Invited Editorial



The role of The Dental College of Georgia in meeting the oral health needs of Georgians

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As the state's only dental school, The Dental College of Georgia (DCG) takes seriously its role in meeting the oral health needs of Georgia. Georgia is the largest state in physical size east of the Mississippi River, and it continues to be one of the fastest growing states in population. In 2016, the estimated population of Georgia was 10,310,371. Over the past 3 years, the number of single-county or low-income Dental Health Professional Shortage Areas (DHPSAs) in Georgia has increased to 131, an increase of 50 areas in 3 years.²

Based on a survey completed by the Georgia Health Policy Center in 2012, there were approximately 4.2 dentists/10,000 population in Georgia,³ compared to 4.4/10,000 reported by the American Dental Association (ADA) and the Human Resources Service Administration (HRSA) in 2006, when Georgia ranked 49th out of all 50 states in the ratio of dentists to population.⁴

In 2007, Dr. Daniel Rahn, then President of the Medical College of Georgia (now Augusta University) appointed dental school dean, Dr. Connie Drisko, to chair the Georgia Dental Task Force to address current and emerging issues relative to dental education. The task force included leaders in the dental profession, higher education, and state agencies. The charge to the task force included the following:⁵

- Develop an action plan for assessing the oral health needs of Georgians.
- Determine if the projected increase in the size of the dental school class is adequate to meet the future needs for general dentistry in Georgia.
- Determine what progress has been made in addressing access to dental care and what can be done to further that progress.
- Determine what steps the dental school should take to address faculty recruitment and retention.
- Identify how the dental school can partner with interested stakeholders in improving the oral health of Georgians.

In 2008, the Task Force reported the following conclusions that could be acted upon by the university:⁵

- A new facility for the dental school is needed to accommodate growth of the class size to 100.
- To meet future workforce needs in Georgia, the DCG must increase enrollment.
- Expansion of the number of residents in the advanced training programs of the DCG is necessary.
- The ethnic and racial diversity of the student body should reflect the population of the state.
- There is a need to increase student recruitment from underserved areas and encourage them to practice in underserved areas.
- The DCG should expand its role in the delivery of care to the underserved through its servicelearning and outreach programs in partnership with the Department of Community Health, the Georgia Area Health Education Centers (AHECs), and other organizations.
- Recruitment and retention of faculty members to teach at the dental school is a concern.
- The burden of student loans upon graduation is a substantial barrier to consideration of an academic career.

This editorial reports on the progress made since the Task Force made its recommendations and identifies challenges that remain.

New Dental School

In 2011 the DCG took occupancy of its new \$122M, 270,000-square-foot clinical facility, which was built to

accommodate 100 dental students per class as well as increases in the advanced training programs of the College (Advanced Education in General Dentistry, Endodontics, General Practice Residency, Oral and Maxillofacial Surgery, Orthodontics, Pediatric Dentistry, Periodontics, and Prosthodontics). The facility houses a dental simulation laboratory, clinical research center, and an outpatient surgical center with two operating rooms.

The J. Harold Harrison, MD Education Commons opened in 2015. It houses classrooms for medical and dental students, a 40,000-square-foot medical simulation center, and learning community spaces. Thus the Education Commons provides space for inter-professional learning opportunities for students from the DCG, the Medical College of Georgia, the College of Nursing, and the College of Allied Health Sciences.

The DCG and the Education Commons are state-of-the-art educational facilities that provide an opportunity for technology-infused education of the state's future dentists and dental specialists.

Increasing Class Size

To address the need for more dentists, the DCG has an objective of increasing class size. Since the opening of a new dental education facility, the class size has increased to 94 matriculates in the current first-year class. The goal is to increase incrementally to a maximum of 100 students per class, as is made possible by ongoing faculty recruitment. Once this class size is reached, the facility will limit further growth.

