SACRAMENTO COUNTY

ORAL HEALTH NEEDS ASSESSMENT



July 2018

SACRAMENTO COUNTY PUBLIC HEALTH

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SACRAMENTO COUNTY ORAL HEALTH PROGRAM

Prepared by

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EXECUTIVE SUMMARY

"In between getting food on the table and getting the kids to school, oral health is a lesser priority—especially for the parents."
– Community Health Specialist in Focus Group

Oral health contributes to a person's overall well-being and self-esteem. Oral diseases, which are largely preventable, cause pain and disability for children and adults who do not have access to proper oral health services as well as contribute to the high costs of care. Unhealthy habits, including tobacco use and consumption of sugary drinks, can contribute to poor oral health.

This report presents findings from a community-driven assessment process to identify oral health needs, risk and protective factors, and service gaps and resources within Sacramento County. The assessment process, guided by The Sacramento County Oral Health Advisory Committee, included primary research gathered through interviews, focus groups and surveys with stakeholders and residents as well as collection and analysis of existing statistical community indicator data. The information will be used to develop an Oral Health Strategic Plan and support strategies to improve the oral health status of Sacramento County children and adults. Highlights of the county's strengths and challenges include the following:

Key Findings

Prevalence of Oral Disease

- About 25% to 37% of Sacramento preschool children screened in the last three years by various programs showed evidence of untreated dental decay. Smile Keepers average was 36.8%.
- 37.1% of all Sacramento adults reported the condition of their teeth as excellent or very good, but only 13.4% of low-income adults said the same.

Protective Factors/Risk Factors

- Though not close enough to the 79.6% Healthy People 2020 goal, about 65% of Sacramento County currently has access to fluoridated drinking water. However, many residents question the safety of tap water and drink bottled water instead—losing the benefit of fluoride.
- 24.3% of children and teens in the general population reported drinking 1-2 glasses or cans of soda on the previous day.
- 14.4% of Sacramento County adults, higher than the state average, report they currently smoke.

Access to Care

- The Medi-Cal Dental Advisory Committee's (MCDAC) has and continues to work with the Geographic Managed Care (GMC) Dental Plans and California Department of Health Care Services to identify problems and barriers to care and implement policy measures to improve access and utilization in Sacramento County.
- Untimely and costly access to zip code-level utilization data from Department of Health Care Services hinders local oral health programs from more specifically targeting their efforts in high-need neighborhoods.
- A large number of community dental clinics provide safety net dental care for Sacramento County's low-income population though awareness of them is uneven.
- Many local organizations play important roles in supporting oral health efforts in Sacramento County by providing direct services, outreach and referrals, advocacy and funding support.
- Denials for general anesthesia dentistry by one Medi-Cal managed health plan, Anthem Blue Cross, continue to present a barrier, a long-standing unresolved issue.
- About 75% of the emergency department visits by children and adults for a dental condition in 2016 were considered preventable.

Dental Services Utilization

- 37.1% of Sacramento women with a live birth in 2015-16 reported making a dental visit during their pregnancy.
- Between 36.3% and 40.7% of children age 0-20 in GMC had an annual dental visit in 2016-17.
- On average, 12.9% of children age 6-9 and 5.8% of children age 10-14 in GMC had sealants in FY 2016-17; the percentages are even lower for the children in Fee-for-Services Denti-Cal.
- Between 15% and 21% of adults in GMC utilized their dental benefits in 2016-17.

Community Input

- 37% of the surveyed dentists said they provided tobacco cessation counseling to all of their patients who use tobacco products. Surveyed dental hygienists believed patient resistance was the main barrier to such counseling.
- 25.6% of general dentist survey respondents do not see children until they are at least three years old.
- 80% of the surveyed dentists who used to take Denti-Cal or GMC stopped because of low reimbursement rates.

- Key informants said oral health education messages integrated with other related efforts were needed to address the serious lack of knowledge about oral health.
- Nearly every focus group participant—especially younger parents—was aware of "first tooth/first birthday" as the time for the first dental visit; the oldest participants were the least likely to know this.
- 32.8% of surveyed adults disclosed they sometimes avoided going to the dentist. They as well as the focus group participants named cost as the main barrier to getting regular dental checkups (48% who answered in Spanish/34.7% in English). Fear of needles and having a bad past experience were the next most common reasons for avoiding the dentist.
- About 33% of surveyed parents said their child drank sugar-sweetened beverages (cola, sports drink, juice, punch) three or more times a week.
- 91.1% of survey respondents (93.7% answering in Spanish) knew fluoride helps to protect teeth and prevent cavities.
- About half of the survey respondents in both English and Spanish were aware of the relationship between periodontal disease and other chronic diseases such as heart disease and diabetes.
- 40.5% of people with a physician said their doctor had asked about their oral health; the GMC/Denti-Cal respondents and those completing the survey in Spanish reported a higher likelihood of being asked about their oral health by their doctor.

Next Steps

These assessment findings are meant to guide Sacramento County Public Health and its partners in developing an Oral Health Strategic Plan for the county to be implemented in January 2019. To address the highest needs identified in this assessment and align with the goals and objectives of the State Oral Health Plan, the implementation strategies should at a minimum focus on:

- Caries prevention among young children (e.g., preventive dental visits, dental sealants);
- Dental visits for pregnant women during pregnancy;
- Continued efforts toward community water fluoridation;
- Greater participation of dentists, particularly specialists, in Denti-Cal and dental Geographic Managed Care;
- Tobacco cessation counseling in dental offices and other healthcare settings;
- Integration of oral health in general health settings, and promotion by medical providers;
- Emergency department visits for preventable dental conditions;
- Greater access to general anesthesia dentistry;
- Accessible Medi-Cal dental utilization data for program planning, advocacy and education.

INTRODUCTION

"It moves at a snail's pace, but the dial does move in getting families to make positive oral health changes." – Key Informant Interview

Good oral health and control of oral bacteria protects a person's health and quality of life. Teeth that function properly are essential for optimal nutrition as well as speech and hearing. Poor health habits along with not being able to see a dentist is related to a range of health problems. An unhealthy mouth, especially if a person has gum disease, can increase the risk of serious health problems such as heart attack, stroke, uncontrolled diabetes and preterm labor. Poor oral health among adults can lead to increased risk for long-term chronic conditions, lost workdays and reduced employability. Children suffering from tooth pain often miss school or are distracted from learning. Early childhood caries (cavities) is now recognized as the number one chronic disease affecting young children, five times more common than asthma and seven times more common than hay fever.[1] Oral health care is particularly important for the health of infants, young children, new mothers, and women who are pregnant or may become pregnant. Since the consequences of poor oral health can have lifelong effects, pregnancy and early childhood are particularly important times to access oral health care. Pregnancy also presents a "teachable moment" when women are receptive to changing behaviors that can benefit themselves and their children. The American Academy of Pediatrics (AAP) and American Dental Association (ADA) recommend the first dental visit take place by the age of 1, and occur at least annually thereafter.

While Sacramento County has made positive gains in increasing the proportion of children with annual dental visits, adults—particularly low-income populations and people of color—have not fared as well. According to the 2016 California Health Interview Survey,[2] about 75% of Sacramento adults overall, but only 54% of those under the federal poverty level, had visited a dentist in the last year. Sacramento County's Denti-Cal and dental managed care utilization rates—40% on average for children and 17% for adults in GMC—continue to be lower than the statewide average despite continued efforts and focus.[3]

This report, produced under the guidance of the Sacramento County Oral Health Advisory Committee in collaboration with Barbara Aved Associates, presents findings from a community-driven assessment process to identify oral health education needs for producing positive oral health behaviors and increasing access to preventive and dental care services to improve the oral health status of Sacramento County children and adults. While access to oral health services in Sacramento County has improved as a result of public health and other local leadership efforts by community partners, a number of opportunities exist for strengthening it, as this needs assessment shows.

Background

Funding for this needs assessment, part of a 5-year oral health grant to Sacramento County, came from the California Healthcare, Research and Prevention Tobacco Tax Act of 2016, which provides $30 million annually to activities that support the state *2018-2022 State Oral Health Plan.* Local health jurisdictions received funding to expand their capacity to coordinate public health activities that support oral health education, disease prevention (including oral diseases caused by tobacco use), surveillance and linkages to treatment. Sacramento County expects to use the findings from this oral health needs assessment to implement strategies that prioritize underserved areas and populations to continue in making progress toward achieving the state Oral Health goals and objectives.

Sacramento County had baseline information about the oral health status of Sacramento County residents from previous studies, primarily focused on the Medi-Cal population, conducted over the last decade that supported the current needs assessment process. These studies identified significant access issues, utilization barriers and gaps in services, bringing together a diversity of local stakeholders and non-traditional providers and creating new leadership and advocacy opportunities to promote oral health.[4] This report builds on that information and closely aligns with the goals and objectives of the State Oral Health Program.

METHODS

"Somehow people have to value it [oral health] and want it. We haven't found a way to ignite this yet." – Key informant interviewee

This oral health assessment involved gathering, analyzing and interpreting data to identify community needs and provide the basis for developing an action plan that will be responsive to the identified needs. The report is organized according to findings about oral health knowledge, prevalence, access, and utilization. Both quantitative (statistics) and qualitative (surveys and interviews) methods were used to collect the information for this assessment.

Advisory Committee

A 21-member Advisory Committee (AC) composed of local partners, experts, and key stakeholder organizations was convened to provide general guidance for the needs assessment process and facilitate access to underserved areas and vulnerable population groups. Because some of the members also participated in the County's recent Community Health Needs Assessment process as well as serve on various oral health advisory groups, their familiarity with the Sacramento County's populations, needs and providers were a definite asset to this needs assessment process. (Attachment 1 acknowledges the Advisory Committee as well as the Oral Health Program staff).

Data Sources and Collection

Secondary Data

The Office of Statewide Health Planning and Development (OSHPD) provided the data on emergency department visits for dental conditions using discharge data when an oral condition was the primary diagnosis.[5] The oral conditions were identified using the ICD-10 diagnosis codes for non-traumatic dental conditions (e.g., "dental caries on smooth surface penetrating into dentine"). Because these dental conditions are largely considered to be *preventable*, they are regarded as potentially avoidable reflecting conditions that would "likely or possibly benefit from better prevention or primary care."[6] The Association of State and Territorial Dental Directors provided the ICD-10 dental codes OSHPD used to pull the data for this report.

Population-based data from the California Health Interview Survey (CHIS)—the largest state health survey in the U.S.—were accessed to examine dental service utilization among the general Sacramento County population.

Existing data on Denti-Cal utilization were retrieved from the California Department of Health Care Services (DHCS) Medi-Cal Dental program. Because DHCS staff does not prioritize "ad hoc" data requests (i.e., data not already on its website) requesters must use the Public Records Act to obtain it and requesters must pay for it. Zip code level utilization data needed for this needs assessment were requested under that process at a charge from DHCS of $4,673.40.[*]

Primary Data – Community Input

Interviews. Eighteen key informants participated in structured telephone interviews as part of the assessment process. They included local leaders, policy makers, dental experts, providers, community-based organization representatives and advocates. Their views and knowledge reflected a wide range of experience and served as a key asset to the study. In addition to extensive interviews with safety net provider staff, a number of follow-up emails helped us learn more about clinic services, capacity, and perspectives on need. (Attachment 2 contains a list of these individuals.)

Surveys. The Sacramento County Dental Society made available to its members an online community dentist survey developed as a part of this needs assessment.[7] Respondents, which included participating as well as non-participating Denti-Cal providers, were asked about dental office practices, capacity, and opinions and experience regarding Denti-Cal (Attachment 3). A similar online survey was created for dental hygienists and distributed to members of Sacramento Valley Dental Hygiene component.[8] Where appropriate, the survey questions asked of dental hygienists parodied those asked of dentists (Attachment 4).

A questionnaire developed in English and Spanish for the general public solicited people's knowledge and opinions about oral health, and asked about their experiences and needs (Appendix 5). The survey was widely distributed in hard copy by members of the AC and included locations where groups of interest would best be reached, to oversample for those populations, such as at family resource centers and Head Start locations. In addition, the survey was available by computer and notices about the online version were posted on the County's and various organizations' websites and in their newsletters.

Additionally, a brief survey was sent to the three contracting GMC Dental Plans asking for their perspectives about the most common oral health needs and barriers and requesting information about their efforts to expand the provider network and increase utilization. One of the three Dental Plans responded to the survey, citing the Early Smiles Sacramento Project and saying the

[*] A second request was made to DHCS for certain information about the GMC program and was considered an ad hoc request; the County was not able to pay $2,881.93 charged by DHCS for providing it.

greatest need was continuing to recruit providers and getting beneficiaries to seek routine screening and preventive services. The other two Plans did not respond to the survey.

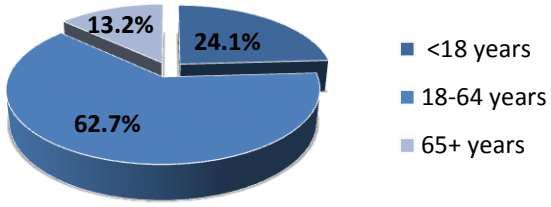
Community Focus Groups. Various types of organizations in five separate locations throughout Sacramento County hosted focus groups with community members. The sites were intended to draw populations that typically gathered there (e.g., preschool parents attending a class or meeting). Although the participants constituted a convenience sample, there was the expectation that *in the aggregate* the groups would be diverse and reflect the populations of highest interest to the needs assessment. A set of structured key questions was used for each group, and tailored as appropriate for the participants. The questions were generally open-ended to encourage dialogue, but included some that were intended to learn specific information (e.g., last dental visit). Spanish interpreters (generally program staff) provided interpretation when necessary. The focus group data were hand recorded by the facilitator during the meetings then transferred to written summary formats where the notes were coded and analyzed.

FINDINGS

County Snapshot

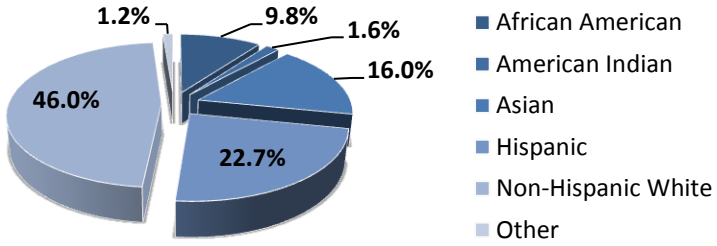
With nearly 1.5 million residents, Sacramento County is one of the largest counties in California. Children aged 0-20 comprise 417,432 of that number. Located in the northern portion of the Central Valley, the county is comprised of 7 cities, 28 census-designated places, and 1 un-incorporated community. As Figure 1 shows, about one-quarter (24.1%) of the population is under age 18; 62.7% is age 18-64; and the remainder, 13.2%, is age 65 and older—percentages that mirror statewide averages.

Figure 1. Sacramento County Population by Age Group, 2016



Socioeconomic status is a key determinant of health and has a significant impact on access to preventive as well as treatment services. Approximately 34.5% of children have Medi-Cal as their primary health and dental insurance. About 16% of the county's population (and 23% of children) were estimated to be living below the federal poverty level in 2016. A large proportion of new mothers lives in a high poverty neighborhood, surpassing the statewide average (42.7% vs. 38.9%). The proportion varies considerably by factors such as geographic location and race/ethnic group, however.[9] Figure 2. displays the racial diversity of the county.

Figure 2. Sacramento County Population by Race/Ethnic Group, 2016



Individuals with limited English proficiency are more likely to forgo needed healthcare services, including dental visits, and experience difficulty comprehending health-related information; 7.0% of individuals in Sacramento County are estimated to have insufficient proficiency in English.

Extent of Oral Disease

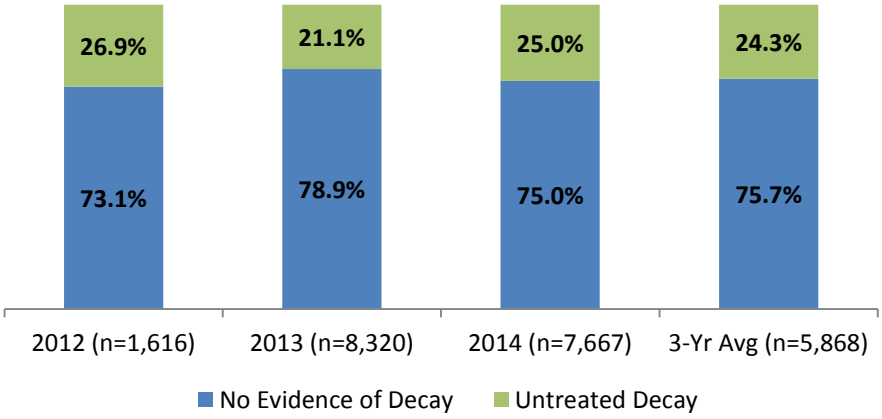
"People wait until their teeth are almost falling out or abscessed; they live in the moment." – Key Informant Interviewee

Prevalence of Oral Disease Among Children

The consequences of poor oral health are particularly critical for children and can have a huge impact on a child's social-emotional health, systemic health, as well as affect a child's performance in school. Dental disease, the most common chronic childhood disease, contributes to school absenteeism, difficulty learning, and diminished nutritional status, self-esteem and overall well-being and development. Prevalence of untreated decay in primary or permanent teeth among children from lower-income households is more than twice that among children from higher-income households.[10]

Pre-kindergarten dental assessments[11] are the best source of surveillance data for providing a picture of dental disease among children. Based on the most recent 3-year average (2012-2014), screening results for the reporting school districts in Sacramento County (nearly all) show that one-quarter (24.3%) of the children had evidence of untreated dental decay (Figure 3).

Figure 3. Results of Pre-Kindergarten Dental Screenings, Reporting School Districts in Sacramento County

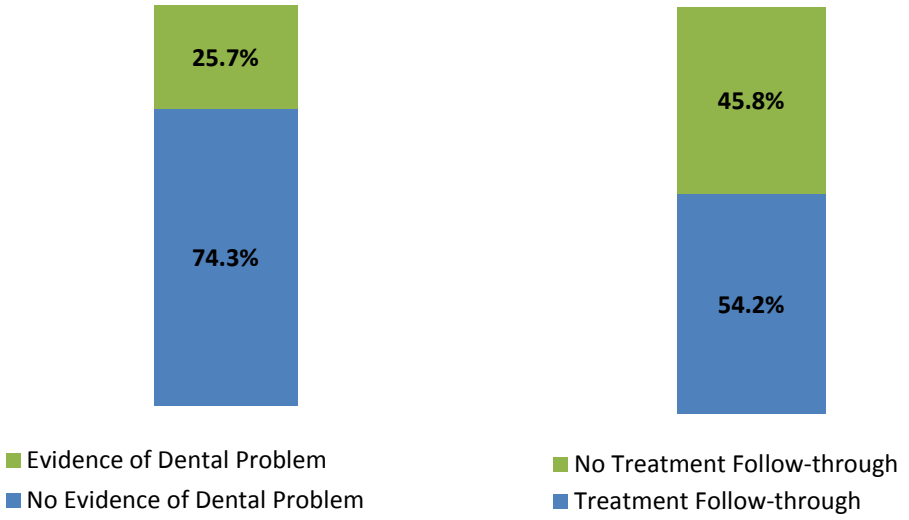


Source: California Dental Association AB 1433 Pre-K Reported Data

Sacramento City Unified School District Child Development Department's assessment findings are similar to the above. Of the 1,155 children who received a dental screening in 2016-17 (representing 77.3% of the enrolled children),[12] one-quarter (25.7%) were diagnosed as "needing treatment." Only 54.2% of the children with an oral problem referred for treatment followed

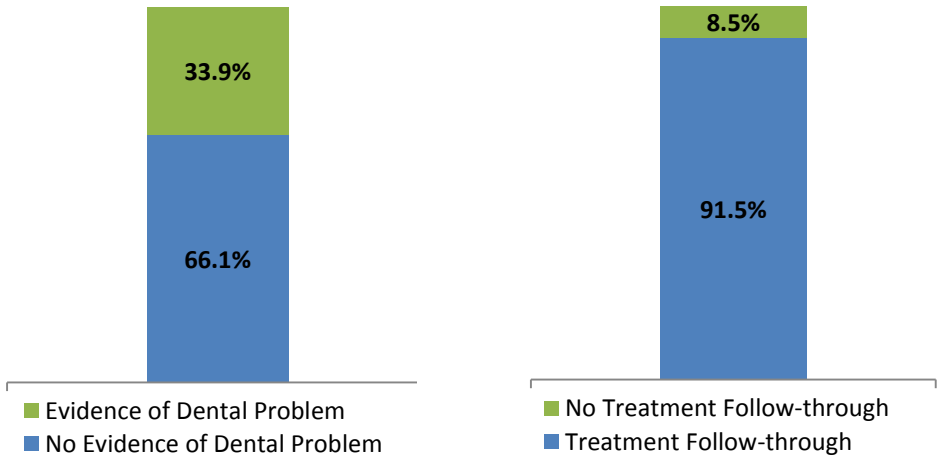
through and received care; according to school personnel, parents' failure to make or keep the appointment was the primary reason that children who needed dental treatment did not receive it (Figure 4).[13]

Figure 4. Results of Sacramento City Unified Child Development Center Dental Screenings, FY 2016-17



Sacramento Employment and Training Agency (SETA), which operates 29 Head Start centers in Sacramento County provides dental screenings to children in their centers. Their results provide further evidence of Sacramento children's oral health needs. Of the 2,522 children who received a dental screening in 2016-17, one-third (33.9%) showed "visible evidence of decay;" 24.8% of the children with decay were assessed to have an *urgent* need for treatment. SETA reported that nearly all (91.5%) of the children with an identified oral problem and referred for treatment received care (Figure 5).[14]

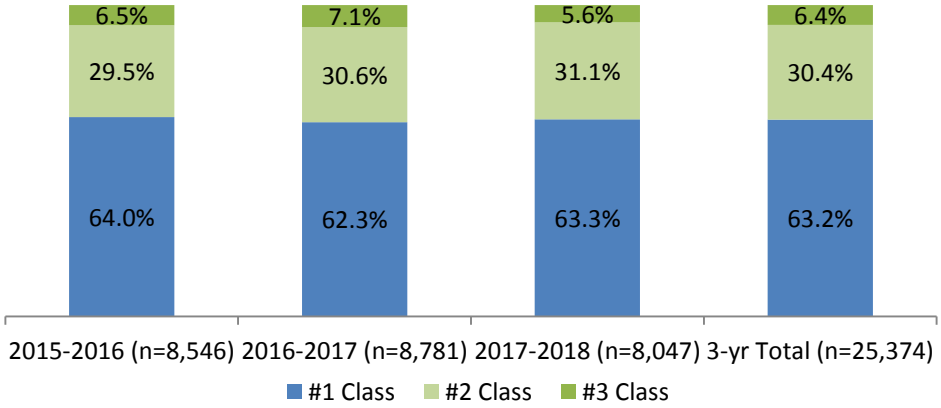
Figure 5. Results of SETA Head Start Dental Screenings, FY 2016-17



Source: Sacramento Employment and Training

The screening results of the Smile Keepers program, conducted in the most high need areas of Sacramento, show an even more striking level of dental decay: an average of 36.8% of children, or 9,339 of them, were identified as needing dental care services (classified as 2 or 3) over the recent three-year period (Figure 6).

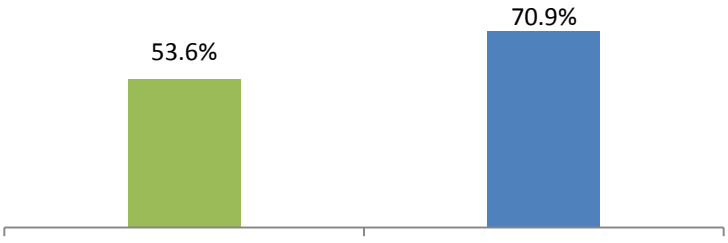
Figure 6. Results of Sacramento Smile Keepers Dental Screenings, FY 2015-16 – FY 2017-18



Class #1: Teeth and gums appear healthy. Visit dentist every 6-12 months for regular check-ups.
Class #2: Non-urgent dental care needed (early or suspicious for decay –needs x-rays, cleaning, etc.); a dentist needs to thoroughly examine the teeth to determine treatment needs.
Class #3: Urgent care needed (signs of gross decay, abscess, or infection); call a dentist immediately.

Statewide surveillance data from the Centers for Disease Control and Prevention (CDC) 2004-05 State Oral Health Survey[15] provide baseline data that can be used for improving local caries experience and untreated tooth decay among kindergarten and third grade students in Sacramento County. According to this survey, over half (53.6%) and more than two-thirds (70.9%) of kindergarten and third grade students, respectively, have some level of caries experience (Figure 7). Children from some racial or ethnic minority groups are disproportionately at higher risk for childhood caries compared to other racial-ethnic groups and the general population. For example, in American Indian and Alaska Native (AI/AN) children, these problem begin early. By the age of two, approximately 39% of AI/AN children have experienced dental caries and by the age of five, 76% are affected by caries.[16]

Figure 7. Percentage of Students with Caries Experience (Treated or Untreated Tooth Decay), California 2004-05



Source: CDC State Oral Health Survey

Prevalence of Oral Disease Among Adults

Dental disease is also a chronic problem among many adults, with those from low-income groups disproportionately affected. A study titled "Prevalence of Periodontitis in Adults in the United States, 2009-2012," [17] estimated that 45.9% of all American adults aged 30 and older have mild, moderate or severe periodontitis; of these, 8.9% have severe periodontitis, the more advanced form of periodontal disease. In adults 65 and older, prevalence rates increase to 70.1%. Prevalence is highest in Hispanics (63.5%) and Non-Hispanic blacks (59.1%), and least among Non-Hispanic whites (40.8%). Research also shows 40% of poor adults age 20 years and older in the U.S. were estimated to have at least one untreated decayed tooth in 2012; [18] among 45-64 year-olds, the percentage with untreated dental caries was 48.6%.[19]

Data on oral disease prevalence among Sacramento County adults is lacking. However, applying national estimates locally from this collective research suggests the following could be the case for adults in Sacramento County:

- With approximately 46% of *all* adults age 25+ (947,748) with mild, moderate or severe periodontitis it could be estimated that 435,964 of adults in Sacramento County currently has some level of oral disease—and 38,800 has severe periodontitis.
- Approximately 70% of *all* adults age 65+ (176,608) with mild, moderate or severe periodontitis means an estimated 123,802 of seniors in Sacramento County are likely to have some level of oral disease.
- 16.3% of the population living below the federal poverty level in Sacramento County means an estimated 78,769 poor adults have some level of oral disease, and approximately 7,010 have severe periodontitis.
- 67,234 low-income adults in Sacramento County (40% of the 171,238 poor age 20 years and older) likely have at least one untreated decayed tooth.

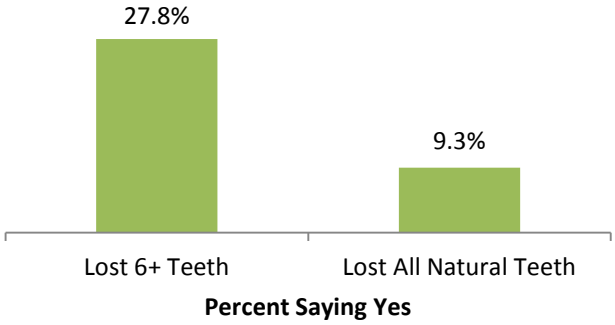
Research from a Government Accounting Office report that examined disparities in oral health care between low-income and high-income adults using key dental health indicators that could have additional relevance for Sacramento County found that:[20]

- Adults living at or below the federal poverty level were less than half as likely to have seen a dentist in the past year as adults earning more than four times the poverty level.
- Adults with Medicaid coverage made fewer visits to dentists than their higher-income counterparts.

- Residents of rural areas were slightly less likely to have visited a dentist in the past year than urban residents.
- The most vulnerable low-income populations are people who are homeless.

Statewide surveillance data from the CDC Behavioral Risk Factor Surveillance System (BRFSS),[21] which also have implications for Sacramento County adults, indicate that 27.8% of California adults age 65+ have lost six or more teeth and 9.3% have lost all of their natural teeth as a result of oral disease (Figure 8 below).

Figure 8. Adults Aged 65+ Who Have Lost Six or More Teeth or All of Their Natural Teeth Due to Tooth Decay or Gum Disease, California 2016.



Source: Behavioral Risk Factor Surveillance System

Because so many California adults experience barriers to dental care, the California Dental Association and CDA Foundation host CDA Cares, a program that allows volunteer dentists, with the assistance of other dental professionals and community volunteers, to provide dental services at no charge. While CDA Cares data are clearly skewed (the event draws the neediest populations), the services provided importantly add to the picture of adult oral disease and need. Table 1 presents the most recent findings from CDA Cares Sacramento.

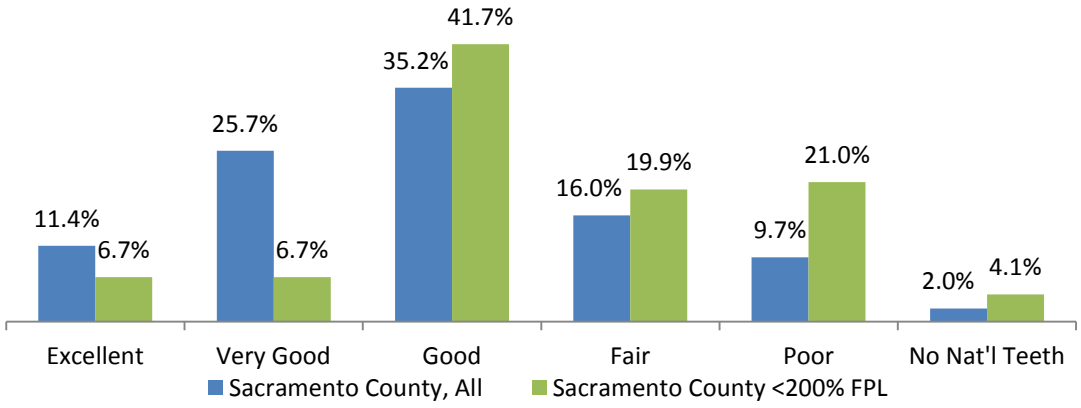
Table 1. Services Provided by CDA Cares Sacramento, 2015

	Total Patients = 2,080 (1,894 adults; 186 children age 0-18)
Procedure	Number Completed
Cleanings	546
Restorative	1,237
Other Restorative Treatment	73
Endo	113
Denture	120
Stayplates	213
Oral Surgery	2,675
Other Surgical Procedures	14

Source: California Dental Foundation, April 2018.

