

ALAMEDA COUNTY Oral Health Needs Assessment

Office of Dental Health **2019**



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Introduction

ental disease can contribute to poor quality of life and poor health outcomes and shares common risk factors with other medical conditions such as diabetes, heart disease and poor reproductive/ birth outcomes. While dental disease is largely preventable and treatable, children from low-income families, older adults (age 65 and older), racial and ethnic minorities, low-income pregnant women and people with special health care needs struggle to gain access to quality dental care. Untreated tooth decay (dental caries) and periodontal disease lead to unnecessary pain, infection, and tooth loss.

Funding from the California Department of Public Health, Office of Oral Health enabled Alameda County to conduct this oral health needs assessment. A comprehensive environmental scan was undertaken to describe current local oral health trends and to catalogue the system of resources and services now available using both primary and secondary data. The assessment that follows also highlights the progress that has been made since the first Strategic Plan was implemented. The assessment findings were shared with the Oral Health Steering Committee, community partners and stakeholders to help inform the development of the 2019-24 Oral Health Strategic Plan. It guided their decisions about where to focus efforts to strengthen the existing network for oral health and to address gaps in prevention, education and early treatment.

ACRONYMS

ACPHD	Alameda County Public Health Department
BRFSS	Behavioral Risk Factor Surveillance System
CAPE	Alameda County, Community Assessment, Planning and Evaluation unit
CDCC	Community Dental Care Coordinators
CHDP	Child Health Disability Prevention
ED	Emergency Department
FQHC	Federally Qualified Health Center
FV	fluoride varnish
HTHC	Healthy Teeth Healthy Communities
HUD	Department of Housing and Urban Development
IDD	intellectual and developmental disability
MPCAH	Maternal Paternal Child and Adolescent Health
ODH	Alameda County Office of Dental Health
RDHAP	Registered Dental Hygienists in Alternative Practice
WIC	Women, Infants and Children

Note: data in the body of the text throughout this document are drawn from the source noted in the accompanying figures.

Methodology

Model

he seven-step model for conducting needs assessments developed by the Association of State and Territorial Dental Directors was used as a guide to conduct Alameda County's oral health needs assessment. The steps are outlined below:



The Oral Health Strategic Plan Steering Committee developed the framework and parameters for the needs assessment process in March of 2018. The combined quantitative and qualitative data collected over the next three months painted a fairly comprehensive picture of the oral health status and experiences of Alameda County residents. At a stakeholder retreat in June 2018, the Committee used the needs assessment findings to develop an expanded and more inclusive vision for oral health. The focus areas from the 2012 Plan were revised and a new one added, based on the assessment's finding of gaps in access to oral health prevention and services for specific populations in Alameda County.

Quantitative Data Indicators

With input from the Steering Committee, a comprehensive list of data indicators was identified (see below). Selected indicators from this list were explored, inventoried and/or collected based on data availability and capacity to collect information in the given timeline. Assessment data was collected from a variety of sources: the California Department of Health Care Services, Center for Oral Health, Medi-Cal Dental Program, Alameda County Office of Dental Health (ODH), Alameda County Dashboard, Women, Infants and Children (WIC), Head Start/Early Head Start programs, school district data, the Behavioral Risk Factor Surveillance System and others.

The most comprehensive local data available was on utilization of oral health services by Medi-Cal eligible children 0-20 years of age and/or those who participated in specific program services such as at Head Start, WIC or the school districts. Local service utilization data was also available for pregnant women and adults under age 65 who are enrolled in Medi-Cal. Some additional data was available for adults living in the Oakland-Hayward-Berkeley Metropolitan Service Area. In cases where local countywide data was not available, this report drew from programmatic data, convenience samples and state or national data to fill in some of the gaps. Data for priority age and population groups that was not available was determined and will be collected over the coming years.

COMPREHENSIVE INDICATOR LIST

Note: Bolded indicators are those that were analyzed for this report

I. Oral Health Outcome-Related

- » Untreated tooth decay (children and older adults)
- » Caries experience
- » Need for dental treatment (children and older adults)
- » Prevalence of dental sealants (children)
- » Perceived oral health status (children)
- » Tooth loss (older adults)
- » Oral and pharyngeal cancer—suspicious oral lesion

II. Access to Care/Service Utilization

- » Dental exam in the past year (all children + Medi-Cal adults and older adults)
- » Preventive dental service (children, adults, older adults)-Medi-Cal
- » Treatment service (children, adults, older adults)-Medi-Cal
- » Placement of dental sealants (children)-Medi-Cal
- » Tooth cleaning
- » Avoidable emergency room visits (children, adults, older adults)

III. Risk Factors

- Demographic factors (percentage Free and Reduced-Price Lunch eligible children in public school; race/ ethnicity for all age groups)
- » Tobacco use
- » Diabetes, alcohol use, Human Papilloma Virus (HPV) exposure, disability
- » Water fluoridation

IV. Intervention Strategies

- » Safety-net clinics/Federally Qualified Health Centers (FQHCs)/community clinics
- » School-based health centers
- » School-based oral health programs (prevention-focused)
- » Kindergarten Oral Health Assessment response rates

V. Workforce, Infrastructure and Policies

- » Dental provider capacity (number of dental professionals and by category of client served)
- » Allied and non-dental professionals—current role and future opportunities in oral health

Qualitative Data Collection Process

The Steering Committee was also interested in information that would illuminate the actual real-life experiences of Alameda residents and include insights from the provider network. A consultant was hired to collect and analyze the qualitative data for this assessment. Eleven interviews and seven focus groups were conducted between March 22 and April 27, 2018. Participants were selected to reflect the county's geographic diversity and each supervisorial district, as well as perspectives from a broad range of populations and agencies including children, foster youth, pregnant women, immigrants, older adults, homeless families, people with special health care needs, FQHC staff, WIC, Alameda County Public Health Department (ACPHD) leadership, and community partners. A focus group of parents of children with special needs was also conducted. In addition, group meetings were conducted with the existing ODH Prenatal Workgroup and Integration with Primary Care Workgroup, which included representatives from other FQHCs, dental and medical providers, etc. from across the county. Separate group meetings were also held with ODH managers and with ODH staff. (See the detailed report in the Appendix).

Oral Health Data for Alameda County

Alameda County Demographic Profile

The total population of Alameda County as of this report is 1.65 million people. To create the County's demographic profile, resident data was examined by age, race, income (as measured by families living in poverty) and highest level of education. Most of Alameda County's residents are over 21 years of age, with children aged birth to 20 years old constituting nearly 25% of the County's population (See Figure 2). Much like the rest of California, Alameda County also has a growing older adult population. In California, by 2030, 1 out of 5 individuals will be 65 years and older.¹



Alameda County is a diverse community. As shown in Figure 3, Whites are the largest population group followed by Asians. Across all race categories, 22.7% of individuals are of Hispanic/Latino ethnicity.



Eight percent of Alameda County families live below the federal poverty level, which is lower than the California average (See Figure 4).



Alameda County had a similar overall distribution to California in highest educational attainment. In the County, fewer individuals had less than an associate degree but more had a bachelor's degree or greater when compared to the California average (See Figure 5).



Early Childhood (0 to 5 years old)

An infant's teeth are vulnerable to tooth decay as soon as they appear, sometimes between 6 and 12 months of age. Untreated tooth decay can cause unnecessary pain and infections that may lead to problems with eating, speaking, playing and learning. To achieve favorable dental disease prevention at the population-level through upstream measures, it is critical to introduce and establish good oral health practices as early as possible. The American Academy of Pediatric Dentistry recommends that every infant should receive an oral health risk assessment from his/her qualified health care professional by six months of age. They also recommend that parents establish a dental home for infants by 12 months of age and that caregivers should implement oral health hygiene measures no later than the time of eruption of the first primary tooth. Finally, it is recommended that favorable dietary habits (e.g. lowsugar, high protein) and optimal exposure to fluoride be established as early as possible.

CURRENT STATUS

In 2016, nearly one in three (32.8%) children 0-5 years of age screened at selected Women, Infants and Children (WIC) clinics in Alameda County showed evidence of untreated dental decay. Disparities exist by race/ethnicity. Asian children (45.1%) and Black/African American children (34.7%) had a higher prevalence of untreated tooth decay compared to their counterparts. These data represent the children who were screened at selected WIC sites that receive dental services during WIC Dental Days.

Recent national data shows similar trends. Although tooth decay is on the decline, certain racial and ethnic groups continue to have a higher burden of disease. The take-away from Figure 6 below, although not representative of all of Alameda County, is that disparities by race/ethnicity are an important consideration as we assess oral health.



