El Dorado Smiles

El Dorado County

Oral Health Plan

2018 - 2022

Coordinated by

El Dorado Oral Health Advisory Collaborative

WELL DORADO
wellness happens here

December 2018

"Sometimes I wonder if education is enough to change personal beliefs around the importance of oral health care. We need to promote a sense of urgency or personal priority in going to the dentist. The challenge is how to create behavior modification that has its roots based in fear."

— Cathy Larsen

Comments, questions, and requests for information can be directed to:

El Dorado County
Public Health Division
Oral Health Program
931 Spring Street
Placerville, CA 95667
(530) 621-6313

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Executive Summary

Key Findings

Findings from the El Dorado County Oral Health Needs Assessment (October 2018) indicate over 185,000 people live in El Dorado County, and while the socioeconomic status of its residents is higher than the median in California, significant disparities exist in oral health and health care depending on one's household income, educational level, native language, and country of origin. This is especially true in children, where 36% of El Dorado County children were certified Medi-Cal eligible in May 2018. Despite having access to dental insurance, only 17% of Medi-Cal certified eligible 1 – 2 year olds and 42% of 3 – 5 year olds had a dental visit (2016), compared with a state average of 24 and 47% respectively.

Many residents are unaware that tooth decay, the most common preventable childhood disease in the US, has long-lasting repercussions, including impacts on one's lifelong physical, psychological, social and economic well-being. Parents with untreated caries do not know that they can pass this infectious disease on to their newborns through their saliva or that children should see a dentist by their first birthday. Many pregnant women believe that dental care during pregnancy is unsafe and they are unaware that a dental visit during pregnancy is actually recommended. Despite this evidence, only 55% of pregnant women in El Dorado County see the dentist during their pregnancy. Income disparities reflect just 40% of pregnant women with incomes 0-200% of the Federal Poverty Guidelines (FPG) see a dentist compared to 66% of those with incomes over 200% FPG. Other key findings are:

- 2% of infants and 1-year-old children in the U.S. (Compared with 1% in El Dorado County) have ever visited a dentist. In contrast, 87% have seen a physician (AAP, Profile of Pediatric Visits, 2010).
- 44% of Transitional Kindergartners/Kindergartners are reported to have received the mandatory school entrance oral health assessment, compared with a state average of 66% (2018).
- Key Informants identified: "The lack of dentists that accept Denti-Cal (especially those that will treat children) and the high cost of paying out of pocket for dental care" as serious issues in El Dorado County.
- The Area Agency on Aging reported: "Dental" at 13%, was identified as the top basic monthly living expense (after paying for housing) that respondents did not have enough money to pay for (2016 survey).

Recommendations

Improving the oral health for all residents in El Dorado County is important. Increasing access and enhancing oral health literacy are steps that can be taken to improve oral health on a community-wide basis. Strategies were developed based on community resources identified in the Asset Map provided in Appendix A. The disparities and suffering from oral health problems are worse among vulnerable and underserved populations throughout the county, especially in children. To address the highest needs identified in this assessment and align with the goals and objectives of the State of California Oral Health Plan, the priorities for action include:

- Caries prevention among children (0 to 20 years of age), especially young children (0-5 years of age).
- Dental visits for pregnant women during pregnancy.
- Integration of Oral Health in Primary Care.
- School-based preventive services, with a focus on low-income schools.
- Community programs providing oral health counseling, referral assistance, and case management.
- Community oral health messaging and community education.
- Surveillance systems to establish benchmarks and monitor progress.

Program Objectives

This Plan outlines the initial strategic steps towards realizing the OHAC's vision for an effective oral health system in El Dorado County. To evaluate where we are in meeting our stated objectives, quantifiable outcome measures are needed.

Healthy People 2020 (page 16) provides a comprehensive set of national goals and objectives for improving the health of all Americans. A smaller set of these objectives, called Leading Health Indicators (LHIs), has been selected to communicate high-priority health issues and actions to improve the health of the U.S. population. The Oral Health Leading Health Indicator is "to increase the proportion of children, adolescents, and adults who used the oral health care system in the past year." This demonstrates the significance of early and regular care. El Dorado County supports the HP2020 Oral Health Leading Health Indicator to increase the proportion of children, adolescents, and adults who used the oral health care system in the past year.

The following objectives were developed (with the emphasis on children, youth and those with Medi-Cal benefits) to promote and improve oral health and reach the objective outlined within this Plan. Refer to Appendix B for a detailed logic model on achieving these outcomes.

Outcome:

- By 2022, reduce the percent of kindergartners with untreated decay (in primary teeth) by 10%.

Process:

- Increase the percent of children enrolled in the Medi-Cal Dental Program who visit a dentist at least once annually by 10% by June 2022.
- By 2020, develop and implement an oral health surveillance system and report data regularly.
- By 2022, increase the number of public health programs and health professionals providing anticipatory guidance and education on oral health to children and parents.

School-Based Oral Health Program:

- Establish school-based Virtual Dental Home programs in at least 3 low-income schools by September 2019, with an additional one school annually for the following 3 years.
- Increase the number of Kindergarten children receiving assessments by 10% by the end of 2019, and 5% more annually over the next 3 years.

Dental Providers and Community Organizations:

- Increase the number of medical partners to integrate oral health into overall health by 10% by 2022.
- Increase the number of community partners engaged in preventive oral health activities in the county by 2022.

Oral Health Literacy and Outreach:

- Increase the number of oral health outreach events in the county by 10% by 2022.
- Between 2019 and 20122, maintain a fully staffed county oral health program and oral health coalition in the County.

Overview

The El Dorado County Oral Health Plan was a collaborative effort that engaged a diverse range of public health partners, community stakeholders, and El Dorado County residents to inform a shared understanding of oral health and quality of life, create a common vision for a healthy future, and build collective investment in implementing strategies to address priority issues in El Dorado County. The term of this Plan is January 1, 2019 through June 30, 2022, and has as its first priority addressing the issues affecting the oral health of children.

