EXHIBITS

Exhibit 11: ADEA Position Papers

These position papers, approved by the ADEA House of Delegates, articulate the official position of ADEA on the specified topics.

ADEA Position Paper on Peer Review, Freedoms and Responsibilities of Individuals	
and Institutions, Health Care Programs, and Due Process for Students in Dental Education	S130
ADEA Position Paper: Statement on the Roles and Responsibilities of Academic	
Dental Institutions in Improving the Oral Health Status of All Americans	S136

ADEA Position Paper on Peer Review, Freedoms and Responsibilities of Individuals and Institutions, Health Care Programs, and Due Process for Students in Dental Education (As approved by the 2003 ADEA House of Delegates)

When used in this document, "dental education" refers to all aspects of dental, allied dental, and advanced dental education unless otherwise indicated. Likewise, the term "dental educator" refers to dental and allied dental faculty, and the term "institution" refers to the academic unit in which the educational program is housed.

PEER REVIEW

Cost, appropriateness, utilization, and quality of health care services are of increasing concern to the providers, consumers, and purchasers of health care. Recent growth in the magnitude of expenditures for health care has caused greater scrutiny of providers than in past years.

Review activities in dentistry are not new. A variety of mechanisms have been tried. Among them are the analysis of postoperative complications, state examining boards, formal review systems in clinics, society grievance procedures, and the quality assessment and assurance activities of government and insurance carriers. However, the development of utilization review, cost control, and quality assurance mechanisms has proceeded much more rapidly in the hospital than in ambulatory care. Medicare, Medicaid, the recent growth of managed care, and other types of third-party programs have accelerated that trend.

More recently, the dental profession, government, and insurance carriers have begun to address review activities in dental care. The government and insurance sectors have emphasized utilization review and quality assurance activities. While most professional activities have been in response to these stimuli, groups such as the American College of Dentists, American Society of Oral and Maxillofacial Surgeons, and Academy of General Dentistry have developed innovative self-assessment approaches. A number of dental and public health clinics have also implemented new quality review and patient grievance procedures. At present, much remains to be done in the development of review activities that are well coordinated and based on professionally accepted standards of care. However, professional involvement is growing.

Dentistry has become increasingly involved in peer review activities, and dental education institutions and programs are required by the Commission on Dental Accreditation to include quality assurance activities as part of their patient care programs. Further, dental education institutions and programs have increased their instruction in peer review activities. Dental education institutions and programs should include in their curricula instruction in peer review. In the establishment of a peer review instruction program, the following principles should be followed:

- 1. Review should be performed and supported by professionals.
- 2. Review should be performed in an impartial and objective manner.
- 3. Review should be based on professionally established and agreed-upon criteria.
- 4. Review should include appropriate and meaningful participation by lay individuals.
- 5. Review should be performed primarily for the purpose of improving performance and to implement sanctions only as a last resort.

It is hoped such instruction will provide new practitioners with the knowledge, appreciation, and understanding they need to encourage their active and informed participation in peer review activities.

In addition to knowledge and understanding, instruction in peer review offers the opportunity to learn skills of working with other practitioners, to analyze one's own and others' provision of dental care, to deal with insurance and government carriers, to learn about the administrative and accountability requirements of public programs, and to learn the actual clinical skills of detailed evaluation of care. Also, instruction in peer review should include development in the student of integrity and honor in service and protection of the public.

As dental education institutions and programs explore the inclusion of new utilization review and quality assurance activities in the instructional program, certain experiences such as the following may be considered helpful and appropriate preparation for practice where review activities are ongoing or in development:

1. Student participation in the development and modification of professionally developed criteria for the evaluation of clinical services.

- Instruction in the need, concepts, and principles of peer review, including the principles of third-party payment, insurance programs, managed care plans, and present professional standards used to review organization programs.
- 3. Introduction of students to the practice of peer review in preclinical years.
- 4. Establishment of peer review panels, which include students, to assess the appropriateness and quality of service provided by students in dental education institutions and programs. For example:
 - a. Periodic postoperative review of treatment procedures to assess treatment.
 - b. Treatment seminars with emphasis on review of preoperative and postoperative treatment.
 - c. Continued development of a viable program of professional ethics.
 - d. Seminar discussions of effective approaches to dealing with inadequate performance disclosed through peer review.

FREEDOMS AND RESPONSIBILITIES OF INDIVIDUALS AND INSTITUTIONS

It is for the general well-being of society that academic institutions have been established for the pursuit of truth, the transmission of knowledge, and public service. Dental schools are set in universities, while allied dental education programs are set in a variety of institutions, from community colleges to dental schools and universities. Institutions of higher education accept the dual principle of autonomy with responsibility in academic matters. The degree of autonomy and the rights and freedoms enjoyed by the academic community are those that have been established by common agreement between academicians and their governing boards. While other elements of society may influence academic policy, only members of the governing boards have the responsibility for determining that which is appropriate to their mission. To relinquish this responsibility does not serve the public interest.

Academic freedom is vested in individual faculty members. The faculty member has a right to extend and disseminate knowledge in his or her area of competence in accordance with the adopted mission of his or her institution. By sustaining academic freedom for its members, an educational institution maintains its integrity and vitality. In return, the faculty must zealously guard the university's reputation for objectivity and honesty. The educator has an obligation to exercise critical self-discipline and judgment in fulfilling these special academic responsibilities.

Dental educators are, in addition to being academicians, an integral part of the dental profession. They aspire to achieve the common good through the highest education, communication, and reason. All elements of the profession should exercise good judgment and pursue a course of cooperation in discharging their individual responsibilities to society.

