

---

# SAN JOAQUIN COUNTY ORAL HEALTH NEEDS ASSESSMENT

---

November 2018



# Table of Contents

Executive Summary.....	2
Key Findings .....	2
Next Steps .....	3
Introduction .....	4
Importance of Oral Health .....	4
Background .....	4
Best Practices in Community Oral Health .....	5
Methodology .....	5
Oral Health Strategic Planning Steering Committee.....	6
Data Sources and Collection .....	6
Findings.....	7
San Joaquin County Demographics.....	7
Oral Health Status.....	8
Dental Service Utilization.....	9
Women’s Dental Visits during Pregnancy .....	10
Medi-Cal Utilization for Children and Adults .....	10
Dental Visits to Emergency Department.....	12
Risk Factor: Tobacco Use .....	13
Access to Dental Services.....	15
Dental Provider Capacity and Distribution.....	15
Dental Transformation Initiative .....	16
CHDP Preventive Oral Health Services .....	16
Community Input.....	16
Focus Groups Findings .....	16
Environmental Scan .....	18
Conclusion.....	20
References .....	21

# Executive Summary




---

Oral health is an integral part of overall health. It is not only linked to self-esteem and personal expression, oral health is associated with quality of life as well.<sup>1</sup> Poor oral health can cause unnecessary pain, disability, and the high cost of dental services can prevent individuals and families from getting the dental care they need. Furthermore, those with unhealthy habits, like tobacco use, and those who do not receive preventive dental services are at higher risks for preventable oral diseases.



This report presents the findings from the 2018 Oral Health Needs Assessment of San Joaquin County. These findings reflect the diverse demographics of San Joaquin County, unravel barriers to accessing dental care, and reveal low utilization among underserved populations. The assessment process, guided by the San Joaquin County Oral Health Strategic Planning Steering Committee, involved an environmental scan to investigate current resources, opportunities, and gaps in care. Primary data was collected through key stakeholder interviews and focus groups. Programmatic and utilization data, or secondary data, contained herein reveal that there is an urgent need for attention to oral health issues and to services that could enhance the oral health of San Joaquin County's residents. The following summarizes the key findings of oral health in San Joaquin County.

## Key Findings


### 1. San Joaquin County children and pregnant women are significantly less likely to utilize dental services than the state average.

-  Three times as many children ages 2-11 years in San Joaquin County (28%) reported not having a dental visit in the last 12 months compared to California (9%).<sup>2</sup>
-  More than two times as many youth in San Joaquin County (44%), compared to the State (19%), reported not having a recent dental examination.<sup>2</sup>
-  Pregnant women in San Joaquin County visit dentists at a lower rate (29%) than the statewide average (43%).<sup>3</sup>


### 2. Preventable dental conditions among young children are a major issue.


-  Child Health and Disability Prevention (CHDP) program providers who have included a dental assessment as part of their well-child visit have identified dental conditions as the most common medical issue among children 0-5 years old.<sup>4</sup>
-  Among children entering kindergarten, 18-24% have untreated dental decay.<sup>5</sup>

### 3. There are not enough dental providers to serve the County's Medi-Cal population.

-  The dentist-to-population ratio for dentists who accept Medi-Cal beneficiaries is half of the generally accepted benchmark (1 dentist per 4,051 Medi-Cal eligible in San Joaquin County compared to 1 dentist per 2,000 Medi-Cal eligible benchmark, respectively).<sup>6-7</sup>


### 4. Adults throughout the County underutilize preventive dental services, indicating significant gaps in care.


 Twenty-two percent (22%) of adults in San Joaquin reported not having a recent dental examination.<sup>8</sup>


 During 2016, only 18% of 21-34 year old adults and 20% of 35-45 year old Medi-Cal beneficiaries utilized dental services.<sup>9</sup>


**5. The water of San Joaquin Valley (including San Joaquin County) is not fluoridated** which puts the population (especially those who are medically vulnerable and underserved) at a higher risk for dental caries.<sup>10</sup>

**6. Community input revealed community experiences and barriers to equitable access to local oral health services.**

 Among 29 focus group participants, 58.6% visit the dentist at least once a year, with the majority of those (58.8%) visiting the dentist every six months. At least 10.3% of participants had not been to the dentists in the last 10 years.

 Focus group participants identified the main barriers to care, which included cost, transportation, fear, and competing health issues. Other barriers included long wait times, short hours of operation, and customer service.

 Most focus group participants had limited awareness of the relationship between tobacco use and oral health.

 Existing infrastructure within the County, including the San Joaquin Treatment & Education for Everyone on Teeth & Health (SJ TEETH) Collaborative, St. Raphael's Free Dental Clinic, Stockton Unified School-based Dental Program, and the CHDP program were identified as strengths.

## Next Steps

In summary, San Joaquin County residents experience many challenges in accessing oral health care. However, there is growing awareness among various stakeholders of the importance and need to improve the oral health of the population through preventive local oral health programs and increased services.

These findings highlight the need for well-designed culturally appropriate programs that focus on children and pregnant women to increase access to, and utilization of, preventive services to improve local oral health outcomes. Increasing the capacity of dental providers and safety net clinics in San Joaquin County is an important issue that needs to be addressed as well. Given the access to care barriers and the diversity of the population, expansion of strategies such as oral health care coordination, will help decrease barriers to accessing care among the most vulnerable populations of San Joaquin County.

This needs assessment provided the basis and data upon which the County's Oral Health Strategic Plan was developed. The plan aims to address the gaps in oral health that were identified in this report, using community-based oral health best practices and approaches.

# Introduction

---

## Importance of Oral Health

Good oral health is vital to individuals, families, and society. According to the 2000 United States Surgeon General's Report, issues of the oral cavity are too often taken for granted, yet they "represent(s) the very essence of our humanity. . . allows us to speak and smile; sigh and kiss; smell, taste, touch, chew, and swallow; cry out in pain; and convey a world of feelings and emotions through facial expressions."<sup>1</sup> Oral health affects every stage of life from eating and speaking to successful employment. Investing in health promoting practices accrues over the life span, and thus should be implemented as early in life as possible, and should continue throughout the life cycle.

The impacts of poor oral health are many and can profoundly impair basic life functions.<sup>11</sup> In very young children, a painful dental infection can lead to failure to thrive.<sup>12</sup> Unaddressed dental problems are linked to frequent school absences and poor school performance.<sup>13, 14</sup> In fact, dental problems are a leading cause of school absenteeism in California, where approximately 874,000 school-days are missed per year, contributing to a loss of nearly \$30 million in funding. Students with a toothache in the last six months are four times more likely to have a low grade point average than those without a toothache. For adults, poor oral health can hinder productivity and may reduce the likelihood of employment.<sup>1</sup> Among older adults, poor oral health is associated with malnutrition and contributes to a lower Health-Related Quality of Life (HRQoL).<sup>15, 16</sup>

## Background








This report, created under the guidance of the San Joaquin County Oral Health Strategic Planning Steering Committee, in collaboration with Miriam Abrams and Associates, presents findings on the oral health status, knowledge and behaviors of County residents; analyzes barriers to accessing dental care and maintaining good oral health practices; and identifies opportunities to improve the oral health status of the County's vulnerable and underserved populations.

Funding for this needs assessment, part of a five year Local Oral Health Program (LOHP) grant to San Joaquin County, was made possible by the California Healthcare, Research and Prevention Tobacco Tax Act of 2016, which provides \$30 million annually to activities that support the California Oral Health Plan 2018-2028. California 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. Findings from this local oral health needs assessment will inform the development of the San Joaquin County Oral Health Strategic Plan and prioritize strategies that serve our most underserved and vulnerable populations. This report uses multiple data sources to create a baseline assessment of the oral health status among San Joaquin County residents. The information presented aligns closely with the goals and objectives of the California State Oral Health Program.

