Statement

Of

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Before the

Senate Special Committee on Aging

Hearing on

"Ageism in Health Care:
Are Our Nation's Seniors Receiving Proper Oral Health Care"

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Good afternoon, Mr. Chairman, and members of the Select Committee on Aging. My name is Dr. Paula Friedman. I am a Professor and the Associate Dean of Administration at the Boston University Goldman School of Dental Medicine. As President of the American Dental Education Association (ADEA), I am pleased to offer testimony today with regard to whether there are enough dentists being educated to treat the elderly and how access to dental care for our elderly population can be improved.

ADEA is the premier national organization that speaks for dental education. It is dedicated to serving the needs of all 56 U.S. dental schools, 727 U.S. dental residency programs, 266 dental hygiene programs, 259 dental assisting programs, and 25 dental laboratory technology programs, as well as the 11,332 full- and part-time dental school faculty, more than 5,266 dental residents and the nation's 37,775 dental and allied dental students. It is at dental education institutions that future practitioners and researchers gain their knowledge; the majority of dental research is conducted; and significant dental care is provided to many underserved low-income populations, including individuals covered by Medicaid and the State Children's Health Insurance Program (SCHIP).

Dental Education's Role

The dental education community acknowledges its rightful role in preparing tomorrow's workforce to fully meet the oral health care needs of an aging and special needs population through education, research and training programs. In a recently published report of the ADEA President's Commission[1] a number of recommendations were made that address meeting the needs of the elderly. The report's recommendations are in five broad areas: (1) monitoring the future oral health care workforce needs, (2) improving the effectiveness of the oral health care delivery system, (3) preparing students to provide oral health services to diverse populations, (4) increasing the diversity of the oral health workforce, and (5) improving the effectiveness of allied dental professionals in reaching the underserved. The report is appended to this statement.

Today, I want to highlight actions that ADEA and/or its members are taking to fulfill the recommendations of the report. First, we are advocating for adequate curriculum time devoted to theoretical and practical considerations in providing care to patients with complex needs and circumstance, including those with developmental and other disabilities, the very young and the aged, and individuals with complex psychological and social situations. Second, we are collaborating with the ADA Commission on Dental Accreditation to adopt or strengthen accreditation standards at all levels of dental education related to competency in treatment of people with special needs.

Third, U.S. dental schools are committed to providing ample opportunities for dental students, residents, and allied dental students to gain exposure necessary to learn about and treat a broad spectrum of elderly patients. They offer rotations in off-site clinics to deliver oral health care to underserved populations as a means to develop culturally competent oral heath providers. They demand that graduates possess competencies that enhance and promote the total health of patients through oral health management of children, adolescents, adults, the elderly, and medically compromised.

The Federal Government's Role

While recognizing its own responsibilities in preparing a dental workforce to care for special needs populations, the dental education community strongly believes that the federal government is a critical partner in this endeavor.

[1] "Improving the Oral Health Status of All Americans: Roles and Responsibilities of Academic Dental Institutions," American Dental Education Association, March 2003.

Consequently, ADEA recommends that Congress:

1) Provide federal funding for general dentistry residency training programs;
2) Broaden grantee eligibility to include dental education institutions for Geriatric Training for Physicians, Dentists and Behavioral/Mental Health Professionals and Geriatric Academic Career Awards;
3) Authorize a new federal geriatric dentistry program;
4) Authorize a new federal loan repayment program at NIH for research on geriatric population; and
5) Authorize a new federal reimbursement program for dental education institutions providing oral health care to the elderly.

The Access Problem

Although dentistry has been successful in preventing oral diseases and in developing effective and relatively inexpensive treatment methods, too many elderly Americans, poor and low-income persons, and minorities have been left behind, resulting in needless pain, increased cost, and decreased health.

Some Facts about Older Adults

- 23% of 65 to 74-year-olds have severe periodontal disease;
- 30% of adults have no teeth (edentulous);
- Oral and pharyngeal cancers occur more often in adults with a lower 5-year survival rate lower in blacks (34%) than whites (56%);
- Prescriptions taken by older adults will have an oral side effect-usually dry mouth which increases the risk for oral disease;
- 5% of Americans aged 65 and older (1.65 million) are living in long-term care facilities where dental care is problematic; and
- Many elderly individuals lose their dental insurance when they retire. Medicaid reimbursement for adults in most states does not exist and Medicare is not designed to reimburse for routine dental care.

In all, an estimated 39.7 million Americans live in areas lacking adequate dental care services as defined by federal criteria under the Health Professional Shortage Area designation. More than 108 million people lack dental insurance, far outpacing the 44 million who lack health insurance. So it is no surprise that the aged, the poor, the rural and the disadvantaged have substantially less access to dental health care than they need or deserve.

