



Pediatric Oral Health
Research & Policy Center

The Importance of the Age One Dental Visit



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Executive Summary

Dental caries is a preventable disease with significant morbidity. If left untreated, it can lead to pain, infection and serious life-threatening events.¹ Multiple national health care organizations recommend that the first dental visit occur by age one,²⁻⁶ yet some continue to challenge the theoretical, clinical and scientific rationale for early preventive dental visits.⁷ The age one dental visit allows for the early prevention and identification of dental disease, maximizing the use of conservative, nonsurgical caries management techniques, such as silver diamine fluoride (**SDF**) and fluoride varnish, for early cavity prevention and arrest.⁸

Dental caries remains the most common chronic disease of childhood, more than four times more prevalent than asthma.⁹ National surveys report that more than 50 percent of children still experience caries in their primary teeth.¹⁰ Racial and ethnic disparities persist in children's access to dental care, with higher disease prevalence in vulnerable populations, including those of low socioeconomic status (**SES**) and with limited resources. Among two- to eight-year-old Hispanic children, the prevalence of untreated disease has increased to nearly 70 percent over the last decade.¹¹ Untreated dental disease in children can lead to significant pain, difficult emergency department (**ED**) visits, and millions of school and caregiver work hours lost each year, with uninsured children having more absences than their insured peers.^{12,13}

Early dental visits can prevent suffering, reduce dollars spent on future surgical and emergency dental services, and maximize the chances for children to grow up with healthy, happy smiles. Including dental services for children younger than three years old as part of the mandatory early and periodic screening diagnosis and treatment benefits and guaranteeing competitive reimbursement for early preventive dental services are two ways to increase access to important dental services for children beginning at age one.

Dental Caries Remains a Major Challenge

Dental caries is a preventable disease that leads to pain and suffering if left untreated.¹ The American Academy of Pediatric Dentistry (**AAPD**),^{2,3} American Dental Association (**ADA**),⁴ American Public Health Association,⁵ and American Academy of Pediatrics (**AAP**)⁶ currently recommend that all children have their initial dental visit during the first year of life; however, some still challenge the clinical, theoretical and scientific rationale for an early dental visit.⁷

Early dental visits for infants and their families offer an opportunity to educate and inform parents about their children's oral health. In dental anticipatory guidance, providers counsel caregivers in infant oral hygiene, home and office-based fluoride therapies, dietary practices and caries risk assessment.² They discuss information relative to oral habits and dental injury prevention tailored to each child's age and stage of development.² Dental exams in infancy identify disease early and maximize the use of conservative, nonsurgical caries management techniques, including SDF and fluoride varnish for early lesion arrest and remineralization.⁸ Conservative therapies can delay or prevent any need for surgical intervention, thereby minimizing risk for adverse outcomes by eliminating or postponing more extreme and resource-intensive behavior management techniques, such as moderate and deep sedation and general anesthesia (**GA**).¹⁴⁻¹⁶

It's More Common Than You Think

Dental caries is the most prevalent disease of childhood, occurring four times more frequently than asthma.⁹ National surveys have reported that 41 percent of two- to 11-year-olds had dental caries in their primary teeth and 42 percent of six- to 19-year-olds had caries in their permanent teeth.¹² Reports from the National Center for Health Statistics indicated higher prevalence, with 23 percent of two- to five-year-olds and 56 percent of six- to eight-year-olds having caries in their primary teeth and 58 percent experiencing caries in their permanent teeth during adolescence.¹⁰

The racial and ethnic disparities in children's access to dental care in the United States persist, with a higher prevalence of dental caries observed in vulnerable populations with limited social and economic support and resources. Although utilization of dental care services by children covered by public insurance has increased over the last few decades, inequity which is correlated with health insurance coverage, SES, minority status, immigration status and having special health care need remains in children's oral health.¹⁷⁻¹⁹

A 2017 study by Dye et al. found that, although untreated dental caries has decreased for all two- to eight-year-olds, among six- to eight-year-olds, nearly half experienced dental caries in their primary teeth with no change between 1999 and 2004 and between 2011 and 2014.²⁰ During the same time periods, however, caries prevalence significantly increased from 60 percent to 69 percent in Hispanic six- to eight-year-olds.²⁰ In addition, Hispanic children are most likely never to have seen a dentist. Among children who are publicly insured, Hispanic and African American children have longer periods of time between dental visits as well as higher rates of caries.²¹⁻²³

