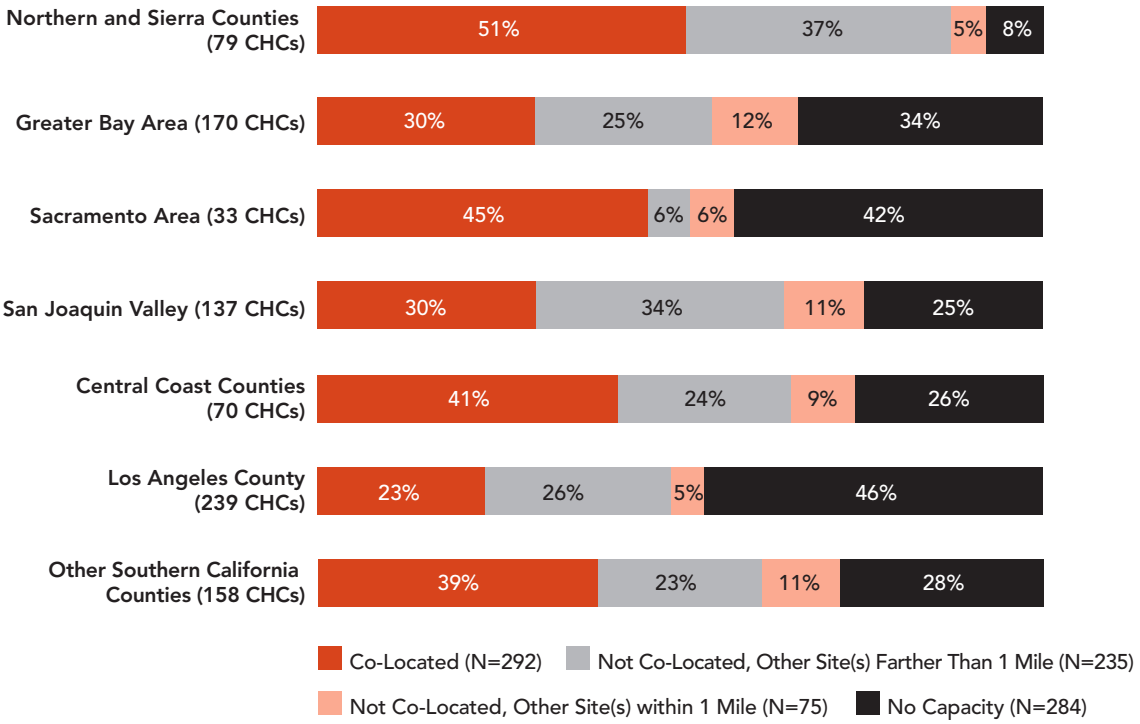
One-Third of California Community Health Centers Provide Co-Located Dental and Primary Care

Of the 886 CHC clinic sites included in this study, 33 percent reported having some level of full-time equivalent (FTE)[8] dentists and alternative practice hygienists on-site and were identified as co-located (Exhibit 1).[9] Approximately one-third of CHC sites lacked co-located dental services but were part of multisite CHC organizations that had dental capacity in either a nearby site (within one mile, 8 percent) or at a more distant site (more than one mile, 27 percent). Roughly one-third of California CHCs (32 percent) had no dental providers on-site or within the larger CHC organization.[10]

Forty percent of FQHC clinic sites were co-located, and another 49 percent reported that dental services were available at another site within their organization. Among FQHC Look-Alike clinic sites, 28 percent were co-located, and another 13 percent reported that another site within their organization provided dental care. Among the remaining

Geographic Distribution of Community Health Centers by Capacity for Co-Located Dental Care, California, 2013

Exhibit 2



Source: UCLA Center for Health Policy Research analysis of 2013 OSHPD data.

