Revising Accreditation Processes and Standards to Address Current Challenges in Dental Education

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Accreditation is an important lever for change in dental education. It is an agent, and agency, that has stimulated and guided contemporary dental education for nearly a century. In this summary, I present a case for revising accreditation processes and standards in order to address the challenges facing dental education and, in turn, to ensure the vitality and continued self-regulation of the profession. A more extensive discussion of accreditation in dental education is contained in "The Interrelationship of Accreditation and Dental Education: History and Current Environment" by Formicola, Bailit, Beazoglou, and Tedesco in this issue.[1]

History of Accreditation in Dental Education

First, it is useful to look at a brief history of accreditation in dental education. In 1918, at the request of the surgeon general of the Army, the Dental Education Council set up an A, B, C classification system for dental schools. The council was an independent organization of representatives from three national associations: dental examiners, teachers, and practitioners. Class A applied to schools with a four-year curriculum of 4,400 hours and buildings and equipment valued at $300 or more per enrolled student. A school lost its Class A rating if 25 percent of its graduates failed the licensing examination for two successive years. Proprietary schools were labeled Class C because they lacked "educational and professional reputability." In 1916, this applied to twenty-one of the nation's fifty dental schools. By 1924, only four were privately owned.

In 1938, the American Dental Association (ADA) became the parent organization for the Council on Dental Education. In 1975, the Commission on Dental Accreditation (CODA) was formed. From 1940 to the present, schools have been classified as "approved" or "provisionally approved" based upon a site visit. In 1998, the classification system changed to include two types of approval, "without noted deficiencies" and "with noted deficiencies." Deficiencies had to be corrected within eighteen months.

The accreditation process evolved through four distinct eras with unique themes.

The Era of Stability: 1940–70

The early guidelines and requirements—now called standards—reflected the findings and conclusions of the Gies report of 1926.[2,3] Dental schools were required to be based in universities, could not be conducted as a business enterprise, and could not be incorporated as a for-profit institution. Similar to medical schools, dental schools had to have the same scholarship as other university disciplines. Further, "dental service must serve biologic ends": students had to have "an understanding and appreciation of

oral and systemic relations in both health and disease, the biologic significance of restorative and replacement procedures; and the interdependence of the dentist and the physician in meeting health needs."[3]

Accrediting committees evaluated the number and qualification of faculty, teaching load, faculty scholarship, and student-teacher ratios. While the curriculum was not standardized, minimum and maximum hours were placed for a four-year course of not less than 3,800 hours or more than 4,400 hours with ten free hours per week. The standards did highlight "various areas of knowledge in diagnosis, in prevention, in therapeutics, and in prosthesis."[4]

In 1964, the standards were revised to reflect the need for schools to pay attention to clinic income and to provide student experiences with dental auxiliaries. These standards were in place with minor revisions over a long period, and site visit committees had a clear understanding of what was expected of dental schools.

The Era of Flexibility: 1970–85

In the early 1970s, substantial change was occurring in all of higher education. Students in the health professions were demanding a curriculum more relevant to the care of patients, and there was increased societal pressure to equalize educational opportunities for women and minorities. These new forces led to dramatic changes in the accreditation process. The *ADA Transactions* of 1969 and 1970 described these changes in a report, "Revision of Requirements for an Accredited School of Dentistry."[5] New schools opened in academic health centers that were not in universities. Though the council preferred formal university affiliations, it accepted dental schools that were under the auspices of a state system of higher education but not formally part of any university.

Other changes made accreditation requirements more flexible and ostensibly more inclusive. For example, new admission standards encouraged the selection of educationally diverse students by eliminating specific required predental courses. Students were not singularly science majors. Additionally, student representation was added to school governance.

