



# Public Health Initiatives: Improving the Oral Health of People in Our Communities

By Susan Elliott-Smith from interviews conducted by Christine A. Hovliaras-Delozier, RDH, BS, MBA

It has been called a passion, a calling and a feeling that you really have to do something to make a change. It is the force that draws oral health care professionals into the public health arena and it has similarities to what pulls people into civic duty or achieving the outcome you desire in your professional position. It is the desire to help as many people in the community as possible.

It is estimated that public health prevention efforts have been responsible for 25 of the nearly 30 years by which life expectancy at birth has increased in the United States since 1900, according to the Web site for the University of North Texas Health Science Center's School of Public Health. The organization describes how public health efforts have decreased the number of measles cases being reported by 900,000 since 1941 and the number of smokers since 1965 by 42 million, and are responsible for the millions of Americans alive each year who might have died from heart disease, automobile accidents and HIV infection.

The question is: Can public health efforts improve oral health statistics? Dental hygienists working for a variety of public health services say yes. Oral health care providers can make a huge impact in public health.

## Defining Public Health

The overall health of a community is monitored and treated by organizations set up on the county, state, regional and national levels. Dental hygienists and other health care professionals are hired in part- and full-time positions to treat and educate members of the community who are at greatest risk.

Prevention and promotion are words that Sharlee Burch, RDH, MPH, uses to describe public health. Burch, who considered public health while still in school, said, "I was always looking at it from the perspective, 'how do I get these people to behave the way that I want them to behave?' When it comes to public health, you're looking at communities; you're looking at large populations. It's unbelievable the things that you can do." Burch, who has been an extension health specialist with the University of Kentucky College of Dentistry, Division of Public Health Dentistry in Lexington, Ky., since 2001, is passionate about this career path for a number of reasons.

"I hope that I'm not only educating those who are learning all about oral health so they can teach their community about oral health, but I also hope that they're being impacted," said Burch, who has 10 years' experience as a dental hygienist.

A job within public health may look on the surface exactly like a private-practice dental hygiene position. The focus is the same: Better oral health and prevention through high-quality care and education. What varies is the audience and the operatory.

## Opportunities in Public Health

Because the universal challenge in public health is access to care, dental hygienists in public health frequently go where the patients are. This might be a nursing home, a Head Start preschool, a juvenile detention center or a federal prison.

"You really have to have a heart and a passion for an alternative career in dental hygiene," said Betsy Lee, RDH, BS. "We call it 'the special care gene.' That person knows deep down inside that they want to do something different. We're providing care to a group of people who unfortunately get what we call a second or a different class of care. It would be my hope and goal that everybody could receive the same quality of care and have the same access to it as everybody else in the community."

When Bill Milner, DDS, MPH, president of Access Dental Care in Greensboro, N.C., approached her while she was a dental hygiene student about joining him in a mobile dentistry practice that serves the physically and intellectual-



*The professionals from the University of Kentucky College of Dentistry Division of Dental Public Health work together to provide oral health services to those who cannot easily access care.*

ly challenged population, she thought she would give it a try. The variety in patients and locations appealed to her.

Lee's long-term care patients range from people in nursing homes and assisted-living centers to group homes for people with physical and intellectual disabilities and adult daycare centers for those with dementia.

Like Lee, Marilyn Frenier, RDH, jumped at the opportunity to work with a mobile dentistry unit. Frenier, who has worked for the Carolinas Healthcare System in North Carolina for the last seven of her 35 years in dental hygiene, comments that helping to make her father more comfortable in a nursing home brought home the desire to work in public health.

"When I would go to visit my dad ....it made me as a hygienist just want to go room to room with an electric toothbrush and brush the residents' teeth since there is such a need for care," Frenier said.

The same overwhelming need for oral health care in the community first struck Kathy Voigt-Geurink, RDH, MA,



*Kathy Voigt-Geurink, RDH, MA, supervising student clinical services at Texas Mission of Mercy Project*



**Heather Young, RDH, BS, instructs a preschool class in proper brushing techniques as part of her job as oral health coordinator for the Yakima (Wash.) County Health District.**

while taking a community oral health course in dental hygiene school. The severity and magnitude of dental disease and the disparities that existed then with children from low-income families, the elderly and those with special health care needs, inspired her to select that line of work for her career.

“I saw the problems then, and many of them still exist today,” said Geurink, who graduated in 1969 and got her first job in public health as a school dental hygienist. She went on to the state dental health educator’s position in

Wisconsin and Colorado before accepting a faculty position at the University of Texas Health Science Center, where she teaches community oral health. In addition to this, Geurink is also the Head Start Region 6 oral health consultant.

“Public health has really been a thread throughout my entire career,” Geurink commented.

For Heather Young, RDH, BS, the draw to public health came from volunteering for community projects.