## Best Practices in Community Oral Health

An assessment of local oral health problems and of the barriers and gaps that contribute to them is best viewed in comparison to dental public health best practices. The following best practices are included here to create a framework, as well as to contribute to an understanding of gaps in local programs and services, which, if addressed, could effectively improve oral health at the community level.<sup>17</sup>

The following are nationally recognized best practices designed to improve oral health at the community level:




-  **Focus on prevention, including dental visits by age one, the application of fluoride varnish, and dental sealants.** The latter have shown to reduce dental decay in school age children by 80%. This upstream approach means focusing on pregnant women and young children to prevent early dental decay and build a lifetime of good oral health habits.<sup>18, 19</sup>
-  **Co-location of services** in places like Women, Infants, and Children (WIC) sites, schools, and community or senior centers;
-  **Systematic linkages to care** through oral health care coordination and other peer educators;
-  **Community-wide and individual educational messages, including oral hygiene education and skill building,** that are age, culturally, and linguistically appropriate, and delivered through trusted sources.
-  **Integration of medical and dental services,** such as the inclusion of dental screening, application of fluoride varnish, oral health education, and referral to a dental practitioner during well-child and Obstetrics (OB) visits;<sup>19</sup>
-  **Community-wide policies** that provide access to and the promotion of, clean drinking water and policies that limit consumption of sugar-sweetened beverages; and
-  **Community water fluoridation** as an effective community-based strategy to reduce dental caries.<sup>10</sup>








## Methodology

---

The needs assessment process was led by strategic planning consultants in consultation with San Joaquin County Public Health Services staff and the Oral Health Strategic Planning Steering Committee. A framework for data collection was developed using State guidelines and was informed by the Association of State and Territorial Dental Directors (ASTDD) seven-step model for Dental Needs Assessment.<sup>20</sup> The needs assessment included primary data collection in the form of focus groups and key informant interviews and secondary data was collected through available data bases and reports. .

The main areas of the assessment include:

-  Demography
-  Oral health status and utilization of services
-  Risk factors for poor oral health outcomes

-  Oral health knowledge, attitude, and perceptions
-  Resources for care: capacity of dental providers
-  Resources for care: facilities and services
-  Public Health Services programs with dental components
-  Prevention/risk reduction strategies
-  Finances
-  Additional systems of care (e.g. virtual dental home, auxiliary dental workforce, etc.)

While PHS was not able to access all of the desired data, the team explored these areas when possible. When feasible, the California baseline for each data source were included in accordance with the California Oral Health Plan 2018-2028 and/or other national indicators.

## Oral Health Strategic Planning Steering Committee

The 31-member steering committee was composed of medical and dental providers, community stakeholders, and program partners from County and community agencies. The group was convened to provide guidance on the needs assessment process and the development of a five-year oral health strategic plan. Many of these members also participated in the San Joaquin Treatment & Education for Everyone on Teeth & Health (SJ TEETH) Collaborative and were familiar with the County's needs, assets, and barriers to accessing dental services. The Steering Committee met regularly from April through November of 2018.

## Data Sources and Collection

Secondary data was collected from various sources to determine County demographics, oral health status, dental service utilization, tobacco use, and availability of dental services. Existing data on Medi-Cal dental benefits utilization were retrieved from the California Department of Health Care Services (DHCS) via their online data portal. Emergency department utilization data for preventable dental conditions was collected from the Office of Statewide Health Planning and Development (OSHPD). Other oral health status indicators were collected from DHCS, the Maternal and Infant Health Assessment (MIHA), and the PHS Child Health and Disability Prevention (CHDP) program.

Primary data was collected via community input. Four focus groups were conducted among community members at four separate agencies. Convenience sampling was used to gather participants and a small incentive was offered for participation. The sites were selected based on the populations served and the ability to coordinate a space for the focus group (e.g., low-income older adults who receive free lunch at the community center dining room). A focus group protocol with structured questions used for each group was developed by Miriam Abrams & Associates. The questions were open-ended to encourage dialogue, and also included some that were intended to learn specific information (e.g., last dental visit). The principle investigator was bilingual in English and Spanish and served as her own interpreter, when necessary. An agency staff member provided interpretation for non-English speaking Asian and Pacific-Islander participants. The focus group data were hand recorded by the facilitator during the meetings then transferred to written summary formats where the notes were analyzed.

An environmental scan consisted of nine key informant interviews and group input from the Oral Health Strategic Planning Steering Committee. Key informant interviewees were hand-selected by the Oral Health program staff with guidance from the Steering Committee. Participants were selected based on their population served, including low-income, underserved, and vulnerable populations. Interviewees included dental experts and providers, agency decision makers, and community-based organization representatives. Interviews were conducted over the telephone and were recorded by the PHS strategic planning consultant. Transcripts were analyzed through thematic coding.

## Findings

### San Joaquin County Demographics

San Joaquin County is the northernmost county within the San Joaquin Valley, where approximately 706,000 people call it home.<sup>21</sup> Like many counties throughout California, its population reflects cultural, linguistic, ethnic, racial, and socioeconomic diversity. The median age is 34.3 years and the median population income is \$59,518.<sup>21</sup> Over 41% of County residents are Hispanic, nearly 33% are white, 15% are Asian and 7% Black. Approximately 25% of residents' primary language spoken is non-English, which is two times higher than the national average. The most common non-English languages spoken are Spanish and Tagalog. Mon-Khmer/Cambodian, Hmong, and Laotian languages are present as well.<sup>21</sup>

Noticeable inequities in access to health care and in health status exist in San Joaquin County. These disparities are most notably correlated to socioeconomic status, with 40% (295,695) of the County's population eligible for the Medi-Cal program.<sup>22</sup> A breakdown of San Joaquin County's total Medi-Cal certified eligible population is shown in Figure 1.

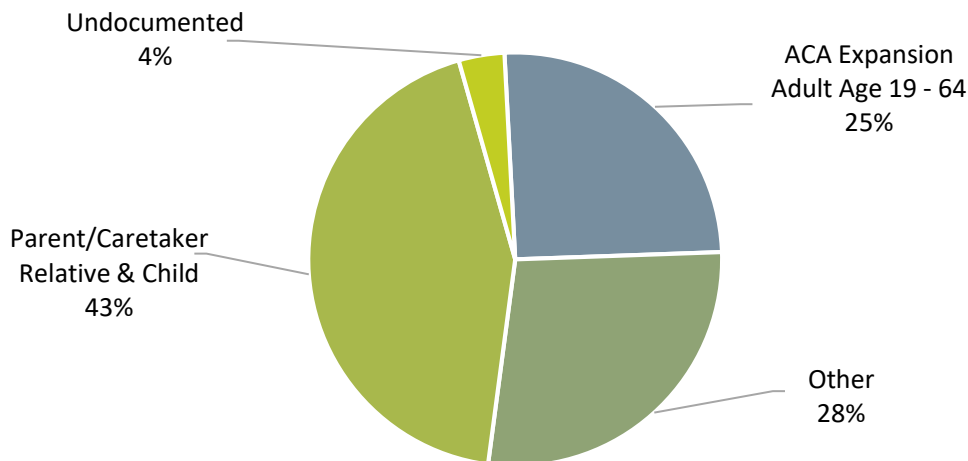


Figure 1: Distribution of San Joaquin County Medi-Cal Eligible Population, 2018<sup>22</sup>



The Free and Reduced Priced Meal (FRPM) Program can be used as a proxy for poverty and for guiding program planning. In San Joaquin County, a larger percentage (64.39%) of school age children qualify for the FRPM compared to California (60.11%).<sup>23</sup>