Figure 6: Prevalence Of Untreated Tooth Decay Among a Convenience Sample of 0-5 Year Old WIC

Nearly 85% of children 0-5 years old in the Head Start and Early Head Start programs in the County were estimated to have received a dental assessment in 2016 (Alameda County Public Information Report, 2016). Twenty-five percent (25.2%) of these children were identified as needing treatment for dental disease, as illustrated in Figure 7:



UTILIZATION OF DENTAL SERVICES

While utilization rates of any dental services by Alameda County's youngest Medi-Cal eligible residents (0-5yrs) is comparable to the State average, it is still very low. Only a little over 3 out of 10 young children had a dental visit during the past year according to 2016 data (See Figure 8). Service utilization was even lower among the youngest children (0-2-years old). Only 28.2% children 1-2 years of age had a dental visit during the past year. Utilization was highest among 3-5-years old (49.8%):



Use of preventive dental services, critical for improving population oral health, is also low. Overall, only 32.7% of the 0-5-year-old children received at least one preventive dental service during the past year according to 2016 data.



USE OF EMERGENCY DEPARTMENTS FOR PREVENTABLE DENTAL CONDITIONS

Use of Emergency Departments (EDs) for non-traumatic dental conditions is an indicator of poor access to dental care. Having untreated and symptomatic dental disease (unmet need for dental care) without access to services in a timely/appropriate manner can also result in visits to the ED. When assessing oral health of a community, lower ED use for preventable and non-traumatic dental conditions is favorable. The rate of utilization of EDs for non-traumatic dental conditions by children 0-5 years of age is lower in Alameda County compared to the statewide average. Yet, young children continue to visit EDs for unmet dental needs. Between 2012 and 2016, the rate of ED visits per 100,000 individuals was 246.5 among children younger than one year, 368.3 among 1-2 year old and 266.2 among 3-5 year old children (see Figure 10). In Alameda County, rates of ED visits by all children 6-17 years of age (irrespective of insurance category) were highest among children 6-9 years old (203.5 visits per 100,000). It is noteworthy that of all children 0-18 years of age, children ages 1-2 years had the highest rate of visiting EDs for non-traumatic dental conditions. Between 2012 and 2014, among Alameda County residents enrolled in Medi-Cal ages 0 through 20, there was a total of 4,259 dental-related ED visits. Nearly half (47.5%) of the ED visits for preventable dental conditions were made by children 0-5 years of age.



School Aged Children (6 to 20 years old)

NOTE: For Medi-Cal data, the age group for children extends up to 20 years.

Dental decay continues to be the most common disease of children 6-11 years old and adolescents/teens 12-19 years of age. At the age of 6, most children experience the eruption of their first permanent tooth. It is recommended that children receive a caries risk assessment followed by application of dental sealants on their permanent molar teeth soon after eruption. Age-appropriate and evidence-based/evidence-informed measures introduced at schools can have favorable large-scale outcomes for oral health. School-based programs (screening, risk assessment, fluoride varnish and dental sealant application and oral health education) reach underserved, low-income children with preventive care and can increase access to timely dental care among children with unmet treatment needs. School-based sealant programs have the potential to reduce racial, ethnic and economic disparities in the prevalence of dental sealants among school age children. The Community Preventive Services Task Force recommends school-based sealant programs based on strong evidence of effectiveness in preventing caries in children.²

CURRENT STATUS

Currently, county-wide representative data estimates for status of oral health among school age children is unavailable but some data was collected by specific programs in schools in Oakland and Berkeley. Among children screened through the Berkeley Sealant Program in 2017, nearly 21% of students had untreated tooth decay with nearly 7% of students having severe tooth decay. Among children screened through the Oakland Student Smiles program, nearly 45% of students had untreated tooth decay with nearly 13.6% of students having severe tooth decay with nearly 13.6% of students having severe tooth decay with nearly 13.6% of students having severe tooth decay with nearly 13.6% of students having severe tooth decay with nearly 13.6% of students having severe tooth decay with nearly 13.6% of students having severe tooth decay with nearly 13.6% of students having severe tooth decay with nearly 13.6% of students having severe tooth decay with nearly 13.6% of students having severe tooth decay with nearly 13.6% of students having severe tooth decay (See Table 1).

	Any Decay (class 2,3, and 4)		Severe Decay (class 3 and 4)		
	(N)	%	(N)	%	
2014–2015	652	43.4%	169	11.3%	
2015–2016	1,121	45.4%	342	13.9%	
2016–2017	886	45.3%	298	15.2%	
All Three Combined	2,659	44.9%	809	13.6%	
SOURCE: Oakland Student Smiles Program Data, ODH, 2014 and 2017					

Table 1: Percent of Children in Oakland Student Smiles Program with Decay, 2014, 2017

CALIFORNIA'S KINDERGARTEN ORAL HEALTH ASSESSMENT

In 2016, only 35% of schools from 7 Alameda County school districts reported Kindergarten Oral Health Assessment data. Eighty-four percent of the 5,400 eligible kindergarteners at those schools had an assessment. Of those who submitted assessments, about 8% had untreated tooth decay. Fourteen percent of the eligible kindergarteners in reporting school districts quoted "financial burden" or "lack of access" as reasons for not receiving an assessment.

UTILIZATION OF PREVENTIVE DENTAL SERVICES

Medi-Cal Eligible Children

Less than half (44.5%) of the Medi-Cal eligible children ages 6-20 in Alameda County had a dental visit during the past year according to 2016 data. The older children–aged 15-20 years—had lower utilization rates as indicated by annual dental visit than their younger counterparts (6-14 years), as shown in Figure 11.



NOTE: For Figure 11, Annual Dental Visit is defined as a yearly dental visit to a dental provider that results in the receipt of any dental service in the range of codes D0100-D9999.

SOURCE: California Department of Health Care Services, Open Data Portal; Available at https://data.chhs.ca.gov/



Figure 12 summarizes the use of preventive dental services for all Medi-Cal eligible children aged birth to 20 years old:

A smaller percentage of Medi-Cal eligible children received dental sealants in Alameda County compared to statewide data. Over 12% of children 6-9 years of age and 6.4 % of children 11-14 years of age received a dental sealant during the past year according to data from 2016 (Figure 13). While this is not a measure of the actual number of children with dental sealants on their permanent molar, this estimate serves as a proxy for the number of Medi-Cal eligible children receiving sealants annually.



Adults (18 to 64 years old)

People are susceptible to tooth decay, periodontal disease and other dental conditions throughout their lives. National data shows that dental caries often go untreated among adults. Best practices for good oral health include visiting a dentist for preventive services every 6 months, and early diagnosis and treatment of dental disease to prevent further deterioration of condition of teeth and mouth.

Survey data from the Behavioral Risk Factor Surveillance System (BRFSS) showed that 35% of the noninstitutionalized adults (18-64 years of age) in the Oakland-Hayward-Berkeley Metropolitan Statistical Area have had at least one permanent tooth extracted due to tooth decay or gum disease in 2014 (Figure 14):



State-level data indicates that 29% of California adults had 5 or fewer teeth extracted due to dental decay or gum disease while 9.3 % had more than 6 or all teeth removed. Figure 15 illustrates that tooth loss increases with age, and that by the time adults reach aged 55-64 years old, more than half of them have experienced tooth loss. Disparities by race/ethnicity and socio-economic status (as measured by educational attainment and household income) have been documented.³ Adults with less than a high school education or an annual household income below \$34,999 were significantly more likely to have had 6 or more teeth extracted due to tooth decay or gum disease than those of higher socio-economic status.



UTILIZATION OF DENTAL SERVICES

General Population of Non-Institutionalized Adults

Nearly 70% of non-institutionalized adults in the Oakland-Hayward-Berkeley Metropolitan Statistical Area reported having a dental visit in the past year according to 2014 data. This rate of utilization of dental services was significantly higher than the statewide average of 64.9% (See Figure 16). California data indicates that the percent who have an annual dental visit increases with education and household income, as Figures 17 and 18 illustrate.



Figure 17: Percent Adults Who Had a Dental Visit During the Past Year, by Education Level, California, 2014



SOURCE: Oral Health Among California Adults. California Department of Public Health. BRFSS Data Snapshot: A Quick Look at California's Health Behaviors. 2016; Issue 2. Available at http://www.ccrcal.org/pdf/BRFSS_SnapShot/Snapshot_Issue02_Nov2016.pdf

Figure 18: Percent of Adults Who Had a Dental Visit During the Past Year, by Household Income, California, 2014



Medi-Cal Eligible Adults

Dental services utilization among Medi-Cal eligible adults has increased over the years but at its best, only about 20% of adults 21 years and older had a dental visit during the past year (See Figure 19). Between 2013 and 2014, there was a significant increase in their use of dental services, which may be attributable to the partial restoration of dental benefits for adults in the Medi-Cal program. With total restoration of adult dental benefits in January 2018, utilization of services by adults is expected to increase significantly. This anticipated increase in service utilization must be taken into consideration as the capacity of the County's oral health care system is assessed and built up.



