Response to the IOM Committee Report on the Future of Dental Education—"Dental Education at the Crossroads: Challenges and Change"

Preface

In the fall of 1994, the president of the American Board of Dental Public Health, Dr. Myron Allukian, recommended that the American Association of Public Health Dentistry (AAPHD) appointed a select committee to review the report of the Institute of Medicine (IOM) Committee on the Future of Dental Education entitled "Dental Education at the Crossroads: Challenges and Change" (1). Dr. Rhys Jones, AAPHD president, appointed the Select Committee (Appendix 1) and charged it with the review and with making recommendations for action by the dental public health community. The committee also was asked to review several recent documents developed by the dental public health community that addressed issues similar to many of those dealt with in the IOM report. In preparing its report the Select Committee elected to give primary attention to the IOM report because of its comprehensive nature, national visibility, and potential impact. These other publications served as valuable resource documents and were helpful in formulating responses to the IOM report. The publications and documents reviewed in addition to the IOM report included:

- Three studies on the specialty of dental public health sponsored by the Health Resources and Services Administration (HRSA): "Residency Training in Dental Public Health: Assessment of Status, Needs, and Issues" (2); "Dental Public Health Practice: Status, Requirements, and Needs in a Reformed Health Care System" (3); and "Requirements for Education and Certification in Dental Public Health" (4). A list of recommendations in each of these reports appears in Appendix 2.
- The Future of Dental Public Health Report entitled "Preparing Dental Public Health to Meet the Challenges and Opportunities of the 21st Century" (5) developed jointly by the AAPHD and Oral Health Section of the American Public Health Association. A strategic plan (6) developed by the AAPHD to serve as a blueprint for achieving the goals of the "Future of Dental Public Health Report" also was included in the material reviewed by the committee.

IOM Study of the Future of Dental Education

The IOM report examines the challenges facing dental education and was released in January 1995, after two years of study conducted by an 18-member committee representing dentistry, medicine, and the lay public. The committee undertook an extensive effort to understand dental education in the United States and the forces shaping it by obtaining input from many dental organizations, institutions, agencies, practitioners and the dental schools. Eight background papers were published in the *Journal of Dental Education* in its January 1995 issue (7). The report is organized around ten chapters, seven of which include its 22 recommendations. The committee emphasized four broad objectives in its report: (1) Improve our knowledge of what works and what does not work to prevent or treat oral health problems. (2) Reduce disparities in oral health status and services experienced by disadvantaged economic, racial, and other groups. (3) Encourage prevention at both the individual level (e.g., feeding practices that prevent baby bottle tooth decay, reduced use of tobacco) and the community level (e.g., fluoridation of community water supplies and school-based prevention programs). (4) Promote attention to oral health (including the oral manifestations of other health problems), not just among dental practitioners, but also among primary care providers, geriatricians, educators, and public officials.

Response to the IOM Committee Report on the Future of Dental Education

The IOM report is important for what it can mean for the preservation and enhancement of the overall health of the nation. The report can play a critical role in the nation's oral and general health through its potential impact on the viability of dental education in this country, on individual dental educational institutions, and on the entire profession of dentistry. While the title of the report and its contents clearly focus primary attention on the dental education of individual students and educational institutions, dental education is not an end in itself, but rather an essential means for securing a valued health benefit for the public, which consumes dental services. Education of the professional work force is an integral component of all those services contributing to the nation's health, including—in addition to professional education—community-based health promotion and disease prevention, individual patient care, and health education of the public.

The dental public health community was well represented on the IOM study committee, and important dental public health perspectives and data are included in the report and re-

A Report Dedicated to David F. Striffler, DDS, MPH. This report is dedicated to Dr. David F. Striffler in honor of his many outstanding contributions to the dental profession, to public health dentistry, and to public health. Dr. Striffler, chair emeritus, Department of Community Health Programs and former director, Program in Dental Public Health, School of Public Health, University of Michigan, was asked to lead the AAPHD effort to review and respond to the report of the Institute of Medicine (IOM) Committee on the Future of Dental Education. Dr. Striffler eagerly agreed to chair the committee, but died unexpectedly one week later. Dr. John Greene, dean emeritus of the University of California San Francisco School of Dentistry, assumed the committee chair in honor of Dr. Striffler.

flected in its findings and recommendations. Many of the recommendations in the report are far reaching, with implications for the dental profession, dental schools, and the public's health; thus, it is appropriate that all components of the dental public health community respond to the numerous recommendations in the IOM report. Full implementation of the IOM recommendations will require the expertise of the dental public health community. The field of dental public health, one of eight recognized specialties of dentistry, spans a broad range of knowledge and skills including management, policy development, health promotion and disease prevention, health care delivery, and research, all well characterized by the competency objectives for dental public health (8). The Select Committee anticipates that the dental public health community can bring significant expertise and resources to bear on the realization of many of the recommendations contained in the IOM report.

