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Dental Education, Science and Related Matters
RECOGNITION OF DENTAL ANESTHESIOLOGY AS A DENTAL SPECIALTY

Background: (Reports:69)

Request to Recognize Dental Anesthesiology as a Dental Specialty: In June 2011, the American Society of Dentist Anesthesiologists (ASDA) submitted to the Council an application for recognition of dental anesthesiology as a dental specialty (Reports 2011:92). The Council announced receipt of the application, posting it on ADA.org (http://www.ada.org/104.aspx) and seeking comment from the communities of interest. In October 2011, CDEL referred the application and the comments to its Committee on Recognition of Specialties and Interest Areas in General Dentistry (Committee on Recognition), requesting that the Committee conduct an in-depth review and report findings and recommendations to the Council.

Following a careful review of the Committee on Recognition’s report, ASDA application, community of interest comments, as well as the ASDA representatives’ appearance before the Council on May 4, 2012, the Council concluded that:

- The ASDA has demonstrated that dental anesthesiology is represented by a sponsoring organization: (a) whose membership is reflective of the special area of dental practice; and (b) that demonstrates the ability to establish a certifying board.
- The ASDA has demonstrated that dental anesthesiology is a distinct and well-defined field, which requires unique knowledge and skills beyond those commonly possessed by dental school graduates as defined by the predoctoral accreditation standards.
- The ASDA has demonstrated that the scope of dental anesthesiology requires advanced knowledge and skills that: (a) are separate and distinct from any recognized dental specialty or combination of recognized dental specialties; and (b) cannot be accommodated through minimal modification of a recognized dental specialty or combination of recognized dental specialties.
- The ASDA has demonstrated scientifically, by valid and reliable statistical evidence/studies, that dental anesthesiology: (a) actively contributes to new knowledge in the field; (b) actively contributes to professional education; (c) actively contributes to research needs of the profession; and (d) provides oral health services for the public; all of which are currently not being met by general practitioners or dental specialists.
- The ASDA has demonstrated that dental anesthesiology directly benefits some aspect of clinical care.
- The ASDA has demonstrated that formal advanced education programs in dental anesthesiology of at least two years beyond the predoctoral dental curriculum as defined by the Commission on Dental Accreditation exist to provide the special knowledge and skill required for the practice of dental anesthesia.
The Council and Committee on Recognition’s Report on the ASDA Application for Recognition of Dental Anesthesiology as a Dental Specialty is provided as Appendix 1.

In summary, the Committee on Recognition concluded and the Council concurred that the ASDA application for recognition of dental anesthesiology as a dental specialty meets the ADA Requirements for Recognition of Dental Specialties. The Council recommends that the following resolution be adopted by the 2012 House of Delegates.

Resolution

16. Resolved, that the American Society of Dentist Anesthesiologists’ request for recognition of dental anesthesiology as a dental specialty be approved.

BOARD RECOMMENDATION: Vote Yes.

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WORKSHEET ADDENDUM

COUNCIL ON DENTAL EDUCATION AND LICENSURE

Report on the ASDA Application for Recognition of Dental Anesthesiology as a Dental Specialty

The American Society of Dentist Anesthesiologists' Request for Recognition of Dental Anesthesiology as a Dental Specialty: On June 1, 2011, the American Society of Dentist Anesthesiologists (ASDA) submitted an application for recognition of dental anesthesiology as a dental specialty to the Council on Dental Education and Licensure (CDEL). The application and appendices (http://www.ada.org/104.aspx) included the necessary information and documentation relating to the six requirements for dental specialty recognition as specified in the Requirements for Recognition of Dental Specialties and National Certifying Boards for Dental Specialists.

The Council announced receipt of the application to communities of interest, made it available electronically on ADA.org, and called for comments. The call was sent to constituent dental societies, recognized dental specialty organizations, recognized dental specialty certifying boards, state boards of dentistry, American Association of Dental Boards, American Dental Education Association and Academy of General Dentistry. The Council notified deans of U.S. dental schools, directors of advanced dental specialty education programs, ADA officers and the Board of Trustees, members of the ADA House of Delegates, and members and directors of ADA Councils and Commissions. In addition, the call for comment was published in ADA News, the ADA Leadership Update and on ADA.org.

The Council received 285 comments from professional dental organizations, academic institutions and individuals in 20 states and Canada. Of those comments, eight came from professional dental organizations, one from an academic institution and 269 from individuals. Of the respondents, 97% (269) support the application; 3% (16) do not support the application. Over 70% of the respondents who support the application are dentist anesthesiologists, general practitioners and pediatric dentists. Many respondents directed their comments to one or more of the six requirements: Requirement 4 was cited the most frequently at 176 times, with 95% of the comments supporting the application’s compliance with the requirement.