The increase in treated dental caries suggests that more children are accessing services, but it also drives home an important point: we are getting to children too late. With every year past age one that we delay dental visits, it is increasingly likely that dental disease can no longer be prevented or arrested, but will require surgical intervention. The link between child abuse and neglect and dental caries is also being investigated, and research suggests an association between the two.²⁴ Viewing children in the context of their social situation, including their family's social capital, provides an important lens to help identify those children who may require the greatest level of early support and intervention to prevent poor health outcomes later in childhood.²⁵

Delaying Treatment Has Serious Consequences

Untreated dental caries can lead to significant pain, difficulty eating, overuse of EDs, and lost school time; it can also progress to systemic infection and even death.¹ It is estimated that over 34 million school hours are lost each year due to dental problems, and children with poor oral health are at the greatest risk for absence from school.^{12,13} Minority and uninsured children have more frequent absences than their white and insured peers due to dental problems.^{12,13} Jackson et al. reported that school-age children with poor oral health status were nearly three times more likely than their counterparts to miss school as a result of dental pain.²⁶ Absences caused by pain were associated with poorer school performance, but absences for routine care were not.

Dental disease can progress systemically and result in death in the most extreme cases.¹ Deamonte Driver, a 12-year-old boy, died in 2007 as a result of an untreated dental abscess that spread to his brain.¹ Alexander Callender died at age six following complications due to septic shock secondary to a dental abscess.²⁷ While deaths from dental disease are not centrally reported, one study examining the outcomes from hospitalizations due to periapical abscesses (severe bacterial infections in the innermost part of the tooth) reported that, from 2000 to 2008, there were more than 60,000 hospitalizations nationally, resulting in at least 66 deaths across all ages.²⁸ Pediatric oral health strongly influences the quality of life and general well-being of children and their families. Much of this is in the hard-to-quantify opportunity costs of missed work, transportation, time away from home and recovery from dental surgery. The 2000 Report of the Surgeon General on Oral Health in America underscores the importance of oral health to overall well-being and quality of life.⁹ The Institute of Medicine and National Research Council's 2011 report on improving access to oral health care to underserved populations conjoins oral and systemic health; the condition of one is linked to the other.²⁹ Children with good oral health live healthier, happier lives and are on a more positive oral health trajectory into adulthood. Evidence suggests that children with early childhood caries (ECC, defined as the presence of one or more decayed [noncavitated or cavitated lesions], missing [due to caries], or filled tooth surfaces in any primary tooth in a child under the age of six³⁰) may be more likely than their peers to satisfy one of the criteria for failure to thrive by weighing less than 80 percent of their age-adjusted ideal weight.³¹

A cross-sectional study of one- to three-year-olds in Brazil found that children with untreated dental disease in advanced stages are more likely to have a poorer quality of life than their peers, including greater difficulty with eating and drinking.³² Following dental rehabilitation, however, children have been shown to experience an increase in growth velocity and, therefore, an increase in overall health.³³ Thomas and Primosch reported that, following dental rehabilitation under GA, a significant improvement occurred in the children's quality of life, as reported by their parents.³⁴ Despite the reported neutral effect on weight gain in this study, the parents reported improvement across quality-of-life indicators, including an increase in the amount of food eaten at meals, the reduction in chewing problems, better sleep, less irritability and fewer complaints from children about their teeth.³⁴ Other reported improvements in quality of life following dental rehabilitation include pain relief, more smiling, improved school performance and increased social interaction.³⁵