Many of these people seek dental care only when the pain and infection creates a dental emergency. Often patients come to dental education institutions with severe problems, sometimes requiring hospitalization. Our institutions provide a dental "safety net" for elderly and other patients who do not have insurance coverage, public program coverage, or adequate resources to pay for dental care. Fees charged in a dental school clinic are around half that of the fees charged by private practitioners in the surrounding communities where they are located. In fact, dental schools and their satellite clinics provide millions of dollars of unreimbursed oral health care each year for elderly and other underserved populations.

According to a study conducted by the American Dental Association[2], slightly more than 18% of patients treated at dental school clinics are 65 years or older. Of all patients treated, 32% do not have an insurance program while half are covered by public assistance with a majority of patients having an income of $15,000 or less. Examples of the commitment dental education institutions are making to improve access for the elderly and others who are underserved can be found across the nation.

[2] "Study of Dental School Facilities and Programs," American Dental Association, August 1999.

For instance,

- In Louisiana, Louisiana State University School of Dentistry (LSUSD) sponsors and conducts numerous community dental education programs including annual oral cancer screenings in collaboration with the American Cancer Association and caregiver instruction to those who work in homes for the elderly. Oral health care is provided by dental students, residents and gratis faculty at the Veterans Administration Hospital.
- In Illinois, Southern Illinois University School of Dentistry (SIUSD) Metro East Dental Fund helps the underserved, including the elderly and children, to receive preventive and restorative dental services. The dental fund supports two major projects: "Restore-A-Smile" and "Kids Who Fall Between the Cracks." Began in 1997, Restore-A-Smile provides free dental services from to elderly, low-income patients identified by SIU School of Nursing. The East St. Louis Housing Authority provides transportation for the patients to the East St. Louis Clinic. A fair number of elderly patients have been fitted with dentures, which in a typical private practice would cost several thousand dollars. The quality of life for these elderly individuals has improved substantially in large part because of the free SIU dental care received.
- In Michigan the University of Michigan School of Dentistry (UMD), located in northwestern Detroit, has a strong urban mission. The School also has a 44-chair hospital based clinic located on the eastside of the city. The clinics provide care for geriatric, disabled, pediatric, HIV/AIDS and underserved populations. UDM is the major Medicaid dental care provider for residents in metropolitan Detroit. The School provides care in a number of outreach clinics. Students provide services in a clinic for the homeless and the working poor, and with portable dental equipment, to nursing home residents. There is a strong service-learning component to the dental hygiene and dental community dentistry courses that includes community education, screenings and other community based oral health projects.
- Wisconsin's only dental school, Marquette University School of Dentistry, annually serves an average of 15,000 patients providing over 69,000 patient visits. Approximately 35% of the patients served at the School's Main Clinic represent minorities, while 32% include low-income individuals with SCHIP or Medicaid status. The School of Dentistry is also the site of the Center for Orofacial Research and Education, as well as a crucial partner providing support for the Wisconsin Geriatric Education Center at Marquette.
- And, lastly, in my own Commonwealth of Massachusetts, Boston University's Goldman School of Dental Medicine offers programs for nursing home residents and homebound elders, homeless and battered women, immigrant populations, HIV/AIDS patients, and spinal cord injury patients with a total of 56,240 patient visits. The dental school is the largest Medicaid provider of oral health services in Massachusetts. In partnership with the Massachusetts Dental Society, the Goldman School of Dentistry provides oral health screenings annually for physically and mentally challenged athletes in the Special Olympics. In the area of dental research, the School's Center for Implantology conducts studies to improve oral health services for edentulous patients, while its Department of Health Policy and Health Services Research engages in research on aging, the interrelationship of oral disease and systemic disease, and expanding access to linguistically and culturally underserved populations.

The Cost of Access

No conversation with regard to access to oral health care would be complete without reviewing how dental care is reimbursed. It is paid for in a variety of ways based on a fee for service schedule:

1. If a patient is enrolled in Medicaid or S-CHIP, payment for dental care is paid directly to the provider through the Medicaid or S-CHIP program in the state. The patient does not have a co-payment if enrolled in the Medicaid program. Patients enrolled in S-CHIP may have a co-payment, which is dependent on their state plan;

2 Federally Qualified Health Clinics (FQHCs) require a co-payment from the patient based on a sliding fee schedule calculated by family income, and the remainder is paid to the dental provider through the FQHC program;

3 Dental insurance, regardless if provided through an employer or privately purchased, has varying degrees of coverage paid to the dental provider. Expenses not covered by insurance are paid by the patient (out of pocket cost); and

4 Patients without program support (federal or state) or without dental insurance coverage pay for services directly (out of pocket costs).

The Dental Workforce

Significant challenges aside from economic barriers posed by lack of dental insurance influence the oral health delivery system—the need to educate and train adequate numbers of dentists in the special oral health care needed for the elderly population and the need for our institutions to conduct research more that fully includes the elderly.

