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ABSTRACT

As part of a series of reports designed to support the implementation of Proposition 10: The California Children and Families Act and to provide comprehensive and authoritative information on critical issues concerning young children and families in California, this report describes the scope and severity of early childhood caries (ECC), a distinctive pattern of severe tooth decay in infants and young children. The report also describes the level of access to preventive and therapeutic services for California's preschool children and discusses the relationship between dental health, early childhood development, and Proposition 10. The report describes the array of programs available for early childhood caries, including the Children's Medical Services, California Children and Dental Disease Prevention Program, Head Start, and the Maternal and Child Health Program. The report argues that oral health should be viewed as a primary care service and that the full integration of oral health into primary care services for children would require a major shift in how such services are presently conceived, provided, and funded. Examples of integrated oral health services are provided. Current and potential sources of funds for dental treatment are described. The report then details recommendations for 5-year objectives for Proposition 10 Commissions related to dental care and oral disease prevention and for utilizing a comprehensive approach in helping communities gain meaningful control of ECC. Research studies on the etiology, prevention, and effects of ECC as well as the cost of treatment are delineated. Two appendices include a list of dental health experts in California counties. (Contains 42 references.) (KB)



UCLA Center for Healthier Children,
Families and Communities

Building Community Systems for Young Children

Building Community Systems for Young Children is a series of reports designed to support the implementation of Proposition 10: The California Children and Families Act. Each installment is written by a team of experts and provides comprehensive and authoritative information on critical issues concerning young children and families in California.

March 2000

Early Childhood Dental Caries

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Early Childhood Dental Caries

"Although dental problems don't command the instant fears associated with low birthweight, fetal death, or cholera, they do have the consequence of wearing down the stamina of children and defeating their ambitions. Bleeding gums, impacted teeth and rotting teeth are routine matters for the children...Children get used to feeling constant pain. They go to sleep with it. They go to school with it...Children live for months with pain that grown-ups would find unendurable. The gradual attrition of accepted pain erodes their energy and aspirations...To me, most shocking is to see a child with an abscess that has been inflamed for weeks and that he has simply lived with and accepts as part of the routine of life. Many teachers in the urban schools have seen this. It is almost commonplace." (Jonathan Kozol -- Savage Inequalities: Children in America's Schools)

I. Introduction and Background

The Problem

Early Childhood Caries (ECC), a distinctive pattern of severe tooth decay in infants and young children, is one of the most common diseases in this age group. By conservative estimates, it affects more than one out of seven preschoolers and over half of California's elementary school children.⁸ It is more prevalent in low-income families, who generally have limited access to dental services.¹ The most tragic fact about the high prevalence of this disease is that it is preventable.

Severe tooth decay in young children has long been recognized as a clinical syndrome and has been referred to by various names, including 'nursing caries,' 'nursing bottle syndrome,' 'night bottle mouth,' and 'baby bottle tooth decay.'² The Centers for Disease Control and Prevention recently suggested that the terms for this clinical syndrome be replaced with 'Early Childhood Caries (ECC)' because the latest research showed that the use of bottles is not the only cause of ECC.

ECC is now recognized as essentially an infectious disease.^{3,4} The first step in its development is primary infection by the bacterium *Streptococcus mutans*. The second step is the accumulation of these organisms to pathogenic levels as a consequence of frequent and prolonged oral exposure to a cariogenic substrate. The final step is rapid demineralization and cavitation of enamel, resulting in rampant caries.

Unlike other infectious diseases, tooth decay is not self-limiting. Decayed teeth require professional treatment to remove infection and restore tooth function.

The scope and severity of the problem appear to vary with cultural, genetic and socio-economic differences within a community. Inappropriate feeding practices expose a child's teeth to sugary liquids for long periods of time. Any liquid that contains sugar, such as milk, formula, fruit juice, and other sweetened liquids, can cause ECC.^{5,6} Sugary liquids pool around the child's teeth, causing tooth decay, which usually begins with the upper front teeth, followed by the primary molars. The process may occur as soon as the teeth appear in the child's mouth.⁷ ECC is a devastating condition, costing thousands of dollars to treat and often requiring a prolonged hospital stay for treatment.

Prevalence/Statistics

California, the most populous state in the U.S., appears to be at least a decade behind the rest of the nation in terms of children's oral health. Evidence from the 1993-1994 California Oral Health Needs Assessment (OHNA) showed that for most oral health indicators, California's children fall far short of the Healthy People 2000 objectives established by the U.S. Public Health Service, and well below 1986-87 national baseline data. Specific findings of the oral health needs assessment of children in California included the following:⁸

- **27% of California's preschool children have untreated tooth decay, and 9% of them are in urgent need of dental treatment**
- **By the time they are 6-8 years of age, 55% of California's children have untreated decay.**
- **Almost one-third of preschoolers and more than two-thirds of elementary and high school children have experienced tooth decay.**
- **The percentage of California's 6-8 year olds with untreated decay was more than twice the national baseline average for this group and was 175% higher than the national Healthy People objective for the year 2000.**
- **Among racial and ethnic minorities, 66% of Hispanic children, 60% of African-American children, and 71% of Asian children have untreated decay.**
- **Only 56% of California preschoolers had visited a dentist in the past year. This is compared to the 1986-87 U.S. baseline of 66% for 5-years.**

Although the reported prevalence of ECC has varied in individual surveys from 1 percent to almost 70 percent, the national prevalence of this condition has been estimated to be 5 percent of children 5 years old and younger.^{7,9,10} Although research into the etiology and epidemiology of ECC has been done, a universally accepted definition for ECC does not exist and methods used to define the condition vary widely among studies. The lack of a specific, accepted definition may, in part, be the cause of the variation in statistics.³⁴ In the most recent national study, approximately 17 percent of 2-to-4 year-olds were found to have experienced caries.¹¹ ECC rates are consistently higher among children in low socioeconomic groups, many of whose parents are not knowledgeable about oral health and prevention of ECC.³⁷

In 1992 Barnes, Parker, Lyon, Drum and Coleman examined 1,230 children from 3-5 years of age enrolled in 37 Head Start programs in Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.¹² The prevalence of ECC by age and by race, respectively, was as follows:

3-year-olds	4-year-olds	5-year-olds
18.5 %	22.4 %	27.9 %

White	Black	Hispanic	Native American
22.2 %	20.5 %	23.8 %	35.1 %

Data from the California Oral Health Needs Assessment of Children in 1994 showed that 14 percent of all preschool children in California had ECC.* The data from this report also showed that children enrolled in Head Start programs had ECC rates that were 19 to 30 percent higher than children in all other pre-school settings.⁸

Access Issues

In the face of this epidemic, the level of access to preventive and therapeutic services for California's preschoolers is far from adequate.

