Many general dentists remain hesitant about providing dental care to children, often due to perceived inadequate pre-doctoral education in pediatric dentistry. Dental schools and faculty members acknowledge that a variety of factors limit the ability to ensure adequate exposure to young children with extensive dental disease. This report provides an examination of the changes and decline in population pools for dental school programs, the challenges of securing adequate patient populations, and current approaches to solving patient shortages. It offers a practical analysis of potential collaborative efforts between Dental Service Organizations (DSOs) and dental schools and outlines best practices in affiliation agreements.
In the past, dental schools have served as safety nets for low-income families looking for quality, affordable dental health care, but they now face increased competition from more efficient care models. Fundamentally, the primary mission of a dental school is teaching, not health care delivery, and therefore dental schools clinics are not as efficient as traditional private practice or corporate models. The increasing number of DSOs, often referred to as corporate dentistry, has given families convenient and accessible alternatives for their dental care, contributing to changes in the patient pools at many dental schools.

Program directors reported that over the past ten years, patient pools have become smaller, lack patients who need restorative care, and are more racially diverse. The resulting reduction in training experiences has been a chronic problem. Over 10 years ago, half of dental schools reported that their students had inadequate competencies attributed to lack of patients and minimal restorative needs in their patient pools, and this problem is growing.

A recent survey of first-year residents in pediatric dentistry training programs identified that only 51 percent felt they were adequately prepared for their first year of residency. Approximately one-third of program directors reported that entering residents were inadequately prepared to perform operative procedures on primary teeth. More than 50 percent felt their first-year residents were inadequately prepared to place a stainless steel crown. This study shows that dental schools are struggling to prepare even the most motivated students, likely a result of diminishing patient pools.

Not a Simple Problem

There is no one reason our dental school clinics have declining patient pools. A number of factors, including dental school locations, proximity to more accessible dental offices (corporate and traditional private practice), and lack of patients requiring restorative care are reasons for the decline in numbers of clinical exposures in dental school settings. In addition, barriers traditionally linked to dental school treatment models such as lengthy appointments, lack of affordable parking, and limited access to public transportation were also noted.

Reasons for the DECLINE IN CLINICAL EXPOSURES in dental school settings include school LOCATIONS, a lack of patients requiring RESTORATIVE CARE, and increased proximity and ACCESSIBILITY of corporate and traditional dental offices to target populations.

Program directors reported that over the past ten years, patient pools have a lower incidence of dental caries. This decline is supported by current research. According to the Dental Caries and Sealant Prevalence in Children and Adolescents in the United States, 2011-2012, by the U.S. Department of Health and Human Services, CDC and the National Center for Health Statistics, more very young children are receiving dental care. The incidence of untreated tooth decay in primary teeth had dropped to 14 percent of children ages 2-8 in 2011-2012. This compares to 23 percent of children ages 2-11 with untreated caries reported between 1988-2004. This reduction in untreated caries may be attributed, in part, to the increase in numbers of pediatric residency positions, changes in Medicaid, and the growth of corporate dental offices.

During the last decade, the challenges in securing a robust patient pool have intensified. Academic dentistry programs and dental schools in particular are not as convenient as private practice. Historically, these programs treated patients with Medicaid who had access to limited numbers of providers. In addition, dental schools have traditionally served uninsured/underinsured children who benefit from discounted fees. Unique challenges that academic programs face in securing an adequate patient population may include:

- Academic programs may be unable to advertise for patients due to university restrictions.
- Programs are typically located in urban areas that are saturated by dentists or DSOs.
- Dental schools may not have the financial resources or support of the university to participate in public or private insurance plans.
- Patients may have access to care sources closer to their homes that provide such other health services as pediatrics and prefer those conveniences.
- Academic programs are typically located inside a larger health care complex, often posing access difficulties and a lack of affordable parking.
- DSOs may deeply discount diagnostic and preventive visits to attract new patients and may draw uninsured or underinsured patients from academic environments.
• Dental schools may have restrictive payment policies (no payment plans or no treatment if patients have outstanding debt) that discourage use.
• A public belief that dental schools offer better or improved quality of care may be less than in the past.

**Dental School Response to the Challenge**

With reductions in funding, dental schools increasingly rely on tuition and clinic fees for revenue. Program directors report high clinic fees are new barriers that may result in patients moving to corporate practices with discounted fees. Patients on government plans may choose corporate practices for their convenient locations, hours, and short appointment times. To manage these issues, schools offer students the opportunity to perform clinical dentistry while on external rotations. Seventy percent of respondents reported having external rotation to FQHCs, school-based programs, safety-net practices, and mobile clinics. Higher volume of care, experience with infant exams, sedated patients, and advanced behavior guidance occurred slightly more frequently in community-based clinics versus dental school settings.

