The Continuing Need for Oral Health Services

Capacity and Utilization in Santa Cruz and Monterey Counties

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April 2022

dientes COMMUNITY DENTAL

Acknowledgements

The report *The Continuing Need for Oral Health Services, Capacity and Utilization in Santa Cruz and Monterey Counties* is possible because of funding from Dientes Community Dental Care and First 5 Santa Cruz County.

A special thanks to Oral Health Access Santa Cruz County members: First 5 Santa Cruz County, County of Santa Cruz Health Services Agency, and Central California Alliance for Health for their commitment to a deep understanding of the need for oral healthcare for all. We would like to particularly acknowledge the help of Central California Alliance for Health for providing several pieces of data for this study. Representatives from various other organizations serving both counties also graciously responded to requests for information, and in some cases, reviewed and provided comments on draft sections of this report.

The needs assessment report was researched and produced by Barbara Aved Associates, a healthcare consulting firm committed to improving oral health care in California.

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EXECUTIVE SUMMARY

In most cases, dental disease is preventable with efforts like oral health education, good homecare, dental cleanings and exams, fluoride treatments and sealants. Yet, lack of knowledge about the importance of oral health and barriers such as financial constraints and fear of the dentist hinder people from getting regular dental care. Importantly, people with the least access to preventive services and dental treatment also have greater rates of oral diseases.

This report presents updated findings from the comprehensive *Oral Health Needs Assessments* Dientes Community Dental Care commissioned in 2016 to benefit Santa Cruz and Monterey Counties. The purpose was to take another look at the key community indicators associated with oral health in the region, including access and utilization, to document current needs, resources, and stakeholder progress. The study was carried out by Barbara Aved Associates between January and April 2022. The scope of the assessment focused on children, adults and seniors not living in nursing or other facilities.

Existing research, data retrieval and a limited number of interviews with local providers and organizations were the main sources of information for the present study. Time and resource limitations did not allow for another community dental survey or formal key informant interviews. The findings and recommendations provide an opportunity for Oral Health Access Santa Cruz County to continue to address needs and gaps through continuing collaborative efforts.

Key Findings*

Leadership and Collaboration

- The multi-stakeholder group Oral Health Access Santa Cruz County, launched by Dientes following the original assessment and now supported by Santa Cruz County, has actively worked to improve oral health and implement strategic plan objectives. It is clear the partners have remained engaged and committed.
- Infusion of new state funding for oral health from Prop. 56 has expanded capacity for providing oral health education and facilitating access to services in Santa Cruz and Monterey Counties.

Regional Profile Factors

- Projected population change between 2014 and 2021 indicates negligible growth in most cities in Santa Cruz and Monterey Counties.
- Agricultural employment estimates for 2020 show about 52,000 farm workers live and work in Monterey County for all or part of the year, and up to 20,000 in Santa Cruz County.
- Being employed and having better overall health are inexorably linked due to the social determinants of health. In January 2022, 6.2% in Santa Cruz County and 9.0% in Monterey County were unemployed, compared to 5.5% statewide.

*To streamline the Executive Summary, references are only included in the body of the report.

- Capacity for English may influence the use of oral health services; 21.1% of K-12 students in Santa Cruz County are reported to be English-Language Learners, and 33.8% in Monterey County.

- Santa Cruz County households have a higher income than the state on average, but cost of living factors have to be taken into account. It has been estimated that it would cost 115% of the average Santa Cruz worker's wages for a year to buy a median-priced home in that city.

- The demand for dental care is closely linked with having dental insurance; on average, only 58% of adults in the region currently have dental insurance coverage. However, May 2022 expanded Medi-Cal dental benefits for adults will improve access to coverage for this population.

- Studies show water fluoridation can reduce the number of cavities children get in their baby teeth by as much as 60% and can reduce tooth decay in adult teeth by nearly 35%. There are no public water systems in Santa Cruz and Monterey Counties that fluoridate their community drinking water supplies.

- The adverse effects of tobacco use on oral health are well established. In 2020, 10.4% of adults in both Santa Cruz and Monterey Counties, higher than the state average of 6.5%, reported they currently smoked.

Prevalence of Oral Disease

- On average, 18% of Santa Cruz County kindergarteners who received a screening in 2018-20 showed evidence of untreated dental decay, a drop from 24% in 2012-14. In Monterey County, 17.8% (up from 15.5%) of children had evidence of untreated dental decay when screened.

- In 2020, 28.5% of of teen students in Santa Cruz County reported missing school days due to a dental problem, and in Monterey County 16.6% did compared to 10.8% statewide.

- About 42% of all Santa Cruz County adults rated the condition of their teeth as "excellent" or "very good," but only about 29% of adults with low-income rated their teeth this highly, with 6.9% saying they had no natural teeth.

Access Issues

- Awareness of the importance of oral health in Santa Cruz County has improved significantly over the last 5 years as a result of leadership and commitment from community partners; opportunities continue to exist for expanding access to services.

- In 2019 and 2020, there was a total of 3,362 emergency department (ED) visits in Santa Cruz and Monterey Counties for a dental reason; about two-thirds of these visits were for an avoidable dental condition. Relative to their population, African Americans had the highest rate of the preventable ED dental visits.

- The percentage of Head Start preschool-age children screened who needed treatment in Santa Cruz County was twice as high as in Monterey County in 2020-2021, 18% vs. 7.6%; however, a similar proportion of children in both counties, about 74%, were able to receive the treatment identified as a result of the screening.

- According to Medi-Cal claims data, 41% fewer individuals in Santa Cruz and 25% fewer in Monterey who had been approved for having needed general anesthesia for a dental procedure followed through with actually getting the treatment. While access to dental general anesthesia services in the region remains a challenge, the referrals that occurred during COVID-19 may have been impacted by the pandemic.

- While the ratio of private dentists to the population is similar to the statewide average in both counties, neither represents adequate capacity. The 13 dentists in Santa Cruz County and 21 in Monterey County listed on the state website as current Medi-Cal dental providers represent 6% and 7%, respectively of the local dentist supply, though the website information contains some inaccuracies about these practices.
- Community dental clinics play a critical role as safety net providers for children and adults with Medi-Cal or no insurance; in 2020 the clinics reported serving 16,656 individuals in Santa Cruz County and 16,177 in Monterey County.

Dental Services Utilization

- In 2020, the California Health Interview Survey (CHIS) showed 78% of Santa Cruz County children and 56% of Monterey County children went to the dentist within the last 6 months; the California average was 59.2%.
- For children aged 0-20 with Medi-Cal, utilization of dental services in both counties in 2019, about 64%, was higher than in California at 50.4%.
- While annual dental visits by 1-2-year-olds with Medi-Cal have increased each year since 2013 in both counties, the improvement in Santa Cruz was striking: from 37.4% to 57.2% in 2019, likely due to the promotion of First Tooth First Birthday by Oral Health Access Santa Cruz County.
- Reported dental sealant use among Santa Cruz County children with Medi-Cal has declined every year from 2013 to 2019, and on average was lower than among children in Monterey County, which remained steadier.
- Despite COVID, 58.0% of the general population of Santa Cruz County residents reported to CHIS in 2020 they visited the dentist within the last 6 months; in Monterey County, 37.6% reported doing so. The adults with low-income in both counties had less recent visits.
- 27.8% of Monterey County adults with low-income, vs. 5.9% statewide, told CHIS they had “never" made a dental visit; the percentage in Santa Cruz County was too low to report due to small sample size.
- In 2016-18, 57% of pregnant people with a recent live birth in Santa Cruz County and 52% in Monterey County reported to CHIS they had made a dental visit during their pregnancy. The goal is for all pregnant people to see a dentist during pregnancy.
- After age 20, dental visits–particularly preventive visits– for adults with Medi-Cal markedly fell in both counties. Between 2013 and 2019, 17.5% of 21-24-year-olds on average visited the dentist for an annual dental exam, and only 9.1% on average had a preventive dental visit.
- Among Santa Cruz County children aged 1-2, White children made the lowest proportion of dental visits, though these children had similar rates to Monterey and the rest of the state. Asians and Whites had the lowest utilization rates among young adults 21-34. The ethnic differences were very small among Santa Cruz County’s older adults.
- About 77% of children in Head Start in both counties received a professional dental exam in 2020-2021; in 2014-15, the proportion in Santa Cruz had been 92.3%, a drop off due to COVID and dental office closures.
- Dental encounters reported to the state show the visits per patient ranged from 2.98 at Dientes to 1.26 at Salud Para La Gente (Salud) to 2.41 at Clinica de Salud del Valle de Salinas (CSVS), a drop in utilization due to the pandemic.

The proportion of children who received dental sealants from the clinics rose noticeably between 2016 and 2017, and generally continued to rise through 2020 at Dientes. While the *number* of children receiving sealants at Salud decreased after 2017, the *proportion* who received them increased. This was not the case for CSVS where the proportion declined.

Recommendations

The following recommendations, fully described in the last section of this report, derive from the needs assessment findings. The recommendations have implications for strategic planning and offer suggestions to local organizations for improving oral health and expanding access to services. There is no particular significance to their order.

1. Continue the momentum created by Oral Health Access Santa Cruz County to capitalize on the various strengths of each member organization.
2. Continue to expand access to dental services in high-need communities.
3. Explore opportunities to increase utilization among children and youth in foster care.
4. Create specific marketing strategies that target young adults, particularly those with Medi-Cal, as a special practice demographic.
5. Expand access to specialty care including hospital and sedation dentistry, endodontics, and oral surgery.
6. Work toward reducing use of the emergency department (ED) for preventable dental conditions by expanding education to CCAH members about access to dental providers and the importance of a dental home.
7. Support and raise awareness of alternatives to general anesthesia like the use of Silver Diamine Fluoride (SDF) on young patients.
8. Increase efforts to educate parents and other caregivers about the importance of oral health.
9. Increase the proportion of communities with fluoridated community water systems by working with local jurisdictions to pass statutes on fluoridating water systems.
10. Share the highlights from the current needs assessment with policymakers, community leaders, advocates and stakeholders.
11. Include community input in future updates of the Oral Health Needs Assessment.
12. Encourage Monterey County to start an Oral Health Access group on the example of the Santa Cruz County committee's work.
13. Continue to advocate for dental benefits to be added to Medicare and for increased Medi-Cal Dental reimbursement rates for private dentists as a way to increase the number of dentists who accept public insurance, thereby increasing access to care.

INTRODUCTION

The importance of oral health to a person's overall health is now widely recognized. Research shows the association between oral disease and diabetes,[1] cardiovascular disease,[2] and even adverse birth outcomes.[3] There is also a greater appreciation for the psychosocial impact of oral health influencing how people appear, speak, chew, work and socialize.[4] Early childhood caries—the most prevalent unmet health care need for children nationwide[5]—is especially troubling because it is preventable. Untreated tooth decay in children can, for instance, affect children's quality of life, causing pain and infections that may lead to problems with learning.[6] Importantly, oral diseases are progressive and cumulative and become more complex over time. Access to early preventive care, particularly for populations at highest risk, is the key.

One of the most significant current challenges is the continuing unknowns around the COVID-19 pandemic. Besides its overall impact on all aspects of society, COVID-19 has had an unprecedented negative impact on oral health services. While an assessment of COVID-19 on the dental sector is beyond the scope of this study, it is important to note its effect on oral health: a recent survey (2021) found that dentists were seeing increased rates of stress-related issues such as teeth grinding (up 76%), cracked teeth (up 69%) and chipped teeth (up 68%) during the pandemic. In addition, dentists said they were seeing increases in cavities and gum disease, likely as a result of changes to people's hygiene and eating habits during the crisis.[7]

This needs assessment report was prepared by Barbara Aved Associates (BAA) for Dientes Community Dental Care to benefit the continuing efforts of healthcare providers, community leaders, policy makers and advocates to improve oral health in Santa Cruz and Monterey Counties. While the study focuses primarily on Santa Cruz County, comparative data from Monterey County are provided throughout. The report updates the comprehensive 2016 report *Central Coast Oral Health Needs Assessment* BAA produced for Dientes—and the subsequent briefer update in 2018.

Oral Health Market Factors

Any plans to expand capacity must take into account certain basic market factors that affect oral health services and seem of value to review here. The main elements of this are supply and demand, which are addressed in this report. The demand side includes patients and patient demographics, financing of care, need for dental care, ability to obtain care, and receipt of dental care. The supply side factors include dentists and dentist demographics, other dental practice organizations and their locations, office and treatment hours, and surgery facilities. These market factors have been especially sensitive to the effects of the COVID-19

[1] Centers for Disease Control and Prevention. National diabetes fact sheet: national estimates and general information on diabetes and prediabetes in the United States, 2011. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
[2] Joshipura K, Jung H, Rimm E et al. Periodontal disease, tooth loss and incidence of ischemic stroke. Stroke. 2003;34:47-54.
[3] Association of State and Territorial Dental Directors. Best Practices Approaches. Perinatal Oral Health. Available at http://www.astdd.org/perinatal-oral-health/#six.
[4] Locker D. Concepts of oral health, disease, and the quality of life. In: Slade GD, ed. Measuring oral health and quality of life. Chapel Hill: University of North Carolina, *Dental Ecology*; 1997:11-23.
[5] Benjamin RM. Oral Health: The Silent Epidemic. *Public Health Rep.* 2010 Mar-Apr; 125(2):158–159.
[6] Blumenshine SL, Vann WF, Gizlice A, Lee JY. Children's school performance: impact of general and oral health. J Pub Health Dent 2008;68(2):82-87.
[7] American Dental Association. Health Policy Institute. February 2021.

pandemic. For example, office closures and restrictive practices (e.g., fewer elective procedures) lowered supply, some of which was not recovered. Avoided dental visits by consumers to reduce the risk of COVID-19 infection caused a decline in the demand for dental care.[8]

Individuals choose to receive dental services because they believe they have a need for those services to maintain their oral health[9] – or they have discomfort or dysfunction. The basic premise is that the demand for oral health stems from an individual's need for dental services and realization of that need. Both need and awareness of need are required for a person to act. For some people—like many who seek treatment from dental providers in these two counties—oral disease and the resulting need for treatment are the starting point for the demand for dental services. Under this concept of demand, if a person is unaware of a need for care—or is not questioned about oral health by their primary care provider at each preventive medical appointment—chances are less that they will seek care. These individuals can benefit from health education and promotion. However, if that individual continues to ignore professional care, the progression of the disease or condition will probably bring the person to understand that a need exists. It may require an episode of acute pain, teeth getting loose, or some other consequence, but the need will express itself sooner or later.[10]

Other community members are more aware that they are at risk for oral disease and may have some disease although they do not experience symptoms. They make regular visits to dentists to obtain information about the current condition of their oral health. Dentists provide that update with diagnostic services, and patients receive preventive services to keep disease from occurring. When disease is detected, they receive treatment to treat oral disease, relieve pain or discomfort, restore function, or correct malocclusion. Under this theory of demand, awareness of the value of regular dental care will have a strong impact on the demand for dental services. In recent years, it has been observed in various economic analyses that aggregate supply of dental services is increasing, but the demand for dental services is level at times and decreasing at times.[11] Although this may be true for overall demand for dental services, this is not the case for community health centers especially in California. As Medi-Cal eligibility in California expands, there is more demand for access to dental services offered by organizations that serve this patient population such as safety net clinics.

These factors, collectively, must be taken into account when identifying the strategic plan objectives and actions that align with the highest needs in Santa Cruz and Monterey Counties.

[8] Impact on Dental Economics and Dental Healthcare Utilization in COVID-19: An Exploratory Study. https://journals.sagepub.com/doi/full/10.1177/2320206820941365
[9] Eklund SA. "Trends in dental treatment, 1992 to 2007." *J Am Dent Assoc* 2010;141(4):391–9.
[10] Nash KD, Brown LJ. "The Market for Dental Services," *J Dent Educ* 2012;76(8):973-986. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1027.6483&rep=rep1&type=pdf
[11] Ibid.

STUDY METHODS

The oral health needs assessment gathered, analyzed, and interpreted data and program information to identify community needs and provide the basis for producing a responsive strategic plan. The significant disruption caused by COVID-19 made it difficult to compare results from the earlier assessment when looking at the currently available data—generally CY 2020 or FY 2020-21, whichever was more available. Thus, the comparisons with "pre-COVID" data should be considered with some caveats. The report begins with a regional profile to provide context to the study and is then organized by children's and adult's oral health status, contributing access factors, and dental services utilization.

Data Sources and Collection

Secondary Data

California Health Care Access and Information, HCAI (formerly called the Office of Statewide Health Planning and Development), provided data on emergency department visits for dental conditions when an oral condition was the primary diagnosis.[12] The oral conditions were identified using the ICD-10 diagnosis codes for non-traumatic dental conditions. Because these dental conditions are largely considered to be *preventable* when people have a regular source of dental care they are regarded as potentially avoidable.[13] The Association of State and Territorial Dental Directors provides the ICD-10 dental codes HCAI uses to pull these data.

Data on Medi-Cal dental utilization were retrieved from the California Department of Health Care Services Medi-Cal Dental program through the California Health and Human Services Open Data Portal. Only existing data were accessed because "ad hoc" requests (i.e., data not already on its website) such as the zip code level data we were able to receive for the earlier needs assessment must be obtained through a lengthy Public Records Act process and requesters must pay for it. Encounters, patient characteristics and other data that dental clinics are required to report to the state and federal government were accessed from the HCAI primary care clinic reports and HRSA's Uniform Data System.

Population-based data from UCLA's California Health Interview Survey (CHIS)—the largest state health survey in the U.S.—were accessed to examine oral health status, behaviors, and dental service utilization among the general populations of Santa Cruz and Monterey Counties. The Central California Alliance for Health provided Medi-Cal claims and other data concerning access for general anesthesia when those services were required for dental procedures for children and adults. Head Start programs in both counties forwarded the dental utilization data they report for their enrolled children.

We also used a focused literature scan to review published articles and reports and provide the rationale for some of our recommendations.

[12] Oral conditions as a secondary diagnosis were not analyzed due to very small occurrences.
[13] Shortridge EF, Moore, JR. Use of Emergency Departments for Conditions Related to Poor Oral Health Care. Rural Health Research & Policy Centers, and NORC Walsh Center for Rural Health Analysis. Final Report, August 2010.

Primary Data

Primary data are a rich source of information about community knowledge, attitudes, experiences and behaviors. The primary data that were possible within the resources of the current needs assessment were provider interviews. Telephone calls were made to each private dental office in Santa Cruz and Monterey Counties that were listed on the state's website as being a Denti-Cal provider regardless of acceptance of new Denti-Cal patients at the time of this study. The purpose of the calls was to confirm participation (verify accuracy of the website information) and inquire about capacity or age limitations and conditions for serving adults and children with special needs.

We also interviewed representatives of the Federally Qualified Health Centers, Western Dental and Cabrillo College to obtain service information, including access to sedation dentistry. It was also of interest to speak with these organizations to learn about progress since the earlier assessment—or, because of COVID-19, current capacity challenges—and any plans for program enhancements. Draft copies of the written descriptions of FQHC services were sent to each of those organizations to allow their staff to review the information for accuracy and to add any other program information they deemed important to highlight current challenges or plans for improvements.

FINDINGS

I. Regional Profile

DEMOGRAPHICS

Population by Place

Demographic trends help to project potential unmet needs for dental and other healthcare-related services and to plan strategically. Based on the April 2020 Census, Santa Cruz County had an estimated population of 261,115 (down slightly from 271,646 in 2015). Monterey County's 2020 population was 437,318 (up from 425,413 in 2015).[14] Looking at the annual population changes between 2015 and 2020 by county and city using standard Department of Finance estimates, Table 1 indicates a slight decline in Santa Cruz County (-3.9%), and a small increase in Monterey County (2.8%).

Table 1. Percent Change in Population between 2015 and 2020 by County and City

County/City	Total Population		Percent Change
	2015	2020	
Santa Cruz	271,646	261,115	-3.9
Capitola	10,052	10,091	0.4
Santa Cruz	63,789	56,156	-12.0
Scotts Valley	11,928	11,755	-1.5
Watsonville	52,087	51,366	-1.4
Balance of County	133,790	131,747	-2.3
Monterey	425,413	437,318	2.8
Carmel-by-the-Sea	3,747	4,023	7.4
Del Rey Oaks	1,660	1,670	0.6
Gonzales	8,357	8,490	-0.4
Greenfield	16,870	18,402	9.1
King City	13,417	14,977	11.6
Marina	20,872	21,920	5.0
Monterey	28,163	28,382	0.8
Pacific Grove	15,388	15,536	1.0
Salinas	154,720	160,206	3.5
Sand City	362	385	6.4
Seaside	33,672	32,121	-4.6
Soledad	24,540	24,454	-0.4
Balance of County	103,645	106,752	3.0

Source: California Department of Finance. City/County Population Estimates with Percent Change

[14] U.S. Census.gov/Quickfacts.

Population by Age

As Table 2 shows, Monterey County has a slightly younger population than Santa Cruz County; 27.7% of residents were age 1-19 at the 2020 Census while in Santa Cruz the proportion was 24.8%. Although these are not large differences, they could suggest the need for children's dental services may be slightly higher in Monterey than in Santa Cruz County. However, the demographic composition in both counties between 2015 and 2025 is projected to shift toward the older population groups, with this change more pronounced in Santa Cruz than in Monterey County.

Table 2. Population by Age Group, and Percentage Change Projected from 2015 to 2025.

