

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

By Susan Elliott-Smith from interviews conducted by  
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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.