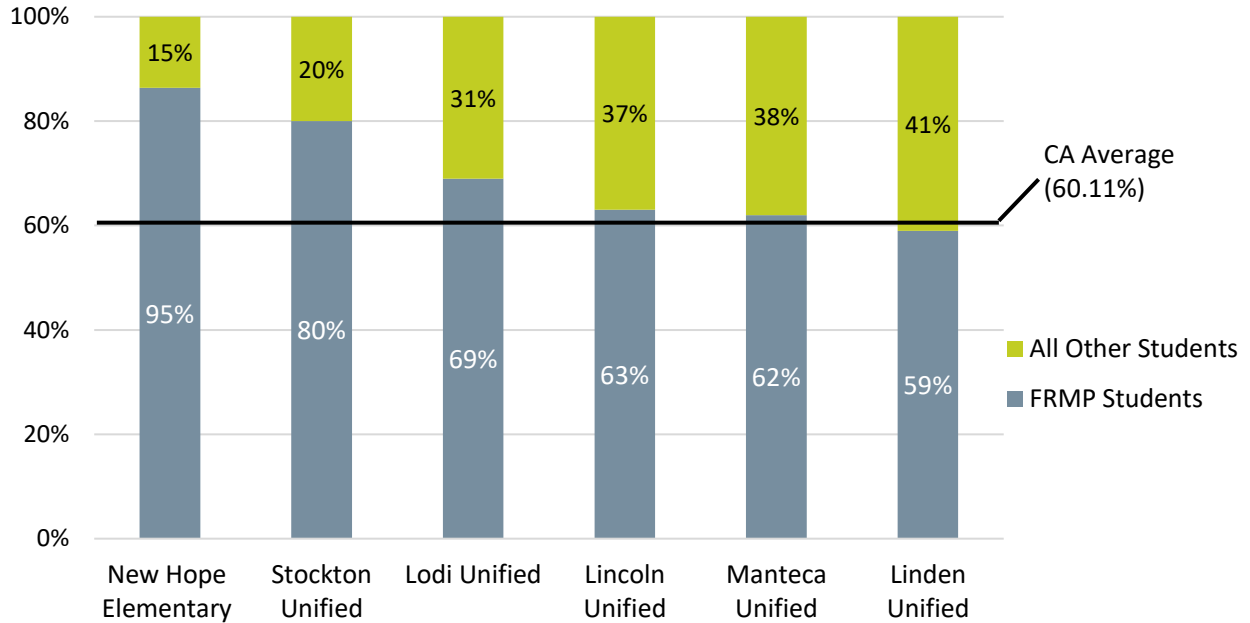


Figure 2: Percentage of Students Participating in the Free and Reduced Price Meal Program in San Joaquin County School Districts (2017-2018)<sup>23</sup>

## Oral Health Status

Among San Joaquin County CHDP program providers who have included a dental assessment as part of their CHDP well-child visit, dental conditions were the most commonly identified medical issue among children age 0-5.<sup>4</sup> Among 1,724 well-child visits, 721 were identified with dental issues.

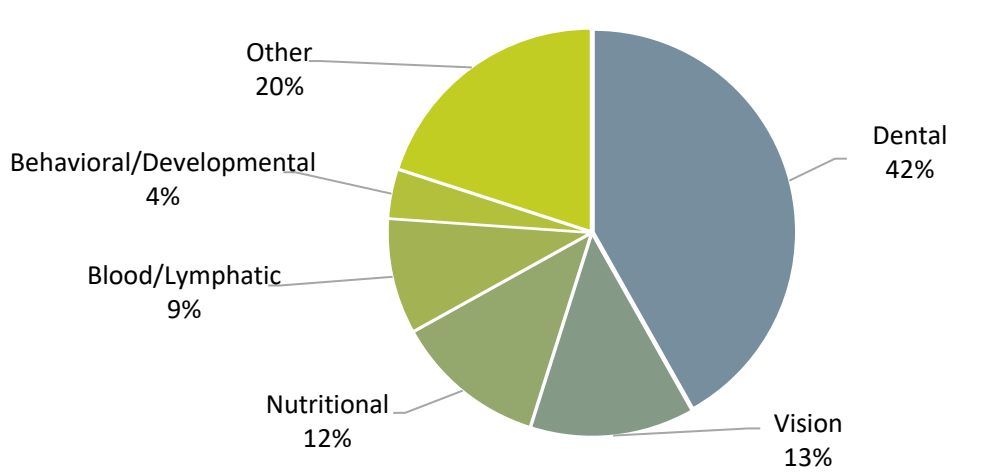


Figure 3: Type of Medical Issues Identified during Well-Child Visits by Child Health and Disability Program Providers<sup>4</sup>

Schools play an important role in ensuring students have access to necessary dental services. In 2006, the California Assembly Bill 1433 (AB 1433), also known as the Kindergarten Dental Check-up Requirement, was enacted to support student readiness and success, and ensure that every child has a dental home.<sup>5</sup> Through this mandate, schools enable the identification of students entering school who have untreated dental disease. These findings can assist families in connecting to dental care.

Figure 4 shows the percentage of students entering kindergarten or 1st grade who participated in the assessment, with untreated tooth decay. The trend has slightly decreased from 24% to 18% for untreated decay over the past six years; however, a large proportion of children still present with untreated dental conditions.<sup>5</sup>

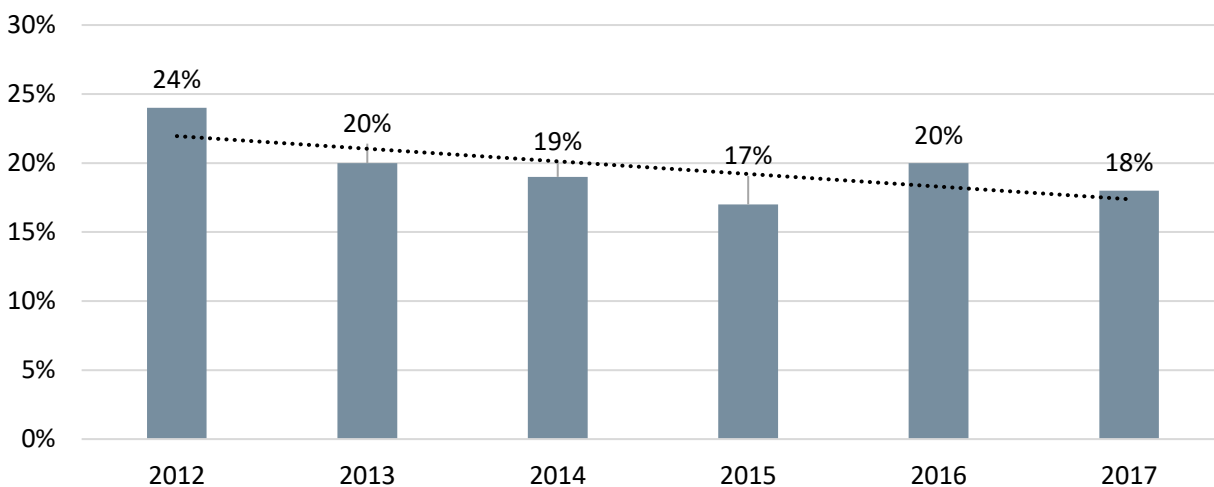





Figure 4: Percentage of Untreated Tooth Decay among Kindergarten Students Entering San Joaquin County Public Schools<sup>5</sup>

People with disabilities are at higher risk for dental caries and often have specific needs for dental care. During 2017, Valley Mountain Regional Center surveyed social work case managers who provide services to children and adults with disabilities.<sup>24</sup> Access to dental care was the top issue reported by case managers. The three main barriers to accessing dental care were identified as:

-  Lack of dental anesthesiologists
-  Lack of oral surgeons
-  Lack of dentists

## Dental Service Utilization

Visiting the dentist in the last 12 months indicates the frequency and efficacy of dental service utilization. Timely dental visits can help to prevent and identify oral health disease early. Utilization of Medi-Cal preventive dental services, sealants, and annual dental visits, are all indicators of having access to preventive services and continuity of oral health care.

As reported in the 2016 San Joaquin County Community Health Assessment, more than two times as many youth in San Joaquin County (44%) compared to California (19%) reported not having a recent dental exam.<sup>2</sup> Only 32% of adults reported not having a recent dental exam, similar to the State average (31%).

### Women’s Dental Visits during Pregnancy

During pregnancy, good oral health is important; however, few women in San Joaquin County receive dental care during pregnancy. Among women who had a live birth in San Joaquin County in 2015-2016, 29% reported a dental visit during their pregnancy, a significantly lower percentage than the State average (43%).<sup>3</sup> While this rate is low for all pregnant women, there are disparities based on age, income, insurance status, and race/ethnicity.