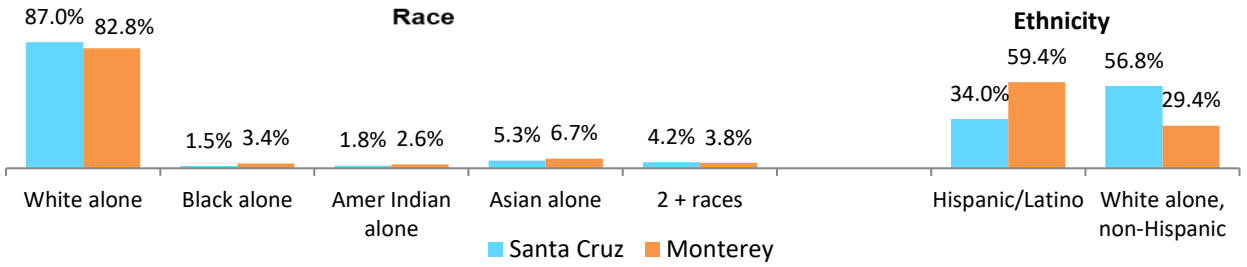
SANTA CRUZ COUNTY						MONTEREY COUNTY					
Age Group	2015 Actual	2018 Actual	2020 Actual	2025 Projected	% Change 2015-2025	Age Group	2015 Actual	2018 Actual	2020 Actual	2025 Projected	% Change 2015-2025
1-4	12,834	11,753	10,785	10,130	-21.1%	1-4	26,499	25,166	23,510	22,563	-14.9%
5-9	16,854	16,631	16,104	14,879	-11.7%	5-9	32,526	31,780	32,231	28,984	-10.9%
10-14	15,149	16,004	16,313	16,442	8.5%	10-14	30,705	31,250	31,912	32,054	4.4%
15-19	23,983	23,573	23,259	25,320	5.6%	15-19	32,161	31,188	33,109	34,694	7.9%
20-24	26,030	25,142	25,394	26,133	0.4%	20-24	33,702	30,864	33,004	34,903	3.6%
25-29	14,784	15,778	15,231	16,484	11.5%	25-29	28,012	26,178	28,707	29,385	4.9%
30-34	16,500	14,124	13,324	14,821	-10.2%	30-34	31,885	26,206	27,467	28,717	-9.9%
35-39	15,947	16,191	15,419	13,162	-17.5%	35-39	29,826	28,934	30,902	27,014	-9.4%
40-44	15,634	15,101	15,221	15,368	-1.7%	40-44	27,822	25,980	29,421	30,822	10.8%
45-49	17,140	16,402	14,981	15,216	-11.2%	45-49	26,427	25,314	26,658	28,876	9.3%
50-54	18,343	16,816	16,252	14,863	-19.0%	50-54	25,624	23,752	25,048	25,595	-0.1%
55-59	19,751	18,526	17,484	16,143	-18.3%	55-59	25,437	25,146	23,985	23,844	-6.3%
60-64	19,579	19,470	18,587	17,391	-11.2%	60-64	22,708	24,450	23,995	23,019	1.4%
65-69	15,611	17,433	17,806	17,930	14.9%	65-69	18,890	21,400	21,200	22,817	20.8%
70-74	9,132	12,167	14,080	17,004	86.2%	70-74	12,561	16,284	17,308	19,780	57.5%
75+	14,252	15,798	17,424	25,973	82.0%	75+	23,372	29,304	27,066	35,187	50.6%

Source: California Department of Finance. Demographic Research Unit. Report P-2C: Population Projections by Sex and 5-year Age Group, California Counties, 2010-2060. Sacramento: California. April 2021.

Population by Race/Ethnicity

The 2021 race/ethnicity composition data in Figure 1 show Monterey, overall, is a more diverse county than Santa Cruz. Santa Cruz has a higher proportion of Whites and a lower proportion of other races. Both counties have somewhat similar percentages of the population who report as 2 or more races. The proportion of Hispanic or Latino population is significantly higher in Monterey than in Santa Cruz County.

Figure 1. Race and Ethnicity of Santa Cruz and Monterey Counties, July 1, 2021



Source U.S. Census Bureau: State and County QuickFacts.

Special and Target Populations

Agricultural Workers

Santa Cruz and Monterey Counties are home to a larger share of agricultural workers than many other counties in California. According to annual agricultural employment estimates for 2020, about 52,000 farm workers live and work in Monterey County for all or part of the year, and up to 20,000 in Santa Cruz County.[15] Undocumented farm workers make up approximately 50% of the farm labor workforce, and 83% in Santa Cruz County according to the Center for Farmworker Families.[16]

Agricultural workers are a special population of interest as they frequently suffer from disparities in oral health compared to other populations, and multiple research studies indicate that access to oral health care is the most significant contributor to these disparities.[17] Many face a lack of dental insurance, long travel times to dental care, linguistic barriers, and shortages of oral health care providers as key obstructions to achieving oral health. Immigrant agricultural workers may have more oral care needs based on their country of origin and the age at which they emigrated to the U.S. Some research has found that the shorter the length of stay in the U.S., the higher the need for treatment of dental caries, and an older age at the time of immigration associated with an increased severity of periodontal disease. [18]

What is evident from the local-level studies from other areas analyzed by the Migrant Health Center[19] is that farmworkers do not choose to forego dental care. Based on a survey of Community/Migrant Health Centers, agricultural worker patients frequently sought emergency dental care, basic restorative services, and preventive services for oral health care needs.[20] Many may be unaware of the resources available to them, however.

Unhoused

To gain a better understanding of the population currently experiencing homelessness, every two years Santa Cruz County, along with communities across the country, conducts a survey to estimate the number of individuals and families who are experiencing homelessness. The County of Santa Cruz January 2019 Homeless Point-in-Time Count reported 2,167 people experiencing homelessness. [21] This represents an increase of about 10.3% from 2014. Of the 2,401 people who accessed the Santa Cruz County Continuum of Care (CoC) homelessness response system in 2021, 1,530 were individuals and 898 were people in families with children. There were 201 unaccompanied youth included in individual and family groups.[22]

Monterey County was home to at least 2,422 homeless residents, according to their 2019 annual Point-In-Time Count.[23] Of the 2,055 people who accessed the Monterey County CoC system (which includes San Benito County) in 2021, 1,265 were individuals and 816 were people in families with children. There were 161 unaccompanied youth included in individual and family groups.[24]

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[15] https://www.labormarketinfo.edd.ca.gov/file/agric/ca-ag-employ-map-2020.pdf
[16] https://www.fwd.us
[17] Finlayson, T., Gansky, S., Shain, S., & Weintraub, J. (2010). Dental utilization among Hispanic adults in agricultural worker families in California's Central Valley. Journal of Public Health Dentistry, 70(4).
[18] Cruz, G., Chen, Y., Salazar, C., Le Geros, R. (2009). The association of immigration and acculturation attributes with oral health among immigrants in New York City. *Amer J Public Health*, 99.
[19] Oral Health. National Center for Farmworker Health, 2011. http://www.ncfh.org/uploads/3/8/6/8/38685499/fs-oral_health_fact_sheet.pdf
[20] Lukes, S., & Simon, B. (2006). Dental services for migrant and seasonal farmworkers in US Community/Migrant Health Centers. National Rural Health Association, 22(3) retrieved from http://www.ncfh.org/uploads/3/8/6/8/38685499/fs-oral_health_fact_sheet.pdf
[21] https://housingmatterssc.org/wp-content/uploads/2019/08/2019-PIT-Count-Full-Report.pdf
[22] https://bcsh.ca.gov/calich/hdis.html
[23] https://www.co.monterey.ca.us/home/showdocument?id=81207
[24] https://bcsh.ca.gov/calich/hdis.html

Seniors

The topic of dental care often gets overlooked for seniors, despite its critical importance to nutrition and health. Older adults aged 65+ are at an especially high risk for mouth and tooth infections and the complications that can come with these problems. An estimated 64% of older adults have moderate or severe periodontitis, compared with less than 38% for younger adults. Both cavities and periodontitis contribute to tooth loss. Dental care for seniors tends to be expensive and is not covered by Medicare or by supplemental plans. While some dental coverage for adults has been restored to Medi-Cal, most seniors have no coverage for dental care at all. The Santa Cruz County Area Agency on Aging 2015 needs assessment showed that paying for dental care was a top-three identified challenge, with 51.4% of respondents saying this was a challenge, regardless of income level.[25]

Foster Youth

Children and youth in foster care are considered to have special health care needs, including oral health care. Youth with a history of foster care report more oral health problems than their peers and are markedly less likely than their non-foster peers to report receiving oral care.[26] Despite mandatory state dental coverage (all children placed in foster care in California become eligible for Medi-Cal insurance), children in foster care face significant barriers to accessing oral health care. One of the largest obstacles is finding a dental provider who takes Medi-Cal. The County's Health Care Program for Children in Foster Care is responsible for assuring foster children's health by helping foster parents obtain timely comprehensive dental examinations and facilitating referrals when specialty care is needed. In 2019, 66.5% of children ages 1-17 in foster care in Monterey County (the same as statewide) and 43.4% in Santa Cruz County had a timely dental exam.[27]

Children and Adults with Disabilities and Special Needs

Going to the dentist can be especially difficult for people with an underlying fear and anxiety about dentistry. For those with physical and intellectual disabilities, the fears and anxieties are compounded by sensory issues, challenging behaviors, and the lack of dentists who are willing to see them.[28] Access to dental care for patients with special needs may also be limited by the ability of their caregiver to effectively evaluate their oral condition and/or by the person's own inability to express their pain or discomfort.[29] In addition to experiencing unique barriers, individuals with developmental disabilities experience higher rates of dental disease.[30] Additionally, many of these individuals end up needing dental work done under general anesthesia (GA) due to extensive dental decay at a young age and/or cooperation challenges that make some dental procedures unsafe for the patient as well as the dentist.

Pregnant People

Good oral health and control of oral disease is especially important during pregnancy as it has the potential to reduce the transmission of oral bacteria from parents to their children. Good oral health in the pregnant parent also reduces the risk of pre-term labor and low birthweight outcomes. Pregnant people with good oral health have reduced risk of developing gum inflammation (gingivitis) or losing a tooth due to advanced gum disease (periodontitis). Control of oral diseases in pregnant people protects their health and quality of life

[25] https://www.seniorscouncil.org/resources/NEEDS_ASSESSMENT_REPORT_FINAL.pdf Needs Assessment Summary provided by Patty Talbot, AAA Administrator and Planner, Seniors Council of Santa Cruz & San Benito Counties.
[26] Sarvas EW et al. Oral health needs among youth with a history of foster care. *J Amer Dent Assoc* August 2021 (152);8: 589-595.
[27] California Child Welfare Indicators Project Reports. UC Berkeley Center for Social Services Research (July 2019) as reported in kidsdata.org.
[28] Dent J. Special Needs Dentistry: Making a Difference for Patients and Caregivers. *Dentistry Today*, March 2019.
[29] Hennequin M, Faulks D, Roux D. "Accuracy of Estimation of Dental Treatment Need in Special Care Patients" *J Dent* 2000 Feb;28(2):131-6. doi: 10.1016/s0300-5712(99)00052-4.
[30] Steinberg BJ. Issues and challenges in special care dentistry. J Dent Educ. 2005;69(3):323–324.

before and during pregnancy and has the potential to reduce the transmission of pathogenic bacteria from parents to their children. Yet many pregnant people do not seek—and are not advised to seek—dental care as part of their prenatal care, although pregnancy provides a "teachable moment." Additionally, pregnancy is the only time some pregnant people are eligible for dental benefits under the pregnancy-only benefit. As of April 2022, Medi-Cal has expanded its pregnancy-only benefit to include coverage throughout the pregnancy and up to 1-year (365) days postpartum. This expansion will also provide extended time for the pregnant parent to access dental care before their pregnancy-only benefit runs out.

In many cases, prenatal and oral health providers are limited in providing dental care during pregnancy by their lack of understanding about its impact and safety. Many dentists needlessly withhold or delay treatment of pregnant patients because of fear about injuring either the parent or the fetus—or because of fear of litigation. Because they have not been trained to understand the relationship between oral health and overall health, many prenatal providers fail to refer their patients regularly to dental providers. [31]

SOCIOECONOMIC FACTORS

Various socioeconomic factors—education level, dietary habits, income—have been shown to affect overall health as well as oral health status and outcomes. While different predictors can play a role, overall, individuals in lower socioeconomic groups have less awareness and access to oral health care and are at a higher risk for dental disease.

Income

A person's income is strongly associated with health status across the income distribution, and influences both health and longevity through various clinical, behavioral, social, and environmental mechanisms. Even relatively healthy lower-income people — those who earn 200% or less of the federal poverty level (FPL), or about $26,000 or less a year—have higher health risks, greater social needs, and worse access to care than relatively healthy moderate-income (200%–400% FPL) and higher-income (>400% FPL) people.[32] Meta-analyses (examining data from many independent studies of the same subject to determine overall trends) of dental health have shown that low individual/household income is associated with oral cancer, dental caries prevalence, and any caries experience.[33]

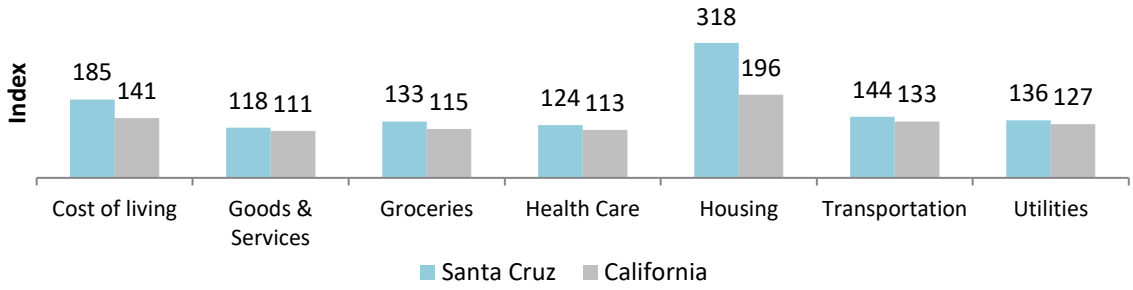
The median household income in 2019 in Santa Cruz County was $82,234 (in Monterey County it was $71,015), according to the U.S. Census.[34] While Santa Cruz County households have a higher income than the state on average, cost-of-living factors have to be taken into account. According to the U.S. Commerce Department, Santa Cruz-Watsonville is the 5th most expensive metropolitan area for all goods and services in all of the United States.[35] Housing is often a household's largest expense and can compound existing disparities and inequalities. Santa Cruz County exemplifies this. The real estate site RealtyTrac estimated it would cost 115% of the average Santa Cruz worker's wages for a year to buy a median-priced home in the city. Cost-of-living factors have a direct impact on maintaining the dental/oral health workforce. If dentists and allied professionals cannot afford to live here, access to oral health care will continue to be limited.

The cost-of-living index in Figure 2 illustrates what it costs to live in Santa Cruz compared to the statewide average for expenses like housing, health care, groceries, etc. The index is based on a national average of

[31] Oral Health During Pregnancy and Early Childhood: Evidence-Based Guidelines for Health Professionals. California Dental Association. 2010.
[32] Why Even Healthy People Have Greater Health Risks Than Higher-Income People. The Commonwealth Fund, 2018.
[33] The Relationship between Income and Oral Health: A Critical Review. https://pubmed.ncbi.nlm.nih.gov/31091113/
[34] http://quickfacts.census.gov/qfd/states/06/06087.html
[35] Bureau of Economic Analysis, US Department of Commerce, 2015, *Real Personal Income for States and Metropolitan Areas 2013*, http://bea.gov/newsreleases/regional/rpp/2015/pdf/rpp0615.pdf

"100." For example, if the cost of living in the graph is 90, then it is 10% lower than average. If the cost of living is 110, then it is 10% higher than average.[36]

Figure 2. Cost of Living Index, Santa Cruz County and California, 2020



Source: Council for Community and Economic Research (C2ER) for 2020.

Population in Poverty

While Santa Cruz County residents earn, on average, higher household incomes than the statewide average, nearly a third (31%) of Santa Cruz County households have incomes below living wages—defined as requiring approximately $68,000 per year for a family of four.[37]

The effects of poverty on access to health services, as well as one's health and well-being, are well documented. "Persons living in poverty," as federally defined is a common measure of economic insufficiency in health services planning. For a family or household of 4 persons living in the U.S., the poverty guideline for 2021 was $26,500.[38] While many Santa Cruz County residents fall under higher-household income brackets, a notable share of households and individuals are struggling.[39] Nearly 11% of the population in the county is estimated to live in poverty, as indicated in Table 3; the rates are even higher in Monterey County, particularly for children.

Table 3. Percent of the Population Living in Poverty, 2021

	Total Population	Children Ages 0-17
Santa Cruz County	10.7%	10.6%
Monterey County	11.6%	15.0%

Source: United States Census Bureau. Small Area Income and Poverty Estimates.

Adults with low-income are less likely to receive timely dental care like regular checkups and are more likely to visit the dentist for specific problems than those with higher incomes —a fact that holds true even for low-income residents who have dental insurance.[40]

[36] The breakdown for each index is as follows: goods & services (33%), groceries (13%), health care (5%), housing (30%), transportation (9%) and utilities (10%).
[37] Santa Cruz County Comprehensive Economic Development Strategy (CEDS), Santa Cruz County Workforce Development Board, Comprehensive Economic Development Strategy. BW Partnership, 2020. Living wages account for regionally specific costs such as housing, food, and insurance. This makes it a much more insightful metric than poverty.
[38] *Federal Register*, Vol. 80, No. 15, January 22, 2015. See also http://aspe.hhs.gov/poverty.
[39] United States Census Bureau. Small Area Income and Poverty Estimates. https://www2.census.gov/programs-surveys/saipe/datasets/2020/2020-state-and-county/est20-ca.txt
[40] Despite Insurance, the Poorest Adults Have the Worst Access to Dental Care. UCLA Policy Brief. July 2020. https://healthpolicy.ucla.edu/publications/search/pages/detail.aspx?PubID=1956

Students Eligible for Free/Reduced School Meals

The percent of students eligible for free and reduced-price meals is one of the markers of community poverty in an environmental assessment. A child's family income must fall below 133% of the federal poverty guidelines to qualify for *free* meals, or below 185% of the federal poverty guidelines to qualify for *reduced-cost* meals. While the proportion of eligible students in Santa Cruz County is somewhat close to that of the state, 52.1% vs. 58.9%, Monterey County student eligibility is significantly greater at 74.8% (Table 4).[41]

Table 4. Student Eligibility to Receive Free/Reduced Price School Meals, 2020-21

Location	Percent
Santa Cruz County	52.1%
Monterey County	74.8%
California	58.9%

Source: California Department of Education.

Food Security and Eligibility for CalFresh

Having access to enough food for a healthy life is another marker for poverty, though it has been noted that "Although food insecurity is closely related to poverty, not all people living below the poverty line experience food insecurity and people living above the poverty line can experience food insecurity."[42] Asked by the 2020 California Health Interview Survey (CHIS) of adults whose annual household income was less than 200% of the Federal Poverty Level whether they were able to afford enough food (food secure), 30.9% in Santa Cruz County and 28.1% in Monterey County said "no," identifying them as food insecure.[43]

CalFresh (known federally as the Supplemental Nutrition Assistance Program or SNAP), provides monthly food benefits to individuals and families with low-income who meet federal income eligibility rules. According to the same CHIS income criteria as above, 11.6% of Monterey County respondents said they were receiving "food stamps;" in contrast, in Santa Cruz County, the proportion was more than double, 25.8%.

Employment

There is a well-established association between employment and better health. Besides the advantage of having employer-based health insurance in many cases—and often dental insurance—studies show healthier people are more likely to gain and retain employment, making for greater family stability.[44] In January 2022, an average of 132,400 residents in Santa Cruz County were in the labor force (persons age 16 and older who are able, available, and actively looking for work, not including the jobless who are not seeking work). During that month, 8,200 (6.2%) were not employed, compared to 5.5% statewide. In Monterey County, 18,200 (9.0%) of the estimated 202,200 labor force were not employed.[45]

Unemployment rates are also available at the sub-county level by Census Designated Place (CDP). CDPs are populated areas that lack separate municipal government, but which otherwise physically resemble incorporated places. Table 5 on the next page lists the February 2022 unemployment rates for areas in Santa Cruz and Monterey Counties in decreasing order of amount.

[41] California Dept. of Education, Free/Reduced Price Meals Program & CalWORKS Data Files (2020-21); U.S. Dept. of Education, NCES Digest of Education Statistics and NCES Online Query System.
[42] https://hungerandhealth.feedingamerica.org/understand-food-insecurity/
[43] UCLA, 2020 CHIS. https://ask.chis.ucla.edu/AskCHIS/tools/_layouts/AskChisTool/home.aspx#/results
[44] https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-018-5337-5
[45] http://www.labormarketinfo.edd.ca.gov/geography/lmi-for-california.html

Table 5. Monthly Unemployment Rate for Cities and Census Designated Places, February 2022[1]

Santa Cruz County (5.4%)		Monterey County (7.2%)	
Area Name	Unemployment Rate	Area Name	Unemployment Rate
Watsonville city	16.3%	Pajaro CDP	32.9%
Corralitos CDP	12.1%	Boronda CDP	28.5%
Boulder Creek CDP	11.3%	Elkhorn CDP	18.0%
Freedom CDP	10.6%	Del Rey Oaks city	16.1%
Interlaken CDP	6.8%	Soledad city	15.9%
Twin Lakes CDP	6.3%	Castroville CDP	14.9%
Ben Lomond CDP	5.4%	Salinas city	12.2%
Felton CDP	5.4%	Prunedale CDP	10.8%
Aptos CDP	4.7%	Pacific Grove city	9.7%
Scotts Valley city	4.3%	Del Monte Forest CDP	7.7%
Rio del Mar CDP	4.2%	Gonzales city	5.9%
Soquel CDP	3.8%	Greenfield city	5.4%
Live Oak CDP	3.7%	Las Lomas CDP	5.4%
Day Valley CDP	3.0%	Carmel Valley Village CDP	4.2%
Aptos Hills Larkin Valley CDP	2.8%	King City city	3.9%
Santa Cruz city	2.6%	Chualar CDP	3.7%
Capitola city	1.5%	Sand City city	3.6%
		Aromas CDP (Monterey Co)	3.4%
		Marina city	2.8%
		Seaside city	2.2%
		Monterey city	2.0%
		Carmel by the Sea city	0.1%
		Bradley CDP	0.0%
		Moss Landing CDP	0.0%
		San Ardo CDP	0.0%
		San Lucas CDP	0.0%
		Spreckels CDP	0.0%

Source: Employment Development Department. Labor Market Information Division.
[1]In decreasing order of magnitude.

Educational Attainment

Low educational level is a predictive factor for a low level of oral health knowledge—understanding and knowing how to manage oral conditions, adopting preventive health practices, and so forth.[46] Research has also shown that educational level influences oral conditions (number of teeth, caries experience).[47] The U.S. Census Bureau estimated that 86.3% of Santa Cruz County and 71.5% of Monterey County residents age 25 and older have obtained at least a high school diploma (or equivalent) in the period 2015-2019, compared to 83.3% statewide.[48] About 41% of adults in Santa Cruz and 24.7% in Monterey have earned a bachelor's degree or higher.