Dental education institutions and programs serve as bridges between the fundamental scientific foundation of the profession and its translation into the health care of the American public. Like other components of the university and other institutions of higher education, dental education institutions have autonomy with responsibility in academic matters. At the same time, their responsibility for health professions education places them in a unique position regarding external influences. For example, licensing and regulation of dental practitioners are vested in authorities outside the university, and those authorities can influence the education process through their rules and regulations.

Various other external agencies seek to influence academic policy and to determine what may and may not be taught and what may and may not be investigated by academicians. Such actions abridge institutional freedom and limit the institutions' prerogative of determining how best to serve the public interest. Professional societies, consumer groups, licensing boards, and other governmental bodies share with educators the responsibility for representing the public interest and for acting in a manner that will improve the profession's service to the public. Encouraging investigation and innovation through orderly processes effects positive changes and enhances the quality of oral health care. The university and other institutions of higher education are the appropriate foci for these activities.

ADEA calls upon faculties, administrators, and governing boards of institutions of higher education to identify any external pressures that may be brought to bear on dental and allied dental education and to reaffirm by their pronouncements and their actions that such pressures will not be permitted to alter the fundamental mission of this segment of higher education. External agencies need to be reminded that, while faculties must consider outside influences, those faculties, under the aegis of their governing boards, have the ultimate responsibility for the educational process. The principles of institutional autonomy and academic freedom are not negotiable.

HEALTH CARE PROGRAMS

ADEA believes that the health needs of the public require a health care system that provides access to care for all Americans and effective preventive and therapeutic treatment at a cost that is affordable. ADEA considers

universal access to care a fundamental goal to be achieved in any restructuring of the health care system. ADEA recognizes that this goal may be achieved through federally funded, federally mandated, or private programs and/or a combination thereof. ADEA believes that federal funds must be included where no other funding is forthcoming to finance basic health care benefits.

Basic Oral Health Care

To maintain and improve general health, oral health services must be an integral component of all health care financing and delivery systems. The development and health of the craniofacial region have a direct bearing on general health and well-being and are a basic element in the quality of life.

ADEA strongly supports basic oral health care benefits for all persons. These benefits should include the provision of acute and primary care. Acute care is emergency care to treat pain, eliminate infection, and treat life-threatening conditions, as well as treatment of traumatic injuries. Primary care includes diagnostic, preventive, restorative, endodontic, periodontal, and surgical services. It also includes prosthodontic care to restore essential function.

ADEA recognizes that important groups of patients require extensive care because of developmental defects and acquired anomalies impairing function, as well as chronic conditions that have oral manifestations. ADEA believes that the scope of basic health care benefits must be sufficiently broad to provide rehabilitative benefits as part of the basic benefit package for these persons.

Dental Education's Role in Ensuring Access

Dental education plays a pivotal role in ensuring access to effective health care through the provision of care, training, and research. Thus, ADEA supports the incorporation of this national resource into the nation's health care system. To this end, health care reimbursement should include compensation to health care institutions for the teaching costs associated with the provision of oral health care.

Provision of Care

Dental education institutions, which include schools of dentistry, hospital dental programs, and allied health programs, are a resource in the local community, the state, and the region. Schools of dentistry provide comprehensive dental care in a setting that offers the benefits of a large interdisciplinary group of generalists and specialists, an active education program, and a research component. This environment affords unique opportunities for a variety of patients, including groups who may not otherwise have access to oral health care in the community. Practitioners in the state often refer patients with more unusual problems to dental schools because the school can offer care that is often not possible in a private practice setting.

ADEA supports the provision of federal and state grants to dental education institutions to establish and enhance primary oral health care training through residency programs in general dentistry (General Practice Residency and Advanced Education in General Dentistry programs), geriatric care, pediatric dentistry, and dental public health. These residency programs provide trained oral health care providers who are needed to ensure access in underserved areas such as rural communities, as well as to geriatric, handicapped, developmentally disabled, high risk, and other medically compromised patients. To facilitate access, ADEA supports the establishment of grants to dental education institutions and programs to offset the cost of providing care to unserved and underserved groups.

ADEA believes that student aid programs are also important mechanisms for improving access to all groups for their health care needs. Thus, ADEA supports National Health Service Corps scholarships and loan forgiveness for practitioners who serve in this or similar programs.

Education and Training

Practitioners who are skilled in diagnosis, risk assessment, and treatment are essential to the provision of oral health care. The role of dental education institutions and programs in preparing an adequate supply of practitioners who have the skills necessary to provide effective primary care is a fundamental part of the health care system.

Practitioners must be prepared to interpret and assimilate new knowledge and apply it appropriately to patient care. ADEA, therefore, advocates grants that will enhance the education process and improve the effectiveness of education in the health professions.

Faculty members who are skilled teachers and researchers are needed to educate future practitioners and to generate the new knowledge for future innovations in patient care. Therefore, ADEA supports grants for development of current and new faculty, such as training grants to acquire new skills in patient care, research, and administration.

ADEA believes that the number of minority graduates of dental education institutions and programs should better reflect their representation in the population, and supports programs that will achieve that goal. Faculty role models are critical to the professional development of minority students, and ADEA advocates grants for programs that enhance the development of minority faculty. Additionally, ADEA endorses efforts that result in improving the health of minority and underserved persons.

ADEA recognizes the important contribution that accredited programs in the allied health fields of dental hygiene, dental laboratory technology, and dental assisting make to the nation's oral health. ADEA strongly supports initiatives that encourage enrollment, support students who are enrolled, and improve the effectiveness of allied dental health education programs.