Pregnant Women

Pregnant women suffer from certain oral conditions like gingival inflammation and bleeding more than nonpregnant women. Studies have found an association between oral disease (high bacterial load associated with gum disease) during pregnancy and poor infant outcomes like low birth weight. A mother's oral health behaviors correlate with the oral health status of her children.⁴ Pregnant women are recommended to complete at least one dental visit during pregnancy. Education by the medical provider/gynecologist and referral to dental care have shown to increase utilization of dental services by two-fold.

While there is no county-level data available, statewide (CA) data from the Maternal and Infant Health Assessment of 2015 shows that more than half the pregnant women (53%) surveyed reported having a dental problem during pregnancy. Women with incomes below 100% of the Federal Poverty Level Guideline, those with Medi-Cal, women with a high school education or less and Black/African American women had a significantly higher prevalence of dental diseases than the overall statewide average.⁵

UTILIZATION OF DENTAL SERVICES

Statewide, despite a high prevalence of dental diseases, utilization of dental services during pregnancy remains low. Although the rate of utilization has been on the rise over the years, at its best, only 43% of pregnant women reported having had a dental visit during pregnancy. In Alameda County, 47% percent of all pregnant women reported having had a dental visit during pregnancy (irrespective of insurance coverage). This rate is comparable to the California average.⁶

Several factors impact access to care and utilization of services during pregnancy. Women of higher maternal age, Hispanic/Latina, Black/African American race/ethnicity, having an income below 100% of the Federal Poverty Level and lower education level (High School/GED or less) were less likely to use dental services during pregnancy than their counterparts.⁷ Figures 20-23 illustrate several of these trends for pregnant women in Alameda County vs. California:



Figure 20: Utilization of Dental Services During Pregnancy by Race/Ethnicity, Alameda County and California, 2015

Figure 21: Receipt of Dental Services During Pregnancy by Income Level, Alameda County and California, 2015





Pregnant women insured by Medi-Cal are eligible to receive dental services. Yet, less than 4 out of 10 pregnant women (38%) in the County with Medi-Cal had a dental visit during pregnancy in 2015. These rates are lower than those for women with private insurance:



Older Adults (65 years and older)

Older adults have unique oral health care needs. Studies have found associations between poor oral health and other chronic disease like diabetes, heart disease, as well as acute exacerbations of conditions like aspiration pneumonia.^{8, 9, 10, 11} National data also shows that tooth decay often goes untreated among adults and older adults.¹²

While local data is not available, statewide convenience sample data from the Center for Oral Health shows a high level of unmet need for dental care among older adults residing in Skilled Nursing Facilities and those who are community-dwelling. Nearly half the older adults screened in Skilled Nursing Facilities and 30% of community-dwelling older adults screened have untreated tooth decay according to 2017 data.¹³ One in three older adults in California's skilled nursing homes have lost all their teeth; prevalence of total tooth loss in this population is three times that of the general population of older adults in California (9.4%). Eighteen percent (18%) of the community-dwelling older adults screened have lost all their natural teeth and an additional 7% lost more than six teeth. Although tooth loss can also result from injury or trauma, it is almost always a result of tooth decay and gum disease. Prevention, early diagnosis and timely treatment are key to maintaining integrity and function for adult teeth and mouths.¹⁴

UTILIZATION OF DENTAL SERVICES

County and state-level data on utilization of dental services by older adults with Medi-Cal is only available in aggregate format and has not been broken down by institutionalized vs. community-dwellers. Since Medicare does not cover dental care, utilization data for Medi-Cal eligible older adults is presented in Figure 24.



Figure 24: Percent of Medi-Cal Eligible Older Adults Who Had a Dental Visit in the Past Year, by Age Group, Alameda and California, 2016

Populations With Special Health Care Needs

Individuals with Intellectual and Developmental Disabilities

Individuals with intellectual and developmental disabilities (IDDs) have poorer oral health and encounter more barriers attempting to access dental treatment services than the general population.¹⁵ Additionally, there's a lack of research that captures their health status and documents their challenges on a national, state, and local level. This population continues to remain underserved and, consequently, suffers from poor oral health which can significantly impact their overall health, well-being and quality of life.

An underlying challenge is that this population category is very broad and can encompass several kinds of disabilities. Without a clear definition of this group, attempting to document the obstacles they encounter remains difficult. Although there has been a push for more consensus in definition, it's complicated due to the numerous types of disabilities and their complexity and comorbidity.

In 2010, 56.7 million people, about 19% of the U.S. population, reported having at least one disability.¹⁶ Within Alameda County, in 2014, approximately 10% of the population identified as disabled with the majority being over 65 years old:



Certain ethnic minorities residing in Alameda County (e.g., Black/African American, American Indian/Alaskan Natives, and Native Hawaiian/Pacific Islander) had a higher prevalence of disabilities compared to other ethnic groups, and to the County overall:



Individuals with IDDs are less likely to be employed, more likely to live in poverty, and more likely to receive government assistance with Medicare rather than private insurance, when compared to the general population. Nationally, 1 in 10 people with disabilities live in poverty and 1 in 4 cannot make ends meet.¹⁷ In Alameda County, 1 in 5 people with disabilities live in poverty while 2 in 5 (42%) cannot make ends meet.^{*18} These statistics suggest that these individuals are more financially vulnerable, less likely able to afford much needed dental services, and at higher risk for poorer oral health and coinciding health risks (See Table 2).

	Persons with Disabilities	Persons without Disabilities
Median Earnings	\$25,237	\$40,616
Living Alone	23%	7%
>50% Housing Cost Burden	24%	14%
Transit Dependent	21%	5%
Uninsured	5%	9%

Table 2: Select Demographic Characteristics of Persons with and without Disabilities,Alameda County, 2014

Source: CAPE with data from American Community Survey 2014, 1-year file

For those with IDDs, dental care is often reported as a top medical need following mental health services and medication. One study found that among 4,732 adults with IDDs about 88% of participants had caries, 32.3% had untreated dental caries, 80.3% were diagnosed with periodontitis, and 10.9% were edentulous.¹⁹ Dental caries and periodontal disease can be extremely common due to difficulty managing and/or receiving proper oral hygiene.

Age and severity of the disability as well as experiencing multiple disabilities (e.g. intellectual and/or physical) or health conditions play a large role in the individual's ability to manage oral health with younger children, older adults, and those with more severe or co-occurring disabilities requiring more assistance. Those with motor, sensory, or intellectual disabilities may experience impaired physical coordination and cognitive skills, limiting their ability to properly manage their own oral hygiene (e.g. brushing and flossing). Individuals with disabilities also have a higher prevalence of psychological distress, asthma, obesity, diabetes, heart disease, and high blood pressure. They are more likely to smoke, delay medical care, and visit the ED compared to the general population, exacerbating oral health diseases. Local data on both caries experience and utilization of services in this population is one of the data gaps in this County.

^{* &}quot;Cannot make ends meet" means household makes less than 200% of the federal poverty level.

Homeless Children and Families

Families experiencing homelessness face multiple challenges in accessing preventive oral health care for children. In turn, dental neglect leads to ED utilization, missing teeth, dysfunctional speech, impaired nutrition and growth, pain and suffering, impaired self-esteem and increased dental and chronic health morbidity as an adult.

According to Homeless Management Information System homeless utilization data (shelters, support services), 38% of children in families meeting Department of Housing and Urban Development (HUD) homeless criteria are under age 5, and not of school age. Local data documenting the number of homeless school-age children in Alameda County is collected by the County Office of Education from the 17 school districts and charter schools in the County. In 2013, the total count was 4,573 students registered as homeless (See Figure 27). This does not include children not enrolled in public preschool programs, and homeless children and youth not identified by school officials. Although all these school children were eligible for educational assistance, 76% of them are ineligible for HUD-funded shelter, short-term or permanent housing programs, as they are living in doubled-up or in a motel, and do not fit HUD/Homeless Management Information System criteria for homelessness.

There has not been an assessment of specific oral health status or needs of homeless children in Alameda County and the County does not currently collect data specifically on either their oral health needs or utilization of services. However, it is likely they suffer at least similar rates of poor dental health as do adults. Persons who are homeless have 12 times more grossly decayed and missing teeth than the general population. Persons living in unstable housing, such as a motel or homeless program shelter are 6 times more likely to have severe dental problems than people living in stable housing situations.²⁰



UTILIZATION OF SERVICES

While the Alameda County Health Care for the Homeless program assures dental care for homeless adults with extensive dental problems such as periodontal disease and tooth loss, services tailored to homeless families and children don't exist. Providers and homeless families that participated in the focus groups and interviews reported multiple challenges to getting care, mirroring the experiences described previously, including lack of Medi-Cal coverage, transportation, stigma associated with homelessness, and mental health issues. These barriers prevent homeless children and families from receiving dental care.²¹ Efforts to fund and offer homeless children similar oral health care management services that are already provided for homeless adults would make a significant contribution to preventing ongoing oral health problems throughout their lives.