Notes: Northern/Sierra region counties: Butte, Tuolumne, Inyo, Calaveras, Amador, Mariposa, Mono, Alpine, Shasta, Sutter, Del Norte, Siskiyou, Lassen, Trinity, Modoc, Plumas, Sierra, Humboldt, Tehama, Glenn, Colusa, Nevada, Mendocino, Yuba, Lake

San Joaquin Valley counties: Fresno, Kern, San Joaquin, Stanislaus, Tulare, Merced, Kings, Madera

Greater Bay Area counties: Santa Clara, Alameda, Contra Costa, San Francisco, San Mateo, Sonoma, Solano, Marin, Napa

Sacramento Area counties: Sacramento, Placer, Yolo, El Dorado

Central Coast counties: Ventura, Monterey, Santa Barbara, Santa Cruz, San Luis Obispo, San Benito

Other Southern California counties: Orange, San Diego, San Bernardino, Riverside, Imperial

CHCs, only 15 percent were co-located, and 6 percent reported that another site within their organization provided dental care (data not shown).

Northern and Sierra Counties Had Proportionally More CHCs with Co-Located Services

Los Angeles County had the smallest proportion of CHCs with co-located dental clinics (23 percent; Exhibit 2), and Northern and Sierra counties had the largest proportion (51 percent). Areas with higher proportions of CHCs with no dental capacity included Los Angeles County (46 percent) and the Sacramento Area (42 percent).

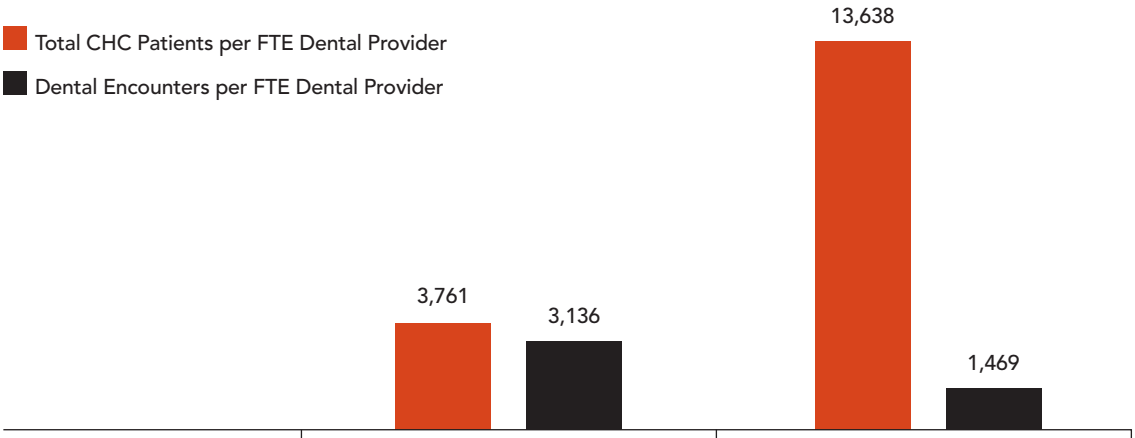
Dental Care Capacity at Some Co-Located CHC Sites Was Very limited

The majority of co-located CHCs (77 percent, or 225 CHCs) had at least one half-time FTE dental provider and 1,000 dental encounters in 2013. This is equivalent to an average of 19-20 dental encounters per week, or a minimum threshold for providing a meaningful amount of dental care. This threshold is equivalent to about 40 percent of the benchmarks for productivity expected from dentists working full-time in CHCs.[11]

Among co-located FQHC sites, 82 percent exceeded the 1,000-visit threshold. Among co-located FQHC Look-Alike sites, 84 percent exceeded this threshold.

Exhibit 3

Number of FTE Dental Providers in Co-Located California Community Health Centers by Number of Dental Encounters and Provider Type, 2013



	Sites with More Than 1,000 Dental Encounters	Sites with 1,000 or Fewer Dental Encounters
Total CHC Patients	1,939,358	218,351
Total Dental Encounters	1,617,361	23,511
FTE Dental Provider/FTE Primary Care Provider Ratio	0.41	0.07

Source: UCLA Center for Health Policy Research analysis of 2013 OSHPD data.

Dental care encounters accounted for 21 percent of total encounters by co-located CHC clinic sites (data not shown).