Indebtedness of dental graduates directly affects decisions to enter professional practice and the nature of those practices. ADEA believes that minimizing the indebtedness of graduates is a responsibility that should be shared with the institution, through efforts to control the cost of education, and the public, through state and federal funds to support education. Consequently, ADEA supports programs that provide grants and low-cost, need-based loans to students. In addition, ADEA urges direct public support for dental education.

The retention and graduation of practitioners from disadvantaged groups are goals that are important for the public's health. Since the indebtedness of disadvantaged students, including minority students, is commonly higher than the average of all students, ADEA supports grant and loan forgiveness programs for disadvantaged persons and minorities, with preference given to those who elect to pursue careers in dental education and research to provide care for underserved populations.

Research

Biomedical research is critical to the health of the nation. Both basic and clinical research has led to improvements in oral health. Further improvements will be the result of continued efforts to produce new knowledge in the prevention and treatment of oral diseases. ADEA believes that allocation of resources for biomedical research must receive a high priority.

ADEA believes that there is a need for research in the effectiveness of allied dental, predoctoral, and postdoctoral health professions education as well as an examination of strategies for maintaining and assessing the continuing competence of health professionals, including issues surrounding licensure and credentialing. ADEA, therefore, supports funding for educational research.

Similarly, research in health services has increased knowledge in the area of the effectiveness of treatment and health care delivery. The impact of this research will contribute to cost containments and improved quality of care, as well as to an understanding of barriers to access. Therefore, ADEA supports funding for oral health services research.

Definition of Interdisciplinary Education

Interdisciplinary health professions education is an educational process providing students of the health professions with experience across professional disciplinary lines as they acquire knowledge and skills in subject areas required in their respective educational programs. Interdisciplinary education should enable students to achieve higher levels of effectiveness and efficiency in certain subject areas than those that would occur if each discipline were taught separately, and it is intended to encourage more efficient use of facilities, faculties, and learning resources among all disciplines. The process provides the student opportunity to interact with students in other health professions disciplines, provides a broader scope and higher quality learning experience, and involves more than one health professions school.

Central to the objective of interdisciplinary health education is the availability to the health professions student of a learning atmosphere that will stimulate the future practitioner to perform in interactive groups with an understanding of the roles of each discipline and the relationship of the roles to one another in the delivery of health services.

To encourage the implementation of interaction in future practice, it is necessary that each health professions discipline provide fundamental principles early in the curriculum and reinforce them later not only by observing role models but also by emphasizing efficient and effective approaches to the solution of health problems. Interdisciplinary education among schools of the health professions and other schools should prepare future practitioners to work in the "team" approach toward the delivery of health services and should encourage more effective approaches to the organization and delivery of health services.

DUE PROCESS FOR STUDENTS IN DENTAL EDUCATION

Introduction

The protection of students' rights through due process is a continuing concern in dental education because of the educational processes unique to dentistry. Dental and allied dental students are required to assume clinical responsibilities before they complete their professional education. Faculty members must, therefore, evaluate the SI34 WILEY ADEA THE VOICE OF DENTAL EDUCATION

ability of students to assume these responsibilities. This evaluation, which includes assessments of personal and professional judgment, ethical integrity, and clinical skills, is often based in part on subjective interpretation and opinion. Because of the nature of these assessments, it is particularly important that students be ensured due process in the resolution of disputes arising from evaluations of professional performance. Due process is a legal concept expressed in the Fifth and Fourteenth Amendments to the U.S. Constitution. The amendments provide that neither the federal government nor a state shall "deprive any person of life, liberty, or property without due process of law." The Supreme Court has indicated that the fundamental requisite of due process is the opportunity to be heard.

Dental education institutions and programs should provide due process to their students in the interest of fairness. The basic principle of a fair and objective hearing should be accorded the student in appropriate situations. If the school intends to pursue charges of misconduct against a student, the concept of due process requires 1) a notice and listing of specific charges, 2) a notice of the right to a hearing, 3) the opportunity to be present and to hear and rebut the evidence at such a hearing, 4) the opportunity to present a defense, and 5) the opportunity to appeal the decision. Clearly, a formal set of procedures must be identified by the institution to ensure that these opportunities are available. The following guidelines will assist dental education institutions and programs in either establishing or reviewing an existing set of procedures designed to ensure due process.

Procedural Guidelines for Due Process—Nonacademic Matters

The following sequential procedures should provide the basis for individual schools to develop or review their policy and procedural statements concerning the due process afforded students in nonacademic matters:

1. Specific responsibilities and rights of students must be clearly stated and published for student and faculty information. The statement must provide the standards expected of students in both academic and nonacademic matters. The institution has the obligation to clarify those standards of behavior that it considers essential to its educational mission and consistent with the code of ethics of the profession. Any specific rules shall represent a reasonable regulation of student conduct; the student shall be as free as possible from imposed limitations that have no direct relevance to the student's education or to the standards of the profession. The determination of performance that constitutes violations of the standards of conduct shall be formulated with student participation and published in advance. Offenses shall be clearly defined.