Many factors act as barriers to access to dental care, including: lack of dental insurance; the fact that higher-income areas have more dentists per capita than low-income areas; language and cultural barriers; attitudes and beliefs about dentists, dental care, and the value of dental disease prevention; residence in a rural area; and problems of child care and transportation.⁴¹

*ECC was defined as the presence of one or more "midft" (i.e., one or more primary maxillary incisor decayed, extracted, or filled teeth).

But those are only the beginning. In addition:

- Fewer publicly supported programs address access to dental services than access to other primary health care services. For example, the majority of federally and state-supported community and migrant health centers in California do not have a clinical dental component, and there are very few dental professionals available through the National Health Service Corps.
- Although school-based health centers are growing in popularity, few of them include dental services.
- There are very few pediatric dental specialists in the state, and far fewer who will provide care for low-income children such as those who are Medi-Cal-eligible. The new influx of children enrolling in the Healthy Families Program is making this shortage even more evident.
- For a variety of reasons, including attitudes about families on “welfare,” concern about how other patients will react, and the low reimbursement rates typically provided by public programs, many dentists are unwilling to provide care for low-income children.
- There are far more people without dental insurance than without medical insurance. (Most so-called “health insurance” is really medical insurance in that it does not provide coverage for dental services, which are an integral component of health services.)
- A restrictive State Dental Practice Act limits the ability of mid-level dental professionals to provide even preventive services where they are most needed.
- Unlike many other states, California offers little in the way of state-supported preventive dental programs, e.g., school-based sealant programs.
- California’s ranking of 47th in the nation in terms of the population’s access to fluoridated public drinking water supplies results in greater need for therapeutic dental care.
- The State Health Department has not taken full advantage of the Omnibus Budget Reconciliation Act of 1989 (OBRA 89), which enabled dentists to serve as entry points for the Early and Periodic Screening, Diagnosis, and Treatment Program (EPSDT).
- State Health Department policy does not allow for direct access to dental services through its Children’s Treatment Program (a program for low-income children not covered by EPSDT). Such children must be referred to a dentist by a medical “gatekeeper,” and can only be referred when obvious dental problems are evident, i.e., they cannot be referred for preventive services.
- Although pressure is increasing for the state to consider a statewide Medi-Cal dental managed care program, early experience with dental managed care suggests that access to

important preventive services may be reduced.

- While poverty and minority status pose significant barriers to gaining access to both primary care and dental care, a recent national study found the most important barrier to primary care to be lack of health (not dental) insurance coverage. For example, the study found that uninsured children were twice as likely as children from poor families, and more than three times as likely as minority children, to be unable to get dental care when they needed it. Nationally, dental insurance is one of the best predictors of whether an individual sees a dentist. The California Oral Health Needs Assessment of Children found that 26 percent of preschool children, 28 percent of elementary school children, and 44 percent of high school students had no dental insurance. Recent data from the 1995 National Health Interview Survey reveal that almost 40 percent of children who have medical insurance have no dental insurance.
- Rural residents face a number of barriers to the receipt of health services. Rates of health insurance coverage in rural areas are lower, reflecting in part the fact that the poverty rate is higher in rural areas than in urban areas, so that rural residents are less able to afford insurance coverage. Rural residents are also more likely to be employed in agriculture and in small businesses, neither of which offer private insurance as extensively as more urbanized industries. In non-metropolitan counties, the ratio of dentists to population decreases with declines in population size, even after controlling for population density and income. Urban residents are more likely to have dental examinations than rural residents, and nationally, 11 percent of rural residents have never visited a dentist. The Oral Health Needs Assessment found that while 64 percent of preschool children in urban communities with fluoridated water had ever seen a dentist, only 47 percent of rural preschool children had done so.
- Often, the resources needed to improve the oral health of children already exist in communities, but lack of coordination or lack of a community-wide approach results in the inefficient use of existing resources. At other times, existing resources are so restricted in their application that they cannot be fully utilized to reduce barriers to care. For example, many families that would otherwise be eligible for Healthy Families coverage have medical coverage, but no dental coverage, through an employer. These families are currently unable to apply for dental-only coverage through Healthy Families.

Table 1. Selected Findings and Disparities Among Racial/Ethnic Groups from the Oral Health Needs Assessment

Indicator	Asian	Black	Latino	White	All
Percentage of children who have <i>never</i> had a dental visit					
• Head Start	6	34	30	39	31
• Non-Head Start	53	47	47	41	45
• All Preschools	51	46	46	41	44
• Elementary school children (K-3)	15	33	38	17	21
• High school students	NA	NA	NA	NA	12
Percentage of children needing non-urgent/urgent dental care					
• Head Start	45/9	36/9	41/11	28/5	38/9
• Non-Head Start	22/7	34/5	29/11	14/2	23/6
• All Preschools	34/7	34/6	30/11	14/2	24/6
• Elementary school children (K-3)	39/36	52/12	44/24	28/12	37/17
• High school students	30/17	35/19	45/30	24/15	33/21
Percentage of children who have received any sealants					
• 8-year-olds	8	4	7	15	10
• 15-year-olds	1	9	6	19	13
Percentage of children with no dental insurance					
• Head Start	NA	NA	NA	NA	22
• Non-Head Start	NA	NA	NA	NA	26
• All Preschools	NA	NA	NA	NA	26
• Elementary school children (K-3)	NA	NA	NA	NA	28
• High school students	NA	NA	NA	NA	44

Source: Pollick HF et al. *Report of the California Oral Health Needs Assessment of Children, 1993-94. Oakland, CA, The Dental Health Foundation, 1999.*

- To understand different cultures is to validate the diversity of human beings. Not all ethnic groups or cultures accept “mainstream” beliefs about oral health, or practice “mainstream” preventive dental practices. Symptoms of disease may be viewed as normal phenomena. Disease defined by dental professionals may differ from “illness” defined by the patient. Different cultures may make decisions affecting their oral health that are contrary to dental practice standards but consistent with cultural values. There are strong relationships between cultural practices, care-seeking behavior, and receptivity to prevention messages. Given that the overwhelming majority of beneficiaries of public programs such as Medi-Cal and Healthy Families are from “non-mainstream” cultures, programs aimed at increasing access to care and changing preventive practices cannot hope to be successful if they are not sensitive and responsive to the cultural diversity of California’s population. Access issues related to cultural differences are highlighted in Table 1.

