

Official but unformatted

Policy on workforce issues and delivery of oral health care services in a dental home

Originating Council

Council on Clinical Affairs

Adopted

2011

Purpose

The American Academy of Pediatric Dentistry (AAPD) advocates optimal oral health and health care services for all children, including those with special health care needs. Strategies for improving access to dental care, the most prevalent unmet health care need for disadvantaged US children, and increasing utilization of available services should include, but not be limited to, workforce considerations. This policy will address workforce issues with an emphasis on the benefits of oral health care services delivered within a dentist-directed dental home.

Methods

In 2008, the AAPD created a Task Force on Workforce Issues (TFWI) which was charged, in part, with investigating the problem of access to oral health care services by children in the US and analyzing the different auxiliary delivery systems available. The TFWI's findings and recommendations were summarized in a report¹ presented to the AAPD Board of Trustees in 2009. That report serves as the basis for this policy.

Background

Access to oral health care for children is an important concern that has received considerable attention since publication of *Oral Health in America: A Report of the Surgeon General*, in 2000.² The report identified "profound and consequential disparities in the oral health of our citizens" and that dental disease "restricts activities in school, work, and home, and often significantly diminishes the quality of life." It concluded that for certain large groups of disadvantaged children there is a "silent epidemic" of dental disease. This report identified dental caries as the most common chronic disease of children in the US, noting that 80 percent of tooth decay is found in 20-25 percent of children, large portions of whom live in poverty or low-income households and lack access to an ongoing source of quality dental care.

The mission of the AAPD, the membership organization representing the specialty of pediatric dentistry, is "to advocate policies, guidelines, and programs that promote optimal oral health and oral health care for infants and children through adolescence, including those with special health care needs."³ AAPD has long focused its efforts on addressing the disparities between children who are at risk of having high rates of dental caries and the millions of US children who enjoy access to quality oral health care and unprecedented levels of oral health. AAPD's advocacy activities take place within the broader health care community and with the public at local, regional, and national levels.

Access to care issues extend beyond a shortage or maldistribution of dentists or, more specifically, dentists who treat Medicaid or State Children's Health Insurance Program (CHIP) recipients. Health care professionals often elect to not participate as providers in these programs

Official but unformatted

due to low reimbursement rates, administrative burdens, and the frequency of failed appointments by patients whose treatment is publicly funded.⁴⁻⁷ Nevertheless, American Dental Association (ADA) survey data reveals that pediatric dentists report the highest percentage of patients insured through public assistance among all dentists.⁸ Especially when considering the disincentives of participating as Medicaid/CHIP providers, more dentists and/or non-dentist oral health care providers cannot be considered the panacea for oral health disparities.

Inequities in oral health can result from under-utilization of services. Lack of health literacy, limited English proficiency, and cultural and societal barriers can lead to difficulties in utilizing available services. Financial circumstances and geographical/transportational considerations also can impede access to care. Eliminating such barriers will require a collaborative, multi-faceted approach.^{9,10} All the while, stakeholders must promote education and primary prevention so that disease levels and the need for therapeutic services decrease.

All AAPD advocacy efforts are based upon the organization's core values¹¹ which include:

1. Health and health care equity
2. An effective dental workforce
3. Effective public programs
4. Oral health promotion
5. Child and adolescent welfare
6. Science, education, research, and evidence-based care

A major component of AAPD's advocacy efforts is development of oral health policies and evidence-based clinical practice guidelines¹² that promote access to and delivery of safe, high quality comprehensive oral healthcare for all children, including those with special health care needs, within a dental home. A dental home is the ongoing relationship between the dentist and the patient, inclusive of all aspects of oral health care delivery, in a comprehensive, continuously-accessible, coordinated, and family-centered way.¹³ Such care takes into consideration the patient's age, developmental status, and psychosocial well-being and is appropriate to the needs of the child and family. This concept of a dental home was detailed in a 2001 AAPD oral health policy¹⁴ and is derived from the American Academy of Pediatrics' (AAP) model of a medical home.^{15,16} Children who have a dental home are more likely to receive appropriate preventive and therapeutic oral healthcare. The AAPD, AAP, ADA, and Academy of General Dentistry support the establishment of a dental home as early as 6 months of age and no later than 12 months of age.^{12,17,18} This provides time-critical opportunities to provide education on preventive health practices and reduce a child's risk of preventable dental/oral disease when delivered within the context of an ongoing relationship. Prevention can be customized to an individual child's and/or family's risk factors. Growing evidence supports the effectiveness of early establishment of a dental home in reducing early childhood caries.^{19,20} Each child's dental home should include the capacity to refer to other dentists or medical care providers when all medically necessary care cannot be provided within the dental home. The AAPD strongly believes a dental home is essential for ensuring optimal oral health for all children.

