

patients is a small point at the top of the pyramid, among the least effective interventions affecting health. The base of the pyramid included changing the context to make individuals' default decisions healthy decisions, as well as socioeconomic factors. The environment my patients live in every day is the biggest determinant of their behaviors. The *Prevention Action Plan*, presented that day by NCIOM president and CEO Pam Silberman, JD, DrPH, reflects this pyramid as well: only 9 of the 45 recommendations made by the task force reflect activities that take place in my office or in my regular interactions with my patients. The second slide that caught my eye emphasized the relationship between a health information system oriented toward prevention, payment that rewards disease prevention, and practice workflows that support prevention and patient empowerment to prevent disease and optimize health. This also places what I do every day in the broader context of my personal health, my family's personal health, and the health of all my neighbors.

Prevention is encoded in the DNA of family physicians, but it is not fully expressed. Prevention really is the hardest thing I do. It consumes my most precious resource—time—while providing the least financial reward. I do the best I can

right now because it's the right thing to do and because no amount of money can match the joy in someone's face as they tell me of completing their first 5K run or of the weight they've lost. No amount of money can match the feeling of finding an early, likely curable, cancer. I can't recall the last child I saw with meningitis or chickenpox, a testimony to the power of immunizations. I—we—can do better, though. A trip to the mall—actually, just a trip to my reception area—to people watch is all the evidence I need that more work is needed. The time to transform my practice is now. The time to transform our communities is now. Health care reform that does not address the fundamental governmental policies and personal behaviors that lead to poor health outcomes seems to me to be quixotic and perhaps doomed to fail. I need your help at both the practice level and community level to see that we change the system, making me the superior doctor I want to be and you deserve. **NCMJ**

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## The Role of Dentists in Prevention

Ronald Venezie, DDS, MS

**T**he 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.<sup>1</sup> 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.<sup>2,3</sup> 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.<sup>4</sup> 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.<sup>5</sup> 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.

For dentists and our teams to be most effective in prevention, we must see children early and on a regular basis. This allows us to assess each child’s risk for oral disease and offer anticipatory guidance to help parents achieve optimal oral health for their children. This is the rationale behind the

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longstanding efforts of the American Academy of Pediatric Dentistry to promote the establishment of a dental home by a child’s first birthday. Admittedly, it has taken some time for this concept to take hold in the dental profession, in part due to students’ historically limited exposure to treating infants and very young children in dental school curricula. However this has changed dramatically in recent years. As an example, the University of North Carolina at Chapel Hill School of Dentistry has implemented the Baby Oral Health Program (BOHP) to provide hands-on clinical experience for dental students in delivering oral health care to infants and toddlers.<sup>6</sup> This is an important step in enhancing the capabilities of the dental workforce—the vast majority of whom are primary care providers—to address early childhood caries as well as to think even more broadly about oral health promotion.

Over the past decade, North Carolina has been at the forefront of engaging the primary medical care workforce in

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.<sup>7</sup> 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**

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**Eat Smart, Move More Health Tip**

## Tame the Tube— and Get Moving

Many of us say we don't have time for physical activity, yet we spend 3 to 4 hours in front of the TV. Not only are we inactive while watching television, we often snack on high-calorie foods at the same time. Trade TV time for physical activity. Walk or bike with your family after dinner. By planning TV time, you'll have more time for physical activity.

For more tips on how to tame the tube where you live, learn, earn, play and pray, visit

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