“I love the clinical aspect of hygiene and the interaction with my patients, but I have always volunteered with community projects and in friends’ classrooms doing education on oral health during dental health month,” said Young, who has been a dental hygienist for seven years. For the past year, Young has worked part time for the Yakima Health District in Washington State. “[Moving into public health] was a great opportunity for me to get out there and do it more often.”

“I love what I do,” said Kimberly Myers, RDH, BS. Myers has been a practicing dental hygienist since 2003. She became a commissioned officer of the U.S. Public Health Services (PHS) and has worked for the Federal Bureau of Prisons for three and a half years; two of them in

## Diverse Opportunities in Public Health

*The following entities represent a sliver of career opportunities in public health for dental hygienists.*

### University of Kentucky College of Dentistry and College of Agriculture

In August 2004, the University of Kentucky (UK) in Lexington, Ky., established an innovative and progressive multidisciplinary partnership between the UK College of Agriculture Cooperative Extension Service Health Education through Extension Leadership (HEEL) and the UK College of Dentistry Division of Dental Public Health and Center for Oral Health Research. The partnership sought to advance education, service and research programs aimed at improving the oral and general health of Kentuckians. The collaborative program emphasizes public education on the relationships between oral health and general health. Service and research projects also were developed as part of the multidisciplinary partnership. As part of the overall partnership, Sharlee Burch, RDH, MPH, was appointed to serve as extension service specialist for oral health, providing statewide dental resources and educational support. She also serves as a liaison between the two colleges.

### Carolinas HealthCare System

Carolinas HealthCare System, in Charlotte, N.C., is a non-profit, self-supporting public organization that offers a wide variety of health and human services to residents of North and South Carolina. CHS’ flagship facility is the Carolinas Medical Center (CMC) in Charlotte, N.C. CMC also serves as one of North Carolina’s five academic medical center teaching hospitals, along with Duke, Wake Forest, UNC-Chapel Hill and East Carolina Universities. CHS operates nursing homes, home

health agencies, radiation therapy facilities and physical therapy facilities. In 1997, Ford T. Grant, DMD, initiated Carolinas Mobile Dentistry, a pilot project to provide access to dental care for nursing home residents. The program also provides experience in on-site dental care of the medically compromised for general practice residents, dental hygienists and dental assistants. Marilyn Frenier, RDH, has worked for the last seven of her 35 years in dental hygiene for the mobile dentistry unit visiting nursing and assisted living homes in the Carolinas.

### Yakima Health District

In partnership with the community, the Yakima Health District in Washington state protects and promotes the health and quality of life for residents and visitors of Yakima County through prevention and control of disease and potential health hazards. The Yakima Health District is an independent governmental entity with specific powers that oversees and supervises all aspects of the health district. As Yakima County Oral Health Coordinator in Yakima, Wash., Heather Young, RDH, BS, works part time planning oral health activities and providing oral health education in the schools, juvenile detention centers, community events and fairs. She also coordinates the efforts of dental hygienists who provide school-based sealants and fluoride varnish programs and maintains a list of dental providers who accept medical assistance coupons and those that are members of a “Mom and Me Program” – a program that offers dental care to children between the ages of 1 and 6.

### Access Dental Care

Access Dental Care in Greensboro, N.C., is a non-profit organization whose mission is to provide on-site, quality com-

Florence, Colo. and the past year and a half at the Petersburg Correctional Complex in Petersburg, Va.

The complex where Myers works consists of a low-security federal correctional institution, a medium-security institution and an adjacent satellite prison camp, all housing male inmates. "When I was hired with the Bureau of Prisons, I had to go through training," Myer explained. "I'm not only the hygienist, but also a correctional worker. I am expected to follow certain things in order to keep the prison safe and running well.

"I think that the population that I'm serving now was probably an underserved population in the community also," Myers observed, who added that she likes to regard her work as improving their health.

## Issues and Answers in Public Health

Dental hygiene patients in the public health arena are typically underserved groups. These are people with financial and physical limitations that prevent them from making regular visits to the dentist. From newborns to frail elderly, many of these patients have family and caregivers who also

prehensive dental services, via mobile equipment and trained professionals, to the intellectually disabled/developmentally disabled (ID/DD) and frail elderly populations in long-term care facilities (nursing and group homes) and to community-dwelling individuals with disabilities. Serving special care patients since August 7, 2000, the organization's mission has been to provide access to the highest-quality dental care available and to provide this care in an effective and efficient way. Each day, the access team, which includes Bill Milner, DDS, MPH, and Betsy Lee, RDH, BS, and a dental assistant, transports portable dental equipment in a customized truck to a different facility, unloads the equipment and sets up the dental office within the facility for the day. Patients are brought to the dental operatory unless bedside care is required.