**Impact of the ACA and Medicaid on DSOs**

One of the essential benefits mandated by the Affordable Care Act (ACA) is for “pediatric services, including oral and vision care.” Therefore, plans provided through the exchanges offer options for dental insurance for children. As a result, new delivery models have come up to meet this previously uninsured population and deliver care. Media attention on DSOs and new or alternative delivery models tends to focus on negative events and practices, but these care providers treat hundreds of thousands of children, offering quality services, often to populations who can’t find equivalent care elsewhere. While sensationalist stories are disturbing, it is important to remember that the legal, ethical, and moral responsibility for providing quality care rests with the licensed dentist, not the corporate entity. Some states have also considered laws or regulations to restrict corporate interference with a dentist’s clinical judgment.

**Time for Creative Solutions**

The pediatric dental profession is in a unique position to look for partnerships between corporate offices and dental education. A blend of school- and community-based education may offer a solution and open the door to novel teaching opportunities for our predoctoral and postdoctoral students. Collaboration with DSOs may give students a broader exposure to higher...
volume care, advanced behavior management, and more complex restorative procedures, which could lead to students who are more competent, confident clinicians.

In order to be successful, our dental students and residents require exposure to diverse patient pools. However, today’s families are busier, often cannot afford to take off work, and may be penalized for taking children out of school for lengthy half-day appointments in dental school settings. Since corporate dental offices often serve these families, collaboration would offer opportunities for young clinicians to improve their communications skills with parents and colleagues. Residents would have the prospect of seeing efficient care models, advanced versions of electronic dental records, and teamwork between dental assistant, hygienist and dentist. Correspondingly, DSOs would have increased opportunity to find talented students interested in continuing to work with diverse populations after graduation.

For those with research interests, corporate dental offices have large data bases of millions of clinical encounters and offer a great opportunity for research projects for students and residents. Corporate offices would, in turn, potentially benefit from these collaborations by gaining access to research expertise from dental schools.

Lessons from Other Disciplines

The Institute of Medicine 2011 report, “Improving Access to Care for Vulnerable and Underserved Populations,” notes that the community is where the patients are and where both education and care delivery should be. We need to learn from our medical colleagues who teach their residents in realistic clinical settings that demand efficiency, cultural competency and quality care. This mission will require a shift in our educational culture and result in changes to the business model of dental schools.

Department chairs and education leaders need to consider the potential advantage of working with engaged community partners (corporate or private). By helping to improve cultural competency, our graduates might be more willing to continue to care for underserved patient populations after graduation. Increased academic faculty interactions within the community clinics will lead to the development and application of uniform measures of quality of care assessment. In addition to residents and students providing needed treatment to children, collaboration would expose them to such corporate environment resources as data management, marketing and business strategies.
There are hurdles to overcome. Some of the most challenging include:

- HIPAA concerns related to patients,
- Dental liability agreements between institutions,
- Financial support for additional supervision of students in corporate practices,
- Difficulty in ensuring quality control of education,
- Variance in treatment and treatment planning philosophy, and
- A need for standardization and calibration of faculty.

Potential Collaborations Between Training Programs and DSOs

Partnerships between corporate entities and academic institutions can be mutually beneficial if structured appropriately. Below are some existing or potential relationships that academic institutions may pursue.

- DSOs may not have the capacity to treat children with advanced behavior guidance needs and may not provide sedation or general anesthesia services. Postgraduate programs may collaborate with DSOs to serve as a referral site for patients needing advanced behavior guidance. Programs could have a facilitated referral path for these patients or act as a “subcontractor” for capitation plans.

- Dental schools have the goal of training entry-level general dentists who are competent in providing dentistry for children. DSOs would benefit from a pool of optimally trained dental students who have had experience treating child patients.

Barriers in Dental Education

Despite the potential for mutually beneficial collaborations, challenges exist to collaboration between DSOs and academic institutions.

- The Commission on Dental Accreditation (CODA) requires that a pediatric dentist supervise pediatric dentistry residents at all times. This may limit the ability of residents to train at DSO sites, unless the sites employ pediatric dentists or hire faculty members.

