A New Framework for Thinking About the Prevention of Oral Disease

The American Dental Association (ADA) is America's leading advocate for oral health, and prevention is the cornerstone and bedrock on which the Association has built its covenant with the nation to serve as its trusted oral health authority. The Association and practicing dentists have been at the vanguard in focusing on the prevention of oral disease. This, of course, is predicated on providing evidence-based clinical preventive services to most individuals in the United States who access dental care and to continue to advocate for, and support, population-based preventive intervention, such as community water fluoridation. Is it time, though, for the profession to begin to rethink what prevention really means? I would like to propose a new framework for thinking about the term "prevention" as it applies to oral disease. Perhaps it is time to think about prevention as the management of oral health risks, including the identification, assessment, and prioritization of these risks, and to take actions designed to mitigate the risks of oral disease or dysfunction.

If indeed this is the case, then prevention begins to mean a lot more than just sealants, fluoride, or routine screening for oral cancer in the dental office. Perhaps the phrase "health risk management" creates a framework for a far more interesting conversation on an effective strategy for prevention activities. Imagine a dental school curriculum completely based on the concept of health management as opposed to disease management. Would a framework like this shift the paradigm from surgical management to medical management of oral disease?

As we all know, the dental profession has proven itself highly effective at surgical disease management—we are incredibly good at providing it, especially for those who have the educational, financial, and cultural means to access care. However, we as a society are failing those members of our communities who are not so fortunate for whatever reason: poverty or inadequate discretionary income, low education levels, cultural disconnects, language barriers, geographic barriers, physical barriers, and fear. All are factors that increase a person's risk of oral disease. The number of US citizens living at or below the federal poverty level, especially children, is growing rapidly. Oral disease rates are on the rise, especially among high-risk populations. Public financial resources to address health disparities are drying up. We need to think and act differently—putting prevention into a much broader, much higher priority context. And to get there, we will have to collaborate in a way never before seen.

The ADA has made a commitment to collaboration. The ADA's new focus on collaboration is seen in our mission, our actions, and in how we are identifying opportunities for the future. Two of the 4 goals in the ADA's current Strategic Plan hone in on the need for prevention and collaboration. One calls for the ADA to be the trusted resource for oral health information that will help people be good stewards of their own oral health. Prevention is key, and it has long been a hallmark of the ADA. A second articulates the need to improve public health outcomes through a strong collaborative profession. Collaboration is no longer elective or something that we simply leave to others.

In 2011, the ADA's House of Delegates took this goal one step further by encouraging all member dentists to be leaders within grassroots community efforts that affect the oral health of the public. The Association believes that dentists must be present and assume leadership roles when policies and programs focused on preventing oral disease and improving community health are being developed. It is incumbent on dentists to ensure that oral health is acknowledged as an integral component of an interdisciplinary approach to improving population health.

This proactive strategy will afford dentists the opportunity to influence the decision-making processes when discussions are being held at the community level on how best to integrate and promote oral health or provide oral health services within a medical home, health home, safety net clinic, school, a facility serving the developmentally disabled, or a nursing home. There are a variety of mechanisms for engaging in these grassroots efforts, including, but not limited to, serving as volunteer leaders of boards of local health departments and federally qualified health centers, school health advisory councils, nursing home advisory committees, Head Start Health Service Advisory Committees, local health partnerships, and local oral health coalitions. By having dentists engaged in these grassroots, broad-based community efforts, collective efforts will be more effective, more likely to achieve their intended outcomes, and less likely to result in unintended consequences that may have minimal impact on preventing oral disease and improving the oral health of the public. Clearly, collaboration is a goal for the entire ADA membership to embrace.

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When it comes to prevention, the ADA is doing quite a bit of work. Currently, the ADA has more than 35 policies related to the prevention of oral disease, such as those centered on fluoride varnish use, school-based fluoride mouth rinse programs, school-based oral health risk assessments, oral health awareness campaigns, oral health literacy, nutrition, and tobacco use and cessation.