### Head Start: Room to Grow for Young Children and Their Families

Launched with a task force recommendation in 1964, Head Start and Early Head Start are comprehensive child development programs that serve children from birth to age 5, pregnant women and their families. They are child-focused programs and have the overall goal of increasing the school readiness of young children in low-income families.

The Head Start program is administered by the Head Start Bureau, the Administration on Children, Youth and Families (ACYF), Administration for Children and Families (ACF) and the Department of Health and Human Services (DHHS). Grants are awarded by the ACF regional offices and the Head Start Bureau's American Indian - Alaska Native and Migrant and Seasonal program branches directly to local public agencies, private organizations, Indian tribes and school systems for the purpose of operating Head Start programs at the community

need education to ensure that those in their care get proper oral health treatment.

Burch's work takes in a wide spectrum of communities in Kentucky and beyond. Because her position is a research title, it provides her the opportunity to engage in many different activities, one of which is a partnership she leads with the College of Agriculture called the Cooperative Extension Service. She develops community programming, health promotion and health education all based on oral health. In addition, she develops curriculum, training, service and research. Because the programs with the College of Agriculture are statewide, and Burch creates curricula that focus on how oral health and habits such as tobacco use con-



**Sharlee Burch, RDH, MPH, teaches an oral health session at a 4-H Camp, a program for youth development for children ages 9 through 14. The program is an integral part of Burch's partnership with the College of Agriculture Health Education through the Extension Leadership Project.**

level. Head Start grantee and delegate agencies provide a range of individualized services in the areas of education and early childhood development; medical, dental, and mental health; nutrition; and parent involvement. Kathy Voigt-Geurink, RDH, MA, is involved in collaborative efforts to develop and support programs in oral health education, disease prevention and access to care for young children and families.

### The U.S. Public Health Service in the Federal Prison Program

The mission of the U.S. PHS Commissioned Corps is protecting, promoting, and advancing the health and safety of the Nation. The Commissioned Corps achieves its mission through rapid and effective response to public health needs, leadership and excellence in public health practices, and the advancement of public health science. As one of the seven uniformed services of the United States, the corps is a specialized career system designed to attract, develop and retain health professionals who may be assigned to federal, state or local agencies or international organizations. The corps is led by the Surgeon General and consists of approximately 6,000 officers.

Kimberly Myers, RDH, BS, is a commissioned officer of the U.S. PHS and has been with the Federal Bureau of Prisons for three and a half years. Myers has been a practicing dental hygienist since 2003. She became a commissioned officer of the U.S. PHS assigned to the Petersburg Correctional Complex in Petersburg, Va. The complex where Myers works consists of a low-security federal correctional institution, a medium-security institution and an adjacent satellite prison camp, all housing male inmates.

nect with chronic diseases and conditions such as oral cancer, some of her work has even crossed into other states.

Burch also participates in the Drug Endangered Children Grant, a program that assists children who have been removed from homes in which methamphetamine is made and used.

“Often times these children are neglected and abused. Oral health is just one small thing that gets neglected,” Burch shared. When these kids are removed from the home, Burch and the state dental director screen the child to see what is needed and get that child dental treatment while he or she is in the foster care system. Burch added that there are a wide variety of services oral health providers can provide through grants.

One such grant, which her department received through the Health Resources & Services Administration (HRSA), is the Kentucky Consortium for Applied Research and Treatment. It covers a program for young mothers and pregnant teens in rural counties called Centering Pregnancy, a group therapy in prenatal care that educates this at-risk group about the link between low-

birthweight and preterm babies and oral health care, as well as providing dental hygiene treatment, including prophylaxes, scaling, root planing, et cetera as needed.

Young also reaches this group through the Yakima Health District’s “Mom and Me” program that educates the whole family about oral health and diet, among other things. Then the child is referred to a dental office, reported Young. The county sees a lot of childhood decay.

“We conduct a ‘smile survey’ every five years, and in 2005, our numbers didn’t meet the Healthy People 2010 guidelines,” Young explained. She added that the Washington State Smile Surveys had similarly discouraging numbers. Young said she feels that her public health position will make a difference in turning the trend revealed by the surveys.

“I hope that educating children on the importance of oral health will break that cycle of poor oral health in families. Those kids will go home and tell their parents what they’re learning and pass it on to other family members,” she said.

For Geurink, the challenges lie in finding Medicaid providers and dental hygienists who will provide oral health education for Head Start centers. She listed a few of the program’s current projects.

“Fluoride varnish is one of the major prevention projects that’s going on nationwide,” Geurink reported. “I think we’re going to see some really good changes because of how it can remineralize enamel and help these young children get a fluoride treatment that they would never get because you can provide it right in the Head Start center. It’s only one

phase of the big project, which of course involves trying to find dental homes for these children so that they’ll go on to have continued good oral health throughout their lifetime.”