To guide the El Dorado County Oral Health Plan, the El Dorado County Oral Health Advisory Collaborative (OHAC) adopted the following Vision, Values and Focus:

Vision:

WE ENVISION an El Dorado where all children are cavity free; families are living healthier, longer lives due to an engaged community oral health effort that is supported by active and committed organizations working together.

Values:

In the pursuit of this vision, our actions will be guided by the following values:

- Integrity
- Collaboration
- Advocacy
- Sustainability
- Service
- Prevention

Focus:

- **Engaged Collaborative (OHAC):** To act as stewards of the Vision and actively working towards developing and improving an oral health system for El Dorado County.
- **Integrated Health System:** Comprised of medical, dental and supporting systems providing a continuum of services easily accessible to all members of the community including education, preventive, restorative and referral services.
- **Informed and Engaged Community:** Acknowledging and supporting a culture of priority for oral health.
- **Sustainability:** Create a sustainable oral health care safety net in El Dorado County by leveraging existing assets and resources; and, to form new partnerships by implement evidence-based programs.

Background

"I know I have a lot of cavities, but I can't go to the dentist because it is too expensive and I also don't have insurance. I have a lot of rotten teeth but they are falling out."

Community Survey Respondent

Poor dental health can threaten the health and normal development of young children and compromise the general health and wellbeing of adults. A growing body of research indicates that poor dental health is directly linked to a number of chronic medical conditions including cancer, diabetes, heart disease/stroke and Alzheimer's. Oral health care is particularly important for the health of infants, young children, new mothers, and women who are pregnant or may become pregnant. Untreated dental problems during pregnancy can contribute to poor birth outcomes and neonatal mortality. It can have devastating effects on the social functioning, self-esteem, productivity and overall quality of life of young and old alike.

The 2018-2022 El Dorado County Oral Health Plan (EDCOHP) is the culmination of focused efforts of El Dorado County Public Health and numerous community stakeholders who are dedicated to improving the oral health of residents throughout our county. The purpose of the EDCOHP is to provide strategies and tactics to reduce oral health disparities as they pertain to underserved areas and with vulnerable population groups, especially children. The plan focuses on five critical areas and includes outcome measures that will allow for ongoing evaluation of progress toward reaching the overall goal to improve the oral health of El Dorado County residents over the course of the next five years. We acknowledge the significant contribution by the members of the El Dorado County Oral Health Advisory Collaborative and for their commitment, dedication and creativity in developing strategies that prioritize underserved areas and populations to continue in making progress toward achieving state and local oral health goals and objectives.

Funding for the EDCOHP, part of a 5-year oral health grant to El Dorado County, came from Proposition 56, the California Healthcare, Research and Prevention Tobacco Tax Act of 2016, which provides $30 million annually to activities that support the state 2018-2022 State Oral Health Plan. El Dorado County received funding to expand the capacity to coordinate public health activities that support the five critical areas of the EDCOHP, including education, disease prevention, surveillance, linkages to treatment and case management.

Just last year, Public Health published its Community Health Improvement Plan (CHIP), a document that guides our county to make improvements in the health and quality of life for all El Dorado residents. Overall wellbeing cannot be realized without oral health, making the EDCOHP an important subset of the CHIP.

Caries (cavities) are the number one chronic disease affecting young children and are five times more common than asthma and seven times more common than hay fever. We can spend a lifetime filling cavities, extracting teeth and conducting expensive restorations (for those with the means) or we can work together to end cavities in young children through a collaborative effort focused on prevention. *We* envision *El Dorado County as a place where children can eat, sleep, play, learn & grow, free from oral pain due to caries.*

Nancy J. Williams, MD, MPH
Public Health Officer
El Dorado County Health and Human Services Agency

Cathy L. Larsen, MEd
Oral Health Coordinator
El Dorado County Health and Human Services Agency

Status of Oral Health in El Dorado County

"If we can get to kids early, we can change their oral health trajectory."

Key Informant

History

Efforts to improve the oral health of El Dorado County residents have been sporadic and isolated. Several local organizations have identified oral health as one of the "needs" or "gaps" in the overall delivery of health care locally. Until now, no attempt had been made to develop an integrated, local oral health program in El Dorado County and this is the first countywide oral health needs assessment conducted in recent times, if ever.

In its 2016 Community Health Needs Assessment, Marshall Medical Center, a nonprofit community healthcare provider located in Placerville, noted the following*: Key informants and focus group participants brought up dental health as a major concern within the Marshall HSA. Participants discussed the lack of dentists that accept Denti-Cal, the lack of comprehensive care and the high cost of paying out of pocket for dental care. One key informant explained, "Dental care is greatly needed especially for the Medi-Cal population, there are very few dentists in the area that will take them." Another service provider explained, "I can tell you that we had significant bottle mouth disease…so on the pediatric side we had a lot of dentition issues."* The assessment also reported that the rate of emergency department visits due to non-traumatic dental issues was 1 ½ times the State of California's overall rate.

In a 2018 South Lake Tahoe catchment area community needs assessment, Barton Health reported that 75% of key informants (N=81) ranked "Oral Health/Dental Care" 5th out of the "Ten Top Health Issues."

In its 2016 – 2021 Strategic Plan, *First 5 El Dorado Children and Families Commission* identified access to oral health care providers as a need. Within this plan, the commission also committed to continue to make investments in the children's health program, to provide parents with information and resources in order to increase regular well - child exams and oral health exams within the Community Hub model.

The Area Agency on Aging, in its Area Plan for 2016 – 2020, reports that respondents (n=522) to a community needs assessment were asked if, after paying for housing, they still had enough money to pay for other expenses. In those that did not, "Dental" at 12.45%, was identified as the top basic monthly living expense that respondents did not have enough money to pay for, followed by food, eyeglasses and utilities, each at 9.34%.

