As the dental hygiene profession celebrates its 100th anniversary, it is appropriate to look back at its origins in the classroom, providing preventive services and education. Turning an eye toward the present day, the Pew Center on the States has just released a report finding that too little is being done at the state level to provide sealants to low-income students. The report characterizes permission for dental hygienists to place sealants in school-based programs without requiring a dentist’s exam as an indicator that should be a part of all states’ prevention strategy and finds that too few states include it.

This article describes successful ongoing school-based programs in four different states and their approaches to school-based dental hygiene.

Future Smiles — Nevada

Terri Chandler, RDH, is founder and executive director of Future Smiles, a school-based dental hygiene program that employs dental hygienists who have been approved for a Public Health Dental Hygiene Endorsement by the Nevada State Board of Dental Examiners.

“This endorsement is critical because it allows the hygienists to provide all phases of dental hygiene care without a comprehensive dental exam by a dentist,” said Chandler, who characterizes Future Smiles as “much more than a dental sealant program.”

“We strive to provide all dental hygiene services, regular recare and dental referrals,” she said. “Through education, we support our mission to improve the dental literacy of our at-risk population. We work directly with school nurses, counselors, teachers, principals and other medical/dental professionals to ensure that the children we serve can secure the necessary resources that will address their needs.”

Chandler pointed out that there are many facets to providing school-based care the way Future Smiles does, citing insurance issues, business aspects, funding and staffing. Each of Future Smiles’ core group of dental hygienists holds the Public Health Dental Hygiene Endorsement and cardiopulmonary resuscitation certification. They all are covered under Future Smiles’ malpractice insurance, workers compensation insurance and general liability.

“Before any health professional can provide school-based health care, the Clark County School District requires a formal Memorandum of Understanding and specific insurance coverage,” she said. “Therefore, all team members must be added to these policies, which cost thousands of dollars annually, before we can provide our dental hygiene services.”
services. Our grant dollars and Medicaid reimbursements cover the operational costs, supplies and salaries. Our service delivery is limited by the funding that we can raise as a non-profit.

“I’m proud to say that the dental hygienists with Future Smiles are the first in Nevada to become credentialed Medicaid providers,” she said. “However, there are limitations within the Medicaid system, and our program continues to see a high percentage of uninsured, low-income children.”

Chandler established Future Smiles as a 501(c)3 nonprofit organization. “We broker our own funding, we write our own grants, and it is 100 percent dental hygiene based,” she said. “One of my primary provisions was anyone that is a part of this organization needs to be an ADHA member. As a benefit, the organization pays half of the membership dues. So if someone wanted to volunteer with us, that’s great, but you need to be an ADHA member. Being a member of our professional association was (and is) really important to me when I originally established Future Smiles.”

Chandler explained how Future Smiles dental hygienists use portable dental units manufactured exclusively by DNTLworks for the organization. “All of our portable dental units were purchased through grants written by Future Smiles. This investment included extensive research on portable dental units, and we found that DNTLworks had exactly what we were looking for in an effective delivery system.”

As executive director of Future Smiles, Chandler is protective of her program’s investment. “There is definitely a learning period when it comes to the set-up, maintenance and transportation of the portable units,” she said. “We invest time into teaching each team member how to care for the units and work together during the transportation to a new school or community site. I prefer that two people break down and load the units. Often, the schools are really great and will help us load or unload equipment. I’m still amazed at how easily the units break down, fit into zippered bags and travel to the next school site. We have special little trolleys to make it easier for us to push stuff around and move into and out of the classroom. And pretty much one dental operatory will fit in the back of my Nissan Murano SUV.”

Since Future Smiles first provided school-based care on December 29, 2009, the program has served 5,778 children and provided 10,857 dental sealants, 2,059 prophylaxes and 4,767 fluoride varnish applications. The group will celebrate their milestone of 10,000 sealants at a luncheon held in February 2013, but admitted there is always more to achieve.

“Our current outreach targets 2,400 children at 12 school sites,” Chandler said. “With additional funding, we could expand our services to serve more children annually at more schools.”

Future Smiles is an enrolled provider with two of Nevada’s three Medicaid Managed Care Organizations (MCOs). The third and largest MCO, UnitedHealthcare’s Health Plan of Nevada (HPN), has not accepted new providers into their system for nearly two years. According to Chandler, this hampers Future Smiles’ ability to receive reimbursement for school-based services.

