The Role of Dentists in Prevention
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The dental profession in North Carolina has a proud tradition of focusing on prevention of oral disease and promotion of optimal oral health. In 1918, with the visionary support of the North Carolina Dental Society, our state established the nation’s first statewide dental public health program. While the oral disease burdens of the early 20th century demanded an emphasis on restorative and surgical treatment for underserved children, preventive and educational activities were important parts of this ground-breaking endeavor. Today, almost a century later, our state’s dental public health program (the Oral Health Section of the North Carolina Division of Public Health) remains a vital part of the dental profession’s commitment to promoting oral health and improving access to dental care. This commitment is realized through activities such as support for community water fluoridation, provision of dental sealants and fluoride mouthrinse targeted to children at high risk of tooth decay, oral health screening, and referral of underserved children both to the private sector and to publicly supported clinics for ongoing preventive and
restorative care. In my view, these community-based efforts are most effective when they are complemented by a strong commitment to prevention on the part of practicing dentists across the state.

As a pediatric dentist, I come face-to-face with the importance of prevention every day. Most of the oral diseases that dentists treat on a routine basis are almost completely preventable. National and statewide epidemiologic data confirm how far we have come as a society in reducing the burden of oral disease and promoting oral health. However, not all groups have benefited equally from these efforts. Much of the disease burden remains concentrated in a small percentage of the population. There also is evidence of what appears to be a troubling reversal of the historical decline in tooth decay prevalence among preschool-aged children. Often those with the most oral disease are members of low-income families, residents of rural and inner city communities, and members of racial and ethnic minority groups. These individuals often have very limited access to dental care, which makes prevention all the more essential.

The issue of early childhood caries (tooth decay) provides a particularly sobering example of the importance of prevention as well as an opportunity to discuss the role of dentists in oral health promotion. Who could argue with the goal of every North Carolina child starting kindergarten free of tooth decay? Unfortunately, 2008-2009 oral health assessment data produced by the North Carolina Oral Health Section indicate that 37% of North Carolina children already have experienced tooth decay in their primary teeth by the time they reach kindergarten. Moreover, one of every six kindergartners was found to have untreated tooth decay.

A number of barriers make addressing the problem of early childhood caries particularly challenging. First, parents and other caregivers must be well informed regarding the risk factors for early childhood caries such as harmful dietary habits, inadequate oral hygiene practices, and lack of access to optimal levels of fluoride on a daily basis. Yet, well-educated families regularly visit my practice with children who have been devastated by severe tooth decay by the age of three or four—often requiring extensive restorative treatment with sedation or general anesthesia. A common question I hear from these parents is, “How could this have happened?” These parents often seem reluctant to grasp the multifaceted nature of tooth decay or their primary role in promoting good oral health for their children.

Education alone is not enough. Behavioral change is never easy. In the context of a busy dental practice, it is often challenging to spend the amount of quality time necessary to inform parents adequately and then to help them accept their responsibility to institute more healthful practices for their children. This seems especially challenging when working with families at highest risk for early childhood caries who may face additional social and financial barriers to making such essential behavioral changes. The challenge of implementing effective behavioral counseling is compounded by a dental reimbursement system that compensates for procedures rather than for the time and expertise devoted by the dentist and dental auxiliaries.

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efforts to educate families with young children and to prevent early childhood caries, especially among high-risk groups such as Medicaid and NC Health Choice recipients. Having played a small part in those early efforts, I am convinced of their value. However, I am equally convinced that they will have limited impact without the full engagement of and partnership with the dental workforce in our state.

Unfortunately, many prevention efforts are hampered by the woefully inadequate funding for oral health services in Medicaid and NC Health Choice. Dentists participating in these programs must be willing to accept reimbursement rates that are far below the actual costs incurred for providing the necessary preventive and restorative treatment. High-risk children often require an amount of time and expertise on the part of the dental team that far exceeds that of a child at lower risk for oral disease. If North Carolinians truly value the goal of every child beginning school healthy and ready to learn, we cannot ignore the need for good oral health. We must adequately fund dental care for our most vulnerable and underserved children.

Dental-medical collaboration can offer additional avenues to achieve effective health promotion for North Carolina. Scientific research continues to illuminate the connections between poor oral health and cardiovascular disease as well as premature, low birthweight infants. Thus, promoting oral health is likely to pay added dividends in terms of a healthier population. Nor should we ignore the potential for the dental workforce—who has regular contact with broad segments of the population—to make positive impacts on health problems such as childhood obesity, head and neck cancer, and tobacco use. Dentists and dental team members have a long history of focusing on prevention, and the future looks bright to me. NCMJ

REFERENCES