- Examples such as these demonstrate the need for every child to have a “dental home.” The dental home concept is fashioned after the medical home model developed by the American Academy of Pediatrics, and is defined as a place where a child can obtain dental care that is accessible, family-centered, continuous, comprehensive, coordinated, compassionate, and culturally competent. The dental home implies joint accountability between the dentist and the family. Providing a dental home means addressing the dental and non-dental needs of the child and family. For the primary care dentist, this role may involve identifying and making referrals to community, state, and federally funded resources that will benefit the child and family.

Relationship to early childhood development and Proposition 10

Oral health is directly related to child development. Oral health is not just the absence of disease. The very first developmental stage of childhood is called the “oral” stage for good reason. Much of an infant’s and a toddler’s world is explored and learned through the mouth. Much of his or her waking time is spent eating, mouthing, chewing and thereby growing. Early tooth loss caused by dental decay can result in impaired speech development, failure to thrive,^{13,14,15} absences from preschool, inability to concentrate, reduced self-esteem, and other psychosocial problems.

Oral health is needed for normal growth. For children to develop normally, they must be able to eat nutritious foods. They cannot do this if their ability to eat is compromised by the pain and infection associated with ECC. Early childhood caries is associated with diminished physical growth in toddlers. Providing dental treatment for children with this condition during early childhood has been shown to result in significant gains toward achieving a normal growth curve.^{13,14,15}

Oral health is a marker for the nurturance of infants and toddlers. Infant and toddler nurturing includes nursing, feeding, and eating, and the associated bonding behaviors that accompany these activities. On the other hand, the inappropriate use of baby bottles (e.g., putting an infant to bed with a bottle containing decay-promoting liquids) can cause devastating dental disease in children during the developmentally critical ages of 1-2 years. Therefore, ECC may serve as an early, and therefore sentinel, sign of other problems in meeting the developmental needs of young children.¹⁶

Oral health providers can play an important diagnostic and preventive role in child health and development. As parents are the child’s primary teachers of healthy habits, interactions within the family can have a major impact on oral health. Providing dental professionals the opportunity to observe parents with their children provides clues to learning strategies, potential behaviors, and difficulties, and, in the extreme, parental child abuse and neglect. Oral health providers also play an important role in teaching parents how to

encourage their young children to brush and floss their teeth.

Oral health has a bearing on Proposition 10 concerns beyond child development. The funding source of Proposition 10, tobacco use, is very much related to oral health. Exposure to tobacco, drugs, and alcohol during pregnancy affects a baby's orofacial growth and development. High-risk behaviors such as tobacco use may be related to poor parenting behaviors, which may result in ECC.¹⁶ Smoking during pregnancy is associated with low birthweight and immunologically compromised children. Just as these outcomes retard overall child development, they also retard dental development, which is, of course, inseparable from overall development.

Oral health is a part of the overall health of a child. Untreated oral disease can exacerbate the already fragile conditions of many children with special health care needs¹⁶ because of the prevalence of chronic medical conditions such as seizure disorders or severe emotional disturbances. For example, it can complicate the treatment of organ and bone marrow transplants (sometimes resulting in death); it can result in severe complications, e.g., pneumonia, urinary tract infections, fever, and generalized infections of the entire body; and it can cause infection of a defective heart valve (resulting in death 50 percent of the time).

Oral health services are fragmented and usually isolated from other child services. Proposition 10 goals emphasize integration of services, and there is no better example of a service needing integration than dental services. Although dental disease represents the most common disease of childhood, and is clearly linked to social status, dental services typically are not integrated with general health and social welfare services. In fact, the provision of effective, coordinated, comprehensive, culturally sensitive dental services to young children could be considered the hallmark of a totally integrated system, as oral health is typically the last service to be addressed. Many early childhood programs, such as public health nursing as it relates to home visits to high-risk infants, the Women, Infants and Children program (WIC), and child care programs, are obvious candidates for integration with dental services. Head Start, considered by many to be the quintessential early childhood development program, has a federally mandated dental component. Screening and preventive clinical services and education of parents are provided on site, and necessary referrals are made for treatment. A model of services by developmental stage is provided as part of the recommendations outlined on page 24.

The importance of oral health and the need for more and better oral health services for infants and toddlers is underappreciated, and even unknown to many people. Public education -- another of Proposition 10's primary strategies -- is critical to highlighting the importance of dental issues and recognizing that successful oral health promotion to children relies on the same interventions that generate general health and well-being: prevention of infectious disease transmission, personal hygiene, sound diet and eating practices, and

benevolent parenting.

II. Evaluation of Existing Systems and Programs

In general, relative to the epidemic proportions of early childhood caries, the existing array of programs is skimpy and tragically inadequate. However, some of the programs that provide fragmented support for some oral health services to some children include:

Children & Medical Services (CMS)

The CMS branch of the California Department of Health Services consists of two programs that include some dental services for children: The Child Health and Disability Prevention (CHDP) program and California Children Services (CCS).

1. CHDP Program

CHDP provides health check-ups by trained medical staff to help children and teens stay healthy and find health problems early. It includes dental screening provide by a primary care provider during the CHDP health assessment. When a child is found to have a dental disease, she/he is referred to a dentist for treatment. If the child is Medi-Cal eligible, he/she will be referred to a Denti-Cal provider. If the family does not qualify for Medi-Cal, they will be referred to community-based clinics, to the Healthy Families program, or to a dentist willing to offer pro bono services or a sliding fee scale based on family income. (In a diminishing number of counties, the county provides funding for the payment of dental treatment for non-Medicaid-eligible children.)

2. CCS Program

CCS provides for medical care to children with chronic, disabling conditions. Dental care will be provided if the oral condition affects a CCS-eligible condition or vice-versa. Additionally, dental services are provided to children with cleft palates or craniofacial anomalies. The third component of CCS dental coverage is orthodontic services to children with medically handicapping malocclusion.