Contrasting the CDA Cares data are the dental self-reports of the general public of Sacramento. Although 37.1% of Sacramento County adults reported the condition of their teeth in 2016 as excellent or very good, the same as statewide, a much lower proportion than statewide of low-income adults, 13.4% vs. 21.9%, were able to report such conditions (Figure 9).

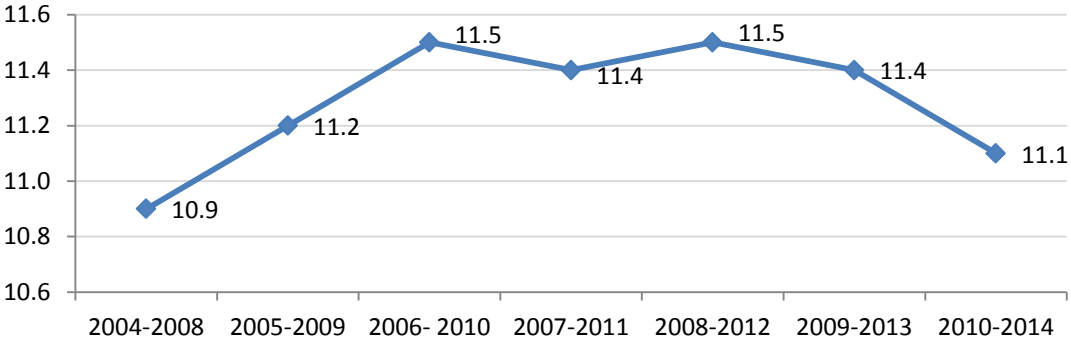
Figure 9. Adults' Self-Reported Condition of Teeth



Source: 2016 California Health Information Survey
Note: some data statistically unstable due to small sample size

In addition to preventing decay, access to regular dental care is important because dental professionals may be the first to spot signs of oral and throat cancer. Oral cancers form in tissues of the mouth or the oropharynx (the part of the throat at the back of the mouth). The known risk factors for developing oral cancer—which is largely preventable—are tobacco use and heavy alcohol consumption. According to the American Cancer Society, individuals who both smoke and drink excessively are 30 times more likely to develop oral cancers than those who do not smoke or drink. While the age-adjusted incidence rate for oral cavity and pharynx cancer in Sacramento County rose to about 11.5 (in cases per 100,000 population) from 2004-08 to 2008-12, it appears to be decreasing and was 11.1 in 2010-14, the latest period for which data are available (Figure 10).[22] The rate was highest among the White population; the incidence among men was nearly three times that of women.

Figure 10. Oral Cavity and Pharynx Cancer Incidence Rate, Sacramento County



Source: National Cancer Institute.

RISK AND PROTECTIVE FACTORS

"If every time I take him [son] they say I'm doing a good job and he has no problems why should I go back just do the same thing again?"
– Focus Group Participant

Risk Factors

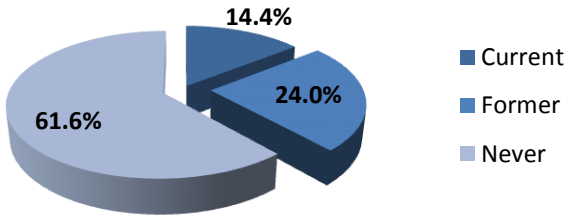
Oral diseases and other chronic diseases share many common risk factors, such as having diabetes as well as poor dietary habits, including consumption of soda and other sugar-sweetened beverages and tobacco use.

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 2016 California Health Interview Survey (CHIS), 14.4% of Sacramento County adults, higher than the state average, report they currently smoke; 24.0% formerly smoked and 61.6% never smoked (Figure 11 below). Of adults who have ever smoked, 24.3% said they did this every day; 13.1% said "on some days."

Figure 11. Smoking Status of Sacramento County Adults



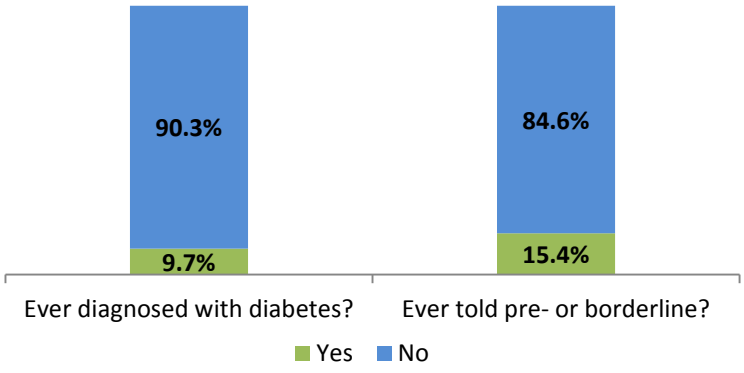
Source: 2016 California Health Interview Survey

The CHIS data by gender show that 18.8% of adult men and 10.6% of adult women in Sacramento currently smoke. The percentage of teenagers that currently smoke is 4.2%; however, the data address only cigarettes, not other tobacco products, and due to small sample size are considered "statistically unreliable." According to the 2017 California Student Tobacco Survey, a large-scale, in-school student survey of tobacco use conducted among middle and high school students, the percent of youth who have used *any* tobacco products in Sacramento County is 14.6%.[23]

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% compared to 66.5% among people without diabetes who make annual dental visits.[24] Treating gum disease can help improve blood sugar control in patients living with diabetes**,** decreasing the progression of the disease. Other than during pregnancy, 9.7% of Sacramento adults have ever been diagnosed with diabetes, and 15.4% told by a doctor they had pre-diabetes or borderline diabetes (Figure 12).

Figure 12. Diabetes Experience, Sacramento County Adults, 2016

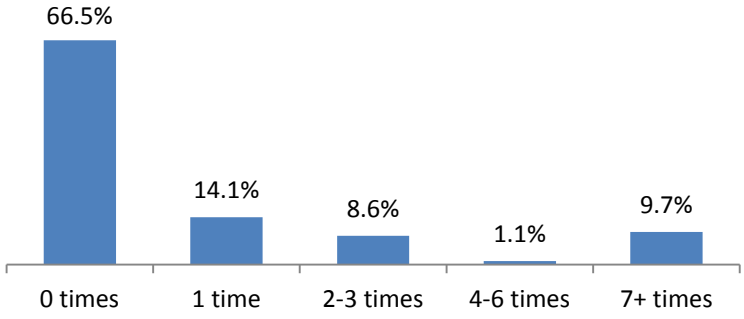


Source: 2016 California Health Interview Survey

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.) While most Sacramento adults (80.6%) reported to CHIS their average weekly consumption of soda was "never" or just one time per week, 10.8% said they drank soda four or more times a week on average.

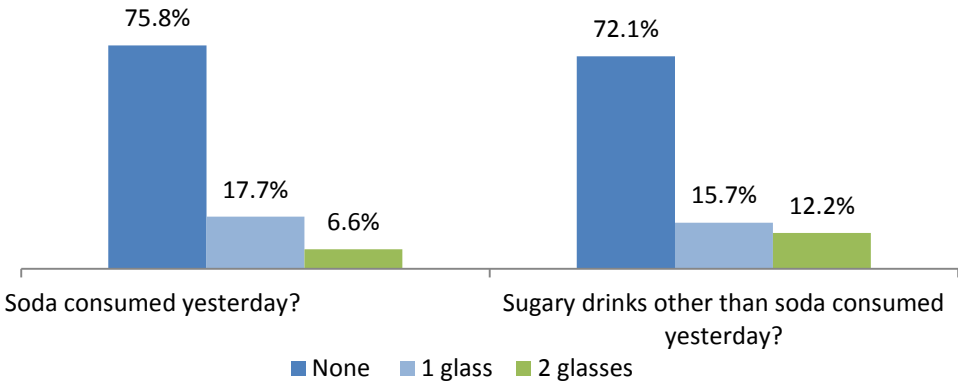
Figure 13. Average Weekly Soda Consumption by Sacramento County Adults



Source: 2016 California Health Interview Survey

About three-quarters of Sacramento County children and teens reported to CHIS not drinking a soda or other sugary drink the previous day; 24.3% and 27.9%, respectively, said they drank 1-2 glasses of soda or a sugary drink other than soda the day before (Figure 14). Their sugared-beverage consumption very closely mirrors the state average.

Figure 14. Soda and Sugary Beverage Consumption by Sacramento County Children and Teens



Source: 2016 California Health Interview Survey

Protective Factors

Community Water Fluoridation

Access to fluoridated water is an important determinant of oral health. Community water fluoridation is the safest, most effective and most economical protective public health intervention for reducing the epidemic of tooth decay.[25] Almost all water contains some naturally occurring fluoride, but usually at levels too low to prevent tooth decay. Water systems are considered naturally fluoridated when the natural level of fluoride is greater than 0.7 parts per million (ppm). When a water system adjusts the level of fluoride to 0.7-1.2 ppm, it is referred to as the optimal water fluoridation. This optimal target goal is aimed at providing the benefits of fluoridation while minimizing the chance that children develop dental fluorosis, a typically mild condition that causes a discoloration of teeth. About 63% of the California population is receiving fluoridated water.[26]

As a result of First 5 Sacramento and the City of Sacramento efforts, close to 65% of Sacramento County currently has access to fluoridated drinking water. The water systems in Sacramento County shown in Table 2 provide a mixture of fluoridated and non-fluoridated water.[27] In April 2018, Golden State Water will begin fluoridating the Arden area. According to advocates, a small gap for fluoridation is in the South Sacramento Area.[28] However, California American Water Company is in the process of purchasing Fruitridge Vista Water Company (South Sacramento) and it has expressed interest in working with First 5 Sacramento to fluoridate the water in that area. A

Water District Map of Sacramento County and a Fluoridation Map of Sacramento County are included in the Appendices (Attachments 6 and 7).

Table 2. Fluoridation by Public Water Systems, Sacramento County, 2016

Fully Fluoridated Water Systems (all water is fluoridated)	Water Systems Providing a Mixture of Fluoridated and Non-Fluoridated Water
Sacramento County WA (Mather-Sunrise Sacramento County WA (Arden Park Vista) Sacramento Suburban Water District - Cal-American Water Co. (Suburban) Cal-American Water Co. (Parkway) City of Sacramento Cal-American Water Co. (Arden)	Sacramento County WA (Laguna/Vineyard)

Source: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html

The largest gap in Sacramento County is in the north area of the county. This gap could be easily solved in a cost effective manner by fluoridating the San Juan Wholesaler which would then provide fluoridated water to five water districts. In addition, the City of Folsom (which has the second largest number of children ages 0 to 5) could fluoridate by adding equipment to one system. By fluoridating the San Juan Wholesaler and the City of Folsom, Sacramento County would then be providing optimal water fluoridation to 90% of the population.

While a large part of Sacramento County water systems *are* fluoridated not everyone is gaining exposure to fluoride by drinking tap water. Following reports in other places involving water quality, many people question the safety of tap water and, according to some of the focus group participants for this needs assessment, many drink bottled water instead—losing the benefit of fluoridation. While tap water may not always taste good everywhere, it is generally safe. According to the California State Water Resources Control Board, which oversees and regulates drinking water, municipal water agencies are required to conduct extensive regular water quality testing by certified laboratories. Testing is performed at a minimum daily, weekly, monthly, quarterly, annually, and triennially. While there *are* a few areas of Sacramento County that are currently out of compliance relative to community drinking water standards, it would be important to emphasize to the community that these systems represent a very small portion of the county; except for Rancho Murieta, all of these systems are in the Delta area.[29] Until consumers' minds are put to rest about the safety of their drinking water, it will continue to be a challenge for oral health educators to promote the use of fluoridated tap water. Because it is beyond the scope of this assessment to address this issue more deeply, interested readers can see Attachment 8 for a list of currently out of compliance systems and a brief explanation.

ACCESS TO SERVICES

"You can inform us all you want but if we don't have money to pay for it [what Denti-Cal doesn't cover] we're not going to the dentist."
– Focus Group Participant

Common Access Barriers

While many children and adults living in Sacramento County enjoy good oral health and ready access to high-quality dental care, some do not. A number of access barriers have contributed to an overall dental system in Sacramento County in which fewer than half of children and less than one-fifth of adults with Medi-Cal saw a dentist last year, as this assessment will show. Barriers to oral health are important to understand and are the result of a combination of factors that are related to both the delivery system (e.g., long waits to get an appointment, foster care system issues, a challenging Medi-Cal dental system) and patients' personal factors (e.g., lack of perceived need and knowledge about the importance of oral health). Education level, income status and ethnicity are important determinants of regular dental care. Even people with dental insurance do not always seek dental services, and dental anxiety can affect whether people make regular visits.[30] Cultural attitudes or the absence of tooth pain can also be strong influences on health behaviors and act as barriers to using preventive services. For example, "fatalism" among Latinos (a strong belief that uncertainty is inherent in life and each day is taken as it comes), [31] or the outlook of "no tooth pain, no need to see a dentist" can influence access. A climate of fear among immigrants, whether documented or undocumented, perpetuated by the current federal administration, is also having an impact on whether immigrant families seek services from local providers and facilities—a step backward after many years of encouraging people to sign up for health insurance and obtain regular medical and dental care.

The barriers Sacramento County residents identified in *this* needs assessment process are described later in the report where all of the Community Input is presented, in a section titled Community Oral Health Survey. The barriers highlighted below draw on recent local research, and because they can serve as foundational information to the assessment are included here for their consistency with the current findings and continuing need to be addressed.

GMC Dental Plan Member Dental Survey

A 2016 GMC member oral health survey of 421 respondents (181 concerning children; 240 concerning adults), provided more information about beneficiary experience and the factors that contributed to under-utilization or non-use of dental benefits in Sacramento County.[32] Based on survey results, beneficiaries identified the following as barriers to using their dental benefits:

- Waiting time during dental visits, the child's absence of tooth pain and dental fear were the most common reasons Sacramento parents delayed taking their child to the dentist.
- 25% of parents found appointment-making with dental offices difficult.
- Thinking they had to pay (all or some), not knowing where to go and having to wait too long during dental visits were the most common barriers for Sacramento adults.

First 5 Sacramento Parent Dental Study

In 2016, in-person interviews were conducted with 123 Sacramento parents of children 1 to 6 years of age enrolled in Medi-Cal who had never taken or delayed taking their child to the dentist. The purpose of the study was to learn what kept parents from utilizing or fully utilizing their child's dental benefits.[33] The interviews revealed the following findings:

- Dental fear expressed by the child or the parent's fear from personal experience emerged as one of the most important barriers.
- Parents were very concerned about taking their child to a dental office that wasn't child-friendly.
- 35% who delayed a visit because they thought the child was too young were told so by a dentist or physician.
- Many parents reported neglecting their own dental health. Only 1 in 5 had made a dental visit in the last year, primarily due to lack of dental insurance (or money to self-pay) and fear of the dentist.
- Transportation difficulties did not appear to be an important factor for underutilization.

Local Dentist and Other Dental Professionals Supply

While dentist supply can affect access by the number of dentists available to treat the population, overall supply is not a limiting factor in Sacramento County. With 1,116 licensed dentists,[34] the county is considered to have an adequate supply based on an estimated dentist-to-population ratio of 1:1,320 in 2016 (a slightly less favorable ratio than the statewide average, 1,210:1).[35] Dentist provider-to-patient ratios, however, cannot take into account differing factors such as demand, the distribution of dentists in the community, a willingness to see patients covered by public programs and so forth. Approximately 80% of the active dentists in Sacramento County are general or family dentists, with the remaining 20% split among the specialties.[36] In addition to dentists, there are 838 licensed Registered Dental Hygienists and 1,917 Registered Dental Assistants.

Dentist supply, however, does not address the question of whether dentists are willing to see patients with Denti-Cal—directly in the fee-for-service (FFS) program or through enrollment with

the GMC Dental Plans—or whether general dentists are trained and willing to seeing very young children in their practices. According to the 2014 state Auditor's Report,[37] the ratio of general dental office providers to beneficiaries willing to accept new Medi-Cal child patients for Sacramento County as of December 2013 was 1:2,585. (By contrast, of the counties with Denti-Cal providers—some had none—Orange County had the most favorable ratio of 1:328 and Humboldt had the worst of 1:8,503).

Dental Professional Shortage Areas

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 healthcare 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.[38] Even with Sacramento County's favorable dentist-to-population ratio described above, there are six designated Dental HPSAs reported in the county (Table 3), not including the two that are correctional facilities (state prison populations).

Table 3. Dental Health Professional Shortage Areas, Sacramento County

Entity	Designation Type	HPSA Score[1]	HPSA Designation Last Updated
Sacramento County Department of Health	Comprehensive Health Center	8	10/21/03
Elica Health Centers	Comprehensive Health Center	20	5/5/15
Sacramento Native American Health Center	Native American Tribal Population	19	11/6/14
Sacramento Community Clinic	FQHC Look A Like	16	11/18/14
Center for AIDS Health Research, Education and Services (CARES)[2]	Comprehensive Health Center	17	5/1/15
The Effort (now named Wellspace)	Comprehensive Health Center	12	5/26/10

Source: http://datawarehouse.hrsa.gov/tools/analyzers/HpsaFindResults.aspx
[1]Scores are 1-26. Higher scores indicate greater need.
[2]CARES is now called One Community Health.

Available Safety Net Dental Services

Access to oral health care for low-income and uninsured populations has improved in recent years but still remains less than optimal to increase Sacramento's dental utilization of populations with disproportionate barriers. Federally Qualified Health Clinics (FQHCs), Indian Health Centers and other

clinic providers play an important role in easing access to oral care for these underserved populations. Contracts with GMC Dental Plans allow Medi-Cal members the option of receiving dental services through these community dental clinics. Additionally, 52 private general dentists, 7 pediatric dentists, 6 oral surgeons and 21 orthodontic practices (some of which are Western Dental clinics) listed on the California DHCS website as currently accepting patients with Denti-Cal[39] (albeit with varying capacity; some likely in GMC network) also provide safety net dental care for Sacramento County's low-income population. Table 4 that begins below lists the safety net resources with brief descriptions, and Attachment 9 shows these locations on a map.

Table 4. Safety Net Dental Resources in Sacramento[1]

Organization/ Website	Address	Description
Sacramento Native American Health Center www.snahc.org	2020 J St, Sacramento, CA, 95811	Services are provided to children and adults and include comprehensive oral exams; digital radiography; periodic oral exams (6 month visits); cleanings and/or deep cleanings; fillings; oral surgery; denture and partial denture fitments; implants; and teeth whitening. For eligibility, must have Medi-Cal or qualify based on income and family size for the sliding fee scale. There are no tribal or ethnic requirements to receive care.
WellSpace Health www.wellspacehealth.org	Oak Park Community Health Center 3415 Martin Luther King Jr. Blvd., Sacramento North Highlands Multi-Service Center 6015 Watt Avenue, North Highlands Rancho Cordova Health center: 10423 Old Placerville Road, Sacramento South Valley Community Health Center 8233 E. Stockton Blvd, Sacramento To open in 2018: Galt	Services are available to infants, children, adolescents, adults, and patients with special healthcare needs and include fluoride treatment; sealants; cleanings; fillings; digital x-rays; emergency appointments; nitrous oxide. Medi-Cal/GMC and Medicare insurances are accepted; patients are helped to apply for programs that help cover the cost of their care through sliding fee scale based on income ($10- $55).

Table continues on next page

Organization/ Website	Address	Description
Elica Health Centers https://www.elicahealth.org/	3701 J St, Sacramento, CA, 95816 1750 Wright St, Sacramento, CA, 95825	Dental care includes comprehensive oral care for individuals up to 21 years of age and preventive care for those over 21. Medi-Cal/GMC and all major insurances are accepted, and an income-based fee discount program.
Health and Life Organization, Inc. dba Sacramento Community Clinics http://www.halocares.org	Southgate Dental Clinic (S. Sac) 7275 E Southgate Drive, Suite 204-206 Sacramento, CA 95823 Assembly Court Dental Clinic (S. Sac) 5524 Assembly Court Sacramento, CA 95823 Del Paso Blvd. Dental Clinic 2138 Del Paso Blvd Sacramento, CA 95815	Service fees are determined by sliding scale.
One Community Health* https://onecommunityhealth.com/ *Formerly CARES Community Health	Midtown 1500 21st St, Sacramento, CA 95811 Arden-Arcade 1442 Ethan Way, Suite 100 Sacramento, CA 95825	Services include adult dentistry; dental exams/ cleanings; dental x-rays; oral health education; urgent dental care; fillings; root canals; extractions; crowns; mouth guards; partial/full dentures; and pediatric dentistry.
Willow Clinic http://www.willowclinic.org/	1200 North B Street, Sacramento, CA, 95814	The dental clinic is open every Saturday. Services include extraction services, dental radiographs (X-rays), periodontal therapy and fillings. Regular dental cleanings and “deep” cleanings are provided during most dental clinic days.

Table continues on next page

Organization/ Website	Address	Description
Sacramento City College Dental Hygiene Clinic www.scc.losrios.edu/ dentclinic.html	3835 Freeport Ave Rodda Hall Sacramento	Open to college students and community members. Services include cleaning and polishing teeth, fluoride applications, pit & fissure sealants, and home-care instructions. With a written request from a dentist, dental X-rays can be taken. No restorative treatment is provided. Hours vary by school semester. Because of the large demand for services, patients can only have their teeth cleaned at the clinic once each year.
Carrington College Dental Clinic www.carrington.edu/California	8909 Folsom Boulevard, Sacramento, CA, 95826	The school offers complimentary dental hygiene services to children and adults that include dental screening, cleaning, fluoride application, sealants, and x-rays (with dental hygiene services).

[1]Does not address clinic capacity or wait times for required treatment.
Source: Organizations' websites and Sacramento Covered at https://www.sacramentocovered.org/ accessed 5/16-20/18.

GMC Dental Provider Networks

A key issue in Medi-Cal dental services is having an adequate number of providers willing to see the number of enrolled children and adults. The Geographic Managed Care Dental Plans provide access to dental services through a network of contracted dentists/dental practices and community dental clinics, referred to as the GMC dental network. The plans are also required to maintain a complete list of specialists by type within the network as well as guarantee access to FQHCs and other community dental clinics. DHCS approves the plans that the Dental Plans must submit to meet these various requirements, and is responsible for monitoring the extent to which they are accurate and implemented. The list of contracted providers is subject to change without notice as provider participation changes periodically. Dentists who wish to provide services to Dental Managed Care members must participate in the Plan's provider network (note: they do not also have to be enrolled in the Denti-Cal fee-for-service program). Table 6 shows the number of private dental practices (some solo, some group) in the GMC network.

Despite improvements, the need to expand the GMC provider network to include access to more specialists (some are still hard to get in and schedule) is a continuing issue according to the Medi-

Cal Dental Advisory Committee, community advocates and focus groups interviewed for this assessment.

Table 6. Number of GMC Dental Plan Network Private Provider Offices in Sacramento County, by Type of Provider

	Access[1]	Health Net[2]	LIBERTY[3]
General Dentist	176	124	115
Pediatric Dentist	33	57	24
Other Specialist Dentist	35	23	17
Orthodontics	4	5	4
Total[4]	248	209	160

[1]Provided on 5/10/18. "General practitioner/pedodontist" listed under General DDS. [2]Provided on 5/24/18. [3]Provided on 5/14/18.
Note: Dental practices do not include community dental clinics.
[4]Not a true total due to provider overlap among the Plans. Health Net and LIBERTY share many of the same providers.

Other Supportive Community Resources

Other local organizations play important roles in supporting oral health efforts in Sacramento County. This includes collaborative relationships, conducting awareness campaigns, making referrals, providing community oral health education and co-located screenings and offering financial support.

Medi-Cal Dental Advisory Committee

MCDAC was statutorily established (AB 1467) in July 2012 to provide oversight and guidance to improve Denti-Cal utilization rates, the delivery of oral health and dental care services, including prevention and education services, dental managed care and fee-for-service Denti-Cal. MCDAC works with the GMC Dental Plans to identify problems and barriers to care and implement policy measures to improve utilization. MCDAC members include local non-profit organizations, representatives from First 5 Sacramento, the local dental society, and other interested individuals. It provides input to the Department of Health Care Services, the California State Legislature, the Sacramento County Board of Supervisors and the Sacramento First 5 Commission regarding policies that impact the delivery of dental services in Sacramento County under the Medi-Cal program or county-administered health care system.

Every Smile Counts!

Every Smile Counts! (ESC!) is Sacramento County's Dental Transformation Initiative/Local Dental Pilot Project (DTI-LDPP), one of 14 state-funded pilots to increase children's utilization of dental services, implement a Caries Risk Assessment to diagnose early childhood caries, and increase

continuity of care. The program targets Medi-Cal eligible children aged 0-20 years old and has three pilot projects that are described below:

- Virtual Dental Home with Care Coordination
- Medical/Dental Partnerships with Care Coordination
- Community Partner Dental Training for Referrals & Care Coordination and Parent Education

The Virtual Dental Home. The Virtual Dental Home (VDH), a collaborative project of The University of the Pacific, Arthur A. Dugoni School of Dentistry, is a community-based oral health delivery system that provides preventive and simple therapeutic services to people in community settings where they live or receive educational, social or general health services. It is intended to become the person's dental home, not a mobile or "screen and refer" model. The VDH consists of a dental team of a dental hygienist and dental assistant working at the site linked by technology with a dentist at a remote office. [40] The onsite services, which are entered into an electronic dental record linked to the dental office, include health history/caries risk assessment, x-rays and intra-oral photos, cleaning, fluoride varnish and sealants. Within 48 hours, the remote dentist reviews each record and determines whether the child can be given a 6-month recall, if there is a beginning cavity or the child needs to come into the provider organization's clinic; in the latter case, the child's parents are notified. In some cases of early cavities, a trained dental hygienist is allowed to do an interim therapeutic restoration.

In Sacramento, the VDH is being piloted exclusively at the Twin Rivers Unified School District. The four provider organizations assigned to the various schools which will deliver the services include WellSpace Health; Sacramento Native American Health Center; Access Dental Services; and Western Dental. Approximately 3,300 children in grades PreK-2 in 14 of the District's schools are projected to begin receiving services in fall 2018.

Medical/Dental Partnership with Care Coordination. This pilot aims to connect children that have not utilized their dental benefits within the past 12 months (i.e., "non-utilizers") to their dental home using their medical home as an access point for referral, providing oral health education, caries risk assessment, and fluoride varnish application. The pilot 1) identifies non-utilizers and shares that information with the child's medical home; 2) trains providers and staff in the medical home on how to provide oral health education, conduct a carries risk assessment, apply fluoride varnish, and refer children to their dental home; and 3) it ensures that information from a referred child's dental visit is shared with the referring physician.

Community Partner Dental Training. Community health workers (CHW) educate parents and families on many topics such as seat belt and car seat safety, nutrition, and how to access medical care. After receiving training through this pilot, CHW's will provide oral health education and help connect families to dental resources. Dental navigators located in hospital

emergency rooms connect families with children needing dental care to their assigned dental plan member services and dental provider.

Early Smiles Sacramento

In 2016, Center for Oral Health established the Early Smiles Sacramento Program with the support of Liberty Dental Plan, HealthNet and Access to serve underserved children in Sacramento County. The services consist of an oral health examination looking for visible decay and any abnormalities, oral hygiene instruction, and topical application of fluoride. Kindergarten through third grade at 10 schools will receive oral health education and tooth brushing kits. The kit will include a tooth brush, toothpaste, flossers and timers, and a tooth brushing chart to incentivize children. [41] The project will also help students seek dental treatment by providing navigation services to their dental plans, along with translation, and transportation services to and from appointments as needed. It has also partnered with Sacramento Covered and Sacramento District Dental Society to help find services for the uninsured and privately insured.

First 5 Sacramento

First 5 Sacramento has a long history of supporting oral health. Its investments have taken a comprehensive approach to combating dental disease among young children and increasing awareness about the importance of good oral hygiene beginning at birth through support for dental screening, community dental clinics, promotion of community water fluoridation, parent education, and evaluations of systems such as the Geographic Managed Care dental program and other studies. The organization also plays an active advocacy role and provides in-kind support to the Medi-Cal Dental Advisory Committee and Sacramento County staff implementing and managing the DTI-LDPP.

Sacramento County Department of Health Services Public Health Division - Health Education Unit

Sacramento County Oral Health Program (SCOHP): Smile Keepers. The Smile Keepers Program has historically targeted pre-school and elementary school-aged children to provide oral health education, screenings, fluoride varnish applications and dental sealants. Oral Health Program staff along with the Smile Keepers dental van also attended several school readiness events and health and resource fairs throughout the county each year. Funding for the direct services component of the program ended June 30, 2018. Oral Health Program staff is now concentrating their efforts, such as this community needs assessment, on activities that support the California Department of Public Health – Oral Health Program *2018-2022 State Oral Health Plan* as described earlier.