- 2. The school shall establish a tribunal or hearing committee appropriate to its organizational structure to serve as the judicial body to ensure due process for students under the published regulations (developed by procedures suggested in 1) concerning student conduct. Essential elements are as follows:
 - a. The charge of the committee, its jurisdiction, and its authority shall be formulated and communicated to faculty and students.
 - b. The hearing committee should be empowered to make decisions regarding the disposition of cases involving alleged violations of the standards and regulations.
 - c. The committee shall include student members selected by students.
 - d. A faculty or student member who is directly or indirectly involved in the particular case being heard shall be automatically excused from the hearing and consideration of the matter.
- 3. A pending action shall not prevent the student from continuing in the academic program unless extraordinary circumstances exist. A student may be suspended from the school for reasons relating to his or her physical or emotional safety and well-being or the safety of other students, faculty, patients, or university property. Such emergency authority shall be vested in the dean of the school or other appropriate academic authority.
- 4. A prehearing may be established to permit the resolution of the issues prior to the commencement of a formal hearing. The informal proceeding must be clearly described as an initial step in the total hearing process, and the results of such an informal proceeding must be documented. Often such a proceeding is the most appropriate manner in which to resolve an existing problem and may save time and expense. In the event that this informal process is unsuccessful, the formal proceedings should follow.
- 5. Any student charged with violation of nonacademic standards of conduct shall be given written notice that states the grounds for disciplinary action. This written notification to the student should contain the following elements:
 - a. A statement of the charge or charges against the student, referring to the specific institutional rule that allegedly has been violated.
 - b. A statement of the date, time, and place of the hearing on the charges. Sufficient time (specified) must be made available to the student to prepare a defense.

- c. A statement that the student has the right to be present at the hearing.
- d. A statement that the student may, if desired, submit a written response to the specific charges set out in the notice letter. If a written response is to be submitted, it shall be forwarded to the committee within a specified time period.
- e. A statement that the student may request a review of his or her student file by appointment in advance of the hearing.
- f. Notification to the student that the identity of any witness(es) to be called on his or her behalf at the hearing should be provided to the committee within a specified time period prior to the actual hearing date. The committee must notify the student of any witness(es) it intends to call at the meeting.
- g. A statement of the institution's policy on representation by an attorney.
- h. A statement to the student that he or she has the right to remain silent to avoid self-incrimination.
- i. A copy of the school's procedures and policy of due process attached to the letter of notice.
- 6. The school must establish a procedure to ensure due process and fairness during the proceedings of the hearing committee. To meet this objective, the following steps are recommended:
 - a. The committee chair shall recommend for the committee's approval a procedural sequence appropriate to each case. The committee chair shall be vested with the authority to rule on specific procedural decisions.
 - b. The student is entitled to appear at the hearing to hear summary statements of the accusations, to provide the committee supporting oral and documentary information, to make opening and closing statements, to call witnesses on his or her behalf, and to rebut any information presented by the institution.
 - c. The student does not have the right to be present during deliberations of the committee.
 - d. The committee may question the student and summon, present, and reasonably question any witness.
 - e. The results of the committee hearing, excluding deliberations, shall be made available to the student upon request within a reasonable period of time.
 - f. The student's adviser, if present, shall be permitted to counsel the student and may be given reasonable opportunity by the committee chair to speak on the student's behalf. This adviser shall not be permit-

ted to question or examine witnesses or committee members unless specifically requested or allowed to do so by the chair.

- g. All aspects of the hearing shall be kept private in order to preserve confidentiality unless a public hearing is requested by the student and approved by the committee.
- h. In its deliberations, the committee shall consider only the evidence that is presented at the hearing.
- i. Burden of proof of the charges rests with the institution.
- j. The chair of the committee shall submit the findings of fact and decision of the boards to the dean of the dental school or equivalent administrator in writing and without undue delay, along with all documents and records considered in the matter. The decision will specifically address the question of disciplinary action and shall set out in reasonable detail the reasons underlying the decision. Where the decision is not unanimous, a minority report may be submitted. The dean or equivalent administrator should consider the decision of the committee as well as the entire record of the case and should implement the decision in the matter as promptly as possible by notifying the accused student in writing. The decision of the hearing committee should be considered final, subject to the student's ultimate right to appeal to the appropriate university officials.
- 7. The school should publish in its catalog, student handbook, or similar publications the policies and procedures that ensure the rights and responsibilities of students. If a challenge of the actual rule or regulation occurs, it should be referred to the appropriate institutional governing body that established the specific rule or regulation.

It should be noted that once a university establishes and publishes such procedures and rules concerning due process, it is bound to abide by its own regulations. The decisions made by the faculty and administration concerning disciplinary matters that do not follow their own prescribed due process procedures may be considered invalid. There are two possible exceptions to the follow-the-rule principle: 1) if the student knowingly and freely agrees to waive his or her right to the original rule and procedures, and 2) when changes in the procedures could not be considered as a disadvantage to the student.

ADEA Position Paper: Statement on the Roles and Responsibilities of Academic Dental Institutions in Improving the Oral Health Status of All Americans

(As approved by the 2004 ADEA House of Delegates)

BACKGROUND

Academic dental institutions are the fundamental underpinning of the nation's oral health. As educational institutions, dental schools, allied dental education, and advanced dental education programs are the source of a qualified workforce, influencing both the number and type of oral health providers. As centers of discovery, academic dental institutions ensure that oral health practice evolves through research and the transfer of the latest science. As providers of care, academic dental institutions are a safety net for the underserved, centers of pioneering tertiary care, and contributors to the well-being of their communities through accessible oral health care services. The interlocking missions of education, research, and patient care are the cornerstones of academic dentistry that form the foundation upon which the dental profession rises to provide care to the public.