The other major public health issues in Young’s county, aside from the typical oral health treatment disparities and access to care, is tobacco and meth mouth – the condition caused by methamphetamine use. She sometimes encounters these problems with kids in the juvenile detention program, a group with which Young can build an easy rapport.

“Those kids are really neat,” she commented. “They’re really comfortable with just talking about things openly with me. Sometimes the conversation goes outside of oral health. They’ll talk about drug use and all kinds of things and I can usually link it to oral health in some way and make them kind of stop and think what they’re doing. It is neat to see them stop and think, ‘you know, well maybe that’s not a good idea.’”

In the Bureau of Prisons, Myers’ greatest challenge is a shortage of staffing, which she feels is a problem throughout public health. In addition, a lot of the population she serves did not have much dental treatment prior to their incarceration. Chronic periodontal disease is fairly common. Her rewards come when patients who may not have known proper flossing and brushing techniques and suffered from a lack of treatment, begin to show improvement.

“They’re just eager to hear what you have to say. When they come back, they say, ‘Ms. Myers, my mouth feels so much better. Thank you so much.’ Their gums look great, they are not bleeding and they are keeping the plaque off their teeth. Their mouths look and feel healthy.”

Access to treatment is the major issue for Lee and Frenier’s patients. The dental hygienists serve in mobile dentistry units that visit nursing, assisted living and group homes in the Carolinas.

“Access is a nationwide issue, and that’s one of the things that the Special Care Dentistry Act is addressing,” Lee asserted. “Historically, dentistry in long-term care facilities has been spotty. Some practitioners will go to the facilities and do dental exams, but then require the patient to come to the office for dental treatment. Others will do dental exams and then the facility’s social workers or family members have to try and find dentists in the community that will provide the treatment.”

The mobile dentistry unit offers access to comprehensive dental care for folks that traditionally don’t get those services.

“There are all these little obstacles,” Lee continued. “You have people with Alzheimer’s disease, who by the time they’ve gotten up and dressed, are so exhausted that taking them into an unfamiliar environment blows the day for them. So we treat people in an environment that they’re comfortable in, as well as providing comprehensive

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care to a large group of people.” For more information on mobile dentistry, see “Product Focus” on page 21.

With the aging of the baby boom generation just around the corner, Frenier said that she sees dental hygienists armed with mobile equipment and information about oral care as the solution.

“There is going to be a lot of need for some kind of care,” Frenier said. “I have one or two residents who are over 100 with most of their teeth who have had good dental care. My generation has had preventive care, and we are going to keep our teeth to a much older age. In the future, we will need to have hygienists go into nursing homes and assisted living facilities and help provide care, give instructions to the staff on oral care and even, on a voluntary basis, to brush the residents’ teeth. I think there will have to be some legislative changes to [provide] some type of affordable dental care for the elderly.”

## Changes and Desired Legislation

To encourage more dental hygienists to enter the public health field, those already engaged in it feel that the care provision barriers need to come down.

Young would like to see more full-time positions in public health. “I know there’s a lot of part-time positions out there, and I feel like I could be more effective being there more often,” Young said.

Geurink is in favor of less restrictive practice regulations for dental hygienists. “There is this paradigm shift in the model of health care delivery and it’s a shift that will bring services by competent providers to the people that need them most,” said Geurink. She said that many states have expanded state practice acts for dental hygienists in an attempt to address the needs of their most vulnerable citizens.

Burch counts among her proudest achievements helping to write general supervision legislation. “I was a president of the dental hygiene association at the time. [We] lobbied for it and saw it passed, and now we can actually do it.” For the future, she would like to see greater support from the board of dentistry, and the development of the status of mid-level practitioner for dental hygienists. As one of the delegates who approved creation of the advanced dental hygiene practitioner (ADHP), Burch said she is excited about this new direction for the profession.

Myers would like to see a national clinical board. “And if not a national clinical board, just ease in transferring licensure,” she noted. “I think with private practice, people are less likely to move from state to state – not that they don’t – but when you’re in a public health setting, you may move a

little bit more. If it was a little bit easier to transfer licensure, or reciprocity was accepted in every state, I think that would be a huge step in helping hygiene altogether.”

## How to Get Involved in Public Health

Dental hygienists can find a variety of ways to become involved in public health. They might continue private practice work, but still volunteer their time. They might seek out programs such as Special Olympics, Special Smiles, or as Geurink recommends, the Adopt-a-Head-Start-Center program. She reported that more than 100 dental hygienists who also work full time attended a course on how to adopt a Head Start Center.