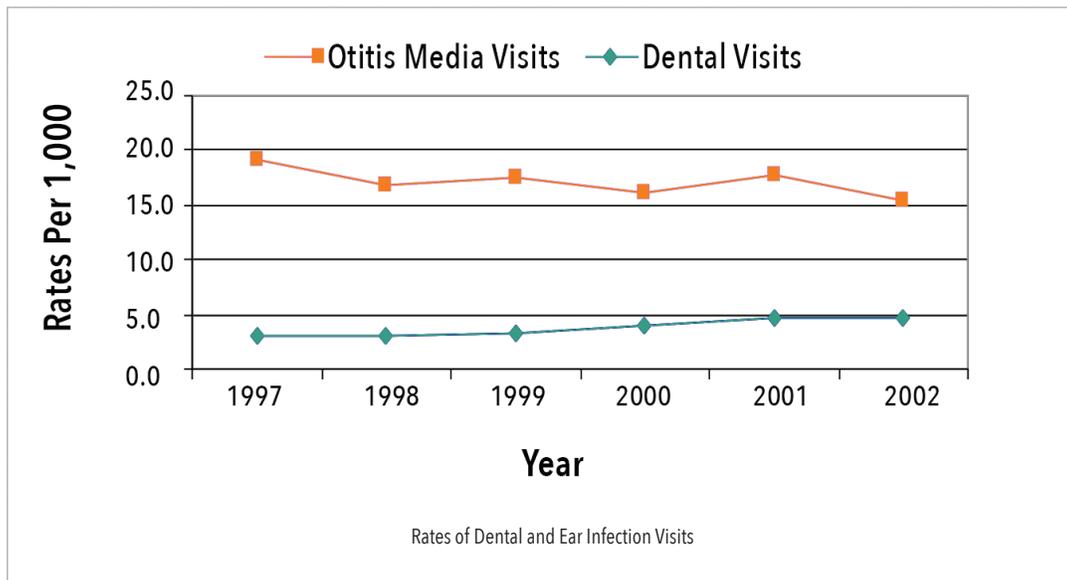
Early Prevention Saves Money for Families and Communities

In medicine, numerous examples can be found of the cost-effectiveness of preventive services. Folic acid supplementation beginning before conception and continuing for the first 10 to 12 weeks can result in dramatically fewer neural tube defects among infants, and the cost reductions are immense.³⁶ Prenatal care also is accepted as an effective tool to reduce health care costs and improve both maternal and infant health. Mothers who do not receive prenatal care are almost three times as likely to have a low-birth-weight infant as mothers who do.³⁷ For every dollar spent on prenatal care, the health care system saves between \$2.57 and \$3.38 on the medical cost of care for low birthweight babies.^{38,39} As with well-child medical visits, one of the cornerstones of the infant dental visit is to prepare parents and caregivers for future needs and age-specific milestones. With early and timely intervention, it is possible to prepare parents for dental milestones while reducing or eliminating future dental caries. This, in turn, should reduce dentally related costs throughout childhood, specifically costs related to restorative care and emergency treatment secondary to infection.

Seeing children early, especially those at increased risk for disease such as minority and publically insured children, allows for maximum prevention and conservative disease management with the goal of reducing invasive and costly restorative care and emergency visits. A recent multicenter study of over 2,000 children found that the odds of having caries at the first dental visit increased by a multiplicative factor of 2.1 for every year of increased age.⁴⁰ A child whose first dental visit is at five years old has nearly 20 times the odds of having caries at their first dental visit compared to a child whose first dental visit was at age one.⁴⁰ In 2014, Nowak et al. examined billing data from 20 corporate treatment centers. Among 40,000 children, if the first dental visit was delayed until age four, there were 3.6 more dental procedures performed on average than if the first dental visit was before age four.⁴¹ This amounted to approximately \$360 more spent per child over years of follow up.⁴¹

Early dental visits are expected to reduce a child's future dental risk, leading to improved oral health and reduced oral health costs. Because untreated dental disease increases in severity and necessitates more extensive and costly treatment, timely intervention has a great potential to reduce the overall costs associated with dental treatment in young children. White et al. examined the use of the operating room and compared visits for two conditions: otitis media (ear infections) and dental caries in otherwise healthy children younger than age five.⁴² The number of otitis media visits per 1,000 children decreased slightly over a five-year period. By contrast, the rate of dental visits increased by 43 percent (See Page 7.)