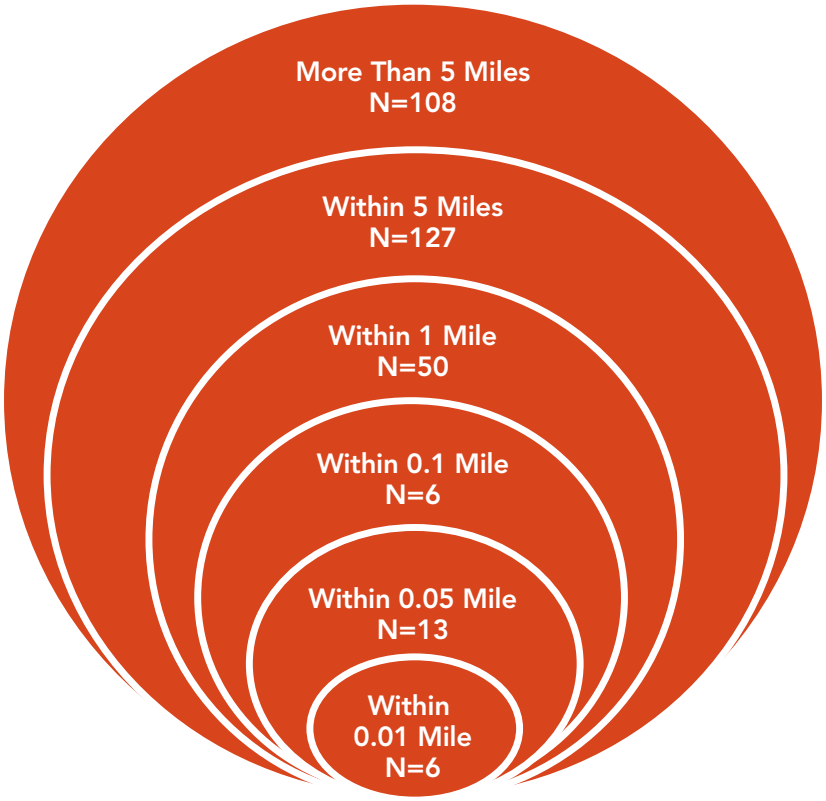
On average, the co-located sites with productivity above the minimum threshold had a ratio of one full-time equivalent (FTE) dental provider on staff (including dentists and registered hygienists in alternative practice) per 3,761 CHC patients (Exhibit 3). These were larger CHCs that collectively provided health care to more than 1.9 million patients, had 1.6 million dental encounters, and had about 0.4 FTE dental primary care providers per every FTE medical primary care provider in 2013. These sites employed an average of 2.3 FTE dental providers, 0.4 FTE dental hygienists, and 4 FTE dental assistants in 2013 (data not shown).

In contrast, sites with more limited dental productivity had a ratio of one FTE dental provider per 13,638 CHC patients, had fewer patients in general, and provided fewer dental encounters (Exhibit 3). These sites employed 0.24 FTE dental providers, 0.01 FTE hygienists, and 0.25 FTE dental assistants (data not shown).

While productivity benchmarks vary, the average is estimated to be 2,500-3,200 encounters per FTE dentist per year.[12]

Number of Community Health Centers without Dental Capacity by Distance to a Co-Located Site in Their Organization, 2013

Exhibit 4



Source: UCLA Center for Health Policy Research analysis of 2013 OSHPD data.

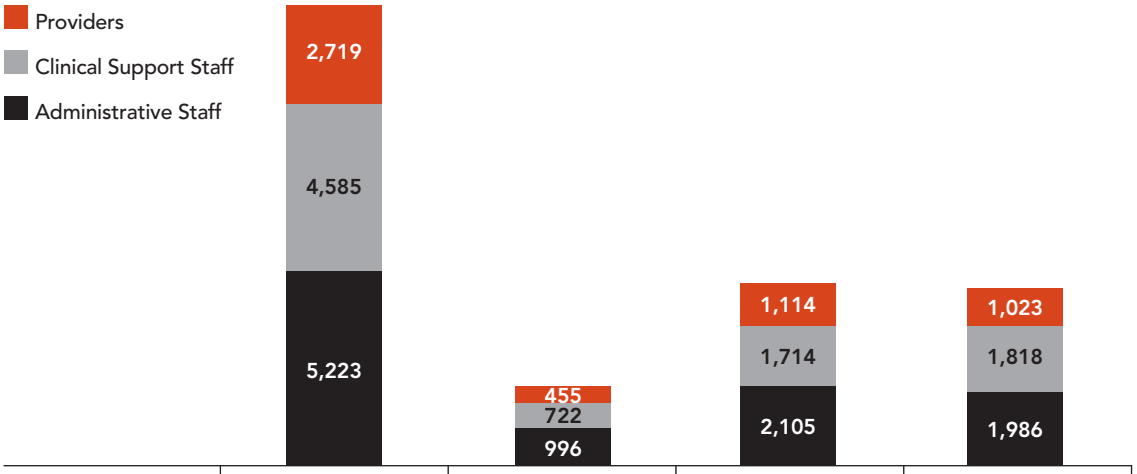
Many CHCs without Dental Capacity Were Far from the Nearest Site with Dental Services