Approximately 4,350 dental students graduate annually from 56 U.S. dental schools located in 34 states, the District of Columbia and Puerto Rico. Despite this number, the dental workforce is not keeping pace with demand. Some states lacking a dental school are seeking solutions to their oral health care needs through partnerships with states that have schools, seeking to establish residency programs, and some have contemplated opening schools. The latest state to open a school, Nevada, welcomed its inaugural class in 2002.

The ratio of professionally active dentist-to-population is projected to continue declining, from its peak of 60:100,000 in 1994 to 54:100,000 in 2020[3]. As a sizable portion of the U.S. population has difficulty availing itself of needed or wanted oral health care, the decline is creating concern as to the capability of the dental workforce to meet emerging demands of society and provide services efficiently.

Based on the age distribution of the dental workforce, it can be estimated that approximately 50 percent of the current dental workforce will retire over the next 20 years. In the next ten years, between 22 to 25 percent of professionally active dentists will retire from the workforce; and by 2015, the number of dental graduates will not be large enough to replace the number of dentists leaving the workforce. Action needs to be taken now to address this looming problem, especially if the access needs for elderly and other underserved populations is to be successfully tackled.

Possessing good oral health is critical to the overall health of a person. Unfortunately, all too often when examining the issue of geriatric health, the dental workforce and oral health care for the elderly are “forgotten.” Examples of this regrettable omission can be found in recent publications, "The State of Aging and Health in America," published by the Merck Institute of Aging & Health and The Gerontological Society of America and in “Emerging Crisis: The Geriatric Care Workforce,” published in the Public Policy & Aging Report, Spring 2003, Vol. 13, Number 2. This publication contains articles on geriatric mental health workforce, nursing, social work, physicians, but no mention of dentistry or oral health is listed.

Clearly, we must redouble our collective efforts to raise the level of visibility of dentistry as a part of primary health care and the importance of oral health as part of overall health. We must continue to publicize the Surgeon General’s Report[4] that alerts Congress and the nation to recognize the importance of oral health and the deleterious effects of inadequate oral health care. It calls attention to the fact that the burden of oral diseases is disproportionate among the U.S. population. Reports from the General Accounting Office and the National Governors Association corroborate these findings.

[3] “Future of Dentistry,” American Dental Association, Health Policy Resources Center, 2001.
[4] “U.S. Surgeon General Report: Oral Health in America”, 2000.

Training programs play a significant role in responding positively to the challenges of oral health disparities for elderly Americans, dental education, and the workforce that are outlined in the Surgeon General's Report.[5] The federal government's commitment to continued funding and expansion of residency training, geriatric education and research programs, is a key that can help ameliorate problems faced by the elderly in accessing oral health care. Federal funding unlocks the doors of promise in America – the promise of access for underserved communities, the promise to students who seek to achieve their dream of becoming a dentist, and the promise that federal investments made in health education and research will be benefit all people in the United States.

Therefore, ADEA recommends that Congress redouble its efforts with regard to expanding and funding training programs that will assist in preparing the dental workforce to meet the needs of an aging population:

1. Fully fund the General Dentistry Residency Training

General dentistry residency programs provide dentists with enhanced skills and broad clinical experiences needed to deliver a broad array of oral health services to a wide spectrum of patients with complex medical needs, including elderly, special needs, medically compromised, as well as Medicaid and SCHIP populations. Dentists completing general dentistry training are better equipped to address a wide variety of oral health maladies without referring patients to specialists. The Institute of Medicine's (IOM) 1995 report[6] on dental education recommended the creation of additional General Dentistry Residency positions to accommodate all dental school graduates. Approximately 1,951 residents train annually in the country's 311 accredited general dentistry programs. Funding for this program must continue in FY 2004. At present this critically important program is been zero funded.

ADEA recommends that Congress provide funding to fulfill the IOM's recommendation.

2. Broaden Grantee Eligibility for Geriatric Training Programs

There are four federal grant programs are authorized and funded that support geriatric education and training: 1) Geriatric Education Centers (GEC); 2) Geriatric Training for Physicians, Dentists and Behavioral/Mental Health Professionals (GTPD); 3) Geriatric Academic Career Awards (GAC); and 4) Geriatric Nursing Knowledge and Experiences in Long Term Care Facilities.

Dental education institutions may only compete for GECs. These programs aim to improve the training of health professionals in geriatrics and develop and disseminate curricula relating to the treatment of the health problems of elderly individuals. Grant funding may be used to support the training and retraining of faculty to provide instruction in geriatrics and continuing education of health professionals who provide geriatric care. Students received clinical training in geriatrics in nursing homes, chronic and acute disease hospitals, ambulatory care centers, and senior centers. In 2003, it is expected that only limited funding of $2 million will be available for up to five grantees.