California Children & Dental Disease Prevention Program (SB 111)

The SB 111 program is the only statewide, school-based preventive dental program for children in preschool through sixth grade. It has been in place since 1979. Due to lack of funding, only 315,000 children (20% of eligible children) per year benefit from this program. Eligibility is based on the proportion of Free School Lunch Program participation for each county. SB 111 has four required components: 1) weekly fluoride mouth rinse or daily fluoride supplement; 2) plaque control; 3) classroom oral health education; and 4) an active oral health advisory committee. With additional funding, other, optimal components, such as dental screenings and sealants, could be included.

County teams work on increasing access to dental care and educating the public to prevent baby bottle tooth decay, oral injuries and dental disease. These services are not offered to preschool children.

Head Start

Every child enrolled in Head Start is required to be screened for dental problems. The Child Health Disabilities Prevention program (CHDP) pays for treatment of those children who are Medicaid eligible; other children have treatment paid for through enrollment in the Healthy Families program. For those children needing treatment who do not have insurance, Head Start funds are provided.

In addition, Head Start programs include dental education as part of their overall health education services to parents and children.

Maternal and Child Health Program (Title V)

The national Maternal and Child Health (MCH) program under Title V of the Social Security Act supports research and training related to oral health as part of its overall mission. However, since the inception of the block granting to states of MCH dollars, it no longer provides direct funding for oral health services. Previously, MCH programs included oral health services as part of categorical programs for prenatal care and health care for children and youth. Under the block grant approach, which began in 1981, it is up to each state to determine what it will do related to oral health as part of its MCH program. While many states allocate significant portions of their respective block grants to oral health, California has not chosen to do so.

About five years ago, the California Department of Health Services supported an oral health needs assessment of California's children. It was the first and only such assessment ever done. As noted, it revealed that there is an epidemic of dental caries in our children, with rates of disease up to twice that in the rest of the nation. Because dental disease has received so little attention -- and is still largely ignored -- it was labeled the "neglected epidemic."

Recently, staff have been hired for the first time in California in the State's MCH program to deal specifically with oral health issues. To date, however, no support is provided for any programs using Title V dollars in California.

III. Integrating and Coordinating Systems and Programs

Few services approach the organizational and professional isolation of oral health services. The other side is the many opportunities for better integrating and improving coordination of oral health with other health and human services for infants and toddlers. Examples are listed below, by developmental period. But lest the forest get lost from the trees, it is important to highlight that oral health ought to be viewed as a primary care service. For many, it is the entry to the health care system. And most of the dental diseases suffered by children are preventable, a critical element of primary care.

The full integration of oral health into primary care services for children would require a major shift in how such services are presently conceived, provided and funded. The examples below can be seen as 'touchpoints,' services that can combine delivery of direct oral health prevention services and referral to on- or off-site oral treatment programs. They are examples of ways in which infants, toddlers and their families can have their oral health needs better met through coordination and integration with specific programs serving that population. Such integration would be synergistic, enhancing not only the oral health of children but also helping the partner service better meet its goals and objectives.

Integration of oral health services into health care for children should start with prenatal interventions. Some examples of programs through which this could be done are:

1. Women, Infants and Children (WIC) Program

The Supplemental Nutrition Program for Women, Infants and Children (WIC) is a food and nutrition program for low-income pregnant, breast-feeding, and postpartum women, infants and children under the age of five who are low-income (up to 185% of poverty) and at nutritional risk. Since 1974, the purpose of this federally funded program has been to prevent health problems and to improve the health of participants during critical times of growth and development. Basic nutrition education, particularly breast-feeding promotion and support, are core WIC services. While WIC does not provide direct health care to participants, a primary goal of the program is to encourage and facilitate access to early prenatal and preventive care, including oral health care.

In California, by far the nation's largest WIC program, 83 local agencies serve 1.24 million participants at 650 local centers. Over half the infants born in California are enrolled in WIC, including virtually all low-income infants. In May 1999, the statewide program served 1.06 million infants and preschoolers in 895,000 working-poor families. The WIC caseload reflects California's diversity. The majority of participants (69%) are Latinos, followed by whites (15%), African Americans (9%), and Asians (1%).

Good nutrition, dental health and general health of mother and child are inextricably linked; it thus makes eminent good sense to link services related to nutrition, dental health and disease. Because it attracts a population that matches the target of other health interventions, a WIC site is ideal for offering education, screening and referral of mothers and children. Oral health is being promoted nationally as an interest of the WIC program and follows other linkage efforts, such as immunization campaigns. Clearly, with education and training, WIC sites could be supported to serve as resource and referral centers for oral health problems.

2. Obstetric visits

A comprehensive prenatal program should include the oral health of the expectant mother in its array of services. Recent studies have shown that poor periodontal health of the mother is a potential independent risk factor for low birthweight.^{28,29,30} Therefore, maternal examinations should include an oral health assessment as part of the standard prenatal work-up. Additionally, this period is an ideal time to begin educating mothers-to-be on how to maintain the health of their newborns. Such counseling should include a focus on the oral health of their children.

In addition, more and more is being learned about the transmission of *S. mutans*, the primary pathogen of dental caries, from mother to child. Consequently, treatment of a new mother for this infection is being increasingly advocated as a part of a caries prevention strategy. Planning for this treatment should start prenatally so that it can be implemented early on postnatally.

After the birth of the baby, examples of services with which oral health could be successfully integrated include:

1. Child care services

With thirty years of success, Head Start provides a model of integrating oral health into child care services. While Head Start serves a population at higher risk than many other child care service providers, no population is without risk. With over half of children in the early grades of elementary school sitting in class with untreated dental disease, dental problems are clearly not confined to just the Head Start population. Head Start guidance materials, cost data, educational materials and working relationships with oral health services and providers provide a foundation toward the integration of and coordination with such services in other similar settings. If it can be done in Head Start, which serves the most needy population, it should be feasible with modest support or investment by parents to *include a dental component in all child care services*. In addition to Head Start programs, which are required to provide participating children with dental assessments, child care centers can also play a role in education, identification, and referral.

2. Primary care/Pediatric visits

Most infants and young children are more likely to visit a pediatrician or family physician than they are to visit a dentist. In fact, in the first three years of life, young children will have over 10 visits to pediatric medical providers for well and sick care. It is therefore important to involve these pediatric providers in the prevention of and screening for dental disease. Such attention cannot be taken for granted, since dental disease is largely ignored in medical school and residency programs for physicians and training programs for nurses. Consequently, the inclusion of oral health as part of a physician exam and anticipatory guidance protocol would require a special effort in *training and development and adoption of practice guidelines by the physician practice*. This should be part of Medicaid's provider requirements.