Central to the dental home model is dentist-directed care. The dentist performs the examination, diagnoses oral conditions, and establishes a treatment plan that includes preventive services, and all services are carried out under the dentist's supervision. This

Official but unformatted

delivery model implies direct supervision (ie, physical presence during the provision of care) by the dentist. The allied dental personnel [eg, dental hygienist, expanded function dental assistant/auxiliary (EFDA), dental assistant] work under direct supervision of the dentist to increase productivity and efficiency while preserving quality of care. This model also allows for provision of preventive oral health education by EFDAs and preventive oral health services by a dental hygienist under general supervision (ie, without the presence of the supervising dentist in the treatment facility) following the examination, diagnosis, and treatment plan by the licensed, supervising dentist. Furthermore, the dental team can be expanded to include auxiliaries who go into the community to provide education and coordination of oral health services. Utilizing allied personnel to improve oral health literacy could decrease individuals' risk for oral diseases and mitigate a later need for more extensive and expensive therapeutic services.

In addition to promoting quality oral health care through its policies and guidelines, AAPD advocacy efforts, in part, include:

1. Improving perinatal and infant oral health by training pediatric and general dentists to perform infant oral health examinations.
2. Representing pediatric dentists on an advisory committee to the Bureau of Health Professions, promoting funding for pediatric and general dentistry residency programs and faculty loan repayment.
3. Conducting annual workshops which train pediatric dentists from across the country to educate legislators on strategies to improve access to pediatric dental care.
4. Working with the ADA to identify non-financial barriers to oral health care and develop recommendations to improve access to care for Medicaid recipients.^{21,22}
5. Partnering with the Office of Head Start to launch the "dental home initiative", engaging the dental community to develop a network of dental homes linked to Head Start facilities throughout the country.²³
6. Utilizing a TFWI (2008-2009) to examine the various non-dentist (also known as mid-level) provider models that exist and/or are being proposed to address the access to care issues.

The AAPD Task Force reported that a number of provider models to improve access to care for disadvantaged children have been proposed and, in some cases, implemented following the Surgeon General's report.¹ At the heart of the issue with each non-dentist provider proposal is ensuring ongoing access to dental care for the underserved. Therefore, practice location and retention of independent non-dentist providers are important considerations. When providers are government employees, assignment to areas of greatest need is possible. However, the current US proposed models are private practice/non-government employee models, providing no assurances that independent providers will locate in underserved areas. Moreover, evidence from several developed countries that have initiated mid-level provider programs suggests that, when afforded an opportunity, those practitioners often gravitate toward private practice settings in less-remote areas, thereby diminishing the impact on care for the underserved.²⁴

In all existing and proposed non-dentist provider models, the clinician receives abbreviated levels of education compared to the educational requirements of a dentist. For example, the dental health aid therapist model in Alaska is a 2 year certificate program with a pre-requisite

Official but unformatted

high school education,²⁵ the educational requirement for licensure as a dental therapist in Minnesota is a baccalaureate or master's degree from a dental therapy program,²⁶ and proposed legislation for dental therapists in Vermont requires a 2 year curriculum including at least 100 hours of dental therapy clinical practice under the general supervision of a licensed dentist.²⁷ Building on their college education, dental students spend 4 years learning the biological principles, diagnostic skills, and clinical techniques to distinguish between health and disease and to manage oral conditions while taking into consideration a patient's general health and well-being. The clinical care they provide during their doctoral education is under direct supervision. Those who specialize in pediatric dentistry must spend an additional 24 or more months in a full time post-doctoral program that provides advanced didactic and clinical experiences.²⁸ The skills that pediatric dentists develop are applied to the needs of children through their ever-changing stages of dental, physical, and psychosocial development, treating conditions and diseases unique to growing individuals.

While most pediatric dental patients can be managed effectively using communicative behavioral guidance techniques, many of the disadvantaged children who exhibit the greatest levels of dental disease require advanced techniques (eg, sedation, general anesthesia).^{29,30} Successful behavior guidance enables the oral health team to perform quality treatment safely and efficiently and to nurture a positive dental attitude in the pediatric patient.³¹ Accurate diagnosis of behavior and safe and effective implementation of advanced behavior guidance techniques necessitate specialized knowledge and experience.