In addition to prevention-oriented policies and awareness campaigns, the ADA helps support the dental profession and the public through a range of science-based programs. A primary focal point is the ADA Center for Evidence-Based Dentistry Web site (http://ebd.ada.org). This site features clinical recommendations/guidelines, a database of systematic reviews, and critical summaries of systematic reviews for dental professionals, as well as a patient-friendly version with "plain language" summaries and patient resources, and has recently been optimized for mobile devices.

Currently available are 8 clinical recommendations/guidelines related to disease prevention. There are more than 1700 systematic reviews that are updated quarterly on a wide range of topics, such as community oral health and oral health literacy, geriatric and special care dentistry, and pediatric dentistry. Furthermore, critical summaries for some of the systematic reviews are also available. These brief summaries provide key concepts and clinical implications in a user-friendly, 1-page format.

In March of this year, the ADA Center for Evidence-Based Dentistry convened the 5th Annual EBD Champion Conference. This conference has aimed to recruit dental team members, with priority given to those who treat underserved populations, to become Evidence-Based Dentistry Champions, learn about EBD, and disseminate this information to their colleagues. Partially funded by a grant from the Agency for Healthcare Research and Quality (AHRQ; Grant Number 1R13HS020551), this conference clearly fits within AHRQ's mission "to improve the quality, safety, efficiency, and effectiveness of health care for all Americans."

Many other organizations are also dedicating an extraordinary amount of time and effort to the prevention of dental disease, but we must ask ourselves this: Are we achieving the public health impact we desire? Rather than a buckshot prevention approach, should we instead develop a laser beam–like *strategic* approach to health management . . . a strategic approach with adequate resources and measurable impact and outcomes?

Let's be honest: there are difficult barriers (ie, risk factors) out there that have the ability to stunt our potential when it comes to achieving optimal oral health. Most Americans have access to the best dental care in the world and, as a result, enjoy excellent oral health. But tens of millions still do not because they are hampered by these barriers and subject to these risks: poverty, socioeconomic status, geography, education levels, health behaviors, emotional barriers, and language or cultural barriers.

We need to educate policy makers on prevention as a health management strategy. To this end, the ADA is publishing a series of statements on access to oral health and the ADA's vision of a healthier, more productive nation enabled by breaking down all of those barriers one by one, substantially lowering the risks related to oral disease, and strengthening the tattered safety net and the entire dental delivery system. Through these efforts and more, the ADA strives to educate the public on the importance of prevention in achieving and maintaining optimal oral health over the life span—as a very important component of an all-around healthy life.

Prevention strategies, including ongoing risk assessments and targeted interventions, need to be implemented from cradle to grave if we are to get ahead of oral disease in this country, and perhaps in the world. In November 2010, the ADA convened a gathering of more than 150 individuals to participate in a National Coalition Consensus Conference: Oral Health of Vulnerable Older Adults and Persons with Disabilities. As health care providers and advocates, we are faced with an unprecedented challenge: increasing numbers of vulnerable older adults and people with functional limitations who require complex oral health care. Focusing on oral health care for the elderly has been a priority for the ADA since 2006. The recommendations from this consensus conference provide a stronger framework for health management for the elderly and the chronically ill.

Improving oral health literacy and self-care behaviors across the spectrum of our population are vitally important, but we first must help educate our policy makers, interprofessional colleagues, and the advocates. Second, we must educate and empower new parents and caregivers so they adopt healthy behaviors and reduce the risk of early childhood tooth decay in their own families. I am excited about the current collaboration between the ADA, the American College of Obstetricians and Gynecologists, and the Health Resources and Services Administration to develop perinatal oral health guidelines. These guidelines will inform policy development, benefit design, and enable interprofessional collaborations to lower the health risks of perinatal women and their infants. The ADA is also collaborating with community health centers and private practice sector stakeholders on addressing the oral health needs of pregnant women and emphasizing the significant role that health centers play within dental practice–based research networks.