3. Health department clinical services

Immunization clinics, public health department well-baby and well-child clinics, and family planning programs all provide potential for inclusion of a dental health component. Dental hygienists could conduct these interventions via any existing program that targets infants and parents. *Linking oral health screening with immunization schedules and public health nursing activities is a low-cost intervention.*³¹

4. WIC program

The WIC program, described above as a site for inclusion of oral health services targeted at the prenatal clients enrolled in its program, offers the same opportunity for infants and toddlers and their mothers. Such a partnership would allow creation of model packages and delivery systems relating WIC and oral health promotion and disease prevention, and would highlight any issues related to such a partnership and allow development of solutions to those issues.

5. Community-based services

Public education about oral health would be an important part of any preventive effort in relation to oral health. The lack of awareness that there is a problem and that the infection and decay of primary teeth is problematic even though they will be replaced, and the need to visit with a dentist at year one and thereafter during this developmental period, are examples of issues that require attention at a community level. Such messages could be incorporated into overall health education campaigns. But first those who develop and manage those campaigns need to accept the need for such messages; and *appropriate materials and media products need to be developed*.

6. Adolescent pregnancy/Parenting programs

State and County programs serving pregnant adolescents and teen parents, such as the State's Adolescent Family Life Program, should include an education and service component for both the teenager and her infant. *Both teen parents and their babies are at higher risk for dental disease.*

7. The ABCD Program in Washington State

A pilot program called "Access to Baby and Child Dentistry," or ABCD, is being conducted in Spokane County, Washington, to expand Medicaid dental services for children. The county has about 400,000 residents and 240 dentists. The program is sponsored by a partnership of the Medicaid program, the Spokane District Dental Society, the Spokane Regional Health District, the Washington State Dental Society and the University of Washington. In the ABCD program, dentists are trained and certified, and receive enhanced payments, to provide improved comprehensive dental services for children who are younger than six years old and enrolled in the Medicaid program. Outreach services are carried out to notify eligible families of the availability of services, to encourage visits to the dentists in early childhood, and to minimize the failure to keep appointments. The program is in its fourth year and has markedly increased the proportion of children receiving dental care.⁴²

IV. Integrating and Coordinating Funding

Current Sources of Funds for Treatment

Denti-Cal

Medi-Cal is California's state Medicaid program, providing health care services for low-income families and individuals who lack other health insurance. Like other Medicaid programs, Medi-Cal is jointly funded by state and federal governments.

Federal law requires the Medi-Cal Program to provide a core of basic services, including inpatient hospitalization, outpatient care, skilled nursing care, doctor visits, laboratory tests, x-rays, family planning, and regular examinations for children under the age of 21. California also has chosen to offer 32 optional services, such as outpatient medications, dental care, and occupational therapy, for which the federal government provides matching funds.

The current dental benefit for children under Medi-Cal is one exam per provider per lifetime. If a child goes back for another exam, he must either go to another provider or go back to

the original provider if he or she is willing to provide the exam for free. Medi-Cal does not pay for anticipatory guidance, which is an important service to the Proposition 10 target group.

Still, Medi-Cal is a source of insurance for the highest-risk children. And if the reimbursement rates were adequate, particularly for the very young child, it would be an even more important source of revenue for services.

Child Health and Disability Prevention (CHDP) program

California's Child Health and Disability Prevention program (CHDP) incorporates a federal program called Early and Periodic Screening, Diagnosis and Treatment (EPSDT), and supplements this with an exclusively State-funded program.

The EPSDT program was authorized in 1966 by Title XIX of the Social Security Act, the act that established the Medicaid program. It provides preventive services to children who are enrolled in Medicaid in accordance with a periodicity schedule established by professionals in each State. In 1989, the law was amended to require a separate schedule for dental services and to provide for the dentist as the primary entry point. Previously, a child could go to a dentist only if referred by a physician. A copy of the periodicity schedule for California is provided in Appendix B.

In addition to paying for the periodic screening for dental problems, EPSDT reimburses for treatment of any condition discovered.

For children not eligible for Medicaid or Healthy Families (see below), the state pays for screening of uninsured children. With the elimination of Proposition 99 funds as a source of support, the treatment for discovered problems is provided by some counties and not others.

In order to become a CHDP provider, a physician is required to attend a provider in-service. This in-Service is presented in the physician's own office and presents an opportunity to educate about the prevention, recognition and management of ECC. Proposition 10 funds could be used to ensure that more health and dental providers were CHDP-qualified and ready.

Healthy Families

The Healthy Families Program (HFP), under the administrative responsibility of the Managed Risk Medical Insurance Board (MRMIB), is a state and federally funded program that provides affordable, comprehensive health, dental and vision coverage for uninsured children. The program recently celebrated its first anniversary.

HFP serves the children of families with annual household incomes of between one and two times the federal poverty rate, about \$27,000 for a family of three. These are the children of working families which earn too much to qualify for no-cost Medi-Cal coverage and too little to afford private health insurance for their dependents.

Healthy Families members pay nominal premiums of \$4-\$9 per child per month (maximum of \$27 per family) for an entire package of health, dental and vision benefits. They choose from a menu of private carriers selected by the state for their specific geographic region.

Dental services covered under Healthy Families include most preventive, basic and major restorative services with no patient copayments required for most procedures and no deductibles or maximums. A few \$5 copayments apply for procedures such as complex oral surgery, crowns and bridges. Among the limitations are coverage for only medically necessary orthodontia and exclusion of cosmetic care and most procedures that correct congenital or developmental malformations.

A major drawback to the program from a dental perspective is that if a family has medical insurance for a child, it is not eligible for Healthy Families' dental insurance, even if it lacks such coverage.

However, for those who do qualify, the program has been extraordinarily successful, an indication of the tremendous unmet need in the dental area. New dental benefit usage statistics for Healthy Families far exceed those of most private or publicly funded dental programs, according to Delta Dental Insurance Company, one of four dental plans administering the dental portion of the program.

With about 80,000 Healthy Families members in the Delta plan as of June 1999, the documented usage rate was about 70 percent, which represents a huge portion of members obtaining dental care within their first six months in the plan. Nearly 11 percent more people got dental care through Healthy Families than would be expected through a typical employer-sponsored program. While the reasons for this have not yet been analyzed, part of the explanation probably lies in the fact that within Delta's Healthy Families program, participating dentists are paid on a fee schedule slightly higher than the Medicaid dental fee schedule set by the state. Also, there are no gatekeepers, as with a dental HMO, and referrals are not required to see participating specialists.