Studies addressing the technical quality of restorative procedures performed by non-dentist providers have found, in general, that within the scope of services and circumstances to which their practices are limited, the technical quality is comparable to that produced by dentists.^{32,33} There is, however, no evidence to suggest that they deliver any expertise comparable to a dentist in the fields of diagnosis, pathology, trauma care, pharmacology, behavioral guidance, treatment plan development, and care of special needs patients. It is essential that policymakers recognize that evaluations which demonstrate comparable levels of technical quality merely indicate that individuals know how to provide certain limited services, not that those providers have the knowledge and experience necessary to determine whether and when various procedures should be performed or to manage individuals' comprehensive oral health care, especially with concurrent conditions that may complicate treatment or have implications for overall health. Technical competence cannot be equated with long-term outcomes.

The AAPD continues to work diligently to ensure that the dental home is recognized as the foundation for delivering oral health care of the highest quality to infants, children, and adolescents, including those with special health care needs. The AAPD envisions that many new and varied delivery models will be proposed to meet increasing demands on the infrastructure of existing oral health care services in the US. New Zealand, known for utilizing dental therapists since the 1920's and frequently referenced as a workforce model for consideration in the US, recently completed its first nationwide oral health status survey in over 20 years. Dental care is available at no cost for children up to 18, with most public primary schools having a dental clinic and many regions operating mobile clinics.³⁴ Overall, 1 in 2 children in New Zealand aged 2-17 years was caries-free. The caries rate for 5 year olds and 8 year olds in 2009 was 44.4% and 47.9% respectively.³⁵ These caries rates, which are higher than the US, United Kingdom, and Australia, help refute a presumption that utilization of non-

Official but unformatted

dentist providers will overcome the disparities. As technology continues to advance, proposed models may suggest dentist supervision of services outside the primary practice location via electronic communicative means rather than through direct observation. Health care already has witnessed benefits of electronic communications in diagnostic radiology and other consultative services. The AAPD encourages exploration of new models of dentist-directed health care services that will increase access to care for underserved populations. But as witnessed through the New Zealand oral health survey, a multi-faceted approach will be necessary to improve the oral health status of our nation's children.

Policy statement

The American Academy of Pediatric Dentistry remains steadfast in its core values and mission to address the disparities between children who lack access to quality oral health care and those who benefit from such services. AAPD believes that all infants, children, and adolescents, including those with special health care needs, deserve access to high quality comprehensive preventive and therapeutic oral health care services provided through a dentist-directed dental home. In the delivery of all dental care, patient safety must be of paramount concern.

AAPD encourages the greater use of expanded function dental assistants/auxiliaries and dental hygienists under direct supervision to help increase volume of services provided within a dental home, based upon their proven effectiveness and efficiency in a wide range of settings.³³⁻³⁹ The AAPD also supports provision of preventive oral health services by a dental hygienist under general supervision (ie, without the presence of the supervising dentist in the treatment facility) following the examination, diagnosis, and treatment plan by the licensed, supervising dentist.

The AAPD strongly believes there should not be a two-tiered standard of care, with our nation's most vulnerable children receiving services by providers with less education and experience, especially when evidence-based research to support the safety, efficiency, effectiveness, and sustainability of such delivery models is not available.

AAPD will continue its efforts to:

1. Educate families, health care providers, academicians, community leaders, and partnered governmental agencies on the benefits of early establishment of a dental home.
2. Forge alliances with legislative leaders that will advance the dental home concept and improve funding for delivery of oral healthcare services and dental education.
3. Expand public-private partnerships to improve the oral health of children who suffer disproportionately from oral diseases.
4. Encourage recruitment of qualified students from rural areas and underrepresented minorities into the dental profession.
5. Partner with other dental and medical organizations to study barriers to care and underutilization of available services.
6. Support scientific research on safe, efficacious, and sustainable models of delivery of dentist-directed pediatric oral health care that is consistent with AAPD's oral health policies and clinical practice guidelines.

Official but unformatted

Furthermore, AAPD encourages researchers and policy makers to consult with AAPD and its state units in the development of pilot programs and policies that have potential for significant impact in the delivery of oral health care services for our nation's children.