Recommendations of the Select Committee

The Select Committee recognizes the importance of the IOM report for dental education, and believes that the directions proposed in the report are in the best interests of the oral and general health of the American public.

Recommendation 1

The AAPHD and the entire dental public health community should endorse the IOM report and vigorously support the implementation of those findings and recommendations targeted toward improving the health of the public and securing the future of dental education.

In endorsing the report and supporting the implementation of its recommendations, the AAPHD can serve as a catalyst for developing a unity of purpose and action among the various communities of interest. If the AAPHD does its job well in this regard, it will serve the public's oral health interests and, at the same time, enhance the welfare and image of the entire dental profession, including dental education, dental research, and dental public health.

As indicated in the IOM report, funding for the provision of health care services is being reduced at federal, state, and local levels. Underserved populations, including those living in poverty, in rural areas, or with serious medical conditions such as HIV, are not being served adequately by the dental delivery system.

Recommendation 2

The dental public health community should work collaboratively with dental educators, practitioners, and researchers, and with their respective professional organizations to secure more adequate public and private funding for personal dental services, prevention and other public health programs, and community outreach activities, including those undertaken by dental students and faculty.

A number of programs exist for increasing the dental work force in underserved areas and, thus, increasing access to dental services by vulnerable populations. However, many of these options such as the National Health Service Corps and state and local community health programs are grossly underfunded. New approaches to increasing the numbers of dentists and auxiliaries practicing in underserved geographic areas could include education loan repayment for dentists and auxiliaries working in state and local health departments and other community settings, and off-site dental public health residencies in federal, state, and local agencies.

Recommendation 3

New approaches for increasing the work force in public health dentistry and the number of dental professionals working in underserved areas should be developed, while existing approaches should be supported and expanded.

The IOM study committee found that a major factor limiting improvement of oral health is a scarcity of consistent, periodic information on the oral health status of the population. Such information helps dental educators, practitioners, and policy makers understand and respond to emerging trends. With timely and appropriate information on the oral health of the public, the dental community will be in a better position to convince health professionals, public officials, and other decision makers to be alert to oral health problems among those they serve, and to take appropriate actions to improve oral health. The federal government needs to work toward sustaining its current efforts in providing oral health information, while the capacity of state and local governments to perform this essential public health function of monitoring oral health status needs substantial strengthening. Efforts at all levels should be undertaken to ensure that appropriate attention is given to the identification of oral health needs in our most vulnerable population groups.

Recommendation 4

The dental public health community should work with public and private organizations to ensure the maintenance of a standardized process to assess periodically the oral health status of the population and to identify changing disease patterns at community and national levels. Particular attention should be given to vulnerable populations in this effort.

The IOM report states that the commitment of dental education to prevention and primary care must remain vigorous. The report also states that the dental profession has a responsibility to serve all Americans and must reduce the wide disparity in oral health status and access to care. To accomplish these recommendations, strong leadership in dental public health is essential within each school.

Recommendation 5

The dental public health community should urge each dental school to have and to support an identifiable organizational focus for public health sciences (formerly departments of community dentistry) in education, research, and service. Each program should have a specialist in dental public health among its faculty.

This academic unit should have as a high priority the responsibility for seeing that the school maintains a vigorous commitment to prevention, population-based oral health services, primary care, and community outreach. This commitment should strive to integrate itself fully with the school's mission, competencies, patient care, and research. The Select

Committee believes that the knowledge, skills, and perspectives brought to the faculty by a board-certified specialist in dental public health are necessary and provide special advantages in leadership for graduate programs in dental public health, other graduate programs, and the predoctoral curriculum.

The IOM report reminds us that there have been many studies of the dental school predoctoral curriculum over the past 70 years. Many of the same recommendations for change keep being made without implementation. This situation challenges leaders in dental education to take those actions necessary to implement these recommendations. As dental faculties and administrators respond to this charge, special attention should be given to the public health sciences. A core public health curriculum should be developed and implemented for all students, including dynamic areas such as community-based prevention, financing mechanisms, access to primary health care, and the essential public health functions of community assessment, policy development, and assurance.