A detailed breakdown of dental services Delta has delivered in the program's first year reflects an emphasis on preventive care. Of those who have actually visited a Healthy Families dentist in the Delta network, 61 percent received preventive and diagnostic care, 30 percent received restorative care and 9 percent received major restorative care.

Unfortunately, families who might otherwise be eligible for dental insurance provided through Healthy Families cannot purchase such insurance if they have medical insurance but not dental insurance, an all-too-common situation. It should also be noted that Healthy Families is not available to any undocumented children.**

Private Insurance

As further testimonial to the isolation of dental care from the rest of health care, most health insurance other than Medicaid and Healthy Families does not include dental benefits. While dental insurance is available as a separate product, fewer employers offer and fewer families have dental insurance than health insurance. Nationally, 150 million people lack dental insurance and millions more are underinsured.³²

Potential Sources of New Funds

SB 111 expansion

Currently, the SB 111 program nominally targets children in grades K-6. However, less than 10% of the 315,00 children enrolled in the program are between ages 4 and 5. Expansion of this program to increase the number of children under age 5 depends solely on increased funding. The program is now funded by the state general fund budget and would require legislative action for expansion.

Change in policy and reimbursement rates under Denti-Cal

Denti-Cal does not reimburse providers for key elements of ECC prevention and treatment: dental counseling and education of patients, fluoride varnishes, sealants on primary teeth, or glass ionomer restorations. Current reimbursement schedules are designed for dental services commonly rendered to older children and adults. Community clinics and private practices depend primarily on third-party reimbursements. It is unlikely that dentists would perform these services unless they can realize some form of reimbursement.

Additionally, Denti-Cal reimburses for one dental examination for a child until he/she reaches 19 years of age unless s/he is willing and able to visit a different dentist every year.

** Figures and data related to Delta Dental's Healthy Families program come from an unpublished report from Delta Dental available on its web page. Data is not available from the other dental insurance carriers under contract with the Healthy Families program.

Children at risk for ECC should receive dental examinations yearly or, in some cases, even more often from a provider familiar with their history.

Even if benefits were adjusted to be more appropriate for the preschool age group, the current reimbursement rates are so low that many providers do not participate in the Medicaid program. Legislative action is required to ensure that Medicaid is providing the necessary and appropriate coverage. Other factors, such as possible high no-show rates, cultural issues, fear of dentists and so on, would perhaps also need to be addressed to improve access and utilization rates. But basic coverage by Denti-Cal would be an important first step.

V. Recommendations

Prevention of dental disease and good oral health is a public health goal and a cornerstone of dentistry. ECC is a disease that can be prevented. However, since ECC is not seen as a serious problem among many in the health community and is generally not life-threatening, public health officials have invested few resources on this issue. And yet, it is clear that only through organized community efforts will we be able to stop this disease.

Today, there are several ways for a child to enter the system (e.g., WIC, child care, pediatricians' offices). However, unless these points of entry include oral health as part of their initial screening, a child will only receive dental care when the disease is already well-established. Early intervention is the key to achieving good oral health. Therefore, this intervention must start when all other preventive services start. Dental screening and counseling should be provided at the same time a child receives his/her first round of immunizations.

Five-Year Objectives for Proposition 10 Commissions

The success of any intervention or group of interventions supported by a Proposition 10 Commission should be measured by achievement of specific objectives. Five-year objectives might include the following:

- 1) At least 90% of all 1-year-olds in the county have received a dental screening and, where indicated, referral services, and their parents have received oral disease prevention counseling.
- 2) At least 75% of all 2-year-olds in the county have received at least three applications of fluoride varnish.

- 3) At least 90% of all children entering educational programs (e.g., Head Start, pre-kindergarten, and first grade) have received the following:
 - 1) An oral health screening
 - 2) Referral for dental treatment, when appropriate
 - 1) Follow-up for necessary diagnostic, preventive, and treatment services.
- 4) No more than 5% of the county's 5-year-olds have experienced ECC.

A Comprehensive Approach

To achieve these objectives, it is recommended that Proposition 10 Commissions utilize a comprehensive approach in helping their communities gain meaningful control of this pediatric epidemic. The most effective way to control ECC is through prevention, and the most efficient way to prevent oral disease -- or any other disease -- is through community-based efforts, including:

Community Water Fluoridation

Until earlier this year, California ranked 47th in the nation in terms of the population's access to optimally fluoridated public drinking water, with only about 17% of the state's population benefitting from this measure. With the introduction of fluoridation to the City of Los Angeles water districts and the anticipated addition in early 2000 of the City of Sacramento's population to those benefitting from fluoridation of the water supply, the percentage of Californians receiving optimally fluoridated water will rise to above 30% in the near future. Fluoridation is the single most effective public health measure to prevent tooth decay and to improve oral health over a lifetime. Efforts to fluoridate the remaining cities of California are a crucial ECC preventive measure. Current California law requires all water districts to fluoridate the water supply if money becomes available for the initial capital costs and for ongoing maintenance.

Early Child Screening and Intervention

Starting from the first year of life, early screening for signs of caries development can identify infants and toddlers at risk for developing ECC. Additionally, early screening can serve as a source of information to parents about how to promote oral health and prevent the development of tooth decay.

Early screening should be performed by a trained dental health professional. Identification and referral for early screening can be facilitated by pediatric providers, child care centers, early intervention programs, home visitors and WIC programs that have frequent and ongoing contact with young children and their families.

High-risk children include those with early signs of ECC, poor oral hygiene, limited exposure to fluorides, and frequent exposure to sugary snacks and drinks. These children should be targeted by professional preventive programs that include fluoride/chlorhexidine varnish applications, fluoridated dentifrices for preschoolers, chemotherapeutic agents, sealants, and diet counseling.¹⁷ Outreach workers, including "promotoras," can help identify high-risk children and facilitate their access to preventive services.