The GTPD provides training in geriatrics through two-year fellowship programs and/or 1-year retraining programs that include clinical, research, administration, and teaching. A minimum of three fellows – one from each discipline of medicine, dentistry and mental health – is required

[5] "U.S. Surgeon General Report: Oral Health in America", 2000.
[6] "Dental Education at the Crossroads: Challenges and Change", 1995.

each year of the award. Only schools of medicine may apply for GTPD grants. Limited funding of approximately $2 million is expected in 2003 for up to five grantees.

ADEA recommends that dental education institutions be allowed to complete for grants under the GTPD program.

GAC awards support career development of geriatricians in junior faculty positions who teach clinical geriatrics. Recipients are required to provide training in clinical geriatrics. Eligible applicants must be board certified or board eligible in internal medicine, family practice or psychiatry, have completed an approved fellowship program in geriatrics and hold a junior faculty appointment at an accredited school of medicine.

ADEA recommends that criteria be broadened so that faculty members employed by U.S. dental schools are eligible to compete for GAC awards.

3. Authorize a New Geriatric Dentistry Residency Training Programs

Although dental needs of the elderly are changing and growing, geriatric dentistry is not a recognized specialty by the Commission on Dental Accreditation. However, there are a small number of geriatric residency programs provide specialized training to residents each year across the country. These programs recognize that the management of older patients requires not only an understanding of the medical and dental aspects of aging, but also of many other factors such as ambulation, independent living, socialization, and sensory function.

Many barriers interfere with providing elderly with dental care, including dental complexity, multiple medical conditions, diminished functional status, loss of independence and limited finances. The new federally funded residency training program in geriatric dentistry would provide both a clinical and research focus preparing graduates for all aspects of clinical care for elderly patients and prepare graduates to pursue careers as academicians. The core curriculum would focus on expanding the resident's knowledge of the aging process, epidemiology, biostatistics, research methodology, health care delivery systems, psychosocial aspects of aging, geriatric medicine for dentists, geropharmacy, geriatric nutrition and teaching strategies. In addition the program would provide research experience to gain skills in the design, implementation, analysis, and reporting of findings from their chosen research project under faculty supervision.

ADEA recommends that a new federal grant program modeled on the general and pediatric dentistry residency programs be authorized by Congress to prepare the dental workforce to meet the growing needs of an aging population.

4. Authorize a new NIH loan repayment program for research on the elderly and other special needs populations

Research is the connection between oral health and general health is widely acknowledged. A thorough oral examination can detect signs of nutritional deficiencies as well as a number of systemic diseases, including microbial infections, immune disorders, injuries, and some cancers. According to the Surgeon General's Report on Oral Health, more than 90 percent of all systemic diseases have oral manifestations. Cancer, for instance, can first appear on the tongue or soft palate. The mouth can provide some of the earliest indications of diabetes and HIV/AIDS. Radiographic or magnetic resonance imaging of oral bone can help identify the onset of osteoporosis.

By learning more about these associations, we can find better ways to pass this knowledge along to patients, all patients including the elderly. To assure continued dental health research is a growing body of knowledge that can be applied to patients more researchers are needed.

The Surgeon General reported that dental schools throughout the nation are struggling to recruit and retain top faculty who conduct such research. This is a crisis that threatens the quality of dental education, oral, dental, and craniofacial research, and, ultimately, access to necessary oral health care for Americans. Presently, there are approximately 350 vacant faculty positions at the 56 U.S. dental schools. The issue of access to care cannot be addressed successfully without increasing the numbers of dentists entering academia and research.

Every American should appreciate the advances in dental health research. As the Surgeon General's report notes, the past half-century has seen the meaning of dental health evolve from a concern over just teeth and gums to a much broader systemic focus. Now we must capitalize on this new knowledge – and make sure this research reaches all Americans including the elderly.

The National Institutes of Health has five authorized and funded loan repayment programs that can repay up to $35,000 a year of qualified educational debt for health professionals pursuing careers in clinical, pediatric, contraception and infertility, or health disparities research. None of these programs focus on the elderly.

ADEA recommends that Congress authorize a new NIH loan repayment program for research on the elderly and other special needs populations.

5. Authorize a new Reimbursement Program for Elderly Dental Care at Academic Dental Institutions

Oral health care is not a benefit covered under Medicare, which exacerbates access by elderly to needed care. Despite the fact that dental schools and their satellite clinics provide a significant amount of oral health care to the elderly more needs to be done. Dental schools cannot expand services beyond what is being done if federal assistance is not made available to assist in paying for unreimbursed care.

ADEA urges Congress to authorize a dental reimbursement program for poor elderly obtaining treatment at the nation's dental education institutions.

Such a program would not only help to increase access to oral health care by the poor elderly but would also enhance training and education opportunities for both predoctoral and residents in geriatric oral health care.