Sacramento County Obesity Prevention Program (SCOPP). The goal of the Sacramento County Obesity Prevention Program is to lower obesity rates in Sacramento County. Program components include training and technical assistance, collaborative efforts, and education. The program also

administers activities to promote Rethink Your Drink messaging, a statewide initiative that focuses on reducing the consumption of sugar-sweetened beverages.

Sacramento County Tobacco Education Program (SCTEP). The Sacramento County Tobacco Education Program is a California state-funded program that aims to improve public health by decreasing tobacco use and exposure to secondhand smoke. SCTEP does this by providing health education, and advocating for policies that protect the public from secondhand smoke. Other program activities include efforts to decrease underage access to tobacco products and improving access to cessation services.

Smiles for Kids (SFK)®

The Sacramento District Dental Foundation provides dental services to those who otherwise would not be able to afford it, focusing especially on children. Smiles for Kids® (SFK) partners member dentists with local schools to screen and provide dental education to thousands of children each year. From the screenings, underinsured and underserved children are treated by member dentists and their teams on SFK Day each February. More than half of those children are then "adopted" for further pro bono treatment – including specialty and orthodontic treatment.

Smiles for BIG Kids® (SFBK)

Patterned after Smiles for Kids (SFK), this program provides necessary dental services to uninsured and low-income adults. It provides donated dental treatment for uninsured, low-income adults age 19+ who are in need of urgent dental care, as well as education on maintaining proper oral health. This program is available to all area adults who meet the program's eligibility requirements, and especially targets the needs of the community's low-income elderly population as well as the parents of children served by the SFK program.

Emergency Department Use for Preventable Dental Conditions

Visiting an emergency department (ED) for non-traumatic dental problems is likely a reflection of poor prevention and suggests inadequate access to readily available community dental services. The use of EDs for preventable dental conditions is a growing problem, particularly among low-income populations.[42,43] Children enrolled in Medi-Cal, for example, have a consistently higher rate of visiting an ED one or more times in the past year than children covered by employer-sponsored insurance.[44]

In 2016-17, there were 8,495 ED visits in Sacramento County due to a primary oral condition diagnosis. Of these visits, 6,148 (72.4%) were made for an Ambulatory Care Sensitive (ACS) dental

condition that are defined as *preventable*—evidence of the need for a regular source of dental care among these ED users. Adults age 21-64 had the highest proportion of this ED use at 80.4% (Table 5). Sacramento County's rates for all age groups were higher than the statewide averages for this period.

Table 5. Sacramento County ED Visits by Condition and Age Group, 2016-17

	Age 0-5		Age 6-20		Age 21-64		Age 65+		All Ages	
All Reasons	56,083		80,230		336,708		79,544		552,566	
All Oral	685	1.2%	1,020	1.3%	6,422	1.9%	368	0.5%	8,495	1.5%
ACS Oral	180	0.3%	621	0.8%	5,161	1.5%	186	0.2%	6,148	1.1%
ACS Oral as % of all Oral		26.3%		60.9%		80.4%		50.5%		72.4%

ACS=Ambulatory Care Sensitive
Source: Office of Statewide Health Planning and Development.

The impact to each Sacramento County hospital for avoidable dental ED visits by children and adults can be seen in Table 6 below.

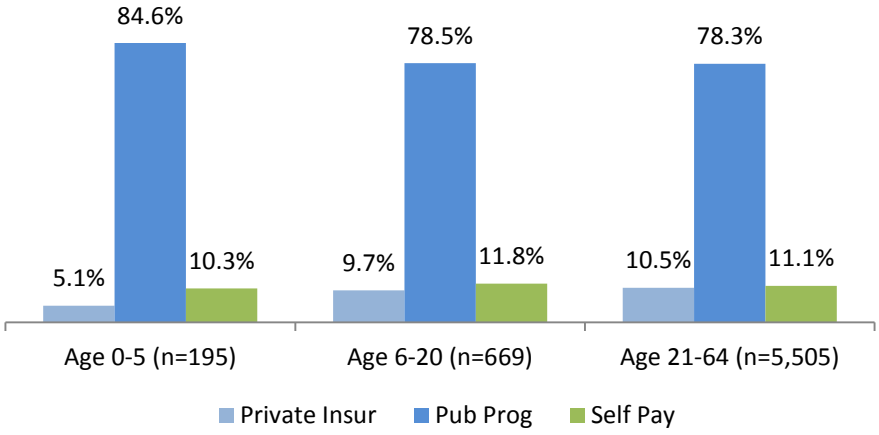
Table 6. Number of ED Visits Made by Children and Adults to a Sacramento County ED for an Avoidable Dental Condition, 2016-17

Facility	Children 0-20	Adults 21+	Total
Kaiser Foundation Hospital - Sacramento	167	1,112	1,279
Kaiser Foundation Hospital - South Sacramento	151	828	979
Mercy General Hospital	50	379	429
Mercy Hospital of Folsom	57	357	414
Mercy San Juan Hospital	98	781	879
Methodist Hospital of Sacramento	92	540	632
Sutter Medical Center, Sacramento	113	967	1,080
University of California Davis Medical Center	73	383	456
Total	801	5,347	6,148

Note: By county of facility.
Source: Office of Statewide Health Planning and Development.

Use of the ED for avoidable dental conditions is expensive, especially when compared to the price of prevention. Public programs—nearly entirely represented by Medi-Cal for individuals under age 65—picked up the tab for the clear majority of Sacramento County residents' preventable ED dental visits in 2016-17 (Figure 15 below). The highest proportion of these dental ED visits, 84.6%, was made by 0-5 year-olds. The disproportionately high percentage of ED visits covered by Medi-Cal supports the need for expanded access for dental services and increased education and prevention services for this population.

Figure 15. Payer Source for ED Visits Made by Sacramento County Residents for an Avoidable Dental Condition, 2016-17



By county of residence.

Source: Office of Statewide Health Planning and Development.

Access to Hospital and Surgery Center-Based Dental Procedures

Not all dental treatment, including treatment of early childhood caries, can be accomplished without general anesthesia (GA). Local anesthesia/conscious sedation and non-pharmacological behavior guidance techniques are not viable for some dental patients.[45] People with special health care needs have treatment conditions, acute situational anxiety, uncooperative age-appropriate behavior, immature cognitive functioning, disabilities, or medical conditions that require GA to undergo dental procedures safely and humanely.

In the Medi-Cal *dental* program, pre-approval from the beneficiary's Medi-Cal *medical* managed care plan is required for dental treatment under GA. This is because the medical portion pays for the facility fee and anesthesia fee (when the GA provider is a medical professional) and the dental portion pays for the dental procedure, which includes the dentist's professional fee (including a dental anesthesiologist if that is who provides the anesthesia). The GMC Dental Plans authorize and pay dentists for hospital/facility-based encounters. Authorization for the hospital and associated charges is provided directly by the health plan.

In Sacramento County, some medical groups associated with some of the Medi-Cal managed care health plans have denied the validity of GA referrals for dental treatment; currently Anthem Blue Cross is the only company doing so, and then apparently not uniformly according to research conducted for this assessment report. For example, one of the main hospital dentists in the county submitted over 820 Medi-Cal authorizations in 2017 across all the companies, and only Anthem Direct (37 submissions, 36 denials) denied the requests. All other companies approved

100% of the time.[46] A California DHCS 2015 All Plan Letter (APL) and a 2017 Treatment Plan Flow Chart providing guidelines for what should be considered have not fully helped to solve the problem and progress in resolving it seems to have stalled. While it is beyond the scope of this assessment to do more than highlight this experience, the denials that have continued into 2018 and presented barriers necessitates addressing through the county's upcoming oral health improvement plan.

DENTAL UTILIZATION

"It's easier to market for kids—who doesn't feel sorry for kids? But, adults have been so ignored." – Key informant interviewee

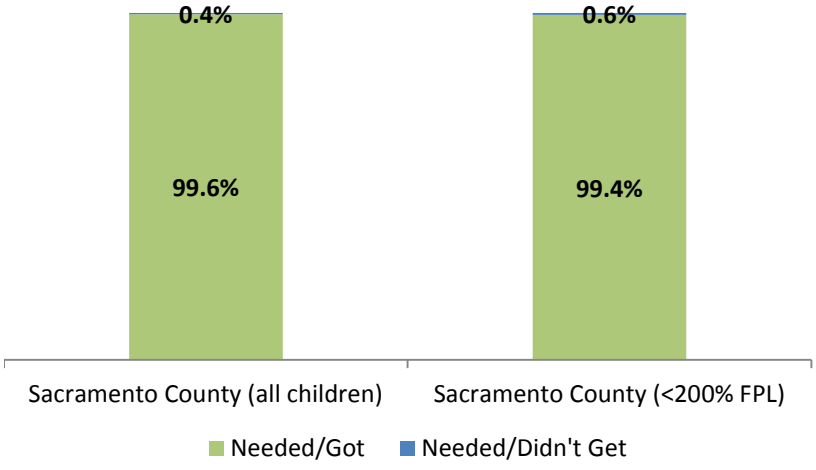
The dental utilization data in this section are presented first for the general population of Sacramento County, and later for the population of Sacramento County enrolled in Medi-Cal (the fee-for-service system called Denti-Cal and the Dental Managed Care system known locally as the GMC program). Within each population group, data are shown for children first followed by adults. Dental utilization by pregnant women is included in the general adult population.

POPULATION-BASED UTILIZATION

CHILDREN

Nearly all parents among Sacramento County's general population, 99.6%, and a similar proportion of those under 200% of the federal poverty level, 99.4%, indicated in the 2016 California Health Interview Survey (CHIS) that their child was "able to receive dental care when it was needed, including checkups, in the past year" (Figure 16). While this is certainly favorable and no doubt reflects utilization improvements that have been made in recent years, it is important to note that the question presumes parents understood that the need for just a *check-up visit* (i.e., where there were no concerns) also constitutes "needed care."

Figure 16. Proportion of Children Needing but not Getting Dental Care in the Last Year

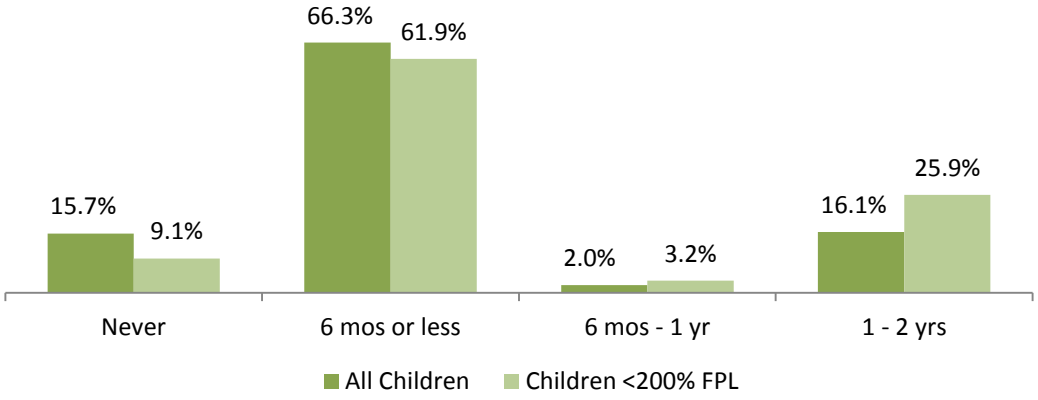


Source: 2016 California Health Interview Survey
Note: Data statistically unstable due to small sample size

Annual Dental Visit

According to the 2016 CHIS, two-thirds (66.3%) of all respondents and close to the same proportion (61.9%) of parents at <200% FPL (the "near poor"), reported taking their child age 1-11[47] to a dentist within the past 6 months (Figure 17). More lower-income parents than the total of parents waited 1-2 years (25.9% vs. 16.1%) to do so, however. The higher percentage of children who had *never* visited the dentist among the general parent population may be explained by the number of those children who could be uninsured and not eligible for public dental benefits as are nearly all of the children in the <200% of poverty group.

Figure 17. Time Since Last Dental Visit, Sacramento County Children and Children Living Under 200% Federal Poverty Level, Ages 1-11



Source: California Health Information Survey

Sealants among all Children

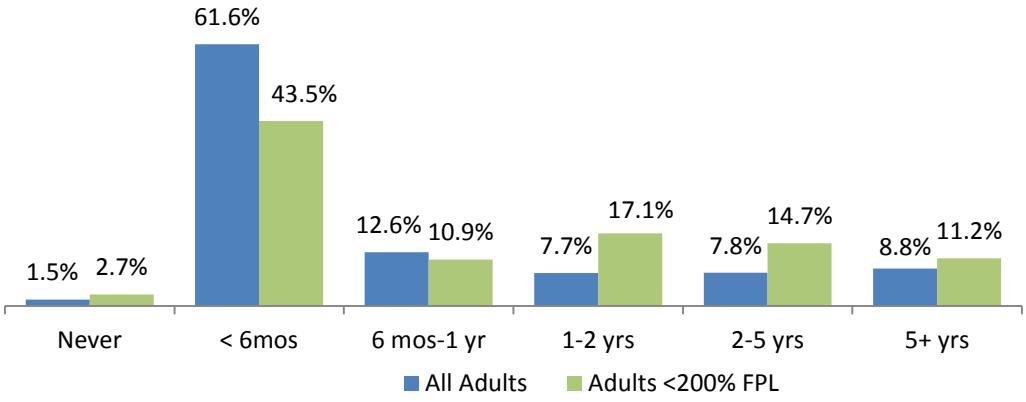
Dental sealants—a thin, plastic coating painted on the chewing surfaces of the back teeth—act as a barrier to help protect teeth from bacteria and acids and are recommended for all children ages 6-9 and 10-14. Federally Qualified Health Centers (FQHCs), which serve both public and privately insured children, are required to report sealants among 6-9 year-olds. In Sacramento County, WellSpace (the only reporting FQHC) in 2016 reported 71.9% of children aged 6-9 years at moderate to high risk for caries received a dental sealant on a permanent first molar tooth.[48]

Other population-level data that may provide a potential baseline for future surveillance in Sacramento County are from statewide sources. Delta Dental, which tracks sealant utilization of high-risk members (any child with restorative services within the last three years), provided 27% of its California commercial fee-for-service 6-9 year-olds with sealants on first molars, and 13% of 10-14 year-olds with sealants on second molars in 2017.[49] (Delta could not provide county-level data.) Statewide surveillance data from the Centers for Disease Control and Prevention (CDC) FY 2004-05 State Oral Health Survey reported the percentage of California third grade students with dental sealants on at least one permanent molar tooth as 27.6%.[50]

ADULTS

About three-quarters (74.2%) of all Sacramento County adults responding to the CHIS reported making an annual dental visit in 2016, generally mirroring populations with access to commercial insurance. Adults living under 200% of the federal poverty level, however, reported 64% annual use (Figure 18), 9% fewer than adults with higher incomes. The proportion of low-income adults reporting "never had a dental visit" was one-and-a-half times higher than the total sample of adults.

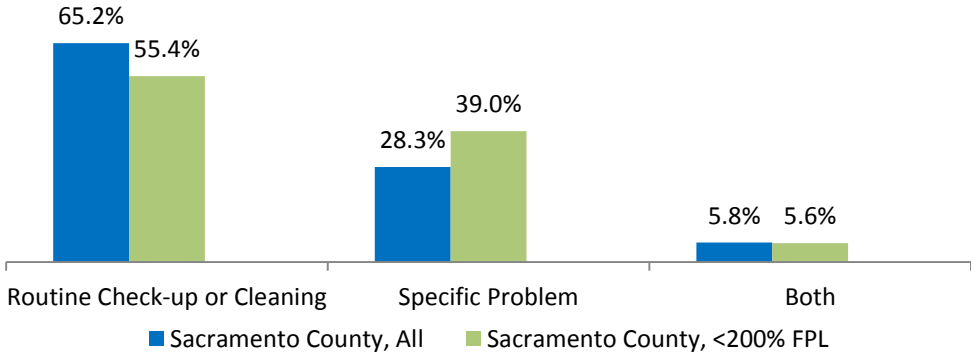
Figure 18. Time Since Last Dental Visit, Sacramento County Adults and Adults Living Under 200% Federal Poverty Level



Source: 2016 California Health Interview Survey

As Figure 19 makes clear, in 2016 poorer adults in Sacramento County visited the dentist for a specific dental problem significantly more often than the general population of adults did, 39.0% vs. 28.3%.

Figure 19. Reason for Adults' Last Dental Visit, Sacramento County Adults and Adults Living Under 200% Federal Poverty Level



Source: 2016 California Health Interview Survey
Note: some data statistically unstable due to small sample size

ORAL HEALTH AND PREGNANCY

Good oral health and control of oral disease protects a woman's health and quality of life before and during pregnancy, and has the potential to reduce the transmission of pathogenic bacteria from mothers to their children. During pregnancy, teeth and gums need special attention. Yet many women do not seek—and are not advised to seek dental care by either their prenatal provider or dentist—as part of their prenatal care. Of women who had a live birth in Sacramento County in 2015-16, 37.1%, lower than statewide at 43.0%, reported a dental visit during their pregnancy.[51] As Table 7 shows, Black and Latina women, women living under 100% Federal Poverty level, and women on Medi-Cal received the lowest amount of dental care during pregnancy; all of these county values shown in the table are lower than the statewide averages.

Table 7. Receipt of Dental Visit during Pregnancy among Sacramento County Women with a Recent Live Birth, 2015-16

DDS Visit	Race/Ethnicity				Family Income			Health Insurance	
	Asian/PI	Black	Latina	White	0-100% FPL	101-200% FPL	> 200% FPL	Medi-Cal	Private
37.1%	43.3%	27.0%	26.7%	41.7%	21.2%	37.7%	56.0%	21.7%	55.5%

Source: CDPH, Maternal and Infant Health Assessment (MIHA) Survey.

DENTI-CAL UTILIZATION

Program Overview

The Medi-Cal Program administered by the California Department of Health Care Services (DHCS) offers dental services as one of the program's benefits. A full scope of services is offered to children under age 21. Beginning January 1, 2018, adult dental benefits were restored to the same level of coverage that was available prior to the reduction in 2009, which includes limits on some treatment and restorative services. Sacramento County is unique in that the greatest majority of Medi-Cal beneficiaries receive their dental services through mandatory enrollment[52] in managed care dental plans contracting under the Geographic Managed Care (GMC) dental program.[53] The exceptions are Medi-Cal beneficiaries who received services through the Denti-Cal program (unless they voluntarily enroll in GMC).

The DHCS website publishes various dental data, not all of it comparable by age group, fiscal period, and system (FFS/GMC), sometimes as a result of various legislative mandates (or no mandates), making presentation of similar data and tracking of trends difficult. In 2015-16—the latest period for which somewhat comparable FFS and GMC are available—approximately 621,855

children and adults in Sacramento County were eligible for Medi-Cal dental services under the GMC and fee-for-service (FFS) programs (Table 8).[54]

Table 8. Medi-Cal Eligibles by Dental Program, Sacramento County, FY 15-16

	Children (Age 0-20)	Adults (Age 21+)	Total
GMC	229,550	242,285	471,835
FFS	31,169	118,851	150,020
Total	260,719	361,136	621,855

Source: Department of Health Care Services Medi-Cal Dental Services Division.
Note: Due to DHCS reporting differences, data shown for FFS are number of beneficiaries who were eligible for at least 90 days continuously; GMC are beneficiaries continuously enrolled for one (1) year with no gap in coverage.

In FY 2016-17, 508,579 Medi-Cal recipients, 46.2% children and 53.8% adults, were enrolled in the three GMC dental Plans (Table 9).

Table 9. GMC Dental Plan Enrollment, FY 16-17

	Age 0-20	Age 21+	Total by Plan
Access	77,680	90,220	167,900
Health Net	67,292	87,189	154,481
Liberty	90,063	96,135	186,198
Total for Age Group	235,035	273,544	508,579

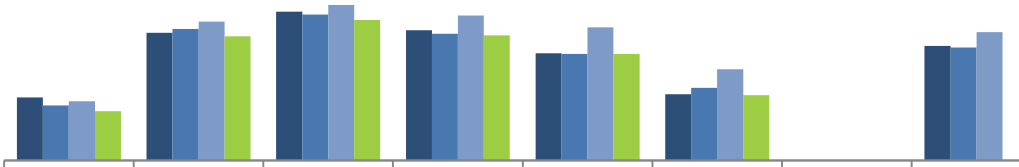
Source: Department of Health Care Services Medi-Cal Dental Services Division.

Children's Utilization

Annual Dental Visit

Annual dental visit (ADV) is the appropriate indicator for reporting utilization. (The DHCS performance measure is the percentage of beneficiaries who had at least one dental visit during the measurement period.) As Figure 20 shows, between 36.3% and 40.7% of children age 0-20 in GMC utilized their dental benefits in FY 2016-17. Because measurement periods and age groupings do not always line up the same on the DHCS dental website between FFS and GMC, slightly different periods are shown in these utilization figures. When children in FFS are included with GMC (in CY 2016), the overall utilization picture for Sacramento County declines slightly. This is understandable as children in Sacramento FFS, which are a small population, are unique in that they largely include children with disabilities and children in foster care and other aid categories that may have greater access issues.

Figure 20. Annual Dental Visit, Sacramento Children by GMC Dental Plan (FY 2016-17) and FFS (CY 2016)



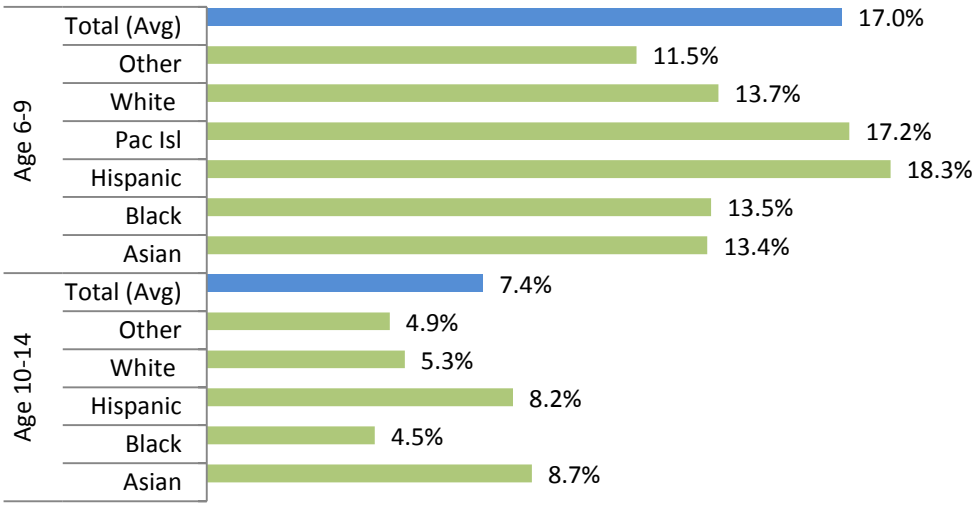
	Age 1-2	Age 3-5	Age 6-9	Age 10-14	Age 15-18	Age 19-20		Age 0-20
Access	20.0%	40.5%	47.2%	41.3%	34.0%	21.0%		36.3%
Health Net	17.5%	41.7%	46.3%	40.2%	33.8%	23.0%		35.8%
Liberty	18.8%	44.1%	49.3%	46.0%	42.2%	28.9%		40.7%
All Sac (GMC+FFS)	15.6%	39.4%	44.6%	39.7%	33.8%	20.7%		

Source: Department of Health Care Services Medi-Cal Dental Services Division.

Use of Sealants among Children with Medi-Cal

In one Medi-Cal FFS system dataset for FY 15-16, a very low percentage of Sacramento County children age 6-9, 7.4%, and age 10-14, 3.7%, was reported to have received sealants.[55] In another Medi-Cal data set,[56] the FFS sealant usage data for 2015 was shown as 10.4% (age 6-9) and 4.7% (age 10-14). The FFS sealant data Medi-Cal reported by *ethnicity* for 2015 shows somewhat higher rates, however. In these data, shown in Figure 21, children of Hispanic and Pacific Island descent had higher rates of dental sealant use than children did on average, particularly for 6-9 year-olds. Children age 6-9 identified by Medi-Cal as "other" had the lowest rates for that age group; among 10-14 year-olds, Black children received the lowest proportion of dental sealants.

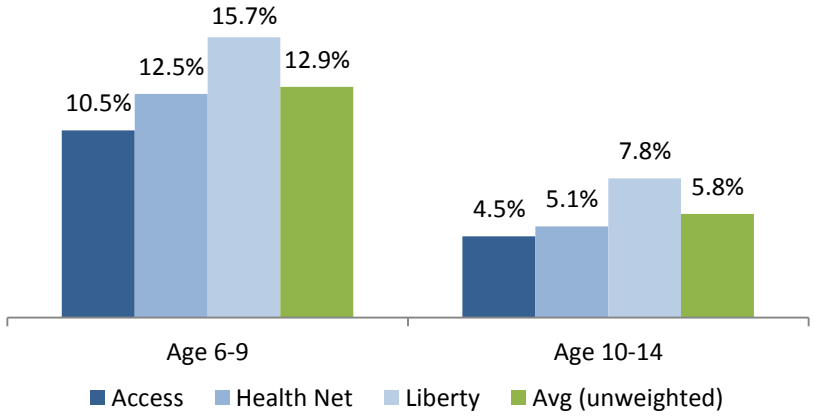
Figure 21. Sacramento County Children's' Use of Dental Sealants by Ethnicity (FFS), CY 2015



Source: Department of Health Care Services Medi-Cal Dental Services Division.

In an even different FFS utilization data set, FY 2016-17, 3.1% and 1.5% of 6-9 year olds and 10-14 year-olds, respectively, were reported for use of sealants.[57] Regardless of the Medi-Cal data set, it is extremely clear that sealants are significantly underutilized. For example, children with Medi-Cal enrolled in one of the GMC dental plans had an average sealant use among 6-9 year-olds of 12.9%, and among 10-14 year olds of 5.8% in FY 2016-17 (Figure 22). These rates were higher than Sacramento children in the FFS system, but lower than the state average, 17.7% and 9.9%, respectively, for that period.[58]

Figure 22. Sacramento County Children's' Use of Dental Sealants by GMC Plan, FY 2016-17



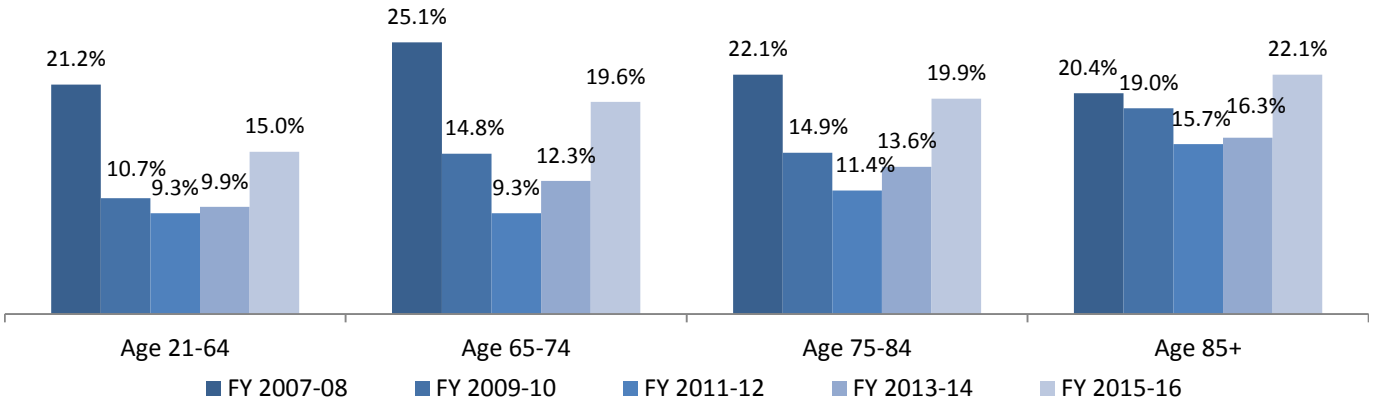
Source: Department of Health Care Services Medi-Cal Dental Services Division.

Adults' Utilization

Annual Dental Visits

The effect of eliminating Medi-Cal adult optional dental benefits in 2009, with partial restoration in May 2014, is evident by the trends shown in Figure 23.[59] Even so, no more than about 25% of adults ever utilized their dental benefits between 2007-08 and 2015-16.

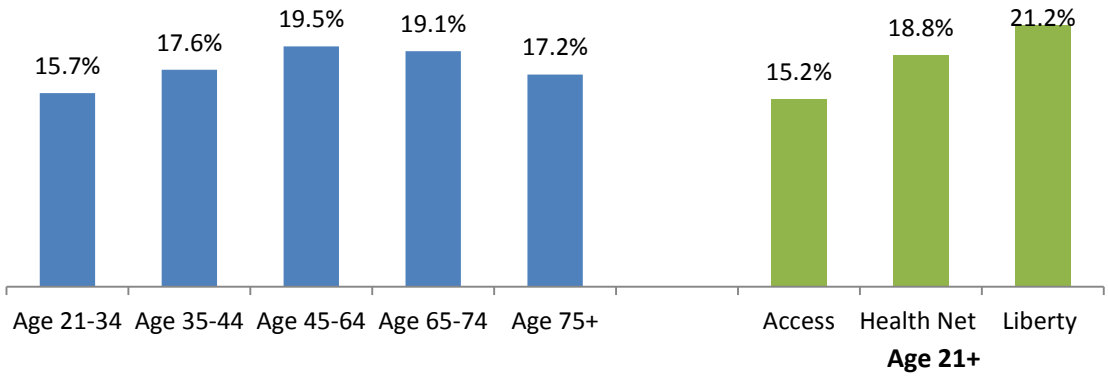
Figure 23. Annual Dental Visits, Sacramento County Adults, Fee-for-Service and Dental Managed Care Combined



Source: Department of Health Care Services Medi-Cal Dental Services Division.