NEED AND DEMAND: IDENTIFYING BARRIERS TO ORAL HEALTH CARE

The surgeon general in his 2000 report, Oral Health in America: A Report of the Surgeon General, demonstrates the need for oral health care, the impact of poor oral health on individuals, communities, and society at large, and the disproportionate burden of oral diseases and conditions among the United States population.¹ As the term is used in this position statement, need for oral care is based on whether an individual requires clinical care or attention to maintain full functionality of the oral and craniofacial complex. The disproportionate burden of oral diseases and disorders indicates that specific population groups are in greater need of oral health care. Demand is generally understood as the amount of a product or service that users can and would buy at varying prices. The extent of oral health care disparities clearly indicates that many of those in need of oral health care do not demand oral health care. While universal access to oral health care is frequently identified as an admirable goal, practical considerations often lead to the conclusion that it is, in fact, unattainable given present resources. Currently in the United States, the provision of health care services, including oral health care services, is treated like a manufactured commodity, with access, price, and quality subject to the incentives that dictate a competitive marketplace. In such a marketplace economy, the variety of factors influencing demand gives way to one major factor: the ability to pay for services rendered.

Health care, and by implication, oral health care, should be treated differently than marketplace commodities. First, oral health is a part of general health. Health is a human good experienced by all humans, vital to human flourishing and basic to the pursuit of life, liberty, and happiness. Secondly, the science and knowledge about oral health are not the property of any individual or organization; rather, society grants individuals the opportunity to learn at academic dental institutions with an assumed contract that this knowledge will benefit the society that granted the opportunity to obtain it. Thirdly, the practice of all health care is based on the commitment to the good of the patient. To ensure that those in need receive care, attention must focus on the variety of barriers that limit access to oral health care and thereby negatively affect demandbarriers such as knowledge and values, availability of care, ability to pay and lack of insurance, and state laws and regulations that unnecessarily restrict access to care.

The underlying barrier to good oral health for the underserved is an oral health care system that has changed little over the past century. The traditional model of oral and dental care, namely that of the solo practice dentist assisted by allied dental personnel providing care under the dentist's supervision, is no longer adequate to address the nation's oral health needs. As academic dental institutions, the dental profession, policymakers, and other stakeholders reconsider the delivery system, the traditional model of oral and dental care will continue to serve an important role in meeting the nation's oral health needs, but a number of other models must be supported, developed, and employed to ensure oral health care for all Americans. The separation of oral health from systemic health in the U.S. health care system has resulted in a disciplinary chasm between oral health providers and the rest of medical care to the detriment of the patient, especially the underserved. This system must be challenged and changed. Academic dental institutions provide not only an alternative model through their clinics, but they also play a basic role in developing new models and recruiting future providers to work within these practice settings.

ACCESS TO ORAL HEALTH CARE: GUIDING PRINCIPLES FOR ACADEMIC DENTAL INSTITUTIONS

The goal of ensuring access to oral health care for all Americans follows from the concept of the American society as a good society, from the role of academic dental institutions in meeting the common good, and from the moral responsibilities of the professional community of oral health providers. The good society can be understood as one that relies on a moral infrastructure-families, schools, communities, and other institutions-and informal social controls to promote substantive values.^{2,3} Members of the good society are expected to contribute to causes that improve all of society rather than merely acting out of self-interest. Social institutions such as family and schools help to form the backbone of the good society. While the United States does not always meet these expectations, arguably it was the intention of the Founders and remains a national purpose that both our leaders and other members of society fulfill social responsibilities for the good of the whole.

Higher education in the United States was conceived as a social investment for the common good.⁴ As professional schools, including academic dental institutions, became a part of universities, they too accepted the responsibility to serve the common good.⁵ In recent years, this social purpose has come under scrutiny from the public who often perceive the university's self-interest as outweighing the concern for the public good.⁶⁻⁸ The lack of an identifiable, public good agenda is one reason for the public's loss of confidence in higher education. Both the university and the dental school and other academic dental institutions must establish goals for the common good, which, for the dental school, include improving access to and appropriate use of oral health care.⁹

The dental profession, including academic dental institutions, constitutes a "moral community," a community "whose members are bound to each other by a set of commonly held ethical commitments and whose purpose is something other than mere self-interest."¹⁰ Moral purpose arises from the nature of the activity in which the members of the community engage. There are four aspects of medicine, which apply equally to dentistry, as a special kind of human activity that give moral status to individual members and collectively to the profession¹⁰:

1. **Vulnerability and inequality**. The vulnerability of the sick person and the consequent inequality that it produces in the provider-patient relationship is a fundamental result of illness. Without access to special knowledge and skill, the person in need loses freedom to pursue life's goals, to make his or her own decisions,

and to help oneself. The provider has a professional and hence moral obligation to protect the patient in this vulnerable condition and to act in the best interest of the patient.

- 2. The nature of medical decisions. Medical decisions, including those made by dentists, are both technical and moral. In seeking the patient's good, the provider must respect the patient's moral beliefs and requests. At times, the provider is confronted with a conflict between the patient's physical well-being and the patient's values. Providing culturally competent care is an example of the unique interaction between technical skill and personal values that belongs to the healing professions.
- 3. The nature of medical knowledge. The nature of medical knowledge creates an obligation in those who acquire and possess it. First, it is practical knowledge for the express purpose of caring for the sick. Secondly, through health professions education, especially that in the context of clinical care and its accompanying risks and opportunities, society grants the health professional the privilege to obtain special knowledge. Society also funds health professions education in unique ways, substantially different from its funding of other areas of higher education and professional education. There is an assumed contract between the learner and society that this knowledge will benefit the society that granted the opportunity. Lastly, as with the medical profession, the dental profession manages knowledge and its application through accreditation and by establishing standards and institutions that safeguard the public.
- 4. Moral complicity. Policies, regulations, and decisions affecting the patient are managed by the oral health provider, most often the dentist. In most settings the dentist is the final safeguard of the patient's well-being and thereby the de facto moral accomplice in whatever is done that affects the patient.¹⁰ Such moral complicity characterizes the place of the dentist and any other oral health professional who might presently or in the future lead the oral health team.