Oral Health Workforce

lameda County is home to 1,468 dentists, 868 Registered Dental Hygienists and 6 Registered Dental Hygienists in Alternative Practice (See Table 3 below). The County is unique in having a newly developed workforce of Community Dental Care Coordinators that are integrated into care systems to improve oral health of vulnerable populations by providing navigation and support to received timely and appropriate care. This workforce is engaged and committed to improving oral health of communities.

PROVIDER	ALAMEDA COUNTY	CALIFORNIA
Dentists ^a	1,696	34,159
Registered Dental Hygienists ^a	868	18, 759
Registered Dental Hygienists in Alternative Practice ^b	6	83
Community Dental Care Coordinators ^c	27	N/A

Table 3: Number of Providers by Type, Alameda County and California

General practice dentists constitute 82% of the workforce in the County while pediatric dentists make up only 4%. (See Figure 28) The number of pediatric dentists or even general dentists who are willing and able to care for very young children is smaller for the Medi-Cal patient population. More information is provided in the qualitative data section of this report.



Only 10.2% of all dental providers in Alameda County treat individuals insured through Medi-Cal. This equates to as few as 173 dentists across the County. Also, very few dental providers treat pregnant women and/or very young children (less than 3 years of age). According to ODH Medi-Cal Dental Provider Survey conducted in 2018 only 65 Medi-Cal dental providers treat pregnant women (37% of all Medi-Cal dental providers).



The Health Resources and Services Administration designates a geographic area a "Dental Health Professional Shortage Area" when the population-to-provider-ratio is more than or equal to 5,000 to 1.²² In Alameda County, access to dental providers who accept Medi-Cal varies by region. Geographic distribution of dental providers and ratio of providers to Medi-Cal eligible individuals is lower in North County, Oakland and Eden Area/Central County than in Tri-Valley/East County and Tri-City/South County. For example, the ratio of residents to the number of providers in the North County is 9,957 residents per provider, as compared to 3,498 residents per provider in the East County/Tri-Valley area (Figure 30 and 31).





Figure 31: General Denti-Cal Providers and Medi-Cal Recipients/General Provider

Qualitative Data: Findings from Key Informant Interviews and Focus Groups

leven interviews and seven focus groups were conducted to help guide and inform the identification of priorities and appropriate strategies for the Strategic Plan. Participants were chosen by ODH and the Steering Committee to include each supervisorial district, and to represent a broad range of perspectives including children ages 0 to 5, school-aged children, foster youth, pregnant teens and women, older adults, immigrants, families experiencing homelessness, people with special health

care needs, Federally Qualified Health Centers (FQHCs), WIC, ACPHD leadership and others. Feedback was also provided by the Oral Health Committee of the Public Health Commission and the existing workgroups from the previous strategic plan.

Focus group participants were asked about: their understanding of good oral health practices and how they received that information; barriers they encountered to getting services; their experiences with dentists; and what would improve their dental experience. Provider focus groups were also asked questions about specific interventions and partnerships. Key informants were interviewed about current work being done in their agency, challenges and barriers, accomplishments and impacts, and what improvements they would like to see. In addition, they were asked specific questions related to their own programs.

The major barriers consumers faced to getting oral health care were cost for services and lack of or insufficient dental coverage; lack of information about good dentists who take Medi-Cal insurance and a limited number who will do so; and negative past experiences, including with dentists who are not trained to provide care for children with special needs. Their primary sources of information on good oral health care, after dentists, were primary care doctors, schools, and other programs such as WIC and Senior Centers.

Dental and medical provider interviewees stressed the importance of agency leadership to support and institutionalize oral health prevention, education and referral through agency policies and practice guidelines. They found the trainings from ODH and Healthy Teeth Healthy Communities (HTHC) to be very valuable and welcomed the addition of the HTHC Project's Community Dental Care Coordinators (CDCCs) to help clients access services and practice good home oral health. They recommended that these trainings be continued, expanded, and made part of their regular practice.

Several strategies to address the key barriers to oral health were identified across all groups:

- » Make information widely available about what the Medi-Cal Dental Program covers, and distribute an annually updated referral list for dentists who accept Medi-Cal.
- » Maintain and expand training on oral health and include more agencies that serve the priority populations.
- Conduct training with dental providers on the importance of preventive oral health care for infants and pregnant women, and provide specific suggestions on how to treat children, especially those with special health care needs.
- Begin to address the shortage of dentists by working with medical and other providers to expand the workforce, including using CDCCs at doctors' offices, expanding the role of Registered Dental Hygienists in Alternative Practice (RDHAPs) and training nurses and medical assistants to offer oral health preventive education and referral.
- Continue to increase integration and cooperation across agencies, not only between medical and dental providers but also by bringing together more stakeholders from different organizations that serve the priority populations.
- Develop a consistent communication strategy that includes oral health education and availability of oral health services that is culturally, linguistically and age-appropriate for priority populations.

Address the lack of local data on oral health by building on the current needs assessment process and the information gathered from HTHC.

In-depth findings from the key informant interviews and focus groups are included in the Appendix.

Gaps in Local Data

Countywide, representative data on oral health status and service utilization is not available for any of the identified population groups. While some data on children is available through the schools, this data is not universally collected. Only 35% of 7 school districts (out of a total number of 18 school districts) reported kindergarten oral health assessment screening data in 2016. Even within school districts that report data, not all the schools do so. In the Oakland Unified School District seven of eighty-six elementary schools report the percent of students with untreated tooth decay. The data gaps were even more significant for other priority populations identified by the Steering Committee as most at risk for adverse oral health outcomes.

Most of the data collected does not compare oral health outcomes and service utilization rates based on social determinants of health, although there is some data available for children 0-5 years of age, pregnant women and adults by race/ethnicity, income and education. In order to monitor and evaluate the impact of the new Strategic Plan's interventions to address oral health equity, the County would need to expand its data collection to include these key demographic factors.

Current data on the prevalence of dental disease and select oral health outcomes (untreated tooth decay, decay experience and presence of sealants on permanent molars) is also lacking. The most recent data available is from 2006. ODH is currently conducting the Basic Dental Screening Survey of third grade students in public schools with the report set to be released in September 2020.

The most significant data indicator gaps were in the following areas:

- CHILDREN 0-5 YEARS OF AGE: County-wide representative oral health and service utilization data among children 0-5 is not collected. The data is available for Medi-Cal eligible children. The data available is limited to untreated tooth decay and need for dental services for children participating in select Head Start/Early Head Start programs and a WIC program convenience sample. Data includes comparisons by race/ethnicity and income.
- SCHOOL AGED CHILDREN: Currently, county-wide representative data estimates for status of oral health among school age children is unavailable. Oral health-related indicator data is collected in a small number of schools/districts for untreated tooth decay and need for dental treatment. Data on percent of Medi-Cal eligible children 6-20 years old who had a dental visit in the previous year or received fluoride treatment is also available.
- PREGNANT WOMEN: There is no county-level data on the oral health status of pregnant women. Utilization data is available for those on Medi-Cal. Data is also available comparing rates based on race/ ethnicity, income and education.
- ADULTS UNDER AGE 65: Tooth loss data is only available for adults in the Oakland-Hayward-Berkeley MSA; annual dental visits data is available county-wide for those on Medi-Cal.
- OLDER ADULTS: The only local data currently available is for Medi-Cal eligible older adults who had a dental visit in the previous year.
- » SPECIAL POPULATIONS: No data is collected locally for homeless children and their families, people with special health care needs, foster youth or immigrant communities.
- PREVENTION POLICIES: There is currently no central database which documents the presence (or absence) of school oral health policies in Alameda County. In addition, there are other policies that could impact oral health status for which we have no current data:

- » Consumption of fluoridated water in all Alameda County cities
- » Number and distribution of dental offices that identify and provide tobacco use counseling to their patients
- » Implementation status of the Oakland City Sugar-Sweetened Beverage Tax, including revenue generated and oral health projects funded

Recommendations to Address Data Gaps

Alameda County oral health data collection is primarily program driven. Except for data made available by the State, the County generally relies on data collected by specific programs that serve the target populations. More comprehensive, countywide collection of both oral health status and service utilization data is clearly needed. Several steps are recommended to fill the data gaps identified and create a system for ongoing data collection and analysis:

- » Establish an oral health surveillance and evaluation work group that coordinates efforts to collect and analyze data utilizing a health equity framework.
- Institute basic screening surveys for school children, including conducting a basic oral health status screening survey for kindergarten and third grade children in all Alameda County public schools, using Association of State and Territorial Dental Directors methods.
- Develop a plan for addressing data gaps identified in this assessment in areas such as access, systems utilization and oral health status for older adults, people with special health care needs, individuals and families who are homeless, and immigrant populations.

