# Clinicians' Perspectives on Prevention

*Tom Bacon, DrPH; Elizabeth Tilson, MD, MPH; J. Carson Rounds, MD; Ronald Venezie, DDS, MS*

## The Vital Role Clinicians Play in Fostering Preventive and Health Promoting Behaviors by Patients

*Tom Bacon, DrPH*

This section of this issue of the *Journal* focuses on the important role played by clinicians in fostering preventive behavior and includes three excellent commentaries by a pediatrician, a dentist, and a family physician. As each of our contributors note in their articles, the research is clear that the influence of a clinician is one of the most important factors for increasing the likelihood an individual will stop smoking, enter into an exercise or weight loss program, or in some other way change behavior to enhance his or her health status.

All three clinicians give a number of reasons the clinician is important in prevention. Dr. Tilson summarizes it well with her triad of trust, timing, and training. As both she and Dr. Venezie note, clinicians are trained to incorporate prevention into their practice, which is particularly true in primary care medicine and dentistry, where regular visits offer an opportunity for influencing the behavior of both children and adults. The trust that patients have in their doctor, dentist, or other primary care clinician is a unique one and places that clinician in a special role to effect behavior change in those they provide care for.

Having noted the obvious reasons for incorporating prevention into clinical practice, all three authors identify a number of barriers to making it a regular part of primary care medical and dental care visits. Although all acknowledge that prevention is a part of their training, it receives much less attention than the diagnosis and treatment of disease. Dr. Rounds notes the oft quoted axiom "the health care system gives the results it was designed to give," and our system is simply not designed to emphasize prevention. He and his colleagues also note that reimbursement for preventive activities has improved, but is not given the level of recognition that treatment of disease receives from a reimbursement standpoint.

While reimbursement is an important issue, the shortage of time to devote to prevention is probably the greatest barrier clinicians face. Given the limited time of an average clinic visit, there is simply not enough time to appropriately incorporate discussions with a patient about health promotion or prevention into the routine office visit and, although all three writers bemoan this fact, none have been able to effectively solve this issue in their practices.

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Finally, the authors acknowledge that there are clear limitations in terms of the impact of clinicians on individual behaviors relative to other factors in the environment. In a 15-30 minute visit, which may occur only once or twice a year, it is difficult for a clinician to overcome the powerful influences affecting behavior such as advertising, the ease of availability of unhealthy foods, and the influence of family and peers on behavior. In addition, access to clinicians is uneven in our society, and thus disparities by income level, race and ethnicity, and other factors exist which limit the ability of the clinicians to influence behaviors at the same level for all patients.

As we seek to design a system that more effectively promotes healthy behavior and preventive activities, it is clear that there must be significant changes in our systems of care. One or more of the authors observe that the burden of preventive activities cannot simply fall on the doctor or dentist, but must involve a team effort of all members of a given practice. Prevention needs to be incorporated in a more holistic way into each clinical office visit, including a more active role by other members of the office team to deliver effective evidence-based messages, answer questions about prevention and health promotion, and reinforce individual efforts to achieve healthier lifestyles. Just as performance improvement is a team activity, incorporating prevention into a practice must be better organized and implemented by the entire health care team to gain maximum effectiveness.

Finally, the authors acknowledge the unique role that doctors and dentists play beyond simply delivering care, and the obligation they have to be engaged beyond clinical practice. The medical, dental, and public health community has been actively engaged for many years in promoting policy changes at the state and federal level, such as advocating for increases in the cigarette tax. Because of the respected role clinicians have in society, they often have a special opportunity to work with legislators and other key policymakers to impact public policy. The role of the primary care clinician is a unique one, and the opportunities these clinicians have to both influence individual behavior and to affect public policy will likely grow in the future as there is an increasing recognition of the need to make prevention a vital part of the efforts to improve health outcomes and to control costs. These three clinicians effectively describe those various roles and make a strong case for the important influence they and their colleagues can have in the future. **NCMJ**

## The Role of Pediatricians in Prevention

*Elizabeth Tilson, MD, MPH*

Pediatricians are primed and well-positioned to address prevention in their practices and with their patients. In fact, prevention is already a core part of pediatric practice. Pediatricians regularly address many issues relevant to prevention, including diet and exercise, physical development, learning, mental health, immunizations, dental health, tobacco, alcohol use, substance abuse, sexually transmitted infections, and environmental exposures.