As a part of this moral community, academic dental institutions play a fundamental role in inculcating values that frame the dental profession's societal obligations. Academic dental institutions must prepare students to enter the oral health care profession as a member of a moral community. Being a part of this community not only means placing the interest of the patient above economic selfinterest, but also participating in the organized profession.

Guiding principles as a philosophy of oral health care have an enduring quality that transcends immediate problems and issues to shape the beliefs and values of the aca-

demic dental community and the professionals it educates. The following general principles are proposed to guide academic dental institutions in pursuit of their missions of education, research, and outreach to improve the oral health status of all Americans:

• Access to basic oral health care is a human right.

A human right is a claim that persons have on society by virtue of their being human. In the good society, individuals have a moral claim to oral health because oral health is a necessary condition for the attainment of general health, well-being, and the pursuit of other basic human rights acknowledged by the society as its aims and to which, therefore, the society is already committed. The corollary of a right is a duty. The duty to ensure basic oral health for all Americans is a shared duty that includes federal, state, community, public, and private responsibilities. The dental profession, including academic dental institutions, as the moral community entrusted by society with knowledge and skill about oral health, has the duty to lead the effort to ensure access for all Americans.

• The oral health care delivery system must serve the common good.

Society grants the health professions a large degree of self-regulation and governance. In return, there is an implicit contract and obligation to serve the public good. Professionalism demands placing the interest of patients above those of the profession. Economic market forces, societal pressures, and professional self-interest must not compromise the contract of the oral health provider with society. The objective of the oral health care system should be a uniform basic standard of care accessible to all.

• The oral health needs of vulnerable populations have a unique priority.

Every person has intrinsic human dignity. Oral health professionals must individually and collectively work to improve access to care by reducing barriers. The equitable provision of oral health care services demands a commitment to the promotion of public health, prevention, public advocacy, and the exploration and implementation of new models that involve each oral health professional in the provision of care.

• A diverse and culturally competent workforce is necessary to meet the oral health needs of the nation.

The workforce of the future must be prepared to meet the needs of a diverse population. Academic dental institutions have a distinct responsibility to educate dental and allied dental professionals who are competent to care for the changing needs of our society. This responsibility includes preparing providers to care for an aging population, a racially and ethnically diverse population, and individuals with special needs. In so doing, academic dental institutions can anticipate and address unmet oral health needs in underserved populations.

These guiding principles are reflected in the major considerations for improving the oral health status of all Americans that follow.

ANTICIPATING WORKFORCE NEEDS

Over the past forty years, dental schools have responded to federal construction and capitation grants, perceived shortages and surpluses of dentists, and increases and decreases in dental school applicants. While the adequacy of the aggregate number of dentists to meet the nation's oral health needs is unclear, disparities are prominently reflected in the geographical distribution of dentists. Dental schools and other academic dental institutions have responsibilities in ensuring a workforce of quality, size, composition, and distribution such that it has the capability of meeting the oral health requirements of all groups of society. While dental schools are a national resource, individually, the schools have a tendency to supply specific states with their dental workforce. Thus, dental schools manage the supply of dentists and influence the availability of care and access to care primarily in the areas they supply with dentists.

Anticipating and meeting workforce requirements and addressing disparities in access to care can best be approached by schools if they understand the workforce requirements of the areas they primarily supply, anticipate the resources necessary to fulfill expectations, and give leadership to the initiatives essential to achieving workforce goals over which they have a sense of responsibility and control. Allied dental education programs are likewise positioned to monitor workforce requirements in the areas they serve. Dental specialty programs and advanced programs must give careful attention to national trends, working closely with their parent institutions, the practicing community, accrediting bodies, and other stakeholders to meet the need for providers.

Traditionally, the primary focus of dental education is to prepare students to enter a private practice dental office. As academic dental institutions consider future workforce requirements, the curriculum should be examined in the light of different points of entry into dental practice. Such a process should include education about the needs of special groups such as the very young, the aging, the physically disabled, the medically compromised, and the underserved and how to render culturally competent care. The process should involve strong guidance in the professional socialization of future practitioners and encourage students to practice in underserved areas and to participate in outreach programs and community service.¹¹ Learning about public health issues and developing public health competencies are important components of the educational experience.¹² Practical steps include exposing students to the delivery of care in a community-based setting as early as possible in the educational process. Ideally, these community-based programs are a part of an integrated health system involving dental teams and nontraditional providers such as primary care physicians and nurses.

THE PATIENT CARE MISSION OF ACADEMIC DENTAL INSTITUTIONS

Patient care is a distinct mission of academic dental institutions. Academic dental institutions-dental schools, hospital-based and other advanced dental education programs not based in dental schools, and allied dental education programs-have played and will continue to play a vital role in reaching the underserved. Oral health care at academic dental institutions has grown from care incidental to students gaining clinical competence in a variety of entry-level procedures to the institutions' serving as providers of comprehensive dental care. As with medical schools and other parts of the academic health center, efficiently delivered patient-centered care is necessary for academic dental institutions to compete for and retain a patient pool for students and residents and to improve clinic and institutional productivity and revenues. At many academic dental institutions, patient care is a mandated responsibility of the parent institution as they are expected to more directly contribute to the benefit of the community as a whole, in part as exchange for the amounts of public dollars received from state and federal sources and in part as fulfilling the public trust society has granted the health professions. Academic dental institutions have moved to more efficient patient management systems, greater use of off-site clinic facilities and community-based programs of care, and an increased responsiveness to societal priorities.