Progress Toward 2012-17 Strategic Plan Goals: Key Activities and Systems Change Results

lameda was the first California county to develop a Strategic Plan for Oral Health. The plan outlined several data-driven strategies to improve oral health for its residents, which have been implemented over the last 6 years. Several new projects and initiatives like the Local Dental Transformation Initiative (Healthy Teeth Healthy Communities) have also been launched. The following section summarizes some of the key activities carried out, and highlights systems changes related to the five 2012-17 Strategic Plan Strategies: Access, Education, Workforce Development, Coordination and Oversight and Evaluation.

Strategy One: Access

Goal: Increase the availability and utilization of oral health services and education programs in locations frequented by pregnant women, children, teens and their caretakers, such as at schools, Women, Infant, and Children (WIC) sites, Head Start, primary care providers' offices, and other locations.

CHILDREN 0 TO 5 YEARS OLD

Accomplishments:

- In 2016, ODH was awarded \$17.2 million for a local dental pilot project titled Healthy Teeth Healthy Communities (HTHC). HTHC is a cross-sector collaborative initiative to implement a county-wide health care coordination system to ensure Medi-Cal eligible children (ages 0-20) receive prevention and continuity of dental care services. Through partners, the Project hired and trained 27 community dental care coordinators who are representative of the community to educate parents on oral health and assist them in accessing dental care services for their children on a regular basis. This funding allowed the County to work intensively on improving access to dental services, especially for priority populations as described below. By the end of 2018, HTHC outreached to 18,393 families, 9,322 dental appointments were made for 4,389 children, youth and young adults.
- During 2012-17, a concerted effort was made to improve access to oral health services for young children by offering them at locations that children and families already utilize. Overall, 5,618 (five thousand six hundred and eighteen) children 0-5 years (5,004 of these were age 0-2 years) were screened and received fluoride varnish (FV) during this period. ODH, Asian Health Services, LifeLong Medical Care and Native American Health Center participated in the screening and FV program.

Systems Changes

In addition to the above activities, ongoing preventive oral health services have been institutionalized at key locations and referral systems for follow-up were established with collaborative partner agencies.

- WIC Collaboration: ODH collaborated with County WIC programs in 4 locations for the last 10 years. Approximately, 1,000 WIC children were screened, provided FV application and care coordination annually through the WIC Dental Days. Now, the California Department of Public Health, Office of Oral Health promotes WIC collaboration for all county oral health programs in the State.
- 2. Head Start: All children in Alameda Head Start have a dental exam within 90 days of enrollment. Follow-up is provided to ensure each child has dental coverage and referrals are made to Bright Smiles, Asian Health Services, La Clinica, Youthful Tooth, and Alameda Pediatric Dental for dental care.
- 3. Federally Qualified Health Centers (FQHC): All Alameda County FQHC sites now provide dental care

services. Asian Health Services decided to continue Care Coordination after the HTHC project ends in December 2020.

4. Chabot College: Dental Hygiene program students provide oral health screening and FV application to preschoolers in two Head Starts and to an annual "Give Kids a Smile Event."

SCHOOL AGE CHILDREN

Accomplishments

Dental screening, prevention and other services were made more accessible to school-aged children in the County through the following efforts:

- ODH provided preventive dental services in 11 Berkeley schools. Since 2012, ODH screened 9,230 students (2nd and 5th grade), and 2,469 students received preventive care.
- FQHCs (La Clinica de La Raza and Tiburcio Vasquez) offered screening, preventive and restorative treatment and care coordination services to 5 schools within Hayward Unified School District; the Tri-City Health Center provided dental screenings and referral at Mahoney Elementary School in Fremont.
- Big Smiles provided sealants, fillings and simple extractions to 34 elementary schools within Oakland Unified School District (OUSD).
- A comprehensive school-based dental program, Oakland Student Smiles, was established in OUSD with 4 partner FQHCs: Native American Health Center, Asian Health Services, La Clinica de La Raza, and LifeLong Medical Care. Services were provided on-site utilizing portable equipment or via mobile dental van at 7 elementary schools. During 2014-2017, 5,928 students were screened (58.5% of the total school population); and 2,034 children were provided treatment (20.1% of the total school population).
- In 2016-17, LifeLong Medical Care provided exams, cleaning, sealants and fillings through a mobile dental van outside East Oakland Medical Clinic; 287 children and adults were served.
- ODH staff provided preventive services at community health fairs for 0-20 year-old residents and at Haight Elementary School in Alameda for kindergarteners.

Systems Changes

 Twelve school-based health centers with Center for Healthy Schools and Communities now offer screening and cleanings, case management and restorative treatment in Oakland, Emeryville, San Leandro and Ashland (unincorporated area). They provided services to 5,311 students.

PRENATAL/PREGNANT WOMEN

Accomplishments

A Prenatal Oral Health workgroup was established in 2016 to improve the oral health of pregnant women through increased access to oral health services and education. Workgroup members included representatives from Oakland and Livermore Head Start, ACPHD's Community Assessment Planning and Evaluation, ACPHD WIC, Maternal Paternal Child and Adolescent Health (MPCAH) Perinatal Services and Family Planning Program, La Clinica de La Raza, Tri-City Health Center, Asian Health Services, First 5 and Children Now. This workgroup accomplished the following:

A prenatal demonstration project assessed the barriers to accessing oral health care during pregnancy through a survey conducted with pregnant women (at WIC sites) and dental providers through 2017. Forty percent of pregnant women responding to the survey said that they don't have dental insurance and 50% of the pregnant women with Medi-Cal indicated that they did not know they had dental insurance. Results of provider surveys showed that only 24 out of 146 private dentists (those that accept Medi-Cal) treat pregnant women.

- A pilot project was launched in April 2017 with Hayward WIC; LifeLong Medical Care provided dental services to pregnant women from a mobile van two Saturdays/month from April–November 2017. The project provided preventive and restorative care to 14 women and 83 children.
- ODH and MPCAH programs conducted training with 15 Comprehensive Perinatal Services Program roundtable participants from 23 locations in Alameda County in December 2015.

Systems Changes

The dental provider network serving pregnant women has been expanded and perinatal service providers have incorporated dental health into their practices:

- 1. During the period of 2012-17, Alameda County increased the number of dental providers who provide dental care to Medi-Cal eligible pregnant women from 30 to 50. In addition, Oakland Head Start now offers a dental clinic two times per year for pregnant women.
- Existing organizations that serve pregnant women have incorporated oral health messages into their practice as a result of the training provided to Comprehensive Perinatal Services Program staff. Comprehensive Perinatal Health Workers strengthened the work with pregnant women, referring them to dental providers. Women get information at least twice during pregnancy to encourage them to see a dentist.
- A pilot was established and then institutionalized in Tri-City Health Center to integrate the system of medical and dental practices and to track the number of referrals for pregnant women from medical clinics to dental services, including who utilized dental services and completed treatment.

Strategy Two: Education

Goal: Educate children, teens, caregivers, and prenatal women about the importance and "how-tos" of establishing and maintaining good oral health through schools, healthcare, childcare and social service providers as well as through a broader social marketing campaign.

CHILDREN AND TEENS

Accomplishments

Several key activities focused on developing the capacity of partner agencies to incorporate oral health education into services they provided to children and families.

- In conjunction with First Five, ODH staff provided training in spring of 2016 to 40 of their staff from diverse disciplines on the importance of preventing early childhood caries, how to integrate oral health education into their programs, and on resources/referral.
- ODH also partnered with Child Health Disability Prevention (CHDP) to train social service workers on the importance of oral health, resources available and appropriate referral. During years 2016-2017, 10 classes were conducted reaching approximately 160 social service workers.

System Changes

- 1. Head Start and Early Head Start programs routinely integrate oral health education into classrooms and inservices for staff.
- 2. Chabot Dental Hygiene Program curriculum includes Community Dental Health class in which students engage in projects in the community to educate pre-school educators on early childhood caries.
- 3. Oral health education to middle school and high school teens is offered through the "Take Back the Tap" curriculum, which emphasizes the importance of drinking tap water instead of sugary drinks and

bottled water. In addition, Alameda County partnered with Oakland Unified School District, nonprofits and community based organizations to bring UCSF faculty and students to classrooms and health centers in Oakland middle schools through the Elev8 national initiative, helping students to stay healthy and engaged in learning as they transition from childhood to adolescence.