Data now suggest that families may prefer to have their children treated under GA in comparison to other behavior management modalities when appropriate; however, cost continues to emerge as a prohibitive factor, especially for those who are uninsured.⁴³ Between 2011 and 2015, the overall utilization and expenditures in North Carolina associated with dental treatment under GA increased.⁴⁴ Although this partially reflects an increase in access to care, the dollar cost associated with treatment under GA has risen sharply.⁴⁴ Green et al. estimate that the cost of GA for dental treatment has jumped over the last 15 years from approximately \$2,600 to more than \$10,000 per visit.⁴⁵



Fewer Costly Trips to the Emergency Room

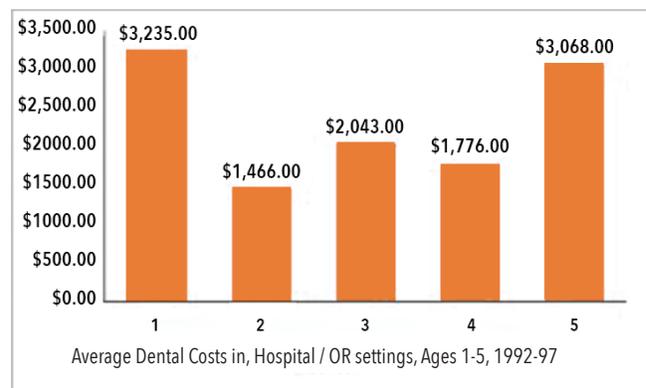
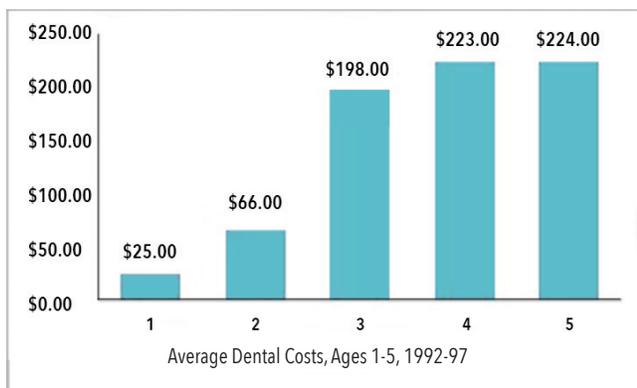
Money, time, and resources are being spent in hospital operating rooms and EDs instead of being allocated to preventing disease initiation and progression. A report that examined Medicaid-insured children younger than age six treated in Iowa for ECC in a hospital or ambulatory care setting indicated that less than five percent of those receiving dental care consumed 25 percent to 45 percent of the dental resources.⁴⁶ Another similar study from Washington State concluded that 19 percent of their pediatric dental emergencies were related to ECC; among them, over half were children 3.5 years or younger.⁴⁷ In Florida, the number of ED visits due to dental emergencies from 2005 to 2014 increased by 43 percent for one- to four-year-olds and by over 70 percent for five- to 14-year-olds during this time period.⁴⁸

One survey of United States hospital-based ED visits due to dental conditions among children found that, in 2008, over 200,000 such ED visits occurred, with an average cost per visit of \$564 and a total ED charge across the United States of over \$100 million.⁴⁹ In 2014, a study using the Nationwide Emergency Department Sample of the Healthcare Cost and Utilization Project for the years 2008 to 2010 found that one percent of all ED visits in the United States involved diagnosis of a dental condition with a mean ED charge per visit of \$760.⁵⁰ ED utilization continues to increase nationally, with an estimated 2.4 million dentally related ED visits occurring in 2014 at an average cost of \$971 per visit for children younger than age 18.⁵¹ Dental intervention in hospital EDs is often limited to management of acute pain and infection, which leaves the chronic disease of dental caries still in effect. In a one-year study from five hospital systems in Minnesota, 20 percent of the individuals (over 2,000 persons) who visited the ED for a dental emergency had at least a second, similar ED visit.⁵²

Dental caries is a disease carrying costs beyond pain, infection, and suffering. For a single admission to a hospital due to dental-related infections, the cost can exceed several thousand dollars, in addition to the other disruptions families face, including lost time from school and work.⁵³ Although it may assuage pain in the short-term, palliative intervention in the ED by physicians imposes a significant cost to the patient, medical institutions and society as a whole.¹ Early prevention, however, can translate into significant cost savings, especially for those families at or below the poverty level, where caries rates are dramatically higher in three-year-olds and younger.