The most recent adult utilization data for FFS and GMC, shown in Figure 24, indicate that no more than about 21% of adults utilized their dental benefits. (Again, as with data reported for children in these two systems, DHCS measurement periods and age groupings do not always line up.) Liberty Dental had the highest utilization rates among the GMC plans. Note that DHCS is not required to report GMC adult utilization by age groups, only as "age 21+."

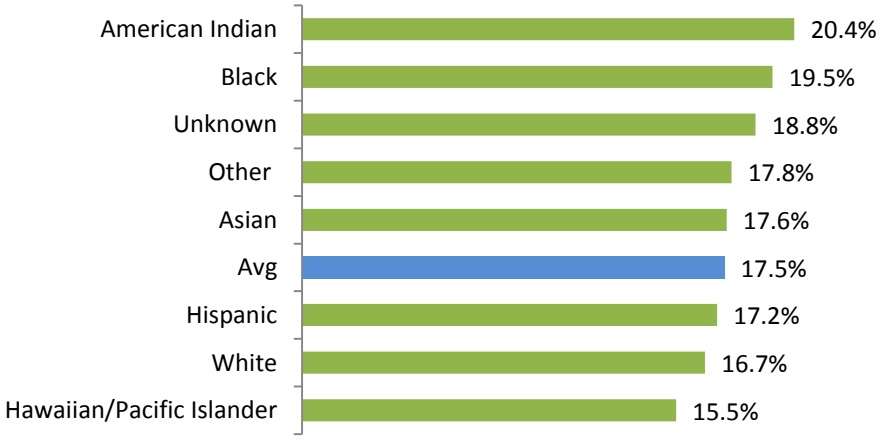
Figure 24. Annual Dental Visit, Sacramento Adults in FFS (CY 2016) and GMC (FY 2016-17)



Source: Department of Health Care Services Medi-Cal Dental Services Division.

Although the population group American Indians with Medi-Cal had the highest rate of dental use (FFS and GMC combined), the differences in Sacramento adults' utilization of dental visits by ethnic group are only marginal (Figure 25).

Figure 25. Annual Dental Visits of Sacramento County Adults by Ethnicity, FFS and GMC Combined, CY 2016



Source: Department of Health Care Services Medi-Cal Dental Services Division.

Denti-Cal Utilization by Zip Code and Provider Type – Children and Adults

In order to do adequate planning to implement improvement strategies, whether in delivering oral health messaging or oral health services, it is useful to examine the most basic level of Denti-Cal community data. Zip code-level utilization tells us where the gaps are by age groups and community locations and allows oral health programs to more specifically target their efforts in high-need neighborhoods. The data can also be used to link under-utilization with access issues such as provider capacity. The utilization of children age 0-20 in the 50 Sacramento County zip codes with adequate data for reporting ranged from 27.1% zip code 95630 (Folsom) to 56.2% in zip code 95615 (primarily Courtland), or an average dental utilization of 37.6%. For adults age 21+ utilization ranged from 10.2% in zip code 95690 (primarily Walnut Grove) to 22.9% in zip code 95655 (Rancho Cordova), average 16.9% (Figure 26). Attachment 10 contains the complete list of beneficiary enrollment and utilization data by zip code.

Figure 26. Range of Denti-Cal/GMC Utilization in Sacramento County Zip Codes, FY 2016-17

Children Age 0-20		Adults Age 21+	
27.1%, zip code 95630 (Folsom)	→ 56.2%, zip code 95615 (primarily Courtland)	10.2%, zip code 95690 (primarily Walnut Grove)	→ 22.9%, zip code 95655 (Rancho Cordova)

Source: Department of Health Care Services, Medi-Cal Dental Division, July 17, 2018.

Dental Visit by Provider Type

The Denti-Cal utilization data in Table 10 on the next page show the number of children and adults in Sacramento County who were eligible for and received dental benefits in the GMC and FFS systems in 2016-17 by the type of provider seen: the number served only at an FQHC and the number seen only at a non-FQHC. Sacramento County beneficiaries, whether enrolled in GMC or served through FFS, made a higher percentage of visits to non-FQHC dental providers, primarily private dentists, than to FQHCs. Some beneficiaries, of course, may have been seen by both provider types during the reporting period.

Table 10. Utilization of Sacramento County in GMC and FFS by Provider Type, FY 2016-17

GMC Program

Age Group[1]	Eligibles[2]	Total Users		FQHC Users		Non-FQHC Users	
		Total Users[3]	Total Utilization[4]	FQHC Only Users[5]	FQHC Utilization[6]	Non-FQHC Only Users[7]	Non-FQHC Utilization[8]
Ages 0-3	59,289	14,536	24.5%	157	0.3%	14,308	24.1%
Age 4-5	36,294	16,906	46.6%	95	0.3%	16,716	46.1%
Ages 6-20	176,946	68,794	38.9%	369	0.2%	68,121	38.5%
Ages 21-64	276,904	48,545	17.53%	574	0.21%	47,659	17.21%
Ages 65+	15,283	2,791	18.3%	10	0.1%	2,762	18.1%
Total	564,716	151,572	26.8%	1,205	0.2%	149,566	26.5%

FFS System

Age Group[1]	Eligibles[2]	Total Users		FQHC Users		Non-FQHC Users	
		Total Users[3]	Total Utilization[4]	FQHC Only Users[5]	FQHC Utilization[6]	Non-FQHC Only Users[7]	Non-FQHC Utilization[8]
Ages 0-3	29,283	2,922	10.0%	268	0.9%	2,581	8.8%
Age 4-5	8,056	2,466	30.6%	163	2.0%	2,210	27.4%
Ages 6-20	50,629	12,941	25.6%	762	1.5%	11,821	23.3%
Ages 21-64	145,602	19,360	13.3%	1,574	1.1%	17,293	11.9%
Ages 65+	35,494	7,347	20.7%	291	0.8%	6,968	19.6%
Total	269,064	45,036	16.7%	3,058	1.1%	40,873	15.2%

[1]Age groups include numbers on both sides (e.g. Age 6-20 includes ages >=6 & <=20)
[2]Includes unduplicated eligibles with no continuous eligibility requirements
[3]Total number of unduplicated beneficiaries with at least one dental service in the measurement period
[4]Percentage of Total Users/Eligibles
[5]Unduplicated number of FQHC only users
[6]Percentage of FQHC Users/Eligibles
[7]Unduplicated number of Non-FQHC only users
[8]Percentage of Non-FQHC only users

COMMUNITY INPUT

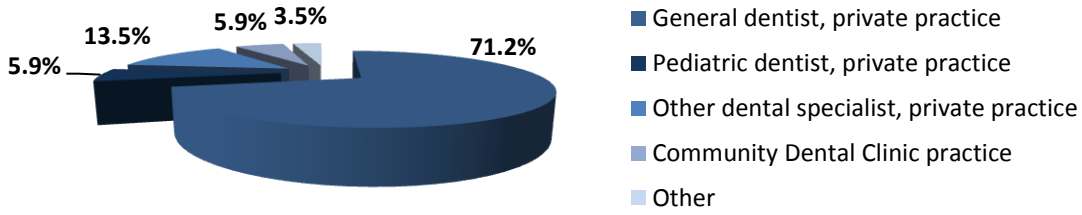
"There's a lot of shame around oral health. People make judgments all the time about others because of their teeth—are they missing? Are they brown? Are they broken?" – Key informant interviewee

Included in this section of the report are the results of the Dentist Survey, Dental Hygienist Survey, Focus Groups, Key Informant Interviews, and the Community Oral Health Survey.

Local Dentists' Experience

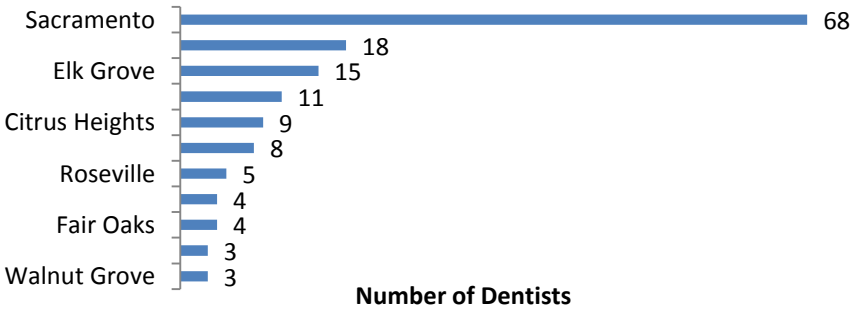
The survey the Sacramento District Dental Society (SDDS) posted online for this assessment, which yielded an 18.8% response rate with 170 usable surveys, was generally reflective of the dentists who practice in Sacramento with the exception of the pediatric providers who are over-represented by about half (Figure 27). As a group, the response rate of other specialists is relatively close to the specialist dentist profile of Sacramento dentists. Seventy-one percent of the respondents were general or family dentists.

Figure 27. Survey Respondents' Type of Main Dental Practice (n=170)



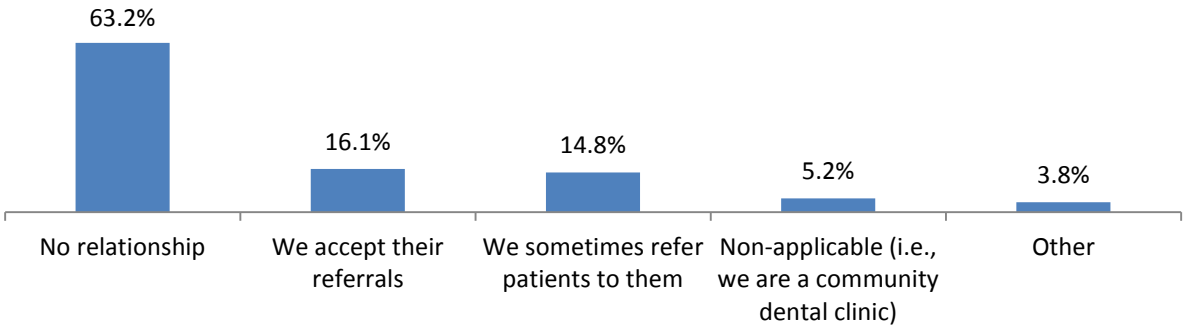
The majority of the respondents (84.1%) see children and adults; 7.7% see only children; and 8.2% see only adults. Close to one-half (45.9%) of the respondents practice in the City of Sacramento (Figure 28).

Figure 28. Location of Dentists' Main Practice (n =148)



The dentists were also asked whether they had a relationship with community clinics for the purpose of collaboration and referral. Some type of relationship—generally referrals back and forth—with community clinics was described by about one-third (30.9%) of the dentists (Figure 29); 63.2%, however, reported they had no relationship with the clinics in their area or even knew if one existed. "Other" relationships included providing information about the services and location of the dental clinics as needed based on the inquiry, "working together to meet the needs of the community," and participating in pro bono community dental clinic functions.

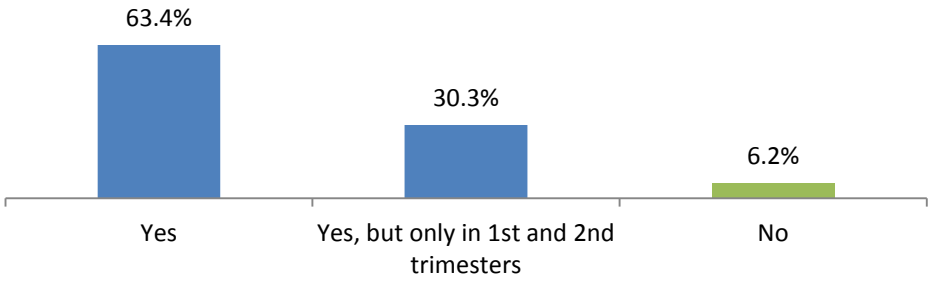
Figure 29. Dentists' Relationships with Community Dental Clinics (n=154)



Pregnancy and Early Childhood

Maintaining good oral health during pregnancy has the potential to reduce the transmission of pathogenic bacteria from mother to child and can be critical to the overall health of both pregnant women and their infants. Although some (30.3%) Sacramento County dentists for whom the question was applicable limit serving pregnant patients to the first and second trimesters, 63.4% reported providing dental care (routine teeth cleanings, dental X-rays, local anesthesia) without reservation to patients during pregnancy; 6.2% do not provide it at all (Figure 30).

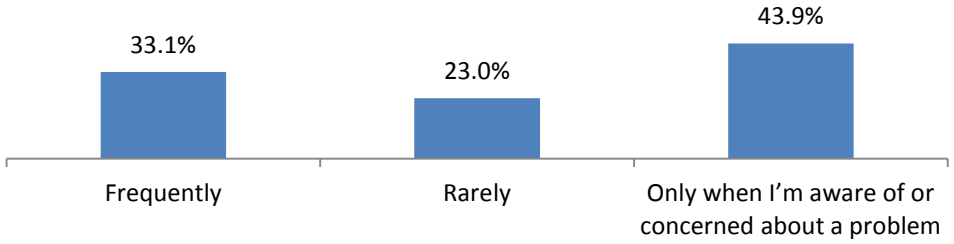
Figure 30. Provision of Dental Care to Pregnant Patients (n=139)



Many (43.9%) of the dentists said they were likely to consult with a pregnant patient's prenatal care provider but not routinely, only when they were aware of or concerned about a particular problem (Figure 31 below). One-third (33.1%), however, frequently consulted about a dental treatment plan; 23% reported they rarely did so. Those who said it was rare to consult with

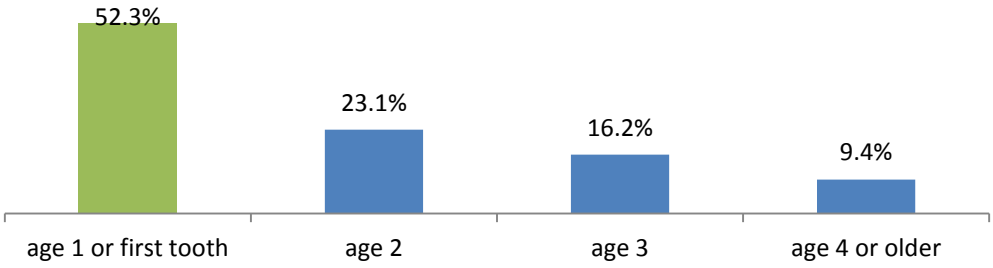
prenatal providers matched the proportion of general-to-specialist ratio of the survey respondents.

Figure 31. Frequency of Consulting with Pregnant Patient's Prenatal Provider (n=139)



Just over half (52.3%) of the general dentist respondents reported following the recommended American Academy of Pediatrics and the American Academy of Pediatric Dentistry that children should be seen by a dentist by their 1st tooth or 1st birthday (Figure 32). Close to 40% don't see children until they are at least three years old and 9.4% wait until age four. While the "First Tooth/ First Birthday" campaign has been effective in Sacramento County, these data suggest greater provider acceptance of very young children could improve the utilization rate for children age 0-3.

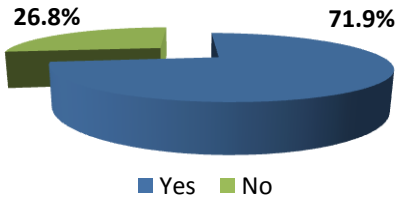
Figure 32. Age at which General Dentists First See Children (n=117)



Preventive Services

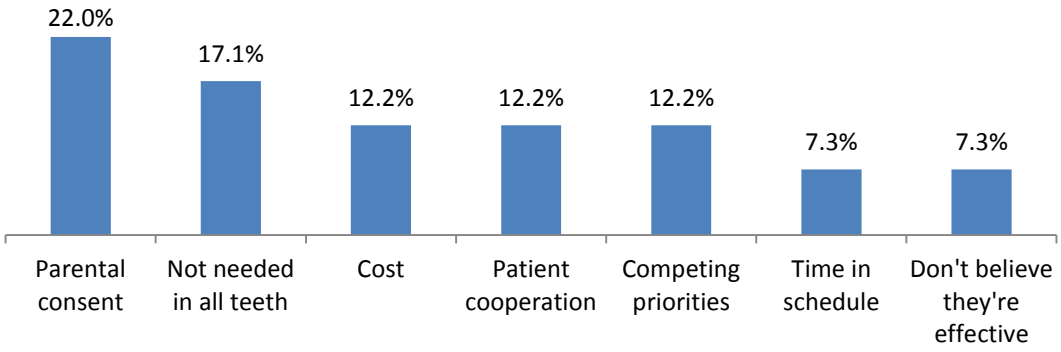
Sealants, which act as a barrier to help protect teeth from bacteria and acids, were reported to be provided to all eligible children under age 14 by 71.9% of the dentists to whom the question was applicable (Figure 33). Though this is a favorable finding, it must be remembered that pediatric dentists—who are likeliest to apply sealants—were over-represented among the survey respondents.

Figure 33. Percent of Dentists Who Provide Sealants to Eligible Children (n=151)



The dentists who said they did not provide sealants to eligible children age 14 and under cited cost, patient cooperation and competing priorities as the main barriers (Figure 34). However, 7.3% thought sealants weren't effective, didn't believe "a virgin tooth with grooves should be sealed," or were needed unless the child was high risk.

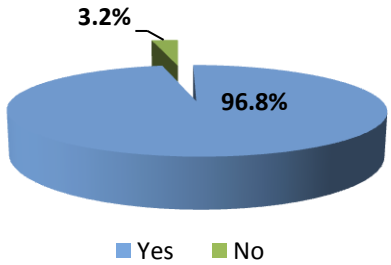
Figure 34. Barriers to Providing Sealants to Eligible Children (n=41)



Note: Note: Respondents could mark more than one choice.

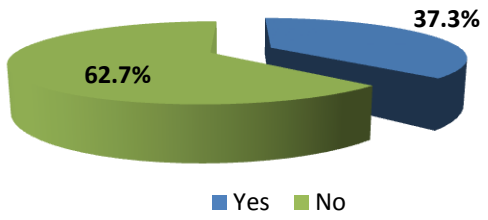
Dentists have used in-office fluoride treatments for decades to help protect the oral health of children and adults, especially patients who may be at a higher risk of developing caries.[60] Nearly all (96.8%) of the general and 100% of the pediatric and community dental clinic dentists who answered the question provide fluoride varnish as a part of their practice (Figure 35). Close to one-third of the specialist offices also reported providing fluoride varnish.

Figure 35. Percent of General and Pediatric Dentists Who Provide Fluoride Varnish as Part of the Practice (n=129)



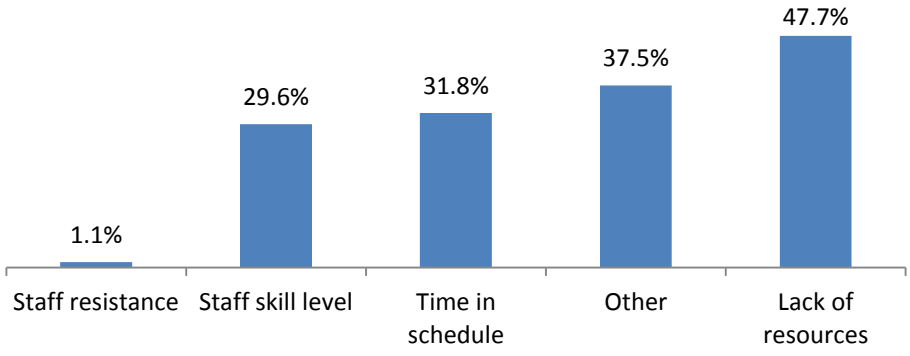
Because of the oral health implications of tobacco use, dental practices provide a uniquely effective setting for tobacco use recognition, prevention and cessation. About 37% of the survey respondents said they provide tobacco cessation counseling to all patients who use tobacco products (Figure 36 below).

Figure 36. Percent of Dentists Who Provide Tobacco Cessation Counseling to Patients (n=158)



Dentists who do not provide tobacco cessation counseling identified the main reasons for not doing so (Figure 37). Lack of resources and not enough time in the schedule were cited most often. Some dentists see tobacco cessation counseling as a medical issue and not part of their role. Several respondents described patient resistance issues ("patients generally not interested"); some said it was because there was no specific reimbursement for tobacco cessation counseling; several observed that there "are not many smokers in the practice;" and a couple wrote that they "just haven't made it a priority" and "no barriers just lack of incentive."

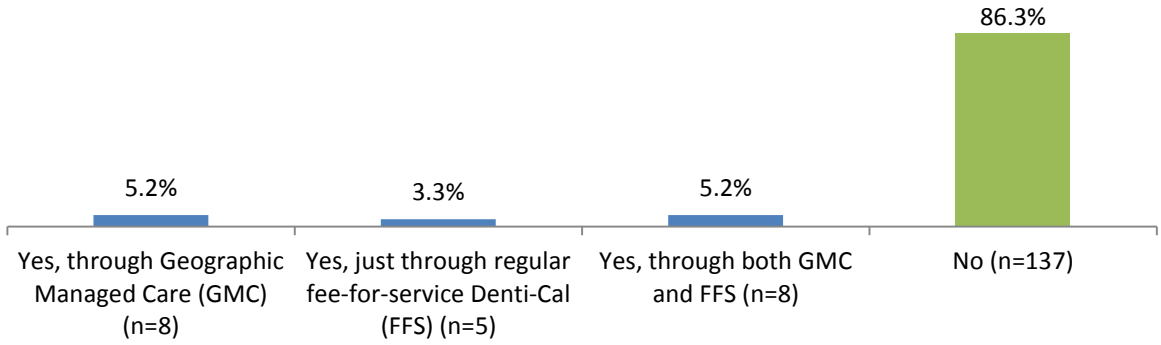
Figure 37. Dental Office Barriers to Providing Tobacco Cessation Counseling (n=88)



Experience with Denti-Cal

There is much evidence that an inadequate provider network for serving patients with Denti-Cal is one of the primary limiting factors for access to care. While dental safety net clinics play an essential role in providing care for the Denti-Cal population, Sacramento County cannot fully meet the oral health needs of children and adults without adequate participation of the dental community. Just over 14% of the respondent dentists see patients with Medi-Cal dental benefits: 5% participate in the GMC program; another 5.2% through both GMC and regular Denti-Cal FFS; and 3.3% through FFS only reported accepting Denti-Cal in their private practice (Figure 38 on the next page); 86.3% of the dentists, however, do not serve the Medi-Cal population.

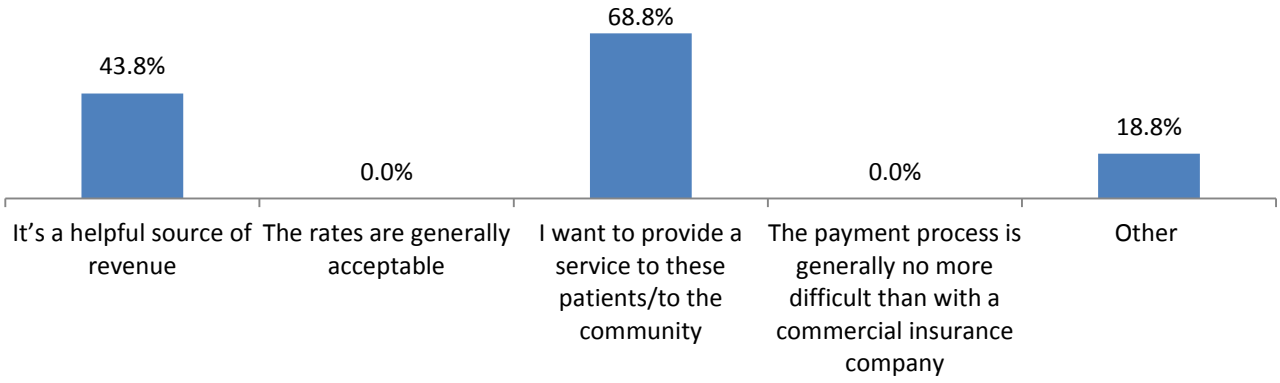
Figure 38. Percentage of Dentists Who See Patients with GMC/Denti-Cal (n=153)



Among the dentists *not* taking GMC/Denti-Cal, "other specialists" and general dentists who answered the question are over represented as 100% and 92%, respectively, answered that they did not participate; a lesser proportion, 67%, of the responding pediatric dentists reported not seeing these patients. (Note: the response rate to this question was nearly the same among the types of dentists.)

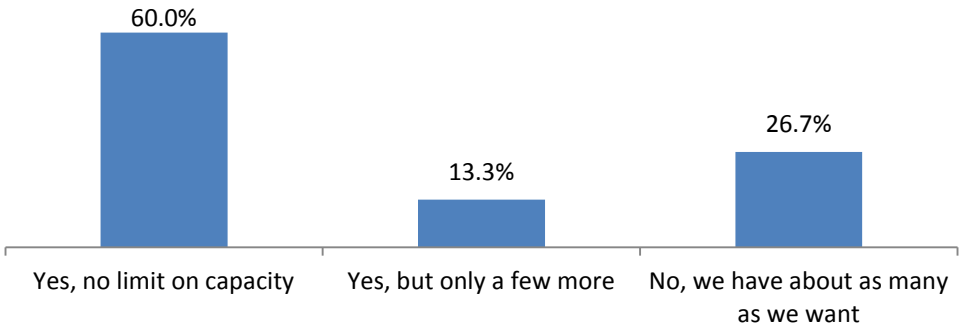
Sixteen of the 21 private practice dentists who participate in GMC/Denti-Cal answered the question about the main reason they decided to do so. The majority (68.8%) said it was "to provide a service to patients and the community;" 43.8% believed it was "a helpful source of revenue" (Figure 39). Three of the dentists who offered "Other" comments said they worked in a practice where it was required ("the place I could get a job after dental school") or as a condition of their student loan repayment/forgiveness.

Figure 39. Main Reasons for Taking GMC/Denti-Cal Patients in the Private Practice (n=16)



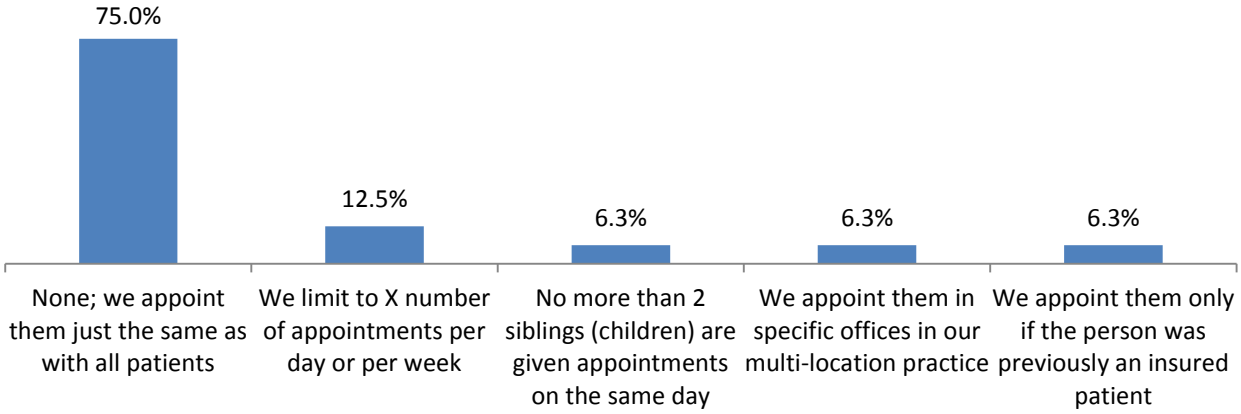
Most (73.3%) of these same private practice dentists reported having *some* amount of capacity to see more GMC/Denti-Cal patients in their practice (Figure 40 on the next page), 18.2% saying they could only accept "a few more," however.

Figure 40. Capacity to See More Denti-Cal Patients in the Practice (n=15)



Asked about placing limitations, the majority (75%) of the GMC/Denti-Cal providers said they did not place any limitations on seeing Denti-Cal patients in their private practices; additional dentists identified the types of restrictions they placed on Denti-Cal patients as shown in Figure 41.

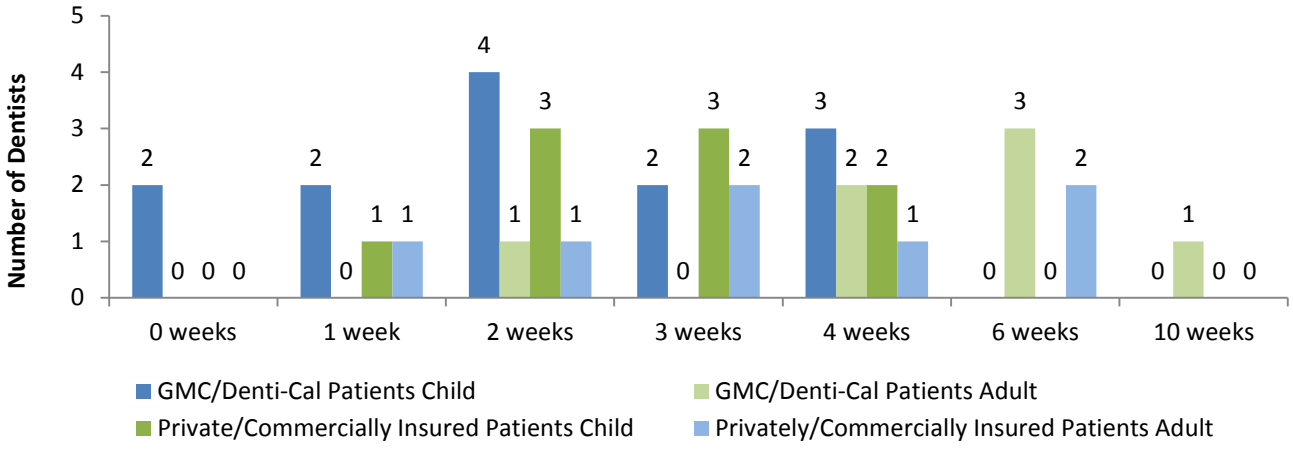
Figure 41. Limitations Dentists Place on Seeing Denti-Cal Patients (n=16)



Note: Respondents could mark more than one choice.