[46] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6894911/
[47] Association between level of education and oral health status in 35-, 50-, 65- and 75-year-olds. https://pubmed.ncbi.nlm.nih.gov/12887338/
[48] http://quickfacts.census.gov/qfd/states/06/06053.html

English Language Learners

Of Santa Cruz County's total 2020-21 K-12 public school enrollment, 21.1% of students were reported to be English-Language Learners (Table 6). In Monterey County, 33.8% of the students fell into this classification, with a lower proportion of its students at risk for long-term English Learner than Santa Cruz students.[49]

Table 6. English Language Learners, K-12, 2020-2021

Grade	Santa Cruz County		Monterey County	
	English Learner	Long-Term English Learner*	English Learner	Long-Term English Learner*
K	10.4%	0.0%	11.6%	0.0%
1	9.7%	0.0%	10.5%	0.0%
2	10.5%	0.0%	10.7%	0.0%
3	10.1%	0.0%	10.5%	0.0%
4	10.2%	0.0%	10.7%	0.0%
5	9.5%	0.0%	9.7%	0.0%
6	8.4%	58.3%	7.9%	54.2%
7	6.6%	47.2%	7.0%	45.1%
8	5.7%	40.1%	6.5%	36.4%
9	5.4%	33.4%	5.0%	24.9%
10	5.0%	25.0%	4.1%	18.8%
11	3.9%	25.9%	3.1%	14.1%
12	4.4%	22.1%	2.7%	16.1%
County Avg	21.1%	22.1%	33.8%	17.3%
CA Avg	21.9%	17.1%	21.9%	17.1%

*An EL student in grades 6 to 12, enrolled in a U.S. school for 6+ years remaining at the same English language proficiency level for 2 or more consecutive prior years, or has regressed to a lower English language proficiency level.
Source: California Department of Education

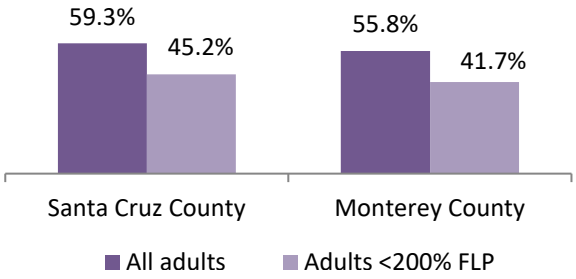
Families where English skills may be limited may also have a low level of oral health literacy, which may interfere with their ability to process and understand oral health information presented in English, or possibly influence oral health status. In Santa Cruz County, 2015-2019 U.S. Census data show 32.1% of households speak a language other than English at home by family members aged 5 and older; the proportion in Monterey County is much higher at 55.2%.[50]

Dental Insurance

The demand for dental care is closely linked with having dental insurance coverage (which, in turn, is closely linked to employment). Between about 56% and 59% of all adults from representative households in Santa Cruz and Monterey Counties reported having dental insurance in the 2020 California Health Interview Survey (CHIS). Fewer adults, however, about 42%-45%, living under the Federal Poverty Level said they had coverage, Figure 3.

[49] California Department of Education. http://dq.cde.ca.gov/dataquest/
[50] http://factfinder2.census.gov

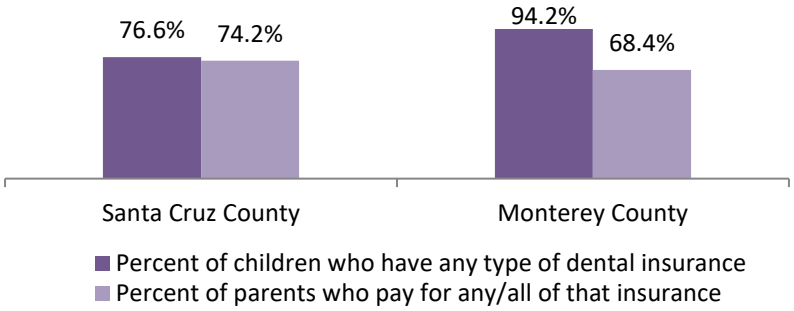
Figure 3. Adults with Dental Insurance, 2020



Source: 2020 CHIS

As Figure 4 indicates, according to CHIS respondents, a greater percentage in Monterey County than Santa Cruz County reported having some type of dental insurance plan for their children, 94.2% vs. 76.6%, respectively. The parents of the children who said they had dental insurance were also asked by CHIS if they paid any or all of the premium or cost of that insurance; more Santa Cruz County parents, 74.2%, picked up part or the entire dental insurance cost for their children, than Monterey County parents, 68.4%.

Figure 4. Children with Dental Insurance, 2020



Source: 2020 CHIS

Covered California

Covered California offers individuals (children and adults) health insurance under the Patient Protection and Affordable Care Act. Because the program is state-subsidized, it provides discounted premiums to those who qualify for it. It is not the same as Medi-Cal; however, contracting health plans available through Medi-Cal and Covered California both offer a similar set of benefits, and one can apply for both programs at the same time through a single application.

According to Covered California income guidelines for 2022, if an individual makes less than $47,520 per year or if a family of 4 earns wages less than $97,200 per year, they qualify for government assistance. Adults living at 0% – 138% of The Federal Poverty Level qualify for Medi-Cal; at > 138% – 400% of FPL they qualify for a subsidy under a Covered California plan.[51]

Dental coverage for children is included with their health plans. All preventative and diagnostic services are offered at no cost, though parents pay part of the cost for other services like fillings, root canals and crowns. Because dental coverage for adults is not considered an essential health benefit, it is offered separately from health insurance plans; no financial assistance is available to purchase these dental plans. Adults in dental PPO plans have a 6-month waiting period for major services (which can be waived if the member provides proof of prior dental coverage). For members who purchase dental benefits through the dental managed care plans, there is no deductible and no annual limit on what the plan will pay for care. The costs for fillings, root canals,

[51] https://www.healthforcalifornia.com/covered-california/income-limits

crowns and other major treatments and services are shared by the consumer and the plan. Costs for dental work performed by dental providers outside the plan's network are not covered. [52]

Medi-Cal

Medi-Cal is a significant purchaser of medical and dental services for low-income individuals. It covers 1 in 3 Californians—and more than half of all children. It also pays for a great proportion of the births in the state: 1,314 or 45.3% of the births in Santa Cruz County in 2020-21 (684 births in Watsonville Community Hospital; 400 in Dominican; and 193 in Sutter Maternity & Surgery Center of Santa Cruz).[53,54]

In January 2022, 82,183 individuals in Santa Cruz County (30,287 ages 0-5) and 207,242 individuals in Monterey County (88,277 ages 0-5) were enrolled in Medi-Cal, most but not all through Medi-Cal's managed care system, Table 7. As of May 1, 2022, the new Older Adult Expansion will provide medical and dental coverage to adults 50 years and over, regardless of immigration status.[55]

Table 7. Medi-Cal Enrollment by Type of Medi-Cal System, January 2022

Medi-Cal System	Santa Cruz County		Monterey County	
Fee for Service (FFS)	7,714	9.3%	36,706	17.7%
Managed Care: Central CA Health Alliance (CCAH)	73,694	89.7%	169,626	81.8%
Out-of-Plan	875	1.1%	910	0.4%
Total	82,183	100%	207,242	100%

Source: California Department of Health Care Services, Medi-Cal Enrollment

Central California Health Alliance (CCHA) covers the Medi-Cal managed care members in both Santa Cruz and Monterey Counties. Medi-Cal managed care enrollment figures, current in January 2022, are shown by age group in Table 8 below.

Table 8. Medi-Cal Enrollment in CCAH as of January 2022

Age Group	Santa Cruz County	Monterey County
1-4	5027	16504
5-9	7048	22240
10-14	7583	23418
15-19	7437	21387
20-24	5999	15504
25-29	5907	12535
30-34	5649	9906
35-39	4603	7788
40-44	4045	6361
45-49	3433	5358
50-54	3516	5655
55-59	3657	5693
60-64	3780	5618
65-69	2504	4152
Total	**70,188**	**162,119**

Source: Central California Alliance for Health, 1/23/22

[52] https://www.coveredca.com/dental/family/
[53] https://www.datasharescc.org/indicators/index/view?indicatorId=11839&localeId=281&localeFilterId=7
[54] Baby Gateway Newborn Enrollment Program. First 5 Santa Cruz. 2020-21 Annual Evaluation Report. Personal communication with David Brody January 26, 2022.
[55] https://thealliance.health/medi-cal-older-adult-expansion/

Other Related Community Characteristics: Protective Factors

Community Supply of Fluoridated Water

Much improvement in public oral health in the U.S. has occurred over the last 50 years, largely due to community water fluoridation. Studies show that water fluoridation can reduce the number of cavities children get in their baby teeth by as much as 60% and can reduce tooth decay in adult teeth by nearly 35%. Adding fluoride to the water ensures that all people in the community benefit, regardless of age, income, education, or access to dental care. Water fluoridation provides dental benefits that continue for a lifetime.[56] All the water supplied to Santa Cruz and Monterey Counties contains natural levels of fluoride, but not enough to prevent cavities. Water fluoridation adjusts the amount of fluoride in a community's water to the best level that prevents cavities.

There are no public water systems shown for Santa Cruz and Monterey Counties in the most current (2016) list of California cities that fluoridate their drinking water supplies that are naturally fluoridated or received purchased fluoridated water.[57] Despite widespread support for the safety and efficacy of community water fluoridation, maximizing dental health remains a challenge due in part to these counties' inability to establish a community drinking water fluoridation program. Historically, water quality issues—particularly in the rural and agricultural parts of Monterey County—that have caused the most concern involve issues over nitrates and other contaminants and pollutants in drinking water systems. [58] Lack of funding, low political will, inadequate resources, and minimal public health awareness may all account for why community water fluoridation in these counties remains a low priority.

Fluoride Varnish

The use of topical fluoride varnish in young children has been shown to prevent tooth decay, slow it down or stop it from getting worse.[59] Once children have teeth it is recommended, they receive topical fluoride treatments from their medical providers as many young children do not see or have access to a dentist until they are older. For adults, fluoride varnish may also be beneficial to prevent root caries if applied at least twice a year.[60] For people living in communities without fluoridated tap water, like Santa Cruz and Monterey Counties, access to regular fluoride varnish is especially important. In 2021, Santa Cruz County clinics reported 1,431 encounters for fluoride varnish treatments for children aged 0-6 with Medi-Cal (Table 9).

Table 9. Fluoride Varnish in Medical Setting for Children 0-6, Santa Cruz County Providers, 2021

Clinic	Number of Encounters
Watsonville Health Center- County of Santa Cruz	150
East Cliff Family Health Center	181
Santa Cruz Women's Health Center	29
Pediatric Medical Group of Santa Cruz	788
Salud Para La Gente	167
Clinica del Valle del Pajaro	116
TOTAL	1431

Source: CCAH Medi-Cal Members, data provided by County of Santa Cruz Oral Health Program, May 16, 2022.

[56] http://www.cdc.gov/fluoridation/statistics/index.htm
[57] http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/fluoridation/Tables/Data2013.pdf
[58] Personal communication with Monterey County Public Health Department, March 2, 2022.
[59] Weintraub J et al. Fluoride varnish efficacy in preventing early childhood caries. *J Dent Res.* 2006 February;85(2):172-176.
[60] Fluoride Varnishes for Dental Health: A Review of the Clinical Effectiveness, Cost-effectiveness and Guidelines. https://www.ncbi.nlm.nih.gov/books/NBK401516/

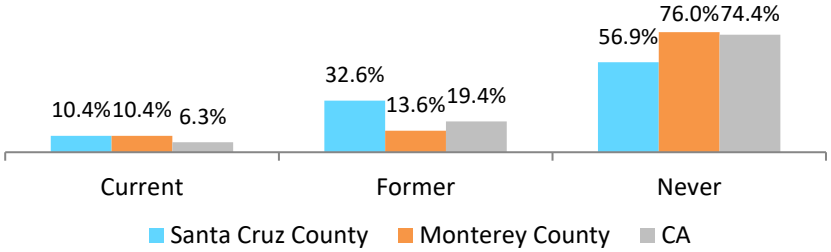
Risk Factors

Oral diseases and other chronic diseases share many common risk factors, such as tobacco use, having diabetes and having poor dietary habits, including consumption of soda and other sugar-sweetened beverages.

Tobacco Products

The adverse effects of tobacco use on oral health are well established. There is a strong link between smoking and oral cancers, periodontal disease, tooth loss and treatment outcomes. Smokers, for example, are about twice as likely to lose their teeth as non-smokers. According to the 2020 California Health Interview Survey (CHIS), 10.4% of adults in both Santa Cruz and Monterey Counties, higher than the state average, reported they currently smoked. Notably fewer adults in Santa Cruz than in Monterey and statewide had never been a smoker (Figure 5).

Figure 5. Smoking Status Reported by Santa Cruz and Monterey County Adults

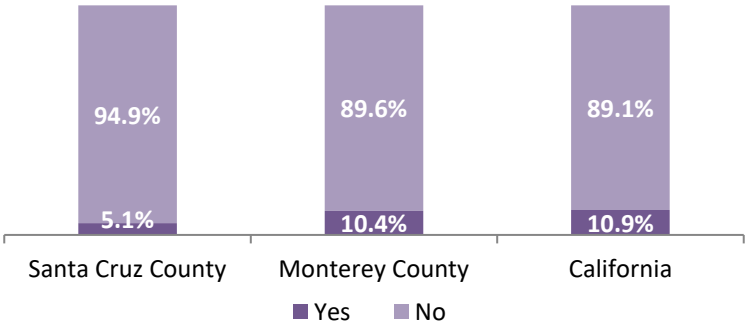


Source: 2020 California Health Interview Survey

Adults with Diabetes

Because oral health and general health are integral to each other, oral signs and symptoms may provide the first clues to the presence of other diseases such as diabetes. Diabetics are more susceptible to the development of oral infections and periodontal disease. They are also less likely to visit the dentist than people with pre-diabetes or without diabetes; about 61% who make dental visits compared to 66.5% among people without diabetes who do.[61] While the prevalence of diabetes in Santa Cruz County is relatively low (5.1%) compared to Monterey County and the statewide average (Figure 6), it is one of the issues that should be monitored by dental providers. For instance, treating gum disease can help improve blood sugar control in patients living with diabetes**,** decreasing the progression of the disease.

Figure 6. Santa Cruz and Monterey County Adults Ever Diagnosed with Diabetes



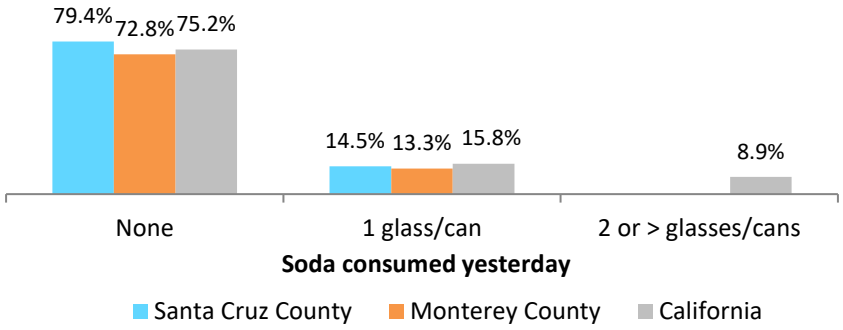
Source: 2020 California Health Interview Survey
Some data considered "statistically unstable" due to small samples

[61] Luo H et al. Trends in annual dental visits among US dentate adults with and without self-reported diabetes and prediabetes, 2004-2014. *JADA* https://doi.org/10.1016/j.adaj.2018.01.008

Soda and Other Sugary Beverages

Tooth decay is caused by bacteria in the mouth using sugar from foods and drinks to produce acids that dissolve and damage the teeth**.** Sugar sweetened beverages have high levels of sugar and drinking these can significantly contribute to tooth decay. (Note that diet or sugar-free soda contains its own "acids" which also can damage teeth.) On average, about three-quarters of Santa Cruz and Monterey County children and teens reported to CHIS not drinking a soda or other sugary drink the previous day; 14.5% and 13.3 %, respectively, said they drank 1 glass or can of soda the day before (Figure 7); the sample size responding to "2 or more glasses/cans" was too small to be reported. Their sugared-beverage consumption, although essentially mirroring the state average, is an important issue for preventive school-based oral health education programs.

Figure 7. Soda and Sugary Beverage Consumption by Children and Teens



Source: 2020 California Health Interview Survey
Some data considered "statistically unstable" due to small samples

II. Extent of Dental Disease among Children and Adults

ADULTS

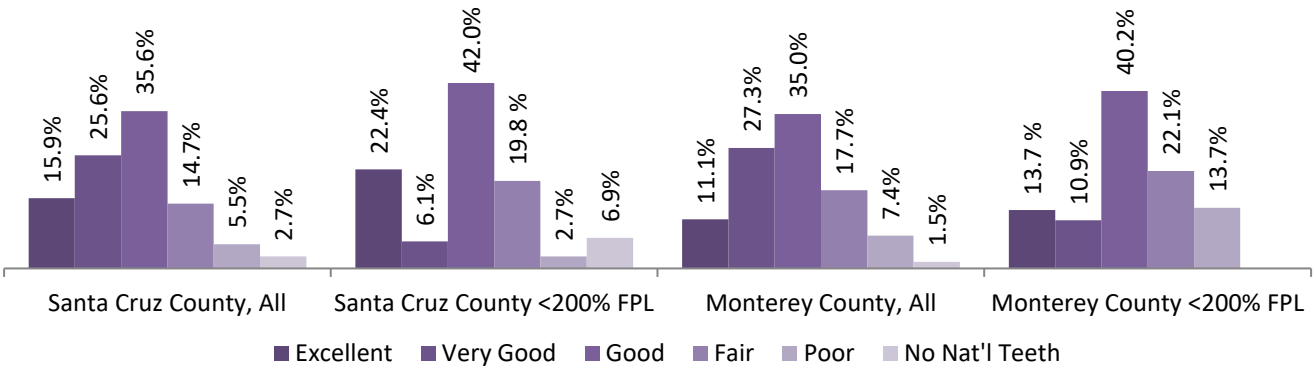
Dental disease is a chronic problem among low-income adults as well as children. In the absence of local data, applying prevalence estimates from collective U.S. research (i.e., 47% of poor adults aged 20 years+ in the U.S. were estimated to have at least one untreated decayed tooth in 2012[62]) suggests the following dental conditions could be the case for adults in Santa Cruz and Monterey Counties:

- Santa Cruz County. With 18.2% (15,805) of the 86,845 adult population ages 20-69 living below 200% of the federal poverty level, approximately 47% with mild, moderate ,or severe periodontitis would mean an estimated 7,428 of these individuals have some level of untreated oral disease.

- Monterey County. With 18.2% (26,090) of the 143,353 adult population ages 20-69 living below the 200% federal poverty level, approximately 47% with mild, moderate, or severe periodontitis would mean an estimated 12,262 of these individuals has some level of untreated oral disease.

The 2020 California Health Interview Survey* asked adults to rate their dental health. 15.9% of all-income adults in Santa Cruz County and 11.1% of all-income adults in Monterey County described the condition of their teeth as "excellent." Surprisingly, a higher proportion of the respondents with low-income, 25.6% and 13.7%, respectively, rated their teeth this highly (Figure 8), an unexpected finding. However, when looking at the combined ratings of "fair" and "poor," a greater percentage of the low-income adults in both counties, especially Monterey, described their teeth this unfavorably. Note that in Santa Cruz 6.9% of adults with low-income vs. 2.7% of the general population of adults stated they had no natural teeth (no figure was available in Monterey County).

Figure 8. Adults' Self-Reported Conditions of Teeth



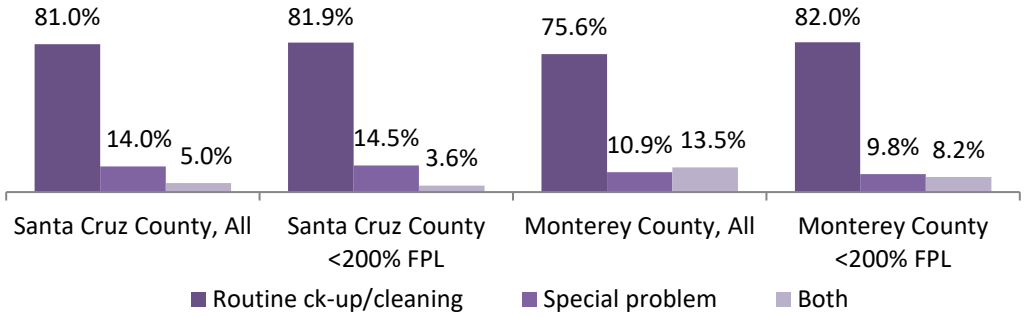
Source: 2020 CHIS

[62] http://www.cdc.gov/oralhealth/publications/factsheets/adult_oral_health/adults.htm

* Some CHIS data are considered "statistically unstable" due to small samples.

Adults in Santa Cruz County, regardless of income status, generally made their last dental visit for similar reasons—routine check-ups/cleaning, problem-related, or both. In Monterey County, a higher proportion of the visits were made for special problems (at the same time or separate from a routine visit), though this was more true for the total group than it was for those with low-income (Figure 9).

Figure 9. Reason for Last Dental Visit by Adults



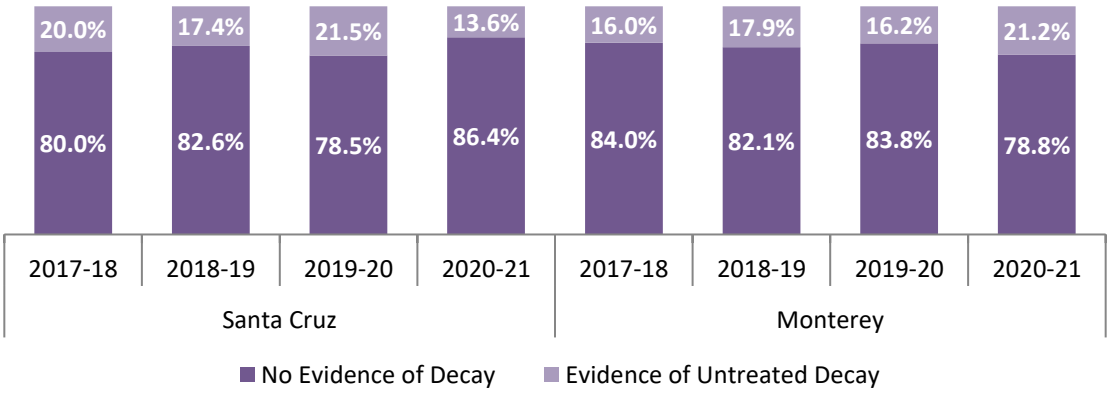
Source: 2020 CHIS

CHILDREN AND TEENS

The consequences of poor oral health are particularly critical for children and can have a significant impact on overall health as well as children's performance in school. Dental disease can contribute to difficulty learning, and diminished nutritional status, self-esteem, and overall wellbeing. The kindergarten dental checkup law (AB 1433) helps identify children with unmet oral health needs and provides schools with essential information to ensure their students are healthy and ready to learn. Though there are limited screening data available to measure the extent of dental disease among children in Santa Cruz and Monterey Counties, the assessment results provide one picture of disease prevalence.

Averaged screening results for the reporting school districts shown in Figure 10 are similar in both counties: 18.1% (down from 24% in the prior 3-year period) of the children in Santa Cruz County and 17.8% (up from 15.5%) of Monterey County children had evidence of untreated dental decay when screened.