Curriculum requirements were also changed to permit more flexibility. The list of required subjects was dropped, and standards encouraged courses in the behavioral sciences and electives. The requirements also made provision for a "compressed" curriculum (e.g., the three-year programs that were encouraged by the Health Manpower Act).[6,7] Hospital and extramural experiences became a requirement, and the council stated that it "believe[d] that such experiences assure an appropriate education experience that may not be attainable or meaningful, if the entire educational experience of students is limited to the physical confines of the dental school."[7] Further, CODA encouraged schools to recruit a more diversified student body in terms of race, ethnicity, and gender. Society, higher education, and dentistry were changing.

Throughout the 1970s, there was a gathering storm of contentious issues in dental education and in the profession. Some of the more important were a large increase in the number of enrolled students, a perception of an excess supply of dentists, the profession's role in Medicaid, a number of schools (fourteen) changing to three-year programs, and internal school conflicts over the curriculum.

The Era of Specificity: 1985–95

To be sure, there was a changing landscape from 1960 to 1978: first-year enrollment grew from 3,616 to 6,300, and the number of schools increased from forty-seven to fifty-nine; dental education costs were rapidly rising; and there was the loss of federal subsidies. Given this state of affairs, the 1983 ADA report on the future of dentistry predicted a steep increase in tuition, closure of schools, and a decrease in full-time faculty.[8]

Several schools converted from three-year to four-year programs, and the mean number of curriculum and clinical hours increased by 16 percent and 20 percent, respectively. The variability in total and course hours among schools was very wide. The *ADA Transactions* in 1985 reported that "prompted by the 1983 *Future of Dentistry Report*, the Commission established an *ad hoc* committee to revise the Requirements and Guidelines for Dental Education Programs."[9] A totally revised program, "Accreditation Standards for Dental Education Programs," was endorsed.

As a result, accreditation standards moved from the general statements seen in the era of flexibility to more explicit guidelines. The general list of requirements was replaced by an explicit list of seventy-nine standards and substandards with "must" and "should" statements and "competent" or "exposed to" levels of skill. The standards also extended to the system of clinic administration and the role of patients. These standards were a radical departure from previous ac-

crediting guidelines and left little room for schools to adapt to local situations. They were viewed as a means for ensuring that all schools complied with a minimum standard of operation.

Over the next ten years, however, schools expressed considerable discontent. They viewed the standards as too specific, leaving little room for individual school differences or innovation. The eighteen-month self-study process in preparation for the accreditation site visit was considered excessive in terms of preparation time and expense.

The Era of Standards Simplification: 1998–Present

In 1998, a new set of standards was put into place that reduced the previous standards from seventy-nine to fifty-five, and many details in the earlier standards were eliminated. For example, fifteen specific requirements under clinical education were reduced to two, and compliance with these two standards was easier because of the removal of specific language. Separate requirements for managing handicapped, medically compromised, and socially and culturally disadvantaged patients were eliminated and replaced by one standard that graduates must be competent in "providing oral health care within the scope of general dentistry *as defined by the school* [emphasis added] for the child, adolescent, adult, geriatric, and medically compromised patient."[10]

Under the new system, less emphasis was placed on educational processes and more on outcomes. Measuring outcomes is difficult, to be sure, and schools have wide latitude in establishing outcomes that they can achieve. The current lack of standardized definitions for outcomes in relation to process may well account for the substantial differences among schools in course content, format, and hours.

Current Environment

The dental school accrediting system has clearly shown the capacity to assess complex scientific and social changes and to develop standards that respond appropriately to these changes. This system has greatly strengthened the quality of dental education and scholarship and, in turn, the dental profession. That does not mean that we can leave the current and enduring challenges unchecked. The time has come again for another comprehensive review and revision of accrediting standards. The evidence for the need for change grows more and more compelling.