In another collaborative effort, the ADA and other organizations are magnifying our collective voices on the importance of preventive activities by forming coalitions. In 2010, the ADA convened the first National Roundtable for Dental Collaboration, with 16 dental organizations represented. The Roundtable has now expanded to 23 participants, including all of the dental specialty organizations, as well as the Hispanic Dental Association, the National Dental Association, the American Association

of Women Dentists, and the Society of American Indian Dentists.

The National Roundtable for Dental Collaboration led directly to the formation of a new coalition—The Partnership for Healthy Mouths, Healthy Lives—and thanks to a successful competitive proposal to the Ad Council, a national $100 million, 3-year oral health awareness campaign will be launched in 2012 with the goal of improving children's oral health by empowering their caregivers to reduce the risk of oral diseases through changes in behavior.

Let's revisit the question I posed at the beginning of this commentary. Are we achieving the public health impact we desire? Are multiple prevention activities enough, or do we need a broader, more comprehensive, and more focused and agreed-on health risk management strategy when it comes to oral health and disease? Health management is more than just prevention and maintenance. It's all encompassing.

We need to readjust our current prevention framework. We need to be visionary, we need to be bold, and we need to redefine what prevention means. I suggest that we must all work together in our common quest to be visionary risk managers and have a measureable impact. The city of Grand Rapids, Michigan, was visionary in 1945 when it became the first community to fluoridate its water supply and set the bar for a strategic plan calling for improved public health outcomes. And today, while we discuss the need to align the multiple stakeholders who care about prevention under one strategic vision and one broad but focused strategy, it's ironic and sad that one of the most truly important public health achievements in our country is under attack.

Lest you think I am overstating the case, let's take a look at oral heath in the early 1940s—before fluoridation. Many adults younger than 40 today are not aware of the ravages of tooth decay that were common in the first half of the 20th century. At that time, the typical schoolchild developed 3 to 4 new cavities each year. It was commonplace for individuals to receive dentures as graduation or wedding gifts. As World War II began, the most common reason for medical deferment was the fact that potential soldiers did not have 6 opposing teeth. The loss of all of one's teeth was viewed as an eventuality.

Today, many people simply do not have that type of decay burden or tooth loss—thanks in large part to the role fluoridation plays in preventing decay. We must not lose sight of the remarkable progress that has been made. No one wants to return to an era of rampant tooth decay. That's why the ADA actively supports fluoridation as part of its mission to improve public health. Community water fluoridation should be the cornerstone of a broad-based comprehensive strategy and not a town hall meeting budget discussion. We need to issue a wake-up call, because fluoridation is under attack. We need communities, individuals, and clinicians to step up and join us and strongly support fluoridated water, the most important cost-effective prevention tactic ever implemented.

In this current economic environment, the constricted budgets of state and local governments will significantly compromise our ability to promote health and manage risk for oral diseases. School-based sealant programs are a proven and effective tactic to reduce the risk of caries. Fluoride varnish programs are cost effective and clinically effective.

Dietary changes in the school setting, such as outlawing soda machines in schools, could have an enormous impact on lowering the risk for oral disease, obesity, and diabetes in this country. Adequate self-care, which will be the focus of the Ad Council public service announcement campaign, may be impactful. We may know in 3 to 5 years. Navigators, such as the community dental health coordinator model that the ADA developed and is piloting in multiple sites, currently have potential to positively impact health by lowering certain barriers to care. All of these activities need to be incorporated into a total approach to health management. As many have said, *we cannot drill and fill our way out of this problem.* The only effective approach will be prevention. We need to reframe what that means by creating a compelling vision—*let's end childhood caries in our lifetime*, for example—a broad comprehensive strategy, and a prioritized set of specific actions and impact measures that we can all agree on to move this country forward.

Together we can achieve the impact we seek: communities, individuals, clinicians, foundations, industry, and the ADA, with vision, with collaboration, and with a strong evidence base.

William R. Calnon, DDS
President, American Dental Association
211 E. Chicago Avenue, Chicago, Illinois 60611,
Phone: 312-440-2500
CalnonW@ada.org