In October 2011, CDEL referred the application and the comments to its Committee on Recognition of Specialties and Interest Areas in General Dentistry (Committee on Recognition). The members of the Committee are:

- Dr. Jeanne P. Strathearn, general dentist, practitioner, CDEL member, committee chair
- Dr. Joel H. Berg, pediatric dentist, educator
- Dr. George T. Goodis, endodontist, practitioner
- Dr. Scott Houfek, general dentist, practitioner
- Dr. Jeffery C. B. Stewart, oral and maxillofacial pathologist, educator

The Council requested that the Committee conduct an in-depth review and report findings and recommendations to the Council at the May 3-4, 2012, meeting. The Committee met monthly between November 2011 and April 2012, studying the application to determine if it demonstrated compliance with each of the six requirements.

In April 2012, the Committee on Recognition teleconferenced with the members of CDEL and discussed preliminary findings.

On May 4, 2012, representatives of the American Society of Dentist Anesthesiologists (ASDA) appeared before the Council to discuss the application and answer questions.
The following summarizes each of the Requirements for Recognition and presents the conclusions of the Committee on Recognition and CDEL.

**Requirement 1:** In order for an area to be recognized as a specialty, it must be represented by a sponsoring organization: (a) whose membership is reflective of the special area of dental practice; and (b) that demonstrates the ability to establish a certifying board.

To comply with this requirement, the Council requires the applicant to submit specific information on the sponsoring organization’s founding and historical development, its officers, membership, bylaws, activities and contributions of its members to the art and science of the discipline. The sponsoring organization is also requested to identify other national dental organizations with a primary interest in the same area of dental practice.

**ASDA Application:** The American Society of Dentist Anesthesiologists (ASDA) is the sponsoring organization for the proposed specialty, Dental Anesthesiology. ASDA was founded February 16, 1980, to support and encourage the clinical practice of anesthesia by dentists and to promote the acquisition and dissemination of associated scientific knowledge. The application states that ASDA is a “strong professional organization with ongoing commitments to quality education for all dentists, advocacy for all patients requiring sedation or general anesthesia, advocacy for all dentists in order to maintain the privilege of administering sedation and general anesthesia with various practice models and advancing the field of anesthesiology for dentists through research and clinical application of current insights into the field of anesthesiology for dental practice.”

ASDA’s membership is reflective of the special practice area, dental anesthesiology. Total membership has grown from 112 members in 2001 to 274 members in 2010, and 65% of dentists who have completed two or more years of dental anesthesiology training are members of ASDA. Active members, licensed dentists who have completed a two-year residency, fall into one of the nine membership categories. Only active members in good standing “may participate in the deliberations and voting of the general Assembly and shall be eligible for election or appointment to any office or agency of the society.” (See Appendix 3 of ASDA’s Application Appendices.)

As an organization, ASDA contributes to the field by pursuing specialty recognition, sponsoring continuing education programs for its members and others, sponsoring professional publications such as *Anesthesia Progress* and developing and maintaining parameters of care for dental anesthesiology. ASDA members have and continue to contribute to the art and science of the field of anesthesia in many ways. The application identifies many of the contributions to research in dental anesthesiology. The application highlights the discovery and development of safer, more effective therapeutic alternatives for pain and anxiety control, separation between anxiety relief and central nervous system depression, and separation between profound analgesia and respiratory depression.

In the fall of 1994, ASDA developed its certifying board, the American Dental Board of Anesthesiology (ADBA). Currently there are 164 diplomates. The ADBA has a constitution, bylaws, officers, appears to be financially stable and has a professional executive director. Several other national dental organizations/agencies—American Dental Society of Anesthesiology (ADSA), American Society for the Advancement of Anesthesia in Dentistry (ASAAD), American Analgesia Society, National Board of Anesthesiology and National Dental Board of Dental Anesthesiology—are involved in the field of dental anesthesiology.

**Comments From Communities of Interest:** Those who commented that Requirement 1 is met acknowledged that ASDA’s membership and officers are reflective of the proposed specialty and noted that ASDA is an organized and proactive association. ASDA has established a certifying board.

The comment that Requirement 1 is not met stated that ASDA membership is not reflective of the specialty as others—general practitioners, oral surgeons—also provide dental anesthesia.
Committee Conclusion: Following review of all information provided, the Committee believes that ASDA has demonstrated that its organization is reflective of the special area of practice and that a certifying board has been established and Requirement 1 has been met.

Requirement 2: A proposed specialty must be a distinct and well-defined field which requires unique knowledge and skills beyond those commonly possessed by dental school graduates, as defined by the predoctoral accreditation standards.