Residency training clinics are a major source of dental services for underserved populations. The regulations that govern Graduate Medical Education (GME) funding for the training and education of dental residents in outpatient clinics also allow funding for stipends, benefits, and teaching costs for residents who work in community clinics. Currently, there are electronic distance education curricula under development that would allow community clinics to offer accredited programs without the need to develop a complementary didactic program, creating additional residency positions. Dental schools should encourage graduates to pursue a year of service and learning that would not only make the students more competent to provide increasingly complex care, but also serve to improve access to oral health care. ADEA should monitor the feasibility of requiring a year of advanced dental education for all dental graduates. If feasible, advocate that all dental graduates participate in a year of service and learning in an accredited PGY-1 program.

If regulatory bodies move further toward legislation that supports a year of postdoctoral education, as has recently happened in the State of New York, most of the new residency positions are likely to be created in community health centers, including rural health clinics, county health departments, and similar public health programs. These entities are a major source of oral health care for underserved populations. Dental education leaders must frequently inform and remind state legislatures of the importance of residency training in clinics where traditionally underserved populations seek care. ADEA, other organized dental associations, and academic dental institutions must continue to advocate for funding to increase dental residency positions and for loan forgiveness to ease the financial burden for dental graduates participating in these programs.

As academic dental institutions consider their patient care mission, there is one important caveat that they, the dental profession, policy makers, and other stakeholders must carefully consider: academic dental institutions alone cannot solve the access to care problems. Partners in addressing access must necessarily include the private practice community, community health centers, and state and federal policy makers. The role of academic dental institutions as a safety net should not diminish their academic purpose. Academic dental institutions have the unique role in society of educating oral health professionals, generating new knowledge, conducting and promoting basic and applied research, and providing patient care to advance education, research, and service to their communities. If forced to choose between their academic mission and their role as a safety net for the underserved, academic dental institutions must put more effort into their academic mission than in improving access. As a safety net for the underserved, academic dental institutions can be supported and even replaced by nonacademic providers and institutions. What others cannot replace is the defining academic purpose that dental schools and advanced dental education programs play in our society.

IMPROVING ACCESS THROUGH A DIVERSE WORKFORCE

The racial and ethnic composition of the U.S. population is projected to change significantly over the next fifty years. By the middle of this century, the Black/African American population will increase from 12.1 to 13.6 percent, and Native Americans will increase from 0.7 to 0.9 percent. Asian/Pacific Islanders will increase from 3.5 to 8.2 percent. The most significant increase will be in the Hispanic/Latino population, from 10.8 to almost 25 percent of the U.S. population. The White/Caucasian population will decline from about 73 to 53 percent.¹³ Currently, about 14 percent of professionally active dentists are non-white, with almost 7 percent Asian/Pacific Islander, 3.4 percent Black/African American, 3.3 percent Hispanic/Latino, and 0.1 percent Native American. About 30 percent of dentists under the age of forty are non-white. However, less than one-half of these minority dentists under forty years of age are Black/African American, Hispanic/Latino, or Native American.14

Physician studies have shown that minority physicians can improve access to medical care and are "more likely than white doctors to serve in communities where there is a shortage of physicians, and to treat minority, sicker, and poorer patients."¹⁵ Other data corroborate that minority dentists are more likely to care for minority patients.¹⁶ Presumably, minority patients are more comfortable seeing providers of the same ethnic and racial group. Perhaps this level of comfort is found in the ability of minority providers to give more culturally sensitive care. Assuming that increasing the number of minority health care providers will increase the use of health care services by minority groups,^{15,17-19} actions must be taken to secure the oral health of the nation in the decades to come through a diverse workforce.

While the percentage of minority dental students has significantly increased since 1980, from about 13 to 34 percent, this increase is primarily due to the growth in the number of Asian/Pacific Islander students. The number of Asian/Pacific Islander students grew from 5 percent of first-year enrollees in 1980 to nearly 24 percent of the 1999 first-year enrollees. The number of underrepresented minorities, defined as racial and ethnic populations that are underrepresented relative to the number of individuals who are members of the population involved,²⁰ has grown less than three percentage points during the same time period. Year 2000 saw minor increases in the underrepresented minority student enrollment for both Black/African American (4.79 percent from 4.68 percent in 1999) and Hispanic (5.33 percent from 5.28 percent in 1999) students.²¹ The only group that approached parity with its representation in the U.S. population is Native Americans. In 2000

this group was 0.65 percent of dental enrollment and 0.7 percent of the U.S. population.

Current ADEA policy strongly endorses the continuous use of recruitment, admission, and retention practices that achieve excellence through diversity in American dental education.²² However, in spite of concerted efforts to recruit underrepresented minorities to careers in dentistry, there has been little increase in the size of the underrepresented minority dental applicant pool over the last ten years. The challenge is made difficult because of a lower proportion of underrepresented minorities in postsecondary institutions, which in turn is caused by lower high school completion rates, attendance at primary and secondary schools with poor academic standards, lack of preparation in science and math, too few mentors, and the lack of access to other educational and career opportunities.

Among the strategies that require more attention are the early identification and development of students who are likely to pursue careers in the health professions. Major efforts are needed to strengthen the academic pipeline. National organizations must explore the development of a database of students who are successful achievers in math and science. Model programs such as the National Science Foundation program that focuses on strengthening math and science skills of middle and high school students should be duplicated. The Bureau of Health Professions' Health Careers Opportunity Program (HCOP), Centers of Excellence (COE), and the Kids into Health Careers Program provide excellent opportunities to inform minority and economically disadvantaged students and parents about careers in the health professions. Ultimately, this program should improve overall access to health for underrepresented minorities and other disadvantaged populations by increasing the minority applicant pool for health professions education. Academic dental institutions can promote dentistry through outreach and involvement of children and youth in their communities through early contact programs.