PREGNANT WOMEN

Accomplishments

- Funding from the first Strategic Plan enabled the ODH to develop Twitter and Facebook messages that were sent to organizations serving pregnant women to re-tweet and put on their Facebook pages at certain prescribed intervals. American College of Obstetricians and Gynecologists posted these messages on their page, as did Comprehensive Perinatal Services Program and WIC, Childcare Coordinating Council, Children NOW and others. An article for Inter-agency Children's Policy Council Newsletter included these messages.
- In May 2017 staff provided updated training to 40 Alameda County WIC staff on integrating oral health into WIC prenatal messages.
- The ACPHD Women's Health Promotion Program, through their Community Baby Shower events incorporates dental health messages into their overall messaging and distributes dental hygiene kits for both parent and child. During February 2016 through August 2017, 120 pregnant women were reached.

Systems Changes

- ODH collaborates with the MPCAH program to ensure staff, including home-visiting program staff, are trained on the importance of integrating oral health education, assessment, and/or referral into their work. ODH provides dental resources and educational materials for MPCAH staff to distribute to clients.
- In 2017, WIC established a prenatal oral health promotion program to build awareness among pregnant women about the importance of dental care and to encourage them to utilize dental services. ODH provides WIC staff regular refresher trainings.

Strategy Three: Oral Health Workforce Development

Goal: Increase the number of oral health care educators and providers practicing in underserved communities who live in and/or who are representative of these communities. Increase the number and cultural competency of other oral health providers who serve young children, pregnant women and teens living in underserved communities.

Accomplishments

To achieve progress toward this goal, the ODH focused on two approaches:

- Recruiting and building capacity of the existing dental service provider network to serve children;
- Supporting a career pipeline of new dental providers who will reflect the diversity of the community and can
 provide culturally appropriate services.

The first strategy has been undertaken in the Healthy Teeth Healthy Communities (HTHC) Project as described in the systems change section.

The second approach was pursued when ODH staff participated in the Alameda County Health Pipeline Partnership (ACHPP) to explore integrating dental career paths into ACHPP programs such as OUSD Linked Learning Health Academies. During school year 2015-2016 and 2016-2017, ODH staff participated in OUSD's Career Day for high school students with the purpose of educating students about the career path options within the dental field, reaching approximately 500 students each year. In June 2017, ODH partnered with all 3 Alameda County Dental Societies to provide a CE course training to dentists on "Dental Treatment Considerations for Pregnant or Lactating Women" reaching 100 dental providers. This course also included information on billing procedures for dental services to pregnant women to encourage dentists to consider accepting pregnant women with Medi-Cal Dental coverage.

Systems Changes

- 1. The HTHC Project is increasing the number of providers who provide preventive services to children 0-20 years of age by actively recruiting dentists to join HTHC program and the Medi-Cal Dental Program through outreach, education, technical assistance, consultation, and offering a menu of incentives. The Project has created an ongoing Community of Practice for these providers, offering training to increase their capacity to serve these children, including overcoming of population-specific barriers to care. HTHC also introduced a mentorship program for the dentists. As of December 2018, 17 private practice dentists and all FQHCs have joined the program.
- 2. ODH provides on-going training for these dental providers on issues relevant to pregnant women. During the last strategic planning period, ODH provided training to 77 dental providers and staff on the importance and safety of oral health care for prenatal women.
- 3. As a result of the ODH connecting the Mentoring in Medicine and Science with the UCSF School of Dentistry in 2015, a partnership was formed in which 45 underrepresented high school and college students each summer will embark on a day visit to gain hands on exposure and mentorship in the dental profession.

Strategy Four: Coordination and Oversight

Goal: Provide coordination and oversight of dental care programs to underserved populations throughout the County and advocate for policies that support the goals of this plan.

Accomplishments

In 2016 the Oral Health Committee created the following issue-specific workgroups: Prenatal Oral Health, Integration of Oral Health into Pediatric Primary Care, Community Health Worker, and Sugar Sweetened Beverage (SSB), to advance priority areas identified at the fall 2015 Mid-Point Strategic Plan Retreat. Through these workgroups, the following activities were accomplished:

- Initial social marketing campaign efforts were re-directed to focus on decreasing consumption of SSBs. The Public Health Commission recommended that ACPHD commission a report on the economic and health impact of obesity in Alameda County. The Oral Health Committee submitted 11 policy recommendations to the Public Health Commission from the report that warranted attention from the Board of Supervisors. The SSB working group helped move these recommendations forward and focused efforts on the successful campaign to pass a soda tax in City of Oakland (the Measure HH Soda Tax Initiative).
- The Integration of Oral Health into Pediatric Primary Care Workgroup conducted a survey of CHDP providers to assess practices and interests in training; provided a CE course for medical providers on "Oral Health: An Essential Component of Pediatric Primary Care" in fall 2016 reaching over 35 medical providers representing 22 clinics; rolled out specific hands-on, on-site oral health and FV application training reaching 200 medical providers at 11 clinics.
- Four CHDP program group trainings reaching 146 medical providers were held in 2014 on the importance of oral health and how to provide dental assessment, education, and FV.
- Chabot College's Dental Hygiene program students provided training to students in the Medical Assistant program on oral health and FV application, reaching about 25-30 students in 2016.

 A local work group was initiated to address statewide policies which allow for FQHC services beyond the "four walls" to community sites and through contracting.

Systems Changes

- 1. The Oral Health Committee of the Public Health Commission was established in 2015 to help address issues of coordination and oversight.
- Measure HH Soda Tax Initiative was passed in the City of Oakland November 2016. The measure generates \$11 million per year in SSB Taxes. Some of this revenue will be allocated for preventive health care which includes dental health.
- 3. The Integration of Oral Health into Pediatric Primary Care Workgroup continues to provide support to the 22 clinics they trained, including educational posters, incentives, and other tools to heighten oral health messages. This workgroup plans to do a FV utilization assessment of 3 large clinics, partnering with CHDP. Based on that assessment, they will develop plans to increase FV utilization.
- 4. In a follow-up survey sent to 22 clinics, all 12 respondents reported that they are including oral health and FV into their periodicity exams. At these clinics, the percentage of children 0-5 years of age receiving FV ranges from 21%-100%.

Strategy Five: Evaluation

Goal: Establish a mechanism for regularly evaluating the progress of the Strategic Plan in accomplishing its objectives.

Accomplishments

- An Evaluation Subcommittee was formed to address overall evaluation for the Strategic Plan. It prioritized outcomes and measures based on the feasibility of implementation and measurement.
- A data collection plan to capture the effectiveness and financial sustainability of the Oakland school-based program was completed. Data was analyzed for 2014-2017 academic school years, and a summary report was produced. These results were shared with the Oakland Student Smiles Collaborative workgroup (including 4 FQHCs, Oakland Unified School District and representatives from the Center for Healthy Schools and Communities).

Systems Changes

- 1. In 2017, the Accountability and Quality Improvement Workgroup was established for the HTHC project to provide technical assistance on program evaluation design, qualitative and quantitative data collection methods, data analysis, reporting and quality management and assurance.
- 2. ODH is developing a surveillance system for tracking county-wide dental health data for school aged children.

Conclusion

he ODH assessment of oral health needs revealed both important accomplishments over the past five years and illuminated key areas of unmet needs and barriers to improving oral health. Gaps in data were identified early in the assessment process, making it difficult to establish trends and patterns of diseases and risk factors. Building a more comprehensive county-wide surveillance system to assess oral health status and needs will be an important part of addressing Alameda County's oral health needs into the future.

Over the last five years, ODH has fostered a strong network of partners collaborating to expand and improve oral health services for low-income and ethnically diverse populations. Early efforts to integrate oral health into schools, medical care practices, children's services and programs like WIC and Head Start have led to longer-term changes in these systems. State-authorized expansion of dental coverage within Medi-Cal, combined with incorporating a model of care coordination (Healthy Teeth Healthy Communities) that links children and families to a dental provider are resulting in increased access. ODH strategies to incorporate oral health programs into elementary schools that include education, screening, preventive care such as fluoride varnish and sealants, and linking children to a dental home are showing promising results toward establishing lifetime habits of good oral health practices.

While Alameda County has made important inroads to addressing oral health needs, there is still much work to be done. The County overall continues to experience shortages of general dental providers, including shortages of dentists that accept new patients on Medi-Cal. The cost of care, finding a dental provider and overcoming negative experiences with dentists are all barriers that were identified in the assessment. Data also revealed significant disparities in oral health status across different ethnic, and racial and income groups. Similar disparities were identified in access to and utilization of both preventive and treatment dental services. Dental caries and untreated dental decay continue to impact the health of Alameda County children.

This report concludes the first phase of Alameda County's strategic planning process—the county-wide needs assessment. Using data from this report, ODH will bring together local leaders and community partners to develop the Alameda County Oral Health Strategic Plan for 2019-2024.

