Improving the Fiscal Sustainability of Teaching Clinics at Dental Schools

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Abstract: Educational patient care clinics are becoming an increasingly important source of revenue for dental schools. Revenue from clinics can help offset the rising cost of dental education. In addition, those clinics represent a source of income over which the schools have reasonably direct control. Recently, a group of nine U.S. dental schools conducted a detailed financial survey of their clinics and shared the confidential results with each other. The purpose of their analysis was to develop benchmarks for key factors related to clinical financial productivity and expenses and to define best practices to guide improvements at each school. The survey found significant variations among the nine schools in revenue produced by predoctoral students and by postdoctoral residents. There were similar variations for levels of clinical staffing. By sharing the results of the survey with each other, the individual schools gained a strong understanding of the business strengths or weakness of their own clinical programs. That information gave each school’s leaders the opportunity to investigate how they might improve their clinical fiscal sustainability.

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Clinical dental education and the resulting revenue generation of student teaching clinics are coming under increased scrutiny by university and dental school leaders with the goal of improving the cost-effectiveness of clinical education and services. According to a recent American Dental Association (ADA) Survey of Dental Education report, educational clinics accounted for 12.7% of total dental school revenue in fiscal year ending 2013. That proportion of revenue was exceeded only by tuition and fees (34.2%) and university indirect support (15.1%). On average, clinic revenue was greater than the financial support from state and local governments (11.1%).

The rising cost of dental education has been offset primarily by increases in tuition and fees, and those increasing costs are a significant concern for dental school leaders. A recent analysis of the cost of obtaining a dental degree versus the financial benefit over the course of a dentist’s career found that, in spite of the trend toward increasing dental school educational debt, the return on investment is still positive. However, there is widespread concern about rising student debt levels and how those debt levels will influence the career choices of potential pre-dental and other health professions students, as well as the career decisions of new graduates. In 2014, those U.S. dental students with educational debt graduated with an average debt of $247,227. That level of debt may prevent many graduates from seeking practice opportunities in underserved areas or considering a career in dental education. On a more positive note, rising student debt concerns may motivate states or the federal government to strengthen or initiate policies that will improve educational financing opportunities for dental students in return for public service after graduation, thereby addressing access to care problems.

Dental schools’ educational clinics (predoctoral, postdoctoral, and dental hygiene) are different from private practice clinics in that their primary function is to educate students, not to generate a profit. Achieving a balance between teaching students and providing patient-centered care while generating maximum net revenue is not easy to accomplish. Students are novice learners who are making strides toward becoming competent entry-level providers, but speed and efficient delivery of care are not always possible as they advance toward competence. The financial dilemma faced by dental schools is how to maximize net revenue in their educational clinics while also providing patient-centered, high-quality education.

In the past, detailed surveys of U.S. dental school clinical fees and revenue have been conducted
The most recently published study of this nature analyzed survey data from more than a decade ago, for fiscal year 2003-04. To keep each individual school’s data confidential, the information was reported either in aggregate or as identified only by a school code assigned for the survey. These results allowed schools to compare their clinical fiscal operations to those of other schools by looking at such factors as revenue per student, per hour, and per class (for second-, third-, and fourth-year students), hours in the clinics, and fees for a sample of procedures. Likewise, that survey allowed for comparisons among advanced education (postdoctoral) programs as well as percentage of clinic revenue by source of payment. The survey information was helpful, but the infrequency of such surveys and the broad scope of geographic, demographic, and other variations among dental schools make meaningful comparisons between schools and over time difficult. By contrast, this article describes the conduct of and results from a collaboration among nine dental schools with the aim of sharing clinical information as a way to improve the financial productivity of each school’s clinical education.

The Big Ten Clinical Financial Survey

In 1958, the presidents of the Big Ten Conference established the Committee on Institutional Cooperation (CIC) as the athletic league’s academic counterpart. Today, there are 14 universities in the Big Ten Conference, and nine of those universities have dental schools. Those universities are the University of Illinois at Chicago, Indiana University, University of Iowa, University of Maryland, University of Michigan, University of Minnesota, University of Nebraska, The Ohio State University, and Rutgers University.