Another avenue for ECC intervention is to focus on the mother's dental health, since they transmit *S. mutans* to their children. Many experts advocate treating existing active disease in the mother in order to reduce the reservoir of caries-producing organisms. Fillings or tooth extractions alone, however, will not solve the problem because *S. mutans* may be still present, co-existing with the mother's normal flora. Therefore, it may be wise to prescribe regular bactericidal rinses (i.e., chlorhexidine) during the perinatal period as well as to make serious efforts to improve the oral hygiene of the mother.^{18,19}

Right now, resources for and access to preventive services are inadequate. One way to deal with these issues is through professional training for primary care providers and dentists:

Primary Care Provider Training

Early diagnosis and referral to dentists are key steps in preventing ECC. Health care professionals often inappropriately separate assessment of oral health from general health assessment. ECC should be a concern of all health professionals who work with expectant mothers and very young children.⁵ Therefore, training medical, nursing and dental personnel to identify ECC is crucial. Most physicians receive two hours or less of education in preventive dentistry during their medical and specialty training. Pediatricians and medical personnel need training in its diagnosis, so they will be better able to identify this disease and provide dental referrals. Unless primary care providers perceive ECC as a serious disease, and an issue of relevance to their practice, no further action can be expected from them. And unless they receive some continuing education on how to recognize and counsel about ECC, any action would be inadequate.

Dentist Training

U.S. dental schools are not adequately preparing graduates for treating young children. Dentists and other dental personnel must master the interpersonal skills needed to manage young children. They must also be trained in the use of pharmacological treatments and restorative procedures which target infants.

Additionally, the number of pediatric specialists is declining.²⁰ The American Academy of Pediatric Dentistry reported that the number of pediatric dentistry training programs has fallen 13 percent since their peak in 1980. The numbers of their graduates is far below the community need.

Finally, more such dentists are needed. Weinstein noted that public health clinics are not staffed by dentists trained in treating infants.¹ Only 25.8 percent of Denti-Cal-eligible children under six years of age saw a dentist at least once during 1997.^{***}

Another element in preventing and treating ECC is health education:

Family Training

The education of mothers and/or caregivers to promote healthy dietary habits in infants has been the main strategy for the prevention of ECC. Education should be promoted, especially in high-risk communities and population groups; for example, low-income families, pregnant women, and women during their child-bearing years.^{2,17,21} Kaste and gift analyzed National Center for Health Statistics (NCHS) 1992 data and found that 95 percent of children 6 months through 5 years of age had used bottles.²² Further, an estimated one-fifth of US children are put to bed with a bottle containing liquids other than water.²³

Several articles have described the most effective content of an education program.^{9,24,25} One facet of the program's education components would focus on teaching parents and other caregivers about healthy feeding practices that can prevent ECC. In fact, if a child discontinues the bottle habit, the progression of the dental lesions may be arrested even before professional dental intervention.²⁶ Education programs and curriculum content could be established or expanded in child care centers, parenting classes, health plans, Head Start, WIC, perinatal programs, hospitals and well-child clinics.²⁷ "Promotoras" and other community outreach workers can be utilized to reach and teach families. Additionally, information regarding ECC could be distributed to parents from dental offices and clinics, and pediatricians' offices.²¹ Meister *et al.* have described programs of prenatal outreach and education for low-income populations, including factors that facilitate and constrain implementation of such programs.⁴⁰

Education of individual parents should not be the only preventive strategy for ECC.¹⁷ Among other things, it should be reinforced by brochures and media campaigns. The National Center for Education in Maternal and Child Health published a comprehensive guide listing all

^{***} Based on Denti-Cal utilization data.

available resources on ECC in the country.**** There are already many existing materials, in a variety of languages, not only for parents, but also aimed at providers. Utilizing these existing materials, instead of producing new ones, would drastically decrease the cost of the health education component of the ECC prevention program.

Therefore, Proposition 10 Commissions should consider launching or supporting projects that:

- Train providers of service to preschoolers -- such as child care workers, WIC program staff, adolescent pregnancy and teen parenting program workers, and parents -- concerning the prevention, recognition and referral sources for oral disease.
- Train medical and dental providers in ECC early identification, prevention, and referral for treatment, and provide skill building to dental professionals that enable them to be more comfortable in dealing with very young children.
- Deliver oral screening and clinical preventive dental services for at-risk participants in programs serving preschool children.
- Develop a media campaign to increase public awareness about ECC and its prevention among families at risk.
- Recruit dentists to treat young children.
- Integrate oral health services into programs serving infants and children, such as child care, WIC, and primary care clinics.
- Provide support for water fluoridation in those communities not yet benefitting from optimal levels of fluoride in their water.
- Ensure access to care by providing treatment resources for those with little or no financial support for oral health services, for example, those who are in the state CHDP program but are not eligible for Medi-Cal, and for whom treatment dollars from Proposition 99 funds are diminishing or gone.

**** [www.ncemch.org/oral health](http://www.ncemch.org/oral%20health), or contact Karen Kraft at the National Maternal and Child Oral Health Resource Center at (703) 524-7802.

Commissions might also:

- Consider policies and provide support for carrying out mandatory dental examinations and indicated treatment prior to entry into daycare, preschool and kindergarten programs.
- Develop a monitoring and tracking system to define and institute surveillance for oral health problems, to enable assessment of the scope of the problem and evaluation of positive health outcomes.
- Expand efforts to increase awareness among professionals and care givers of the orofacial signs and symptoms of abuse and neglect, as well as issues of nurturance, and the means by which to take appropriate action.
- Work with the legislature, governor, and administrators of Denti-Cal, CHDP, SB 111 and other programs to ensure that the needs of young children are met. This includes expanding programmatic eligibility, setting standards (including quality-of-care measures for early childhood dental services), and generating adequate reimbursement. Such steps by state Proposition 10 commissions would indicate to the voters of California that commissions are working to solve the policy and fiscal problems that currently act as barriers to the health of young children.
- Support the utilization of anticipatory guidelines for parents of infants and toddlers as a standard of care in health and child care settings. These standards were developed by the Academy of Pediatric Dentistry, the American Dental Association, and the American Academy of Public Health Dentistry,^{38,39} to address issues in the following Table.³³

Recommendations for Counseling Interventions for ECC Prevention by Developmental Stage

Age 6-12 months, first visit to the dentist, when the first primary teeth are erupting:

- for infants with discoloration of the teeth
- diet and nutrition questions related to nursing practice and bottles at bedtime
- discussion of oral development to prepare the parent for the pattern and timing of tooth eruption and problems related to teething
- tooth brushing, including the modest amount of fluoridated toothpaste to be used in infants and toddlers
- the level of infection by *S. mutans* in mother and child can be established and the indicated treatment provided (this is the period when *S. mutans* can start to colonize the child's mouth)