The new program could be modeled on the modestly funded dental reimbursement program authorized under the Ryan White CARE Act that helps to train students and residents in caring for HIV/AIDS patients' oral health care needs. This program is a successful cost-effective federal-institutional partnership that provides quality oral health care to people living with HIV/AIDS while training providers to effectively and safely deliver care to these patients. Dental education institutions apply for partial reimbursement for the costs of providing oral health care services to people living with HIV and AIDS.

Conclusion

In conclusion, I turn your attention to recommendations made in a 1995 U.S. Department of Health and Human Services report entitled, "A National Agenda for Geriatric Education." The White Paper contains a chapter, "The State of the Art of Geriatric Dental Education and Training," that includes a number of recommendations including: 1) increase the number of general dentistry training programs, 2) increase the number of academic training opportunities for dental faculty, 3) increase the number of general dentistry training programs offering advanced geriatric dental training; and 4) increase funding for geriatric research and research training. I have appended to my written statement the report's recommendations for dentistry.

Mr. Chairman, on behalf of the American Dental Education Association, I thank you and the Committee for the opportunity to make recommendations on how Congress, dental education and the country can help to address the growing needs of the elderly population in gaining access to oral health care and increasing the numbers of well-trained dentists in meeting these needs.

RECOMMENDATIONS FROM A NATIONAL AGENDA FOR GERIATRIC EDUCATION: WHITE PAPERS

Edited by Susan M. Klein, DNSc, RN
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1995

The following recommendations are excerpts from A National Agenda for Geriatric Education: White Papers, Volume 1, Administrative Document. What follows is the complete text of each recommendation, including the rationale, and action(s) required.

DENTISTRY

RECOMMENDATIONS

Oral Health, Primary Care, and Reimbursement

1. Recognize oral health care as an integral part of primary care.

Rationale: The vast majority of dentists are general practitioners. Frequently they are the first contact health care professionals providing primary oral health care services to older patients. These dentists provide a comprehensive range of diagnostic, therapeutic, preventive, and rehabilitative treatments. Furthermore, this first contact care is coordinated, longitudinal, comprehensive and preventive -the elements of primary care. These older patients often require medical, social, and/or legal services in addition to oral health care. Therefore, oral health care also functions as a gateway into the larger system of health, social, and legal support services through the recognition of these needs by the dentist and referral to the appropriate individual or agency.

Action Required: Recognize dentists as primary care providers in health care literature, public policy pronouncements, legislative mandates, and regulatory interpretations of legislation.

2. Establish dental coverage as an essential component of any comprehensive health benefits package and increase access programs for special needs patients.

Rationale: Economically disadvantaged and physically impaired older adults are most likely to experience oral problems which can greatly influence their general health and quality of life. Cost significantly deters dental utilization by these "at-risk" older patients. Medicare dental reimbursement is extremely limited, and most states have no adult Medicaid dental coverage or use reimbursement schedules below 50% of prevailing fees. Only 10% of older adults have private dental insurance and nearly 80% of annual dental expenditures are out-of-pocket expenses. These unfavorable economic realities have discouraged the development or expansion of geriatric dental clinical programs by dental schools. A limited number of programs sponsored by organized dentistry, dental schools, and other organizations have attempted to improve dental access for at risk older adults, but typically demand far exceeds project capacities.

Actions Required
1) Establish Medicare dental benefits to include a full range of preventive and rehabilitative services and expand Medicaid oral health coverage for older adults with reimbursement rates comparable to prevailing fees;
2) Increase options for private dental insurance coverage for older adults;
3) Initiate and improve access programs for special needs patients.

3. Implement detailed workforce analyses to define present and future needs for trained geriatric dental personnel in academic and clinical settings.

Rationale: Current information necessary to accurately project dental workforce needs for the elderly is lacking. A carefully designed and regularly scheduled analysis evaluating older population characteristics, trends in prevalence and incidence of dental diseases, perceived need and demand for care, and standards of care issues is required. These findings will help in the implementation of new policies to ensure a sufficient number and distribution of qualified academic leaders and clinical dental providers (including the allied disciplines) in geriatric

dentistry. Workforce study findings will provide data useful for identifying and differentiating skills necessary for geriatric clinicians and academicians (in order to develop better training programs) and propose viable strategies for continued monitoring of geriatric dentistry workforce concerns.

Action Required: Conduct periodic, federally funded geriatric dental workforce studies.

4. Develop, implement, and evaluate geriatric dentistry clinical competencies and educational standards.

Rationale: There is little agreement on the specific clinical competencies and appropriate level of education and training necessary for all dental providers, including new dental graduates, advanced general dentistry students, general practitioners, dental specialists providing care to older patients, clinical faculty, geriatric academicians, and dental auxiliaries. The continuous improvement of quality in geriatric educational and training programs depends on more effective ways of evaluating and improving educational programs to achieve competencies.