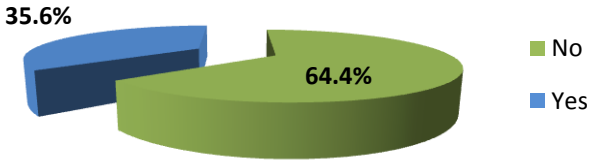
The GMC/Denti-Cal providers were also asked how far out their appointments were for a routine, non-urgent visit for both GMC/Denti-Cal patients and private/commercially insured patients to assess implications for access. Although the sample size is too small to be representative, the responses show that adults in these practices have to wait longer than children do to obtain an appointment (consistent with focus group feedback), and adults with GMC/Denti-Cal wait the longest number of weeks, as indicated in Figure 42 on the next page. Children with GMC/Denti-Cal seem to have a fewer number of weeks to wait for an appointment than commercially insured children do; for example, four of the 14 dentists said they appoint these children within or less than a week.

Figure 42. Number of Weeks Appointments Booked Out, by Type of Patient (n=14)



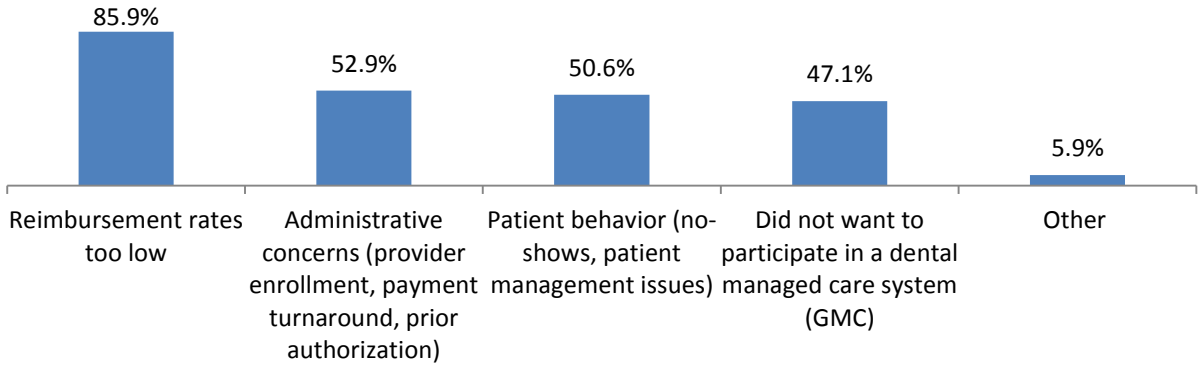
One-third (35.6%) of the dentists who answered the question reported that while they no longer accepted Denti-Cal/GMC in their practice, they had done so in the past (Figure 43). There was no difference in the type of responses based on type of dentist.

Figure 43. Did You Ever Used to Take Patients with Denti-Cal in this Practice? (n=132)



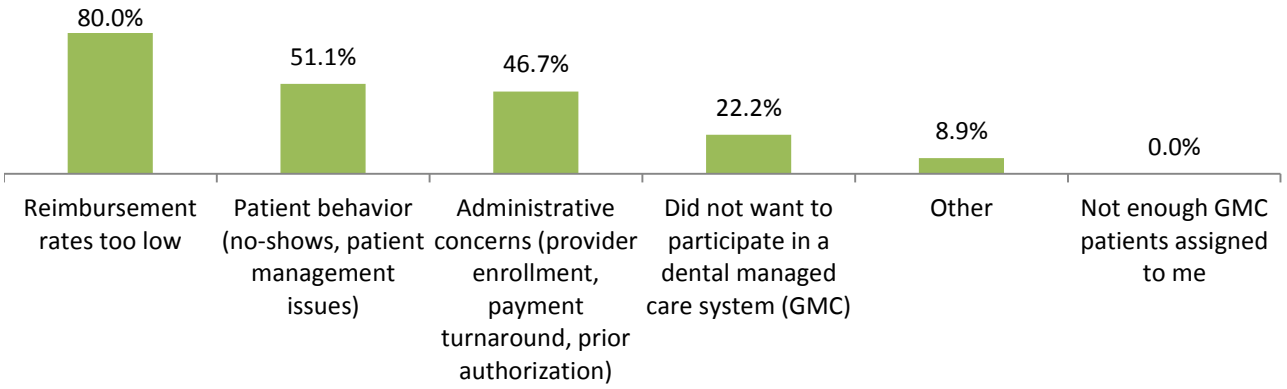
Numerous studies confirm that rates that are below the cost of providing care deter dentists from participating in Medi-Cal programs. In this survey as well, low reimbursement rates accounted for the main reason these dentists had dropped or never participated in GMC/Denti-Cal. (Note: the survey did not ask whether dentists had dropped just GMC or just Denti-Cal FFS.) Figure 44 below displays the main reasons dentist had for not taking GMC/Denti-Cal, and Figure 45 which follows hows why those who used to accept it dropped it. Besides the issue of low reimbursement, negative patient behaviors and leaving the program due to some of the administrative issues that adds to the cost of seeing GMC/Denti-Cal patients such as trying to get paid were cited by the respondents as important reasons.

Figure 44. Reasons Why Dentists Did Not Ever Participate in GMC/Denti-Cal (n=85)



Note: Respondents could mark more than one choice.

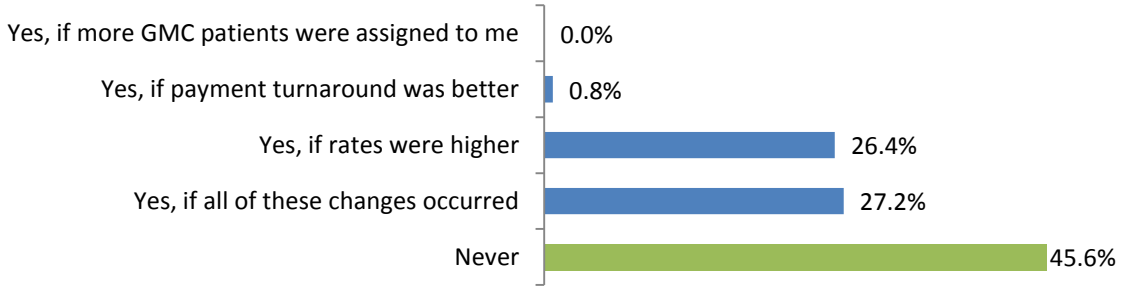
Figure 45. Reasons Why Dentists Stopped Taking Denti-Cal (n=45)



Note: Respondents could mark more than one choice.

While nothing would persuade 45.6% of the non-GMC/Denti-Cal dentists to participate in the program, 54.4% indicated certain factors that might make a difference (Figure 46). The specific changes or improvements dentists said it would take to potentially interest them in participating again or ever in GMC/Denti-Cal relate to the same factor that most accounted for their never taking or having stopped taking GMC/Denti-Cal, and that was reimbursement issues.

Figure 46. What Might Make a Difference in Dentists Seeing Denti-Cal Patients (n=125)



Dentists' Recommendations for Improvement

Because the needs assessment findings are expected to drive the development of the oral health improvement plan, dentists were asked, "What one thing would you change in Sacramento County to improve access to dental care for children and adults?" About 43% of the respondents provided the input described in Table 11 below. Many of their suggestions apply equally to both children and adults, with some indicating "everything concerning children same for adults."

Table 11. Dentists' Recommendations for Improvement

For Children	For Adults
▪ More parent education/awareness about importance of OH for their children. (n=13) ▪ Raise GMC/Denti-Cal reimbursement; especially for anesthesia and specialty care. (n=7) ▪ 100% community water fluoridation; get people to drink tap water. (n=6) ▪ More available Denti-Cal dentists, especially specialists for referrals; "clean up" Denti-Cal to attract more providers. (n=5) ▪ Preventive services; mandatory early screening and prevention. (n=3) ▪ School-based OH education and screening. (n=3) ▪ Campaigns for better food choices, diet. (n=3) ▪ Get rid of GMC. (n=2) ▪ Better insurance coverage; scope of benefits. (n=2) ▪ Medical office awareness of OH impacts. ▪ Quality clinics with volunteer dentists. ▪ Better orthodontic coverage. ▪ Better access to OR treatment.	▪ More access to care through better insurance coverage/ funding; more affordable options. (n=13) ▪ OH education for adults ("emphasize prevention can save later pain and cost"; find ways to make OH of more importance/value. (n=13) ▪ Wider scope of GMC/Denti-Cal benefits, e.g., restorative, bicuspid endo, additional tooth replacement alternatives. (n=4) ▪ "Same as for children." (n=4) ▪ Increase Denti-Cal reimbursement. (n=4) ▪ More available Denti-Cal providers, especially specialists for referrals, endodontics and crowns, all periodontal treatments. (n=3) ▪ 100% community water fluoridation. (n=2) ▪ Eliminate dental managed care. (n=2) ▪ Nutrition/diet education ("avoid hidden sugars") and relationship to OH. (n=2) ▪ Access to OR treatment ▪ Mobile clinics.

Note: Some comments were edited for length or clarity.

Fifteen of the dentists when invited to write in further comments that could add insight to the needs assessment provided the comments below, some echoing the recommendations they'd made in Table 11 above; there is no importance to the order in which these comments (which are verbatim) are listed:

- Offer loan repayment for new graduates to work in clinics or take Denti-Cal.
- Virtual dental home a plus for schools and special needs population as well as home bound seniors.

- Mandatory kindergarten oral health assessment and reporting for all schools with funding for care coordination to ensure a dental home and treatment of any identified dental needs.
- Increased medical primary care and dental care integration and collaboration.
- Consistent and ongoing funding of provider rate increases from Prop 56 revenue.
- More expansive inclusion of dental preventive service codes and other dental service codes in provider rate increases.
- Education materials on how to brush, informing parents to help young children with brushing, baby bottle decay, flossing. Most children with Denti-Cal brush only 1x/day in morning and do not floss. Education on brushing 2x/day and flossing 1x/day before bedtime.
- Find funds through community giving to fund access to care and children.
- The few providers who abuse public insurance ruin it for those who don't. The hoops dentists have to jump through to be reimbursed are crazy. The shady practices of a few offices result in the punishment of all offices and patients.
- Simplify billing and reimbursement processes.
- Teach more of the general public about proper nutrition so people can avoid hidden sugars to avoid diabetes, obesity and heart disease, and lower the risk for oral disease.
- Create value for regular dental screenings.
- There are basically no available services for homeless and needy.
- We need to support individuals and families in getting to their appointments and also to place requirements for exams not just for kindergarten but elementary, middle school and high school. We need to set up a system where children identified with decay have a dental caseworker who ensures they receive care.
- The GMC program in Sacramento County is a waste of taxpayer money. Too much money for little treatment. This should have stopped years ago.
- The merry-go-round of treatment authorization and compensation levels needs to be done by an outside entity (dental society) then patients can be sent to offices for treatment/ compensation.
- Train more professionals to provide oral health services specifically for this population; maximize auxiliary staff.

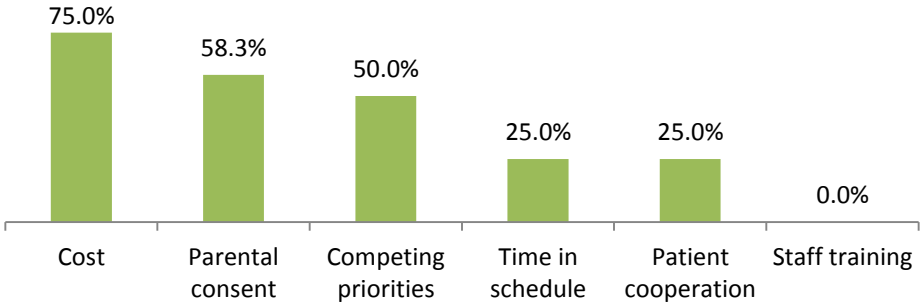
Dental Hygienist Survey

The dental hygienist survey distributed to members of Sacramento Valley Dental Hygiene component yielded 48 responses; 44 (93.6%) who worked in a private dental office and 3 (6.4%) who worked in a community dental clinic (one person did not answer the question).[61] Although this survey did not yield a favorable response, the dental hygienist perspective represented by these responses may contribute additional understanding to the needs assessment.

Ninety percent of the respondent practices served both children and adults. These practices differed significantly from the dentist survey respondent practices concerning a child's first dental visit: a lower percentage of practices where hygienists worked, 31.7%, see children by the first tooth or first birthday vs. 52.3% of the dentists' practices. (One of the community clinic respondents answered that her/his practice waited for age 4.) Fluoride varnish was provided to patients in 71% of the offices and clinics where the hygienists worked.

Provision of sealants to all eligible children under the age of 14 was 67%, similar to the dentists' responses at 71.9%. Whereas only 12.2% of dentists believed cost to be a barrier to sealants, 75% of hygienist perceived this as a major issue (Figure 47). About three times the proportion of hygienists than dentists saw parental consent as an important barrier.

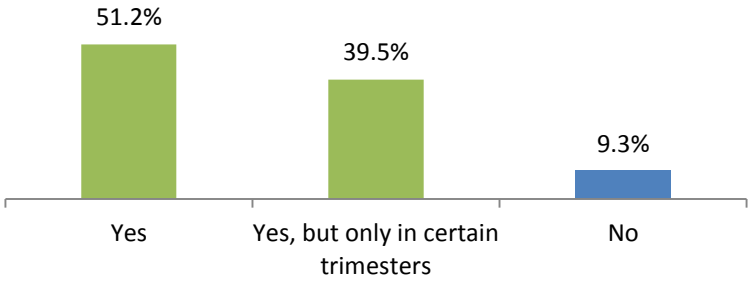
Figure 47. Barriers to Providing Sealants to Eligible Children Cited by Dental Hygienists (n=12)



Note: Note: Respondents could mark more than one choice.

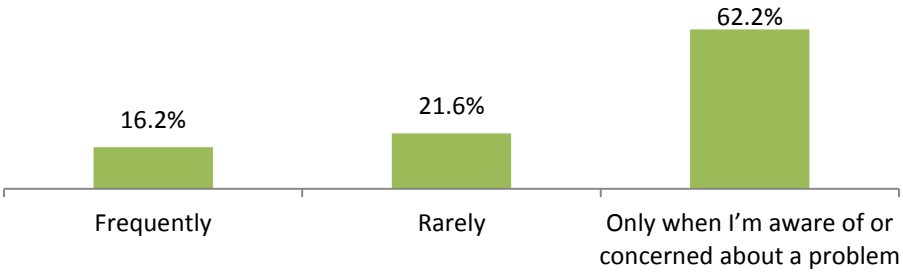
Just over half (51.2%) of the hygienists' practices provided routine teeth cleanings, dental X-rays and local anesthesia to patients during pregnancy without reservation. Another 39.5% limited serving pregnant patients to the first and second trimesters (Figure 48). Only four respondents described the main barrier(s) to providing care to pregnant patients. These were no x-rays during pregnancy (n=4); no anesthesia in certain trimesters or unless the patient was in extreme need of treatment (n=2); checking with the patient's prenatal provider before proceeding with treatment (n=1); and no treatment unless it was an emergency (n=1).

Figure 48. Provision of Dental Care to Pregnant Patients Where Dental Hygienists Work (n=43)



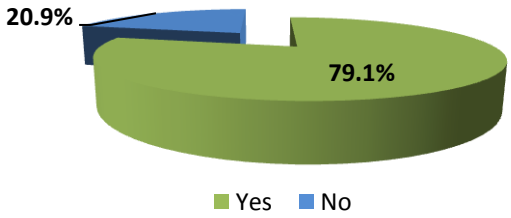
Most (62.2%) of the hygienists said they were likely to consult with a pregnant patient's prenatal care provider but not routinely, only when they were aware of or concerned about a particular problem. About 16%, however, reported they frequently consulted about a dental treatment plan; 21.6% reported they rarely did so. Interestingly, twice the proportion of dentists than hygienists reported frequent consults with prenatal care providers.

Figure 49. Frequency of Dental Hygienists Consulting with Pregnant Patient's Prenatal Provider (n=37)



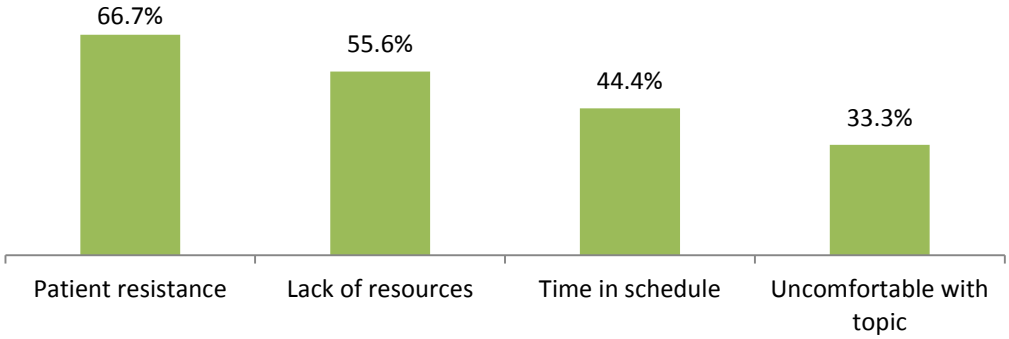
About 80% of the survey respondents—a slightly higher proportion than the dentists—said they provided tobacco cessation counseling to all patients who use tobacco products (Figure 50).

Figure 50. Percent of Dental Hygienists Who Provide Tobacco Cessation Counseling to Patients (n=43)



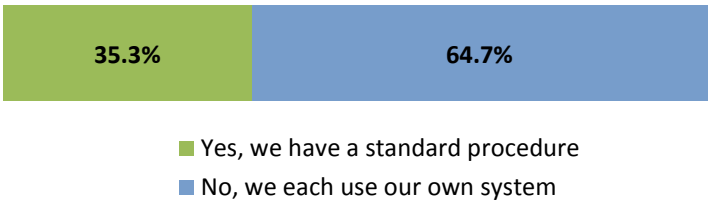
Patient resistance was the most commonly cited barrier for tobacco cessation counseling in the dental office, followed by a lack of resources and time in the schedule for doing so, and discomfort with the topic (Figure 51).

Figure 51. Barriers to Providing Tobacco Cessation Counseling Cited by Dental Hygienists (n=9)



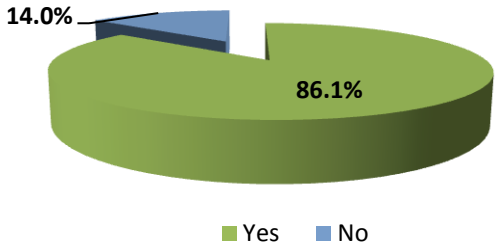
About one-third (35.3%) of the dental office staff use the same messaging for tobacco cessation guidance, while 64.7% use their own system (Figure 52).

Figure 52. Dental Office Staff's Use of the Same Messaging for Tobacco Cessation Guidance (n=34)



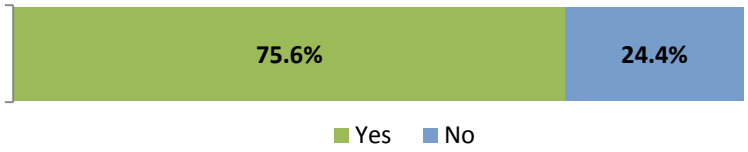
The greatest majority (86.1%) of the dental hygienists reported providing guidance to all patients concerning sugar-sweetened beverages (Figure 53). Five of the six who said they did not identified patient resistance (n=3), time in the schedule (n=2), and a lack of resources (n=1) as the main barriers; no one marked the "uncomfortable with topic" response choice.

Figure 53. Provision of Guidance to all Patients Who Use Sugar-Sweetened Beverages (n=43)



When asked whether they would be interested in receiving continuing education courses that focused on simple ways to incorporate tobacco cessation and/or sugar-sweetened beverage guidance into their practice, three-quarters (75.6%) of the hygienists indicated interest (Figure 54).

Figure 54. Percent of Dental Hygienists Interested in CE Course on Incorporating Tobacco Cessation and/or Sugared Beverages Guidance into Office Practice (n=41)



Dental Hygienists Recommendations for Improvement

To inform the needs assessment further, the dental hygienists were also asked, "What one thing would you change in Sacramento County to improve access to dental care for children and adults?" Twenty (58%) of the respondents provided the input shown in Table 12, generally listed by frequency of mention. In many cases, recommendations for adults were same as expressed for children.

Table 12. Dental Hygienists' Recommendations for Improvement

For Children	For Adults
▪ Reach out more to underserved areas with treatment and education. ▪ Earlier and more school-based screenings. ▪ Sealants for every eligible child. ▪ Fluoridated water + awareness that fluoride is safe. ▪ Mandatory yearly visits for access to school. ▪ Have their primary care providers express the importance of dental care/maintenance. ▪ Place restrictions on the amount of carbonated drinks they consume. ▪ Increased provider participation in GMC/Denti-Cal to increase access. ▪ Greater access to care via more RDH and DDS mobility. ▪ Pay hygienists what they're worth to provide services to low income individuals. ▪ Tongue tie screening at birth or soon after.	▪ Prophy twice a year and education in oral health. ▪ Free screenings. ▪ Fluoridated water + awareness that fluoride is safe. ▪ More access to care through better insurance coverage/ funding; more affordable options. ▪ Education for adults ("emphasize prevention can save later pain and cost"; find ways to make it of higher value.

Focus Groups

A total of 89 individuals attended one of the five community focus groups convened for this project. While no one group was expected to be representative of Sacramento County, *in the aggregate* the groups reflected a diversity of residents and locations (Table 13), particularly those individuals with needs most often addressed by community needs assessments.[62] The participants were typically 20-50 years of age, although one group included several older adults.

Table 13. Sacramento Community Focus Group Characteristics

	Site/City	Characteristics	Participants
1	La Familia ESL/diabetes education class Maple Neighborhood School, Sacramento	White and Hispanic; mixed gender; young and older adults	**29**
2	Family Resource Center Rancho Cordova	Primarily Hispanic, mostly English speaking; mostly women; most young adults	**26**
3	SETA Head Start, parent meeting Citrus Heights	Mixed ethnic group; mostly women; parents of young children	**11**
4	NAACP meeting South Sacramento	Primarily black; young and older adults; mixed gender	**9**
5	La Familia/Birth and Beyond staff Sacramento	Mixed ethnicity; mixed gender; mixed ages	**14**
Total			**89**

Last Dental Visit

Overall, about 50% of the groups reported having made a dental visit themselves in the past year. For those with children, nearly all (a little more than 9 of 10) said they had taken their child(ren) to the dentist in the past year, many within the past six months.

Child's First Dental Visit

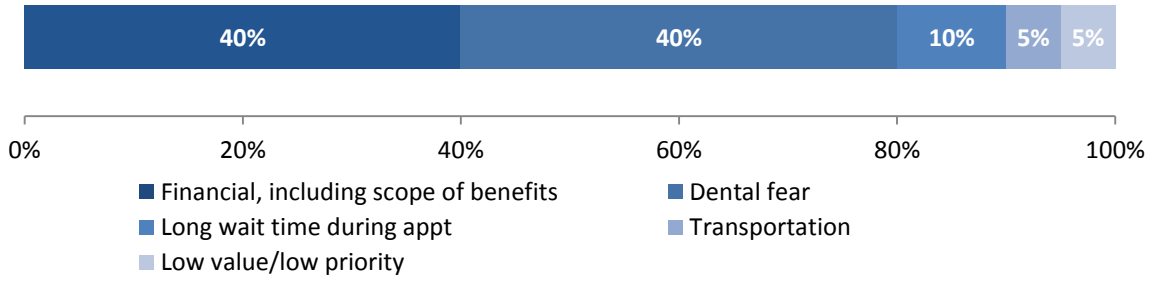
Except for one group—where opinions tended to vary—nearly every participant knew that taking a child to the dentist by "first tooth or first birthday" was recommended, possibly reflecting oral health education efforts of the host organizations or by others. (In one group, a stack of First Tooth/First Birthday decals was sitting on the table where the group was gathered.) In general, older adults, possibly because they raised their children in an earlier era, were not aware—and often surprised by—how early in life dental visits should begin.

Barriers to Care

The participants offered perspectives about their dental experiences—sometimes sharing insight from friends' and families' experiences—and identified specific barriers to achieving good oral

health, responding to questions such as, What are the main reasons people don't go to the dentist, especially when everyone in GMC has an assigned dentist (i.e., dental home)? In the majority of cases, personal barriers topped the list. As Figure 55 indicates, having to pay when a person has no insurance—or for benefits not fully covered by Denti-Cal—and dental fear received the highest mention in equal proportions. Participants with Denti-Cal were satisfied with their children's coverage but not the adult scope of benefits; many described having only part of needed treatment paid for and being charged for the remainder of the services, with some having to forgo treatment completion. The majority of adults without any form of coverage shared that they could not even pay the lower end of the fee-charging clinics' sliding fee schedules. When offered the opportunity to apply for credit, most declined because they either knew they didn't qualify or couldn't make the payments if they took a loan ("The next thing you know, you're in collections"). One participant with GMC dental remarked that in making a phone appointment she was told, "no problem we take it," which gave her the impression she would not be charged for the services. However, when the exam revealed "five things they could do for free and five things that weren't covered," she was told it was "all or nothing." Because she could not afford the balance of treatment, she relinquished the entire range of needed care.

Figure 55. Main Barriers to Oral Health Cited by Focus Group Participants



Note: percentages are approximates

Being afraid themselves ("I don't want that big ol' needle in my mouth") or for their children was cited by an average of 40% of participants as a significant barrier to making or keeping a scheduled appointment. Some felt the dentist didn't believe them when they said they felt pain during a procedure ("it's just pressure, not pain"), and said they never went back or bothered to find a new dentist due to the fearful experience. Some participants remarked that "in the old days things were worse," and acknowledged that many procedures "were better now" and people weren't always aware of that. In addition to fear of pain (perceived or real based on experience), a couple of the parents specifically mentioned anxiety related to the use of a papoose board on an acquaintance's child ("I don't want my child tied down like that"), and believed that that would "set children up for future fear."

"A long wait" *during* a dental visit (only one person mentioned a long wait to *obtain* a non-urgent appointment) was also considered a reason why people skipped dental visits. Being made to wait too long (in some cases longer than when they attended their medical appointments, which they couldn't understand) made it harder to leave work, find childcare or take off from school. One or two people in three of the groups described also transportation as a barrier.

A few (about six or seven) participants in two of the groups discussed concerns about specific issues in the GMC program. Some felt customer services in dental offices were "rude once you tell them you're Medi-Cal." One participant recounted that when she called the dental office to make an appointment and disclosed her type of insurance (GMC), the "former friendly phone person turned rude on me and put me on hold forever." Some adults had been denied treatment not based on cost but oral health status ("they said my cavities weren't bad enough yet;" "they only approved removing two of my four wisdom teeth"), and in one case a savvy consumer did not "rely on the dentist telling me treatment was denied" called the GMC *Plan* to appeal. One person who had sought help in an emergency room (note: a total of 6 focus group participants went to the ER for a dental reason) shared that she went home and "pulled out my bad tooth myself because they wouldn't do it [she was given pain medication] and it hurt too bad."

Generally, people recognized the relationship between going to the dentist and having good oral health. However, a few people (both genders and various ethnicities) expressing the belief that if they took care of their teeth by brushing there was little need to visit the dentist, or go very frequently. A couple of participants acknowledged that they "just hadn't gotten around to it" ("timewise, it never worked out for me all of last year"). Adult tooth pain was considered to be the main reason for the need to visit a dentist according to three participants.

Of interest, although most of the key informant interviewees mentioned that being unaware of the importance of oral health was a major barrier to seeking care, and many people did not understand its value, virtually no one in the focus groups identified lack of knowledge as a barrier.

Awareness of Relationship of Oral Health to Other Health Issues

Many in each group themselves said they had heard of the relationship between periodontal disease and diabetes but fewer knew of its connection with heart disease and threat to the fetus during pregnancy.

Medical –Dental Communication

Primary care providers have an important role to play in promoting oral health. Yet, only one or two people in four of the focus groups (and none in one group) reported that their doctor usually

talked to them about oral health at their regular medical visit. In most cases where oral health was addressed, women shared that it was during their pregnancies.

Participant Recommendations

Participants were given the opportunity to give input to the upcoming oral health planning process by being asked, What could make a difference in helping people in Sacramento County achieve better oral health? Although it was explained that the focus of the county's oral health program is on prevention, these individuals offered the following suggested improvements:

- Expand the scope of adult dental benefits so that all treatment needs can be addressed.
- Help more people access affordable care (e.g., lower sliding fee schedules, more pro bono services).
- GMC Dental Plans should work with provider offices to ensure all staff become more sensitive regarding customer services ("be more polite to us").

Key Informant Interviews

Eighteen key informants whose names had been provided by the Advisory Committee participated in a telephone interview. The interviews generally lasted 30-40 minutes. The key informants represented a good cross-section of Sacramento County health and human services community-based organizations and other individuals with an informed perspective about unmet oral health needs. While most of the interviewees spoke to the issues they knew best from their professional roles, many were also able to consider and describe the needs of others in the county when prompted with questions to help them think about population characteristics, geography, political landscape and other factors that influence oral health knowledge, attitudes and access to services.

