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In this month's letter, Dr. Rick Valachovic, Executive Director of the American Dental Education Association, examines the explosive growth in dental hygiene programs and asks what impact it has on the dental hygiene workforce and access to care.

**Dental Hygiene Program Capacity: Finding the Right Balance**

Earlier this year, I wrote to you about developments at some of the new dental schools that have emerged in recent years. While the number of these new institutions is striking, it doesn't begin to rival the upsurge in new dental hygiene schools and programs. An impressive 131 new programs have received accreditation since 1990, and this increased capacity is reflected in a nearly 25% percent increase in first-year enrollment from 6,087 in 1998-99 to 7,525 in 2007-08. Today the ADA lists a record 309 entry-level programs and another 60 bachelor's degree completion programs.

For many years now, the U.S. Department of Labor's Bureau of Labor Statistics has listed dental hygiene among the country's fastest growing professions. It projects a 30 percent increase in employment for dental hygienists between 2006 and 2016.

This projection and the expressed desire of private dental practices for more dental hygienists are driving the creation of new programs. Those initiating the programs equate this growing market for hygienists with a growth opportunity for educational institutions, but the workforce equation is more complex than it appears at first blush.

"Programs open in good faith," says Gwen Welling, Manager for Dental Hygiene Education at the American Dental Association (ADA). "They think there is a demand and that they have something to offer. Local employers also genuinely want more hygienists. But typically these programs open in urban areas that already have established programs, and soon the dental hygienists living there find themselves underemployed."

In other words, the balance between supplying graduates and putting them to work is a delicate one. Preliminary calculations seem to indicate that when dental hygiene programs produce more graduates than the local market can absorb, both the workforce and the access equations become unbalanced. We know that dental hygienists are desperately needed, but too often educational opportunities are clustered in areas where there are enough providers.

I posed this conundrum to Dr. Susan Crim, Chair of the Department of Dental Hygiene at the University of Tennessee Health Science Center. Susan was elected ADEA Vice President for Allied Dental Program Directors in 2008. From that perch, she has a panoramic view of what's going on in dental hygiene education.

Susan told me that there is concern among allied dental program directors and others that the development of so many new programs where there are existing programs within a 100-mile radius could lead to workforce saturation. She cited the case of Phoenix, Arizona, which already has three community college-based, two-year programs in close proximity to one another. There are plans to open two new private for-profit programs in that city, one of which will enroll a relatively large class of 30 in 2010.

"A proprietary program has opened in my area," Susan told me, "but the first class has not yet graduated, so we have not seen its impact on employment."

In 2001, Dr. Karl Haden of the Academy for Academic Leadership, Kathleen E. Morr of Pennsylvania College of Technology School of Health Sciences, and I issued a report analyzing trends in allied dental education. At that time, U.S. dental hygiene
programs numbered 255, and enrollment was already on the rise, up 9.5 percent in the second half of the preceding decade.

We saw this as a positive development, especially in light of the oral health challenges that had just been outlined in *Oral Health in America: A Report of the Surgeon General*. That document made clear the importance of scaling up community-based disease prevention and personal oral health care as the ratio of dentists to population declines. (It was declining then and continues to decline today.) The Surgeon General’s report also emphasized the need to draw on the skills of allied dental personnel to meet the nation’s oral care needs.

The American Dental Hygienists’ Association in 2004 voted to create a new expanded dental hygiene workforce model, the Advanced Dental Hygiene Practitioner (ADHP). Some states have been evaluating this new model to expand oral health services, especially to those populations with limited access to care.

So how can new programs avoid saturating local markets for dental hygienists and place new graduates where they are most needed? The establishment of satellite campuses appears to be an effective model. Kentucky was one of the first states to offer dental hygiene education through this type of distance education program. The state still has a number of satellite programs affiliated with a parent community and technical college. These programs recruit and admit applicants from rural areas, typically a handful per site in any given year, and graduates go on to serve their communities rather than to compete for jobs in already saturated markets.

Kentucky is not alone. According to the *ADA 2007-08 Survey of Allied Dental Education*, 26 schools have satellite programs that extend their reach. These programs typically attract nontraditional students with families who are committed to staying in their local areas. If the ADA survey is any indication, such older students make up a significant portion of today’s dental hygiene student body. The survey found that 9,160 of the 15,010 dental hygiene students enrolled during the 2007-08 school year had job or family care responsibilities. That’s 61 percent!

I recently spoke to Vicki Coury, Chair of the Department of Dental Hygiene at the University of Oklahoma College of Dentistry (OU). OU has three dental hygiene distance education sites that were set up to alleviate shortages in rural areas. OU partners with three of the state’s technology centers, which jointly operate the programs. The technology centers are supported with regional tax dollars, and preference in admissions is given to students from those regions. This approach seems to benefit all concerned, with the overwhelming majority of graduates remaining in the rural areas where they are needed.

“It’s clear that the need for hygienists is being met in most areas of the state,” Vicki told me. “In the western part of the state, dental hygienists were once so scarce there that dentists didn’t even bother to look for them. Now that our program has made hygienists available, it’s created a demand for their services in that region.”

So satellite programs seem to be beefing up the distribution side of the access equation and improving the balance of the workforce equation as well. Susan Crim agrees, but she thinks more is needed.

“In addressing access to care, we need to augment the utilization of dental hygienists by looking at less restrictive patient care delivery systems and assigning additional roles and responsibilities,” Susan insists. “This expansion of roles and responsibilities must be accompanied by establishing higher levels of academic credentials for the profession and creating viable pathways for current students and hygienists to pursue advanced degrees and professional development. It is essential that educational programs established for these new roles effectively prepare graduates with the requisite knowledge, skills, and competencies to provide safe, high-quality care in all settings.” (This issue will be discussed further at the 2010 ADEA Allied Dental Education Summit.)

Some states are already doing this, by creating mid-level providers or exploring expanded roles for allied health professionals. What does the future hold? A number of pressures may begin to put the brakes on the current unprecedented expansion of programs. It’s already difficult to find qualified faculty, especially at the administrative level, and the problem will worsen as baby boomers retire. In addition, the retirement of dentists from private practice will further reduce the number of practices providing job opportunities. Finally, if the workforce becomes saturated, tuition-driven private schools may find they have fewer applicants and less incentive to stay in business.

Vicki and her colleagues at OU have begun to consider what they will do if the number of dental hygiene graduates begins to outstrip demand. In addition to OU’s production of more graduates statewide through its satellite programs, Oklahoma has begun to see an influx of hygienists from out of state.

“We’ve moved from a situation where graduates had multiple job offers to one in which they may need to go out and actively seek employment,” Vicki observes. “Nevertheless, the majority of our students had jobs lined up when they graduated last year.”
And there’s one more factor that may upset the workforce balance in Oklahoma: the new Community Dental Health Coordinator (CDHC) degree, which OU is currently piloting. When the first class graduates in late 2010, it will be interesting to see how these new health professionals impact the need for hygienists. Some speculate that CDHCs will reduce demand, while others believe they will increase it, as the new providers reach out to communities and bring more people into dental offices for treatment.

Only time will tell how all of this will shake out and if we will succeed in finding an approach to program growth that balances workforce and access needs in all their complexity. Above all, we must make sure that high educational standards for accreditation and licensure are maintained as the number of programs expands, especially with new provider models emerging on the horizon.

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