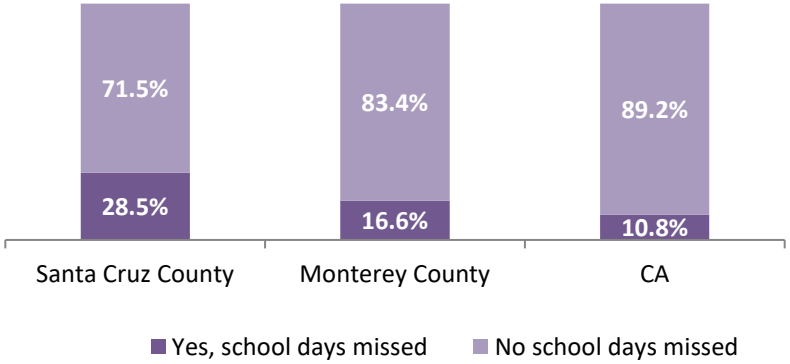
Figure 10. Kindergarten Dental Screenings by School Year, Reporting School Districts



Source: California Dental Association AB 1433 Pre-K Reported Data

Children with poorer oral health status are more likely to experience dental pain and perform poorly in school.[63] Dental disease also contributes to school absenteeism,[64] as it did for over one-quarter (28.5%) of students in Santa Cruz County, and 16.6% in Monterey County in 2020 (Figure 11).

Figure 11. Percent of Teen Students Reporting Missed School Days Due to a Dental Problem



Note: Does not count the time missed for cleaning or a check-up. Only includes teens who attend school. Data for younger children are not available from CHIS.
Source: 2020 CHIS

[63] Jackson SL. Impact of poor oral health on children's school attendance and performance. *Amer J Pub Health.* October 2011 ;01(10): 1900–190.
[64] http://www.cdc.gov/mmwr/preview/mmwrhtml/su6302a9.htm

III. Access Factors

In addition to the factors described above that influence oral health care—such as oral health knowledge and literacy, being uninsured, fear of the dentist, insufficient levels, or lack of access to water fluoridation, and cultural barriers—low provider-to-population ratios, an inadequate number of dentists who accept Medi-Cal and clinic capacity (wait times) can be major barriers to obtaining dental care.

DENTAL HEALTH PROFESSIONAL SHORTAGE AREA

The federal Health Resources and Services Administration develops shortage designation criteria and uses them to decide whether a geographic area, population group or facility is a Health Professional Shortage Area or Population. Dental Health Professional Shortage Area (DHPSA) is a federal designation recognizing communities that can demonstrate they have a shortage of dental professionals. DHPSA designation is a prerequisite for participating in a variety of state and federal funding programs designed to increase access to services. It is given to areas that demonstrate a shortage of providers on the basis of availability of dentists. The designation is based on MSSA (medical service study area) boundary, population-to-dental practitioner ratios of 1:5,000, available access to healthcare and other factors.[65]

The designated Dental HPSAs in Monterey County and Santa Cruz Counties are shown in Table 10.[66] (Although Santa Cruz Community Health Centers is listed as a designated Santa Cruz Dental HPSA, the organization does not offer dental services.) Dientes' DHPSA status is covered under the County's FQHC.

Table 10. Dental Health Professional Shortage Areas

Name	Designation Type	HPSA FTE Short	HPSA Score[2]	Rural Status
Santa Cruz County				
Salud Para La Gente	FQHC		23	Non-Rural
Santa Cruz Community Health Centers	FQHC		25	Non-Rural
County of Santa Cruz	FQHC		25	Non-Rural
Monterey County[3]				
ME-MSSA 106 Bradley/San Ardo	Medicaid Eligible Population HPSA	0.3	10	Rural
ME-MSSA 109.1/Prunedale	Medicaid Eligible Population HPSA	4.5	16	Non-Rural
MEE Memorial Hospt Medical Clinic	Rural Health Clinic		11	Rural
Taylor Farms Family Health & Wellness Center	Rural Health Clinic		11	Non-Rural
Clinica de Salud Del Valley de Salinas	FQHC		21	Non-Rural
County of Monterey	FQHC		21	Non-Rural
Salud Para La Gente	FQHC		23	Non-Rural

[1]Source: http://datawarehouse.hrsa.gov/tools/analyzers/HpsaFindResults.aspx
[2]HPSA Score determines priorities for assignment of clinicians. The scores range from 0 to 26 where the higher the score, the greater the need.
[3]Note: Additional Dental HPSAs not included: Monterey County Population Group: Low Income - MSSA 105/King City (HPSA Score 19); Population Group: Low Income/MFW - MSSA 108 (Carmel Valley) Population Group: Low Income (HPSA Score 15); and MMSA 109.2/Salinas (HPSA Score 19), available at https://data.hrsa.gov/DataDownload/FRN/E_BCD_HPSA_H6_FederalRegister.pdf and https://data.chhs.ca.gov/dataset/health-professional-shortage-areas-in-california

[65] https://hcai.ca.gov/wp-content/uploads/2020/10/MSSADefinitionMap.pdf
[66] http://datawarehouse.hrsa.gov/tools/analyzers/HpsaFindResults.aspx

DENTIST SUPPLY

While overall dentist supply can affect the number of dentists available to treat people with Medi-Cal (i.e., Denti-Cal), overall supply is not a limiting factor in Santa Cruz or Monterey. As shown in the schematic below, with 218 licensed dentists in 2019, Santa Cruz County is considered to have a medium-to-high supply with an estimated dentist-to-population ratio of 1:1,258, slightly higher than the average statewide ratio (1:1,150); Monterey County, with 297 licensed dentists, has a slightly lower ratio of 1:1,457.[67] Although these dentist-to-population ratios are not unfavorable, it should be noted that the dentists are not evenly distributed throughout the community from a community standpoint. Approximately 80% of the active dentists in these 2 counties are general or family dentists, with the remaining 20% split among the specialties.[68]

	Number of Dentists (2019)	Dentist-to-Population Ratio
Santa Cruz County	218	1:1,258
Monterey County	297	1:1,457

Dentist supply, however, does not address the question of whether dentists are willing to see patients with Medi-Cal or see children and adults with special needs, or whether general dentists are trained and agreeable to seeing very young children in their practices.

Provider Participation in Denti-Cal

At the time of this assessment (February 2022), the state Denti-Cal website listed 13 private dentists in Santa Cruz County and 21 in Monterey County as current providers, 6% and 7%, respectively of the local private dentist supply in each county. Although these dentists are *listed* as providers, there are inaccuracies; for example, about 82% of these dentists in Santa Cruz and 80% in Monterey show as *actively participating* in Denti-Cal, though not all of them are currently accepting patients with Medi-Cal. On the other hand, some dentists on the Denti-Cal website shown as *not* currently accepting new patients *are* actually accepting them (see Table 11 for details). The dentists listed as "not currently accepting" (or listed as "currently accepting" but were not) said their practices were too full (high total volume) to see new Medi-Cal patients (or, they did not want a higher *proportion* of Medi-Cal in their payer mix than they already had).

Overall in California, a little more than 15% of dentists treat Denti-Cal enrollees.[69] Numerous studies show that despite the state's efforts, low Denti-Cal reimbursement rates historically are the main reasons for lack of willingness to participate in the program.[70, 71,72] A 10-year, state-by-state, analysis in 2013 of Medicaid fee-for-service dental reimbursement rates (for primarily children's services) found California's pediatric Medi-Cal rates among the lowest: 29%, as a percentage of commercial dental insurance charges.

An August 2018 report by the CA Department of Health Care Services [73] compared the Medi-Cal dental reimbursements rates against other Medicaid programs from states of comparable size, with a comparable Medicaid population using certain billing codes (averaged across all age groups for most of the procedures). It

[67] https://www.countyhealthrankings.org/explore-health-rankings/rankings-data-documentation
[68] Prior personal communication (2018) with Debi Diaz, Executive Director, Monterey Bay Dental Society. And, re-confirmed according to the California Dental Association, the 80% general dentist/20% specialist split is the rule of thumb as a common reference.
[69] https://www.calhealthreport.org/2018/08/20/still-grappling-provider-access-issues-state-pours-money-denti-cal/
[70] See for example the dentist survey results in *Ventura County Oral Health Needs Assessment* and *Without Change it's the Same Old Drill*, both available at https://www.barbaraavedassociates.com/products.html
[71] *A Ten-Year, State-by-State, Analysis of Medicaid Fee-for-Service Reimbursement Rates for Dental Care Services*. https://www.aapd.org/assets/1/7/PolicyCenter-TenYearAnalysisOct2014.pdf
[72] *The Challenge of Meeting the Dental Care Needs of Low-Income California Adults with the Current Dental Workforce.* UCLA Policy Brief. July 2021. https://healthpolicy.ucla.edu/publications/Documents/PDF/2021/Dental-Care-Needs-Low-Income-CA-Adults-policybrief-jun2021.pdf
[73] https://www.dhcs.ca.gov/services/Documents/MDSD/2018-Dental-Rate-Review-8.6.19.pdf

showed relatively more favorable findings, evidence of some of its program improvements. In FY 2016-17, DHCS found Medi-Cal paid an overall average between 65% and 106% of New York, Illinois, Florida, and Texas Medicaid Program's dental fee schedule. The review findings also identified a decrease in providers who were rendering and billing for dental services since 2008.

SAFETY NET DENTAL SERVICES*

In addition to the private dentists who accept patients with Denti-Cal, community dental services provide critical safety net dental care for Santa Cruz and Monterey Counties' low-income population. Table 11, which begins on page 34, describes these resources. It is important to remember that due to COVID-19 and the nature of dentistry and high-aerosolizing procedures, access to oral health care in the region as elsewhere was significantly impacted. Dental offices, including the FQHC clinics, are now working to catch up on delayed treatments and preventive maintenance for their established patients.

Dientes Community Dental Care

Dientes, now in its 30th year, operates 3 (soon to be 4) dental clinics within Santa Cruz County staffed by 7.50 FTE dentists and other bilingual dental staff. Dientes has had a pediatric dentist who specializes in the oral development of children on staff since 2004. Currently, in addition to general dentists, Dientes has 2 full time pediatric dentists and brings in an Endodontist and Oral Surgeon to provide comprehensive care. Dientes' largest clinic on Commercial Way has 15 chairs and offers a range of dental services centrally located in Santa Cruz near Dominican Hospital; the Watsonville site has 5 chairs and is co-located with the Santa Cruz Public Health Department's Health & Dental Center. The Beach Flats clinic has 4 chairs and is located in an economically impacted neighborhood close to downtown. Finally, a new 11-chair clinic will open in fall 2022 in the Live Oak neighborhood on a health and housing campus with Santa Cruz Community Health and Mid-Pen Housing to provide integrated care. About one-third of the 8,341 dental patients seen in 2020 were non-English speaking. Dientes reported a total of 24,875 patient encounters in 2020.[74] With the addition of the new clinic in Live Oak that opens in Fall 2022, Dientes will be serving 18,000 patients annually with over 60,000 dental visits.

Since 2008, Dientes has invested in state-of-the-art technology systems, including electronic health records, chair-side computers, and digital x-ray equipment. As an early adopter, these technologies have helped to create an excellent operational model including enhanced diagnostic capabilities and increased productivity. Capacity is a critical issue for Dientes. Currently, the Commercial Way and Beach Flats clinics are generally not accepting new patients; however, limited exceptions are made for oncology patients, pregnancy, veterans, young children aged 0-3, children that have siblings who are already patients, and foster care children. This policy helps ensure timely appointments for current patients to complete their treatment plans. Watsonville is booked out for new adult appointments 43 days and 45 days for pediatric new patients. Across the organization, Dientes reports it has to turn away over 75 new patients a day. This situation underscores the need for their new Live Oak clinic.

The following wait times are for *current* patients in spring 2022: Adults experience an average wait time for a treatment appointment of 16 days at Commercial Way, 25 days at Watsonville, and 15 days at Beach Flats. For a treatment appointment for pediatric patients, the wait time is 14 days at Commercial Way, 26 days at Watsonville, and 15 days at Beach Flats. The average wait for a pediatric exam appointment is next day at Commercial Way, 45 days at Watsonville, and 4 days for Beach Flats. For adult exam appointments, the average wait time is 11 days at Commercial Way, 42 days in Watsonville, and 4 days at Beach Flats.

* See the Clinic-Based Utilization section of this report that starts on page 48 for more data on dental utilization.

[74] https://data.chhs.ca.gov/dataset/primary-care-clinic-annual-utilization-data

Mobile dental services are provided at varying times during the month through the outreach program at 16 schools in Santa Cruz County as well as Juvenile Hall, the Housing Matters campus (local homeless shelter), Santa Cruz Community Health, and Skilled Nursing Facilities throughout Santa Cruz County.

In addition, Dientes has begun making upstream investments in college savings accounts to incentivize children visiting the dentist. It also reports a number of workforce development programs that include working scholarships for RDAs to become RDA-EFs, a residency program with NYU Langone starting this summer, and internships with dental assisting schools; an apprenticeship program for assistants is also being explored.

Salud Para La Gente

Salud Para La Gente (Salud) is a federally qualified health center (FQHC) in Santa Cruz County that for over 40 years has grown to 6 clinics (4 of which offer dental services, including the new pediatric clinic that will open in April) and 4 school-based health centers. The clinics are staffed by a total of 5.84 FTE dentists along with re-instated oral hygiene services with the RDH and RDA-EF staff whose positions had been eliminated with decreased appointments due to the pandemic.

To better serve the nearly three-quarters (70%) of patients reported as non-English speaking, a majority of the staff are bilingual. Nearly 95% of Salud's 27,748 patients are at or below 200% of the Federal Poverty Level and 43% are reported to be homeless. Close to 45% are agricultural workers or their dependents. Salud has agreements with the local Office of Education to serve children enrolled in the Migrant Head Start program. Some children are new to the area, and many are new to dental care. These children are particularly at high risk for caries (and have untreated caries) due to their economic and nutritional status.

In 2020, Salud's 8,315 unduplicated dental patients represented 30% of its total patient population. The number of dental encounters (visits) reported to HCAI for 2020 was 10,496.[75] As dental visits during pregnancy are not part of the state or federal reporting system, it is not known how many of the agency's 1,306 prenatal patients received a dental visit. However, Salud reports it is prioritizing the scheduling of pregnant adult women who are not yet established in the dental program.

Due to the pandemic and capacity constraints, Salud is not currently able to see established adult patients for dental services. The FQHC has about 125 established patients on its waitlist to initiate or complete treatment. On average, staff reports they receive about 200 inquiries a month for patients wishing to establish care. (New appointments are currently accepted for children, however.) Due to limited capacity, Salud is seeing new *external* (i.e., someone not already a patient of the FQHC) adult patients on an emergency basis only. The clinic treats the emergency (walk-ins and same-day emergency slots are available for urgent appointments) and refers the patient to area providers who accept Denti-Cal. Child appointments for regular, non-urgent care are generally available within 2-3 weeks—the standard wait time for pediatric appointments.

Adult patients, about 10 per year, with developmental disabilities and other special needs who cannot safely receive dental services without sedation (nitrous oxide and general anesthesia are not offered) are referred to UCSF or Stanford for dental anesthesia services. Children needing GA are referred to Central Coast Pediatric Group in Salinas where staff reports the average interval between referral and completion of treatment, depending on the severity, can take up to 2 months.

[75] Publicly available data for this section of the report were pulled from the following sources on March 4, 2022: https://data.chhs.ca.gov/dataset/primary-care-clinic-annual-utilization-data and https://data.chhs.ca.gov/dataset/primary-care-clinic-annual-utilization-data

In addition to reinstating pre-COVID schedules templates to improve access to care with more appointment availability, Salud is currently in the process of re-opening its school-based health centers and, in partnership with Cabrillo College's Dental Hygiene program, reinstating clinical practicum rotations with student interns.[76]

Clinica de Salud del Valle de Salinas

Clinica de Salud del Valle de Salinas (CSVS) in Monterey County, founded in 1980, serves the healthcare needs of agricultural and other low-income families in the Salinas Valley and greater Monterey Bay, and offers both primary care medical and dental services. Dental care is offered at 9 clinic sites as well as through mobile clinics that serve many homeless communities. CSVS plans to open a new dental clinic in Salinas by mid-2022 that will offer the full range of general dentistry services offered at other sites.

The dental clinics are staffed by a total of 8.88 FTE dentists along with other dental staff. Because nearly three-quarters (72%) of patients are reported as "best served in a language other than English," a majority of the staff are bilingual in several languages. About 97.1% of CSVS's 48,671 patients are at or below 200% of the Federal Poverty Level and 15.8% are reported to be homeless. Close to 48% are agricultural workers or their dependents.

In 2020, 16,177 unduplicated dental patients represented 33.2% of the CSVS's total patient population. The number of dental encounters reported to HCAI for these patients was 38,997. As dental visits during pregnancy are not part of the state or federal reporting system, it is not known how many of the agency's 1,320 prenatal patients received a dental visit.[77]

Patients with developmental disabilities and other special needs who cannot safely receive dental services without sedation (nitrous oxide and GA are not offered) are referred to UCSF for dental anesthesia services where there are long waits for treatment.

Prior to the disruption caused by COVID-19, CSVS partnered with the Monterey County Office of Education to provide school-based dental screenings, including for children enrolled in the county's Migrant Education program. CSVS plans to resume screenings when restrictions on campuses are lifted.[78]

OTHER DENTAL PROVIDERS

Western Dental

Western Dental, which serves a large portion of Medi-Cal patients, has 2 clinics in Santa Cruz County that serve children and adults. The clinics are open Monday – Friday with no weekend availability (as it did prior). The clinic offers general dentistry (the general dentists cover most special services as well) and orthodontics. Discounted rates and a financing plan are offered for treatment and other services not covered by Denti-Cal. The 1 clinic in Monterey County is based on the same model but offers Saturday hours (8:00 – 4:30). Walk-ins and emergency appointments are accepted. While capacity to accommodate patients varies at the clinics, waiting times for appointments must meet licensing requirements (e.g., 21-day maximum for regular appointments) and Quality Assurance Management tracks access monthly.[79]

76 Program information obtained through personal communication with Salud staff, March 8-14, 2022.
77 Publicly available data for this section of the report were pulled from the following sources on March 4, 2022: https://data.chhs.ca.gov/dataset/primary-care-clinic-annual-utilization-data and https://data.chhs.ca.gov/dataset/primary-care-clinic-annual-utilization-data.
78 Program information obtained through personal communication with CSVS dental staff, March 8, 2022.
79 Personal communication with LaMeica Wharton, Business Manager, February 2, 2022.

Cabrillo College

The Dental Hygiene Program serves approximately 3,000 patients annually and offers assessment, prophylaxis, root planning, and sealants along with local anesthesia and nitrous oxide analgesia services. The youngest aged patient is usually 4 years old. Appointments are required. Cabrillo is not a current Denti-Cal provider and accepts only cash or check.[80]

Table 11. Dental Providers Accepting Denti-Cal, by Category of Provider

SANTA CRUZ COUNTY					
Community Dental Clinics					
Provider/ Organization	**Address**	**Hours**	**Dental Services**	**Serve Special Needs (Y/N)**	**Payment Options**
Dientes Community Dental	Main Clinic 1830 Commercial Way, Santa Cruz	Mon-Sat: 7:30am-12pm, 1pm-4pm	Comprehensive dentistry (preventative, treatment, restorative-dentures, specialty) and oral health education	Yes, children and adults based on patient ability to cooperate	Medi-Cal, Visa, MasterCard, cash, check, sliding scale for uninsured patients; uncompensated care; no private insurance
	1430 Freedom Blvd., Suite C Watsonville	Mon-Thu: 8:30am-12:30pm, 1:30pm-5pm Fri: 7:30am-12pm, 1pm-4pm			
	Beach Flats 302 Riverside Ave. Santa Cruz	Mon-Fri: 7:30am-12pm, 1pm-4pm			
	1500 Capitola Rd. Santa Cruz	Will open in fall 2022			
	Outreach Program -- 16 schools (due to COVID recovery, typically 26 schools plus skilled nursing facilities)	Various hours	Preventative dentistry and oral health education		Medi-Cal, uncompensated care for uninsured, contract
	Outreach at Housing Matters 115 Coral St. Santa Cruz	Once a week (In fall 2022, twice a week)	Comprehensive dentistry (preventative, treatment, restorative-dentures, specialty) and oral health education		Medi-Cal, contract
	Outreach at Juvenile Hall 3650 Graham Hill Rd. Felton	Various hours	Comprehensive dentistry (preventative, treatment, restorative-dentures, specialty) and oral health education	Yes, children	Medi-Cal, contract, uncompensated care

Table continues on next page

[80] Personal communication with Cabrillo College Dental Hygiene Program, January 31, 2022.