“What they’re saying — UnitedHealthcare’s HPN — is that there are plenty of providers enrolled with HPN in Nevada,” Chandler recounted. “They say we don’t need any more providers; we just need to enroll more children into the Medicaid system.” However, Chandler cites the Centers for Medicare and Medicaid Services 2011 Use of Dental Services in Medicaid and CHIP as evidence that only 31 percent of Nevada’s children who were enrolled in Medicaid accessed the system for preventive dental services. She strongly believes that more school-based providers will increase access ratios.

“And that isn’t the full story. Thirty-two percent of the children served by my program are enrolled in a Medicaid product, while 68 percent are uninsured. These are families of four, working, with a monthly income averaging $1,200. So they would all qualify for Medicaid. Number one, why aren’t they enrolled? And number two, even if they were enrolled in HPN, I couldn’t receive any reim-

Future Smiles offers a full complement of dental hygiene services and emphasizes oral health education to improve the dental literacy of populations at risk for oral disease.
Many of the children don’t have tooth decay, she said: “They just need their teeth cleaned. I went to Laughlin, Nevada and treated some children at the high school that hadn’t been to the dentist in years. They’re 15, 16 years old, and they have early periodontal disease and gingivitis. Some of the children had so much calculus because they never got the opportunity to go to a dentist and have their teeth cleaned. When I was finished, and they’re running their tongues around their teeth saying, ‘Oh my gosh, thank you.’

"Can you imagine a 15-, 16-year-old initially being a little guarded, arms folded, going ‘What are we doing here today?’ and then afterwards saying, ‘Thank you. When are you going to be back, Miss Terri?’"

To learn more about Future Smiles visit their website at www.futuresmiles.net.

### Health Promotion Specialists — South Carolina

Tammi O. Byrd, RDH, is the CEO/clinical director of Health Promotion Specialists, a statewide school-based dental sealant program in South Carolina. The dental hygienists it employs are assigned to a particular group of schools and become a dental home for many children, Byrd said.

The children served receive a dental hygiene assessment, a preventive dental health program based on a caries risk assessment, preventive services including prophylaxis, dental sealants and fluoride varnish, dietary counseling, and referral for all needs that fall outside the dental hygiene scope of practice in the school setting. “We also assist in the referral process, including follow-up daily for all children with urgent care needs,” Byrd said.

The dental hygienists work in close collaboration with the school nurses, and also refer children to the speech therapists, nurse practitioners and pediatricians, as well as local dentists.

“The hygienists are paid a base salary and a commission based on production, work quality and collaborative spirit,” Byrd said. The organization bills Medicaid, private insurance and private pay.

The dental hygienists use state-of-the-art portable equipment. “The set-up includes a patient chair, operator’s stool, light and unit with high- and low-speed suction and an air/water syringe,” Byrd said. Piezoelectric scalers are also available if necessary.

“Each dental hygienist has her own autoclave, which is kept at home,” Byrd said. “She has enough hand instruments and handpieces to see a full day’s patients and extras for any extenuating circumstances that may arise. She keeps a puncture-proof container with enzyme soak to place the instruments in after use and to transport back home for sterilization.” The hygienists also have a cart that contains necessary supplies.

According to Chandler, it is time for the government to get involved. “Are you telling me that our state government can’t say, ‘This is a school-based program that is cost-effective, removes the barrier of transportation for the parents and keeps kids healthier?’” she asked. “I think they can. But I think that there has been a barrier of transportation for the parents and keeps kids healthier?”

‘This is a school-based program that is cost-effective, removes the barriers that you can treat their kids,” she said, “because they see these kids suffering on a daily basis with tooth decay. They can’t eat, they don’t sleep well, and they’re sitting there holding their little faces during class.”
"The equipment fits in their respective cars/SUVs," Byrd continued. "For each school, the equipment is set up in an approved location and left there until all of the children at that school who have signed consent forms have been seen. All hand instruments and patient records are taken home each day."

Health Promotion Specialists buys its equipment from Aseptico and DNTLworks. "Over the years, we have found that we prefer some equipment from each company based on reliability, customer service and price," Byrd said.

"We have seen a dramatic drop in children with dental issues visiting the nurse’s office. We have also seen an increase in the number of children that are seen in a dental office."

Tammi O. Byrd, RDH, Health Promotion Specialists

"We have picked up on cases of child abuse and sexual abuse that have potentially saved lives,” Byrd said. “We have worked with the Medicaid fraud department to report, investigate and convict Medicaid abusers.”

"We could definitely accomplish more — save more children from trauma and pain, and save more money — both private and public payers’ money,” Byrd said.