The CIC encourages and supports academic units in Big Ten universities to collaborate and conduct peer group meetings to share ideas and best practices. In that spirit, the deans of the dental schools at the Big Ten universities meet regularly to explore areas of mutual interest. These dental schools share several characteristics, including that they are publicly supported as part of state universities and are affiliated with research universities according to the Carnegie Classification of Institutions of Higher Education.

The deans of these dental schools meet annually at the Big Ten Conference headquarters near Chicago. In addition, they invite their respective academic, clinical, or financial officers to the headquarters for meetings focusing on specific issues or goals. Most recently, the deans decided to collaborate on a survey of their schools to compare clinical operations, focusing on clinic finances to identify benchmark outcomes. The resulting benchmarks and analysis would help determine in what areas improvements are possible and how high-performing levels are reached. That analysis could provide valuable information to guide strategic decisions, with the hope of leading to improved clinical financial productivity at all their dental schools.

At the first Chicago meeting of the clinical and financial officers in June 2014, draft questions for the inaugural Big Ten clinical financial survey were discussed, refined, and formalized. Participants agreed the survey would gather data from fiscal year 2013. Data were collected for predoctoral and postdoctoral clinics but not for other clinical programs such as faculty practice or dental hygiene. The face-to-face discussion was very helpful in resolving potential issues of data retrieval and interpretation of survey questions. The initial survey was launched soon thereafter.

The clinical and financial group met again prior to the fall 2014 ADEA Sections on Business and Financial Administration and Clinic Administration (BFACA) meeting, and after reviewing results, the group decided to add additional questions. Additional data were collected, and in December 2014 the deans held a meeting at Rutgers School of Dental Medicine to review and discuss the final survey results.

Those results from the nine schools identified some surprising variations among schools. Some of those variations are shown in Table 1. For example, annual assigned clinic hours for combined D3-D4 residents ranged from fewer than 1,600 hours to more than 2,500 hours. Collections (dollars per hour) for D3 students ranged from under $9 at one school to more than $23 at another. For D4 students, the range was from under $14 to nearly $41. Further comparisons and in-depth analysis showed that fees alone could not account for the magnitude of these differences. There were similarly large variations in the financial productivity of postdoctoral residents across the dental schools, with some residents providing services that generated as much as six times the revenue per hour as their counterparts in the same program at a different school.

Relative to clinic expenses, the survey also gathered data on clinical staffing: measuring FTE staff overall (total) and by job description per 10,000 patient visits. Those results also showed considerable variation across the schools and resulted in further
study of staffing by class size (including a few schools outside the Big Ten that agreed to participate and had smaller class sizes). In general, it appears that smaller schools required a larger number of staff per 10,000 patient visits (not surprising and likely an effect of economies of scale). After identifying the leading benchmark programs at the various schools, the deans shared additional information to better understand how the most productive programs achieved such high results.

Broader Implications

Surveys like this one could be helpful to all dental schools as they compare their clinical financial details to those of others. The dental deans in the Big Ten universities comprise a relatively small group whose members have a strong, trusting relationship and are thus comfortable with freely sharing sensitive financial information and ideas among themselves. Other dental schools could benefit from collaborating and sharing similar information within small groups of peer schools, whether they are similar in terms of location, mission, or other factors. The recently conducted ADEA Survey of Dental School Clinic Finances also presents a significant opportunity for all dental schools to explore their clinical financial conditions and compare themselves to other schools. The data collected in the ADEA survey will be kept secure and strictly confidential within a central database. In the reports to the deans, schools will be identified only by confidential codes. However, those who wish can follow the example of the Big Ten deans and compare themselves to others who wish to share data and extend the comparisons. By understanding how their school measures up to national averages and self-selected peers, as well as where they fall in national ranges, each school can begin to discover opportunities for improvement within its own programs.

Identifying differences and sharing information among dental school leaders allows for deeper exploration of factors that contribute to greater financial success. Information such as that collected in all these surveys can stimulate discussion and guide planning in dental schools about implementing changes to emulate financially successful programs. Overall, improving net clinical revenue can help slow the rising costs of dental education.

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REFERENCES