To comply with this requirement, the Council requires the applicant to provide a definition of the proposed specialty and demonstrate the unique knowledge and skills beyond those commonly possessed by dental school graduates by comparing and contrasting the accreditation standards for predoctoral and advanced specialty education programs.

ASDA Application: The application presents the following definition of dental anesthesiology: “Anesthesiology is that specialty of dentistry pertaining to the art and science of pain, anxiety, and behavior management achieved through pharmacologic and other interventions.” The application also borrows from the Accreditation Standards noting that dental anesthesiology residents are trained “in the most comprehensive manner, to use pharmacologic and non-pharmacologic methods to manage anxiety and pain of adults, children, and patients with special care needs undergoing dental, maxillofacial and adjunctive procedures as well as to be qualified in the diagnosis and non-surgical treatment of acute orofacial pain and to participate in the management of patients with chronic orofacial pain.”

An in-depth analysis of the differences between the knowledge and skills possessed by a dental school graduate versus the knowledge and skills possessed by a dentist anesthesiologist program graduate are presented in the application. The application clearly demonstrates distinct differences in the level and depth of instruction by comparing the Accreditation Standards for Dental Education Programs and the ADA’s Guidelines for Teaching the Comprehensive Control of Pain and Anxiety in Dentistry to the CODA Accreditation Standards for advanced education programs in Dental Anesthesiology.

The application reported the results of a 2006 study related to sedation education in dental schools. The study revealed that over “24% of those surveyed did not perform or have any demonstration of sedation in dental school” and “over 80% had limited exposure to sedation education including nitrous oxide inhalation sedation while in dental school.” The application also referenced a 2007 ADA Survey of Current Issues in Dentistry related to use of pain and anxiety control modalities by dentists. The survey found that “62% of dentists did not provide any sedation service and the remaining 38% mainly used inhalation sedation.”

Differences in the level of knowledge (i.e., in-depth vs. familiarity) between the proposed specialty and predoctoral didactic and biomedical sciences and clinical curricula demonstrate that the knowledge and skill levels required are beyond those possessed by dental school graduates. Further, the application references ADA’s Guidelines for Teaching the Comprehensive Control of Pain and Anxiety in Dentistry that states “the knowledge, skill and clinical experience required for the safe administration of deep sedation and /or general anesthesia are beyond the scope of predoctoral and continuing education programs.”

Comments From Communities of Interest: Those who commented that Requirement 2 is met believe that anesthesia is a well-defined field which requires education, knowledge, and skill beyond that possessed by dental school graduations. They point to the ADA Guidelines for Teaching Pain Control and Sedation to Dentist and Dental Students that states: “the knowledge, skill and clinical experience required for the safe administration of deep sedation and /or general anesthesia are beyond the scope of predoctoral and continuing education programs.”

Those who commented that Requirement 2 is not met believe that dental graduates receive the anesthesia education they need to begin practice. If dentists want to use additional techniques in their practice, there are many avenues to obtain the required advanced knowledge and skills.
Committee Conclusion: The Committee believes that the information provided in this section of the application documents that dental anesthesiology is a distinct and well-defined field that requires knowledge and skills beyond those commonly possessed by dental school graduates. Accordingly, the Committee believes that dental anesthesiology meets Requirement 2.

Requirement 3: The scope of the proposed specialty requires advanced knowledge and skills that: (a) are separate and distinct from any recognized dental specialty or combination of recognized dental specialties; and (b) cannot be accommodated through minimal modification of a recognized dental specialty or combination of dental recognized specialties.

To comply with this requirement, the Council requires the applicant to identify the advanced knowledge and skills required for practice of the proposed specialty that are not included with the scope of other recognized specialties and to identify and comment on areas of perceived and actual overlap between the proposed specialty and one or more of the recognized dental specialties.

ASDA Application: To demonstrate compliance with Requirement 3, the application presents a comparison of the advanced knowledge and skills described in the accreditation standards for those specialties involved in surgical dental procedures i.e., endodontics, pediatric dentistry, periodontics, oral and maxillofacial surgery and advanced education programs in general practice residency, to the accreditation standards for advanced education programs in dental anesthesiology. Prosthodontics, while noted in the application, does not have accreditation standards related to sedation or general anesthesia training. The application notes that because there are no requirements for knowledge and training of any kind in deep sedation or general anesthesia for the dental specialties in dental public health, oral and maxillofacial pathology, and oral and maxillofacial radiology, these specialties are not included in the review. In addition, because the accreditation standards for the specialty of orthodontics and dentofacial orthopedics only require “familiarity with pain and anxiety control” this specialty is not included in the review.