Recommendation 6

The dental public health community should work with the American Association of Dental Schools to review existing curricular guidelines in public health sciences and to establish a set of competencies and guidelines for a core public health curriculum that addresses new and emerging realities in community assessment, prevention of oral diseases, provision of health care, policy development, assurance, and education of predoctoral and graduate dental students.

The IOM report recognizes that dental practitioners will use more medical knowledge in the future and recommends that the dental profession become more closely integrated with medicine and the health care system on all levels—education, research, and patient care.

Recommendation 7

Faculty in the public health sciences should take a lead role in developing closer operational, educational, and research affiliations with colleagues in other health science schools such as medicine, public health, and nursing; and with the broader university community, including disciplines such as business, sociology, economics, and social work.

Developing meaningful community clinical rotations for predoctoral students and quality education and training sites for an increasing number of general dentistry residents, as called for in the IOM report, will require special skills and creativity. Accomplishing this task and at the same time improving relationships between dental schools, the practicing dental community, and local community and consumer groups will be a difficult challenge. Such efforts, if not handled with great sensitivity, could inadvertently upset fragile town-gown relationships.

Recommendation 8

Dental public health leaders should make themselves available to dental school faculty and administrators to assist with the development of effective programs to respond to community problems. Dental school deans should be encouraged to call on the consulting and planning expertise of the dental public health community at federal, state, and local levels to assist with their community outreach efforts as called for in the IOM report.

Strong leadership is required of the dental public health community to accomplish the goals of the IOM report, as well as the "Future of Dental Public Health Report" and the actions called for in this report. Meeting these challenges will require special and expanded opportunities for training of dental public health personnel in such areas as health policy, health services research, and health care administration. The Select Committee believes that these opportunities should include short-term opportunities, such as continuing education courses for those already practicing in public health settings; and longer-term, nondegree programs such as the Robert Wood Johnson Health Policy Fellowship Program, as well as programs based in academic institutions leading to degrees, such as the Individual or Institutional National Research Service Awards.

Practitioners in dental public health have an ever-present and increasing need for development and refinement of knowledge and skills. The "Future of Public Health Report" (9), another study conducted by the IOM, cites a critical need for well-trained public health leaders with not only strong technical training, but with the leadership skills to facilitate effective management, community diagnosis, policy development, and the application of research findings to community settings. In research, the paucity of studies of oral health services is directly related to the limited number of health services researchers in dentistry, exacerbated by the absence of training programs, and by the limited and decreasing funding for such research. Often the potential contributions of faculty with public health skills such as in epidemiology and community organization are not well understood by colleagues in schools of dentistry.

Recommendation 9

The AAPHD should make special efforts to identify, develop, publicize, and obtain support for short- and long-term training opportunities for dental public health practitioners. AAPHD should work with federal, state, and local governments and other public and private organizations to develop and provide funding for addition educational opportunities.

The IOM committee fully embraced research as an important component of dental education. The types of research called for in the IOM report are similar to many of the long-standing research questions of interest to the dental public health community. Throughout the report the committee pointed out opportunities for dental school faculty to participate in clinical, behavioral, and health services research. Recommendations are advanced that call for improving our knowledge of what works and does not work to prevent or treat oral health problems; supporting research on outcomes, health services, and behavior related to oral health; studying oral disease patterns and trends and the factors affecting them; and developing cost-effective strategies likely to help those with the poorest health status and those with limited access to oral health services.

These research questions and requi-

site methods called for in the IOM report are similar to those articulated in the 1992 document, "A Research Agenda for Dental Public Health: Rationale and Development" (10), developed jointly by the AAPHD and the Oral Health Section of the American Public Health Association. The AAPHD report "The Future of Dental Public Health" recognizes the many contributions of dental public health scientists to research efforts in areas such as epidemiology, behavioral sciences, and health services research.

Recommendation 10

The AAPHD should promote the dental public health research agenda among dental schools, with the American Association of Dental Schools and the American Association for Dental Research; and the dental public health community should work toward collaborative relationships with scientists within dental schools and the university community for its implementation.

Funding for epidemiology and health services research is often difficult to obtain because of limited research funds in the National Institute of Dental Research (NIDR), Agency for Health Care Policy and Research (AHCPR), Health Care Financing Administration (HCFA), and other federal agencies. To comprehensively address the research needs in epidemiology, behavior and disease, dental utilization, health promotion, and disease prevention will require substantial levels of research support.

Recommendation 11

The AAPHD should collaborate with other organizations such as the American Association for Dental Research and the American Association for Dental Schools to promote a higher priority for epidemiologic, behavioral, and health services research within the extramural programs at the NIDR, AHCPR, HCFA, HRSA, CDC, and other federal and private organizations.