Pregnant women over the age of 35 have higher utilization (45%) of dental services during pregnancy compared to the younger ages (33.1%\* for ages 15-19 and 25.4% for ages 20-34).<sup>3</sup> Table 1 shows, Asian/Pacific Islanders (API) and Blacks visit the dentist while pregnant less frequently than Whites (26.0%, 14.9%, and 41.7%, respectively). Hispanic women also visit the dentist during pregnancy at a lower rate than White women (25.0% and 41.7% respectively).<sup>3</sup>

Utilization is low among all family income levels at or below the Federal Poverty Level (FPL); however, the main disparity is between women between 101-200% FPL and >200% FPL.<sup>3</sup> This signifies the difficulty of accessing care for the working poor who may not qualify for Medi-Cal and still face many barriers to accessing dental care. Pregnant women who have private insurance report visiting the dentist at a higher rate (43.3%) than women enrolled in Medi-Cal (22.3%).<sup>3</sup> This is particularly notable, as pregnant women with Medi-Cal insurance have full dental benefits; this indicates the need for more awareness and education about Medi-Cal benefits and the importance of oral health care during pregnancy.

Table 1

*Receipt of Dental Visit during Pregnancy among San Joaquin County Women, 2015-2016<sup>3</sup>*

DDS Visit	Race/Ethnicity				Family Income			Health Insurance	
	White	Hispanic	API	Black	0-100% FPL	101-200% FPL	>200% FPL	Medi-Cal	Private
29.0%	41.7%	25.0%	26.0%*	14.9%*	28.1%	18.6%	39.1%	22.3%	43.3%

\* Estimate should be interpreted with caution due to low statistical reliability (RSE is between 30% and 50%).

### Medi-Cal Utilization for Children and Adults

Medi-Cal utilization rates of preventive dental services among all racial/ethnic groups of children ages 0-20 in San Joaquin County are at or below the State baseline of 37.8%, with the exception of Hispanics who are slightly over the California baseline (38.4%).<sup>9</sup> All fall well below the State goal for preventive services utilization.

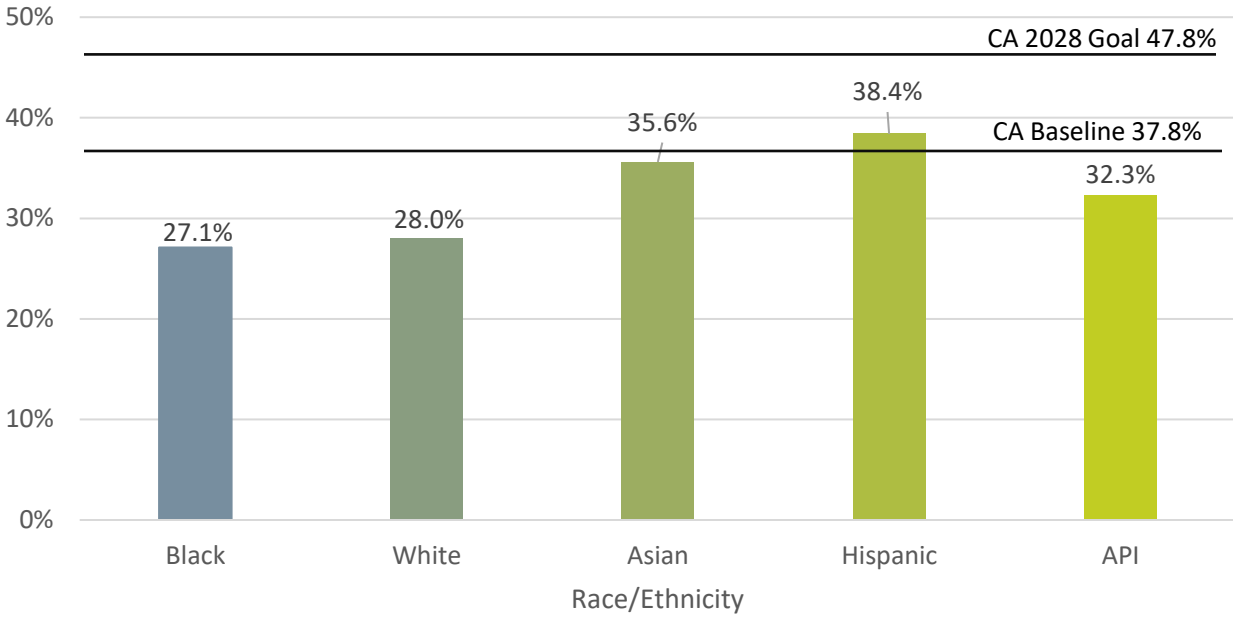


Figure 5: Preventive Dental Service Utilization among Medi-Cal Beneficiaries age 0-20 San Joaquin County, by Race/Ethnicity<sup>9</sup>

Sealants on permanent molars are the most effective strategy to prevent dental cavities.<sup>25</sup> To be most effective, sealants should be applied as soon as the permanent teeth erupt or between the ages of six and nine years. In San Joaquin County, sealant usage among children ages 6-9 years who have Medi-Cal is similar to the state average across years and among all racial/ethnic groups.<sup>9</sup>

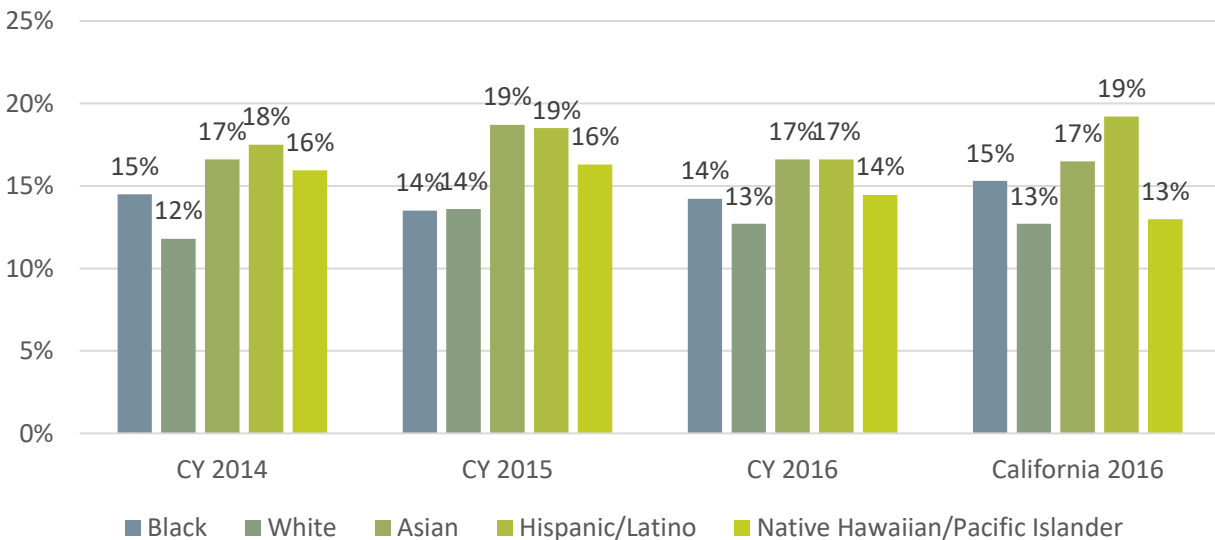


Figure 6: Dental Sealants among Medi-Cal Beneficiaries ages 6-9 in San Joaquin County by Race/Ethnicity, 2014 – 2016, California comparison 2016<sup>9</sup>

Annual dental visits for adults ages 21-44 years among San Joaquin County Medi-Cal beneficiaries has increased from 2013-2016, but remains slightly lower than the state average for adult utilization.<sup>9</sup>