El Dorado Smiles

In 2016, El Dorado Community Health Centers began operation of a mobile dental clinic van, *El Dorado Smiles*. *El Dorado Smiles* is operated in partnership with El Dorado County Library Services Department, Health and Human Services Agency, El Dorado Community Health Centers (EDCHC), El Dorado County Office of Education, and the First 5 El Dorado Children and Families Commission and specifically serves school-aged youth. EDCHC dental providers with *El Dorado Smiles* offer exams, x-rays, cleanings, fluoride treatments, fillings, and emergency dental care. The mobile dental clinic van meets youth throughout the county at their respective schools on the Western and Eastern slopes of the county. During the 2017-18 school year, *El Dorado Smiles* provided dental services for 579 children, or 2.1% of the total El Dorado County public school population.

El Dorado County Oral Health Plan

The El Dorado County Oral Health Plan provides guidance for all oral health advocates. Agreed-upon goals, objectives and strategies encourage all participants to engage in collaborative work to attain identified oral health outcomes.

Goals

The overall goal is for all El Dorado County residents to have access to, and utilize, patient-centered comprehensive oral health care and education. To achieve this, the following project goals have been established:

Goal 1: To improve the oral health of El Dorado County Residents by addressing determinants of health, and promoting healthy habits and population-based prevention interventions to attain healthier status in healthy communities.

Goal 2: To align dental health care delivery systems, payment systems, and community programs to support and sustain community-clinical linkages for increasing utilization of dental services.

Goal 3: To collaborate with payers, public health programs, health care systems, foundations, professional organizations, and educational institutions to expand infrastructure, capacity, and payment systems for supporting prevention and early treatment services.

Goal 4: To develop and implement communication strategies to inform and educate the public, dental care teams, general public and decision makers about oral health information, programs, and policies.

Goal 5: Develop and implement a surveillance system to measure key indicators of oral health and identify key performance measures for tracking progress.

Group Key

This plan identifies target goals, objectives and outcomes for achieving optimal oral health in El Dorado County, as well as evidence-based strategies and activities for achieving these outcomes. For each of the key areas detailed on the subsequent pages, the following icons identify stakeholder groups to whom specific activities will be most relevant. Refer to Appendix A for an Asset Map of the El Dorado County Oral Health Program stakeholders.

Community Based Organizations: Any non-health related group with a mission to improve health in its community.

Community Health Organizations: Any group that provides, trains for, or advocates for oral health (i.e., safety net organizations, professional health organizations, local health departments).

Educators: An individual who provides knowledge or training to promote oral health.

Individuals: A person acting to better his/her personal health or that of others.

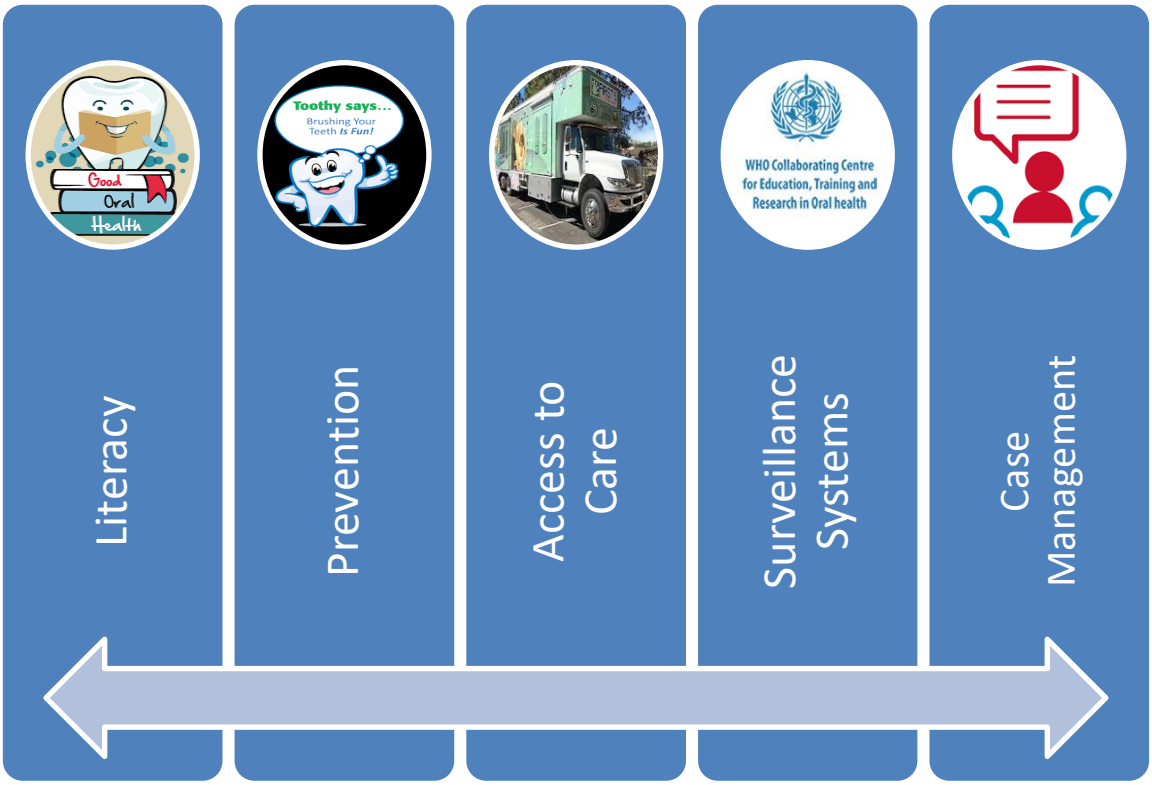
Policy Makers, Government & Funders: Those who influence or determine laws, policies, practices, and funding at a state, or local level.

Oral Health Collaborative: A local alliance whose purpose is to connect El Dorado County oral health advocates in a collaborative effort to ensure the best oral health care, access and outcomes for all residents.

Providers: An oral health or primary care professional responsible for delivering health care.