The Macy study team believes that, at a general level, CODA needs to consider or reconsider recent reports that make a case for change: the ADA's 2002 *Future of Dentistry* report,[11] *Oral Health in America: A Report of the Surgeon General,*[12] *Crossing the Quality Chasm: A New Health System for the 21st Century* (Institute of Medicine),[13] *In the Nation's Compelling Interest: Ensuring Diversity in the Healthcare Workforce* (Institute of Medicine),[14] *Missing Persons: Minorities in the Health Professions* (Sullivan Commission Report),[15] "The Case for Change in Dental Education" (ADEA),[16] and "The Origin and Design of the Dental Pipeline Program" (funded by the Robert Wood Johnson Foundation and California Endowment).[4] These are all of high importance, including the Macy study report published in this special supplement to the *Journal of Dental Education*.[17] These reports form a strong body of evidence for the need to revise accreditation processes and standards for dental schools. Their major findings and recommendations need to inform those who have responsibility for updating the standards.

The following issues need specific and timely attention through the accreditation system. First, standards must foster the careful review of resources and expenditures in relation to acceptable educational processes needed to produce competent graduates. Reductions in faculty and delayed investment in infrastructure will seriously impair the quality of dental education. Second, the accreditation system should follow the historically sound guidelines of the Gies report on the scholarly engagement of full-time dental faculty.[2] If dentistry is to continue as a learned, self-regulating profession, dental schools must provide faculty with the same scientific training and research opportunities as other members of the academic community. Third, standards must be developed that define the requirements for strong academic dental schools. CODA must ask: are dental schools outside the framework of traditional research universities in the best interest of dentistry and the American people? Fourth, guidelines must be laid out that specify the proper organization and management of clinics. It is clear that there are many educational advantages to community-based dental education programs, if properly organized and managed. Fifth, the accreditation system should encourage schools to advance their opportunities in clinical education while addressing some of their pressing financial problems through the development of internally operated, patient-cen-

tered delivery systems in which the patient becomes the center of concern. Sixth, accreditation standards must challenge schools to establish programs that effectively and substantially create and sustain a diverse academic community. While there is no simple solution to meet the diversity challenge, strengthened standards will help. Seventh, accreditation standards need to recognize the responsibility of safety net health services. Dental schools have always played an important dental safety net role by providing care to underserved and medically disabled populations. While declining resources make it more difficult for schools' commitment to the public good, we cannot ignore our role and our responsibility here. Eighth, schools must prepare students to understand scientific developments and use new technology in the care of communities and patients; this must be ensured through the accreditation process. The approach designed for the Macy panels on contemporary curriculum should be used further to identify and address the major gaps in the basic science, behavioral science, and clinical curriculum. Ninth, accreditation needs to determine the meaning of the wide variation among schools in curriculum hours and content and identify schools not keeping up with the rest of the field. Standards must ensure that each school's curriculum is up to date and contemporary in science, technology, and practice. Last, but far from least, adoption and effective use of educational methods and technologies and the climate for teaching and learning that ensures the capacity of graduates to be critical thinkers and lifelong learners is essential to not only the improvement of our programs, but also the continued nourishment and advancement of the profession.

Admittedly, this is not the responsibility of just the accreditation system. All the major dental organizations and individual leaders and other stakeholders need to assist in solving these problems. But the accreditation system does have a special responsibility, precisely because it is so influential and has been a powerful lever for change. Instead of just emphasizing difficult to measure outcomes, explicit process standards are needed as well for the core medical, dental, and behavioral sciences and for patient care areas. This is the only way to ensure that all dental graduates have the same required basic education.

More broadly, we suggest that CODA and other leaders revisit the principles underlying dental education because, ultimately, they are reflected in the accreditation standards. The Macy study was conducted on the basis of the principles presented in the Gies report.[1] These principles continue to be the bedrock for dental education and practice, and it is time for dental educators and practitioners to either recommit to them or modify them if they are out of date.

As one community, we must recognize the power for change that comes through the accreditation process. It has been able to capture the momentum from social and scientific change and move dental education and, in turn, the profession into the future through the structure of its guidelines, requirements, and standards. Clearly, it has played a major role in keeping the education system strong. Once again, it is a critical time for the accreditation system to do what it does best: take the long view, look mindfully, and set educational standards that prepare dentists for contemporary practice.

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