References

1. Hinson HP, Berlocher WC, Berg JH, et al. Report of the American Academy of Pediatric Dentistry's Task Force on Workforce Issues. Chicago, Ill: American Academy of Pediatric Dentistry; 2009.
2. US Dept of Health and Human Services. Oral Health in America: A Report of the Surgeon General. Rockville, Md: US Dept of Health and Human Services. National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.
3. American Academy of Pediatric Dentistry. Mission Statement. *Pediatr Dent*. 2010;32(special issue):4.
4. Damiano PC, Brown ER, Johnson JD, Scheetz JP. Factors affecting dentist participation in a state Medicaid program. *J Dent Educ* 1990;54(11):638-43.
5. Morris PJ, Freed JR, Nguyen A, Duperon DE, Freed BA, Dickmeyer J. Pediatric dentists' participation in the California Medicaid program. *Pediatr Dent* 2004;26(1):79-86.
6. Hughes RJ, Damiano PC, Kanellis MJ, Kuthy R, Slayton R. Dentists' participation and children's use of services in the Indiana dental Medicaid program and SCHIP: Assessing the impact of increased fees and administrative changes. *J Am Dent Assoc* 2005;136(4):517-23.
7. Berman S, Dolins J, Tang S, Yudkowsky B. Factors that influence the willingness of private primary care pediatricians to accept more Medicaid patients. *Pediatrics* 2002;110(2):239-48.
8. American Dental Association. 2009 Survey of Dental Fees. Chicago, Ill: American Dental Association; September, 2009.
9. American Dental Association. Breaking down barriers to oral health for all Americans: The role of workforce. A statement from the American Dental Association. February 22, 2011. Available at: "http://www.ada.org/sections/advocacy/pdfs/ada_workforce_statement.pdf". Accessed March 14, 2011.
10. Academy of General Dentistry. White paper on increasing access to and utilization of oral health care services. Available at: "<http://www.agd.org/files/newsletter/7025accesstocarewhitepaper7-31-08.pdf>". Accessed March 14, 2011.
11. American Academy of Pediatric Dentistry. Core Values. *Pediatr Dent*. 2010;32(special issue):5-6.
12. American Academy of Pediatric Dentistry. American Academy of Pediatric Dentistry 2010-11 Definitions, Oral Health Policies, and Clinical Guidelines. Available at: "<http://www.aapd.org/media/policies.asp>". Accessed March 12, 2011.
13. American Academy of Pediatric Dentistry. Definition of dental home. *Pediatr Dent* 2010; 32(special issue):12.
14. American Academy of Pediatric Dentistry. Policy on dental home. *Pediatr Dent* 2001;23(suppl):10. Revised 2004.
15. American Academy of Pediatrics Ad Hoc Task Force on the Definition of the Medical Home. The medical home. *Pediatrics* 1992;90(5):774.
16. American Academy of Pediatrics. Preventive oral health intervention for pediatricians. *Pediatrics* 2008;122(6):1387-94.