Five Key Elements of the Oral Health Program

To help achieve the goals and objectives of this Plan, strategies (located on the following pages) were developed in five key areas, or elements. While the overarching goal of promoting five elements of health is to improve oral health for all residents of El Dorado County, each element has unique benefits and impacts on population health.



Oral Health Literacy

Oral health is the single greatest unmet need for health services among children in El Dorado County. Increasing community-wide knowledge of steps to take to achieve and maintain long-lasting oral health help to overcome oral health care disparities and human suffering. Medical and dental health professionals, as well as community programs, can promote good oral hygiene by teaching and encouraging parents to make wise decisions about their children's food and to regularly floss and brush teeth. Professional evaluation of oral health and referral to a dental home should be part of well child care in the doctor's office, and regular preventive dental care should begin in early childhood by age 1. Facilitating easier access to preventive dental information and services helps families who are facing multiple stressors to meet life's basic needs. Dentists trained in assessing and treating children less than 2 years of age are needed. See Appendix A for a listing of evidence-based educational program resources.

Disease Prevention

Prevention is cost-effective. According to the American Academy of Pediatric Dentistry, costs to treat symptoms related to dental disease are up to ten times those of providing preventive dental services. For schools, dental pain results in lost revenue from Average Daily Attendance (ADA) funding. For children, dental pain results in poor nutrition, low self-esteem, sleep difficulties, missed days at school, and poor school performance. Enhancing school-based and community-based preventive dental services by dental hygienists and others including screening, cleaning, application of fluoride varnish and dental sealants, preventive education, and structured referral processes are cost-effective investments.

Access to Care (Linkages to Treatment)

Suffering from oral health problems in El Dorado County is worse among vulnerable and underserved populations. The provision of preventive information and services in easily-accessible locations alleviates discrepancies in oral health. Linkages to treatment can be improved when clinical, public health and community sectors work together. One proven strategy for reaching children and adolescents at high risk for oral disease is through programs with linkages to oral health professionals and other health partners in the community. These programs serve as models for improving access to oral health education, prevention, and treatment services for school-age children and adolescents at high risk for oral disease. Linkages to treatment are dependent on continued support and encouragement to engage in collaborative efforts of the oral health stakeholders and to enabling the realization of the group's vision.

Surveillance Systems

There are significant gaps in local oral health data due to the lack of a coordinated effort. This makes it difficult to measure the overall oral health status of the county and any changes over time. Assessing the effectiveness of efforts to prevent and reduce dental decay by analyzing local data is vital to making informed decisions on future activities. Establishing oral health surveillance systems is a strong recommendation of the EDCOHP to evaluate the effectiveness of the oral health program.

Case Management Services

Outreach and case management services are vital to enabling vulnerable and high risk populations to access oral health care and effective preventive interventions. Integrating, enhancing, supporting and collaborating oral health case management services in existing programs for children and families (preschools, Head Start, schools, WIC, CHDP, etc.) will help to significantly reduce oral health disparities in the county.

Resources and Assets

The key to successful implementation of these five elements lies in the ability of the local community to form a seamless integration of oral health into is core operations. Essential resources and assets are identified in Figure 1 and in Appendix A.

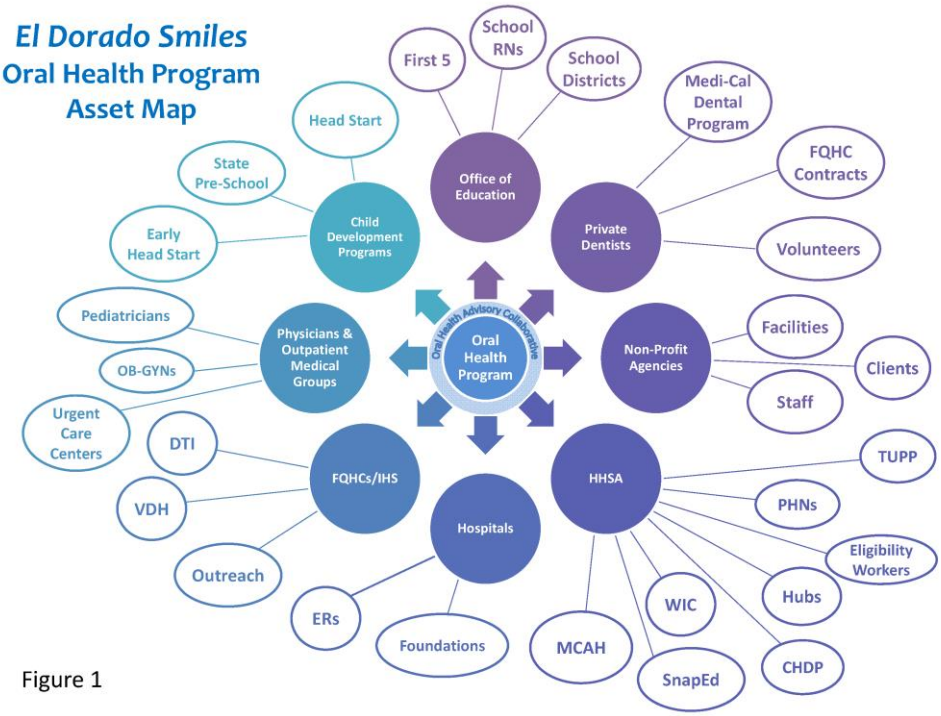


Figure 1

Goal 1:

To improve the oral health of El Dorado County Residents by addressing determinants of health, and promoting healthy habits and population-based prevention interventions to attain healthier status in healthy communities.

OBJECTIVES

1. **Increase the number of Kindergarten children receiving assessments by 10% by the end of 2019, and 5% more annually over the next 3 years.**
2. **By 2022, reduce the percent of kindergartners with untreated decay (in primary teeth) by 10%.**

Strategies:

- Join the El Dorado County Oral Health Advisory Collaborative and actively participate in strategies to ensure that community oral health needs are met.
- Explore the role of oral health as it impacts program mission and take steps to strengthen oral health within programs.
- Provide parent/family education about caries and early childhood caries (ECC), including a "caries are contagious" and "First Tooth – First Birthday = First Dental Visit" campaigns.