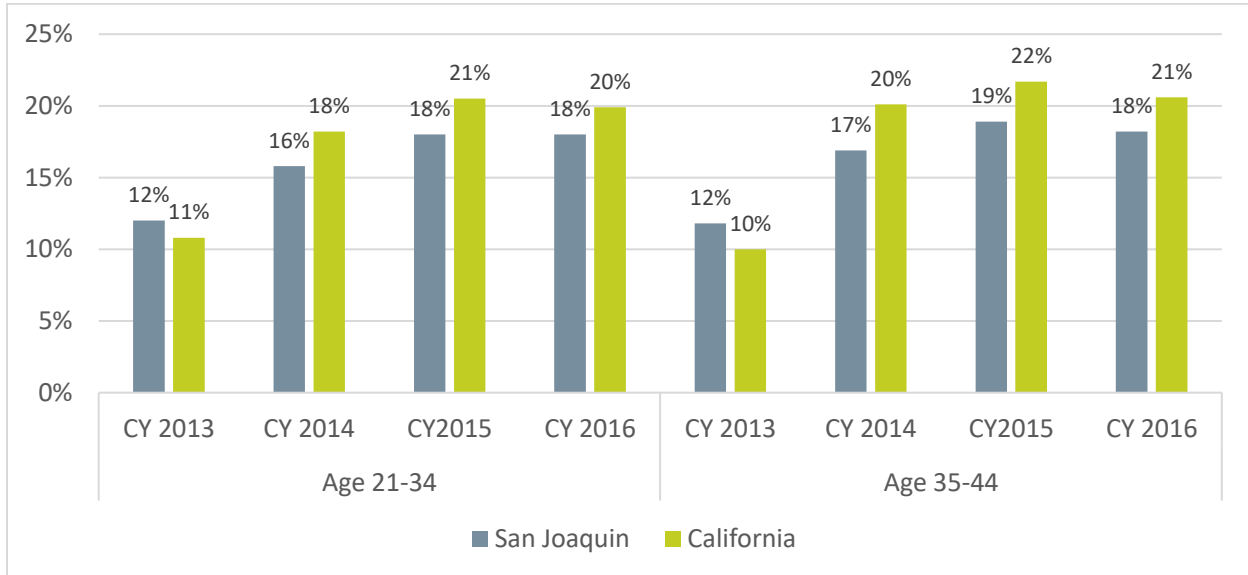


Figure 7: Annual Dental Visit among Medi-Cal Beneficiaries ages 21-44 in San Joaquin County, 2013-2016<sup>9</sup>

### Dental Visits to Emergency Department

Emergency departments are not an ideal destination for dental care; nevertheless, they are used quite often for addressing emergent dental issues. In 2012, emergency departments in California had approximately 113,000 visits for preventable dental conditions.<sup>26</sup> Not only are these treatments more costly, they do not necessarily address the underlying dental condition and typically focus on reducing inflammation and pain.

In San Joaquin County, the rate of emergency department visits for Non-Traumatic Dental Conditions (NTDCs) that are classified as Caries/Periodontal/Preventive Conditions (CPP) is lower than that for the state. The largest percentage of emergency department visits (44%) for CPPs is among adults ages 21-34 years.<sup>26</sup> Approximately 4% of emergency department visits for CPPs were children ages 0-5 years. While this is lower than other age groups, it signifies that very young children end up in the emergency department for preventable dental conditions.

More than 70% of the visits to emergency department in San Joaquin County due to CPPs in 2016 were billed to Medi-Cal (n= 3,206).<sup>26</sup> This indicates that a disproportionate amount of individuals on Medi-Cal visit the emergency department for dental care compared to those with private insurance.

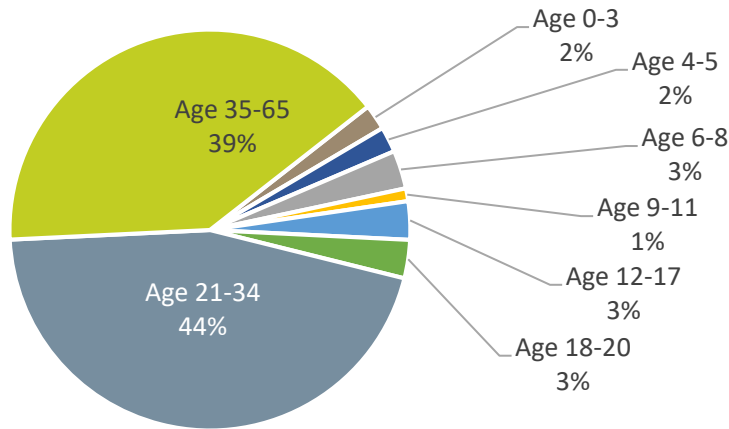


Figure 8: Emergency Department Visits for Caries/Periodontal/Preventive Conditions (CPP) by Age Group, San Joaquin County, 2016<sup>26</sup>

Note: The percentage of NTDCs does not exclude visits from the same person coming multiple times and are not age-adjusted.

## Risk Factor: Tobacco Use

Tobacco use causes major adverse effects on health and well-being. Half a million Americans die prematurely from smoking each year. Smoking and tobacco exposure cost about \$300 billion per year.<sup>27</sup>

As mentioned in the Status of Oral Health in California: Oral Disease Burden and Prevention 2017, the adverse effects of tobacco use on oral health are well established and the use of any form of tobacco has been recognized as a major cause of oral and pharyngeal cancers.<sup>27,28</sup> Half of all periodontal disease cases in the United States may be attributable to cigarette smoking.<sup>29</sup> Furthermore, smoking increases inflammation of the gum leading to periodontitis and eventual tooth loss, and affects the successful healing of oral wounds and periodontal therapy.<sup>30,31</sup>

Tobacco control programs, like San Joaquin County’s Smoking and Tobacco Outreach and Prevention Program (STOPP), help to reduce morbidity, disability, and mortality related to tobacco use.<sup>28</sup> Like many other tobacco control programs, STOPP promotes tobacco cessation, prevention, policy, and environment change.

According to the Robert Wood Johnson Foundation’s County Health Rankings & Roadmaps, the percentage of adult smokers in San Joaquin County is trending downward, similar to the state of California.<sup>32</sup>

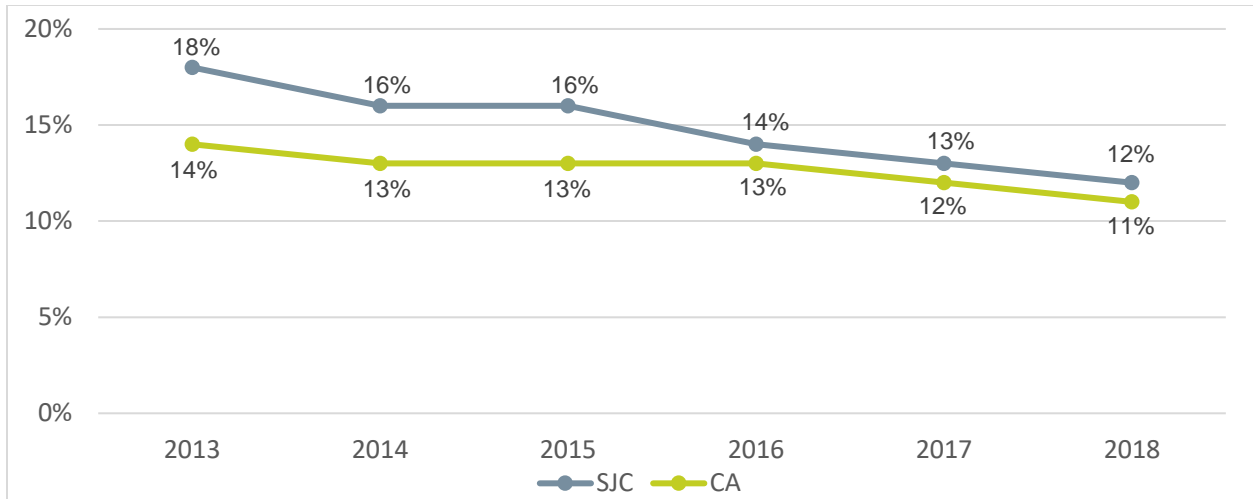


Figure 9. Adult Smoking Rate, 2011-2018<sup>32</sup>

In the California Healthy Kids Survey (2017), San Joaquin County youth were asked if they ever used tobacco in their lifetime. Lifetime use increased by grade, and electronic, or e-cigarettes, were more commonly used when compared to cigarettes.<sup>33</sup> Figure 10 shows that the preferred method of tobacco use among youth tends to be e-cigarettes or other vaping devices.