“Dental hygienists always find the time,” said Geurink of volunteering in public health arenas. “We have the heart, we have the desire to step forward and do something as far as volunteering one day a month or one day a week. It’s time to step forward, to join the forces and participate in the health care delivery models that will reach the large segments of our population who have been left out of reach for far too long.”

Resources even exist for students to test the waters of public health. Myers recommended that students seek out externships such as the one offered by the U.S. PHS called the Commissioned Officer Student Training and Externship Program (COSTEP). Working through the dental hygiene schools, facilities in the PHS invite students to complete a rotation.

Frenier shared that students may spend a rotation with the Carolinas program from the community college in Charlotte, N.C. “I explained to them that this population of people is the fastest growing and encourage them to specialize in geriatrics,” she said.

Burch leads first-year dental students in a basic preventative course and a public health course. “I have an opportunity to do some clinic work with them. We go out and actually do sealants on needy kids in Appalachia,” she said.

“We show [these students] that there are people who need you beyond whether they can pay you. Our emphasis is that ... there’s more to dentistry, more to the profession you’ve chosen than cosmetics or making them money or any of those kind of glamorous things. There are people who really need your expertise so that they can live well, feel well and be well,” Burch concluded.

Lee encourages those who feel a pull toward public health to get involved. “There are pods of people all across the country that do special care dentistry and I think if somebody really has an interest, they should... contact the Special Care Dentistry Association and find the person in their area,” Lee said.

For Geurink, who teaches public health courses to dental hygiene students and lectures to dental students on social

**Dental hygienists can find a variety of ways to become involved in public health.**

responsibility, schools are the route to securing the next generation of practitioners: “If we reach them when they’re in school, they will more likely work together to serve their community.”



Sharlee Burch, RDH, MPH is a public health hygienist employed by the University of Kentucky College of Dentistry. She provides health promotion, education, programming, technical assistance and service research to the UK College of Agriculture’s Cooperative Extension Service, which has offices in each of Kentucky’s 120 counties. She is a past president of the Kentucky Dental Hygienists’ Association and currently serves as speaker of the house.



Marilyn Frenier, RDH, graduated from Midlands College with an Associate Degree in Dental Hygiene. Through her position with Carolinas Mobile Dentistry of Charlotte, N.C., she assists Ford T. Grant, DMD, in the care of nursing home residents and in on-site dental care of medically compromised patients.



Betsy Lee, RDH, BS, is a clinical dental hygienist and secretary for Access Dental Care of Greensboro, N.C. She holds a Bachelor of Science in Dental Hygiene from the University of North Carolina at Chapel Hill and an Associate of Applied Science in Dental Hygiene from Guilford Technical Community College. In addition, Lee had a Fellowship in Special Care Dentistry at the North Carolina Dental Hygiene Academy of Advanced Studies in 2005.



Kim Myers, RDH, BS, graduated from the University of New Mexico School of Medicine – Division of Dental Hygiene. She is a commissioned officer in the United States Public Health Services Corps. And currently holds a position in the federal correctional complex in Petersburg, Va.



Kathy Voigt-Geurink, RDH, BS, MA, is an associate professor in the Department of Dental Hygiene, School of Allied Health Sciences, University of Texas Health Science Center. Her responsibilities include teaching community oral health and supervising student service-learning projects. Prior to her teaching, Geurink worked as a public health dental hygienist in Minnesota, Wisconsin and Colorado initiating statewide community oral health programs for underserved populations. She has worked with Head Start Programs throughout her career to improve

the oral health of children and families. She presently serves as the Head Start Oral Health Project Coordinator for the Association for State and Territorial Dental Directors (ASTDD) and she is the Region VI Head Start Oral Health Consultant. Her publications include the textbook, *Community Oral Health Practice for the Dental Hygienist*, Elsevier 2005.



Heather Young, RDH, BS, is the oral health program coordinator for Yakima County, Washington, and a clinical hygienist at the office of Kurt Labberton, DDS, in Yakima, Wash. She holds a dental hygiene degree from Yakima Valley Community College and a Bachelor of Science degree in Biology from Central Washington University. She is a member of the Central Washington Oral Health Foundation, Washington State Oral Health Coalition, and the Yakima Oral Health Coalition.

Because **public health approaches** consider the entire population, they

- focus on problems that present the largest burden within the community;
- concentrate resources on interventions with strong evidence of effectiveness (i.e., “the greatest good for the greatest number”);
- include collaboration with multiple community partners; and
- evaluate the impact of programs on the population’s health.

## The American Dental Hygienists’ Association

is actively involved in the dialogue regarding public health policies and programs in America.