SANTA CRUZ COUNTY					
Community Dental Clinics, cont.					
Provider/ Organization	**Address**	**Hours**	**Dental Services**	**Serve Special Needs (Y/N)**	**Payment Options**
Salud Para La Gente	East Beach Street Clinic 204 East Beach St. Watsonville	Mon-Sat: 8:30am-5:30pm	Patient education, prevention and general dental including exams, x-rays, emergencies, fillings, extractions, cleanings, sealants, and fluoride.	Based on ability to cooperate	Medi-Cal (Denti-Cal), Delta Dental, Pacific Union Dental, Western Growers / Pinnacles
	Clínica del Valle del Pájaro 45 Nielson St. Watsonville	Mon-Thu: 8:30am-7:00pm Fri: 8:30am-5:30pm			
	Salud at Valle Verde 252 Green Valley Rd. Freedom, CA 95019	Mon-Fri: 8:30am-5:30pm	Patient education, prevention and general dental including exams, x-rays, extractions, fillings, cleanings, sealants, and fluoride.		
	School-based health centers: Watsonville C Chavez Middle School Pájaro Middle Sch Pájaro Valley HS Starlight Elementary	School hours/hours vary	Dental Virtual Home/ teledentistry. Patient education, prevention and general dental including exams, x-rays, temporary fillings, cleanings, sealants, and fluoride. Follow-up for treatment		
Other Dental Providers					
Cabrillo College Dental Hygiene Clinic	6500 Soquel Dr., Bldg. 2100 Aptos, CA	Vary and change depending on the semester. For Spring 2022: Mon: 1pm-4:30pm Tue-Wed: 8am-4:30pm No walk-ins; appointments are required; no triage sessions.	Assessment, prophylaxis, root planning, local anesthesia, nitrous oxide analgesia, sealants; limited to patients aged 5 and older.	Kids age 5+ and adults; screened over the phone; based on any medication/ health/ behavioral/ mobility issues	Cash or check only; no debit cards, no insurance; patients can't bill their insurance; not a Denti-Cal provider
Western Dental	1107 Ocean St. Santa Cruz, CA	Mon-Fri: 9am-6pm Closed weekends	Exams, cleaning, digital x-rays, bridges, crowns, dental implants, dentures, orthodontics; no GA dentistry	Kids + adults	Most insurances, including Medi-Cal
	1895 Main St. Watsonville, CA	Mon-Fri: 9am-6pm Sat: 8am-4:30pm			

Table continues on next page

SANTA CRUZ COUNTY				
Private Dentists Listed as Medi-Cal Dental Providers				
	Address	**Specialty**	**Accepting Medi-Cal Dental Patients now? Notes**	**Serve Special Needs (Y/N)**
Sofia Espinoza, DDS	21 Brennan St. Ste1 Watsonville, CA	General dentistry	Yes, website accurate	Kids + adults (but no sedation)
Mohana Awasthi, DDS	1588 Soquel Dr. Ste 3 Santa Cruz, CA	General dentistry	Yes, website accurate	No; not wheelchair accessible
Holly Asadi, DDS	94 Mariposa Ave. Watsonville, CA	General dentistry	(Answering machine x 8 messages; no response)	---
Suman Ramakumar, DDS	40 Penny Ln. Ste 2 Watsonville, CA	General dentistry	*In*correct, Medi-Cal seen only in their Santa Clara location	---
Karen Trinh, DDS	98 Mariposa Ave. Watsonville, CA	General dentistry	No, website accurate	Kids + adults (if cooperative)
Norman Yung DDS	24 Alexander St. Watsonville, CA	General dentistry	No, website accurate	Kids <21 only
Harry Shively, DDS	3233 Valencia Ave. Aptos, CA	General dentistry	No, website accurate	Adults only
Deepak Sachdev, DDS	122 Thicket Ln. Freedom, CA	General dentistry	No, website wrong	Kids + adults (if cooperative)
Louis Hong, DDS	1041 Freedom Blvd. Watsonville, CA	General dentistry	No, website accurate; he wants it to show as not accepting though he *will* accept, age 5-20 only	Kids age 5-20
Ben Tarsitano, DDS	70 Penny Ln. Ste B Watsonville, CA	Oral surgeon	Yes, website wrong; but only age <18 with referral from area counties	Kids + adults (if cooperative)
Kayhan Mashouf, DDS	270 Green Valley Rd. Freedom, CA	Orthodontics	Yes, website accurate	Kids + adults (but if no sedation req'd)
Rael Bernstein, DDS	1970 Freedom Blvd. Freedom, CA	Orthodontics	Yes, website accurate	Kids + adults (but if no sedation req'd)
Donald Connolly, DDS	386 Green Valley Rd. Watsonville, CA	Orthodontics	Yes, website accurate	Kids + adults (but if no sedation req'd)
	9059 Soquel Dr Ste D Aptos, CA		Yes, *in*correct on website; but only for orthodontics; he has contacted Medi-Cal many times to no avail	
	824 Mission St. Santa Cruz, CA			

MONTEREY COUNTY					
Community Dental Clinics					
Provider/ Organization	**Address**	**Hours**	**Dental Services**	**Serve Special Needs (Y/N)**	**Payment Options**
Clinica de Salud del Valle de Salinas	620 E Alvin Dr. Salinas, CA	Mon-Thu: 8am-9pm Fri: 8am-5pm Sat: 8am-4:30pm	General dentistry, cosmetic dentistry, oral surgery, endodontics, pediatric dentistry, preventative dentistry	Children and adults – based on patient ability to cooperate w/out sedation	Medi-Cal, sliding fee scale, private insurance, Covered CA
	29-A Bishop Rd. Pajaro, CA	Mon-Fri: 8:30am-5pm Sat: 8:30am-5pm			

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MONTEREY COUNTY					
Community Dental Clinics, cont.					
Provider/ Organization	**Address**	**Hours**	**Dental Services**	**Serve Special Needs (Y/N)**	**Payment Options**
	808 Oak Avenue Greenfield, CA	Mon-Fri: 8am-5pm Every 1st & 3rd Sat: 8am-12pm Every Second Sat: 8am-12pm	General dentistry, cosmetic dentistry, oral surgery, endodontics, pediatric dentistry, preventative dentistry	Children and adults – based on patient ability to cooperate w/out sedation	Medi-Cal, sliding fee scale, private insurance, Covered CA
	799 Front St. Soledad, CA	Mon-Fri: 8am-5pm			
	2180 N Main St. Salinas, CA	Mon-Fri: 8am-5pm			
	10561 Merritt St. Castroville, CA	Mon-Thu: 8:30am-5:30pm Fri: 7:30am-4:30pm			
	126 5th St. Gonzales, CA	Mon-Fri: 8am-5pm			
	1156 Fremont Blvd. #101 Seaside, CA	Mon: 10:30am-7pm Tue: 8am-5pm Wed: 8am-5pm Thu: 8am-5pm Fri: 9am-5pm			
	Mobile clinic for populations with homelessness	Mon-Fri: 9am-4pm	Limited to exams, cleaning, x-rays, extractions		
Other Dental Providers					
Western Dental	921 S. Main St. ("Salinas II") Salinas, CA	Mon-Fri: 9am-6pm Sat: 8am-4:30pm	General dentistry (most specialties covered) and orthodontics; no GA dentistry	Kids + adults	Medi-Cal (with discounted rates and financing plan for non-covered services) and private insurance
	1229 N. Main St. Salinas, CA				
Private Dentists Listed as Medi-Cal Dental Providers					
	Address	**Specialty**	**Accepting Medi-Cal patients now? Notes**	**Serve Special Needs (Y/N)**	
Central Coast Pediatric Dental Group	945 Blanco Cir. Ste D Salinas, CA	Pediatric dentistry	Yes, website accurate	Yes, ages <19	
	633 E Alvin Dr. Ste B Salinas, CA				
Peter Yang, DDS	41 W Romie Ln. Salinas, CA	General dentistry	Telephone always goes to busy signal x 10 attempts	---	
Mourad Mikhail, DDS	631 E Alvin Dr. J2 Salinas, CA	General dentistry	Yes, website accurate	Ages >10 (if no sedation required)	
Bharat Rakshak, DDS	1070 N Davis Rd. Ste D Salinas, CA	General dentistry	Yes, website accurate	Ages <21 (if cooperative)	
Weidong Wang, DDS	1165 Freemont Blvd Seaside, CA	General dentistry	Yes, website accurate	Kids + adults (if cooperative)	

Table continues on next page

MONTEREY COUNTY, cont.				
Private Dentists Listed as Medi-Cal Dental Providers, cont.				
	Address	Specialty	Accepting Medi-Cal patients now? Notes	Serve Special Needs (Y/N)
Davie Ramirez, DDS	421 Center St. Gonzales, CA	General dentistry	Yes, website accurate	Kids
Ha Heather Nguyen, DDS	515 Alameda Ave. Ste A Salinas, CA	General dentistry	Yes, website accurate	Kids + adults
Harshita Patel, DDS	640 E Alvin Dr. Ste A Salinas, CA	General dentistry	Yes, website accurate	Kids + adults (if no sedation required)
Youngrim Kim, DDS	1137 N Main St. Ste A Salinas, CA	General dentistry	Yes, but only ages <19	Kids + adults with "minor needs"
Victor Lopez Del Aguila, DDS	224 San Jose St. Ste 4 Salinas, CA	General dentistry	Yes, website accurate	Kids + adults with "minor needs"
Chattan Patel, DDS	652 E Laurel Dr. Ste C Salinas, CA	General dentistry	Yes, but only ages <30	Kids + adults (if cooperative)
Jamie Dominguez, DDS	672 E Romie Ln. Salinas, CA	General dentistry	Yes, website accurate	Kids + adults (if no sedation required)
Tale Gredinberg, DDS	323 N Sanborn Rd. Ste F Salinas, CA	General dentistry	Yes, but only ages <25	No
Ernesto Mireles, DDS	696 Walnut Ave. Ste 1 Greenfield, CA	General dentistry	No, website is wrong	No
Juan Valencia, DDS	559 E Alisal St. Ste 101 Salinas, CA	General dentistry	No, website is wrong	No
Hamlet Karapetian, DDS	550 Canal St. Ste A King City, CA	General dentistry	Yes, but ages >6	Kids + adults
Chons Pua, DDS	1064 Pajaro St. Salinas, CA	General dentistry	No, website is accurate	Kids + adults (if cooperative)
Hla Myaing, DDS	770 E Romie Ln. Ste C Salinas, CA	General dentistry	Yes, but will be closed 3-4 mos. (DDS health issue)	No
Aparnavalli Nayudu, DDS	1089 S Main St. Salinas, CA	General dentistry	Yes, website accurate	Yes, ages >10
Ben Tarsitano, DDS	640 E Alvin Dr. Ste C Salinas, CA	Oral surgeon	Yes, website is wrong; but only age <18 w/ referral from counties	Kids + adults
Rosa Estrada, DDS	275 W Laurel Dr. Ste D Salinas, CA	Orthodontics	Yes, website accurate	Kids + adults (if cooperative)
Rael Bernstein, DDS	631 E Alvin Dr. Ste D Salinas, CA 741 Front St. Soledad, CA 335 El Dorado St. Ste 8 Monterey, CA	Orthodontics	Yes, website accurate	Kids + adults (if no sedation required)

Sources of information: Medi-Cal Dental Services Program, accessed on 1/17/22 at https://dental.dhcs.ca.gov/Members/Medi-Cal_Dental/Find_A_Dentist/ and organization websites; communication with organization representatives; and interviews with DDS provider offices.
Note: information current as of 3/15/22. While the resources shown are for Santa Cruz and Monterey Counties only, some providers in other nearby counties, such as private dentists in San Benito County (Hollister), also serve individuals with Medi-Cal.

OTHER SUPPORTIVE ORAL HEALTH-RELATED EFFORTS

Oral Health Access Santa Cruz

Oral Health Access (OHA) Santa Cruz County—a Steering Committee of local health industry experts, community leaders, and education advocates—was formed in 2016 in response to the pressing needs identified in the earlier Oral Health Needs Assessment. To provide comprehensive leadership, the Committee is chaired by Dientes Community Dental Care Executive VP of Operations, Dr. Sepideh Taghvaei, and Santa Cruz County Supervisor Zach Friend (see Attachment 1 for the full Steering Committee member list). The broad range of partnerships has allowed OHA to collectively tackle issues greater than any organization could address alone, raising visibility of oral health as a significant health issue in Santa Cruz County.

The release of the Committee's *2021 Oral Health Report Card*[81] at the Oral Health Summit in 2021 showcased the impact of the *OHA Strategic Plan 2017–2020,* sharing the ways the community had improved oral health in the county. Three key goals were undertaken: launching a first tooth first birthday campaign; promoting kindergarten/1st grade oral health screenings; and expanding oral health prevention and treatment capacity.

Supported by Proposition 56 funds, the Oral Health Access Steering Committee has made tremendous impact in all three of the initial goals as evident by the increase in Medi-Cal utilization rates in children. For example, Medi-Cal Dental utilization for ages 0-2, increased from 16% in 2014 to 52% in 2018 and utilization for ages 3-9 increased from 39% in 2014 to 70% in 2018. In 2021, the committee added a new goal: oral health promotion for pregnant people.

Central California Alliance for Health (CCAH)

CCAH is responsible for new Medi-Cal member orientation, mailing them an orientation package when it receives the eligibility files from the State. Oral health information is not a routine part of the package, however. Although dental services are "carved out" of Medi-Cal Managed Care Plan contracts (the Plans are not responsible for providing dental services) an Alliance vendor makes new member welcome calls in which information about how members would access dental services is provided. Medi-Cal members are informed in writing that dental services are covered through the Medi-Cal Dental program rather than the Alliance and are given the toll-free statewide telephone number for that program to find a participating provider. Alliance sends members a quarterly newsletter and bases the health promotion content "on what the Plan wishes to reinforce" that month. The last oral health-related message was in the June 2020 newsletter, promoting "First Tooth First Birthday". Staff indicated that "if space allows," the June 2022 newsletter may contain a reminder for members to contact a dentist for a visit.

According to Alliance staff, about 2% of the Medi-Cal member calls are related to oral health. This proportion may be more a reflection of members' awareness that CCAH does not cover dental services than of the true need for help. Staff estimated that when they do get calls concerning dental issues, about 75% of the calls relate to an access issue (e.g., "I can't find a provider"), and about 25% to questions about coverage (e.g., "Can I get braces for my child?"). The split between calls concerning child and adult issues, similar to the earlier needs assessment, is still about 60%/40%, respectively. [82]

[81] http://oralhealthscc.org/wp-content/uploads/2021/02/Oral-Heatlh-Report-Card-2021_FINAL_ENG.pdf
[82] CCAH information in this section provided through personal communication with Luis Somoza, Alliance Member Services Manager, February 1, 2022.

HOSPITAL AND SEDATION DENTAL SERVICES

Sedation, including general anesthesia (GA), can be of great help to patients during dental treatments to relieve anxiety, prevent pain and ensure the safety of the procedure for both the patient and the dentist.[83] While regular dental visits, combined with good preventive home care, can avoid some of the need for dental care provided with GA, dental treatment for some children and adults with special needs is only possible through GA because of their disproportionate oral health burden and limited ability to tolerate the requirements of receiving care.

Prior Authorization

Access to dental GA services can be impeded by the need for pre-authorization from the patient's Medi-Cal managed care plan. This is because the plan pays for the facility and anesthesia fee when a medical anesthesiologist or certified registered nurse anesthetist (CRNA) provides anesthesia for dental procedures, while Medi-Cal's dental program pays for the actual dental services.[84]

Although denials, delays, or other difficulties for Medi-Cal GA dental requests by managed health care plans has been a significant problem in other areas of the state,[85] prior authorization approval has not been a barrier for individuals with Medi-Cal in Santa Cruz and Monterey Counties, nearly 90% of whom are covered by Central California Alliance for Health. In 2021, CCAH received 88 prior authorization requests for Santa Cruz members and denied only 1 (1.1%); for Monterey members, it denied only 4 (2.8%) of the 144 requests it received (Table 12).[86] None of the adults with developmental disabilities in either county was denied approval for dental GA services, and the only child denial (Santa Cruz County) was because the dentist did not provide adequate documentation. The low denial rate is largely because CCAH works with dental providers to make sure they understand the requirements and information needed to process the requests.

Table 12. Prior Authorizations for Surgery Facility Sedation for CCAH Medi-Cal Members, 2021

	Santa Cruz County				Monterey County			
	Adults w/out DD[1]	Adults w/ DD	Children w/out DD	Children w/ DD	Adults w/out DD	Adults w/ DD	Children w/out DD	Children w/ DD
Requests	2	37	32	17	1	41	60	42
Approvals	2	37	32	16	1	41	56	42
Approval Rate	*100.0%*	*100.0%*	*100.0%*	*94.1%*	*100.0%*	*100.0%*	*93.3%*	*100.0%*
Deny due to no Documentation	0	0	0	1	0	0	1	0
Deny due to no Medical Necessity	0	0	0	0	0	0	3	0
Deny due to Other Reason	0	0	0	0	0	0	0	0

[1]DD = developmentally disabled.
Source: Courtesy of Central California Alliance for Health, March 8, 2022.

Access to Anesthesia Providers and Facilities

[83] Silverman J, Reggiardo P, Scott Litch CS. An Essential Health Benefit: General Anesthesia for Treatment of Early Childhood Caries. Technical Report 2-2012. Pediatric Oral Health Research and Policy Center. May 2012.
[84] The CA Department of Health Care Services (DHCS) All Plan Letter (APL 15-012, *Revised, August 21, 2015)* describes the requirements for Medi-Cal managed care health plans to cover intravenous sedation and GA services provided for dental services in hospitals, ambulatory medical surgical settings, or dental offices. Although DHCS interprets the APL as providing *guidelines* for what should be *considered*, some medical managed care plans have cited this *policy* in denying care, creating an access problem for patients with Medi-Cal in a number of counties.
[85] *Painful Realities: General Anesthesia Access in Sacramento Geographic Dental Managed Care*, Barbara Aved Associates, June 2020, available at www.barbaraavedassociates.com.
[86] Care for Santa Cruz Alliance members was requested, approved for, and took place at a number of facilities. Personal communication with Dale Bishop, MD, Chief Medical Officer, and Hilary Gillette-Walch, RN, MPH, CPH, both of Central California Alliance for Health, February – March 2022.

Access issues to hospital dentistry from too few local oral surgeons and other dentists willing to take Medi-Cal GA cases are also compounded in Santa Cruz and Monterey Counties and elsewhere in the state by low Medi-Cal facility reimbursement rates. A recent study highlighting oral health equity for people with Medi-Cal concluded that "nowhere is the tragedy of low reimbursement more evident today than in the inability of pediatric dentists and oral surgeons to gain hospital and surgical center operating room access."[87] Low fees have increasingly limited the number of hospitals and surgery centers willing to accommodate dental cases as operating room (OR) time competes for more financially equitable cases.[88] COVID, of course, has exacerbated the problem even as pandemic infections have declined.

Individuals with Medi-Cal needing general anesthesia dentistry in Santa Cruz and Monterey Counties must usually travel out of the county to receive care as there are no facilities in the area for hospital dentistry that accept Denti-Cal. UC San Francisco is the most common referral source. The wait for GA dental appointments at UCSF is reported to be 4-6 months.

In addition to UCSF, children in Santa Cruz County needing treatment under GA sedation are generally referred to Central Coast Pediatric Dental Group (CCPDG) in Monterey County. CCPDG has 3 practice locations. There, the 6 dentists on staff offer conscious sedation dental services but the wait for these appointments can be 2-3 months. For children who need to be treated under general anesthesia, 2 of the Center dentists (Drs. Chiang and Saisho) perform the restorative work at Natividad Medical Center in Salinas. However, since the start of COVID, Natividad has *not* allowed CCPDG to schedule any dental cases in the OR—and this continues to be the case as of this writing. Prior to the pandemic, the GA dental cases at Natividad were scheduled 2-3 days a month and generally 5-6 cases were performed each of those days. At best, because of this limited availability, there was an average wait of at least 2 months (except for emergencies). Because of the backlog in referrals, CCPDG estimates the wait for care will be as long as 6 months once they are able to get back into the OR at Natividad.[89]

The referral options for GA for adult and older teenage patients with Medi-Cal are especially limited. The most accessible resource for Santa Cruz County residents *had* been an oral surgeon in Hollister (San Benito County), Dr. Terry Slaughter, who saw both children and adults and offered conscious sedation and GA in his office. However, he retired in December and the office is now closed.

Central California Alliance reports that while it does not track each case, it case manages many of the members with developmental disability. CCAH also follows up on any access grievances that are brought to its attention. It expects the referring clinic and primary care provider to let it know if there are any issues, too.

CCAH provided a list of 126 claims received in 2021 from GA anesthesia providers for covering dental services for Medi-Cal members in Santa Cruz and Monterey Counties. The majority of the claims were for children (88.2% from Santa Cruz, 98% from Monterey). As Table 13 on the next page shows, most claims, 11.4% for Santa Cruz residents and 20.1% for Monterey, were submitted by UCSF. Comparing the number of total GA requests CCAH approved in 2021 with the total number of GA services it actually paid for—though not expected to be a perfect correlation but an indication of the number of patients able to follow through from referral to treatment—points to further evidence of inadequate dental GA access in the region, particularly in Santa Cruz County. Of 87 approvals for residents of Santa Cruz, there were 51 claims submitted, 41% fewer surgeries performed than were approved. For the 140 approvals given for Monterey County residents, 105 claims were submitted, 25% fewer than approved.

[87] Casamassimo P et al. To work toward oral health care equity, start with Medicaid. *J Am Dent Assoc* 2021 July;152(7):495-499, p. 496.
[88] According to a representative from a large California hospital system, dental cases are always low priority for hospital ORs that can bill for "big" compensation cases like cardiovascular surgery; personal communication, January 29, 2022.
[89] Personal communication with Kathy Diaz, CCPDG Administrator, March 9, 2022.

Table 13. Dental Claims by Anesthesia Provider 2021 (Distinct CCAH Member Count)

	Santa Cruz County Members		Monterey County Members	
Name of Facility/Provider (Alphabetical order)	Number of Children 0-20	Number of Adults 21+	Number of Children 0-20	Number of Adults 21+
Amit Saxena	0	0	0	0
Andrea Murray	0	0	1	0
Andrew Infosino	1	0	2	0
Andrew P Horsley	3	0	4	0
Angela M Marsiglio	1	0	1	0
Anjali A Dixit	0	0	1	0
Aparna R Dalal	0	0	0	1
Bay Area Dental Surgery Ctr	4	0	6	0
Carole Lin	0	0	1	0
Central California Dental Surgery Ctr	0	0	1	0
Chi-Ho Tsui	0	0	0	0
Children's Hospital & Research Ctr Oakland	0	0	0	0
Christine Jette	0	0	1	0
Christopher Vanderbeek	0	0	0	0
Claire M Brett	0	0	1	0
Community Regional Medical Center	0	0	0	0
David L Robinowitz	1	0	1	0
Delta Surgical	0	0	0	0
Denise P Chang	1	0	2	0
Echo Rowe	0	0	0	0
Fernando Okonski	0	0	1	0
Gabriel E Sarah	0	0	2	0
Gail S Shibata	0	0	2	0
Gregory Hammer	0	0	2	0
Gundala Reddy	0	0	0	0
Hapy Bear Surgery Ctr LLC	2	0	0	0
Hung G Nguyen	0	0	1	0
James McFadyen	0	1	0	0
Janice Man	0	0	1	0
Jeanie K Bhuller	1	0	0	0
Jina L Sinskey	0	0	1	0
Joel Nagafuji	0	0	1	0
Joseph R Grim	0	0	0	0
Julianne Mendoza	0	0	1	0
Julie Williamson	1	0	1	0
Justin S Libaw	1	0	3	0
Kings Canyon Surgery Center	0	0	2	0
Kristin Sun	1	0	0	0
Lisa Ferguson	0	1	0	0

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Cont. from previous page

	Santa Cruz County Members		Monterey County Members	
Name of Facility/Provider (Alphabetical order)	Number of Children 0-20	Number of Adults 21+	Number of Children 0-20	Number of Adults 21+
Louise Furukawa	0	0	1	0
Lucile Packard Children's Hospital	5	0	7	0
Marino Fernandez	0	0	0	0
Mark L Rigler	0	3	0	0
Marla B Ferschl	1	0	2	0
Maurice S Zwass	0	0	4	0
Merced Ambulatory Surgery Center, LLC	0	0	0	0
Michael E Moellenhoff	0	1	0	0
Michael Lennig	1	0	1	0
Mohammad Esfahanian	0	0	1	0
Morgan McCarroll	1	0	0	0
Nicole M Baier	**0**	**0**	**1**	**0**
Odinakachukwu A Ehie	0	0	2	0
Olga Wolke	0	0	1	0
Radhamangalam Ramamurthi	2	0	2	0
Romy Yun	0	0	2	0
Salida Surgery Ctr	1	0	1	0
San Jose Dental Surgery Ctr	3	0	4	0
Santa Clara Valley Medical Ctr	0	0	1	0
Stephanie Pan	0	0	1	0
Tammy Wang	1	0	0	0
The Children's Dental Surgery	0	0	1	0
Thomas Anderson	1	0	0	0
UCSF Medical Center - Op	10	0	28	1
Valley Children's Hospital - Op	0	0	0	0
Victor M Yanez-Segura	0	0	0	0
Zenret Yadok	0	0	0	0
Zhe Chen	1	0	2	0
Total	**45**	**6**	**103**	**2**

Source: Courtesy of Central California Alliance for Health, February 17, 2022.