Action Required: Convene a task force of dental educators and clinicians to determine educational standards/requirements and clinical competencies that are appropriate for geriatric dental practitioners, clinical faculty, and academicians; include representatives of the appropriate AADS sections; ASGD; the Academy of General Dentistry (AGD).

5. Dental school accreditation standards will require geriatrics education.

Rationale: Older patients represent a diverse group of people with a wide range of physical, medical and psychosocial presentations any or all of which may vary from appointment to appointment and will affect the type of dental care required. Older adults also have different patterns and prevalence of oral diseases and are seeking dental care in greater numbers than in the past. Homebound adults and institutionalized elders may require on-site or bedside dental care. Educational offerings to prepare students to meet the oral health needs of independent, frail, and functionally dependent elders and to determine the appropriate treatment and setting for care delivery will allow practitioners to provide appropriate quality care for older adults. These geriatric issues are a necessary component of the curriculum for all predoctoral, appropriate postdoctoral training programs, and allied dental health programs.

Actions Required
1) Incorporate geriatric dentistry curriculum as a required part of all dental predoctoral, appropriate postdoctoral training programs {advanced education in general dentistry programs (AEGDs), general practice residency programs (GPRs) and dental specialties which treat older patients}, and allied dental programs;
2) Develop, implement, and evaluate mandatory standards for geriatric components by accreditation boards in consultation with gerontological and geriatric dental experts.

6. Establish geriatric dentistry core content in national dental and dental hygiene boards and regional/state licensure board examinations.

Rationale: A growing number of elderly will be utilizing dental services during the next 20 years and nearly 40 % of these older adults will present with complex health and functional problems. To ensure adequately trained dental providers, a sufficient number of representative geriatric dental. Topics must be included within the staged testing required for graduation and licensure.

Actions Required
1) Identify key geriatric dentistry knowledge and clinical competency skills;
2) Increase national board geriatrics content;
3) Expand testing of geriatrics content in regional/state licensure examinations.

7. Educate all health professional students in the principles of inter- disciplinary team management to include the oral needs of older patients.

Rationale: Dental education historically has included preventive, diagnostic, therapeutic and rehabilitative topics in its curriculum. It should continue to do so, emphasizing and expanding those topics to cover the findings and treatment needs of older patients. In addition, the appropriateness of case consultations and referrals to both

dental specialists and other health care professionals who can satisfy a wide variety of health and social services needs of the elderly should also be stressed.

Interdisciplinary team training curriculum includes information about communication skills, conflict management, and the roles of all disciplines represented on the team. This enables dental team members to appreciate the contributions of other health disciplines and fosters communication among them. Other health professionals need to understand the breadth and scope of the abilities of dentists and allied dental health personnel to manage the oral health needs of medically compromised older patients. This is particularly true since the prognosis of frail older patients managed by an interdisciplinary team is better than the prognosis of patients not managed this way.

Actions Required
1) Include the principles of interdisciplinary team training as a required element in dental and allied dental curricula; provide learning opportunities for these students to function as participating members of an interdisciplinary health care team in clinical settings;
2) Incorporate interdisciplinary team training into standards for dental school accreditation;
3) Include education on the oral health needs of older adults, and the contributions of dental health personnel to their interdisciplinary management in the curricula of health professions schools.

8. Employ continuous quality improvement (CQI) to improve dental education and the dental care of older patients.

Rationale: The principles and process of CQI has been shown to improve the quality of educational programs as well as patient care. Few dental health faculty and practitioners have the knowledge and skills to assess the structure, process, and outcomes of dental education and/or service programs in which they work to improve the quality of services provided. Faculty must learn the most effective methods of educating adult trainees and determine outcomes in the form of competencies. Dental providers must learn the most effective treatments for geriatric dental care and the expected patient outcomes. Improvements can be accomplished through activities such as problem solving, goal setting and achievement, and continuing education (CE) coursework.

Actions Required
1) Employ CQI to evaluate clinical and didactic educational outcomes;
2) Include the principles and procedures of CQI in all dental and allied dental curricula, providing opportunities to participate in CQI activities in a dental treatment program;
3) Incorporate CQI training into the standards for school accreditation.

Geriatric Dentistry Postdoctoral

9. Increase the number of postdoctoral general dentistry training programs

Rationale: The rapidly growing biomedical knowledge base and technological breakthroughs are challenging dental schools to produce dentists with up-to- date skills needed to successfully treat older adults. Due to this challenge and on-going demand (nearly 40% of graduating dental students applied to GPR/ AEGD programs but positions were not available for over 20% of them), the ADA's Council on Dental Education recently endorsed the creation of additional positions in postgraduate programs in general dentistry. GPR and AEGD programs facilitate the difficult transition from dental school into general practice through advanced didactic training and clinical experience. Opportunities for training these students to successfully treat the frail and functionally compromised elderly are quite promising, especially within a 2-year program format.