To find out more, visit [www.adha.org/publichealth](http://www.adha.org/publichealth)

# On the Road with Mobile Dentistry— Its Impact on Our Communities

By Susan Elliott-Smith from interviews conducted by  
Christine A. Hovliaras-Delozier, RDH, BS, MBA

The 16-foot truck rolls into the parking lot. Using a hydraulic lift system, the employees begin cheerfully and efficiently moving their equipment into the building. Several hours later, they carefully pack their gear for the day and visit another facility the next day. From a distance, it looks like a catering service working a reception. It is actually a mobile dental practice attending to the needs of an underserved community of patients who have difficulty managing a trip to a typical dental office operator.

“We have two operatories’ worth of dental equipment on that truck that is unloaded for treatment,” said Betsy Lee, RDH, BS, of Access Dental Care of Greensboro, N.C. Equipped with chairs, state-of-the-art operating units, fiberoptic lights, digital X-ray and accompanying supplies, this mobile unit treats 15 to 18 patients each day, sometimes six days a week.

“We set up a dentist office every single day in a different place,” said Lee, who notes that total set-up time is 20 minutes. The whole concept of mobile dentistry is access to equal treatment for patients with special needs who, because of physical issues, cannot get to a dental office.

“I call it the whimper zone in a private practice,” said Bill Milner, DDS, MPH, president of Access Dental Care. “Anything outside of a regular behavior – if you can’t keep your mouth open for an appointment, if your body moves, if you come in a wheelchair – is very intimidating to a practice.”

Ford Grant, DMD, who is on the board of directors for Access Dental Care and helped get the program initiated, has a similar mobile dentistry unit for Carolinas Healthcare System in Charlotte, N.C. Carolinas Mobile Dentistry launched in 1997.

“I was fortunate to get in the general practice residency at the University of Louisville, and that just opened my eyes up to a whole other area of patient care, the medically compromised patients,” says Grant, who has been in dentistry for 22 years.

While director of geriatric dentistry at Carolinas Medical Center, Grant took mobile equipment into nursing homes on a limited basis. During this time, he met Milner, whom he credits for helping Carolinas Mobile Dentistry to launch.



**Access Dental Care, Greensboro, N.C., transfers staff and equipment to various facilities using a 16-foot truck. This mobile unit treats 15 to 18 patients each day, sometimes six days a week.**

“I realized this is a field that is wide open,” Grant said. “Not many people were in it because there wasn’t much money to be made, and there are much easier ways to approach the practice of dentistry. This is a field that had been ignored and the patients had been ignored. That struck a chord with me.”

Milner shares a similar story. A dentist for 32 years, Milner began a public health program through the North Carolina Dental Society to address older adult care in the mid 1980s.

“We started looking at Mike Helgeson’s program at Apple Tree Dental in Minneapolis as kind of a model for what could be done in North Carolina,” Milner explained. “Then Ford Grant came in 1997, and we wrote a grant for foundation funding.” In 2000, Milner and Lee started Access Dental Care.

“It’s been a slow progression from the beginning,” said Milner. “We realized that we needed a successful model.” Milner’s plan to build this comprehensive model to care for those with physical and intellectual disabilities stems from a desire to expand public health. “We had to move from health departments just serving kids to getting out in the community and seeing those that are unable to access the system,” he explained.



**Betsy Lee, RDH, BS, of Access Dental Care, Greensboro, N.C., moves pieces of the group's mobile operatory into an skilled nursing facility.**



**Betsy Lee, RDH, BS, of Access Dental Care, Greensboro, N.C., treats a special needs patient as part of a mobile dentistry program.**



**Dr. Bill Milner and Pat Lineberry, dental assistant, of Access Dental Care, Greensboro, N.C., begin treatment on a patient in a skilled nursing facility.**



**Dr. Bill Milner of Access Dental Care, Greensboro, N.C., may treat up to 18 patients each day, per facility, as part of a mobile dentistry unit.**

As other mobile dental units started up, techniques adapted and improved. When Grant saw improvements in Milner and Lee's mobile unit, his first reaction was: "Hey, we should've gotten the bigger truck." We've always been sort of one-upmanship on each other, but that's really helped. That's been to the benefit of our patients." For the most part, a sink, an electrical outlet, some privacy for patients and a 20- by 20-foot-square space are all that is needed at each facility to make an instant operatory.

"It might be an activity room. It might be a physical therapy room. We could put a screen in between the patients," Grant said. The team recently added a driver to get the equipment to the facilities the night before and unload it. After appointments, the driver reloads the equipment and moves it to the next site.

Access Dental Care uses a similar approach, except the team moves their own equipment. Milner slyly refers to this as their "corporate exercise program." To see the team in action, visit their Web site at [http://www.accessdentalcare.org/pages/More\\_About\\_Us\\_Page.html](http://www.accessdentalcare.org/pages/More_About_Us_Page.html).

Milner points out that operating in close quarters and working efficiently require teamwork and the ability to assist where needed. "So I may be holding the light or holding an X-ray sensor or helping out here and there," he explained. "It's important for everybody to work as a team."