- Ensure that evidenced-based oral health education is a part of the school health curriculum (e.g. America's ToothFairy, Teeth for Tots).
- Participate in *El Dorado Smiles* school-based preventive oral health program.
- Provide opportunities for children to brush their teeth when they are in a location for four hours or more or have had a meal.

- Assist in developing and promoting public education campaigns focused on cavities prevention, fluoridated community water supplies, fluoride varnish and sealants.
- Promote education and resources for providers to reach underserved populations (pediatric, teens, elders, developmentally disabled, etc.).

- Attend primary care oral health training to become confident in the ability to promote caries prevention, perform oral health assessments, and oral health anticipatory guidance (AAP & AAPD recommendations).
- Provide parent/family education about the importance caries prevention.
- Accommodate/promote infant and toddler dental visits in WIC, Early Head Start, etc.

- Support development and implementation of evidence-based programs for dental sealants, fluoride varnish and oral health education in local schools.
- Coordinate outreach programs; implement education, health literacy campaigns and promote integration of oral health and primary care.
- Develop integrated and standardized oral health education and curriculum recommendations.

- Learn about cavities and how they form ("caries are contagious" campaign).
- Understand the importance of oral health to overall health.
- Support in-school oral health literacy with school principals, at PTA meetings and with local school boards.

- Support local legislation that increases public water fluoridation.
- Promote public education campaigns and messaging focused on the "caries are contagious" campaign, fluoridated community water supplies, fluoride varnishes and sealants.

Goal 2:

To align dental health care delivery systems, payment systems, and community programs to support and sustain community-clinical linkages for increasing utilization of dental services.

OBJECTIVES

1. **Increase the number of medical partners to integrate oral health into overall health by 10% by 2022.**
2. **By 2022, increase the number of public health programs and health professionals providing anticipatory guidance and education on oral health to children and parents.**

Strategies:

- Increase the number of programs that provide preventive dental visits and dental home education in locations frequented by vulnerable and higher risk populations (WIC, Head Start).
- Provide training to non-health care organizations regarding access to dental insurance and the Medi-Cal dental program through promotion of SmileCalifornia.org and Covered California.
- Provide parent/family education about the importance of an age 1-year dental visit (1st tooth – 1st year – 1st dental visit campaign) and establishment of a dental home.

- Include oral screenings concurrently with school hearing and vision screenings.
- Promote parental oral health education and prevention including Brush, Book, Bed.
- Read story books about oral health and going to the dentist to young children.

- Assist in developing and promoting public education campaigns focused on the benefits of age 1-year dental visit, dental home, semi-annual dental visit with fluoride varnish and sealants.
- Ensure that local health agencies have available patient education resources/tools on preventive oral health, including impact of oral health on physical health.

- Contract with FQHCs to provide dental services to Medi-Cal and low-income populations.
- Partner with local schools to assist with in-school screenings, school-based/school linked oral health services and clinics.
- Integrate oral health with primary care and other family health and chronic disease programs.
- Participate in the Medi-Cal Dental Program.

- Use professional organizations to discuss workforce needs and strategies.
- Partner with the CHDP program to promote oral health educational and training resources.
- Promote the first dental visit by one year of age.
- Promote oral health by developing and implementing prevention and healthcare policies and guidelines for programs, health care providers, and institutional settings (e.g., schools) including integration of oral health care and overall health care.

- Learn about the importance of taking children for an age 1-year dental visit.
- Promote in-school screenings and school- based clinics with schools and local school boards.

- Support increased oral health education infrastructure in schools (*El Dorado Smiles*).
- Promote oral health social marketing and awareness campaigns.

Goal 3:

To collaborate with payers, public health programs, health care systems, foundations, professional organizations, and educational institutions to expand infrastructure, capacity, and payment systems for supporting prevention and early treatment services.

OBJECTIVES

1. **Establish school-based Virtual Dental Home programs in at least 3 low-income schools by September 2019, with an additional one school annually for the following 3 years.**
2. **Increase the percent of children enrolled in the Medi-Cal Dental Program who visit a dentist at least once annually by 10% by June 2022.**

Strategies:

- Include oral health in the training for traditional health workers.
- Provide opportunities for dental professionals and students to serve in a volunteer or paid capacity through collaboration with outreach programs.

- Train providers to work respectfully and proficiently with diverse communities.
- Expand the reach of current oral health education activities by engaging new stakeholders and partners and creating a collaborative approach to oral health messaging efforts.
- Educate dental students on loan repayment programs for workers in underserved areas.

- Expand access to oral health services through federally qualified health centers (FQHCs), Indian health services (IHS), provider clinics and public/private partnerships.
- Support teledentistry Virtual Dental Home in underserved areas (e.g., by having dental hygienists in the field receive supervision from a dentist electronically).

- Incentivize and educate dentists and expanded practice dental hygienists (EPDHs) to treat underserved populations.
- Educate retired professionals about incentive programs, such as reduced fees from the Board of Dentistry and Medical Teams International.
- Recruit and train multilingual and multicultural providers, educators and health system navigators.

- Promote education and resources for providers to reach underserved populations.
- Encourage collaboration and communication between oral health education institutions and community partners.
- Implement the CDC health literacy certification program.
- Establish a continuously accessible source of dental care for all infants, children and adolescents.
- Partner with professional associations to create continuing education courses for oral health professionals focused on health literacy and cultural competency concepts.

- Strengthen existing and develop new outreach programs that recruit potential dental professionals from diverse backgrounds.
- Gather county-level surveillance data to identify demographic and geographic variation, and target interventions appropriately.

Goal 4:

To develop and implement communication strategies to inform and educate the public, dental care teams, general public and decision makers about oral health information, programs, and policies.