The Evidence is Clear: Early Intervention Works

Several studies have examined the effectiveness of early dental visits. A seminal study was conducted by Savage et al., who examined the effects of early preventive dental visits on subsequent utilization and costs of dental services among pre-school-aged children.⁵⁴ Children who had their first preventive dental visit by age one were more likely to have subsequent preventive visits but were not more likely to have subsequent restorative or emergency visits. Additionally, the age at the first preventive dental visit had a significant positive effect on dentally related expenditures, with the average dentally related costs being less for children who received earlier preventive care. The average dentally related costs for children with the first dental visit at age one was \$300 less than for those who waited until age three. Two subsequent studies of Medicaid-enrolled children in Wisconsin⁵⁵ and Michigan⁵⁶ failed to find a relationship between an early dentist visit and total dental costs. Unlike the study conducted by Savage et al.,⁵⁴ neither investigation considered the hospital, ED, or other medically related costs associated with treatment of dental disease in young children. A disproportionate share of costs for dental treatment of children younger than age five is for ED or hospital visits that are realized in medical costs (See tables below).



An Alabama study examined the effectiveness of preventive dental visits in reducing non-preventive dental visits and expenditures.⁷ The authors concluded that “preventive dental visits can reduce subsequent non-preventive visits and expenditures for children continuously enrolled in CHIP. However, they may not reduce overall program costs.” These results are not surprising, given that the investigation examined children in two cohorts (children at least eight years old and children eight years old and younger). The inclusion of older children with those in the preschool-age population (children younger than six years old) may skew the findings, as a higher proportion of younger children need to be seen in ambulatory or hospital settings for care.

Another study conducted in North Carolina compared outcomes for Medicaid-enrolled children who had a preventive visit before 18 months old with those who had a visit at 18 to 42 months old.⁵⁷ This investigation defined preventive visits as primary, secondary, and tertiary. (Primary prevention is defined as true prevention: preventing disease from the start. Secondary prevention refers to detecting disease early and arresting progression. Tertiary prevention is focused on reducing morbidity and complications of a condition.)

For the purposes of their analysis, a primary preventive visit was defined as an early dental visit for preventive services that had no treatment on the day of visit or for three months. A secondary preventive visit was defined as an early dental visit for preventive services that was followed by no more than two restorative treatment procedures. The study found that children who had a primary or secondary preventive visit by 18 months old had no difference in subsequent dental outcomes compared with children in older age categories; however, children who had a tertiary preventive visit by 18 months old had lower rates of subsequent treatment and lower treatment expenditures compared with children in older age categories. Children who benefited most from an early preventive visit were already presenting with dental needs by 18 months old.⁵⁷

Preventive dental visits before five years old have been associated with significant reductions in children's non-preventive dental visits and expenses associated with non-preventive services.⁵⁸ Nowak et al. found that, over eight years of follow up, children who had their first dental visit before age four spent an average of \$360 less on dental treatment than those who did not.⁴¹ A 2014 systematic review examined the importance of preventive dental visits from a young age.⁵⁹ This study concluded that, although there are costs associated with preventive services, early preventive dental visits may be associated with reduced restorative dental care visits and related expenses during the first years of life.⁵⁹ The benefits of early prevention extend beyond childhood and across the life of the individual, as conceptualized by the life-course approach to health status.

Children with greater caries experience at five years old are much more likely to have dental caries, tooth loss, and periodontitis in adulthood (age 26) when controlling for SES.⁶⁰ This life-course approach also sheds light on oral health disparities; children who are of low SES at five years old are also more likely to have lost a tooth in adulthood due to dental caries, controlling for oral health status in childhood.⁶⁰ Beyond the savings on restorative dental care provided in an office or hospital setting, the prevention of dental disease has the potential to save millions of dollars per year on dental-related ED visits and hospitalizations and reduce an untold amount of pain and distress.