## Challenges in Mobile Dentistry

The challenges involved in mobile dentistry go beyond being in a different location every day. It requires communication skills beyond traditional private practice, said Lee. "We have to communicate with psychologists, pharmacists, physi-

cians, nurse practitioners, physicians' assistants, nurses, occupational therapists, physical therapists, speech and language pathologists, social workers, caregivers and responsible parties."

Milner and Lee said that a typical day also might require dealing with combative patients or helping a patient with cerebral palsy to relax enough for treatment.

For Marilyn Frenier, RDH, who works with Grant in Carolinas Mobile Dentistry, positioning these patients presents another challenge. "A lot of these residents can't recline like you and I can when we go to the dentist. They have so much osteoporosis and curvature of the spine, and it is hard for them to lie flat in the chair. Then, aspiration is always a concern, too. We use lots of pillows to make them as comfortable as possible."

A typical visit might find Frenier starting with a polish or even toothbrushing. "Many of our residents and patients cannot do their own oral care, so there is a lot of plaque and a lot of food debris. We do polish first or sometimes toothbrush first with chlorhexidine," Frenier said. Grant added that root decay is a big challenge in their elderly population.

"I make an individual care plan for all the residents," continued Frenier. "I evaluate what they can do for themselves and what assistance they need. Sometimes all they need is just a setup." Sometimes the assistance of a Certified Nurse Assistant (CNA) is required to get the job done.

"Another big part of our service to the nursing home is in services for their staff," said Frenier, explaining that she covers assessments with the nursing staff and daily oral care with the CNAs. During this training, she emphasizes the link between oral health and systemic disease. The team's greatest rewards come when they see the results of the daily oral care training they give the nursing home staff.

"It takes a special person, I think, to deal with this type of population, especially with the dementia. That is a hard realm. It's amazing; we really have very few people that we just absolutely cannot treat," Frenier said.

## Innovations for Mobile Dentistry

Milner has found a few dental equipment manufacturers that work with mobile dentistry practices. "The two main suppliers would be A-dec and Spartan. Then Patterson Dental also deserves a lot of credit for having tried to work with this type



**Equipment for the mobile operatory is similar to what is used in standard dental practices. However, mobile dentistry programs from across the country collaborate to adapt dental equipment to suit their needs. Many times, the programs work with manufacturers such as A-dec (specially designed dental and operator's chairs) to create designs or hire their own fabricators to alter existing products.**

of practice. From the very beginning they have been very supportive of what we've done," he commented. The key considerations in product choice include versatility, size, speed and disposability.

At the top of the list for important equipment is the dental chair. Milner credited Michael Helgeson, DDS, of Apple Tree Dental for spending a substantial amount of time working with A-dec to design the chairs used in mobile dentistry.

"The top priority is not having a backache at the end of the week," Milner said. "To do that, you've got to have a chair that you can get into the right positioning." Grant said this is the must-have equipment for making patients with special needs comfortable for treatment.

"People with kyphosis or different problems move around a lot. You need to get their heads in the right position. If you have a substandard chair or a chair that's very limited, you can't do that," Grant said.

Because the mobile dental team also needs self-contained water and air compression for suction, they use the Spartan USA MTC Multi-task cart. Sometimes products need modification for mobile use. Then the teams consider the terrain a wheelchair would travel.

"We found a lot of the wheels on these mobile carts were so small, they'd fall in between the cracks on an elevator," Grant explained. "Anything we've bought, we adapt with four-inch solid rubber or pneumatic wheels so it'll go over little bumps in the curbs, and in the curb cut-throughs for wheelchairs."

To eliminate lighting issues, both teams bring their own. The Carolinas Mobile Dentistry team uses fiber optic headlights. Access Dental uses the Welch Allyn DenLite.

Speed is another qualifier for mobile dentistry products. Both teams use the Statim 5000 Autoclave, not only because of the speed of its cycle – it can sterilize in eight minutes – but also because the unit is small.

"It has a low profile so it goes on top of one of our carts and still fits through the door into the van," said Grant.

For quicker X-rays, Grant and his team use X-ray film with the developer and fixer built into it. "It's not as quick as digital but it's sort of the low-tech way of getting a quick X-ray," Grant commented.

Access Dental uses digital radiography, specifically the Aribex NOMAD portable X-ray system. "It looks like a radar gun and the staff really enjoys it," Milner commented. Lee mentioned that because of the patients' physical challenges, the team does a lot of head-holding and X-ray positioning. Because of this, they use a latex lead-lined glove for protection.

Another aspect of mobile dentistry is disposability. "If things are disposable, it helps us out quite a bit because we do not have to clean things up and put them back," said Grant. He admits this can be expensive, but there is no substitute for saving the time to see additional patients. Disposable scalpels, the Open Wide Disposable Mouth Rest from Specialized Care Co., and other one-use products all get evaluated for mobile dentistry purposes.