OBJECTIVES

1. **Increase the number of community partners engaged in preventive oral health activities in the county by 2022.**
2. **Increase the number of oral health outreach events in the county by 10% by 2022.**

Strategies:

- Educate families and promote oral health importance from pregnancy through lifespan.
- Collaborate with partners to conduct public service campaigns and other multi-media advertising about the importance of a dental visit.
- Participate in community-clinical linkages.

- Develop curricula that ensure that dental and dental hygiene students are trained in business models, practice philosophies and cultural competency that support successful businesses in underserved areas of the county.
- Participate in media campaigns to ensure consistent messaging.
- Incorporate oral health as a part of a coordinated school health program.

- Provide support/training to non-health organizations for the inclusion of oral health practices.
- Volunteer to participate in pilot projects that can assess the feasibility, cost-effectiveness and health outcomes of innovative and effective workforce solutions.

- Support integration of oral health and primary care.
- Identify continuing education opportunities, including cultural competency, for dentists, dental hygienists, dental assistants and receptionists.
- Coordinate and align quality improvement, evaluation and research projects that aim to improve children's oral health in El Dorado County.
- Support community-clinical linkages for increasing utilization of dental services and referrals.

- Implement an evidence based oral health literacy campaign such as the American Academy of Pediatrics Brush, Book, Bed (BBB) Campaign.
- Inventory oral health educational materials and resources and develop evaluation criteria for determining which products meet standards for being effective, credible, and culturally and linguistically competent.
- Develop marketing strategies, interventions, and activities to achieve communication goals.

- Provide feedback on community messaging.
- Participate in oral health outreach programs and encourage others to participate as well.

- Support public service campaigns designed to reduce the rate of early childhood caries.
- Promote oral health social marketing and awareness campaigns.
- Expand programs such as the First 5 supported oral health initiatives, Healthy Kids, Healthy Teeth (HKHT Project) and VDH in WIC sites.

Goal 5:

To develop and implement surveillance systems to measure key indicators of oral health and identify key performance measures for tracking progress.

OBJECTIVES

1. **By 2020, develop and implement an oral health surveillance system and report data regularly.**
2. **Between 2019 and 20122, maintain a fully staffed county oral health program and oral health coalition in the County.**

Strategies:

- Assist in data gathering efforts by adding oral health questions to existing community surveys.
- Support client participation in children's "open mouth" surveys.
- Promote client participation in surveillance efforts.

- Establish a countywide database for tracking education, fluoride varnish (age 6 months to 18 years), sealants and other school-based preventive services.
- Share all relevant data and facts relating to the negative effects of oral problems on students' success in school.
- Support student participation in children's "open mouth" surveys.

- Support the establishment of an extensive oral health surveillance system.
- Share surveillance data among public health partners consistent with law and protection of personal confidentiality and privacy.
- Participate in a surveillance workgroup to develop a 5-year surveillance plan.

- Share surveillance data among public health partners consistent with law and protection of personal confidentiality and privacy.
- Support the establishment of an extensive oral health surveillance system.
- Test innovative solutions in local pilot projects and scale up successful strategies to improve children's oral health.

- Develop an Evaluation Plan to monitor and assess the progress and success of the Oral Health Program.
- Support the establishment of an extensive oral health surveillance system based on ASTDD guidelines and CSTE indicators for oral health.
- Coordinate the regular collection and analysis of children's oral health data including that related to disparities among vulnerable population groups.
- Identify the prevalence of caries experience, untreated tooth decay, and dental sealants.
- Use data to enhance children's oral health advocacy efforts.

- Participate in community and organizational surveys.
- Participate in school-based oral health programs.

- Support collection of ER and OR data that is related to oral health.
- Use data to enhance children's oral health advocacy efforts.
- Develop and maintain data systems for data collection, analysis, and dissemination.
- Advocate the use of an oral health screening as a school readiness indicator (Kindergarten oral health assessment under AB 1433)

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This plan was made possible through the combined efforts of countless individuals, private providers and community-based organizations. We appreciate the time everyone made available to provide insights and strategies into the oral health issues impacting residents in El Dorado County.

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Tina Alhona
Dental Supervisor
El Dorado Community Health Centers

Olivia Byron-Cooper, MPH
Program Manager/Epidemiologist
El Dorado County Health & Human Services Agency

Ellen Deutsche, RD
Nutrition Services Supervisor, WIC
El Dorado County Health & Human Services Agency

Theresa Fagouri, CHES
Health Education Coordinator, SnapEd
El Dorado County Health & Human Services Agency

Kathi Guerrero
Executive Director
First 5 El Dorado

LaVonne Hammelman, DMD
Dentist
The Smile Shop

Carl Hillendahl, DDS
Dentist
Sacramento District Dental Society

Kathryn Jeanfreau, MPH
Epidemiologist
El Dorado County Health & Human Services Agency

Patrick Klein
Development Director
El Dorado Community Health Centers

Kevin Monsma, MEd
Deputy Superintendent
El Dorado County Office of Education

Chalise Morgan, DDS
Supervising Dentist
Shingle Springs Health & Wellness Center

Jenny Pettit, MA
Director, Child Development Programs
El Dorado County Office of Education

Lynnan Svensson, MSN, RN, PHN
Nursing Program Manager
El Dorado County Health & Human Services Agency

April Westfall, DMD
Dentist
The Smile Shop

Nancy Williams, MD, MPH
Public Health Officer
El Dorado County Health & Human Services Agency