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APPENDIX: FOCUS GROUP AND KEY INFORMANT INTERVIEW REPORT

INTRODUCTION

Eleven interviews and seven focus groups were conducted between March 22 and April 27, 2018. Participants were chosen by ODH staff and the Strategic Planning Steering Committee to reflect the geographic diversity of the County and the perspectives from a broad range of populations and agencies that serve the community, including children ages 0-19, seniors, foster youth, immigrants, homeless, people with disabilities and special needs, Federally Qualified Health Centers (FQHCs), Women, Infants, and Children (WIC), Public Health Department leadership, and others. A focus group of parents of children with special needs was also conducted in addition to group conversations with the ODH Integration of Oral Health Pediatric Care workgroup and the ODH Prenatal workgroup and ODH staff.

The qualitative data collection was an iterative process. The experiences described by the community participants helped illuminate and inform the input from the providers. Comments specifically made by the focus groups were incorporated as relevant. A summary of just the community focus group findings is included separately at the end of this Appendix.

FINDINGS AND RECOMMENDATIONS

The following topics were most frequently raised by both agency representatives and community focus group participants:

- I. Partnering with Diverse Agencies
- II. Working with Specific Populations:
 - a. SCHOOLS
 - b. HOMELESS CHILDREN AND FAMILIES
 - c. PEOPLE WITH DISABILITIES AND SPECIAL NEEDS
- III. Integration of Medical and Dental Services
- IV. Communication and Messaging
- V. Data
- VI. Dental Providers
- VII. Community Focus Groups Summary

I. Partnering with Diverse Agencies

Leadership and staff from a broad range of programs (see page 45) stated that they are committed to providing oral health education to their clients and most have taken significant steps to do so. They noted that the relationship between agency staff and clients is extremely beneficial in helping families value the importance of oral health practices, address client fears, and help them find affordable and accessible dental services. Some of the efforts providers identified as key to building and expanding the network's capacity to incorporate oral health into their programs were:

- » Trainings by ODH and Healthy Teeth Healthy Communities (HTHC) collaborative members.
- » HTHC Community Dental Care Coordinators (CDCCs) who help clients access services and practice good home oral health.
- » ODH and FQHCs offer oral health education, assessment and preventive services at WIC clinics and Head Start sites.

SUGGESTIONS FOR STRENGTHENING THESE EFFORTS:

- Make oral health education trainings a regular practice at agency sites and emphasize why oral health is important to overall health and quality of life; the efficacy of beginning prevention during pregnancy before age one; and how staff can help clients achieve good oral health.
- Address the challenges of making oral health care a priority when at-risk populations struggle with housing or other basic needs; train staff to help them figure out to fit it in their daily lives.
- » Encourage leadership to require oral health education be included throughout the agency.
- Work with WIC staff to more effectively promote monthly dental days and encourage more WIC clients to participate in oral health assessment and prevention services offered there.
- » Consider how to reach transition-aged youth and homeless populations with oral health education.
- » Supply free toothbrushes and toothpaste and motivational "swag" items to partner agencies.

II. Working with Specific Populations

a. SCHOOLS

School staff reported that offering oral health education, prevention services, and treatment services at school campuses is extremely effective in increasing access to care and improving oral health practices. Student participation increases significantly the longer the services are available and as providers establish relationships with students and their families. Sometimes students and their families begin accessing treatment at the "home site" of the clinic.

- School leadership can support oral health efforts through relevant school policies; for example, if the school shortens the time allotted for appointments it is not feasible for the student to be treated properly and it sends a message that oral health needs are not important.
- » Address high no-show rates for dental appointments by considering further education, double booking appointments, or having back-up appointments (could result in longer wait times).
- School staff, wellness coordinators and clinic staff should identify "high priority" students most likely in need of services and provide care coordination to ensure they receive oral health care.

- Ensure a "warm hand-off" from clinic staff, school and visiting nurses and care coordinators so that the student receives treatment and is practicing good oral health care.
- Encourage older students to work with younger ones around oral health, such as when medical assistants in the school training program were taught how to apply fluoride varnish (FV) to younger students.
- » Consider incorporating into preschools the international practice of children brushing their teeth together on site.

b. HOMELESS CHILDREN AND FAMILIES

Healthcare for the Homeless helps homeless adults to access oral health services but does not offer similar services for children. Feedback from the director of that program and from homeless participants in the focus groups indicated that people who are homeless have difficulty practicing good oral health and accessing services, usually seeking services only when they have acute pain.

SUGGESTIONS:

- Advocate for Highland Hospital to become an FQHC so they can be reimbursed at a higher rate for the oral health services that many homeless people seek there.
- Consider developing a mobile dental program that visits different living situations, such as homeless encampments, shelters, assisted living, etc. This could help people with disabilities and aging adults who may be homeless.
- Work with agencies serving homeless children and families to assess dental needs at intake and help families to access oral health services.

c. PEOPLE WITH DISABILITIES

People with disabilities are at high risk for dental disease. Those with fine motor issues find it difficult if not impossible to brush their teeth well. Most dental providers don't transfer from a wheelchair to a dental chair and won't treat clients in a wheelchair. While most FQHCs are reportedly doing a good job treating people with disabilities, there is a long waiting list. University of the Pacific also has a good program serving people with disabilities but is difficult to reach and has a long waiting list. Parents of children with special needs provided feedback based on their own experiences that informed the suggestions in this section.

- Bring RDHAPs to group homes, daycare centers and other sites serving people with disabilities to get people into care and reduce the anxiety of going to a dentist's office.
- » Explore the tele-dentistry model.
- » Educate organizations, such as the Regional Center, that work with people with disabilities on the importance of oral health and train caregivers on how to demonstrate good home practices.
- Train dental providers on how to treat children with special needs and how to prepare them and their families in advance of the visit, including sending books and materials ahead of time.
- » Offer "Autism Dental Days" with medical providers to provide training and help families with children with special needs know that their child would be well-treated.

III. Integration of Medical and Dental Services

Significant strides have been made in this area. Many clinics now incorporate oral health assessments, FV, and dental referrals into their exams, particularly for children and pregnant women. While several focus group participants said they learned about good oral health habits and the need to see a dentist from their primary care provider, many medical providers find it difficult to fit this into a short visit. The strategies already being implemented to promote integration of oral health into medical care have been very successful and should be continued.

SUGGESTIONS:

- » **Continue to work with medical providers** to determine what aspects of oral health assessment, education, prevention and referral can be done by nurses and medical assistants.
- Provide incentives to medical assistants to attend trainings by making it a requirement for advancement and by offering special certificates for completion of training.
- » Review how the successful integration of Behavioral Health into medical practice was achieved, and apply their lessons learned to the integration of oral health.
- Have a trained oral health staff member/advocate at all important conversations for the clinic, to "lift up" dental when discussing overall health.

IV. Communication and Messaging

Lack of consistent messaging about oral health was mentioned frequently in the provider interviews, as well as the focus groups. Specific comments included:

- » Many focus group participants do not know that the Medi-Cal Dental Program covers adults, nor what services are covered and which dentists in their area accept it.
- » Medical and other staff throughout agencies and clinics also don't have current information about Medi-Cal Dental coverage and local providers.
- Although many focus group participants stated what good oral health practices are, most staff members interviewed thought that many people, particularly at-risk populations, don't know this information nor why oral health practices are important, and likely are not practicing good home health practices consistently.
- Some focus group members, particularly seniors, thought that if they take good care of their teeth, they don't need to see a dentist.

- A strong oral health message needs to be disseminated through a broad marketing campaign, that is modeled on the successful First Five message campaigns, is thoroughly pre-tested and includes social media and texting to reach young people.
- A second component is to develop and distribute information through libraries, neighborhood newsletters and 1:1 messaging through agencies, schools, Head Start, WIC, and medical and dental providers. Provide a handout about what Medi-Cal Dental Program covers and which dentists accept it.
- » Continue to work on improving communication among and within agencies about the importance of oral health as part of good overall health.

V. Data

Data is an area that needs much greater resources and attention, particularly in three key areas:

- There is a lack of county-wide, baseline data on oral health status and trends. This is being addressed somewhat through the current needs assessment process as well as the information being gathered through HTHC.
- » More work needs to be done to specifically measure and analyze the impact of interventions and to address gaps that are identified.
- » Data sharing across programs is a major problem.

SUGGESTIONS:

Explore potential for incorporating some information into one common form that would be easier to track and could help integrate information among different providers and agencies.

VI. Dental Providers

ODH and HTHC have worked to expand the number of dental providers who treat pregnant women and/or young children and take Medi-Cal Dental. This is having a major impact, particularly increasing the number of pregnant women being seen. For example, most mothers in the WIC focus group said they were able to see a dentist during their pregnancy. Nonetheless, some dental providers continue to believe it is not safe to treat pregnant women and some think that very young children do not need to see a dentist on or before their first birthday. Parents of children with special needs also report that few dentists are trained in how to treat their children, resulting in very bad experiences.