Student Admissions

The DCG strives to admit students that reflect the diversity of Georgia by offering various pipeline programs. It partners with Office of Student and Multicultural Affairs of the Medical College of Georgia to offer the Student Educational and Enrichment Program (SEEP) and Prematriculation programs. SEEP is a seven-week summer, non-residential program for high school students in the local Augusta area. With courses in various biomedical sciences, hands-on labs, clinical shadowing, networking opportunities, and guest speakers, the program prepares students for a career in the health professions.

Pre-matriculation is a 6-week summer program for medical and dental students who have been accepted at the Medical College of Georgia and the DCG. Designed to prepare students for the first year of health professional school, Prematriculation is an intensive academic program that focuses on content knowledge, skills development, networking, and adjustment through a variety of courses, guest lectures, social activities, workshops, and hands-on activities.

The Dental Scholars Program allows outstanding students the opportunity to achieve their BS and DMD degrees in only seven years. Students accepted in this program take classes together as a cohort and participate in special opportunities for volunteering, clinical exposure, and research. To matriculate to dental school, students must meet metrics throughout the first three years.

The Summer Student Training and Research (STAR) Program is designed to provide biomedical research experience for undergraduate students who have a desire to pursue graduate education in the biomedical sciences. This program provides opportunities for highly motivated and talented undergraduate students to develop skills as young scientists and to explore their interest in biomedical research. During the course of the nine-week program, STAR students participate in a biomedical research project under the guidance of an Augusta University faculty member.

In addition, the Director of Admissions of the DCG travels throughout Georgia to build relationships with underrepresented minority undergraduate students and college advisors, including those at historically black colleges and universities and those at colleges in rural areas. This assists the DCG pipeline programs in areas where prospective dental students, lacking the means to travel to Augusta, are provided resources for equal preparation in becoming competitive applicants.

As a result of these programs and other initiatives, the DCG has experienced an increase in underrepresented minority students. For the class of 2020, 13% are underrepresented minority students, defined as African Americans and Hispanics. Although this percentage of such students does not completely reflect the diversity of the population of Georgia, the DCG has made improvements in the admission of underrepresented minority students.

Recruitment of Students from Underserved Areas

The DCG continues its efforts to recruit students from DHPSAs. Over the last 8 years, the average number of students from DHPSAs is 54.2%; the average for the last 4 years is approximately 62%. For the class of 2020, the average is 78.8%. The DCG tracks where students locate immediately after graduation. On average, approximately 50% of the graduating class goes on to advance training in residency programs. Therefore, the data for students returning to DHPSAs includes only those who return immediately after graduation and, therefore, is lower than the total number that actually return. The percentages of graduating seniors returning DHPSAs for the classes of 2013, 2014, 2015, and 2016 are 22%, 14%, 30% and 18%, respectively.

Delivery of Care to the Underserved

For the past 9 years, as a result of funding provided by HRSA grants, the DCG has worked with the Dental Public Health and the AHECs to send senior dental students across

the state to dentally underserved areas to provide oral health care. Last year, nearly 18,000 procedures were performed by dental students in 25 clinic sites across Georgia, primarily located in DHPSAs. The comprehensive goal is to provide oral health services and introduce dental students to areas of the state where dentists are needed, and to broaden clinical educational mentorship opportunities to off-campus dental sites, where students are able to build skills, intermingle with other health professional students, and network with dental professionals. Through community-based partnerships, the senior clerkship program bridges the dental curriculum with hands-on, real-world patient care in culturally diverse communities.

In addition, dental students are required to provide 25 hours of community service per year. Last year, dental students in the first three years of dental school provided over 7000 hours of community service in Augusta and around the state. Each senior student spends eight weeks at clinics throughout the state. Even with this commitment to service, over the last 5 years, the average graduation rate for the DCG has been 98.9%.

The DCG also participates annually in the Give Kids a Smile program of the American Dental Association Foundation by providing free oral health services to underserved children. In 2016, the DCG and College of Allied Health Sciences provided radiographs, dental prophylaxis, extractions, and restorations for 125 local children.