Pediatricians are well-prepared to address preventive issues for several reasons. First, we are trusted. Pediatricians, like physicians in general, are privileged to have the respect of their patients and are considered a trustworthy source for health advice. Parents value and want a relationship with their pediatrician and look to the pediatrician to partner with them in the care of their children.[1] Second, we are trained. Pediatricians receive specialized training in prevention and early detection during residency and ongoing continuing medical education. We also have the pre-existing visit structure. Our well-child planned visit schedule is the perfect opportunity to promote prevention activities. Also, importantly, we have the right audience. Parent and adult caregiver role modeling and actions are some of the strongest influences on children's health behavior, and these adults accompany children to office visits. During these visits, we have the opportunity to address the adult-child dyad. And finally, we have the right timing. Many health behaviors are established at a young age and many health and behavioral problems are more easily modified with early detection and intervention. By being involved with the care of a child, often from birth, we have ample opportunity to provide guidance and promote the establishment of healthy behaviors or intervene early to prevent problems before they are well-entrenched.

Despite the fact that pediatricians are well-positioned to address prevention, they encounter some barriers when trying to do so. Despite training, there still may be a perceived lack of knowledge or skill to provide preventive services. Third party payors, such as insurance companies, may not reimburse visits solely dedicated to prevention (e.g., a follow-up visit to address obesity detected at a well-child visit). Completion of an immunization series may be deterred by incomplete or inaccessible prior medical records or parental concerns generated by the lay media. Pediatricians may worry that adult caregivers perceive it to be inappropriate for a pediatrician to comment on adults' behavior, and there are multiple competing demands during the short visit time.

In addition, there may be many linguistic and cultural differences that come into play when dealing with preventive issues. For example, recent immigrants may not trust the safety of tap water and therefore not offer it to their children. Dental caries may develop secondary to the lack of fluoride. There might be cultural differences in the perception of a healthy body image, thus affecting parents' motivation to address weight concerns in their child. There may be

cultural differences in food preparation, thus affecting the acceptance of standard American dietary advice. There may be social stigmas surrounding cognitive development and mental health services, thus diminishing parents' willingness to accept these services for their child.

Finally, one of the biggest challenges to prevention is the reality that most of a patient's time is spent outside the influence of the practice. It may be difficult to make office visits so powerful that they can override the negative forces to which the child is exposed the rest of the year. For example, children may be exposed to asthma triggers, toxins, and environments that deter healthy eating and exercise in their homes, schools, and neighborhoods. These factors may be pervasive and persistent and can greatly affect a child's health.

While numerous, many of these barriers may be overcome or at least reduced. Pediatricians, and physicians in general, can pursue more training in promoting prevention, such as training in motivational interviewing techniques that can be applied to many health behaviors. Pediatricians can advocate for policies to allow for reimbursement of counseling and prevention visits, either on their own or through their professional societies. Practices can utilize the North Carolina Immunization Registry to obtain and share immunization history across practice sites. Pediatricians can provide and link parents to trustworthy sources of information about vaccines (e.g., American Academy of Pediatrics website) to balance the messages they may receive in the lay media.

Pediatricians can be reassured that many adults perceive advice on health behavior as appropriate and typically welcome it, especially as it affects their child's health. An especially appropriate setting for this advice is in the context of an adult caregiver who smokes. Exposure to parental smoking can not only have ill effects on children's health, but can also greatly increase the risk of the child becoming a smoker. Studies have shown that the majority of parents who smoke believe that pediatricians should offer them cessation advice and would welcome that advice.[2,3] Offering this advice could prevent the immediate and long-term consequences of exposure to environmental tobacco smoke.