"With the increase in access and referral, we are seeing a lot of overtreatment. Children that have no visible signs of decay, no cavitation, shadowing or missing tooth structure, return to the schools with 12–20 pulpotomies and stainless steel crowns. "And then you have the children with obvious decay that do not make it to their appointment and end up in pain.”

Byrd advocates for dental hygienists performing intermediate restorative technique, also called atraumatic, in school settings and nursing homes.

"There are specific guidelines already developed for this type of program, and it has been shown to be successful,” she said. "In one year, the spread of decay was slowed by 50 percent, and after three years, the spread of decay had been eliminated. In fact, teeth are less likely to need endodontic treatment if there is less disturbance to the tooth for restorative procedures. The restorations last as well as typical restorations do. In deciduous teeth, this may be all that is necessary to keep a child functional and comfortable until the tooth exfoliates.”

Byrd also said she believes that nursing home patients could see their quality of life improve with intermediate restorative technique, through the reduction of pain and spread of bacteria, without the costs of transportation. "In many cases, the restorations may last for the rest of their lives.”

"The dental hygienists working with Health Promotion Specialists in South Carolina schools have made a difference in the lives of many children," Byrd said. "Our program sees approximately 19,000–20,000 children a year. We have seen a dramatic drop in children with dental issues visiting the nurse’s office. We have also seen an increase in the number of children that are seen in a dental office.

"Increased Medicaid fees did not change utilization rates for dental care. Once our program started in the schools, the number of children receiving dental sealants went up, and the number of children presenting in private dental offices also increased.”

Health Promotion Specialists has realized accomplishments in addition to the preventive oral health cares services provided.

"The dental hygienists in South Carolina’s Health Promotion Specialists sealant program become a dental home for many children. Shown here are Katie Ackerman, RDH, and a young patient."
Children’s Dental Network and Salem Children’s Dental Network — New Hampshire

Hope Saltmarsh, RDH, MEd, is executive director of New Hampshire’s Greater Derry Oral Health Collaborative Corporation (GDOHCC), a non-profit organization that operates two school-based oral health programs: Children’s Dental Network and Salem Children’s Dental Network.

“New Hampshire’s school-based dental programs are created at the community level,” Saltmarsh explained. “In the late 1980s, in a move to cut costs, New Hampshire disbanded its school-based dental programs run by the New Hampshire Department of Health and Human Services.”

This move closed many longstanding school-based hygiene programs around the state. As a result, 21 New Hampshire communities have developed their own school-based programs. Many receive limited state funding; all raise additional funding necessary to support their programs. Eligibility criteria, student services and sponsoring organizations differ for each program.

“Because our program was created by the dental and public school communities working together, we have enjoyed the active support of both from the beginning.”

Hope Saltmarsh, RDH, MEd
Greater Derry Oral Health Collaborative Corporation

Saltmarsh had only private practice experience in 1993, when GDOHCC hired her to organize and deliver a mobile dental program in two pilot elementary schools. She coordinated screenings by volunteer dentists and provided dental prophylaxes and fluoride applications once a year for students unable to receive routine preventive dental care.

Children’s Dental Network, the first and larger of GDOHCC’s two programs, provides in-school services twice a year at 20 schools and Head Start, Saltmarsh said. Services include toothbrush prophylaxes, screenings by volunteer dentists, fluoride varnish applications, glass ionomer sealants and temporary fillings without excavation using glass ionomer cement. Salem Children’s Dental Network provides the same prevention and no temporary fillings, delivering services once a year in seven schools.

“Children’s Dental Network is unique in that it has been consistently well-supported financially, has had long-term broad support by most local dentists and serves a population of students selected because they reside in towns served by a philanthropic health care foundation, Alexander Eastman Foundation, rather than because they go to schools with a high percentage of students on free-and-reduced lunch,” Saltmarsh said. This unique set of circumstances has allowed participating dental hygienists to collaborate with area dentists using evidence-based practices that provide comprehensive care for students.

GDOHCC employs two part-time dental hygienists and a dental assistant in addition to Saltmarsh. All are employees of GDOHCC, and programs are dependent on grants and contributions received for one year at a time.

“Dianne Powers, RDH, has been working in the schools with me since 2000,” Saltmarsh said. “In addition to providing students with preventive services, she heads up our oral health education program.”

Last year, Saltmarsh said, Powers gave oral health presentations — usually one classroom at a time — to nearly 9,000 students in kindergarten through fifth grade. Powers and Mary Davis, RDH, help Saltmarsh deliver in-school treatments for students in preschool through middle school at 27 schools in seven towns and at Derry Head Start. The past two summers, services have also been delivered at the WIC program in Derry.