Unmet Needs

The key informants were asked to describe what they thought were the most significant oral health problems/needs in Sacramento County that needed to be addressed, keeping in mind the objectives of the State Oral Health Plan. The interviews yielded fairly consistent results with the focus group responses and community survey conducted for this assessment although the key informants identified a much broader picture of the needs and barriers. Table 14 below identifies the most important needs and indicates the extent to which they were identified by the interviewees.

Table 14. Most Important Oral Health-Related Needs Identified by Key Informants (n=18)

Issue	Frequency of Mention
Better informed population OH importance	8
Greater awareness of eligibility, scope of benefits and where to go for services	4
Expanded coverage/expanded scope of Denti-Cal benefits for adults	3
Greater communication/consultation between medical and dental providers	3
Preventive services provided in more settings	2
Transportation assistance	2
Integrated, uniform oral health messaging	2

Some interviewees identified more than one need.

The majority of the interviewees believed that much of the county's population, including "highly educated people," did not have enough knowledge about oral health or understand its importance and relationship with general health. One interviewee gave as an example people not knowing the two-way relationship between diabetes and periodontal disease (i.e., those with diabetes are at an increased risk for serious gum disease because they are generally more susceptible to bacterial infection, and have a decreased ability to fight bacteria that invade the gums). Two additional individuals particularly mentioned soda and other sugary drinks ("Believe it or not, some people don't know the damage soda can do to you"). The point was also made that there was a need for oral health messaging to be uniform and better integrated by various professionals and in various settings; for example, training for Family Service Workers (i.e., eligibility workers) to learn more about oral health and incorporate it into their work.

Despite ongoing and increased efforts of advocates and the GMC Dental Plans, four of the key informants remarked that there were groups eligible for subsidized dental services but unaware of it, and groups with coverage who did not know where to go, in particular new immigrants and refugees, who needed more assistance as well as prevention education. It was suggested that dental Plans should focus more outreach efforts in Galt and Walnut Grove where needs were high and access more limited.

Interestingly, two key informants remarked that in general access "is pretty good in Sacramento County" while two others commented it was "still bad." An additional interviewee observed that referrals to specialists was the main access issue and another specifically identified access to general anesthesia dentistry as a need.

While more focus on prevention was viewed as a primary need, especially in view of the advocacy role many key informants play for children, three individuals believed this grant opportunity should be used to help more adults receive dental services. They acknowledged the greater cost of treatment to prevention ("pennies on the dollar"), but thought adults had been "wrongly ignored" in efforts to expand services. Two interviewees mentioned the relationship between oral health

"shame" (bad teeth, missing teeth) and lack of employment; another had observed that "if parents aren't practicing good oral health themselves they may not pay attention to their kids' teeth."

Barriers

Barriers to achieving good oral health are complex, and the result of a combination of healthcare structure and personal factors. Table 15 displays the most common barriers the key informants identified as impeding oral health or restricting access to services, many of which relate back to their perspectives about need. Besides the relationship of oral health to general health ("People don't relate any disability they have to their teeth"), the common barriers of cost, transportation difficulties and language barriers were cited. Many GMC members were said to be unaware of the transportation benefit covered in their scope of benefits. Other barriers were interrelated; for example, how a person perceives need may be the result of lack of knowledge about the importance of oral health ("My parents had dentures so I will too"), cultural beliefs ("baby teeth aren't always valued by our clients"), or lack of pain ("Nothing is hurting so I don't need to go"). Misinformation can also act as a barrier ("People aren't drinking the tap water; they think the water is not safe"). Various types of real or perceived dental fear—of losing one's teeth, of treatment cost, of pain—sometimes linked with misinformation, were noted as important personal barriers by five of the interviewees as a reason for avoiding the dentist or delaying a visit until an infection, abscess or other "dental crisis" necessitated help.

Table 15. Common Barriers to Oral Health Identified by Key Informants (n=18)

Issue	Frequency of Mention
Lack of information/lack of knowledge of importance about oral health	11
Dental fear	5
Low personal value about oral health/low priority regardless of adequate knowledge	3
Inaccessible clinic hours/not being able to get off work or school	2
Financial concerns	2
Different cultural attitudes about teeth/when to seek services	2
Transportation difficulties	2
Limited health literacy	1
Language differences between clients and providers	1
The highly addictive nature of sugar that "hooks" people	1
No Denti-Cal reimbursement for case management	1
Inadequate communication between medical (especially prenatal) and dental providers	1

Some interviewees identified more than one barrier.

A few of the key informants remarked that despite relatively accessible services and acceptance that oral health is important, some people "just don't make going to the dentist a high enough priority." Laziness in investing in lifestyle change and unwillingness to accept personal ownership were

suggested as reasons. Some of the following comments reflect these views while others offered alternate explanations:

- "Success [adoption of desired behavior] varies based on the extent to which parents embrace the value of oral health."
- "Even after receiving oral health information where they rank it as important they don't follow through and change behavior."
- "Our [school] families don't do prevention; this makes going to the dentist more fearful and they avoid it because they think it's going to hurt."
- "The family says 'oral health is important' but that priority can certainly change when life challenges occur."
- "It's a matter of trust; if they don't have a relationship with who's giving them the information they may not trust it." "Once you establish trust with a family they'll pay more attention to what you're trying to teach them/get them to do differently."
- "When people realize they're harming themselves—when you can show them what erosion looks like on their own teeth and it's not just a concept—you get behavior change."
- "Young parents' lives are so full of emergent needs that oral health gets the short-shrift."

In addition to the personal factors that influence perceived needs—shaped by an individual's experiences as well as beliefs and values—the key informants cited a few delivery system issues that serve as barriers. These included having office/clinic hours open only when people are at work or school, providers limiting case management for Denti-Cal patients because they aren't able to be reimbursed for it, and medical and dental providers infrequently communicating with one another about their patients.

Opportunities for Improvement

The opportunities the key informants identified as "untapped" or needing strengthening in Sacramento County recognize that single interventions will not lead to sustainable oral health improvement. Multiple approaches, uniform and creative messaging, and involvement by more entities—including non-traditional providers—were the most frequently cited suggestions for improvement. For example, nearly half of the key informants commented that to more effectively promote prevention and take advantage of the "captive audience," school-based services, including a parent education component, was the way to go (Table 16). Likewise, bringing the Virtual Dental Home into more schools—and other appropriate settings—was viewed as an important strategy.

Table 16. Priority Oral Health Improvement Recommendations Offered by Key Informants (n=18)

Opportunities to Improve or Strengthen	Five-Year Achievement
▪ School-based services, especially for sealants. ▪ Pediatricians and prenatal providers better trained in oral health of pregnant women and young children; more collaboration with dentists. ▪ Oral health education messages integrated with other related efforts; all organizations/provider groups messaging. ▪ Creative, powerful negative consequences messaging. ▪ Delivering care in different systems, e.g., Virtual Dental Home in more settings. ▪ Adult dental benefits/access to care. ▪ Accessibility of referrals to specialists, especially for individuals with special needs. ▪ Dental Plans building more trust/making families feel more comfortable. ▪ Community water fluoridation.	▪ Increased utilization. ▪ Fewer dental caries. ▪ A better informed population, especially parents of young children. ▪ More dentists participating in community events to increase visibility of oral health importance.

In order of frequency of mention. Some interviewees identified more than one opportunity.

In an improved effort to reduce oral disease, it was suggested that the medical and dental communities needed to build closer relationships ("bridge the siloes"), and in the case of pregnant patients establish more collaboration to increase accessibility of dental treatment during pregnancy. While more training was said to be needed for pediatric providers ("Pediatricians just don't do oral health well") to reach the youngest children, getting every child into the dentist earlier ("Physicians and dentists see different things when they look in the mouth") and certainly prior to entering kindergarten should be a higher priority.

Interviewees also noted unexploited opportunities to integrate key messages not only by physicians but more service organizations such as Family Resource Centers and programs like Birth and Beyond ("The education has to be from several sources; it's solidified when others in the family do it"), and allowing for the needs of different populations ("In some cultures, such as in Afghan families, the man may be educated but the woman is illiterate, so you're really addressing the husband with written materials; the information should also be delivered verbally so both parents can benefit). A couple of the key informants believed that oral health messages were "too cheerful," and should take a page from the impactful tobacco ads that focus on negative consequences. They made the point that "nothing is going to hit people hard unless it's really graphic."

Several individuals acknowledged that while children and disease reduction should continue to be a focus of the Sacramento County Oral Health Program, there were opportunities where adults, particularly those of working age with "horrendous dental needs," should be helped ("Most patients do not see us until their teeth are bothering them"). The suggestions to improve adult oral health included more pro bono events, integration with diabetes education programs and help in understanding dental benefits and navigating to find a provider for GMC members. In this regard, a couple of the interviewees felt the Dental Plans needed to "make families more comfortable" and "build more trust" to increase the likelihood that outreach efforts would lead to increased utilization.

Key informants were also given the opportunity to look ahead and "Name the most important change or improvement you would want to see in Sacramento County five years from now." Table 16 on the previous page summarizes their hoped-for achievements.

Community Oral Health Survey

The Community Oral Health Survey yielded a response of 1,705 usable surveys from distribution throughout the county.* The vast majority, 1,563 (91.7%), were completed in hard copy, and the remainder, 142 (8.3%), online (Table 17). About one-third of the surveys were completed on the Spanish version, essentially only via paper copy.

Table 17. Number of Survey Responses by Survey Language and Mode (n=1,705)

	English	Spanish	Total
Paper	1,028	535	1,563
Online	137	5	142
Total	1,165 (68.3%)	540 (31.7%)	1,705 (100%)

ADULTS

Overall, adults ages 27-40 made up the largest proportion (52.9%) of the survey sample. When looking at the surveys by language type, twice the percentage of people ages 18-25 completed the form in English than in Spanish (Table 18). The ethnic breakout of the sample is relatively consistent with the percentages of Sacramento's Asian, American Indian, multi-race and "other" populations; the survey sample shows an over-sampling of Hispanics and Blacks and under-sampling of White, non-Hispanics, the result of intentional placement of surveys in targeted community locations.

Table 18. Characteristics of the Survey Respondents

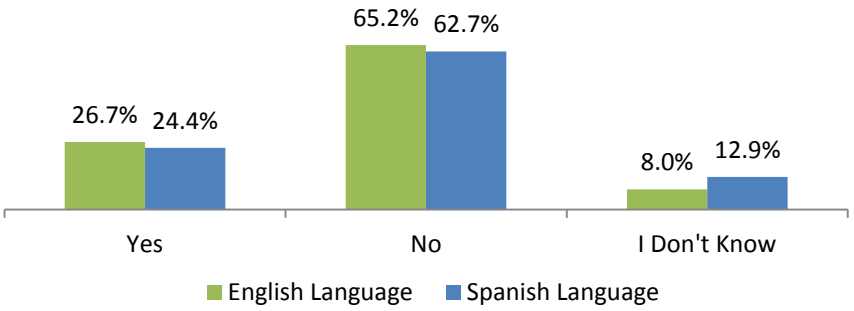
Characteristic	English Language	Spanish Language	Total Surveys
Age			
Age 18-25	22.5%	11.3%	19.2%
Age 27-40	50.6%	57.1%	52.9%
Age 41-64	23.7%	27.1%	24.3%
Age 65+	3.2%	4.5%	3.6%
Ethnicity			
White, non-Hispanic	23.0%	16.2%	21.3%
Hispanic/Latino	26.1%	64.8%	38.7%
Black	18.1%	13.3%	15.2%
Asian	21.0%	0.6%	15.0%
American Indian	1.1%	1.6%	1.3%
Multi-race	6.2%	2.0%	5.0%
Other	4.4%	1.4%	3.5%

* The survey has a margin of error of +/- 3% at a 95% level of confidence and can be considered representative of the populations of interest.

Oral Health Status

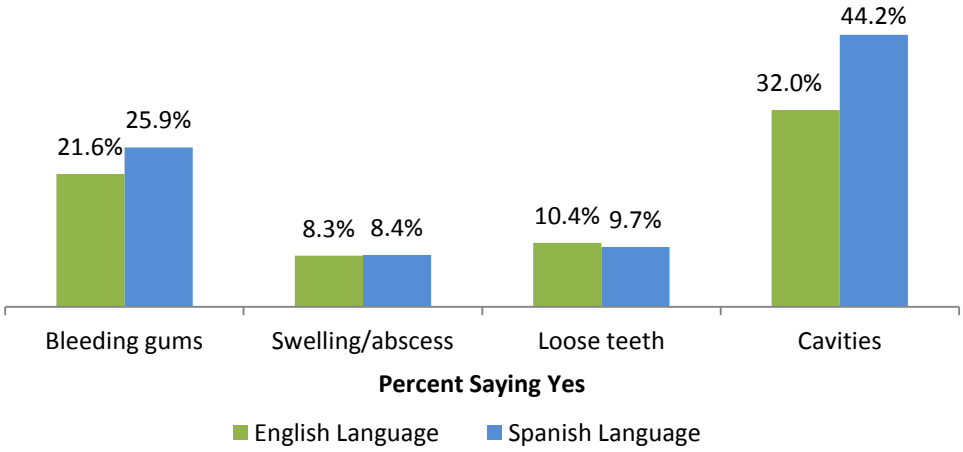
The survey respondents were asked a series of questions about their current and past oral health status. About one-quarter of them, regardless of which language they completed the survey in, reported having a dental problem "right now." About half again of the Spanish than the English language respondents, 12.9% vs 8.0%, "didn't know" if they currently had a problem (Figure 56).

Figure 56. Survey Respondents' Self-Reported Current Dental Problems



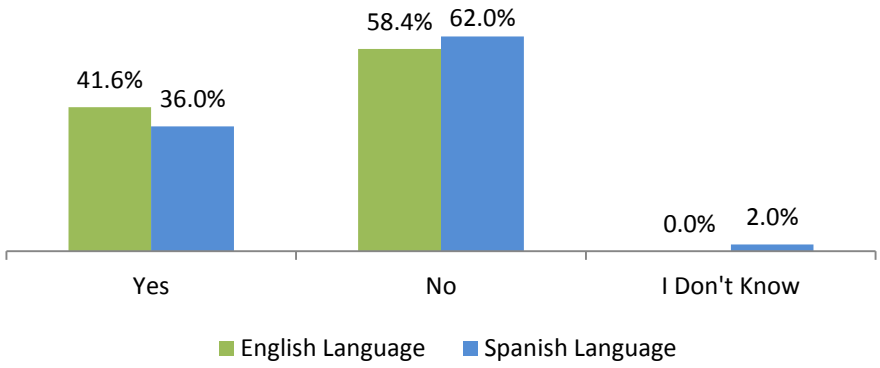
A relatively large proportion of adults—one-third or more—said they had had cavities in the past year, with nearly 40% more of the Spanish language respondents reporting this, and about one-quarter had experienced bleeding gums (Figure 57).

Figure 57. Type of Dental Conditions Survey Respondents Experienced in the Past Year



Although tooth loss in adults has decreased in recent decades, it remains more of a problem for some population groups.[63] In this survey sample, about 39% of respondents on average (English 41.6%/Spanish 36.0%) had experienced having an adult tooth, not including wisdom teeth, pulled (Figure 58 on the next page).

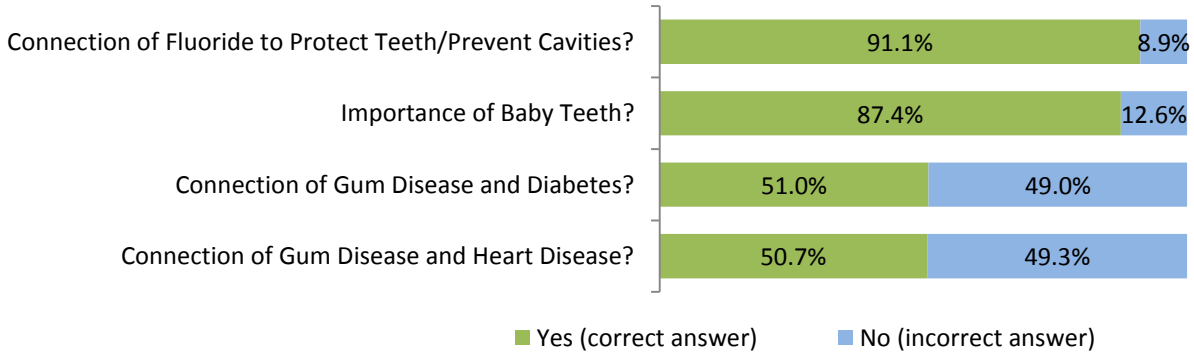
Figure 58. Percent of Survey Respondents Who Ever Had an Adult Tooth Pulled



Oral Health Knowledge

Assessing oral health knowledge is important to plan appropriate preventive oral health education programs. As Figure 59 indicates, the greatest majority (91.1%) of the survey respondents knew that fluoride strengthens or helps to protect teeth and prevent cavities, with a slightly higher proportion of those answering in Spanish knowing the correct answer (93.7% vs. 89.9%). Nearly the same proportion of all respondents thought baby teeth were important "even though they're going to fall out anyway." Respondents, regardless of the language used for the survey, were less aware of the relationship between periodontal disease and heart disease and between periodontal disease and diabetes. Only about half the group was able to answer those two questions correctly as the graph shows.

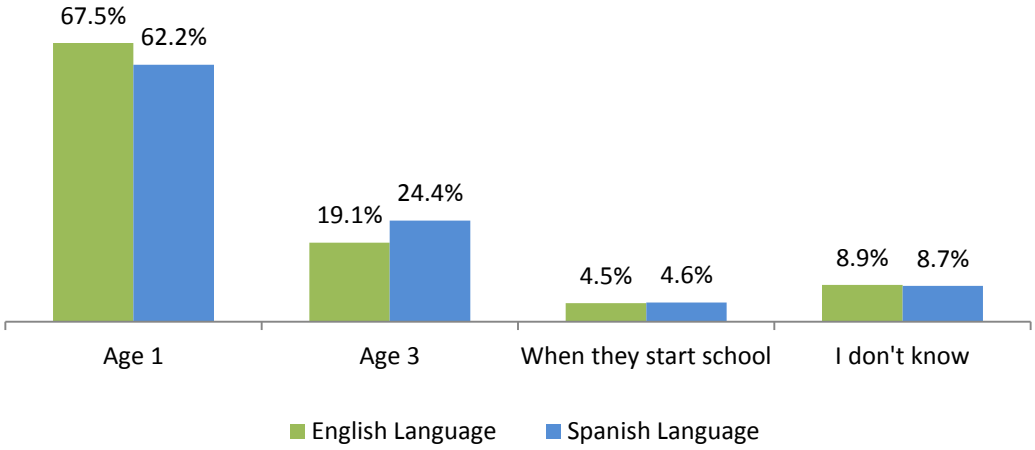
Figure 59. Survey Respondents' Knowledge of Oral Health



Overall, 7.1% of the respondents left blank the question about periodontal disease and diabetes; 8.9% about its relationship to heart disease; 4.7% about the importance of baby teeth; and 5.1% about the efficacy of fluoride, perhaps implying no knowledge about these issues (respondents were deliberately not given an "I don't know" option).

While about two-thirds of the group were aware of when a child should have a first dental visit (with English language respondents slightly more aware), about one-quarter of the sample had not gotten or perhaps didn't agree with the First Tooth/First Birthday (FT/FB) message (Figure 60).

Figure 60. Survey Respondents' Answers for Age of a Child's First Dental Visit



Looking at the FT/FB message by respondent ages, the older the age group the less likely the adults were to be aware of the first-visit recommendation, which is similar to the responses of the focus group participants (Table 19).

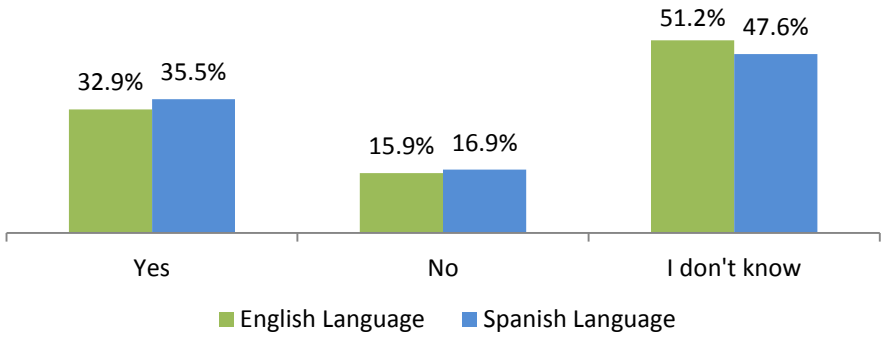
Table 19. Survey Respondent Awareness of FT/FB Message by Age Group

	Age 18-26	Age 27-40	Age 41-64	Age 65+
Percent with Correct Answer	64.7%	71.4%	54.6%	52.6%

Risk Factors/Protective Factors

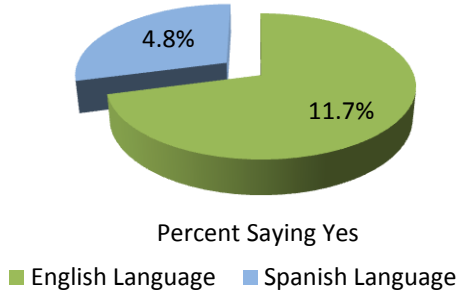
Some of the survey questions dealt with factors that put people at higher risk of oral disease and those that help prevent disease. While about a third of the respondents thought their tap water at home contained fluoride (the question did not include whether they *drank* it), over half of them said they were unaware (Figure 61 below).

Figure 61. Survey Respondents' Understanding of Whether Fluoride is Present in their Tap Water



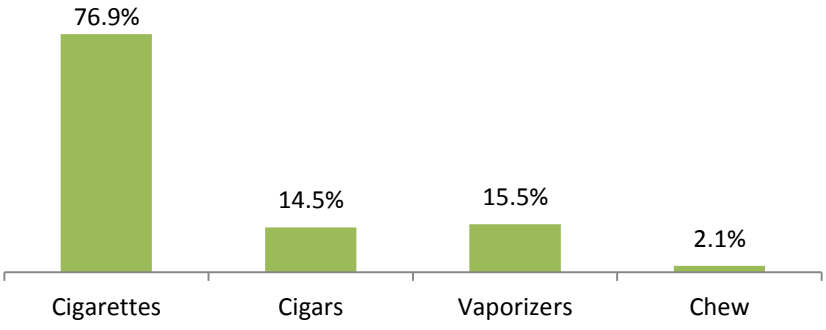
Because of the oral health implications of tobacco, the survey provided an opportunity to query about its use. Overall, 9.6% of the respondents reported currently using a tobacco product. A much greater proportion of English language respondents than Spanish language respondents, 11.7% vs. 4.8%, said they were current users (Figure 62). (Note that the 2016 CHIS cited above showed 14.4% of Sacramento adults in the general population said they were current smokers.)

Figure 62. Percent of Survey Respondents Who Use Tobacco



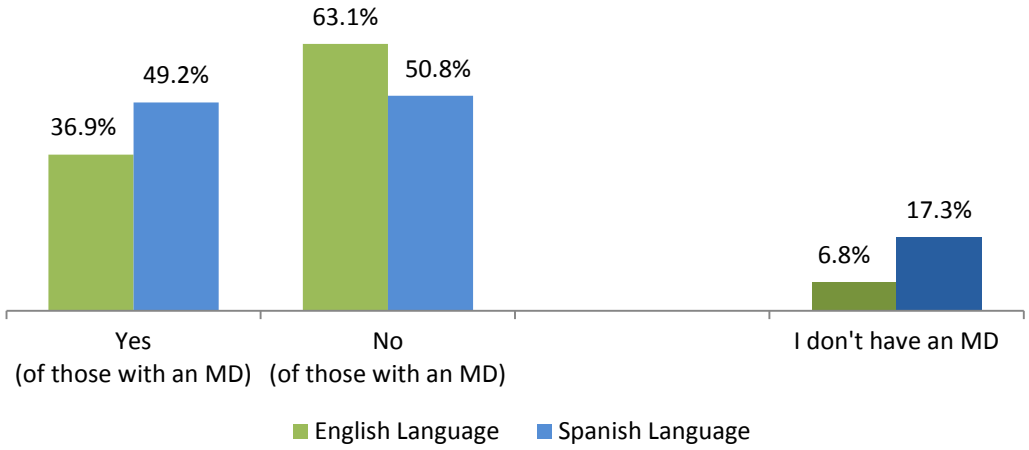
By a large margin, those who used a tobacco product smoked cigarettes. There were essentially no differences in type of product use between the Spanish and English language survey respondents.

Figure 63. Type of Product Used by Survey Respondents Who Use Tobacco



Primary care physicians are well positioned to promote oral health but do not always capitalize on this opportunity. Among the survey population with a physician, only 40.5% overall (data not shown) said their medical doctor ever asked about their oral health, with one-third more Spanish than English language respondents conveying this (Figure 64). Of note was the proportion of respondents who said they did not have a medical doctor; one-and-a-half times the percentage of Spanish language respondents reported the lack of a physician.

Figure 64. Percent of Survey Respondents Whose Doctor Asks About Dental Health



Looking at this question by insurance type, a higher proportion of respondents with GMC/Denti-Cal who had a medical doctor than with either employer-based or ACA/Covered CA reported generally being asked by a physician about their dental health (Table 20).

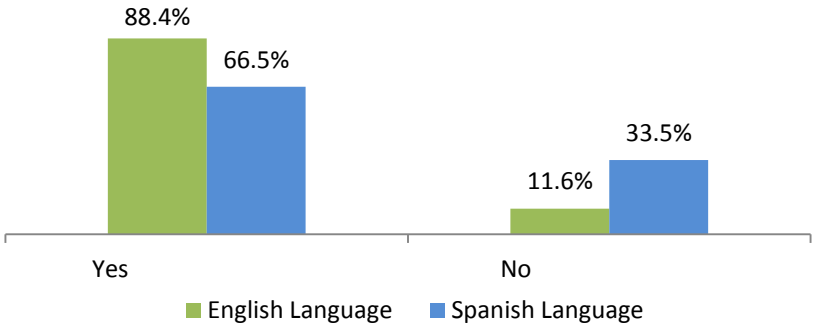
Table 20. Percent of Survey Respondents Whose Doctor Asks About Dental Health by Type of Insurance

	Private	Denti-Cal	ACA/Covered CA
Percent Saying Yes	11.4%	17.1%	9.4%

Access and Utilization

Having and *using* dental benefits contributes to good oral health and reduces future dental care costs. Overall, 81.6% of the adults reported having dental insurance. As Figure 65 shows, 88.4% of the individuals who completed the survey in English had some form of coverage compared to 66.5% of the Spanish language respondents who reported having it.

Figure 65. Percent of Survey Respondents with Dental Insurance



The types of dental insurance carried by those with coverage can be seen in Figures 66 and 67. GMC/Denti-Cal accounted for 48.5% of the insurance types among Spanish language respondents compared to 33.4% among English language respondents, about a 45% difference.

Figure 66. English Language Respondents' Insurance Type

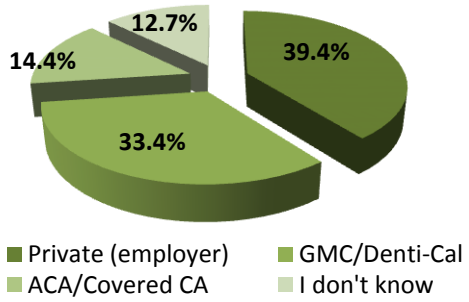
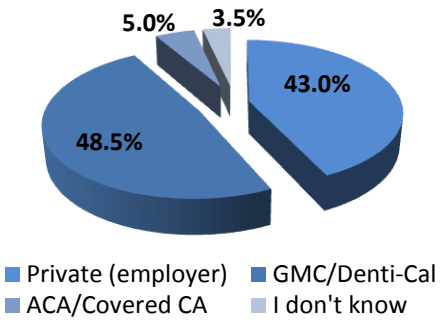
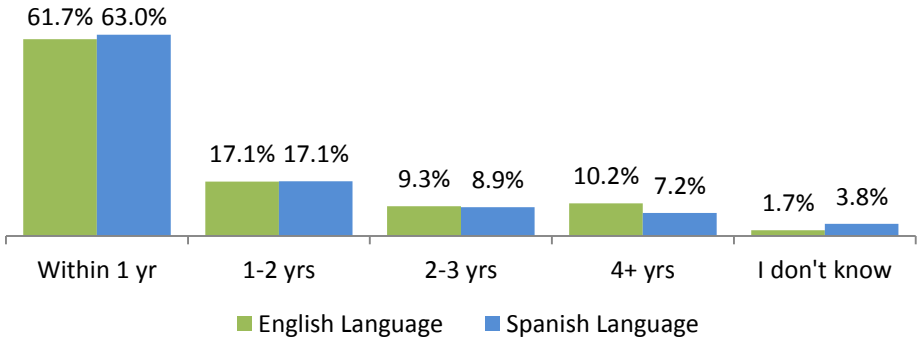


Figure 67. Spanish Language Respondents' Insurance Type



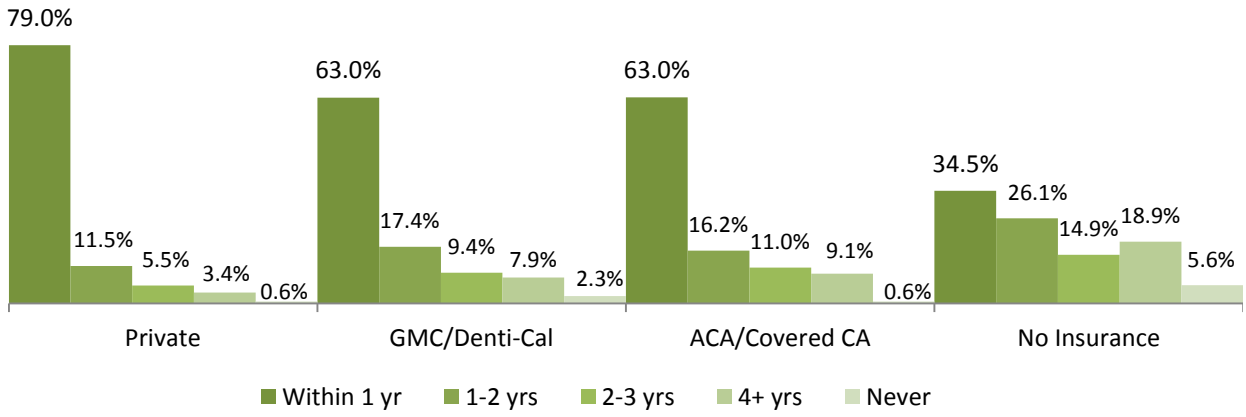
The majority of survey respondents (about 62% on average) reported making a dental visit within the last year. There was very little difference in the time of the last dental visit of up to three years ago based on whether someone completed the survey in English or Spanish (Figure 68). Beyond that period, however, nearly 30% more English than Spanish language respondents reported their last dental visit had been four years ago or longer. Spanish language respondents were 23% likelier to say they didn't remember how long it had been.