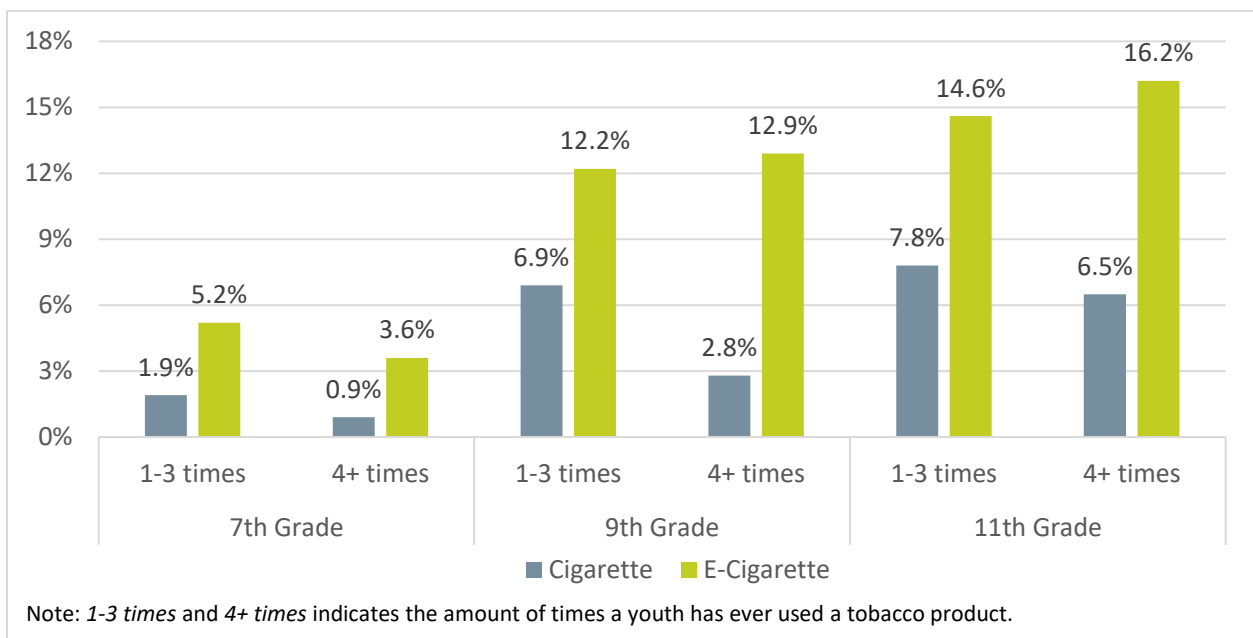


Figure 10. Lifetime Tobacco Use, by Grade Level in San Joaquin County, 2013-2015.<sup>33</sup>

## Access to Dental Services

### Dental Provider Capacity and Distribution

In the County, there are 73 dental providers who accept Medi-Cal patients, of which 29 are taking new patients.<sup>6</sup> Only two of 19 (11%) community clinics provide dental services in San Joaquin, which is below California average of 68%.<sup>34, 35</sup>

Table 2

*Federally Qualified Health Centers Providing Dental Services<sup>34, 35</sup>*

FQHCs providing Dental Services	N	%
San Joaquin County Baseline (2018)	2	11%
California Baseline (2018)	886	68%
California Target (2025)	974	74%

### Capacity of Denti-Cal Providers

One measure to determine if the capacity of the dental care system is able to meet the needs of underserved populations, is to review the provider to population ratio. The generally accepted benchmark of patients for a dental practice is 2,000 patients per dentist. The ratio for San Joaquin County is calculated as 4,051 Medi-Cal eligible patients per dentist accepting Medi-Cal patients.<sup>6,7</sup> This calculation was based on the number of dentists enrolled as Medi-Cal providers; this ratio is approximately half of the State benchmark.

### Geographic Distribution of Denti-Cal Providers

As noted in the map below (figure 11), most of the dental providers serving the Medi-Cal population are located near the urban areas of Stockton, Tracy, and Lodi.<sup>6</sup> Given the barriers to accessing dental care for people with lower socio-economic status, the geographic distance to available dentists creates an un-doubtable obstacle for the underserved population to access the needed dental care.

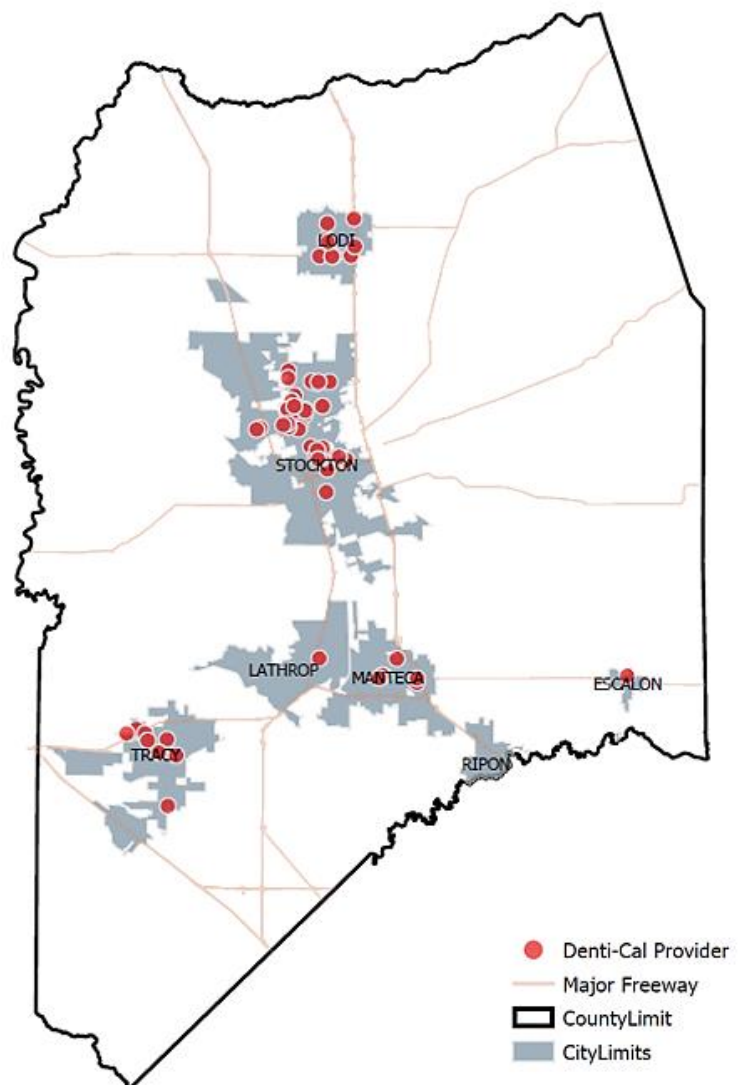


Figure 11: Geographic Location of Medi-Cal Dentists in San Joaquin County<sup>6</sup>



## Dental Transformation Initiative

In alignment with the Centers for Medicare and Medicaid Services (CMS) Oral Health Initiative, the Dental Transformation Initiative (DTI) aims to increase the statewide proportion of children ages 0 – 20 years enrolled in Medi-Cal who receive a preventive dental service in a given year.<sup>36</sup> DTI Domain I has created an incentive mechanism to encourage dentists who are enrolled as Medi-Cal dental providers to provide more preventive services. Prior to the initiation of San Joaquin County’s local DTI program in 2017, the County’s rate of preventive services for children had slightly decreased from 2014 to 2016 (-0.30%).<sup>36</sup>

Table 5

*Percentage of San Joaquin County Medi-Cal Enrolled Children Age 0-20 Years Who Received At Least One Preventive Dental Service, 2014-2016<sup>36</sup>*

Year	%
2014	36.10%
2016	35.80%
Change (+/-)	-0.30%

## CHDP Preventive Oral Health Services





In early 2018, San Joaquin County’s CHDP program surveyed their provider offices to determine what preventive dental services are being offered to CHDP children. The survey was sent to 38 provider offices and there was a 52.6% response rate. Of those who responded, 89% reported they provide fluoride varnish for children 0-5 years. When asked about counseling families to take children to the dentist by age one, 89% responded “yes” and 83% indicated they refer children to the dentist annually after age one. All respondents (100%) indicated they talk about the importance of a dental home.