Faculty Recruitment and Retention

With the increase in dental students from 80 to 100 per class, recruitment of faculty members to maintain the current faculty to student ratio also has increased. On a national level, there is a shortage of dental faculty members, and this is true for the DCG as well, primarily because academic salaries are not commensurate with the earnings of an average dentist in private practice. Thus, there has been an increase in dentists from programs not approved by the Commission on Dental Accreditation (CODA) for teaching positions nationwide as they are unable to practice dentistry outside of a US academic institution. At the DCG, only dentists from non-CODA-approved programs with two years of advanced training in the US are considered for appointment to the faculty.

In addition, the base salaries for faculty members at the DCG are lower than the average for those at other US public dental schools⁶ and considerably lower than that for the average dentist in private practice in Georgia.

As is the trend nationwide, the faculty at the DCG are greying. The average ages for DCG full-time and part-time faculty are 51 and 61 years, respectively. Nearly one-third (24) of full-time DCG faculty are currently eligible to retire. In five years, an additional 10 faculty members will be eligible, resulting in 45% of faculty members at retirement

age. Of the paid part-time faculty members, 72% (25 of 35) are either at retirement age or are rehired retirees. Therefore, it is expected that the DCG will need to hire new faculty members to maintain the faculty: student ratio.

Student Loan Repayment

Dental student indebtedness reduces the likelihood that new graduates will be recruited to rural areas and DHPSAs to pursue academic careers. The American Dental Education Association reports that the total educational debt for the 2016 graduating class of students with debt is \$262,119.⁷ With the current cost of tuition and fees at approximately \$40,000 per year at the DCG, the average debt of the dental students graduating with debt in 2016 is more \$190,000, with a range between \$25,000 and \$383,000. These figures do not include their undergraduate educational debt.

As student debt increases, it is increasingly difficult to recruit dentists to rural areas and DHPSAs. As part of HRSA funding for over 10 years, the DCG has provided 17 dentists with loan repayment, varying from \$15,000 to \$75,000, for serving in rural areas and DHPSAs. However, in the most recent renewal of the DCG HRSA grant to support outreach, loan repayment programs were not included. The state of Georgia has also provided loan forgiveness, but only on an annual basis. Without loan repayment, it remains difficult to recruit dentists to establish practices in rural areas. Furthermore, dentists are less likely to establish practices in rural areas if loan repayment is not sustained over a period of several years.

To assist faculty members with loan repayment, the DCG applied for and received a \$670,000 HRSA Faculty Loan Repayment grant for the period of 2010-2015. General, pediatric, and public health dentists were eligible. Over the 5-year grant period, recipients received 10-, 15-, 20-, 25-, or 30% loan repayment over years 1 through 5 of the grant, respectively. Faculty members receiving loan repayment were required to provide dental services as community service for each \$1000 of repayment. As the DCG was recruiting faculty members to accommodate the increase in class size, the grant was an effective recruitment and retention tool. Ultimately, nine DCG faculty members received loan repayment through the grant program. However, dental specialist faculty members did not qualify, even though they often have more debt due to their specialty training. The last call by HRSA for a faculty loan repayment grant required that the institution provide matching funds, which has made it prohibitive for the DCG.

In summary, the DCG has made progress toward meeting the recommendations of the Georgia Dental Task Force. The DCG met the goals of building a new dental school, increasing its dental and residency class sizes, and establishing a state-wide service-learning and outreach programs in partnership with the HRSA, the Department of Community Health, the Georgia Statewide AHECs, and other organizations. Progress has been made in developing

pipeline programs for underrepresented minority students and students from areas with shortages of dental health professionals, although the number of these students does not yet fully represent the population of Georgia. Substantial work remains to recruit and retain dental school faculty members and to reduce student indebtedness.

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