Figure 68. Survey Respondents' Last Dental Visit



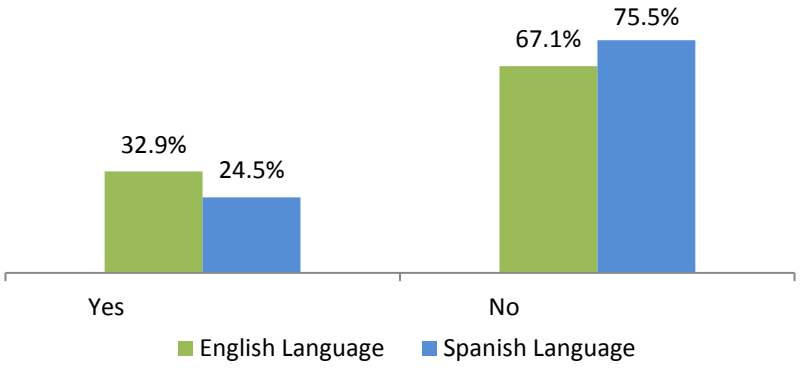
Recency of last dental visit was further examined by type of insurance. Unsurprisingly, as Figure 69 indicates, among individuals with a form of dental coverage, those with private insurance reported the most recent dental visits, 79.0% within the past year. GMC/Denti-Cal respondents reported visiting the dentist within the past year less often that those with private insurance, but in equal proportion as adults with ACA/Covered CA, 63.0%; 2.3% with GMC/Denti-Cal said they had never gone to the dentist.

Figure 69. Frequency of Survey Respondents' Last Dental Visit by Type of Insurance Coverage



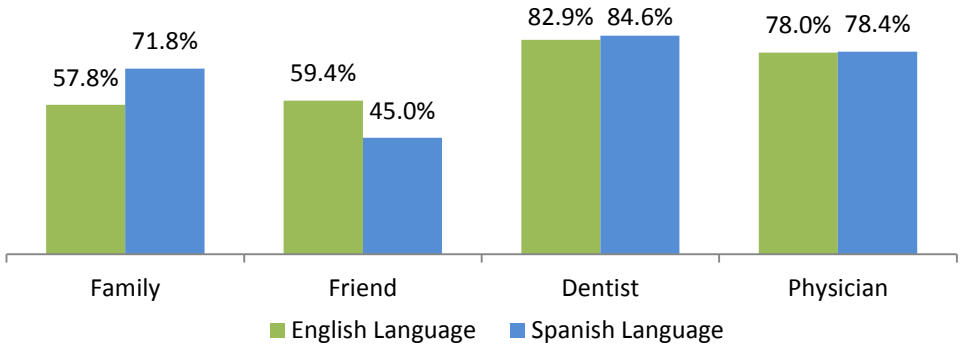
It is generally agreed that dental treatment during pregnancy is safe. However, some prenatal providers do not ask about or encourage patients to see their dentist, some dentists are reluctant to treat pregnant patients, and some well-meaning family and friends discourage it, creating unnecessary obstacles for women seeking care. Between about one-third (English language) and one-fourth (Spanish language) of the survey respondents for whom the question applied reported ever being told they should not have dental treatment during pregnancy (Figure 70).

Figure 70. Percent of Female Survey Respondents Told No Dental Treatment During Pregnancy



Dentists followed by physicians were the primary sources for telling women they should not get dental treatment when they were pregnant. Friends were more influential for English language than Spanish respondents, 59.5% vs. 45%. Family was a more important source of dissuasion for Spanish than English language respondents, 71.8% vs. 57.8% (Figure 71).

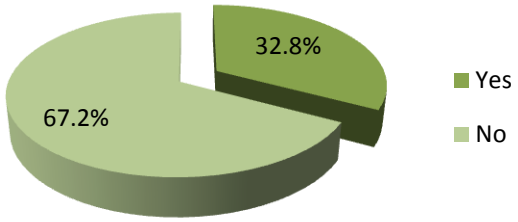
Figure 71. Who Told Female Survey Respondents No Dental Treatment During Pregnancy



Barriers

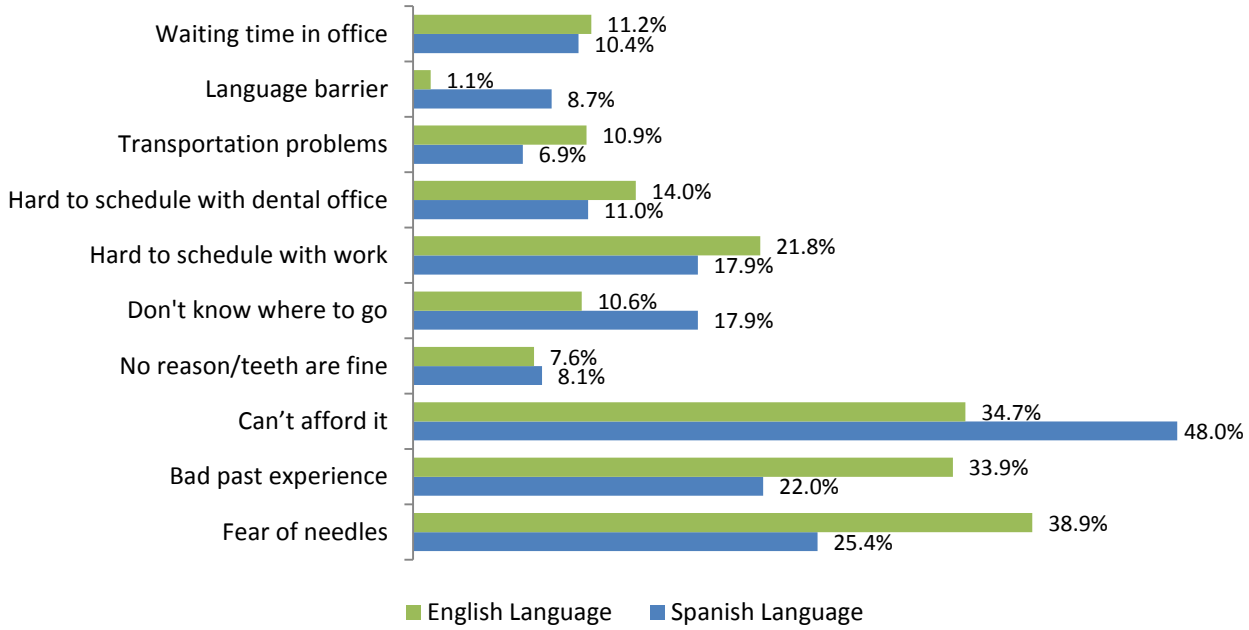
Adults avoid going to the dentist for a variety of reasons; some barriers are due to personal factors while others are a result of delivery system barriers. One-third (32.8%) of the survey respondents overall reported ever avoiding dental visits (Figure 72).

Figure 72. Percent of Survey Respondents Who Ever Avoid Going to the Dentist



Cost was the major factor preventing many of the adults from getting regular dental checkups, reported by 48% of Spanish language respondents and 34.7% English respondents (Figure 73). Fear of needles and having a bad past experience were the next most important reasons for avoiding the dentist, reported at a higher proportion by English (about one-third) than Spanish language respondents (about one-quarter).

Figure 73. Main Reasons Survey Respondents Avoided Going to the Dentist



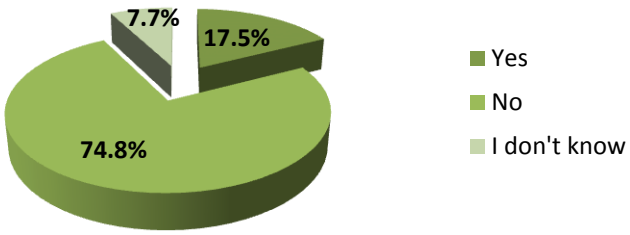
Note: Survey respondents could identify more than one reason.

Certain barriers reported by GMC/Denti-Cal respondents are important to note because these respondents would be expected to have a dentist of record and come to the attention by the Plans when they didn't make an annual dental visit. About 11% of people with GMC/Denti-Cal reported avoiding the dentist because they "can't afford it"; 3.2% said it was because they "didn't know where to go."

CHILDREN

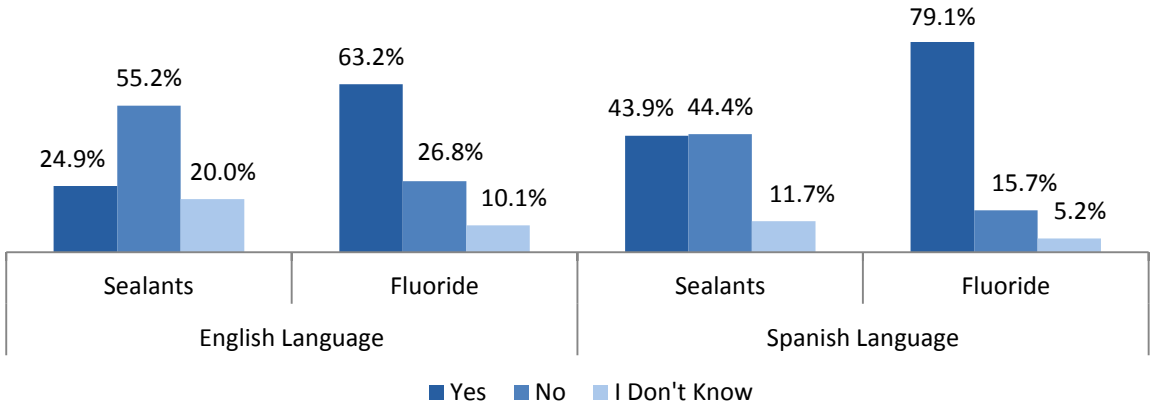
Survey respondents with children ages 1-17 were asked about the dental experience of their *youngest* child. Overall, 17.5% of the respondents believed this child had a current dental problem; 7.7% said they were unsure. There was no difference in responses by survey language type.

Figure 74. Percent of Survey Respondents' Children with Current Dental Problem



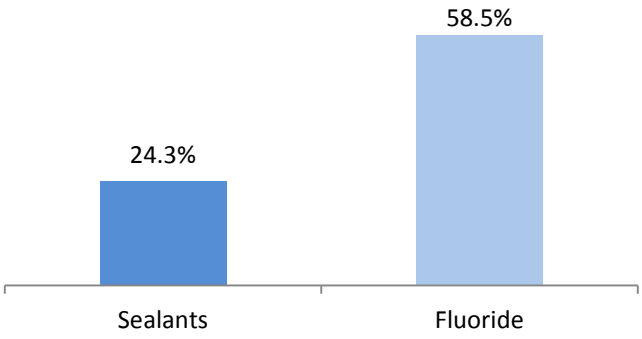
While about one-quarter of the respondents completing the survey in English reported their child had ever had both a dental sealant and fluoride put on their teeth, a much higher proportion of Spanish language survey respondents reported their children had these: 43.9% (sealants) and 79.1% (fluoride) vs. 24.9% and 63.2%, respectively, for respondents in English (Figure 75). Twice the proportion of surveys in English than Spanish reported parents being unaware of whether their child had had sealants or fluoride varnish.

Figure 75. Percent of Survey Respondents' Children with Sealants and Fluoride Varnish by Language Type



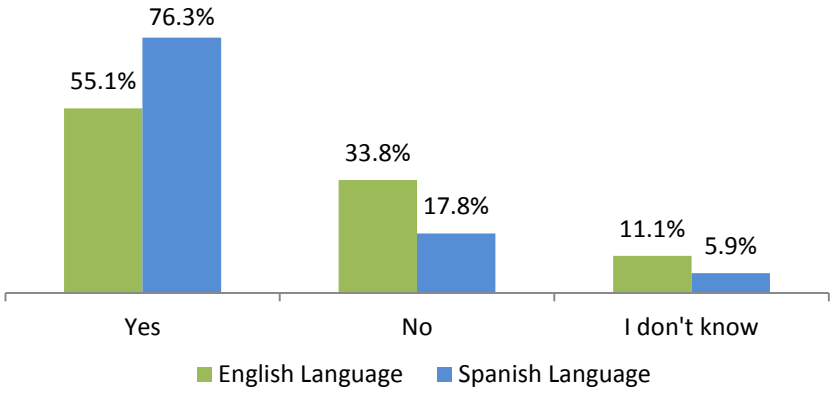
When children of parents with GMC/Denti-Cal coverage were examined, their recalled use of sealants and fluoride varnish was 24.3% and 58.5%, respectively (Figure 76). (Note: other children in the data set likely were covered by GMC/Denti-Cal even if their parents weren't, e.g., uninsured parents.)

Figure 76. Percent of Survey Respondents' Children with Sealants and Fluoride, Parent with GMC/Denti-Cal



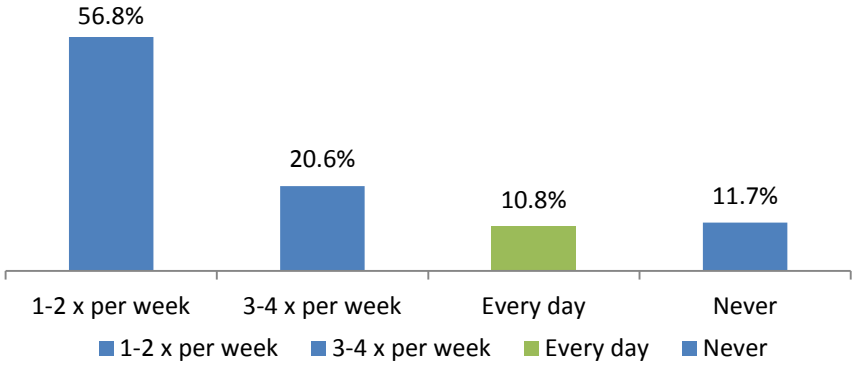
About 40% more of the parents reporting in Spanish than English said their child's doctor asked about dental care or looked at their child's teeth during a well-child exam, 76.3% and 55.1%, respectively (Figure 77 on the next page).

Figure 77. Survey Respondents' Children Whose Doctor asked about Oral Health During Well-Child Exam



Close to one-third of the parents overall reported their child drank sugar-sweetened beverages (cola, sports drink, juice, punch) three or more times a week (Figure 78). On average, 10.8% said it was every day, though a slightly higher percentage of Spanish (12.1%) than English (10.3%) reported this frequency; 12.9% of English language respondents said their child never drank these beverages while 9.0% of the Spanish respondents reported the same (data not shown).

Figure 78. Frequency of Sugar-Sweetened Beverages by Survey Respondents' Children



APPENDICES

"If they have no pain, it's harder for me to educate and convince them for it to sink in" – Key informant interviewee

Attachment 1:	Sacramento County Oral Health Advisory Committee and Staff
Attachment 2:	Key Informant Interviewees
Attachment 3:	Private Dentist Survey
Attachment 4:	Dental Hygiene Survey
Attachment 5:	Community Oral Health Survey
Attachment 6:	Sacramento County Water Purveyors Map
Attachment 7:	Community Water Fluoridation Map
Attachment 8:	Sacramento County Public Water Systems Out of Compliance
Attachment 9:	Map of Safety Net Dental Resources in Sacramento County
Attachment 10:	Denti-Cal Utilization in Sacramento County Zip Codes

Attachment 1

Oral Health Advisory Committee and Staff

(In alphabetical order by first name)

Advisory Committee	Affiliation/Organization
Alisha Hightower	Premier Access Insurance Plan
Camille-Johnson Arthur	Sacramento County Public Health Division – Black Infant Health Program
Cathy Levering	Sacramento District Dental Society
Charles Newens, DDS	Private practice
Cynthia Johnston	Sacramento County Public Health Division – CHDP
Danielle Cannarozzi	LIBERTY Dental Plan
David Gordon	Sacramento County Office of Education
Debra Payne	Sacramento County/Medi-Cal Dental Advisory Committee
Gricelda Ocegueda	Sacramento Employment and Training Agency
Jan Carver	California Rural Indian Health Board, Inc.
Julie Beyers	Volunteer
Julie Gallelo	First 5 Sacramento
Katie Conklin	Access Dental Plan
Kate Varanelli	Volunteer
Katie Andrew	Children Now
Kristina Clinton	Sacramento County Public Health - Dental Transformation Initiative
Lisa Greenshields	Sacramento County Youth Detention
Lisa Miller	Celi, Inc., Faith-based organization
Lisa Rufo	Premier Access Dental Plan
Lori Hansen	San Juan Unified School District
Marie Miranda	Carrington College Dental Hygiene Program
Martha Cisneros Campos	Avesis Incorporated
Melissa Fellman	Sacramento City Dental Hygiene Program
Mike Baldwin	Child Abuse Prevention Center
Natalie Woods Andrews, PhD	Sacramento County Office of Education
Olivia Kasirye, MD	Sacramento County Public Health Division – Public Health Officer
Paula Kuhlman	Sacramento City Unified School District
Rachel Shafer	Center For Oral Health
Ranjit Dhaliwal	Sacramento County Public Health Division - Epidemiology
Robert Wassmer	CSUS Public Policy and Administration
Robyn Alongi	Sacramento County Public Health Division – Dental Transformation Initiative
Terrence Jones, DDS	Commissioner, First 5 Sacramento / Chair MCDAC
Yvonne Rodriguez	Sacramento County Public Health Division – Tobacco Education Program
Oral Health Staff and Consultants	
Barbara Aved, PhD	Barbara Aved Associates
Deborah Blanchard	Sacramento County Public Health Division
Jan Resler	Sacramento County Public Health Division
Karen Lemieux	Sacramento County Public Health Division
Lyanna Pillazar-Blanco	Sacramento County Public Health Division
Stacey Kennedy	Sacramento County Public Health Division

Key Informant Interviewees

(In alphabetical order by first name)

Name	Affiliation/Organization
Anthony Garcia	Child Action
Bianca Yee, DDS	Private dental practice
Bonita Mallory	Twin Rivers School District
Charles Newens, DDS	Private dental practice
Debra Payne	Sacramento County Public Health Division/Medi-Cal Dental Advisory Committee (MCDAC)
EvaMarie DelPuerto and Cynthia Morla	Sacramento Native American Health Center
Genevieve Levy	Sacramento Food Bank
Jan Resler	Sacramento County Oral Health Program
Karen Lemieux	Sacramento County Oral Health Program
Lisa Greenshields	Sacramento County Youth Detention
Maureen Clark	Community Resource Project WIC Program
Olivia Kasirye, MD and Melody Law, MD	Sacramento County Public Health
Paula Kuhlman	Sacramento City Unified School District
Robert Silva	Sacramento Employment and Training Agency (SETA)
Rolande Tellier	University of Pacific Arthur A. Dugoni School of Dentistry
Terrence Jones, DDS	Commissioner, First 5 Sacramento / Chair MCDAC

Sacramento Private Dentist Survey[1]

Dear Dentist,

Thank you for taking 4-5 minutes to respond to this brief survey. Your feedback is very important and will be useful to the Sacramento County Oral Health Needs Assessment for improving care for low-income children and adults in our community. It is also your opportunity to express opinions about Denti-Cal. **This survey is for all dentists who see patients from Sacramento County whether or not you see Denti-Cal patients.** Please respond by **April 13, 2018**—and encourage your colleagues to respond as well. Thank you.

Q1 Please describe your main type of practice: (check only 1)

a) ____ General dentist, private practice
b) ____ Pediatric dentist, private practice
c) ____ Other dental specialist, private practice
d) ____ This is a Community Dental Clinic practice
e) ____ Other (please specify)

Q2 City/town where this practice (your *main* practice) is located:

Q3 Type of patients in this practice: (check only 1)

a) ____ Children only
b) ____ Adults only [please skip to Question 7]
c) ____ Children and adults

Q4 At what age do you first start seeing children in this practice?

a) ____ age 1 or first tooth
b) ____ age 2
c) ____ age 3
d) ____ age 4 or older

Q5 Do all eligible patients in your practice, under the age of 14, receive dental sealants?

____ Yes
____ No
____ We don't see children in this practice

If no, what are the barriers to providing sealants to all eligible patients under the age of 14? (Check all that apply)

a) ____Cost
b) ____Time in schedule
c) ____Patient cooperation
d) ____Parental consent
e) ____Staff competency
f) ____Competing priorities
g) ____Other (Comment box)

Q6 Do you provide fluoride varnish as part of this practice?

a) ____ Yes
b) ____ No
c) ____ We don't see children in this practice

Q7 How does this practice relate to the community dental clinics in your area?

a) ____ No relationship
b) ____ We accept their referrals
c) ____ We sometimes refer patients to them
d) ____ Non-applicable (i.e., *we* are a community dental clinic)
e) ____ Other (please describe)

Q8 Do you provide dental care to pregnant patients (routine teeth cleanings, dental X-rays, local anesthesia, etc.)?

d) ____ Yes
e) ____ Yes, but only in certain trimesters
f) ____ No
g) ____ This question isn't applicable to our patient population

Q9 How often do you consult with a pregnant patient's prenatal care provider about a dental treatment plan?

a) ____ Frequently
b) ____ Rarely
c) ____ Only when I'm aware of or concerned about a problem
d) ____ This question isn't applicable to our patient population

Q10 Do you provide tobacco cessation counseling to all patients who use tobacco products?

a) ____ Yes
b) ____ No

If no, what are the barriers to providing tobacco cessation counseling to patients who use tobacco products? (Check all that apply)

a) ____Time in schedule

b) ____Staff resistance

c) ____Lack of resources

d) ____Staff skill level

e) ____Other (Comment box)

Q11 In this practice, do you currently see patients covered by the Medi-Cal dental program?

a) ____ Yes, through Geographic Managed Care (GMC)
b) ____ Yes, just through regular fee-for-service Denti-Cal
c) ____ Yes, through both GMC and FFS
d) ____ No

Q12 Did you ever used to take patients with Denti-Cal in this practice?

a) ____ No
    1) What were your main reasons for not taking Denti-Cal patients? (Check all that apply)
        a) ___ Reimbursement rates too low
        b) ___ Patient behavior (no-shows, patient management issues)
        c) ___ Administrative concerns (provider enrollment, payment turnaround, prior authorization)
        c) ___ Did not want to participate through dental managed care plans
        d) ____Other (please describe)
b) ____ Yes
    2) Why did you stop? (Check all that apply)
        a) ___ Reimbursement rates too low
        b) ___ Patient behavior (no-shows, patient management issues)
        c) ___ Administrative concerns (provider enrollment, payment turnaround, prior authorization)
        d) ___ Not enough GMC patients assigned to me
        e) ___ Did not want to participate in a dental managed care system (GMC)
        f) ___ Other (please describe)

Q13 Would you consider accepting GMC/Denti-Cal patients in the future if your concerns were answered?

a) ____ Yes, if rates were higher
b) ____ Yes, if payment turnaround was better
c) ____ Yes, if more GMC patients were assigned to me
d) ____ All of the above
e) ____ Never

If you do not currently accept Denti-Cal, please skip Qs 14-18, go to Q19 and complete the survey

Q14 What were the main factors that influenced your decision to be a GMC/Denti-Cal provider? (check all that apply)

a) ____ It's a helpful source of revenue
b) ____ The rates are generally acceptable
c) ____ I want to provide a service to these patients/to the community
d) ____ The payment process is generally no more difficult than with a commercial insurance company
e) ____ Other (please describe)

Q15 What limitations do you place on seeing GMC/Denti-Cal patients in this practice? (check all that apply)

a) ____ None; we appoint them just the same as with all patients
b) ____ We limit to X number of appointments per day or per week
c) ____ No more than 2 siblings (children) are given appointments on the same day
d) ____ We appoint them in specific offices in our multi-location practice
e) ____ We appoint them only if the person was previously an insured patient
f) ____ Other (please describe)

Q16 How far out are appointments booked *for GMC/Denti-Cal patients* for a routine, non-urgent visit? (complete for the types of patients seen in this practice)

a) CHILD ___ weeks
b) ADULT ___ weeks

Q17 How far out are appointments booked *for private-pay/commercially insured patients* for a routine, non-urgent visit? (complete for the types of patients seen in this practice)

c) CHILD ___ weeks
d) ADULT ___ weeks

Q18 Do you have current capacity to see more GMC/*Denti-Cal* patients in this practice?

a) ____ Yes, no limit on capacity
b) ____ Yes, but only a few more
c) ____ No, we have about as many as we want

Q19 What 1 thing would you change in Sacramento County if you could to improve the oral health of children and adults?

For children: *For adults*:

Q20 Additional comments that could add insight to the county oral health needs assessment?

Thank You!

Dental Hygienist Survey

Dear Dental Hygienist:
Thank you for taking 4-5 minutes to respond to this brief survey. Your feedback is very important and will be useful to the Sacramento County Oral Health Needs Assessment for improving care for low-income children and adults in our community. Please respond by **April 5, 2018**—and encourage your colleagues to respond as well. Thank you.

Q1 Please describe the type of practice where you are employed: (check only 1)
a) ____ General dentist, private practice
b) ____ Pediatric dentist, private practice
c) ____ Other dental specialist, private practice
d) ____ This is a Community Dental Clinic practice
e) ____ Other (please specify)

Q2 City/town where this practice (your main practice) is located:

Q3 Type of patients in this practice: (check only 1)
a) ____ Children only
b) ____ Adults only [please skip to Question 7]
c) ____ Children and adults

Q4 At what age do you first start seeing children in this practice?
a) ____ age 1 or first tooth
b) ____ age 2
c) ____ age 3
d) ____ age 4 or older

Q5 Do all eligible patients in your practice, under the age of 14, receive dental sealants?
____ Yes
____ No
____ We don't see children in this practice

If no, what are the barriers to providing sealants to all eligible patients under the age of 14? (Check all that apply)
a) ____Cost
b) ____Time in schedule
c) ____Patient cooperation
d) ____Parental consent
e) ____Staff training
f) ____Competing priorities
g) ____Other (Comment box)

Q6 Do all eligible patients in your practice receive topical fluoride treatments?
a) ____ Yes
b) ____ No
c) ____ We don't see children in this practice

Q7 Do you provide preventive dental care to pregnant patients (routine teeth cleanings, dental X-rays, local anesthesia, etc.)?
a) ____ Yes
b) ____ Yes, but only in certain trimesters
c) ____ No
d) ____ This question isn't applicable to our patient population

If no, please describe the main barrier/s to providing care to pregnant patients.

Q8 How often do you consult with a pregnant patient's prenatal care provider about a dental treatment plan?
a) ____ Frequently
b) ____ Rarely
c) ____ Only when I'm aware of or concerned about a problem
d) ____ This question isn't applicable to our patient population

Q9 Do you provide tobacco cessation guidance to all patients who use tobacco products?
a) ____ Yes
b) ____ No
c) ____ Not applicable to my practice

If no, what are the barriers to providing tobacco cessation guidance to patients who use tobacco products? (Check all that apply)

a) ____ Time in schedule
b) ____ Patient resistance
c) ____ Lack of resources
d) ____ Uncomfortable with topic
e) ____ Other (Comment box)

If you provide tobacco cessation guidance to patients in your office, does all staff use the same messaging?
a) ____ Yes, we have a standard procedure
b) ____ No, we each use our own system

Q10 Do you provide guidance to all patients who use sugar-sweetened beverages?
a) ____ Yes
b) ____ No
c) ____ Not applicable to my practice

If no, what are the barriers to providing guidance to patients who use sugar-sweetened beverages? (Check all that apply)
a) ____ Time in schedule
b) ____ Patient resistance
c) ____ Lack of resources
d) ____ Uncomfortable with topic
e) ____ Other (Comment box)

If you provide guidance to patients in your office who use sugar-sweetened beverages, does all staff use the same messaging?
a) ____ Yes, we have a standard procedure
b) ____ No, we each use our own system

Q11 Would you be interested in continuing education courses that focus on simple ways to incorporate tobacco cessation and/or sugar-sweetened beverage guidance into your practice?
a) ____ Yes
b) ____ No

Q12 What ONE thing would you change in Sacramento County if you could to improve the oral health of children and adults?

For children:

For adults:

Q13 Additional comments that could add insight to the county oral health needs assessment?