In trying to handle multiple competing demands during an office visit, pediatricians can prioritize preventive activities, utilize quick clinical tools, engage in system redesign, and embrace a multidisciplinary approach to prevention. Pediatricians can strive to follow evidence-based screening, practices, and protocols and prioritize those activities with a strong evidence base. The United States Preventive Services Task Force is one source of evidence-based recommendations for preventive services.[4] Pediatricians can use their quick screening, assessment, and counseling tools. For example, the Ages and Stages Questionnaire, the PEDS Response Form, the Pediatric Symptom Checklist, and the Edinburgh Postnatal Depression Scale are all quick, validated tools that assess behavior, development, and mental health concerns. In addition, Eat Smart Move More NC has easy to use clinical tools for assessing and counseling about diet and exercise behaviors. Finally, pediatricians, as well as physicians in general, must recognize that they cannot do everything on their own. Embracing a multidisciplinary approach, both within and outside of the practice, can foster success. Physicians can ensure that non-physician staff is working at the top of their licenses and incorporated into prevention activities. Other professional disciplines can be incorporated into the practice setting as well, such as a developmental specialist, a mental health professional, or a dietician. One caveat with a co-located model, however, is that while potentially a benefit from a patient care standpoint, it can be a challenge to make this a financially sustainable business model. In the absence of co-location, physicians can know about their community resources and refer patients to them. Further, physicians can take advantage of case management services that may be available through a patient's insurer (e.g., Carolina Access Medicaid) or the public health system (e.g., Child Service Coordinator).

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Physicians can seek to recognize and understand the cultural differences that may exist within their practice population, especially as they may relate to health behaviors and other issues relevant to prevention. One way to do so would be to assess how well a practice meets Federal Standards for Cultural and Linguistic Appropriate Services.[5] The practice could then use these standards as a guide to achieving greater cultural and linguistic competency.

Finally, physicians can promote policy and environmental changes that affect how and where their patients live, learn, and play. Physicians can educate families about and promote healthy home environments and can lend support and advocacy for policy changes in schools and communities that promote health. In addition, physicians can model healthy behaviors and healthy environments by rewarding children with books or stickers rather than lollipops or other sweets, engaging in healthy behaviors themselves, and promoting workplace wellness efforts for their staff. **NCMJ**

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# I Want to Be a Superior Doctor


*J. Carson Rounds, MD*


> *The superior doctor prevents sickness;*
> *The mediocre doctor attends to impending sickness;*
> *The inferior doctor treats actual sickness.*
>
> Chinese proverb[1]
>
> *Doctors and undertakers*
> *Fear epidemics of good health.*
>
> Gerald Barzan[1]
>
> *It is a lot harder to keep people well than it is to just get them over a sickness.*
>
> DeForest Clinton Jarvis[1]

Benjamin Franklin was actually trying to sell shares in his fire insurance company when he coined the phrase "An ounce of prevention is worth a pound of cure," but it has become one of the most well-known aphorisms about medicine. We all seem to agree with Ben, but it is hard to look at health in the United States today and say we all follow his advice. The leading causes of death in this country are mostly attributed to our behaviors. We merrily eat fast food, smoke, sit on our ever-enlarging buttocks while we watch TV and surf the web, all while complaining about the cost of drugs and medical care. We have mortgaged our families' futures to foreign investors to pay for stents, bypass surgery, chemotherapy, gastric bypass surgery, dialysis, statins, and alcohol-related motor vehicle accidents. While we have the second most productive workforce in the world,[2] we don't have the healthiest.[3] How can we start living in a manner that actually honors what we say we believe?

I fear that I have not yet achieved the status of the superior doctor named in the aforementioned Chinese proverb. How can I practice my art in such a way that my patients and my community truly strive to achieve optimum health? Dr. Warren Newton is fond of reminding me that a system gives the results it was designed to give. If you don't like the results, you have to change the system. I believe the answer lies in transforming my practice while advocating for major changes in how our communities and nation approach health.

Changing my practice needs to start with my own health behaviors. A recent survey of California physicians found 7% were depressed, 53% reported moderate to severe stress, just over 6% screened positive for alcohol abuse, 35% did not participate in regular exercise, 34% slept less than six hours per night, and 21% reported working over 60 hours per week. There was a correlation between working over 65 hours a week and lack of exercise, less than six hours of sleep, and not eating breakfast.[4] It is hard to lead others to change a behavior if you aren't "practicing what you preach." From my perspective as a practicing family physician, the traditional model of practice and the current health care system are not conducive to encouraging healthy physician behaviors.