Of the 886 CHC clinic sites in this study, 751 (85 percent) were part of organizations with clinics in multiple locations. Of the CHC clinics that were part of multisite organizations, 257 had co-located primary care and dental services. Another 310 clinics did not have co-located services but were part of an organization that provided dental services at another clinic site. An additional 184 clinics were part of CHC organizations that had no sites with dental capacity within the organization. A total of 48 sites provided only dental services without co-located primary care within these multisite organizations (data not shown).

Exhibit 4 shows the distance to the nearest co-located or dental-only site for members of multisite organization clinics that had no on-site capacity to provide dental services. Many sites (50) were within one mile of a co-located or dental-only site within their organization, and 6 sites were very close—i.e., essentially next door. On the other hand, 108 sites with no on-site dental capacity were more than five miles away from a co-located or dental-only site within their multisite organization.

Exhibit 5

Characteristics of California Community Health Centers by Dental Capacity, 2013



	Co-Located (N=292)	Not Co-Located, Other Site(s) within 1 Mile (N=75)	Not Co-Located, Other Site(s) Farther Than 1 Mile (N=235)	No Capacity (N=284)
Total Patients	2,157,709	412,428	1,059,274	1,310,568
Total Encounters	7,523,333	1,345,561	3,480,662	3,302,859
Total Revenues	$1,697,074,606	$265,712,148	$608,207,738	$519,362,208
Medi-Cal as Percent of Total Encounters	48%	46%	50%	33%
Percent of Patients Ages 0-4	12%	11%	13%	5%
Ages 20 & Older	63%	66%	64%	76%

Source: UCLA Center for Health Policy Research analysis of 2013 OSHPD data.

Community Health Centers' Size, Productivity, and Revenues Varied by Dental Capacity

Co-located CHCs were larger facilities than clinics without on-site dental capacity. Co-located sites had at least 2.5 times more providers, clinical support staff, and administrative staff than those with no dental capacity (Exhibit 5). They also had 1.6 times more patients, 2.3 times more encounters, and 3.3 times more total revenue than CHCs lacking dental service capacity. Similarly, the percent of Medi-Cal encounters was greater among CHCs with co-located sites (48 percent) than among those with no dental capacity (33 percent). Compared to clinics with no dental capacity, clinics with co-located dental services had more patients ages 0-4 (12 percent vs. 5 percent) and fewer patients ages 20 and older (63 percent vs. 76 percent).

CHCs that were not co-located but that had dental capacity elsewhere in their multisite organization also were smaller than co-located sites in terms of numbers of FTEs, patients, encounters, and revenue. However, these CHCs had a percent of Medi-Cal encounters and a ratio of patient ages similar to those of sites with co-located dental services.

Opportunities Exist for Improving Access to Dental Care in Community Health Centers

This analysis highlights opportunities to improve access to oral health care in California CHCs. Only one-third of CHC clinic sites had co-located dental services in 2013, with significant regional variation across the state. Most CHC sites that were

part of multisite organizations but did not provide co-located dental services were not located within easy walking distance of another facility with dental capacity. Distance—even relatively small distances within urban areas—may be a substantial barrier to successful referrals and access to dental care within multisite organizations. CHCs with co-located sites had more resources in terms of providers, higher levels of productivity, and more diverse revenue sources than CHCs without dental capacity.