EMERGENCY DEPARTMENT USE FOR PREVENTABLE DENTAL CCONDITIONS

The use of an emergency department (ED) for dental problems serves as a marker for disparities in the quality and access to a regular dental home. Seeking dental services in an ED for a non-urgent condition is likely a reflection of poor prevention and suggests lack of access to readily available community dental services. Research has shown that approximately 1.5% of ED visits across the U.S. annually are dental care related issues; the greatest users for non-traumatic dental conditions were among the uninsured and Medicaid beneficiaries compared to people with private insurance. [90] Importantly, inadequate access to oral health care provided in the ED creates a pattern of repeat non-traumatic dental condition ED visits.[91]

[90] Kim PC, et al. Factors associated with preventable emergency department visits for non-traumatic dental conditions in the U.S. *Int JEnviron Res Public Health.* September 2019;16(19):3671.
[91] Ranade A et al. Emergency department revisits for nontraumatic dental conditions in Massachusetts. *J Amer Dent Assoc* August 2019;150(8):656-663.

In 2019, there were 744 total ED visits made by Santa Cruz County residents due to a primary oral diagnosis, 452 (60.8%) of which were made for an *ambulatory care sensitive condition* (ACS)—those reflecting the conditions that would "likely or possibly benefit from better prevention or primary care,"[92] and therefore considered potentially avoidable. The following year, 2020, 314 of the 478 ED dental visits (65.7%) were for an ACS condition. In Monterey County, in 2019, 1,156 residents visited an ED for an oral condition; 710 (61.4%) of these visits were related to an ACS oral condition. In 2020, 655 of the 974 ED dental visits (67.2%) were considered an ACS oral condition. The 2-year average ACS oral conditions for both counties are shown in Figure 12 below.

Figure 12. Average Percent of ED Dental Visits Considered Preventable of all ED Dental Visits in Santa Cruz and Monterey Counties, 2019-2020

Source: CCAH.

Table 14 breaks out the ED dental visits ("all oral") and avoidable dental visits ("ACS oral") by the number of these visits for various age groups. Overall, residents of both counties made fewer dental ED visits in 2020, "the COVID year," probably reflecting avoidance of the ER consistent with sharp decline in ED volume in the U.S. at the height of the pandemic.[93]

Table 14. ED Visits for an Oral Condition by Santa Cruz and Monterey County Residents[1] by Age Group, 2019 and 2020

Santa Cruz County

	Age 0-5			Age 6-20			Age 21-64			Age 65+		
CY	All oral	ACS oral	% ACS oral	All oral	ACS oral	% ACS oral	All oral	ACS oral	% ACS oral	All oral	ACS oral	% ACS oral
2019	80	20	25.0%	98	49	50.0%	514	357	69.5%	52	26	50.0%
2020	29	11	37.9%	50	27	54.0%	362	257	71.0%	37	19	51.4%

Monterey County

	Age 0-5			Age 6-20			Age 21-64			Age 65+		
CY	All oral	ACS oral	% ACS oral	All oral	ACS oral	% ACS oral	All oral	ACS oral	% ACS oral	All oral	ACS oral	% ACS oral
2019	184	48	26.1%	183	100	54.6%	699	517	74.0%	90	45	50.0%
2020	120	35	29.2%	133	76	57.1%	669	509	76.1%	52	35	67.3%

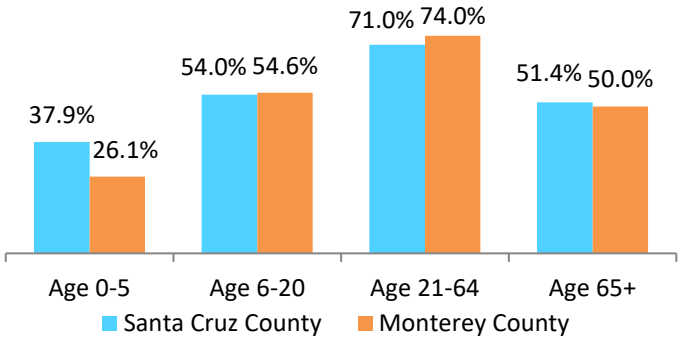
[1]By patient's county of residence regardless of facility location.
[2]Ambulatory Care Sensitive Conditions. Primary ICD-10 Codes. List of codes available from study author.
Source: Emergency Department Data, 2019-2020, Department of Health Care Access and Information (formerly OSHPD), February 26, 2022.

Looking at the 2019 data (to reflect a pre-COVID period), there were some differences between the two counties, specifically in the ED users aged 0-5. About one-third more young children from Santa Cruz County than from Monterey County sought care in an ED for a preventable dental condition, 37.9% vs. 26.1% (Figure 13). School-age children and youth (age 6-20) and seniors used the ED at somewhat equal proportions in both counties.

[92] Shortridge EF, Moore, JR. Use of Emergency Departments for Conditions Related to Poor Oral Health Care. Rural Health Research & Policy Centers, and NORC Walsh Center for Rural Health Analysis. Final Report, August 2010.
[93] Avoidance of Emergency Care—A Marker of Long-standing Inequities. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2783271

The age group difference for adults ages 21-64, similar in both counties, is striking as these residents made the highest proportion of preventable ED dental visits. Considering this alongside the very low Medi-Cal dental utilization by this age group (see page 48), clearly points to the importance of ensuring better linkages to a dental home for adults.

Figure 13. Percent of ED Visits for an ACS Oral Condition[1] as a Percent of all ED Oral Visits by Santa Cruz and Monterey Counties Residents[2] by Age Group, 2020



[1]Ambulatory Care Sensitive Conditions. Primary ICD-10 Codes. List of codes available from study author.
[2]By patient's county of residence regardless of facility location.
Source: Emergency Department Data, 2019-2020, Department of Health Care Access and Information (formerly OSHPD) February 26, 2022.

In 2019 and 2020, there was a total of 2,024 (down from 2,392 in 2014) ED visits to the 6 ED facilities in Santa Cruz and Monterey Counties for an ACS dental condition—a notable improvement. The lower ED visits in 2020 than in 2019 were likely due to people avoiding the ED due to COVID-19 risk. (Note: because these are visits by *county of facility*, residents of other counties could be included.) Children aged 0-20 made up 19.7% of the total ED visits in 2019 and 15.7% in 2020 (Table 15).

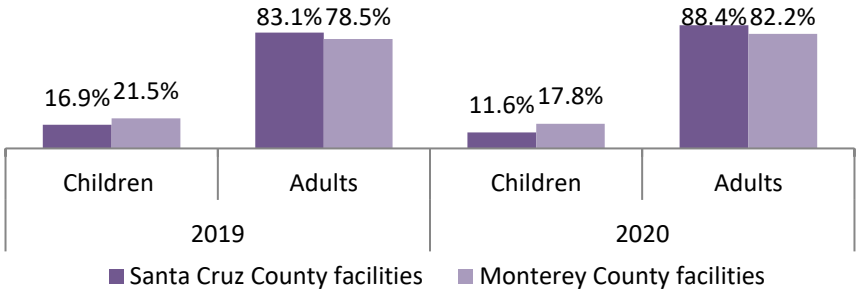
Table 15. Number of ED Visits Made by Children and Adults to a Monterey County and Santa Cruz County ED[1] for an ACS Oral Condition[2], 2019 and 2020

Facility	County	2019			2020		
		Children 0-20	Adults 21+	Total	Children 0-20	Adults 21+	Total
Community Hospital of the Monterey Peninsula	Monterey	19	188	207	15	132	147
George L. Mee Memorial Hospital	Monterey	19	33	52	11	54	65
Natividad Medical Center	Monterey	76	188	264	62	199	261
Salinas Valley Memorial Hospital	Monterey	29	114	143	21	118	139
County Total		143	523	666	109	503	612
Watsonville Community Hospital	Santa Cruz	45	176	221	25	117	142
Dominican Hospital	Santa Cruz	27	179	206	12	165	177
County Total		72	355	427	37	282	319
Total		215	878	1,093	146	785	931

[1]By county of facility.
[2]Ambulatory Care Sensitive Conditions. Primary ICD-10 Codes. List of codes available from study author.
Source: Emergency Department Data, 2019-2020, Department of Health Care Access and Information (formerly OSHPD), February 26, 2022.

In both 2019 and 2020 Monterey County hospitals experienced a slightly higher proportion of the area's ACS dental ED visits by children than the Santa Cruz County hospitals did (Figure 14).

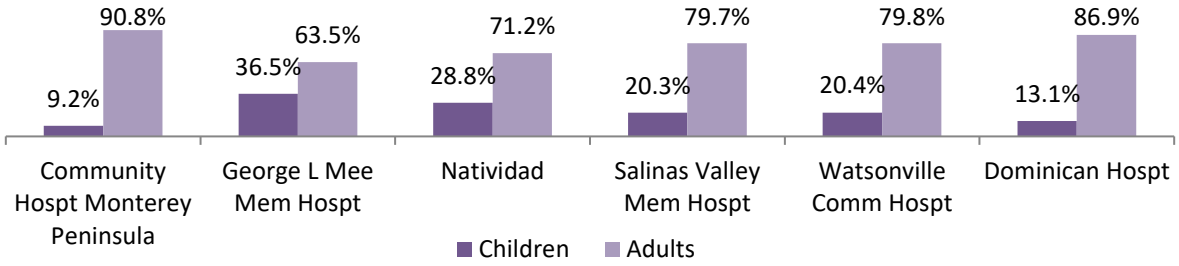
Figure 14. Proportion of ED Visits by Children and Adults for an ACS Oral Condition,[1] 2019 and 2020



[1]By county of facility.
[2]Ambulatory Care Sensitive Conditions. Primary ICD-10 Codes. List of codes available from study author.
Source: Emergency Department Data, 2019-2020, Department of Health Care Access and Information (Formerly OSHPD), February 26, 2022.

Figure 15 shows the individual ED facilities' share of the total child and adult ASC dental visits in both years. Proportionately, George L. Mee Memorial Hospital saw more children while Community Hospital Monterey Peninsula saw more adults. (Note: the 2020 data are not shown but are very similar to the 2019 data in the figure).

Figure 15. Proportion of ED Visits by Children and Adults for an ACS Oral Condition[1] by Name of Facility, 2019



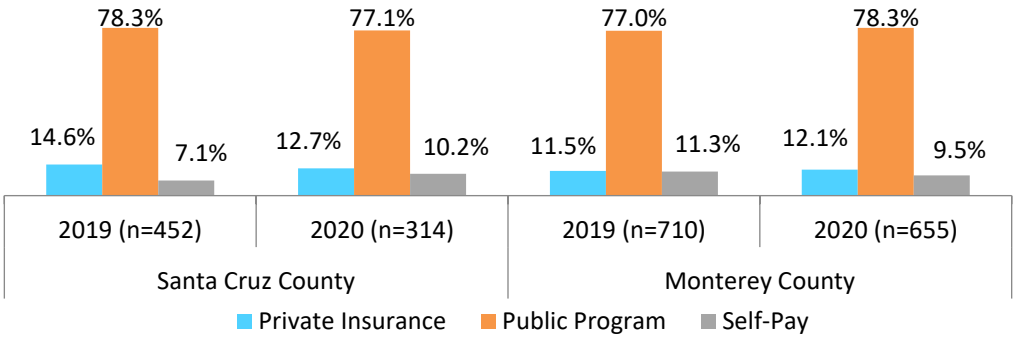
[1]By county of facility.
[2]Ambulatory Care Sensitive Conditions. Primary ICD-10 Codes. List of codes available from study author.
Source: Emergency Department Data, 2019-2020, Department of Health Care Access and Information (Formerly OSHPD), February 26, 2022.

Emergency Department Dental Visits by Payer Source

Use of the ED for avoidable dental conditions is expensive, especially when compared to the price of prevention. ED dental visits have been reported to cost more than $1 billion to the U.S. healthcare system annually, with an average cost of $749 per visit.[94] Public programs—nearly entirely represented by Medi-Cal—picked up the tab for the clear majority of Santa Cruz and Monterey County residents' ED dental visits considered preventable in 2019 and 2022 (Figure 16 on the next page).* There was very little difference in the proportion paid by payer source between the two counties. The disproportionately high percentage of ED visits covered by Medi-Cal suggests there is a greater need for expanded access for dental services and increased education and prevention services for this population.

[94] Okunseri C. *J Evidence Based Dent Practice.* 2015;15(1):33-34.
* Note: Unlike in our previous reports, OSHPD (now called HCAI) was not able to provide payer data by age group because of data concerns related to patient confidentiality.

Figure 16. Payer Source for ED Visits Made by Santa Cruz and Monterey County Residents[1] for an ACS Oral Condition,[2] 2019 and 2020



[1]By patient's county of residence regardless of facility location.
[2]Ambulatory Care Sensitive Conditions. Primary ICD-10 Codes. List of codes available from study author.
Source: Emergency Department Data, 2019-2020, Department of Health Care Access and Information (formerly OSHPD)

Rates (per 100,000 population) of non-traumatic ED dental visits considered avoidable by age and race/ethnicity group are shown in Table 16. Relative to age, the majority of these visits in both counties were among young adults (18–34 years of age), similar to findings from other studies.[95] The largest differences between the two counties by age group were for the 1–2-year-olds (higher in Monterey). Racial disparities in the utilization of EDs for dental conditions are a consistent finding in research. Relative to its population in Santa Cruz and Monterey Counties, African Americans had the highest rates of ACS dental visits. This finding is consistent with national data that demonstrate that Black Americans, especially those with no or public insurance and of low socioeconomic status, have higher rates of ED visits than other groups.[96]

Table 16. Rate of ACS Dental Visits to an ED by Patient Age and Race Ethnicity, 2017-2019

	Santa Cruz County	Monterey County
Age Group		
All	366.8	377.3
1-2 years	321.2*	539.6
3-5	311.1	410.4*
6-9	284.9	263.5*
10-13	177.6	164.2
14-17	220.0	209.9*
18-34	533.1	555.0
35-64	401.9	374.3
65+	148.1	188.1
Race/Ethnicity		
Asian	--	85.2
African American	508.6	587.0
Other	202.5	485.5
White	235.8	250.9
Hispanic	430.4	371.2

*= Observations for which there were 30-59 ED visits are noted to have low reliability. -- = Fewer than 11 observations.
All rates are crude rates per 100,000 population.
Source: Department of Health Care Access and Information (formerly OSHPD). ED Visits 2014-2019.

[95] DeLia D, Lloyd K, Feldman CA, Cantor JC. Patterns of emergency department use for dental and oral health care: implications for dental and medical care coordination. *J Public Health Dent* (2016) 76(1):1–8.
[96] Okunseri C, Okunseri E, Chilmaza CA, Harunani S, Xiang Q, Szabo A. Racial and ethnic variations in waiting times for emergency department visits related to nontraumatic dental conditions in the United States. *J Am Dent Assoc* (2013) 144(7):828–36.

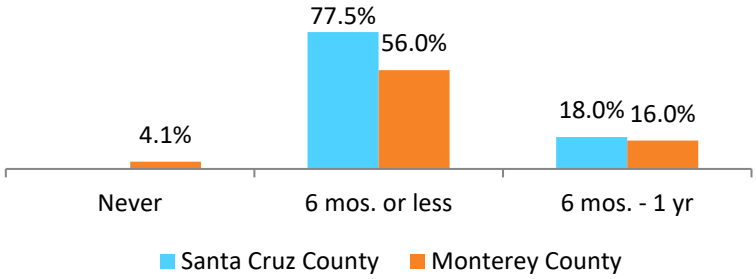
IV. Dental Services Utilization

POPULATION-BASED UTILIZATION

Children

According to the 2020 CHIS—which reflects a large part of the main "COVID year"—77.5% of Santa Cruz respondents reported taking their child age 1-11[97] to a dentist within the past 6 months; this is a significantly higher proportion than parents did in Monterey County that year, at 56.0% (Figure 17).[98]

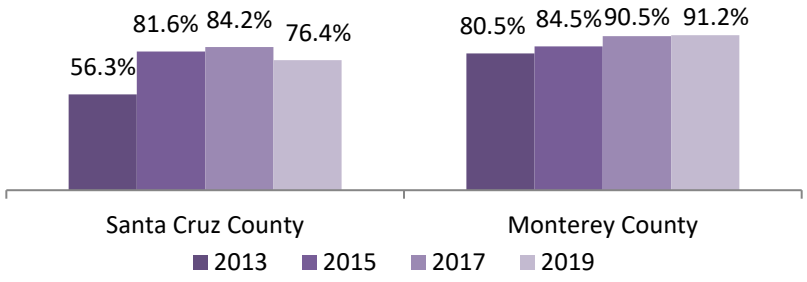
Figure 17. Frequency of Last Dental Visit among Children, 2020



Source: 2020 CHIS

Tracking trends over time without the "COVID year" (Figure 18), shows a steady rise in utilization since 2013 in recommended dental visits among children in both counties; Santa Cruz utilization in 2019, however, dipped down from 84.2% to 76.4%.

Figure 18. Last Dental Visit Six Months or Less among Children, Selected Years 2013 - 2019



Source: CHIS, selected years

Adults

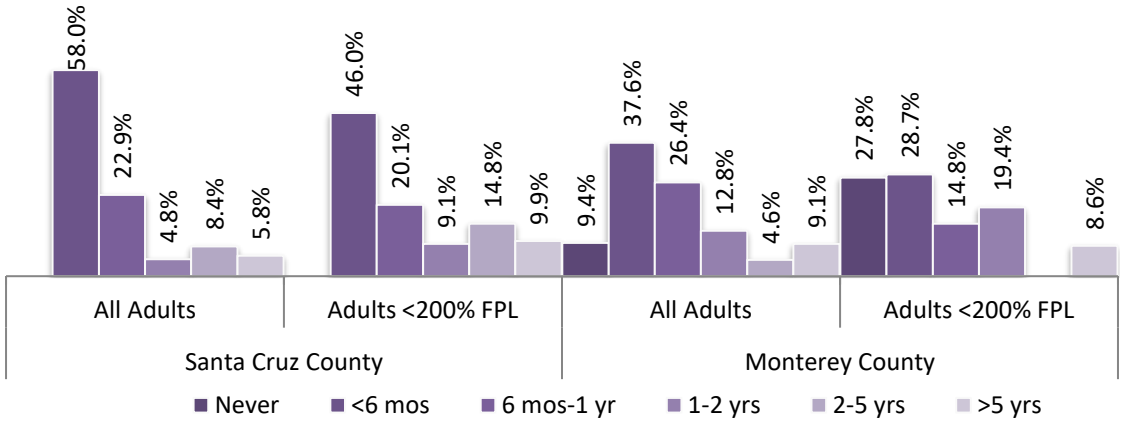
Overall, Santa Cruz County residents reported to CHIS in 2020 they visited the dentist more recently than residents of Monterey County did; 58.0% vs. 37.6% respectively had made a visit within the last 6 months. The adults with low-income in both counties had less recent visits; for instance, 9.9% of the low-income population in Santa Cruz and 8.6% in Monterey said they hadn't seen a dentist in more than 5 years. Of this group, 27.8%

[97] For this measure, the CHIS question asks parents to include "any child up to age 11 with teeth so it is possible the age group contains some children <1."

[98] UCLA Center for Health Policy Research. http://ask.chis.ucla.edu/AskCHIS/tools/_layouts/AskChisTool/home.aspx#/geography. Some of the CHIS data for Santa Cruz County are considered "statistically unstable" due to small samples—which is true for other counties as well. It is important to note that self-reported utilization of dental services may be higher than that which can be verified.

in Monterey reported they had “never" made a dental visit; some in Santa Cruz also reported “never” but the percentage was suppressed due to small sample size.[99]

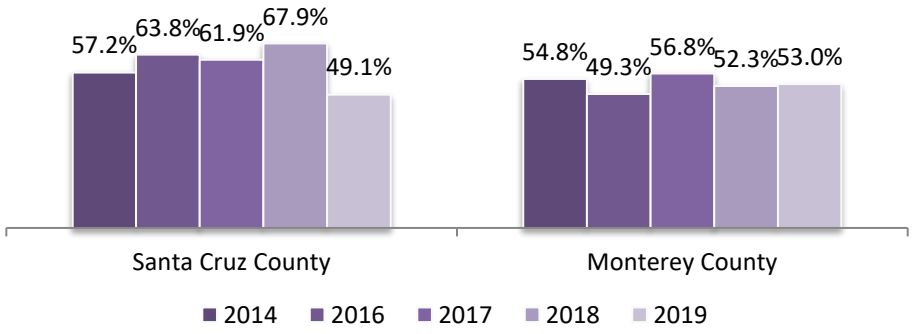
Figure 19. Frequency of Last Dental Visit among Adults, 2020



Source: 2020 CHIS

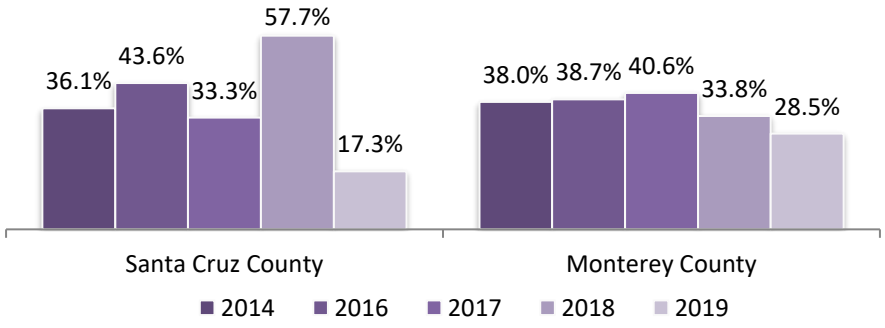
Looking at adult utilization over time without “COVID year” 2020 to remove potential skewing (Figure 20), there was a relatively small variation from year to year in both counties; however, as with the child population, the adult utilization in Santa Cruz noticeably decreased between 2018 and 2019. The overall utilization of adults at <200% FPL (Figure 21 farther down), was unsurprisingly lower, but while Monterey County is more consistent each year, Santa Cruz County utilization especially fluctuated between 2018 and 2019.