- The addition of training sites or change in location requires a major change request to CODA that can only be approved semiannually. In addition, these sites are subject to site visits. These rules limit programs’ flexibility in establishing and making adjustments to training in DSO sites. New rule changes may address this challenge.

- Academic programs are typically part of a university or hospital. Contract negotiation takes place at a number of levels, and this bureaucracy can make negotiations slow or impossible.

- Academic programs may be reluctant to partner with DSOs due to fear of backlash from alumni, competing DSOs, or local dental associations.
How-to Guide: Best Practices in Affiliation Agreements

The school recognizes the primary function of the affiliation site is to provide dental services for its patient population through optimally qualified health care providers. The site recognizes that the primary function of the school is to prepare health care providers through optimal educational preparation of the students. In entering into this affiliation relationship, therefore, both the school and site recognize a dependency by each on the other in fulfilling their obligations in the delivery of dental services. There is a shared benefit of all parties to provide pediatric dentistry students and residents with clinical experiences in community-based practices.

Experience has shown that there may be differences in the overall objectives of institutions and corporate entities. In this regard, an educational institution’s focus may be providing optimal experience for students, while the corporate focus maybe on production. In order to avoid conflict, it is important to clearly identify and delineate boundaries between the educational mission and business model. This is best insured by understanding the responsibility of student supervision and training to ensure best patient care for the experience as well as the future care that students will provide when they graduate.

The role of the schools should include:
1. Assume responsibility for the planning and implementation of the educational program in pediatric dentistry.
2. Assure continuing compliance with educational standards established by the curriculum accrediting agencies.
3. Confer faculty appointments to qualified practitioners who are engaged in instruction and supervision of dental students and/or pediatric dental residents.

The role of the affiliation sites should include:
1. Recognize that staff members with faculty appointments will be sharing educational responsibilities with the school.
2. Provide the physical facilities and equipment necessary for the required clinical education experience and clinical practice.
3. Provide each student/resident an orientation program with the operational policies and regulations of the site.
4. Provide written evaluation, as required by the school, of the students'/residents’ level of performance, progress, and potential as a dentist.
5. Reserve the right to request that the school withdraw from clinical experience any student/resident whose health or performance is detrimental to patient well-being or to the operation of the site.

Affiliation sites and school should agree to:
1. Determine by mutual agreement the number of students/residents, their level of academic education, and the scheduling of their clinical educational experiences at the site.
2. Establish by mutual agreement the overall and unit objectives of the affiliation, devise methods for their implementations, and evaluate their effectiveness.
3. Inform each other of any changes which may affect clinical education.

Publications: The School agrees to recognize the site as a teaching affiliate in appropriate literature, and the site agrees to a similar identification of the school in its publications. All parties agree that such publications will be consistent with school policy and subject to mutual review and approval.

Fiscal Considerations: Students and faculty are not employees of the site and are present solely because of their participation in the educational program established by the agreement.

Accreditation: The site facility shall be maintained to meet accreditation by the Commission on Dental Accreditation. It is the responsibility of the site to notify the school of any significant changes in its clinical facilities or programs that might impact or alter the educational program and its accreditation.
Conclusions

Dental education is late in recognizing the opportunity for guided, mutually beneficial approaches with community corporate entities. In light of the dwindling patient pools at a number of dental schools, leaders must look for innovative solutions to train dentists to care for the most vulnerable patients. A judiciously drafted partnership with a DSO may improve the ability of dental schools to effectively and efficiently prepare dental students in pediatric dentistry.

References


The American Academy of Pediatric Dentistry (AAPD) is the recognized authority on children's oral health. As advocates for children's oral health, the AAPD promotes evidence-based policies and clinical guidelines; educates and informs policymakers, parents and guardians, and other health care professionals; fosters research; and provides continuing professional education for pediatric dentists and general dentists who treat children. Founded in 1947, the AAPD is a not-for-profit professional membership association representing the specialty of pediatric dentistry. Its 9,900 members provide primary care and comprehensive dental specialty treatments for infants, children, adolescents and individuals with special health care needs. For further information, please visit the AAPD website at http://www.aapd.org or the AAPD's consumer website at http://www.mychildrensteeth.org.

The Pediatric Oral Health Research and Policy Center (POHRPC) exists to inform and advance research and policy development that will promote optimal children’s oral health and care. To fulfill this mission, the POHRPC conducts and reports oral health policy research that advances children’s oral health issues and supports AAPD public policy and public relations initiatives at the national, state, local, and international levels with legislatures, government agencies, professional associations, and other non-governmental organizations.

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