Age 12-24 months, when completion of primary dentition occurs and occlusal relationships and arch length are determined:

- diet and nutrition discussion should include weaning and the role of carbohydrates in the caries development process
- fluoride adequacy should be established to ensure maximum protection

Age 2-6 years, when loss of primary incisors and eruption of first permanent molars and incisors occur:

- discussion of oral habits; a child who sucks on a finger when he or she is in the mixed dentition stage requires a different approach than a toddler with the same habit
- discussion of oral development revisited, with explanation of the pattern and timing of eruption of the permanent teeth
- oral hygiene should be reviewed as the child takes increasing responsibility for his or her care with special attention to monitoring the amount of toothpaste used and discouragement of eating or swallowing toothpaste emphasized
- flossing should be instituted as the interproximal contacts close

VI. Research Review

A. Etiology/Causes of ECC

Year	Authors	Summary
1988	Ripa L	This study provides a comprehensive review on Baby Bottle Tooth Decay.
1996	Berkowitz RJ	This paper discusses the etiology of ECC from a microbiological perspective
1996	Milnes A	This paper reviews the scientific literature, describes the clinical characteristics of this disease, and reports on its prevalence in various locations and populations around the world.
1998	Seow W	This paper reviews biological issues in ECC in light of the current understanding of the field.
1999	Ramos-Gomez FJ, Tomar SL, Ellison J, Artiga N, <i>et al.</i>	This article questions whether feeding patterns are the primary etiologic factors in ECC.

B. Prevention of ECC

Year	Authors	Summary
1988	Ripa L	This study provides a comprehensive review on baby bottle tooth decay.
1995	Nowack AJ, Casamassimo PS	This paper discusses anticipatory care guidance as a framework for prevention that goes beyond caries to address all aspects of children's oral health.
1996	Weinstein P	This paper reviews progress in current research and suggests a number of new approaches focusing on behavioral and chemotherapeutic methods.
1997	Nowack AJ	This paper discusses the need and rationale for having children be seen by dentists by their first birthday.
1998	Ismail A	This paper reviews methods currently used for the prevention of ECC. While education should be promoted, this review found that it had a modest impact on the development of ECC. Early screening for signs of caries development, starting from the first year of life, could identify those at risk for developing ECC.
1998	Milgrom P	This paper focuses on primary prevention of ECC. The author states that attempts at prevention will fail unless they begin in the prenatal period and address the health of both the mother and the child.
1998	Weintraub J	This paper proposes strategies for preventing ECC, preferably for the greatest number of children at the lowest cost. Population-based, public health approaches are more likely to reach the target population groups at risk of developing ECC than individual, private practice-based approaches.

C. Effect of ECC on Body Weight

Year	Authors	Summary
1988	Acs G, Shulman R, Chussid S, Lodolini G,	This paper presents four case reports of children with ECC and failure to thrive. After dental rehabilitation, all patients exhibited an acceleration of weight velocity. During the period of observation, the weight velocity continued to increase with time, consistent with the 'catch-up' phenomenon of growth that is observed in nutritionally deprived children.
1992	Acs G, Lodolini G, Kaminsky S, Cisneros G	This study found that of nursing caries patients, 8.7% weighed less than 80% of their ideal weight, compared with only 1.7% of the control patients. Of ECC children, 19.1% were in the 10 th percentile or less for weight, compared with only 7.0% of control subjects.
1999	Acs G, Shulman R, Wai NG M, Chussid S	This study found that comprehensive dental rehabilitation resulted in catch-up growth, such that children with a history of ECC no longer differed in percentile weights from comparison patients.

D. Cost of ECC Treatment

Year	Authors	Summary
1988	Ripa L	This study provides a comprehensive review on baby bottle tooth decay.
1993	Milnes A, Rubin C, Karpa M, Tate R	The authors' results showed that those who live distant to treatment centers had significantly higher costs than groups who were closer. The costs which primarily accounted for this difference were travel, and costs associated with hospitalization and the administration of general anesthesia.
1995	Duperon D	This paper illustrates that treatment is costly, ranging from \$2,000 to \$6,000 for a two- to three-hour hospital or surgicenter procedure. In-office sedation may cost \$300 to \$400 per hour, if a dental anesthesiologist is available.
1996	Ramos-Gomez F, Huang G, Masouredis C, Braham R	The cost of dental treatment increased with deft (i.e., decayed, exfoliated, or filled tooth) and ranged from \$408 for deft 2-5 to \$1725 for deft 16-20. Many patients failed to comply with recommended treatment for reasons of cost.
1999	Ramos-Gomez FJ, Shepard DS	This article addresses the cost-effectiveness of three levels of preventive intervention used to treat dental caries in disadvantaged children.

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VIII. Appendix A: California Dental Health Experts by County

Los Angeles:

- Maritza Cabezas, DDS, MPH
Los Angeles County Department of Health Services
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Pediatric Dentist, University California Los Angeles, School of Dentistry
- Charles Goldstein, DDS, MPH
Clinical Professor, and Chair, Community Dentistry and Public Health
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- Andrea Azevedo, BDS, MPH
Dental Health Consultant
Maternal and Child Health Branch

San Bernardino:

- Arlene Glube
Coordinator, Dental Disease Prevention Program
CHDP Dental Hygienist

San Diego:

- Gayle Duke, RDH, MSED
Dental Hygienist Consultant
Children & Medical Services Branch

San Francisco:

- Francisco Ramos-Gomez, DDS, MPH
Pediatric Dentist, Associate Professor, UCSF
School of Dentistry

For help in locating experts in oral health for preschoolers in other counties, contact:

- The Dental Health Foundation
520 Third Street, Suite 205
Oakland, California 94607
(510) 663-3727

IX. Appendix B: Periodicity Schedule in California's CHDP (EPSDT) Program

Age (Years)	<3	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Interval to Next Referral	**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Annual Dental Referral		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

** Note: A dental screening/ assessment is a required procedure in every CHDP health assessment regardless of age. Children under age three (3) shall be referred to a dentist if a problem is detected or suspected or found, and for maintenance of dental health. Children on Medi-Cal may be given the California Denti-Cal Beneficiary Services telephone number 1-800-322-6384 for assistance in finding a dentist.

Reference: California Code of Regulations, Title 17, Subchapter 13, CHDP, Section 6843. Code of Federal Regulations, Title 42, Section 440, 40(b), Part 441, Subpart B.

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