Figure 20. Last Dental Visit Six Months or Less among All Adults, Selected Years 2014 - 2019



Source: CHIS, selected years

Figure 21. Last Dental Visit Six Months or Less among Adults at 0%-200% FPL, Selected Years 2014 – 2019



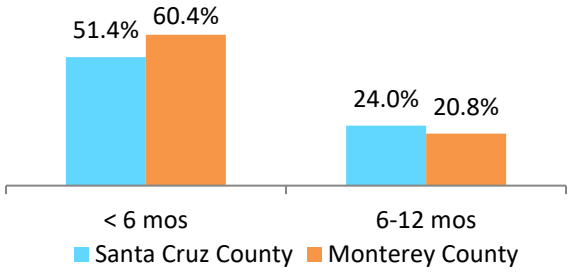
Source: CHIS, selected years

[99] Ibid.

Seniors

CHIS dental utilization data for residents 65+ are incomplete—and statistically unstable in some cases—except for a couple of visit intervals. For all survey respondents over age 65 in Santa Cruz County, 75.4% reported making a dental visit (for any reason) in the last year; the proportion in Monterey County was higher, at 81.2% (Figure 22). These findings are more favorable than national rates as overall, approximately two-thirds (65.6%) of U.S. adults aged 65+ had a dental visit in the past 12 months,[100] and in California, 72.4%. CHIS dental data for low-income seniors (<200% FPL) in the two counties are too small to report, though the same national data show poor and near-poor older adults were less likely to have had a dental visit in the past year (42.7% and 42.8%, respectively) compared with adults who were not poor, and could be applicable to low-income Santa Cruz and Monterey County seniors as well.

Figure 22. Last Dental Visit among Seniors Age 65+, 2020



Source: 2020 CHIS

Pregnant People

Good oral health and control of oral disease protects people's health and quality of life before and during pregnancy and has the potential to reduce the transmission of pathogenic bacteria from parents to their children. Of pregnant people who had a live birth in Santa Cruz County in 2016-18, 56.9% (higher than 37.1% in the prior 4-years) reported making a dental visit during pregnancy; a slightly lower proportion, 52.0%, of women who gave birth in Monterey County reported a dental visit. Table 17 provides additional details about the women that could have implications for program planning. The mothers' age doesn't show a relationship to receiving dental care in Santa Cruz as it does in Monterey. Overall, the differences in dental visit experience are more variable among Santa Cruz County women.

Table 17. Receipt of a Dental Visit during Pregnancy among Santa Cruz and Monterey County Women, 2016-18[1]

DDS Visit	Race/Ethnicity				Family Income			Payer		Mother's Age		
	Asian/PI	*Black*	*Latina*	*White*	*0-100% FPL*	*101-200% FPL*	*> 200% FPL*	*Medi-Cal*	*Private*	*15-19*	*20-34*	*35+*
Santa Cruz County (n=1,500)												
56.9%	--	--	43.9%	67.3%	47.8%	40.2%	71.5%	47.1%	69.2%	56.4%	57.7%	54.9%
Monterey County (n=3,000)												
52.0%	53.0%	--	52.0%	52.6%	53.3%	52.2%	53.7%	51.7%	53.2%	73.4%	47.6%	62.0%
California												
44.3%	47.0%	34.2%	37.3%	54.8%	35.1%	35.9%	56.7%	35.5%	53.8%	38.1%	42.6%	50.6%

Source: CDPH, Maternal and Infant Health Assessment (MIHA) Survey. Women with a recent live birth.

[1] Data for the 3 years are combined. The sample size of Santa Cruz County was 297; it was 601 in Monterey County.

[100] https://www.cdc.gov/nchs/products/databriefs/db337.htm

MEDI-CAL DENTAL UTILIZATION

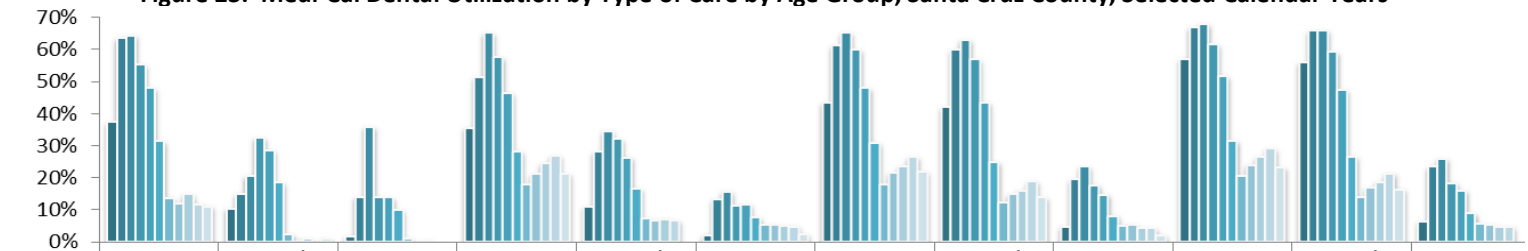
All Age Groups

The detailed Figures 23 and 24 on the next page show the Medi-Cal dental utilization rates in Santa Cruz and Monterey Counties, respectively, by type of care for state-determined age groups over a 7-year period. In Santa Cruz County, the annual dental visits (ADV) for children aged 1-2 generally increased from 2013 to 2019, though CY 2015 shows a dip as also occurred in the 3–5-year-old age group. The rate for children aged 6-9 (averaging about 65.9%) was relatively constant across the four calendar years.

After age 20, dental visits–particularly preventive visits– began to markedly fall among residents in both counties. In Santa Cruz County, for example, between 2013 and 2019, only 17.6% on average of young adults aged 21-24 visited the dentist for an annual dental exam, and an average of 9.1% had a preventive dental visit. Among the same young adult age group in Monterey County, 15.3% on average made an annual dental visit.

For seniors, annual dental visits in both counties generally increased similarly from year to year but decreased slightly from age group 65-74 to age group 75+. Blank cells in the two bar graph figures indicate missing data for those services. Note that some differences in adult utilization rates after 2013 could reflect the partial restoration of Medi-Cal adult optional dental benefits by the Department of Health Care Services in May 2014 (pursuant to Assembly Bill 82, Chapter 23, Statutes of 2013), and the fuller restoration in 2018.

Figure 23. Medi-Cal Dental Utilization by Type of Care by Age Group, Santa Cruz County, Selected Calendar Years

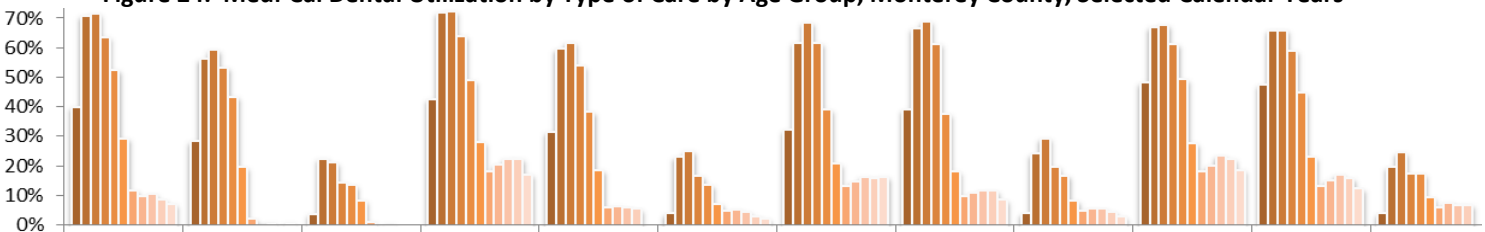


	ADV	Preventive	Restore	ADV	Preventive	Restore	ADV	Preventive	Restore	ADV	Preventive	Restore
	2013			2015			2017			2019		
Age 1-2	37.4%	10.5%	1.9%	35.7%	11.0%	2.2%	43.4%	42.1%	4.7%	57.2%	56.0%	6.3%
Age 3-5	63.7%	15.1%	14.1%	51.4%	28.2%	13.4%	61.3%	60.0%	19.5%	67.1%	65.9%	23.5%
Age 6-9	64.5%	20.7%	36.0%	65.2%	34.7%	15.8%	65.4%	63.2%	23.5%	68.1%	66.1%	26.0%
Age 10-14	55.4%	32.6%	14.0%	57.6%	32.1%	11.4%	60.0%	57.0%	17.8%	61.7%	59.3%	18.5%
Age 15-18	48.0%	28.7%	13.9%	46.5%	26.4%	11.7%	48.0%	43.5%	14.8%	51.7%	47.5%	16.1%
Age 19-20	31.5%	18.6%	9.9%	28.3%	16.7%	7.7%	30.9%	25.0%	8.2%	31.6%	26.6%	8.9%
Age 21-34	13.8%	2.4%	1.1%	17.9%	7.4%	5.4%	18.1%	12.3%	5.1%	20.5%	14.1%	5.8%
Age 35-44	12.0%	0.8%		21.2%	6.7%	5.3%	21.5%	14.9%	5.4%	24.1%	16.9%	5.3%
Age 45-64	14.9%	1.0%	0.2%	24.6%	7.2%	5.0%	23.7%	16.1%	4.4%	26.6%	18.8%	4.7%
Age 65-74	11.8%			26.9%	6.7%	4.9%	26.5%	18.9%	4.3%	29.1%	21.4%	4.6%
Age 75+	11.1%	1.1%	0.0%	21.3%		2.4%	21.9%	13.9%	2.2%	23.3%	16.5%	

ADV = annual dental visit; Preventive = use of a preventive service; Restore = use of a restorative service. Age groups predetermined by Medi-Cal.
Source: Medi-Cal Dental Program, https://data.chhs.ca.gov/

In Monterey County, the annual dental visits for children aged 1-2 also increased from 2013 to 2019, though in this county CY 2017 was the irregular year; this dip also occurred in the 3–5-year-old age group. The rate for children aged 6-9 (averaging about 69.9%), however, was relatively constant across the four calendar years. The decline in annual and preventive dental visits seen after age 20 in Santa Cruz County similarly occurred in Monterey County.

Figure 24. Medi-Cal Dental Utilization by Type of Care by Age Group, Monterey County, Selected Calendar Years

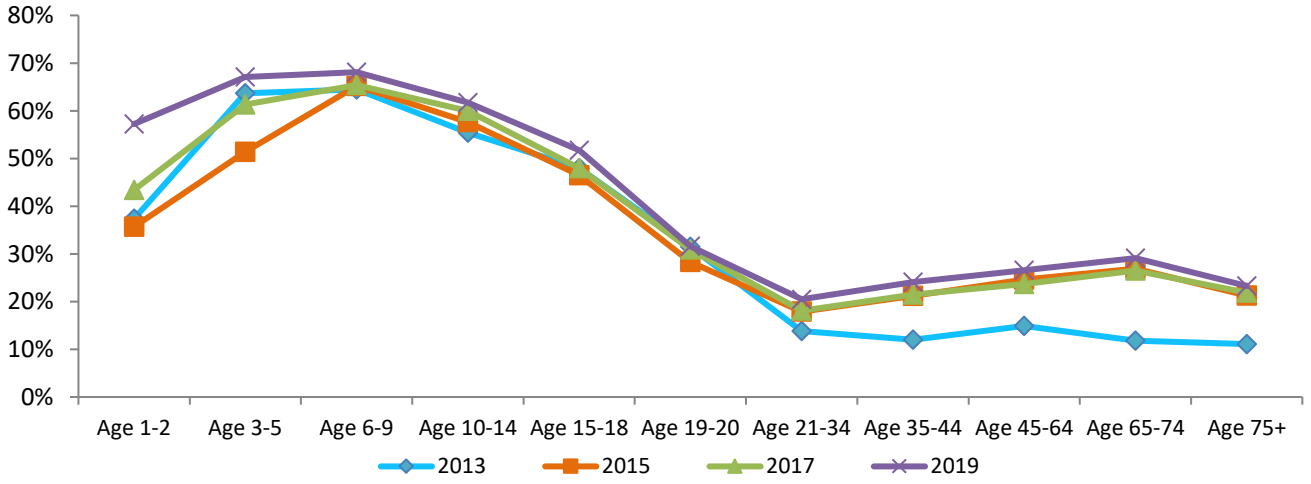


	ADV	Preventive	Restore	ADV	Preventive	Restore	ADV	Preventive	Restore	ADV	Preventive	Restore
	2013			2015			2017			2019		
Age 1-2	40.0%	28.4%	3.8%	42.6%	31.6%	3.9%	32.2%	39.1%	4.0%	48.2%	47.5%	3.9%
Age 3-5	70.9%	56.2%	22.5%	71.9%	59.6%	23.1%	61.7%	66.6%	24.1%	67.1%	66.0%	19.7%
Age 6-9	71.4%	59.2%	21.1%	72.3%	61.8%	25.1%	68.5%	68.9%	29.4%	67.7%	66.0%	24.5%
Age 10-14	63.6%	53.4%	14.3%	64.1%	53.9%	16.6%	61.5%	61.4%	19.8%	61.3%	59.0%	17.3%
Age 15-18	52.5%	43.5%	13.5%	48.9%	38.3%	13.6%	39.1%	37.6%	16.8%	49.3%	44.7%	17.3%
Age 19-20	29.4%	19.6%	8.3%	28.0%	18.6%	7.3%	20.7%	18.1%	8.2%	27.7%	23.0%	9.3%
Age 21-34	11.7%	2.1%	1.0%	18.1%	6.1%	4.7%	13.2%	9.8%	4.8%	18.2%	13.4%	6.1%
Age 35-44	9.6%	0.4%		20.5%	6.3%	5.2%	14.6%	10.8%	5.5%	20.1%	15.1%	7.6%
Age 45-64	10.4%	0.7%	0.2%	22.4%	5.9%	4.4%	16.2%	11.5%	5.4%	23.4%	17.0%	6.9%
Age 65-74	8.5%			22.5%	5.4%	2.9%	16.0%	11.6%	4.4%	22.4%	15.8%	6.9%
Age 75+	7.2%	0.6%		17.2%		2.2%	16.3%	8.5%	2.9%	18.7%	12.3%	

Note: ADV = annual dental visit; Preventive = use of a preventive service; Restore = use of a restorative service. Age groups predetermined by Medi-Cal.
Source: Medi-Cal Dental Program, https://data.chhs.ca.gov/

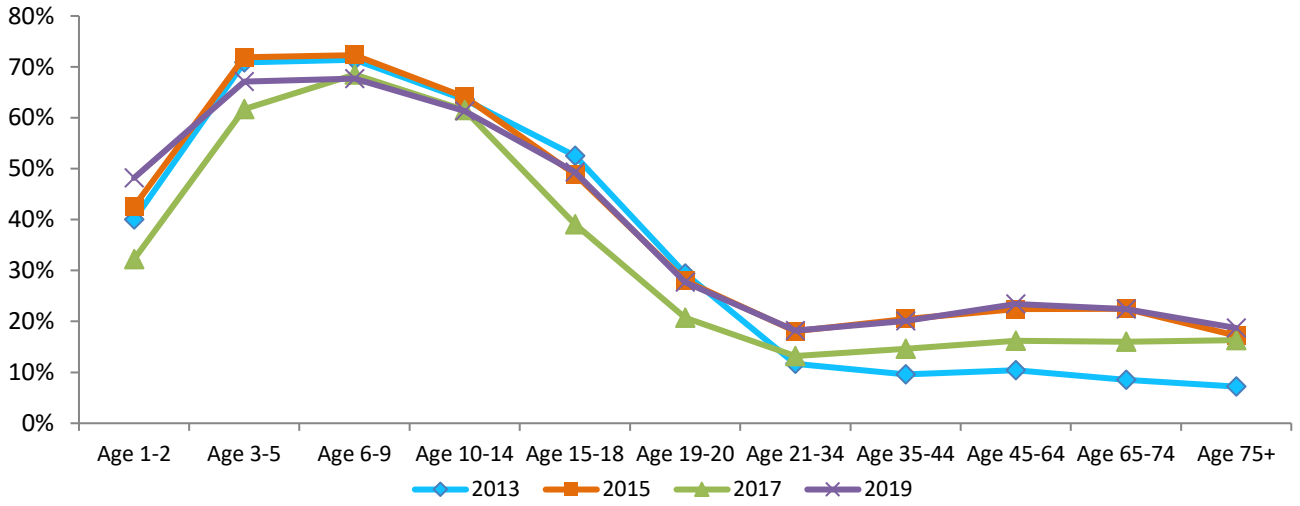
Using a line graph (Figures 25 and 26) to better visualize only the Annual Dental Visits shown in Tables 23 and 24 above, something that seems apparent is that once young people leave home, typically by about age 20, and are not under their parents' care (or insurance), regular dental care becomes less of a priority for them.

Figure 25. Annual Dental Visits (ADV) in Medi-Cal by Age Group, Santa Cruz County



Note: Age groups predetermined by Medi-Cal.
Source: Medi-Cal Dental Program, https://data.chhs.ca.gov/

Figure 26. Annual Dental Visits (ADV) in Medi-Cal by Age Group, Monterey County



Note: Age groups predetermined by Medi-Cal.
Source: Medi-Cal Dental Program, https://data.chhs.ca.gov/

Race/Ethnicity Differences

Looking at the question of disparities, Table 18 displays Medi-Cal annual dental visits made by 3 different age groups by race/ethnicity where data were relatively available for 2019. The age groups represent some of the lowest overall utilizers. Among Santa Cruz County children aged 1-2, White children had the lowest proportion of dental visits, though these children had similar rates to Monterey and the rest of the state. In Monterey, Black children (Santa Cruz had no data for this group), made the fewest dental visits among the ethnic groups, but matched the state rate as well. For Hispanic and "Other" children, however, the differences were more noticeable; these children from Santa Cruz County had a higher visit rate than either Monterey County or California.

Asians and Whites had the lowest utilization rates among young adults in Santa Cruz County. In Monterey, "Other" and White young adults made the fewest visits. The ethnic differences were very small among Santa Cruz County's older adults. In Monterey County, among older adults, Hispanics made the fewest dental visits. However, among younger adults and children, Hispanics had a higher proportion of visits.

Table 18. Medi-Cal Annual Dental Visits by Race/Ethnicity, Selected Age Groups, 2019.

	Santa Cruz County			Monterey County			California		
	Age 1-2	Age 21-34	Age 65+	Age 1-2	Age 21-34	Age 65+	Age 1-2	Age 21-34	Age 65+
Asian	--	16.0%	24.6%	--	--	29.9%	38.2%	22.7%	30.4%
Black	--	23.2%	25.0%	26.6%	16.8%	28.1%	27.4%	22.5%	23.9%
Hispanic	68.2%	24.3%	25.5%	52.7%	19.8%	20.3%	37.0%	23.7%	24.1%
Other	49.2%	20.4%	29.1%	28.3%	13.7%	--	31.4%	22.7%	26.9%
White	27.8%	15.6%	27.6%	28.5%	14.1%	22.1%	26.7%	20.2%	27.4%

-- = data missing or suppressed because of small sample size.
Source: Medi-Cal Dental Program, https://data.chhs.ca.gov/

Childhood

Looking at the average annual dental visits made by young children 1- to 9-years old, the rate in Santa Cruz and Monterey Counties is nearly similar, 63.1% and 64.1%, respectively. Both are more favorable than the California rate as only half (50.4%) of children ages 1-9 statewide made an annual dental visit in 2019.

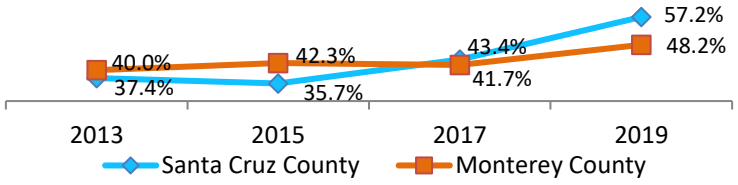
Figure 27. Percentage of Medi-Cal Annual Dental Visits by Children Aged 1-9, 2019

Source: Medi-Cal Dental Program, https://data.chhs.ca.gov/

Very Early Childhood

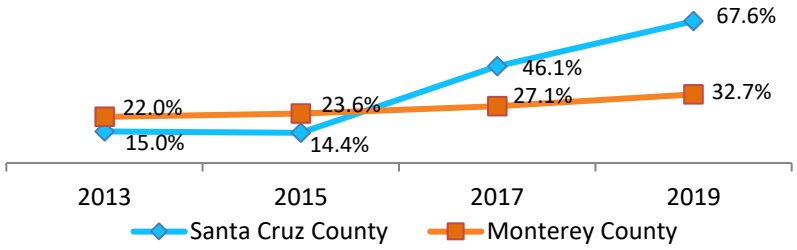
Because of the importance of primary baby teeth—and recognizing the promotion of "First Tooth First Birthday" (FTFB) by Oral Health Access Santa Cruz County—we looked at Medi-Cal utilization for the 1-to-2-year-olds. First using Medi-Cal's Annual Dental Visit (ADV) as the indicator, the relative gains in utilization by these children in both counties was notable (Figure 28). These were children continuously enrolled in Medi-Cal for at least 3 months during each measure year. When we looked at the Medi-Cal dataset where continuity of enrollment was the entire year, we had to use Overall Utilization as the indicator as ADV was not an available category. The improvement, shown in Figure 29 on the next page, is even more striking, especially among Santa Cruz County children; this was very likely influenced by the efforts of the FTFB campaign.

Figure 28. Medi-Cal Dental Utilization by 1–2-Year-Olds (When Annual Dental Visit was the Indicator)



Source: Medi-Cal Dental Program, https://data.chhs.ca.gov/

Figure 29. Medi-Cal Dental Utilization by 1–2-Year-Olds (When Overall Utilization was the Indicator)

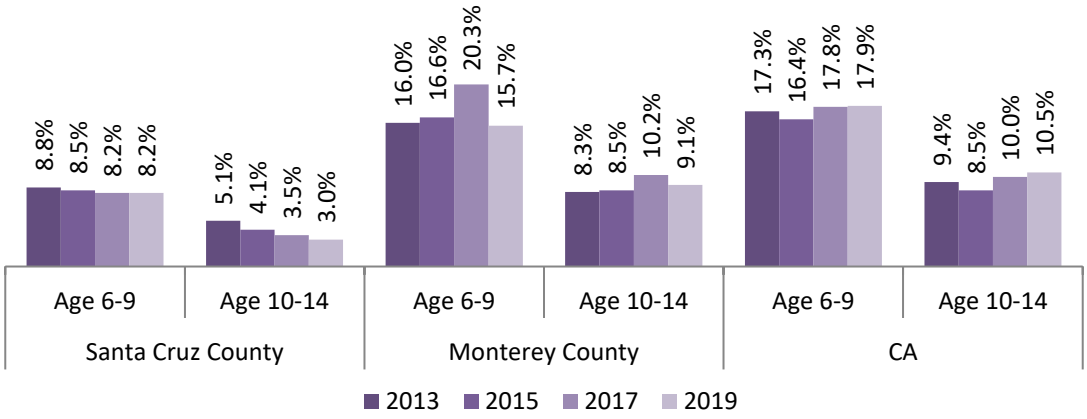


Source: Medi-Cal Dental Program, https://data.chhs.ca.gov/

Use of Sealants

Dental sealants—a thin, plastic coating painted on the chewing surfaces of the back teeth—act as a barrier to help protect teeth from bacteria and acids. The rate of sealant use by Santa Cruz County children declined each year from 2013 to 2019. These children also received significantly fewer sealants than children did statewide and in Monterey County—which mostly saw increases during the reporting period—putting them at higher risk for tooth decay (Figure 30).