SACRAMENTO COUNTY

COMMUNITY ORAL HEALTH SURVEY

PART I: ADULTS

1. Do you have any dental problems right now?
   _____Yes _____No _____I don't know

2. Do you have dental insurance? _____Yes _____No
   If Yes, what type?
   ____ Private (from job) ____ Denti-Cal /GMC Dental Plan ____ ACA/Covered California ____ I don't know

3. When was your last visit to a dentist?
   _____Within 1 year _____ 1-2 years _____2 - 3 years _____4 or more years _____Never

4. Do you use tobacco? _____Yes _____No

   If yes, what type? (Check all the apply)
   _____Cigarettes _____Cigars _____Vaporizers _____Chew

5. Does your *medical* doctor ever ask about your dental health?
   _____Yes _____No _____I don't have a medical doctor

6. Have you had any of the following in the *past year*? (Check all that apply)
   _____Bleeding gums _____Swelling/abscess _____Loose teeth _____Cavities

7. Have you ever had an adult tooth pulled (not including wisdom teeth)?
   _____Yes _____No _____I don't know

8. Have you ever been told that you *should not* have dental treatment during pregnancy?
   _____Yes _____No _____N/A (never been pregnant)

   If yes, who told you? (Check all that apply)
   _____Family _____Friend _____Dentist _____Medical doctor

9. Is there a connection between gum disease and heart disease? _____Yes _____No

10. Is there a connection between gum disease and diabetes? _____Yes _____No

11. Are baby teeth that important even though they're going to fall out anyway? _____Yes _____No

12. Does fluoride strengthen (or help to protect) teeth and helps prevent cavities? _____Yes _____No

13. Is the tap water in your home fluoridated? _____Yes _____No _____I don't know

14. Children should have their first dentist visit by:
    _____Age 1/when first tooth comes in _____Age 3 _____When they start school _____I don't know

Please turn over and complete the survey

15. Do you ever avoid going to the dentist? _____Yes _____No
    If yes, what are your *main* reasons for not going to the dentist? (Check only the ones that apply)

    _____Fear of needles/shots
    _____Bad past experience
    _____Can't afford it
    _____No reason/my teeth are fine
    _____Don't know where to go
    _____Hard to schedule with my work/school
    _____Hard to schedule appointments with the dental office
    _____Transportation problems
    _____Language barrier
    _____Wait time while at the dental office

PART II: CHILDREN

ANSWER FOR YOUR *YOUNGEST* CHILD AGE 1 – 17 (If not applicable, skip to the next section and finish):

16. Has this child ever had a dental sealant?
    _____Yes _____No _____I don't know

17. Has this child ever had fluoride put on their teeth?
    _____Yes _____No _____I don't know

18. Does this child have any dental problems right now?
    _____Yes _____No _____I don't know

19. Does this child's medical doctor ever ask about dental care or look at the child's teeth during a well child exam?
    _____Yes _____No _____I don't know

20. How many times a day does your child drink sugar-sweetened beverage (cola, sports drink, juice, punch)?
    _____1-2 times/week _____3-4 times/week _____Every day _____Never

PLEASE TELL US ABOUT YOURSELF:

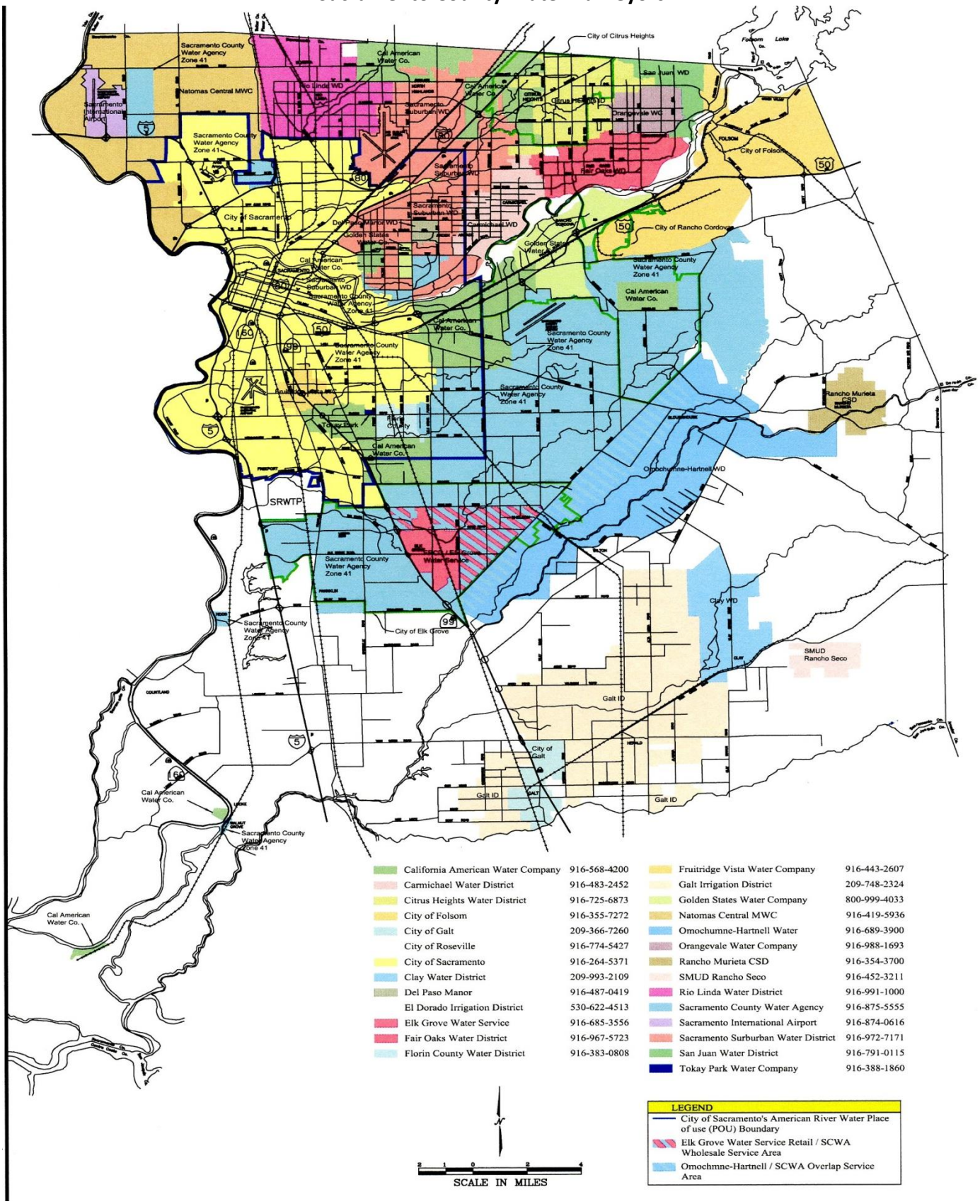
21. Age?
    _____18 – 26 years _____27 – 40 years _____41 – 64 years _____ 65+ years

22. Ethnicity?
    _____White/Caucasian _____Latino/Hispanic _____Black/African American
    _____Asian/Pacific Islander _____American Indian _____Multi-race _____Other

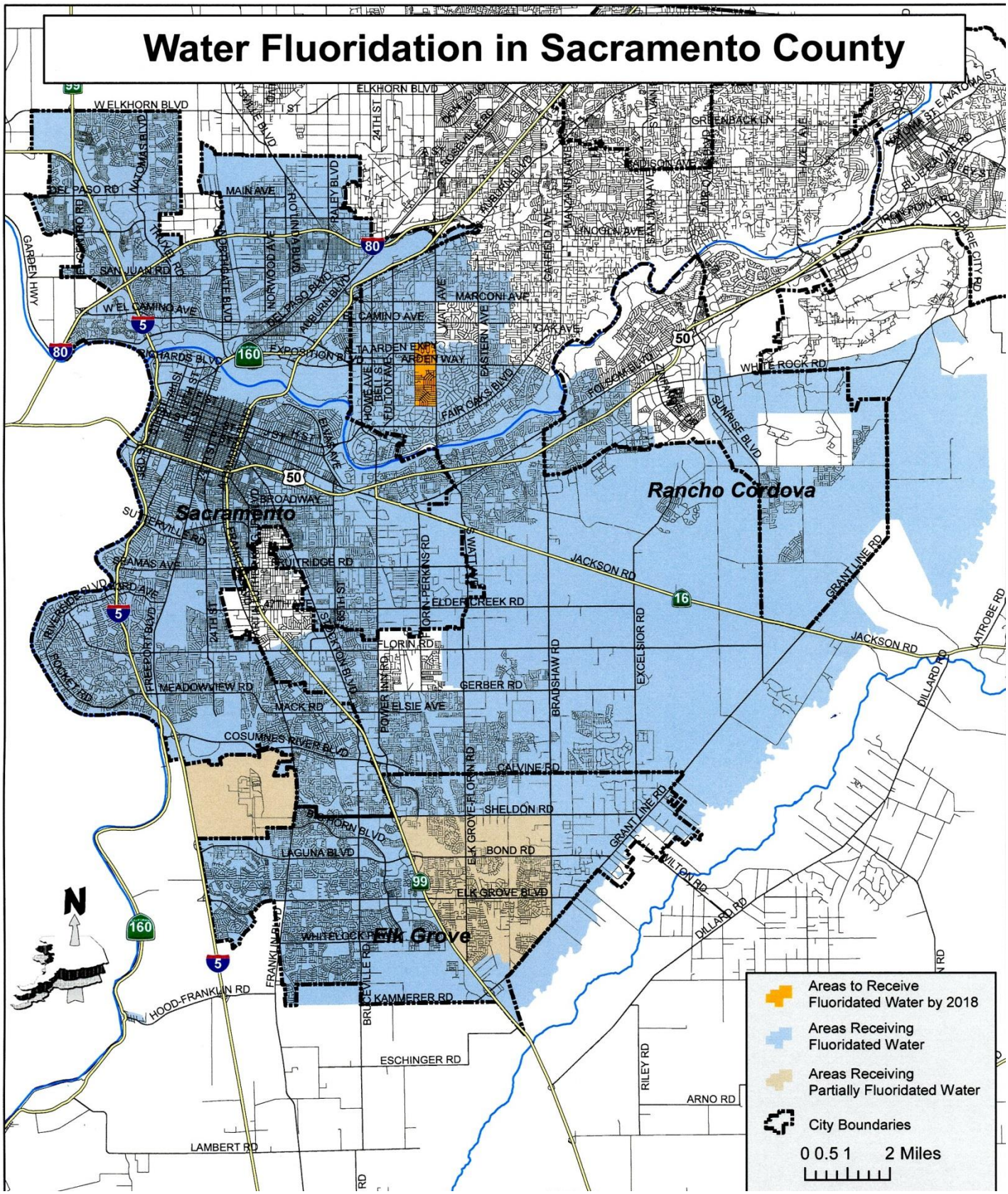
THANK YOU!!!

Your opinion will help improve services in Sacramento County.

Sacramento County Water Purveyors



Water Fluoridation in Sacramento County, 2016



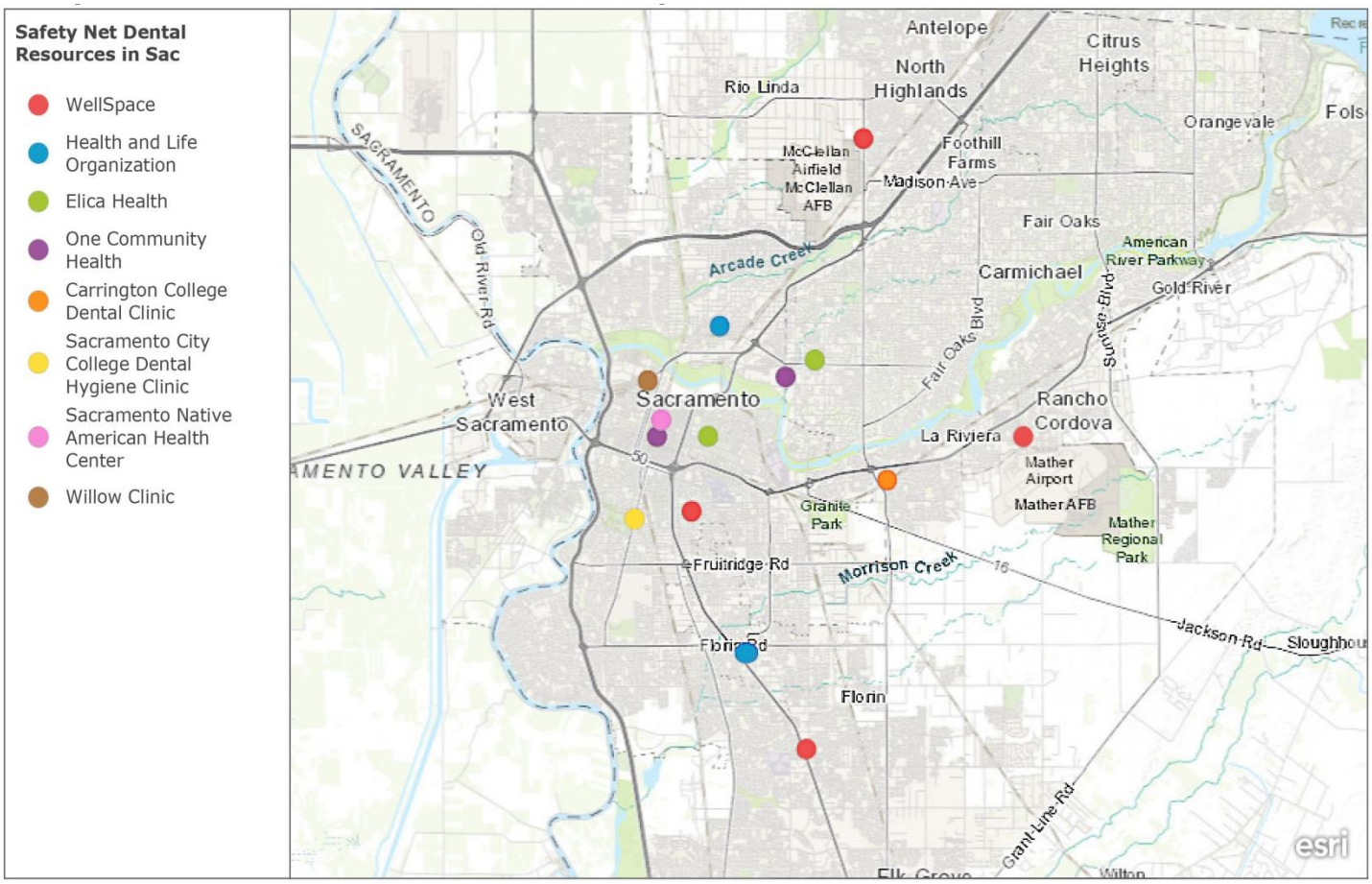
Attachment 8

Sacramento County Public Water Systems Out of Compliance
(June 12, 2018)

Water System Name	City	Substance Name	Brief Explanation
B & W Resort Marina The Courtland Group Locke Water Works Co Rancho Marina Vieira's Resort, Inc.	Isleton Courtland Walnut Grove Isleton Isleton	Arsenic	Arsenic is a chemical element that naturally occurs in the earth's mineral deposits and dissolves in groundwater. To minimize the minute cancer risk (from a lifetime exposure pf drinking 2 liters/day for 70 years), water systems are required to treat the water with some sort of filtering system.
Rancho Murieta Community Service	Rancho Murieta	TTHM	The use of chlorine to disinfect water produces various disinfection byproducts, classified mainly as halogenated and non-halogenated byproducts (trihalomethanes and haloacetic acids). Even though they pose a less acute health risk than do waterborne diseases, TTHMs are among important water quality issues.

Source: State Water Resources Control Board, Division of Drinking Water. Explanations are adapted from various internet sources.
Note: there no current violations in the county relative to nitrates which originate in groundwater primarily from fertilizers, septic systems, and manure storage or spreading operations. Where there are out-of-compliance systems for nitrates, signs must be posted prominently that say "Do Not Drink The Water." More information about the status of these systems' addressing the compliance issues can be found on the SWRCB website.

Map of Safety Net Dental Resources in Sacramento County



County of Sacramento, Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Attachment 10

Denti-Cal Utilization in Sacramento County Zip Codes, FY 2016-17

Sacramento County Children 0-20				Sacramento County Adults 21+			
Zip Code	Beneficiaries (eligibles)[1]	Children Ages 0-20 Total Users[2]	% Utilization[3]	Zip Code	Beneficiaries (eligibles)[1]	Adults Ages 21+ Total Users[2]	% Utilization[3]
94571	19	*	*	94571	22	*	*
95608	8,739	2,928	33.5%	95608	10,726	2,214	20.6%
95610	8,130	3,049	37.5%	95610	8,409	1,470	17.5%
95615	178	100	56.2%	95615	119	19	16.0%
95621	6,503	2,308	35.5%	95621	7,257	1,256	17.3%
95622	0	0	N/A	95622	0	0	N/A
95624	8,166	2,955	36.2%	95624	9,268	1,576	17.0%
95626	925	327	35.4%	95626	1,043	161	15.4%
95628	3,532	1,100	31.1%	95628	4,772	720	15.1%
95630	3,308	897	27.1%	95630	4,428	676	15.3%
95632	5,262	2,043	38.8%	95632	4,292	772	18.0%
95638	233	93	39.9%	95638	201	34	16.9%
95639	38	17	44.7%	95639	43	*	*
95640	*	0	*	95640	12	0	0.0%
95641	249	85	34.1%	95641	325	46	14.2%
95652	284	138	48.6%	95652	175	30	17.1%
95655	621	280	45.1%	95655	730	167	22.9%
95660	11,171	4,414	39.5%	95660	10,055	1,805	18.0%
95670	11,168	4,228	37.9%	95670	10,544	1,805	17.1%
95671	0	0	N/A	95671	*	0	*
95673	3,485	1,304	37.4%	95673	3,372	557	16.5%
95678	167	49	29.3%	95678	161	30	18.6%
95680	33	*	*	95680	17	*	*
95683	221	67	30.3%	95683	264	38	14.4%
95690	450	201	44.7%	95690	283	29	10.2%
95693	529	179	33.8%	95693	552	81	14.7%
95724	0	0	N/A	95724	0	0	N/A
95757	5,177	1,871	36.1%	95757	5,741	1,027	17.9%
95758	7,758	2,786	35.9%	95758	8,542	1,501	17.6%
95811	919	308	33.5%	95811	2,278	403	17.7%
95814	508	170	33.5%	95814	1,873	385	20.6%
95815	9,247	3,353	36.3%	95815	8,505	1,441	16.9%
95816	549	161	29.3%	95816	2,160	356	16.5%
95817	2,216	800	36.1%	95817	3,226	590	18.3%
95818	2,302	901	39.1%	95818	3,034	550	18.1%

Table continues on next page

Sacramento County Children 0-20				Sacramento County Adults 21+			
Zip Code	Beneficiaries (eligibles)[1]	Children Ages 0-20 Total Users[2]	% Utilization[3]	Zip Code	Beneficiaries (eligibles)[1]	Adults Ages 21+ Total Users[2]	% Utilization[3]
95819	466	135	29.0%	95819	889	136	15.3%
95820	9,363	3,848	41.1%	95820	9,000	1,479	16.4%
95821	8,576	3,183	37.1%	95821	9,193	2,039	22.2%
95822	9,673	3,797	39.3%	95822	9,837	1,679	17.1%
95823	23,303	9,238	39.6%	95823	20,681	3,744	18.1%
95824	10,186	4,390	43.1%	95824	8,926	1,434	16.1%
95825	6,832	2,607	38.2%	95825	7,674	1,696	22.1%
95826	4,851	1,586	32.7%	95826	6,011	1,100	18.3%
95827	3,642	1,425	39.1%	95827	3,980	721	18.1%
95828	13,931	5,659	40.6%	95828	14,687	2,432	16.6%
95829	3,839	1,442	37.6%	95829	4,501	776	17.2%
95830	92	31	33.7%	95830	91	*	*
95831	2,980	903	30.3%	95831	4,112	661	16.1%
95832	3,722	1,460	39.2%	95832	3,100	548	17.7%
95833	7,422	2,698	36.4%	95833	6,996	1,256	18.0%
95834	5,253	1,926	36.7%	95834	5,018	970	19.3%
95835	3,685	1,177	31.9%	95835	4,214	774	18.4%
95836	0	0	N/A	95836	0	0	N/A
95837	*	0	*	95837	11	*	*
95838	11,781	4,324	36.7%	95838	10,317	1,670	16.2%
95841	4,141	1,451	35.0%	95841	4,893	906	18.5%
95842	8,044	3,051	37.9%	95842	7,502	1,436	19.1%
95843	8,471	2,981	35.2%	95843	7,679	1,221	15.9%
95864	1,634	564	34.5%	95864	2,013	330	16.4%
			Avg = 37.6%				**Avg = 16.9%**

Source: California Department of Health Care Services, Medi-Cal Dental Division, July 17, 2018.

[1]Includes unduplicated eligibles with no continuous eligibility requirements

[2]Total number of unduplicated beneficiaries with at least one dental service in the measurement period for specified age group

[3]Percentage of Total Users/Eligibles

ENDNOTES AND REFERENCES

[1] US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, US Public Health Service. *Oral Health in America: Report of the US Surgeon General.* NIH publication no. 00-213. Washington, DC: DHHS, NIDCR, USPHS; 2000.
[2] The California Health Interview Survey is one of the largest household surveys on health in the United States. It is administrated by the UCLA Center for Policy Research.
[3] http://www.dhcs.ca.gov/services/Pages/DentalReports.aspx
[4] These studies produced by Barbara Aved Associates include: *Sacramento Children Deserve Better: A Study of Geographic Managed Care Dental Services*, June 2010; *Sacramento Children and Dental Care: Better Off Than Five Years Ago?* December 2015; and *Barriers to Utilization of Dental Benefits: Medi-Cal Dental Managed Care Member Survey, January 2016.* Available at www.barbaraavedassociates.com.
[5] Oral conditions as a secondary diagnosis were not analyzed due to very small occurrences.
[6] 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.
[7] The survey had an adequate reach of area dentists, as approximately 82% are members according to the Dental Society.
[8] Sacramento Valley Dental Hygiene component does not have the same percentage of active members as does organized dentistry.
[9] https://www.cdph.ca.gov/Programs/CFH/DMCAH/MIHA/CDPH%20Document%20Library/SnapshotCoSacramento2013-2014.pdf
[10] http://www.cdc.gov/mmwr/preview/mmwrhtml/su6302a9.htm
[11] AB 1433 requires that children have a dental checkup by May 31 of their first year in public school, at kindergarten or first grade. Screening is on a voluntary basis.
[12] The program requires a yearly dental exam, but if parent does not provide an updated dental exam for a re-enrolling student (second year in preschool), the old exam will be counted in the current year. So the number of screenings may not be truly accurate.
[13] Sacramento City Unified School District Child Development Department. Data provided by Paula Kuhlman, April 13, 2018.
[14] SETA Head Start centers. Data provided by Gricelda Ocegueda, April 3, 2018.
[15] https://nccd.cdc.gov/oralhealthdata/
[16] Phipps KR, Ricks TL. The Oral Health of American Indian and Alaska Native Children Aged 6-9 Years: Results of the 2016-2017 IHS Oral Health Survey. Indian Health Service Data Brief, April 2017.
[17] Eke PI, et al. Update on Prevalence of Periodontitis in Adults in the United States: NHANES 2009 to 2012. *J Periodontol.* 2015 May;86(5):611-22.
[18] http://www.cdc.gov/oralhealth/publications/factsheets/adult_oral_health/adults.htm
[19] Untreated dental caries, by selected characteristics: United States, selected years 1988–1994 through 2011–2012. http://www.cdc.gov/nchs/data/hus/hus14.pdf#066
[20] http://www.gao.gov/new.items/he00072.pdf
[21] https://www.cdc.gov/brfss/
[22] https://statecancerprofiles.cancer.gov/incidencerates. SEER*Stat.
[23] University of California, San Diego. 2016 California Student Tobacco Survey. San Diego, CA, February 2017.
[24] 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
[25] https://www.cdc.gov/fluoridation/index.html.
[26] https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html
[27] Installing the equipment to add fluoride to water systems is very expensive. In 1995, California passed a mandate that all water systems with more the 10,000 household connections fluoridate water, but only for those cities that had an outside funding source available.
[28] Personal communication with Kris Clinton, First 5 Sacramento, March 14, 2018.
[29] https://www.waterboards.ca.gov/water_issues/programs/hr2w/ Personal community with Paul Williams, State Water Resources Control Board, Division of Drinking Water, June 11, 2018. See also *Sacramento Bee,* May 31, 2018 https://www.sacbee.com/news/state/california/water-and.../article212276614.html
[30] Sohn W, Ismail A. Regular dental visits and dental anxiety in an adult dentate population. *JADA,* January 2005, 136:58-66.
[31] http://www.cdc.gov/healthcommunication/pdf/audience/audienceinsight_culturalinsights.pdf
[32] *Barriers to Utilization of Dental Benefits: Medi-Cal Dental Managed Care Member Survey, January 2016.* Sacramento, CA: Barbara Aved Associates.
[33] *What Parents are Saying About Fear and Other Barriers to Children's Use of Dental Services*, November 2016.Sacramento, CA: Barbara Aved Associates. Available at www.barbaraavedassociates.com.
[34] http://report.oshpd.ca.gov/?DID=HWDD&RID=Provider_Count_and_Percentage as of 12/11/17.

[35] http://www.countyhealthrankings.org/app/california/2018/rankings/sacramento/county/outcomes/overall/snapshot
[36] Personal communication with Cathy Levering, Executive Director, Sacramento District Dental Society. According to the California Dental Association, the 80% general dentist/20% specialist split is the rule of thumb as a common reference.
[37] *California Department of Health Services. Weaknesses in its Medi-Cal Dental Program Limit Children's Access to Dental Care*. Report 2013-125. Sacramento: California State Auditor, December 2014.
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[40] http://www.dental.pacific.edu/departments-and-groups/pacific-center-for-special-care/innovations-center/virtual-dental-home-system-of-care/about-virtual-dental-home
[41] Report by LIBERTY Dental Plan to Medi-Cal Dental Advisory Committee, minutes of February 1, 2018.
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[43] Wall T. Recent trends in dental emergency department visits in the United States:1997/1998 to 2007/2008. *J Pub Health Dent.* Summer 2012;72(3):216–220.
[44]Medi-Cal Versus Employer-Based Coverage: Comparing Access to Care. California Healthcare Foundation. July 2015. http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/M/PDF%20MediCalAccessComparedUCLA.pdf
[45] 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.
[46] Personal communication with Nancy Purcell and Sacramento District Dental Society, May 10-23, 2018. Of the 2017 Anthem Direct submissions with 36 out 37 initial denied (97 % denial rate) when patients appealed the denial using Anthem internal appeals process 12 out 17 internal appeals were denied (70 % denial rate); 6 patients appealed those denials with the IMR/state hearing process and all 6 were approved (100% overturn rate). But not all parents went through the time consuming appeal process. Another main Sacramento hospital dentist submitted about 55 requests to Anthem in 2018 with 10 denials; all were appealed and approved (100% overturn rate).
[47] 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."
[48] https://www.bphc.hrsa.gov/datareporting/reporting/2017udsreportingmanual.pdf
[49] Delta Dental of California Oral Health Care Measures, May 21, 2017. Personal communication with Carl Ludwig, MPH, June 27, 2018.
[50] https://nccd.cdc.gov/oralhealthdata/
[51] California Department of Public Health; Center for Family Health; Maternal, Child and Adolescent Health Program, *Maternal and Infant Health Assessment (MIHA) Survey, 2015-2016*, June 19, 2018.
[52] Most Medi-Cal children in Sacramento are required to enroll in a GMC dental plan; however, some are in aid codes which cannot enroll in managed care (e.g., children with a Share of Cost), and some with non-mandatory aid codes (determined at the time of Medi-Cal application) have the option of *voluntarily* enrolling in dental managed care or accessing services through the traditional fee-for-service (FFS) system. Children in foster care are an example of a category that may be exempt from mandatory enrollment in GMC.
[53] Dental services are not included in Medi-Cal managed care *medical* plans' contracts with the state; the medical plans' responsibility for dental services is limited to referring members to the Medi-Cal dental program and providing an oral health assessment as part of the initial and periodic health assessments as required under the Child Health and Disability Prevention Program.
[54] California Department of Health Care Services FFS vs DMC Medi-Cal Dental: Annual Dental Visits - Fee-for-Service vs. Dental Managed Care. http://www.dhcs.ca.gov/services/Documents/MDSD/AnnualDentalVisitsFFSvsDMC.pdf (adults) and California Department of Health Care Services FFS vs DMC Medi-Cal Dental: Annual Dental Visits - Fee-for-Service vs. Dental Managed Care. http://www.dhcs.ca.gov/services/Pages/DMCPerformanceMeasures.aspx (children). The fiscal periods for these two age groups unavoidably vary, slightly.
[55] Beneficiary Utilization Performance Measures Report Fee-For-Service - Statewide by County - State Fiscal Year 2015-2016.
[56] California Department of Health Care Services Sealants by County Medi-Cal Dental: Sealants Utilization Data - Calendar Years 2013 – 2015.
[57] http://www.dhcs.ca.gov/services/Documents/MDSD/Fee%20For%20Service%20Performance%20Measures/SFY16-17Q1_SUPUtilByCounty.pdf
[58] http://www.dhcs.ca.gov/services/Pages/FFSPerformanceMeasures.aspx
[59] Medi-Cal recipients have a fully restored package of dental benefits in 2018 as a result of legislative action taken during the 2017-18 budget process. Currently, adult benefits in Denti-Cal include basic preventive, diagnostic, restorative, anterior tooth endodontic treatment, complete dentures and complete denture reline/repair services.
[60] http://www.ada.org/~/media/ADA/Member%20Center/FIles/patient_72.ashx
[61] It is possible that some of the dental hygienist respondents worked in the same offices and community clinics as the dentist survey respondents; any overlap was unavoidable, however.
[62] As discussed earlier, these findings represent the experiences and perceptions of the people who attended a focus group; their opinions were requested to get a read on what they thought about a variety of issues, and by itself do not represent the whole picture.
[63] https://jada.ada.org/article/S0002-8177(14)63742-9/pdf