Mobile equipment is required for clinical services. GDOHCC owns two sets, each including a portable chair, operator stool, portable light and capsule mixer for glass ionomer. GDOHCC purchased its mobile equipment from manufacturers Aseptico and DNTLworks, and owns a donated steam autoclave.

“The schools provide us with tables, desks, chairs and a reasonably private space,” she said. The treatment area varies from school to school, sometimes in the nurse’s office, sometimes in the hallway and almost every room in between. “A sink is not required,” Saltmarsh said, “but electricity is.”

GDOHCC itself has a small office space in a Derry elementary school where the equipment is stored in the summer. During the school year, staff members transport equipment and supplies to schools in their own vehicles.

“In most schools, services are delivered using two portable patient chairs side-by-side,” Saltmarsh explained. “This arrangement allows for maximal efficiency, as our assistant, Debi Grochmal, can help both hygienists.”

New Hampshire dental hygienists may place sealants under public health supervision, but temporary fillings require direct supervision of a dentist, Saltmarsh said. “Students with permission for treatment and identified as needing a temporary filling can be treated in one chair by a hygienist while we have dentists with us performing screenings in the adjacent chair.”

“Last year, our hygienists treated Matthew, a sixth-grader who had participated in our program for two years,” Saltmarsh said. “The first time we treated him, he had six cavities, and his family couldn’t afford dental treatment. We placed temporary fillings on three of his primary molars and three of his permanent molars.

“Over the next two years, we treated him four more times, applying fluoride, sealants and one more temporary filling. This year, his mother was delighted to tell me that she just got dental insurance and had scheduled a dental appointment for Matthew. The decay on the remaining teeth with temporary fillings was no worse than two years earlier.”

Interdisciplinary collaboration is a major contributor to the organization’s success. “GDOHCC has three dentists on its 11-member board of directors,” Saltmarsh said. All three have been actively involved with the program from its inception, and two have served as supervising dentists for the programs for many years, reviewing every treatment record at least once a year. Other board members include school nurses and principals, a pediatrician, businessman, attorney and public health program administrator.

GDOHCC is located in the southern part of New Hampshire, where the population density is among the highest in the state. According to Saltmarsh, many dentists serve this region.

“Currently, there are also quite a few dentists who accept New Hampshire Medicaid,” she said. “Because our program was created by the dental and public school communities working together, we have enjoyed the active support of both from the beginning. Every year, 30–40 dentists have participated in some way to serve schoolchildren. Many volunteer to do screenings, and quite a few accept referrals from GDOHCC to donate services to return a student to good health if these services would be impossible otherwise.”

GDOHCC dentists and hygienists use the best available evidence and best practices from other school-based programs to develop their clinical preventive practice models, Saltmarsh added. “GDOHCC started applying sealants in 2004 as part of a New Hampshire Statewide Sealant Project.

“In 2007, we adopted the protocol used by researchers at Forsyth Institute in Boston in the ForsythKids school-based program.” This includes treatments twice a year: prophylaxis, fluoride varnish, glass ionomer cement sealants and temporary fillings. “The first year we used the new protocol at two schools,” Saltmarsh
GDHOCC helps parents learn where to find a dentist who takes their insurance, how to apply for New Hampshire Medicaid, find affordable care, find specialist care, and so on. For students with urgent or significant dental treatment requirements who lack resources to obtain it, the program connects them to an area dentist who will provide donated or affordable treatment. “Last year, 22 students received over $22,000 worth of donated care,” Saltmarsh said.

Working at the state level to improve oral health in New Hampshire, Saltmarsh serves as chair of the Policy Committee of the state’s Oral Health Coalition, teaches continuing education courses at New Hampshire Technical Institute Concord’s Community College for public health hygienists, and participated in the Workforce Workgroup convened by Pew Center for the States in 2011.

Legislation was passed in early 2012 to create a new member of the dental workforce: the Certified Public Health Dental Hygienist (CPHDH), who will be able to place ITR without excavation and take X-rays in addition to other services already permitted under public health supervision. Representing GDHOCC, Saltmarsh testified in support of that legislation and the safety of hygienists placing temporary restorations.

“When GDHOCC hygienists complete the requirements to become CPHDH, we will deliver ITRs more efficiently,” Saltmarsh said. “Currently, students have their ITR placed while we have a dentist with us, but often need to return later to have the rest of their treatment. Students who send in forms late or are absent when the dentist is present will no longer miss out on the option of receiving an ITR.”