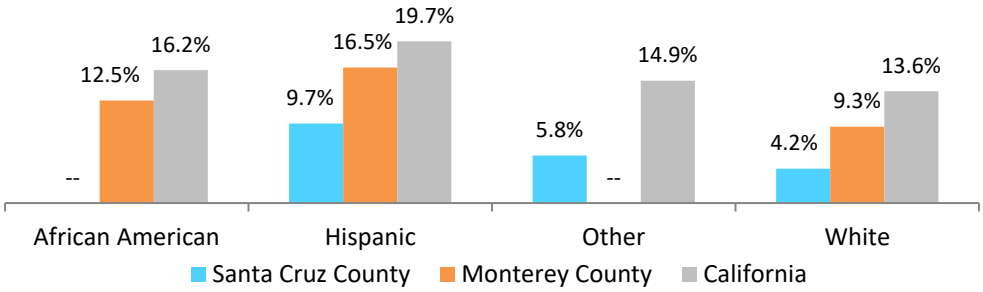
Figure 30. Rate of Sealant Use by Age Group, Selected Years



Source: Medi-Cal Dental Program, https://data.chhs.ca.gov/

Considering the question of racial disparities for children and sealant use, we can see from Figure 31 that while the rates for 6–9-year-olds for all groups are higher for Monterey than for Santa Cruz, both lag behind the state, Santa Cruz particularly so. The missing figures in the graph (as well as missing ethnic groups) represent suppressed data due to small sample size.

Figure 31. Rate of Sealant Use Children Ages 6-9, by Ethnicity, 2019



-- = data missing or suppressed because of small sample size.
Source: Medi-Cal Dental Program, https://data.chhs.ca.gov/

The Dental Transformation Initiative (DTI)

The recent Dental Transformation Initiative (DTI) represented a Medi-Cal strategy to improve dental utilization of children ages 0-20 in selected counties in California. One of its goals was to improve continuity of care by establishing and incentivizing an ongoing relationship between beneficiaries and private and safety net dental providers.[101] DHCS provided incentive payments to dental service office locations that met or exceeded the set annual utilization benchmarks. DTI participation by Santa Cruz and Monterey County providers in the final year of the program (2020) is shown in the boxes below:

	Santa Cruz County Providers	Monterey County Providers
Total number of service office locations	15	25
Number of service office locations that received incentive payment	11	24

Source: DHCS DTI Final Annual Report, 2021.

[101] https://www.dhcs.ca.gov/provgovpart/Documents/DTI-PY5-Final-Annual-Report.pdf Note: DTI concluded that utilization of preventive dental services increased over the 5-year period by 2.19 percentage points, but decreased by 9.47 percentage points from 2019 to 2020 due to COVID.

Because children who receive continuity of health care services have better outcomes,[102] we looked at the experience of children receiving services by DTI providers in Santa Cruz and Monterey Counties. Table 19 shows the number of children with Medi-Cal who remained with the same service office location for 2, 3, 4, 5 and 6 continuous years. (Note: because Santa Cruz County was one of the original pilot counties, its data are included in all years; Monterey data appear only in the last 3 years when the state expanded the number of pilot counties and Monterey was added.) Based on these state data, 12.4% of the children from Santa Cruz County (vs. 9.7% of the state average for the initial pilot counties) had dental exams for 6 consecutive years, which indicates the relative steadiness of this subset of children and the value of continuity of services.

Table 19. Number of Children with Medi-Cal Continuously Returned to the Same Dental Offices for Dental Exams as of Dental Transformation Initiative (DTI) Final Program Year

Provider County	Dental exams received by children in 2020	Dental exams received in 2 years (2019 and 2020)	Dental exams received in 3 years (2018, 2019, 2020)	Dental exams received in 4 years (2017, 2018, 2019, 2020)	Dental exams received in 5 years (2016, 2017, 2018, 2019, 2020)	Dental Exams received in 6 years (2015, 2016, 2017, 2018, 2019, 2020)
Santa Cruz	14,852	3,003	1,166	403	417	1,842
Monterey	37,120	5,436	17,040	--	--	--

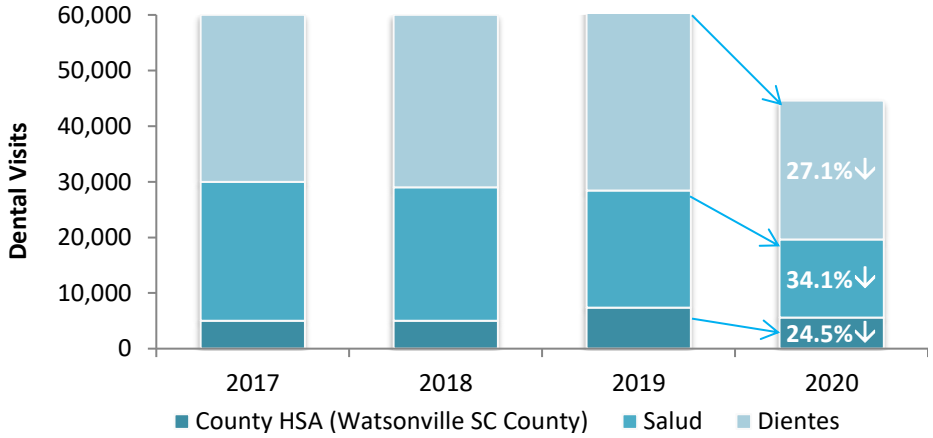
Source: DHCS DTI Final Annual Report, 2021.

CLINIC-BASED UTILIZATION

Safety Net Clinic Coalition (SNCC) Utilization Data

The Health Improvement Partnership (HIP) Safety Net Clinic Coalition (SNCC) utilization data from CY 2020—which will duplicate some of the FQHC dental data presented below—show that while total *medical* visits increased by 9.7% since 2015, total *dental* visits decreased by 29.2% over a 3-year period (data not shown). Looking at 3 of the clinics featured in the HIP presentation, where "County HSA" is Dientes, the dramatic decline is apparent between 2019 and 2020—probably due to COVID-19 (Figure 32, next page).

Figure 32. SNCC Clinics Dental Visits Percentage Change from Prior Year



Source: HCAI (OSHPD); SNCC Utilization data reported by each clinic.
Graph reproduced from Health Improvement Partnership of Santa Cruz County, SNCC Report, 2021
Note: County HSA (Watsonville SC County) dental visits are provided by Dientes

[102] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2083711/

FQHC Utilization Data

Each calendar year, federal Health Center Program awardees such as Federally Qualified Health Centers (FQHCs) and look-alikes are required to report a core set of information as part of the Uniform Data Reporting System (UDS). Trying to reconcile some of the UDS dental reports with OSHPD (under its new name, Department of Health Care Access and Information, HCAI) dental reports is a bit problematic, however. Santa Cruz County's reporting in UDS is only for Watsonville and homeless patients across all other clinics. HCAI includes reporting in all clinics, except Watsonville. Tables 19 and 20 display UDS data reported by Salud and CSVS and, for Dientes, its Electronic Health Record system, and pertain to all dental patients and dental encounters regardless of payer. In the case of sealants for children ages 6-9 (Table 21), recall that Medi-Cal specific data, including sealant use, is provided above and is also a valuable source for understanding utilization in these counties regardless of clinic provider.

In the Salud and CSVS clinics, dental patients went from representing about 41-%-45% of the agencies' total patients across the 5-year period to about one-third in 2020. The drop in unduplicated dental patients in 2020 from earlier years is likely the result of COVID (Table 20).

Table 20. Percentage and Number of Dental Patients per Agency, 2016-2020

	Dientes Community Dental[1]		Salud Para La Gente[2]		Clinica de Salud del Valle de Salinas[2]	
Year of Procedure	% Dental Pts	# Dental Pts	% Dental Pts	# Dental Pts	% Dental Pts	# Dental Pts
2016	100.0%	10,463	39.%	10,940	40.8%	19,061
2017	100.0%	10,870	40.1%	10,641	45.7%	22,017
2018	100.0%	11,426	41.4%	11,286	43.9%	22,117
2019	100.0%	12,066	41.3%	11,568	41.1%	21,544
2020	100.0%	9,732	30.0%	8,315	33.2%	16,177

Source: [1] Dientes Electronic Health Record. [2]Data reported to UDS at https://data.hrsa.gov/tools/data-reporting/program-data?grantNum=H80CS00226

The proportion of children who received dental sealants from the reporting clinics rose noticeably between 2016 and 2018, and at Dientes generally remained the same through 2019 (prior to the pandemic). At Salud, while the *number* of children receiving sealants decreased after 2017, the *proportion* who received them increased. This was not the case for CSVS where the proportion declined (Table 21).

Table 21. Children Ages 6-9 Who Received Dental Sealants, 2016-2020

	Dientes Community Dental[1]		Salud Para La Gente[2]		Clinica de Salud del Valle de Salinas[2]	
Year of Procedure	# of Children	% of Children	# of Children	% of Children	# of Children	% of Children
2016	436	24.1%	408	25.9%	156	20.0%
2017	467	27.0%	1,008	62.9%	400	48.6%
2018	498	28.6%	922	55.7%	106	49.1%
2019	491	27.9%	768	64.3%	264	36.8%
2020	266	23.5%	449	65.7%	214	30.0%

Source: [1] Dientes Electronic Health Record. [2]Data reported to UDS at https://data.hrsa.gov/tools/data-reporting/program-data?grantNum=H80CS00226

Looking at the 2020 HCAI primary care clinic data that were reported for dental encounters (that UDS does not include), the average number of encounters or visits/patient ranged from 1.26 at Salud to 2.41 at CSVS to 2.98 at Dientes (Table 22).

Table 22. Number of Dental Encounters and Average Encounters per Patient in FQHCs, 2020

	Dientes Community Dental		Salud Para La Gente		Clinica de Salud del Valle de Salinas	
	Dental Encounters (Visits)	Avg Dental Visits/Pt	Dental Encounters (Visits)	Avg Dental Visits/Pt	Dental Encounters (Visits)	Avg Dental Visits/Pt
2020	24,875	2.98	10,496	1.26	38,997	2.41

Source: Encounter data reported to HCAI (OSHPD) at https://data.chhs.ca.gov/

HEAD START

Health highlights from the 2020-2021 Santa Cruz County and Monterey County *Head Start Programs Information Report* concerning children's dental care are shown in Table 23.[103] A comparison with the earlier needs assessment data for Santa Cruz County shows improvement in the proportion of children with a dental home, 99% in 2020-21 compared to 94.3% in 2014-15. While the proportion of children who received a dental exam decreased from 92.3% to 78% between those 2 periods—due to office closures during COVID—there were 2 positive findings: the percentage of children with evidence of decay (children needing treatment) decreased, and the percentage who actually got the needed treatment rose. The percentage of children who needed treatment in Santa Cruz County was twice as high as in Monterey County in 2020-2021, 18% vs. 7.6%. However, about the same proportion of children in both counties, were able to receive the treatment they needed, 75% and 73.9%, respectively.

Table 23. Dental Experience of Children in Head Start

	Santa Cruz County		Monterey County
	2014-2015	*2020-2021*	*2020-2021*
Children with a dental home	94.3%	99%	99.3%
Children who received a professional dental exam	92.3%	78%	76.1%
Children with a professional dental exam who needed treatment	22.8%	18%	7.6%
Children needing treatment who were able to receive it	65.4%	75%	73.9%

Source: Offices of Education, Head Start, Santa Cruz and Monterey Counties.

CALIFORNIA HEALTHY KIDS SURVEY (CHKS)

CHKS collects data on students in grades 5, 7, 9 and 11 a minimum of every 2 years across California school districts. Among other issues, the Survey is used to track student attitudes, behaviors, and utilization of health-related services. There are still no CHKS data regarding physical health, including dental care.[104] This continues to be a missed opportunity among school children with CHKS, not unique to Santa Cruz or Monterey.

[103] Personal communication with Lizbeth Gomez, Health Coordinator, Monterey County Office of Education, February 25, 2022, and Rocío Uviña-Compeán, MPH, Health Manager, Child & Family Development Programs, Encompass Community Services, March 3, 2022.

[104] California Department of Education, CA Healthy Kids Survey. Accessed March 1, 2022 at https://calschls.org/reports-data/ The only remotely related information about school health is reported by WestEd's *CA School Staff Survey* (as cited on kidsdata.org) regarding the percentage of public school staff on the extent to which they agree their "school provides adequate health services for students." The Santa Cruz County data was apparently too small to report, but in 2017-2019, 17.4% of responses by high school staff and 15.6% by middle school staff in Monterey County reported strong agreement that their school provides adequate health services)

RECOMMENDATIONS

Despite disparities and other gaps in access to oral health services, Santa Cruz and Monterey Counties have many assets upon which to expand the safety net. Many organizations with commitment and expertise have come together since the 2018 oral health needs assessment, some with a new infusion of state OH funds, working to address oral health in community and school settings, clinics, and the public health system. The Central Coast is fortunate to have such forward-thinking dental health leadership and advocates.

The following recommendations are intended to improve access and suggest a few specific areas for growth. Some of the same strategies can address multiple needs and benefit both counties. There is no particular significance to their order. As always, deciding which recommendations to implement and in what priority order is the appropriate role of local stakeholders; it should be based on criteria such as alignment with strategic planning goals, the degree of difficulty in addressing the need, the feasibilty and cost of implementation, and the impact to other systems if changes are made.

1. **Continue the momentum created by Oral Health Access Santa Cruz to capitalize on the various strengths of each member organization and consider expanding membership to appropriate organizations in Monterey County** for more regional collaboration, working through any turf or other issues that might interfere.

2. **Continue to expand access to dental services in high-need communities** by adding new or additional clinic capacity, including the use of mobile clinics, where warranted by market factors such as unemployment rates in certain cities/towns, the location of private dentists who currently accept Medi-Cal patients, and Medi-Cal utilization rates that were highlighted in this needs assessment.

3. **Explore opportunities to increase utilization among children and youth in foster care.** Because this is a "discrete pediatric population with more intensive service needs than the general pediatric population or even other children who are poor,"[105] with more intensive and complex service needs than their peers, children in foster care face more significant barriers in accessing oral health care. The main obstacles to address likely include lack of dentists willing to accept children's Medi-Cal dental insurance; lack of resources available to case workers (i.e., large caseload burden); child transience, leading to the lack of a dental home; foster parents' competing needs and their own oral health experience; child behavior problems; and lack of dental buy in from adolescents.[106]

4. **Create specific marketing strategies that target young adults, particularly those with Medi-Cal, as a special practice demographic.** Their abysmal utilization rates (in both counties) clearly points to the importance of ensuring better linkages to a dental home and making taking care of their oral health more of a priority. Play on factors such as the oral health risks associated with tobacco use and oral jewelry (e.g., hygiene), and unrecognized oral disease that may lead to reduced work activity as well as extensive

[105] American Academy of Pediatrics, District II, New York State Task Force on Health Care for Children in Foster Care. *Fostering health: health care for children and adolescents in foster care.* 2d. Lake Success, NY: American Academy of Pediatrics; 2005:77–78.
[106] Melbye M et al. A First Look: Determinants of Dental Care for Children in Foster Care. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4065575/

treatment costs if conditions are left untreated. For those who are parents, inform and reinforce the influence their own oral health attitudes and behaviors can have on their young children's oral health.

5. **Expand access to specialty care including hospital and sedation dentistry.** This is especially problematic for adult and older teenage patients with Medi-Cal where access in the two counties is extremely limited. We understand using hospital operating rooms for dental cases displaces the opportunity for more profitable procedures. We also fully recognize that ongoing pressure to reduce health system spending will require hospitals to find new operational efficiencies to survive in a post-COVID-19 environment,[107] and the low priority given for dental cases. Perhaps the involvement of county officials (Board of Supervisor members) can be enlisted to help highlight the problem and make even a small improvement. San Andreas Regional Center that serves people with disabilities in Santa Cruz and Monterey Counties might also be counted on to help individuals with disabilities—who disproportionally need GA for dental work—once more awareness of the issues has been raised among case managers (who typically do not have oral health on their radar because of other pressing demands for their time).[108]

6. **Work toward reducing use of the emergency department (ED) for preventable dental conditions.** Adults with Medi-Cal in both Santa Cruz and Monterey Counties made a significantly higher proportion of preventable ED dental visits than children which when viewed alongside their low utilization rates should not be surprising. Encourage CCAH to make regular promotion of oral health more of a priority among its health education efforts.

7. **Support and raise awareness of alternatives to General Anesthesia**. In some cases where patients cannot be relatively cooperative during a dental visit, behavior management techniques can be used which enable treatment to be completed, reducing, or avoiding the need for general anesthesia. From a patient management perspective, you might develop easily available and accessible education programs for dental providers to enhance knowledge and understanding of medical and behavior intervention strategies (e.g., offer training programs for oral health and non-oral health care providers to perform desensitization techniques). Another suggestion is to tie completion of certified education programs to enhanced payment rates for prevention and early intervention procedures and for behavior support (i.e., support that leads to adoption of "mouth healthy habits") which is gaining some traction elsewhere.

   In addition to behavior management techniques and emphasizing early prevention, other alternatives to use of general anesthesia include the use of silver diamine fluoride (SDF). SDF is a substance that is easy to apply in patients who lack the ability to cooperate for more intensive care. SDF arrests and stops the progression of decay when applied to a carious lesion and can buy the practitioner a few years until the patient is older and able to cooperate. In January 2022, SDF was authorized as an allowable procedure for patients under the age of 7 by Medi-Cal and should be incorporated to the toolkit of all dental providers, especially for those children with special needs or the inability to cooperate.

8. **Increase efforts to educate parents and other caregivers about the importance of oral health.** Although we did not collect primary data on the issue during the present study, it is important to include this as a recommendation. "Champions" who share the vision from the regional dental society, First 5s in both counties, school districts, faith-based groups and cultural/social organizations—some who have been active partners—can help parents better understand how to improve their children's oral health, for instance through reducing consumption of sugar and other sweetened beverages. Although an average of about 1 in 5 preschool children screened through the Kindergarten Oral Health round ups with evidence of untreated dental decay *is* an improvement from 5 years ago, on the parent side low priority (including thinking their

[107] Melnick G, Maerki. *The Financial Impact of COVID-19 on California Hospitals.* California Health Care Foundation. June 2020.
[108] *Painful Realities: General Anesthesia Access in Sacramento Geographic Dental Managed Care*, Barbara Aved Associates, June 2020, available at www.barbaraavedassociates.com.

child is too young to see a dentist, having other more pressing challenges) and fear of the dentist remain the most common barriers to work through.

9. **Increase the proportion of communities with fluoridated community water systems.** This issue may continue to be an area of "mission impossible" because of lack of funding, low political will, inadequate resources, and minimal public health awareness that accounts for why community water fluoridation in Santa Cruz and Monterey Counties remains a low priority. Nonetheless, some of our prior recommendations bear repeating to possibly generate interest include providing evidence-based educational information to key stakeholders and the general public that address health and safety concerns, and making presentations on the value and safety of community water fluoridation to health professionals, community stakeholders and policymakers. Additionally, it would be important to sustain and expand the local, broad-based coalitions that support and defend community water fluoridation, and continue to advocate for community water fluoridation in communities that are not currently fluoridating their community water systems.

10. **Share the highlights from the current needs assessment with policymakers, community leaders, advocates and stakeholders**, as you did with the original oral health needs assessment, through strategic plan and media presentations and contacts with potential grantmakers and other funders.

11. **Include community input in future updates of the Oral Health Needs Assessment.** We understood there were limited resources (human and capital) to include primary data collection—focus groups, interviews, community OH survey—in the present study. However, tapping into the opinions, attitudes, behaviors and experiences of community members, particularly the special populations, provides a uniquely rich source of information for crafting approaches and strategies tailored to their input. These data collection methods add tremendous value to needs assessments and allow one to take a deeper dive on questions like *why* people with dental insurance aren't using their benefits, or *why* they don't follow through with treatment when it's been arranged for them and costs nothing, putting a human face on utilization statistics.

12. **Encourage Monterey County to start an Oral Health Access group on the example of the Santa Cruz County committee's work.** The partnership among organizations in Santa Cruz has increased community awareness of the importance of oral health, garnered support from policymakers and led to the expansion of dental services. Sharing these positive experiences and the lessons learned can benefit Monterey County colleagues and be replicated in their communities.

13. **Continue to advocate for Medicare dental benefits and increased Medi-Cal dental reimbursement rates.** Research makes clear that when reimbursement is adequate provider participation and patient access improve. In addition to the unique role safety net providers play, private dentists are key to improving access in Medi-Cal.

ATTACHMENT 1

Oral Health Access
SANTA CRUZ COUNTY

Oral Health Access Steering Committee Members

Member Name	Agency
Dr. Sepi Taghvaei	Dientes Community Dental Care, Co-Chair OHA
Zach Friend	Santa Cruz County Supervisor, Co-Chair OHA
Allyson Violante	For Supervisor Friend
Amy Peeler	Santa Cruz County Clinics – Santa Cruz Health Center
Ana Soria	Delta Dental/ Medi-Cal Dental
Claudia Martin	Salud Para La Gente
Corinne Hyland, MPH	Santa Cruz County – Oral Health Program
Danielle Mendoza-Pacheco	Santa Cruz County – Oral Health Program
David Brody	First 5 Santa Cruz County
DeAndre' James	Pajaro Valley Health Trust
Dr. Roz Saedi	Delta Dental/ Medi-Cal Dental
Dr. Sung H. Sohn	Salud Para La Gente
Heather Lawler, RDH, MSDH	Cabrillo College Dental Hygiene Program
Hillary Gillette-Walch	Central California Alliance for Health (CCAH)
Jennifer Swaney	Delta Dental/Medi-Cal Dental
Judy Thompson, RN, PHN	Santa Cruz – Child Health and Disability and Prevention Program
Martine Watkins	County Office of Education (COE)
Maureen McCarty	Assemblymember Mark Stone representative
Michelle Garza, MPH	Santa Cruz County Clinics – Santa Cruz Health Center
Primavera Hernandez, MPH	Santa Cruz County – Oral Health Program
Rachel Sandobal	Salud Para La Gente
Raquel Ruiz	Santa Cruz County Clinics – Santa Cruz Health Center
Roseanne Swanstrom-Belville, RN	Santa Cruz – Child Health and Disability and Prevention Program
Sheree Storm	Dientes Community Dental Care
Susan Irby, RN	Santa Cruz County – Healthcare Program for Children in Foster Care
Walter Espinoza	Santa Cruz County Clinics – Watsonville Health Center

Updated May 2022.
For questions, please contact: **info@oralhealthscc.org**