## Community Input

This section captures the results of community focus groups and key informant interviews. This information revealed individual experiences and barriers to equitable access to oral health services.

### Focus Groups Findings

Four focus groups were conducted with underserved and vulnerable populations from May to June 2018. There were 29 focus group participants, consisting of:

-  Southeast Asian refugees and immigrants
-  Hispanic low-income older adults
-  African-American low-income pregnant women
-  Diverse ethnic group, low-income pregnant women

### Oral Health Knowledge

Knowledge about good oral health practices varied among groups; however, most participants knew regular dental visits are important. Forty-one percent of the participants reported seeing a dentist at least twice a year, while some reported having not seen a dentist for years.

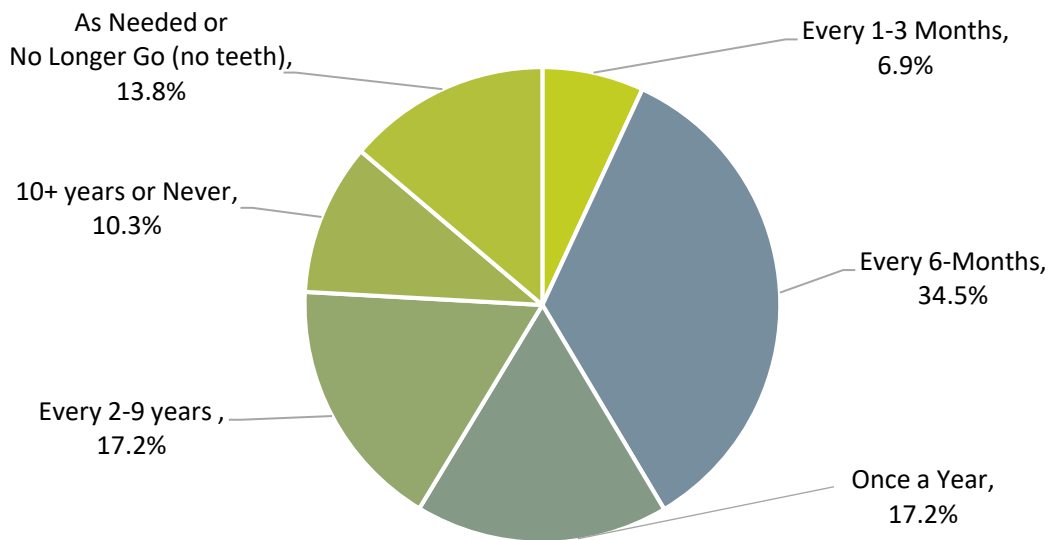


Figure 12. Frequency of Dental Encounters among Focus Group Participants

Participants shared their knowledge about good oral hygiene. Most participants mentioned that they brush their teeth regularly, though the frequency varied by participant (once a day, twice a day, two to three times per day, only at night, etc.). One participant (3.45%) mentioned changing their toothbrush every three months, 10 mentioned flossing (34.5%), and four recommended avoiding soda or sugary foods (13.8%). Focus group participants readily recognized that they did not practice the following consistently:

- 🌿 Brushing teeth after every meal
- 🌿 Flossing
- 🌿 Brushing the tongue
- 🌿 Getting regular dental cleanings
- 🌿 Going to the dentist for treatment.

### Barriers to Dental Care

The largest reported barrier to accessing dental care was the cost of services, including cost for exams, treatment and preventive care. Office practices, such as long wait times for appointments, short hours of operation, and lack of customer service were also cited by many focus group participants. Other barriers included transportation, competing health issues, and bad experiences, such as extractions without follow-up

or more extractions than mentioned prior to anesthesia. Participants expressed their fear of going to the dentist because of these bad experiences.

### *Solutions*

Focus group participants brought up some ideas on what will be helpful to improve their oral health. Most frequent suggestions were to increase the number of free or low cost services, use mobile clinics to overcome transportation issues, and increase access to care. The Asian and older Hispanic focus groups mentioned that community water fluoridation could be an acceptable method to improve oral health.

## **Environmental Scan**

Strengths, opportunities, and gaps were identified in the oral health environment in San Joaquin County. These were identified by the Oral Health Strategic Planning Steering Committee and through key informant interviews.

### *Strengths*

In this section, strengths from two different perspectives will be examined: (1) overall infrastructure and systems strengths, and (2) specific programmatic strengths in San Joaquin County. Programs listed below were identified as existing infrastructure and foundation to future work in improving local oral health:

#### San Joaquin TEETH Collaborative

First 5 San Joaquin received grant funding from DHCS DTI to initiate the Local Dental Pilot Project (LDPP). This program has created great momentum and collaboration among agencies serving children to improve children's oral health. The coalition is called the San Joaquin Treatment & Education for Everyone on Teeth & Health (SJ TEETH) Collaborative. The LDPP currently funds a number of pilot initiatives, including:

- Oral health care coordination at five partner agencies;
- Oral health screening, education, and prevention services at WIC, schools sites, and child care centers by Community Medical Centers;
- Virtual Dental Home services at schools and community sites, which includes preventive diagnostic and temporary fillings for children; and
- Literacy and oral health education through the Reach Out and Read literacy program.

#### St. Raphael's Free Dental Clinic

St. Raphael's dental clinic is under the umbrella of St. Mary's Dining Hall and has been providing free dental services to San Joaquin County's homeless and working poor individuals and families for over 60 years. The clinic collaborates with San Joaquin Dental Society, as well as, other local agencies to provide much needed care to the population most at need including uninsured individuals.





#### Stockton Unified School-Based Dental Program

Stockton Unified School District is a good example of coordinated efforts to offer school-based dental services throughout the district. This program offers a variety of services from sealants to restorative dental work. For many students, this is their sole-source of needed dental care.

#### Child Health and Disability Prevention (CHDP) Program





PHS CHDP program has been active in providing patient referrals to dental services and assisting with provider recruitment throughout the County. The CHDP program has the potential to expand its scope in oral health education and promotion.

In addition, the following areas of strengths were noted:

-  Strong collaborations between stakeholders and leaders;
-  Increased visibility of oral health programs and its importance through new initiatives that involve a large network of organizations such as SJ TEETH;
-  High level of interest and motivation across agencies to improve the oral health of the County; and
-  Ongoing data collection.







#### *Gaps*

These areas were identified as gaps in the oral health systems and access to care:

-  Lack of dental providers accepting Medi-Cal: Stakeholders identified that low reimbursement rates and high patient no-show rates are possible reasons for few providers accepting people with Medi-Cal benefits;
-  Long geographical distances for County residents to access dental services and transportation barriers;
-  Language barriers, especially for immigrant families speaking Asian languages; and
-  Homeless, seniors, and people with disabilities face additional barriers in accessing care.

#### *Potential solutions*

Key Informant Interviews identified the following as potential solutions to the aforementioned gaps:

-  Cross-train staff at different agencies, including members of the SJ TEETH collaborative;
-  Optimize coordination and streamlining of processes and forms used in oral health care coordination and oral health education across agencies;
-  Expand and sustain the workforce of oral health care coordinators;
-  Expand the Virtual Dental Home project and its integration with other services, such as school-based and early childhood programs;
-  Conduct systematic outreach to dental providers and encourage them to accept more Medi-Cal patients;
-  Increase community oral health awareness and education through promotional media campaigns;

- 🌱 Support policy and advocacy efforts to improve access to care for underserved populations, including policy changes in the Medi-Cal dental program (e.g. increasing providers' reimbursement rate); and
- 🌱 Create sustainability through funding and programs for ongoing improvements in the community's dental health and access to dental services.