Evidence increasingly suggests that, to be successful in preventing dental disease, we must begin preventive interventions early, within the first years of life. If appropriate measures are applied sufficiently early—in infancy—it may be possible to raise a cavity-free child. Children with caries in the primary dentition are more likely to have caries in the permanent dentition, and caries on primary molars has been shown to have the highest predictive value of future pit and fissure caries as permanent teeth emerge.^{61,62} Exposing families to dental anticipatory guidance and preventive services as primary teeth begin to emerge may prevent caries from developing and has the potential to improve the trajectories of the oral health of children, especially those whose caregivers would otherwise not have exposure to important information about best oral health care practices. The medical community has promoted the concept of a medical home to improve families' care utilization. Establishment of a dental home early in the child's life can introduce children and their families to prevention and early intervention prior to the development of dental problems.^{3,63,64}



Overcoming Barriers to Early Care

Although more children with public health insurance are accessing dental care, many barriers to care remain in place.⁶⁵ Under the Medicaid program, early and periodic screening, diagnostic, and treatment (**EPSDT**) services are required for most individuals younger than 21 years old. EPSDT includes periodic screening, dental, vision, and hearing services. Each state, however, individually determines the content and periodicity of these services. The AAPD's Guideline on Periodicity of Examination, Preventive Dental Services, Anticipatory Guidance, and Oral Treatment for Children contains detailed recommendations regarding the content and periodicity of professional dental services for children.⁶⁶ Not all states use the AAPD's periodicity schedule; as of 2018, not all states reimburse for preventive services delivered to children younger than three years old.⁶⁷ Following the periodicity and content schedule for oral health services, as recommended by the AAPD's guideline, is a first step to removing barriers to necessary and effective prevention and treatment of dental disease.⁶⁶

In 2018, despite clear recommendations from leading pediatric medical and dental organizations that children visit the dentist by age one, public insurance in 13 states did not reimburse providers for dental code D0145: oral evaluation for patient under three years of age.⁶⁷ Far fewer states reimburse for code D1354: caries arresting medication (SDF), which has the potential to delay or prevent more costly and invasive procedures that may otherwise need to be rendered in an operating room or ED setting.^{14,15,67} Even in states that reimburse for SDF, the reimbursement method and amount varies greatly, and such lack of clarity poses barriers to care by prohibiting provider uptake and use.^{67,6}

Including oral health services for children younger than three years old as part of each state's EPSDT services and expanding Medicaid coverage can remove the cost barrier to dental care for families and improve the oral health trajectory of enrolled children. Evidence suggests that Medicaid expansion has improved access to care for minority children and may have positive health effects for adults. A 2016 study found that public health insurance expansions to children and pregnant women narrowed racial/ethnic oral health disparities in young adulthood.⁶⁹ A separate 2016 analysis of the long-term impacts of Medicaid exposure in early childhood suggests that access to Medicaid in early childhood (age zero to five years old) was associated with meaningful improvements in adult health (25 to 54 years old).⁷⁰

One program in Michigan (Healthy Kids Dental) showed an increase in dental care utilization, an increase in dentist participation in Medicaid, and a decrease in the distance traveled by patients for dental appointments when providers were reimbursed at competitive levels for preventive services administered to children enrolled in Medicaid.⁷¹ States should be reliably and competitively reimbursing for basic early preventive health services for children, thereby decreasing barriers to necessary preventive care and narrowing the sharp disparities in health status.

When Health Care Providers Collaborate, Kids Win

The integration of oral health services into primary medical care necessitates collaboration and cooperation with the medical community for coherence of health messaging and timely referral of each child to a dental home. Over the last several years, dentists and other health care providers joined forces to obtain positive health outcomes for children. In North Carolina, the Into the Mouths of Babies (**IMB**) program trains family physicians and pediatricians to deliver preventive oral health services to children from the emergence of the first tooth through 42 months during well-child visits. Services include applying fluoride varnish, delivering anticipatory guidance to caregivers, performing oral health screenings, and making referrals to a dental home by age one.⁷²

Reports indicate that children receiving four or more IMB visits before three years of age show an 18 percent reduction in caries and a 21 percent reduction in hospitalizations for dental treatment.^{73,74} Overall, it was estimated that between 2004 and 2014, IMB contributed to a decline in dental caries rates and helped reduce the disparities in oral health between low and other income families at the larger community level.⁷⁵