DILEMMAS BEYOND THE SCOPE OF THE COUNTY DENTAL PLAN:

Three major issues were noted that are likely beyond the scope of the County plan:

- 1. There aren't enough dental providers. There is still a significant shortage of dental providers who see young children and/or pregnant women. With the growing encouragement for these groups to see a dentist, this situation could worsen.
- 2. The dental system of care, including cost, isn't adequately serving the population. Nearly all focus group members felt that dental insurance is very ineffective at making preventive and treatment services affordable, even for middle income people. Because extractions are less expensive than treatments that could help save teeth, these are performed more routinely than needed, particularly in the African American community.
- **3.** There needs to be a system of oversight to address patient issues. Focus group members didn't know where to go to report poor treatment, lack of treatment or over-treatment.

- » Continue and expand the work that ODH and HTHC are doing to train providers and increase the number that accept Medi-Cal and serve young children and pregnant women.
- » Explore creative solutions to the dental provider crisis such as the development of the oral health workforce beyond dentists, including Care Coordinators, growth in the role of RDHAPs, etc.
- » Replicate incentives for providers in underserved areas that are offered to medical providers.

VII. Community Focus Groups Summary

The following information summarizes comments and recommendation from the community focus groups, which were comprised of community residents from different geographic regions across the County.

1. Information about prevention and dental care:

Most focus group participants said they knew how to take care of their teeth, and the importance of regular dental visits. Many parents were familiar with resources, including videos on how to brush young children's teeth, and ways to motivate their children to brush their teeth well, such as the Elmo video on YouTube, colorful toothbrushes, etc. Most said they knew to take their child to a dentist by age 1 or as soon as their baby got a tooth.

The primary sources of information on good oral health care, in the order most mentioned, were:

- » Dentists
- » Primary care doctors
- » Schools (half of WIC parents said their child received oral health information at school)
- » Programs they participate in (e.g. WIC, Senior Center, etc.)
- » Health fairs

Additional places focus group members would like to get information on the importance of oral health and what to do to take care of their teeth included, in order of importance:

- » TV (all age groups)
- » Billboards
- » Library, neighborhood newsletters, senior help line (seniors)
- » Social media (primarily Facebook), possibly texting (other adults)
- » Signs at children's playgrounds

2. Accessing dental treatment:

In addition to the issues listed previously, the most common reasons for not seeing a dentist were:

- » Not knowing a good, competent dentist who takes Medi-Cal. This by far, was the biggest barrier.
- » Transportation: getting to the dentist and/or having a dentist who is closer.

3. Experience with dentist:

Consumers who had good experiences listed the following two elements as most important:

- » Dentist was friendly, compassionate, not rushed, and answered their questions.
- » "They helped me through my fear and treated me like a person, not a thing in a chair."
- » They felt confident they received good care and got the treatment they needed. Dentists told the patient how to take good care of their teeth.

Additional comments included:

- » Dentist was gentle and there was no pain
- » Easy to get to office

- » Short wait time
- » Dentist was child-friendly, gave their child a toy and knew how to make it fun
- » Had translation (Spanish)

The following were most often mentioned as being part of a bad experience with the dentist:

- Cost. Most focus group participants noted that care was expensive whether or not they had insurance and that there was inconsistency of costs among dentists. Many didn't know what treatment would cost before receiving it, didn't understand what Medi-Cal covers or that Medi-Cal covers dental services. Few dentists take Medi-Cal or other dental insurance plans.
- Treatment. Many felt they did not receive good treatment and they still had dental problems afterwards. Some were undertreated while others thought they were over-treated. Some dentists were rough, and it hurt, others were unfriendly or didn't give them good information.
- Parents of children with special needs had many experiences where dentists didn't know how to treat their children appropriately, expecting them to be quiet or respond in a way that they were incapable of. Dentists didn't take the extra time that was needed to help with their fears, or to provide resources including books, toys, etc. that would help prepare their child for their visit to be successful.
- » Long wait times both to get an appointment, as well as at the dentist office. This was particularly a problem for children who have a shorter attention span.

REQUESTS TO IMPROVE SERVICES AND ACCESS TO SERVICES:

When asked "What is the one most important thing to improve?" participants stated the following in order of what was said most frequently:

- Address cost: Having Medi-Cal fully cover dental or improving insurance coverage was the most frequently stated need for improvement. Help people get on Medi-Cal.
- Provide current information, particularly on what Medi-Cal covers and a list of competent dentists including those who accept Medi-Cal and who are in proximity, updated annually and distributed widely.
- » Friendly, patient-oriented dentists who know how to treat all children. Have more dentists, so the wait time is less.
- » Transportation to the dentist (mentioned much less frequently)

OTHER SUGGESTIONS INCLUDED:

- » Widely distribute free toothbrushes, toothpaste and floss
- Train dentists on treating children with special needs, including having more books, toys and other resources for the children and the parents. This may include an "Autism Dental Day" for HMOs, partnering with dental providers, etc.

SPECIFIC INFORMATION FROM WIC FOCUS GROUP PARTICIPANTS:

- Most WIC focus group participants received oral health information from WIC although only half of the respondents knew about WIC Dental Days. All those who went were happy with the treatment, including how to take care of their child's teeth.
- » Most women said they could get a dental appointment during their pregnancy.

CONCLUSION AND RECOMMENDATIONS

County-wide efforts to increase access to oral health services by integrating oral health practices into a broad and diverse network of agencies are clearly having an impact. To continue to strengthen and build on these successful strategies and address identified gaps, the following recommendations were made by providers and community focus group participants:

- » Continue to increase the integration and cooperation between medical and dental providers and across partner agencies by:
 - » Carefully reviewing how behavioral health was integrated into medical care and determine applicability to oral health, ensuring that dental is "at the table" in all health settings and appropriate conversations;
 - » Bringing a greater diversity of stakeholders from different agencies together so that oral health issues are addressed by all primary providers, with a warm hand-off among partners;
 - » Continuing to address the limited time medical providers have with patients and review what nurses and medical assistants can do re: oral health; train medical assistants re: FV, etc.; and expand use of CDCCs at doctor's offices;
 - » Improving data sharing and exploring the potential for ways medical and dental health records could be integrated within the next five years;
 - » Expanding the number/type of agencies, and frequency of staff trainings re: importance of oral health, good oral health practices, and how to access oral health services;
 - » Engaging agency leaders to institute policies incorporating oral health into services.
- » Develop an oral health communication strategy that is:
 - » Culturally, linguistically and age-appropriate;
 - » Attractive and widely disseminated to a broad group of stakeholders;
 - » Inclusive of information on Medi-Cal Dental Program coverage, local providers who accept Medi-Cal, etc.
- Expand successful practices and collaborations tailored to priority populations such as homeless people, people with disabilities and special needs, and seniors.
- » Widely distribute toothbrushes, toothpaste and floss to underserved populations, including swag that encourages their use particularly among children.
- Employ specific strategies in this report to increase participation in oral health services at school sites. Consider piloting incorporation of tooth brushing at pre-schools.
- Continue to increase the number of providers accepting young children and pregnant women on Medi-Cal. Increase education of providers on importance of treating young children and safety of treating pregnant women.
- » Begin discussions to develop innovative solutions addressing the major systemic issues of insufficient number of dental providers, lack of affordability of dental services, and quality of treatment.

COMPLETE LIST OF INTERVIEWS, FOCUS GROUPS AND GROUP DISCUSSION PARTICIPANTS

Alameda County District-Specific Interviews

- » Axis Health Services (District 1)
- » Chabot Dental Hygiene Program (District 2)
- » Lotus Bloom Family Resource Center (District 3)
- » Ashland Place—Resource for Community Development—Housing Complex (District 4)
- » LifeLong Medical Clinic (District 5)

County-wide Interviews

- » AC Developmental Disability Council
- » Alameda County Public Health Department (ACPHD) Maternal Paternal Child and Adolescent Health
- » ACPHD Nursing
- » Beyond Emancipation Foster Care
- » ACPHD leadership
- » Healthcare for the Homeless

Alameda County District-Specific Focus Groups

- » City of Fremont Senior Programs (District 1)
- » Glad Tidings Church free lunch participants (District 2)
- » Lao Family Community Development (District 3)
- » Roots Community Health Center (District 4)
- » Telegraph WIC consumers (District 5)
- » School District Health and Wellness Coordinators (across the County)
- » Parent members of Family Advisory Councils—Help Me Grow and California Children's Services (across the County)

Group Discussions

- » ODH Prenatal Workgroup
- Integration with Primary Care Workgroup (including representatives from FQHCs, with both dental and medical providers from across the County)
- » ODH managers and staff





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