Co-location of dental providers in primary care settings can greatly improve accessibility of dental care in several ways. Patients can receive same-day visits without the need to take multiple days off work for separate visits at different sites. Medical providers can screen patients for oral health risk and disease and more easily refer higher-risk patients within their organization to dental providers who are willing to see them, and vice versa. Dental and medical providers can jointly manage complex patients and can benefit from interactions that enhance their knowledge of medical and dental fields. Medical and dental practices can be aligned to provide coordinated, efficient, patient-centered care that addresses both the medical and oral health needs of patients in a single setting.

CHC sites without on-site dental capacity that are part of larger multisite organizations can refer patients to another site within the organization for oral health care. However, patients may not follow up with referrals due to transportation barriers and inability to take additional time from work, which can contribute to higher no-show rates. Referred patients may also encounter long wait times at referral facilities, which can be avoided with increased capacity due to co-location.

Co-locating dental care within primary care settings requires additional financial resources for dental infrastructure, personnel, and administrative support but enhances patient-centered care. Co-location is more critical in areas with lower supplies of private or other public dental providers, as well as where there is higher need for dental care within the CHC's service area and primary care patient population. The decision by organizations to co-locate is likely to have a significant and positive impact on access to dental care and improved oral health of the populations who depend on CHCs for their care.

Policy options to promote co-locating dental care in CHCs include requiring on-site availability of dental services for FQHC and FQHC Look-Alikes, infrastructure grants for building and equipping dental facilities, reimbursement payments that help create a business case for providing dental services to high-risk segments of the population, loan forgiveness programs that help CHCs recruit dental providers, or combinations of these and other options.

Methodology

The data used in the analyses for this policy brief were obtained from the California Office of Statewide Health Planning & Development (OSHPD) Primary Care Clinics Annual Utilization data for 2013. We included data from CHCs that reported data in 2013, were operational, and employed or contracted with primary care providers (physicians, physician assistants, or nurse practitioners). Mobile sites were excluded (15 medical and 2 dental). Distances between sites within the same organization were calculated using R and the Meeus great circle distance. Sites that provided only dental services were included in the "distance to a dental site" calculations among multisite organizations.

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Endnotes

1 Pourat N, Roby D, Wyn R, Marcus M. Characteristics of Dentists Who Provide Dental Care to Publicly Insured Patients. *Journal of Public Health Dentistry* 67(4):208-16, Fall 2007.

2 Required preventive services include oral hygiene instruction, oral prophylaxis (teeth cleaning), and topical application of fluoride.

3 U.S. Department of Health and Human Services, Health Resources and Services Administration. *Integration of Oral Health and Primary Care Practice*. February 2014. Accessed on 4/18/2015 from *http://www.hrsa.gov/publichealth/clinical/oralhealth/primarycare/. https://www.google.com/.*

4 Institute of Medicine. *Improving Access to Oral Health Care for Vulnerable and Underserved Populations*. July 2011. Accessed on 6/23/15 from *http://www.hrsa.gov/publichealth/clinical/oralhealth/improvingaccess.pdf*.

5 U.S. Department of Health and Human Services, Health Resources and Services Administration. 2014 Health Center Data: *http://bphc.hrsa.gov/uds/datacenter.aspx*.

6 Primary care was defined as salaried or contract PCPs. PCPs included physicians, physician assistants, and nurse practitioners.

7 Free clinics and CHCs that did not employ or contract with PCPs were excluded from the analyses unless indicated. The latter group included dental-only clinics, mobile clinics, and other specialized clinics that did not employ or contract with PCPs.

8 A full-time equivalent clinician or staff may reflect one individual working 40 hours/week or two or more individuals each working part-time but adding to 40 hours/week.

9 257 of these sites were part of multisite organizations, and 35 were single-site organizations.

10 184 of these sites were part of multisite organizations, and 100 were single-site organizations.

11 DentaQuest Institute's Safety Net Solutions Expert Advisor Core Slide Deck, personal correspondence, 6/26/15.

12 Neale J, Martin RF, Balzer J, Siegal M, Raymond C, Isman B. *Safety Net Dental Clinic Manual*. Accessed on 9/13/15 from *http://dentalclinicmanual.com/chapt6/3_6.html#visitsperdent*.