Action Required: Fund additional postdoctoral general education programs.

10. Increase the number of postdoctoral academic training opportunities for dental faculty.

Rationale: The 1987 DHHS Report to Congress, Personnel for Health Needs of the Elderly Through Year 2020, emphasized the enhanced training of dental providers as an important priority, and concluded that existing programs would not generate the required number of trained geriatric dentists. Currently, there are very limited postdoctoral educational opportunities available in geriatric dentistry. In addition to the few university-based masters level educational programs, there are 9 faculty training projects (FTPs) funded by the BHPr, which are

the only FTPs in geriatric dentistry currently available in the U.S. Additional positions are needed to retrain dental faculty in the clinical, teaching, and research skills to be successful academicians and leaders in the field. Other innovative strategies such as preceptorships and release time to develop research skills are needed for faculty interested in aging and oral health.

Action Required: Establish additional 2-year fellowship training programs, 1-year retraining programs, and other innovative models to train academic leaders in geriatric dentistry.

11. Postdoctoral general dentistry training programs must offer advanced geriatric dental training.

Rationale: Advanced general dentistry skills are needed to provide effective oral health care to many older adults. Dentists are treating larger numbers of older adults with challenging physical and psychosocial impairments which can negatively alter the outcome of dental care. Additionally, the oral heath problems of the elderly can be remarkably complex. Postdoctoral opportunities to treat a wide range of "at risk" older patients vary considerably across programs. In order to qualify dentists to meet the challenges of dental care provision to elders, all GPR/ AEGD programs must provide meaningful community and/or hospital-based geriatric dentistry training opportunities for residents. Efforts need to focus on building and refining advanced curricular and clinical content to establish the competence and confidence of general dentists.

Actions Required
1) Establish didactic and clinical experiences treating the functionally dependent and frail older dental patients in all GPR/AEGD programs;
2) Evaluate effectiveness in teaching geriatric dentistry through the GPR/ AEGD accreditation process.

12. Increase the number and types of alternate pathways to geriatric education available for dental professionals to encourage life-long learning.

Rationale: Education and training in geriatric dentistry available to dental professionals is limited to traditional CE programs which are generally poorly attended, or too superficial to meet practitioner needs. Alternative pathways to geriatric education for practicing dental personnel must be explored and developed. Because CE attendees are adult clinicians, androgogical techniques should be employed, and must include hands-on clinical experiences.

Actions Required: Increase the number of:
1) GECs with dental training programs;
2) CE programs with hands-on clinical care in a variety of extended care settings and other non-traditional educational opportunities;
3) CE programs conducted collaboratively by schools, VAs, dental organizations, GECs, and Area Health Education Centers (AHECs).

13. Increase funding for geriatric research and research training.

Rationale: The knowledge base in oral health and aging must continue to expand to serve as a foundation for education and training programs in geriatrics, and to guide practitioners as they provide cost effective care to older patients. This expansion will occur only with adequate research funding. Basic research is needed to understand the effects of the aging process on the oral cavity and its functions. Clinical research is needed to better understand the etiologies and treatments of oral diseases and their relationship to systemic disorders commonly affecting older adults. Health services research is needed to examine issues of access, appropriateness of care, and maximizing clinical outcomes for services provided to older patients. Educational research is needed to support the development, evaluation, and enhancement of teaching methodologies and innovative educational programs and technologies.

Successful geriatric academicians must possess a variety of skills and attributes which include proficiency in scientific inquiry and methods, and grant writing. Thus, research training is an essential component of postdoctoral geriatric education and training. Students and researchers must be attracted to the field of geriatric dentistry to serve as role models and educators.

Actions Required
1) Fund additional research and research training programs in oral health and aging;
2) Fund career development grant opportunities for dental faculty interested in aging.

Underserved Populations and Geriatrics Education/Training

14. Recruit and retain underrepresented ethnic/racial minority dental and allied dental health students and faculty in geriatrics and other fields of dentistry.

Rationale: Underrepresented ethnic/racial minorities in the dental profession include Blacks, Hispanics, and American Indians. In 1991, although minorities constituted 22% of the U.S. population, they accounted for only 13.5% of dental school enrollment. Many of these minority students are educated at the 2 schools of dentistry at the Historically Black Colleges and Universities. Similarly, there are very few clinical and academic minority faculty in geriatric dentistry and allied dental health to serve as role models for these students. While education and training opportunities in geriatric dentistry are minimal at best for all dental providers, even fewer training opportunities specific to minority oral health issues are offered in dentistry.