The partnership between the AAP and AAPD promotes the dental and medical home models and, moving forward, will allow for better identification of children who would benefit most from oral health screening and referral. A recent multi-year study by the AAPD exemplifies this medical-dental cooperation. Using variables readily available at a well-child visit (e.g., age, primary language, and feeding practices), this multi-center study collected data from primary care visits, and a predictive model was developed to identify children who would be most likely to have dental caries at the time of their first dental visit.⁴⁰ Tools such as the AAPD's predictive model for caries risk promote interdisciplinary partnership and advance quality health care, as defined by six domains set forth by the Institute of Medicine: (1) safe; (2) effective; (3) patient-centered; (4) timely; (5) efficient; and (6) equitable.⁷⁶ By eliminating burdensome screening tools and replacing them with efficient, easy-to-use, and evidence-based risk assessment tools, the AAPD initiative also aligns with the goals of Healthy People 2020, released in 2010 by the US Department of Health and Human Services. Healthy People 2020 highlights the need to address social determinants of health and create social and physical environments that promote good oral health for all.⁷⁷

Dental caries is a chronic disease with high morbidity, as demonstrated conceptually by a type A morbidity and mortality pyramid, in which increasingly severe outcomes and effects are stacked on top of one another.¹ The extent of individual disease depends on many factors within the individual, family, and community levels and must be addressed in a multifactorial manner moving forward. Dental caries shares many common risk factors with other diseases (e.g., obesity and diabetes). Consequently, identifying and addressing these common risk factors have the potential to reduce overall morbidity and mortality associated with chronic diseases of childhood in a cost-conscious and effective manner.⁷⁸

Engaging other professionals to educate families, including physicians, social workers, dietitian nutritionists, and community health workers, increases the likelihood of meeting families where they are in terms of oral health knowledge and practices and promotes knowledge, transfer, and positive behavior change.⁷⁸ Additionally, including insurance coverage for case management codes, as part of EPSDT benefits, has the potential to improve the oral health outcomes of children, especially minority children and those of low SES.⁷⁹ Dental case management can make the dental home accessible for families by improving patient understanding, educating caregivers on preventive practices, and providing administrative assistance with scheduling appointments, arranging childcare and transportation, and filling out paperwork.^{67,79} Addressing challenging structural barriers to care as a part of the broader health system includes increasing public coverage and incorporating tailored services, such as case management, into routine practice.

As attention shifts toward identifying modifiable risk factors common to multiple chronic diseases, including dental caries, a continued partnership among advocates for children's dental and oral health as well as overall well-being will be necessary to deliver efficient and effective intervention. Facilitating access to primary dental and medical care will require ongoing research and close collaboration among health care providers to advocate on a local, state, and national level for policies that reduce barriers to safe, quality care. These include designating resources for caregiver education and provider training as well as standardizing timely and competitive reimbursement for preventive services for children. Preventive health care has the overwhelming support of the AAP, AAPD, ADA, and other professional dental and medical organizations. Following their recommendations for providing basic dental health services to children younger than three years old will reduce barriers to the health and well-being of our children.

Conclusion: Early Intervention Brings Vital Rewards

Dental disease can have devastating effects on young children and their families, and treatment can be costly. Strong clinical, theoretical, and scientific evidence supports early dental visits to improve health outcomes and reduce dental-related costs. The study conducted by Savage et al. followed children for five years; one can only speculate what the cost savings would be if the children were followed for 10 or 20 more years.⁵⁴ Since young patients with caries in their primary teeth are three times more likely to develop caries in their permanent teeth, early and effective prevention of caries in the primary dentition has the potential to reduce suffering and expense.⁶¹ If the trend of using more preventive services and less restorative or emergency services holds or increases, the cost impact would be dramatic, with savings in the millions of dollars.

The benefit of saving dollars on dental treatment as a result of early preventive dental services is well-established, but the other benefits of early dental visits cannot be ignored. Early dental visits allow for the establishment of a dental home, which is modeled after the AAP's medical home concept, where primary care can be provided in a consistent setting and caregivers and providers form a lasting relationship. Similarly, early dental visits build foundational trust in the patient-provider-caregiver interaction, allowing for open discourse where caregivers can be given counseling on infant oral hygiene practices, fluoride therapies, injury prevention, dietary counseling, and oral habit formation.² Early preventive dental visits not only save dollars, they also maximize the chances of creating home environments in which oral health is valued and families are armed with knowledge and skills to raise a cavity-free child.

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