The primary goal is the same as any other dental office, Grant asserted. "Our mission is to provide the same level of care that that patient would've gotten if they had made it to a dental office. I don't want to see 50 people and do quick flashlight exams and say they've had dental care."

## A Wish List for Future Change

Acknowledging the frustration of good practitioners, Milner encouraged a greater acceptance of patients with physical and intellectual disabilities in any dental practice.

"The dental staff doesn't know what to do with patients that they have seen their whole lives for 30 years, and now have early Alzheimer's or they've had a stroke. [This staff may] have given the patient the best care in the world, but now, because of a disability, dentistry may be over for them.

"We have got to do a better job of teaching folks in the private practice setting to be more comfortable with an early Alzheimer's patient and with someone who has a disability," Milner continued. "It's okay to hold someone's head with a caregiver there. We can teach them, but they have got to assume more responsibility in the future." Part of meeting this need is to open up more special care dentistry practices.

"We need to have 10 sites across North Carolina that local practitioners can refer people to or at least pick up the phone and call one of the members of the dental team and say,



**The DenLite from Welch Allyn provides more lighting options for mobile dentistry units.**



**Lead-lined gloves give dental hygienists protection while holding and positioning patients with physical and intellectual disabilities.**



**The Open Wide Disposable Mouth Rest from Specialized Care Co. offers the convenience of disposability.**

‘How do I handle this patient?’ Milner continued. ‘We need to have accessibility at the grassroots level. We need to have the good training programs for specialty training at the schools.’ He would like to see more special care dentistry incorporated into a residency program.

Milner has prepared a balance sheet of actual costs to deliver services, which he will present to the North Carolina legislature.

‘This comes under the policy change side of things, and we are asking for a supplement to allow us to quit working....six days a week, 12 hours a day. You can have a successful model, but it comes at a cost of trying to do the job right and trying to deliver the services that you feel are necessary,’ Milner shared.

Both Milner and Grant said they hope to make the mobile dentistry practice attractive to other oral health care providers, to encourage them to participate in this unique facet of the profession.

Grant encouraged everyone in the profession to consider the options. He classifies the right fit for mobile dentistry as ‘people who have a high interest in medicine or the medical side of dentistry; people who have a high level of adventure.’

‘You might not get much recognition for it,’ he said. ‘You might not even make as much money doing it – so we’re talking about some special people there. In every dental class, there are people who meet those criteria. They may not know they’re that person yet, because I never thought I’d be doing this now.’



Ford T. Grant, D.M.D., attended the University of Louisville for his undergraduate, dental and general practice residency training. Dr. Grant was in private practice in Louisville, Ky., and a part-time clinical instructor in periodontics at the University of Louisville School of Dentistry before completing the University of Kentucky’s Geriatric Fellowship Program at the Sanders-Brown Center on Aging. In 1992, Dr. Grant joined the faculty of the Department of Oral Medicine at Carolinas Medical Center (CMC) in Charlotte, N.C., as Director of Geriatric Dental Education and as adjunct assistant faculty, University of North Carolina School of Dentistry. His present practice, Carolinas Mobile Dentistry received the 2001 ADA

Geriatric Oral Health Care Award. Dr. Grant is a Fellow of the American College of Dentists, a Fellow of the American Society for Geriatric Dentistry (ASGD), a Fellow of the Academy of Dentistry International, a Diplomate of the American Board of Special Care Dentistry (ABSCD) and is a Member of the Royal College of Surgeons, Edinburgh in Special Needs Dentistry (mSND, RCSEd). He presently serves as an officer of the North Carolina Dental Society’s Second District. Dr. Grant is past president of the ASGD and serves on the boards of the Special Care Dentistry Association and the ABSCD.



William E. Milner, DDS, MPH, is the president of Access Dental Care in Greensboro, N.C., a non-profit organization that seeks to develop special care dental programs, serving residents of nursing homes, assisted living facilities, group homes, home health and Hospice programs. Dr. Milner has a Master of Public Health Administration from University of North Carolina At Chapel Hill. He received his Doctor of Dental Surgery and a Bachelor of Science, Biology from Baylor University, Waco, Texas. He is the chair of the North Carolina Dental Society Special Care Committee, and is responsible for organizing and directing an interdisciplinary group of 34 special care-interest organizations dedicated to improving the oral health special care patients.

Dr. Milner is a member of the Long-Term Care Advisory Board, Joint Commission on Accreditation of Healthcare Organizations and provides consulting to the American Dental Association, Council on Access, Prevention and Interprofessional Relations, as well as the North Carolina Local Health Departments and State Dental Societies.