Actions Required
1) Expand geriatric dentistry educational and training opportunities at the faculty development and advanced general dental educational levels, and offer funding preferences for programs successful in the recruitment and retention of minority participants;
2) Expand current efforts to recruit and retain underrepresented minority students into dental and allied dental geriatric and other educational programs;
3) Expand the recruitment and retention of underrepresented minority faculty into academic leadership roles to serve as role models.

15. Include culturally relevant geriatric curricula in dental and allied dental programs.

Actions Required
1) Develop consensus documents outlining culturally relevant geriatric content for dental and allied dental curricula;
2) Develop ethnogeriatric materials for dental education;
3) Incorporate culturally relevant geriatric content in dental and allied dental curricula.

16. Recruit and retain dental providers for underserved older populations.

Rationale: Underserved older adult groups include those with special needs such as the homebound, long term care residents, ethnic/racial minority groups, rural or inner city residents, and/or those with limited ability to pay for dental services. Dental providers often find serving these groups unattractive due to financial considerations, practice preferences, or inadequate education and training to meet the special health care needs of some elders.. Educational debts averaging $60,000 makes it more difficult for dental graduates to practice in underserved areas.

Community-based settings for the underserved are often unfamiliar or considered unattractive to graduating students. Dental and allied dental health students have limited exposure to underserved populations and community-based faculty role models. Budget restrictions within dental and allied dental health programs have resulted in a decline in extramural clinical training experiences, as well as training in nontraditional delivery settings. The decreased funding for the BHPr FTPs and for GECs has also decreased training opportunities in geriatric dentistry.

Actions Required
1) Funding to develop, implement, and evaluate model community-based geriatric dental educational programs;
2) Continue the BHPr funding priority for FTP applicants "that demonstrate linkages for the purpose of training educators serving the minority and low income elderly";
3) Link state support for dental and allied dental education to clinical experiences in geriatric dentistry in community-based settings with appropriate faculty role models;
4) Expand loan repayment programs for dental graduates practicing in underserved areas.

17. Reduce regulatory practice barriers for qualified allied dental health professionals to provide selected dental health services in long term care settings.

Rationale: There is a severe shortage of dental practitioners serving individuals in long term care settings (e.g. private homes, nursing homes, adult congregate living facilities, congregate meal sites). In order to address the substantial unmet dental needs of older adults residing in these settings as well as provide high quality cost-effective care, dental teams including expanded function dental auxiliaries (dental hygienists and assistants) should be assembled. Current state dental practice acts generally do not allow: hygienists to provide dental treatment and education under general supervision; dental assistants to provide expanded rehabilitative dental functions; and/or dental laboratory technicians to assume more responsibilities in prosthodontic fabrications.

Actions Required
1) Develop guidelines associated with utilization of allied dental providers in long-term care settings;
2) Change state dental practice acts to allow expanded use of qualified allied dental personnel within alternative care settings.

Educational Technology

18. Develop, implement, and evaluate innovative educational strategies for teaching geriatrics using model educational technologies.

Rationale: Older patients seeking dental care vary greatly in terms of their physical abilities, medical conditions, mental status, and social milieu. This must be considered when individualizing dental treatment. Educational programs to foster the development of critical decision-making skills for managing the complicated diagnostic and treatment realities presented by older patients are vital. Geriatric dentistry is an evolving field with a growing but incomplete body of in-depth knowledge. Life-long learning attitudes and behaviors are needed to encourage students to continue their growth in this field once formal training has ceased. To develop quality geriatric dentistry educational programs, faculty training in innovative curricular development opportunities and technical resources must be made available. The development of new innovative educational approaches is a scholarly activity worthy of significant consideration by respective universities for faculty promotion.

Actions Required
1) Develop innovative educational teaching programs in geriatric dentistry that advance critical decision-making skills and life-long learning attitudes and behaviors;
2) Develop effective educator-training programs in innovative educational methods;
3) Provide resources to support the faculty development of new creative educational programs;
4) Develop a consensus document which fosters inventive curricular development as a scholarly activity worthy of significant consideration during evaluation for promotion and/or tenure by universities.

19. Develop a geriatric dentistry database to facilitate technology transfer, curriculum development, "and research discoveries.

Rationale: A specialized database in dentistry with a dedicated geriatric dentistry archival and retrieval system is needed to facilitate the rapid expansion of information discovery and knowledge dissemination. The existence of a database dedicated to geriatric dentistry would improve the immediacy of access to already developed materials, expedite information retrieval, promote collaborations of students, faculty, researchers, and practitioners in the development of new knowledge and aid in technology transfer of new information. Educational methodologies, curricula, clinical papers, consumer oriented materials, professional and lay-:-oriented educational software programs, expert directories, short reports concerning new developments, clinical tips, and other types of information which have not typically been included in previous global data banks could be stored in this system.

Action Required: Develop a database specific to geriatric dentistry with the capability of including a variety of material/sources, particularly data which do not now reside in a central database.