Matt Wonnacott, MD
Director
Barton Community Health Center

Healthy People 2020 Oral Health Indicators

Healthy People 2020 Objective		U.S. Target HP 2020 (%)	U.S. Baseline (various years) (%)	California Baseline (various years) (%)
OH-1	Dental caries experience			
	Young children, aged 3–5 (primary teeth)	30	33.3[a]	53.6[k]
	Children, aged 6–9 (primary and permanent teeth)	49	54.4[a]	70.9[l]
	Adolescents, aged 13–15 (permanent teeth)	48.3	53.7[a]	
OH -2	Untreated dental decay in children			
	Young children, aged 3–5 (primary teeth)	21.4	23.8[a]	27.9[k]
	Children, aged 6–9 (primary and permanent teeth)	25.9	28.8[a]	28.7[l]
	Adolescents, aged 13–15 (permanent teeth)	15.3	17[a]	
OH-3	Untreated dental decay in adults			
	Adults aged 35–44 (overall dental decay)	25	27.8[a]	
	Adults aged 65–74 (coronal caries)	15.4	17.1[a]	
	Adults aged 75 and older (root surface)	34.1	37.9[a]	
OH-4	Permanent tooth extraction because of dental caries or periodontal disease			
	Adults aged 45–64	68.8	76.4[a]	49.5[m]
	Adults aged 65–74 (lost all natural teeth)	21.6	24[a]	8.7[m]
OH-5	Moderate or severe periodontitis, adults aged 45–74	11.5	12.8[b]	
OH-6	Oral and pharyngeal cancers detected at the earliest stage	35.8	32.5[c]	23.2[n]
OH-7	Oral health care system use in the past year by children, adolescents, and adults	49	44.5[d]	
OH-8	Low-income children and adolescents who received any preventive dental service during past year	33.2	30.2[d]	
OH-9	School-based health centers (SBHC) with an oral health component			44.0[o]
	Includes dental sealants	26.5	24.1[e]	
	Oral health component that includes dental care	11.1	10.1[e]	
	Includes topical fluoride	32.1	29.2[e]	
OH-10	Local health departments (LHDs) and Federally Qualified Health Centers (FQHCs) that have an oral health component			
	FQHCs with an oral health component	83	75[f]	
	LHDs with oral health prevention or care programs	28.4	25.8[g]	

Healthy People 2020 Objective		U.S. Target HP 2020 (%)	U.S. Baseline (various years) (%)	California Baseline (various years) (%)
OH-11	**Patients who receive oral health services at FQHCs each year**	33.3	17.5[f]	18.5[p]
OH-12	**Dental sealants**			
	Children, aged 3–5 (primary molars)	1.5	1.4[a]	
	Children, aged 6–9 (permanent 1st molars)	28.1	25.5[a]	27.6[l]
	Adolescents, aged 13–15 (permanent molars)	21.9	19.9[a]	
OH-13	**Population served by optimally fluoridated water systems**	79.6	72.4[h]	63.7[q]
OH-14	**Adults who receive preventive interventions in dental offices (*developmental*)[r]**			
	Tobacco and smoking cessation information in past year	N/A	N/A	
	Oral and pharyngeal cancer screening in past year	N/A	N/A	
OH-15	**States with system for recording and referring infants with cleft lip and palate (*developmental*)[r]**	N/A	N/A	N/A
OH-16	**States with oral and craniofacial health surveillance system**	100	62.7[i]	N/A
OH-17	**State and local dental programs directed by public health professionals (PHP)**			
	Indian Health Service and Tribal dental programs directed by PHP	25.70	23.40[i]	
	Indian Health Service Areas and Tribal health programs with dental public health program directed by a dental professional with public health training	12 programs	11 programs[j]	

a National Health and Nutrition Survey, 1999–2004
b National Health and Nutrition Survey, 2001–2004
c National Program of Cancer Registries (NPCR), CDC/National Chronic Disease Prevention and Health Promotion (NCCDPHP); Surveillance, Epidemiology, and End Results (SEER) Program, National Institutes of Health (NIH)/National Cancer Institute (NCI), 2007
d Medical Expenditure Panel Survey (MEPS), AHRQ 2007
e School-Based Health Care Census (SBHCC), National Assembly on School-Based Health Care (NASBHC), 2007–2008
f Uniform Data System (UDS), Health Resources and Service Administration (HRSA)/Bureau of Primary Health Care (BPHC), 2007
g Annual Synopses of State and Territorial Dental Public Health Programs (ASTDD Synopses), Association of State and Territorial Dental Directors, (ASTDD), 2008
h Water Fluoridation Reporting System (WFRS), CDC/NCCDPHP, 2008
i ASTDD Synopses, ASTDD, 2009
j Indian Health Service, Division of Oral Health, 2010
k Data from California Smile Survey (2006) for kindergarten
l Data from California Smile Survey (2006) for 3rd grade children
m BRFSS, 2012
n CCR, 2011
o School Based Health Alliance. Of 231 health centers, 101 have some type of dental service, 49 offer preventive services only, 49 offer both preventive and restorative services, and 3 offer dental treatment only.
p HRSA, DHHS, 2013. Percentage calculated using number of patients who received dental services and total patients served. (*Source:* http://bphc.hrsa.gov/uds/datacenter.aspx?year=2013&state=CA)
q CDC 2012 Water Fluoridation Statistics
r HP 2020 developmental objectives lack national baseline data. They indicate areas that need to be placed on the national agenda for data collection.