Summary Statement

The Select Committee makes these recommendations for actions to be taken by the AAPHD and the larger dental public health community to assist with the implementation of the recommendations contained in the IOM report. The committee believes that dental public health has a unique opportunity provided by the report to provide leadership, as well as an obligation, to reach out and join with others who have similar interests and to use our special expertise and experience to improve and protect the oral and general health of the American people.

References

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Appendix 1

Committee Members

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Appendix 2
Recommendations Resulting from Three HRSA Contracts on Dental Public Health Education

Dr. Wotman's Recommendations fro: "Residency Training in Dental Public Health: Assessment of Status, Needs, and Issues"	Dr. Shulman's Recommendations from "Dental Public Health Practice: Status, Requirements, and Needs in a Reformed Health Care System"	Dr. Niessen's Recommendations from "Requirements for Education and Certification in Dental Public Health"
1. Funds should be made available to support advanced education in public health at MPH and residency levels. 2. Funds should be provided aimed at increasing the competency of dentists working in public health positions who are not eligible for board certification via off-site residencies. 3. Model programs in areas of great need (public health; management, administration, planning, and policy; prevention; environment; and research) should be developed that, in conjunction with a basic public health core, would satisfy the eligibility requirements of the ABDPH. 4. Load forgiveness programs should be developed for dentists and dental hygienists working in public health. 5. Funds should be made to facilitate the development of additional recognition (credentials) for dental public health workers.	1. A pool of dentists with MPH degrees is currently actively employed in the field of dental public health. Because those individuals are mid-career people, they cannot afford to leave their jobs for a year to pursue an educational program. However, they are also most able to benefit immediately from dental public health residency training by incorporating such training into their work activities. Dental public health residency programs should be structured to accommodate the educational needs of working public health dentists through on-the-job residency programs. 2. The standards for advanced specialty education programs in dental public health were first revised in 1985 and updated in 1990. These should be reexamined in light of the core functions and new educational programs developed since 1990, such as the PhD in oral epidemiology. Given the needs of the core function requiring greater linkage and integration with other health arenas, the standards should reflect the diversity of training experiences that dentists entering the field of dental public health may have in the future. The standards should be sufficiently flexible to include dentists who have advanced education and the requisite core public health courses, e.g., PhD/DrPH, MPP, MPA. A core public health curriculum and a series of tracks to accommodate specialists should be identified. 3. To develop future dental public health personnel, flexible MPH degree programs must be available given the rising debt of dental students and the decreased numbers of graduating dentists. Trends in public health education suggest that most students are mid-career and schools of public health are developing educational programs to meet their needs. For example, the current models for such programs exist at the University of North Carolina and the University of Michigan. To stimulate demand for these degree programs, the bureau could develop a grant program to dentists pursuing the MPH degree to defray tuition and travel costs. Because dentists who pursue careers in dental public health often sacrifice income potential associated with private dental practice, loan repayment should be made available to dentists who have pursued this training and who work in state and local health departments. 4. No standards presently exist for advanced training for dental hygienists in dental public health. The participants recommended that standards for advanced education in dental public health for dental hygienists be developed. Hygienists are a valuable asset to public health and, with additional formal training, can make even greater contributions. Some are, in fact, in dental public health residency-type experience for dental hygienists with MPH degrees.	1. Dental public health residency programs should be structured to accommodate the needs of dentists with MPH or equivalent degrees who are employed and unable to leave their positions. This can be accomplished by the development of on-the-job residency programs. 2. Standards for advanced specialty education programs in dental public health should be revised. They should be sufficiently flexible to include dentists who have advanced education and the requisite core public health courses (e.g., PhD/DrPH, MPP, MBA). This should be accomplished by the AAPHD, the ABDPH, and the Commission on Dental Accreditation. 3. To develop future dental public health personnel, flexible MPH degree programs must be available given the rising debt of dental students and the decreased numbers of graduating dentists. Training grants through schools of public health should be available to dentists pursuing MPH programs. An alternative, loan repayment for a dentist practicing public health in an underserved area should be considered by the federal government. 4. The ABDPH and the AAPHD should review the requirements for board eligibility in dental public health, particularly with regard to advanced training and years of experience. 5. A grant program for the development of on-the-job residency programs for these individuals will be the most cost-effective way to produce an increase in the number of public health-trained dentists. The grant program would not require the development of new dental public health residency programs, thus leveraging the government's investment. Funds could be provided to existing residency programs to defray the marginal costs of training an additional resident off-site. These costs could be as low as $5,000 to $10,000 per resident per year and could include tuition, travel, and supplies.