GDHOCC’s dental hygienists have an effective, comprehensive model to support the oral health of young people in their area, but they could do more. “Only about 25 percent of the student population we serve is covered by Medicaid,” Saltmarsh said. “Most lack dental insurance. Therefore, our programs require considerable grant funds and contributions to operate. "With more funding, we could serve more children in more schools and community settings.”

### Tooth Tutor Dental Access Program — Vermont

Robin Miller, RDH, BA, is a public health dental hygienist working at the Vermont Department of Health in the Office of Oral Health; she coordinates the Tooth Tutor Dental Access Program at the state level. “The program has been in existence since 1997. Currently there are about 30 dental hygienists (tooth tutors) working with about 100 schools,” Miller said. “Approximately one third of Vermont elementary schools participate in the program.”

“About 50 percent of the kids who have Medicaid insurance access dental care on a yearly basis — which is quite high compared with other states,” she said. “Our program data shows that, in general, children in the Tooth Tutor Dental Access Program have insurance, and they have a dentist who will see them.”

Although some of the tooth tutors are funded by grants and foundations, most are funded through reinvestment of dollars reimbursed to schools that participate in the state’s Medicaid Administrative Claiming (MAC) program. The MAC program, administered by the Health Department’s Early and Periodic Screening,
Diagnosis and Treatment (EPSDT) staff, provides reimbursement to schools for administrative activities to identify and enroll eligible clients in Medicaid and facilitate access to services covered by Medicaid. Schools can choose to reinvest MAC funds in a number of different ways,” Miller explains, “and one third of the schools in Vermont use these funds to support a dental hygienist to implement this program.”

The hygienists working as tooth tutors are not providing clinical services in schools, so no equipment is necessary. The exception is a dental screening for the target group students. “The children in the target group are the children in the school that have not accessed dental care in the past year,” Miller said.

“The first thing the tooth tutors do is a record review. They go through the emergency cards and get a list of children who have a dentist and no date of last visit, or they have both and the date of last visit is over a year, or they have no information. Those children are all in what we call the initial target group. Then they contact those families, introduce themselves and explain the Tooth Tutor program. Immediately, they’ll hear back from about 30 percent of those families, saying ‘Oh, yes, we just didn’t fill out the information.’ So in that way, they help the school nurse clean up the records.

“Then we get what we call the true target group,” Miller continued. “Their job is to work throughout the year trying to make connections with those families, as well as develop their referral network of dentists in the area. They’re also doing the dental health education in schools. They visit each classroom one or two times, but they’re also encouraged to be on school wellness committees and attend school health fairs and really become embedded in the school community.”

Miller says she sees the tooth tutors as the liaison between the families that aren’t accessing dental care and the local dental community. “A really important part of their job is to kind of canvas their area and develop a referral network of dentists who agree to accept their referrals from the school,” she said. “I think of it as they are bringing these two groups of people together who otherwise would not have met.”

The tooth tutors provide oral health education, and the supplies they have are provided by the state. “Often, a supervisory union will hire one dental hygienist to work in the four or five schools through-out the whole supervisory union. The hygienists in general work one day a week throughout the school year, and they alternate visiting the different schools. The Vermont Department of Health provides them with a ‘tooth tote’ — a big bag with a dental puppet, videos, books, a mouth model, toothbrushes, that kind of thing.”

Miller said that, in the past, classroom visits by the tooth tutors were, to a degree, devalued. “We used to kind of pooh-pooh the classroom stuff: what good does that do in the long run? We really wanted them to spend their time helping families find dental homes.

“But we realized it’s that classroom, it’s that familiar face, it’s embedding in the school community that makes the parents much more likely to respond to the offer of assistance. When a child comes home excited about the information they learned today from Miss So-and-so, parents are going to be more likely to sign that permission form allowing Miss So-and-so to do the screening, or to help them find a dentist, because their child is excited about it.”

The Tooth Tutor Dental Access Program is currently undergoing a formal evaluation process. “Recently, the Office of Oral Health of the Vermont Department of Health hired a program evaluator,” Miller said. “We look forward to the results because, while we think this is a great program, we don’t have any real way of doing a cost analysis and saying, ‘a school spent this much money, but this is how much money was saved over the long haul.’

“Vermont has very positive sealant rates and dental access rates,” she said, “and I think that the Tooth Tutor Dental Access Program, with the support of the Vermont State Dental Society and the Vermont Dental Hygienists’ Association, is an important part of that. It’s a real collaborative effort between the Vermont Department of Education, the Vermont Department of Health and the Vermont Dental Community, and it’s very exciting to be a part of this program.”

Reference


Jean Majeski is ADHA managing editor, Access.