Official but unformatted

17. American Dental Association. ADA Statement on Early Childhood Caries. 2000:454. Available at: "<http://www.ada.org/2057.aspx>". Accessed March 12, 2011.
18. Academy of General Dentistry. When should my child first see a dentist? Available at: "<http://www.agd.org/public/oralhealth/Default.asp?IssID=296&Topic=C&ArtID=1186#body>". Accessed March 12, 2011.
19. Savage MF, Lee JY, Kotch JB, Vann WF, Jr. Early preventive dental visits: Effects on subsequent utilization and costs. *Pediatrics* 2004;114(4):e418-23.
20. Lee JY, Bouwens TJ, Savage MF, Vann WF Jr. Examining the cost-effectiveness of early dental visits. *Pediatr Dent* 2006;28(2):102-5; discussion 192-8.
21. American Dental Association Council on Access, Prevention, and Interprofessional Relations. Report on the June 23, 2008 Medicaid Provider Symposium. Chicago, Ill. Available at: "http://www.ada.org/sections/professionalResources/pdfs/topics_access_medicaid_symposium.pdf". Accessed March 12, 2011.
22. American Dental Association. Proceedings of the March 23-25, 2009 Access to Dental Care Summit. Chicago, Ill. Available at: "http://www.ada.org/sections/about/pdfs/access_dental_care_summit.pdf". Accessed March 12, 2011.
23. Providing Dental Homes for Head Start and Early Head Start Children. Reference #HHSP23320072912YC. Office of Management and Budget No. 0990-0115. Effective Date: September 30, 2007.
24. Satur J, Gussy M, Mariño R, Martini T. Patterns of dental therapists' scope of practice and employment in Victoria, Australia. *J Dent Educ* 2009;73(3):416-25.
25. Alaska Native Tribal Health Consortium. Alaska Dental Health Aide Therapist Initiative. Available at: "<http://www.anthc.org/chs/chap/dhs/>". Accessed April 7, 2011.
26. Minnesota Statutes 2008, section 150A.06, Subd.1d. Dental therapists. Available at: "<http://www.dentalboard.state.mn.us/Portals/3/Licensing/Dental%20Therapist/DTLEG.pdf>". Accessed March 13, 2011.
27. Vermont 2011 H.398. An act relating to the regulation of dental therapists. Available at: "<http://www.scribd.com/doc/49762674/H-398-As-Introduced-Vermont-General-Assembly-via-MyGov365-com>". Accessed March 13, 2011.
28. American Dental Association Commission on Dental Accreditation. Accreditation Standards for Advanced Specialty Education Programs in Pediatric Dentistry. 1998;23. Available at: "<http://www.ada.org/sections/educationAndCareers/pdfs/ped.pdf>". Accessed March 13, 2011.
29. Vargas CM, Ronzio CR. Disparities in early childhood caries. *BMC Oral Health*. 2006 Jun 15;(6 Suppl)1:S3. Available at: "<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2147596/?tool=pubmed>". Accessed April 7, 2011.
30. Casamassimo PS, Thikkurissy S, Edelstein BL, Maiorini E. Beyond the dmft: The human and economic cost of early childhood caries. *J Am Dent Assoc* 2009;140(6):650-7.
31. American Academy of Pediatric Dentistry. Guideline on behavior guidance or the pediatric dental patient. *Pediatr Dent* 2010;32(special issue):147-55.
32. Ryge G, Snyder M. Evaluating the quality of dental restorations, *J Am Dent Assoc* 1973;87:369-377.
33. Scott Wetterhall S, Bader JD, Burrus BB, Lee JY, Shugars DA. Evaluation of the Dental Health Aide Therapist Workforce Model in Alaska - Final Report. 2010. Available at:

Official but unformatted

- ["http://www.wkkf.org/~media/F2E86B5717174D2E9311359902DF7216.ashx"](http://www.wkkf.org/~media/F2E86B5717174D2E9311359902DF7216.ashx). Accessed March 13, 2011.
34. Gillies A. NZ children's dental health still among worst. *The New Zealand Herald*. March 6, 2011. Available at:
["http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10710408"](http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10710408). Accessed March 14, 2011.
 35. New Zealand Ministry of Health. Age 5 and year 8 oral health. In: *Our Oral Health: Key findings of the 2009 New Zealand Oral Health Survey*. New Zealand, 2010. Available at:
["http://www.moh.govt.nz/moh.nsf/Files/oralhealth-statistics/\\$file/age5-year8-oral-health-data-from-school-dental-services-2009-v2.xls"](http://www.moh.govt.nz/moh.nsf/Files/oralhealth-statistics/$file/age5-year8-oral-health-data-from-school-dental-services-2009-v2.xls). Accessed March 14, 2011.
 36. Luciano JW, Rothfuss LG, Von Gonten AS. The expanded function dental assistant training program. *US Army Medical Department Journal*, 2006:Jan-Mar. Available at:
["http://findarticles.com/p/articles/mi_m0VVY/is_2006_Jan-March/ai_n17213723/"](http://findarticles.com/p/articles/mi_m0VVY/is_2006_Jan-March/ai_n17213723/). Accessed April 6, 2011.
 37. Beazoglou T, Brown LJ, Ray S, Chen L, Lazar V. *An Economic Study of Expanded Duties of Dental Auxiliaries in Colorado*. American Dental Association, Health Policy Resources Center. Chicago, Ill; 2009. Available at:
["http://www.ada.org/sections/professionalResources/pdfs/topics_economic_prod-2009.pdf"](http://www.ada.org/sections/professionalResources/pdfs/topics_economic_prod-2009.pdf). Accessed April 6, 2011.
 38. Brearley Lj, Rosenblum FN. Two-year evaluation of auxiliaries trained in expanded duties. *J Am Dent Assoc* 1972;84(3):600-10.
 39. Lotzkar S, Johnson DW, Thompson MB. Experimental program in expanded functions for dental assistants: Phase 3 experiment with dental teams. *J Am Dent Assoc* 1971;82(5):1067-81.