## Conclusion

---

The results of the San Joaquin County Needs Assessment highlight the urgency and high level of need in this County: the oral health status is poor; the utilization of dental services (particularly among children and pregnant women) is below the State average; dental providers (especially those who accept Medi-Cal) are few and concentrated in urban areas; and there are significant barriers to accessing dental care. While these factors influence all County residents, vulnerable communities are suffering the most. This needs assessment highlights the importance of planning and implementing effective community-based oral health strategies.

## References

---

1. U.S. Department of Health and Human Services. (2000). Oral health in America: A report of the Surgeon General. Rockville, MD: U.S. National Institute of Dental and Craniofacial Research, National Institutes of Health.
2. California Health Interview Survey. (2014). CHIS 2013 – 2014 child public use file. Los Angeles, CA: UCLA Center for Health Policy Research.
3. California Department of Public Health. (2017). Maternal and infant health assessment survey. Retrieved from <https://www.cdph.ca.gov/Programs/CFH/DMCAH/MIHA/Pages/Data-and-Reports.aspx>.
4. San Joaquin County Child Health Disability and Prevention program. (2018). San Joaquin County Public Health Services (January 1, 2016- June 30 2017).
5. California Dental Association. (2018). Kindergarten oral health assessment. Retrieved from <https://www.cda.org/PublicResources/CommunityResources/KindergartenOralHealthRequirement/AB1433Results/tabid/253/u1074q/73616E206A6F617175696E/Default.aspx>.
6. California Department of Health Care Services. (2018). Medi-Cal dental program: Denti-Cal provider directory. Retrieved from <https://www.denti-cal.ca.gov/find-a-dentist/results?page=1&state=ca&distance=100&location=&countyCode=39&specialtyId=#results>.
7. California Department of Health Care Services. (2018). Medi-Cal Certified Eligible, Most Recent 48 Months. Retrieved from <https://www.dhcs.ca.gov/dataandstats/statistics/Pages/Medi-Cal-Certified-EligiblesRecentTrends.aspx>
8. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. (2016). Additional data analysis by CARES (2006-2010). Retrieved from <https://healthiersanjoaquin.org/pdfs/2016/oral%20health.pdf>.
9. Department of Health Care Services; Medi-Cal Dental Services Division. (2017). Dental utilization measures and sealant data (2013-2016). CHHS Open Data Portal. Retrieved from <https://data.chhs.ca.gov>.
10. Centers for Disease Control and Prevention. (2018). Community water fluoridation. Retrieved from <https://www.cdc.gov/fluoridation/index.html>
11. Casamassimo, P.S., Thikkurissy, S., Edelstein, & B.L., Maiorini, E. (2009). Beyond the dmft: The human and economic cost of early childhood caries. *Journal of the American Dental Association*, 140(6), 650-657.
12. Sachdev, J., Bansal, K., & Chopra, R. (2016). Effect of comprehensive dental rehabilitation on growth parameters in pediatric patients with severe early childhood caries. *International Journal of Clinical Pediatric Dentistry*, 9(1), 15-20.
13. Pourat, N., & Nicholson, G. (2009). Affordability of needed dental care is linked to frequent school absences, pre-publication manuscript. Los Angeles: UCLA Center for Health Policy Research.
14. Seirawan, H., Faust, S., & Mulligan, R. (2012). The impact of oral health on the academic performance of disadvantaged children. *American Journal of Public Health*, 102(9), 1729-1734.
15. Hyde, S., Satariano, W. A., & Weintraub, J.A. (2006). Welfare dental intervention improves employment and quality of life. *Journal of Dental Research*, 85(1), 79-84.

16. Association of State and Territorial Dental Directors (ASTDD). (2018). White paper: Improving oral health access and services for older adults. Retrieved from <https://www.astdd.org/docs/improving-oral-health-access-and-services-for-older-adults.pdf>.
17. Handler, A., Issel, M., & Turnock, B. (2001). A conceptual framework to measure performance of the public health system. *American Journal of Public Health, 91*(8), 1235-1239.
18. Chou, R., Cantor, A., Zakher, B., Mitchell, J.P., & Pappas, M. (2013). Preventing dental caries in children < 5 years: Systematic review updating USPSTF recommendation. *Pediatrics, 132*(2), 332-350.
19. United States Department of Health and Human Services, Health Resources and Services Administration. (2014). Integration of oral health and primary care practice. Retrieved from <https://www.hrsa.gov/sites/default/files/hrsa/oralhealth/integrationoforalhealth.pdf>
20. Association of State and Territorial Dental Directors. (2003). Assessing oral health needs: ASTDD seven-step model. Retrieved from <https://www.astdd.org/oral-health-assessment-7-step-model/>
21. U.S. Census Bureau (2016) American community survey 5-year estimates (2012 – 2016). Retrieved from <http://factfinder2.census.gov>
22. California Department of Health Care Services. (2018). California Department of Health Care Services, MIS/DSS Data Warehouse 2018. Retrieved from <http://www.dhcs.ca.gov/dataandstats/statistics/Pages/Medi-Cal-Certified-EligiblesRecentTrends.aspx>
23. California Department of Education. (2018) California Longitudinal Pupil Achievement Data System (CALPADS) Fall 1, 2017-18. Retrieved from <https://www.cde.ca.gov/ds/sd/sd/files.asp>
24. Valley Mountain Regional Center. (2017). Survey of social work case managers serving both children and adults in San Joaquin, Stanislaus, Amador, Calaveras, and Tuolumne Counties.
25. Azarpazhooh, A., & Main, P.A. (2008). Pit and fissure sealants in the prevention of dental caries in children and adolescents: A systematic review. *Journal of the Canadian Dental Association, 74*(2), 171-178.
26. California Department of Public Health, Office of Statewide Health Planning and Development (OSHPD). (2016) Emergency department visit for Caries/Periodontal/Preventive Conditions (CPP).
27. California Department of Public Health. (2017). Status of oral health in California: Oral disease burden and prevention 2017. Retrieved from [https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CDCB/CDPH%20Document%20Library/Oral%20Health%20Program/Status%20of%20Oral%20Health%20in%20California\\_FINAL\\_04.20.2017\\_ADA.pdf](https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CDCB/CDPH%20Document%20Library/Oral%20Health%20Program/Status%20of%20Oral%20Health%20in%20California_FINAL_04.20.2017_ADA.pdf)
28. U.S. Department of Health and Human Services. (2014). The health consequences of smoking: 50 years of progress. A report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. Retrieved from <http://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf>
29. Tomar, S.L., & Asma, S. (2000). Smoking-attributable periodontitis in the United States: Findings from NHANES III. National Health and Nutrition Examination Survey. *Journal of Periodontology, 71*(5), 743-751.
30. Nociti, F.H., Casati, M.Z., & Duarte, P.M. (2015). Current perspective of the impact of smoking on the progression and treatment of periodontitis. *Periodontology 2000, 67*, 187-210.
31. American Academy of Periodontology. (1999). Position paper: Tobacco use and the periodontal patient. *Journal of Periodontology, 70*(11), 1419-1427.

32. Robert Wood Johnson Foundation. (2018). County health rankings & roadmaps. Retrieved from <http://www.countyhealthrankings.org/app/california/2018/rankings/san-joaquin/county/factors/3/snapshot>
33. California Department of Education. (2017). California healthy kids survey. Retrieved from <https://www.wested.org/project/california-healthy-kids-survey-chks/>
34. California Primary Care Association. (2018). Community health center profiles by County. Retrieved from <https://www.cpc.org/CPCA/CPCA/>
35. California Department of Public Health. (2018) California oral health plan, 2018 – 2028. Retrieved from <https://www.cdph.ca.gov/Documents/California%20Oral%20Health%20Plan%202018%20FINAL%20%205%202018.pdf>
36. California Department of Health Care Services. (2017). Dental transformation initiative final annual report. Retrieved from <https://www.dhcs.ca.gov/provgovpart/Documents/DTIPY1FinalReport.pdf>