Appendices

Appendix A

Oral Health Program Asset Map

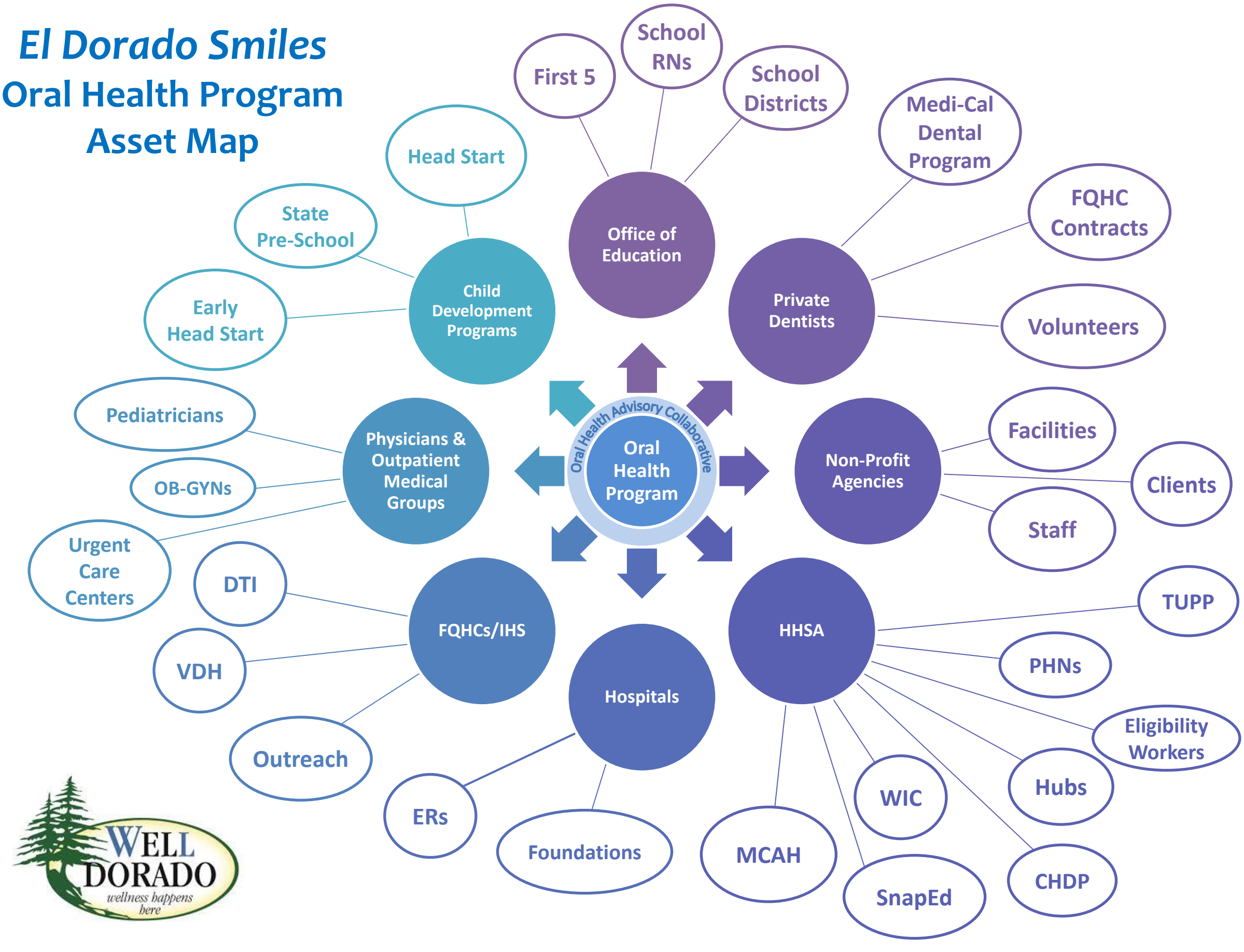
Appendix B

Logic Model

Appendix A

Oral Health Program Asset Map

El Dorado Smiles
Oral Health Program Asset Map



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Appendix B

Logic Model

EL DORADO COUNTY ORAL HEALTH PROGRAM LOGIC MODEL

Using these resources INPUTS	*We engage in these activities* ACTIVITIES	*To produce these results* PRODUCTS/OUTPUTS	*Which will yield these benefits* OUTCOMES	*Will lead to achieving* STATE ORAL HEALTH OBJECTIVES

Existing Infrastructure

- OHP Funding & Staff
- El Dorado Smiles Dental Van
- Oral Health Advisory Collaborative
- Educational materials

✚

Additional Infrastructure developed with funding From other than current funding levels

- Additional *El Dorado Smiles* Mobile Oral Health Pods (Preventive Dental Outreach using Virtual Dental Home model)

✚

Additional resources as they become available

- *El Dorado Smiles* Mobile Oral Health Pods (Preventive Dental Outreach using Virtual Dental Home model)

Identify program activities Related to the following:

1. Program Infrastructure – Staffing, Management & Support
2. Data Collection & Surveillance
3. Needs Assessment
4. Identification of resources & assets
5. Oral Health Plan
6. Interventions/Programs
7. Partnerships & Coalitions
8. Communications & Literacy
9. Policy Development
10. Training & TA
11. Evaluation
12. Program Coordination & Collaboration with Internal/External Partners

Identify Outputs:

1. Staff hired, Advisory Committee formed, AC meetings conducted
2. # of data systems identified
3. # of needs identified
4. # of assets, resources
5. # of OHP goals
6. # of interventions / programs
7. # of partnerships/ coalitions
8. # of communications
9. # of policies
10. # of trainings
11. Evaluation Plan developed
12. # of external partners

Outcomes:

Short Term:

- Increase capacity
- Increase collaboration
- Targeted surveillance
- Collaborative communications
- Coordinated system to address specific needs

Intermediate

- Increased utilization of data and resources for program decision making
- Increased number of engaged partners
- Increased number of policies and programs that support oral health
- Increased engagement of dental, medical and social services workforce
- Increased number of people engaged in healthier habits
- Increased number of people receiving evidence-based interventions

Long Term

- Reduction in:
  - Dental caries prevalence & untreated caries as measured in kindergarten and 3rd grade children
  - Tooth loss
  - Oral & pharyngeal cancers
  - Emergency room visits
  - Children treated under general anesthesia
- Reduction in health disparities

Indicators:

- Caries experience & untreated caries - Kindergarten; Third Grade
- Preventive dental visit in children: - Preventive dental visit among Medicaid children (1-20 years)
- Children with dental sealant on a molar (6-9 years)
- Dental visit during pregnancy
- Kindergarten Dental Check-ups
- Children under 6 years enrolled in Medi-Cal receiving dental services provided by a non-dentist provider
- Number of Community Health Worker and Home Visiting Program that provide oral health counseling and care coordination
- Number of patients who receive dental services at FQHCs
- Number of dentists practicing in dental professional shortage areas
- Number of FQHCs providing dental services
- Community Oral Health Literacy
- Preventive oral health care for Infants & young children (age 0 – 5) for low-income families (WIC, head start, etc.)