There is also room for improvement in medical education. My medical education was state of the art, and I am quite grateful to all my teachers at the East Carolina University School of Medicine (I am too old to have attended the Brody School of Medicine!) and the Charlotte AHEC Family Medicine Residency. It would be hard to say, however, that we focused as much on prevention as we did on treating disease. I suppose it will always be necessary to emphasize disease and treatment, but we should endeavor to teach more about nutrition, exercise, and strategies to modify behaviors so my future partners can follow (and help me follow) Hippocrates' advice that our food should be our medicine. I know much has changed since my days in training and I would encourage educators to continue to assess how best to create a culture of prevention.

Everything I do in my office is really nothing more than trying to convince another person to modify their behavior, whether it is giving them a prescription for an antibiotic which should be taken twice a day with food, recommending an immunization, or recommending 30 minutes of exercise

five days a week. Helping people realize that they have a behavior they wish to modify and then giving them the tools to do it goes a long way. It can be time consuming, however, and not likely to pay as well as convincing them to change only one behavior—to take a pill. It is also an easier behavior for me, and one that is reinforced in a Pavlovian fashion many times a day.

The current workflow of a typical medical office is not always conducive to prevention. Paper charts have flow sheets which work only as well as the busy physician makes them work. Insurance companies that send me multi-page lists of patients for whom they have no claims data for a particular preventive service are, frankly, mostly frustrating. They are often wrong, apply only to a limited number of my patients, come at seemingly random times, and create more uncompensated work for my office. In short, they don't really alter the system of care. Offices that have electronic health records (EHRs) are generally not much better than those still using paper charts. If the EHR does have the capability to prospectively identify and notify patients about the need for a preventive service, arranging to have that functionality implemented during an office visit is either too complicated or costly for many practices.

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There are some solutions to these issues. Evidence shows that "wellness visits, recall and reminder systems, and standing orders are associated with higher rates of delivery of preventive services in primary care practices."[5] There is still much to learn about the best way to implement these and other changes. Findings from the American Academy of Family Physicians' TransforMED Medical Home National Demonstration Project conclude that "a strategy of many small steps and being willing to learn from our failures will go a long way."[6] TransforMed has also shown that there "is value in registries [that] allowed adopting population-based, proactive approaches to management of prevention and chronic disease care."[7] Our office will begin the process of transforming into a patient-centered medical home this year and will be exploring the use of a registry for just this purpose. EHR vendors must design systems that allow for easy identification of patients who need preventive services whether through registries or database searches. These must be an integral part of the EHR and not an add-on in terms of either cost or implementation. Payment for this type of care must be part of the answer as well. As family physicians around the country move to this new model of care, the payment system has to begin to address innovative ways of payment that recognize both the costs and the benefits of this type of care.

It won't be easy. Most office visits aren't preventive, but a transformed model can change that: all visits can be preventive. Preventive visits are typically still "yearly physicals," with patients saving up all the problems they have and hoping to have them all solved in one visit, often conflicting with our goal of providing preventive services. A study from Duke's Community and Family Medicine department estimated that a family physician with 2,500 patients needed 7.4 hours every working day to provide all recommended preventive services.[8] Another study from the same department estimated it would take 10.6 hours per working day to provide all the care needed for chronic disease management.[9] Based on the amount of time it takes me to document in my EHR, I will need to spend 24 hours each day to complete my daily tasks. Clearly, I need a system that involves other team members in my office in ensuring all these services are provided in a timely fashion. My EHR needs to support this system, and it has to be simple to implement. I need to allow my team to help with the preventive services and lifestyle changes my patients need.

Changing how I practice will only go so far in improving the health of my community, however. In December, I was fortunate to be able to attend the 17th Annual Healthy Carolinians Conference and NCIOM Prevention Summit. Dr. Thomas Friedan, director of the Centers for Disease Control and Prevention, was the keynote speaker. Two things in his presentation really caught my eye and graphically demonstrated how much of my patients' health really doesn't depend on me. The first was a pyramid of factors that affect health; what I do in my office and my interactions with my

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*

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.[1] 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.[2,3] 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.[4] 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.[5] 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 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.[6] 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.

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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.[7] 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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