Each academic dental institution can help identify and share strategies in mentoring, recruitment, minority faculty development, admissions process review, and cultivating a better image of oral health professions among minority youth. Academic dental institutions and national dental associations in cooperation with partnering organizations, including other health professions organizations at the national, state and local levels, private foundations, special interest and advocacy groups such as the National Congress of Black Churches, the Congressional Hispanic Caucus, the Congressional Black Caucus, the National Association for the Advancement of Colored People, public education, and the federal and state governments, must continue to promote the value of diversity as related to quality of care, to inform minority groups about the opportunities and rewards of a career in oral health care, and to encourage minority youth to prepare for and apply to dental school and other academic dental programs. Finally, as academic dental institutions, the practicing community, other stakeholders in the delivery of health care, and their national organizations interact with policy makers at both the state and federal level, there continues to be a need to reframe the argument for affirmative action based on the common good.

TYPES OF ORAL HEALTH PROVIDERS

The current oral health workforce has a reserve productive capacity through the utilization of allied dental professionals. As the ratio of dentists to population declines and as the demand for or need of dental services increases. in the national aggregate or through programs to bring oral health care to underserved population groups or areas, there will be need to draw upon this reserve capacity and even expand productive capacity through a more extended use of allied dental professionals. Tapping into this reserve capacity must not only include a more intensive utilization of allied dental personnel, but the examination of new roles and responsibilities, in a less restrictive delivery system, that would further augment the output of the dental team and extend the availability of oral health care. As has been well documented, extended utilization of allied health personnel is one way to increase the efficiency of health care delivery and the availability of care.²³⁻²⁹

One of the major obstacles to full utilization of allied dental professionals is state laws and regulations that limit practice settings and impose restrictive supervision requirements. The level of supervision should reflect the education, experience, and competence of the allied dental professional. At present, many state practice acts do not reflect what allied dental professionals have been educated to do competently. While academic dental institutions cannot themselves effect a change in the laws and regulations, they are often positioned to influence the elimination of regulatory language that unnecessarily restricts the services provided by allied dental professionals. More specifically, the leadership of academic dental institutions is positioned to inform legislative leaders and state board members about ways that dental assistants, dental hygienists, and dental laboratory technicians can contribute to alleviating the access to oral health care problems in their communities and states. To ensure the competence of allied dental professionals, the academic dental education community must continue to support accredited programs and nationally recognized certification for dental assistants, dental hygienists, and dental laboratory technicians.

As pressure mounts on policy makers to improve access to oral health care, it is likely that state practice acts will become less restrictive, especially for dental hygienists who have graduated from accredited programs and are licensed. Academic dental institutions, including those community and technical colleges, should monitor how these developments are evolving in the states they serve. Educational programs should anticipate these changes so that allied dental graduates will be prepared to provide expanded care in unconventional settings. For example, dental hygienists should be prepared to assume new roles as oral health educators, providing educational services, oral health training programs, and oral health screenings without supervision. Dental hygienists have new roles to play in the treatment of periodontal disease. Dental assistants should carry out extended functions that can further increase the productivity of the dental team and facilitate access to oral health care. Dental laboratory technicians must be prepared for emerging roles in the light of scientific advances in biomimetics and bioengineering. The evolving roles of allied dental professionals underscore the need for quality education through accreditation and the recognition of professional competence through certification.

The attitudes and behaviors of superior team performance are learned best in the context of the provision of care with other health care professionals. Interdisciplinary courses and activities, especially with dental students and even with nontraditional providers such as physicians and other primary care providers, and greater involvement in community health care delivery systems are critical steps to prepare the future allied dental workforce. Students should experience integrated care in an efficient delivery system.

NONTRADITIONAL PROVIDERS OF ORAL HEALTH CARE

Of the fifty-five accredited U.S. dental schools, fortyfour are part of academic health centers. Specialty programs, general dentistry and Advanced Education in General Dentistry programs, and allied programs are well ensconced in a variety of settings that provide opportunities for interaction with other health professions. Academic dental institutions are well positioned to educate other health professionals about oral health. One way to foster this integration is to provide students with clinical experiences in public dental clinics that are integrated into larger medical clinics. Dental schools could initiate interaction among dental students, medical students, and other primary care practitioners not merely in the basic sciences, but also in clinical practice. Not only must primary care 142 WILEY ADEA THE VOICE OF DENTAL EDUCATION

practitioners learn to be a part of the oral health team, dentists must become more involved in assessing the overall health of their patients through screening, diagnosis, and referral. No single health profession, including dentistry, can solve the access to oral health care problem alone.

SUMMARY OF ROLES AND RESPONSIBILITIES

With the communities of dental education, regulation, dental practice, and other health professions working together, in conjunction with public and private policy makers and partnerships, the oral health care needs of the underserved will be met, thereby ensuring access to quality oral health care for all Americans. In summary, academic dental institutions can work to this end most effectively by discharging these roles and responsibilities:

- Preparing competent graduates with skills and knowledge to meet the needs of all Americans within an integrated health care system;
- Teaching and exhibiting values that prepare the student to enter the profession as a member of a moral community of oral health professionals with a commitment to the dental profession's societal obligations;
- Guiding the number, type, and education of dental workforce personnel to ensure equitable availability of and access to oral health care;
- Contributing to ensure a workforce that more closely reflects the racial and ethnic diversity of the American public;
- Developing cultural competencies in their graduates and an appreciation for public health issues;
- Serving as effective providers, role models, and innovators in the delivery of oral health care to all populations; and
- Assisting in prevention, public health, and public education efforts to reduce health disparities in vulnerable populations.

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