The application describes the full scope and depth of knowledge and skill required to achieve the levels of competency and proficiency required of those completing advanced training in dental anesthesiology as compared to the instruction provided for the listed advanced specialty education programs. Specifically, information addresses the required depth of knowledge and skills in the areas of general anesthesia, deep sedation, and methods of pain, anxiety and behavior control for the each of the comparison specialties based on their respective Commission on Dental Accreditation standards. The application highlights the volume of additional training for dental anesthesiology residents, but also describes the scope of training that extends beyond that of those in the other relevant dental specialty programs.

The application explains that while others dental specialties, particularly Oral and Maxillofacial Surgery (OMFS), do incorporate anesthesia training into their postgraduate courses, the extent and scope of the training is not as extensive as the training found within dental anesthesiology programs. The application includes a listing and associated measurement methods used to assess attainment of the specific unique competencies and proficiencies for this specialty. There is a clear explanation of the technical training required for this specialty and the quality and volume of additional unique training required.

The application states that some aspects of the proposed dental specialty naturally overlap with other specialties: “local anesthesia and conscious sedation will always be used by specialists and general dentists and these pain control modalities are not the exclusive province of any one discipline of dentistry.” The application identifies the overlaps in scope between the proposed specialty and existing specialties of periodontics, endodontics, pediatric dentistry, oral and maxillofacial surgery and general practice residency, but also demonstrates that the extensive in-depth knowledge and skills in general anesthesia, deep sedation, and methods of pain, anxiety and behavior control for dental anesthesiology are beyond those of these specialties. While certain procedures could be subsumed within the scope of other recognized dental specialties, it appears evident that the full range of procedures cannot be easily incorporated within the scope of any other recognized dental specialty.
Among the currently recognized dental specialties, only oral and maxillofacial surgery programs devote more than one month of formal training in anesthesiology. The application states that “OMFS programs would need to add approximately 13-19 months to their programs to include these proficiencies,” demonstrating the field of anesthesiology cannot be “readily incorporated” by OMFS. Even the very definition and scope of the specialty of OMFS would have to undergo change to incorporate the full scope of dental anesthesiology, since the defined scope of oral and maxillofacial surgery does not include the experience of providing general anesthesia for general dentistry or other specialties. Further, it was noted that oral and maxillofacial surgeons do not routinely provide anesthesia services for other areas of dentistry while dentist anesthesiologists and medical anesthesiologists provide services for both general dentists and specialists.

Comments From Communities of Interest: Those who commented that Requirement 3 is met believe that dental anesthesiology is separate and distinct from other dental specialties. While noting some knowledge and skills overlap, the education standards and clinical requirements for deep sedation and general anesthesia are well beyond those required for oral and maxillofacial surgery and pediatric dentistry programs. For example, dental anesthesiology program requirements include 12 months of hospital anesthesia service for residents versus four months for OMFS residents. Dentist anesthesiologists work with patients of all ages with a variety of psychological and physical conditions in a variety of settings.

Those who commented that Requirement 3 is not met believe that the knowledge and skills required for dentist anesthesiologists are not separate and distinct from other dental specialists, particularly oral and maxillofacial surgeons and pediatric dentists. They view the overlap in knowledge and skills of the specialties as extensive, especially when compared to oral and maxillofacial surgery, leaving dental anesthesiology with a narrow exclusive focus. Also, they believe that the curricula in oral and maxillofacial surgery and pediatric dentistry can easily be adapted to include more anesthesiology training and experiences. Some view dental anesthesiology on a continuum with various levels and types of training widely available.

Committee Conclusion: Following review of all information provided, the Committee believes that ASDA has provided evidence to support that the scope of this practice area is separate and distinct from any recognized dental specialty or combination of recognized dental specialties and further, that it cannot be accommodated through minimal modification of a recognized dental specialty or combination of recognized dental specialties. Accordingly, the Committee believes that dental anesthesiology meets Requirement 3.

Requirement 4: The specialty applicant must document scientifically, by valid and reliable statistical evidence/studies, that it: (a) actively contributes to new knowledge in the field; (b) actively contributes to professional education; (c) actively contributes to research needs of the profession; and (d) provides oral health services for the public; all of which are currently not being met by general practitioners or dental specialists.

To comply with this requirement, the Council requests the applicant to cite epidemiological studies which indicate the incidence and/or prevalence of conditions diagnosed and/or treated by practitioners of the proposed specialty; document and assess the need for services that are not being met by general practitioners or recognized dental specialists; provide information on who contributes to the body of knowledge for the proposed specialty; identify and analyze new and emerging trends in the field; number of individuals who devote the majority of time to the practice of the discipline and document how the proposed specialty contributes to the educational needs of the profession.

ASDA Application: There is significant epidemiological data supporting the need for an organized specialty to provide the full scope of pain and anxiety control for all areas of dental practice. The application provides extensive data regarding the type of patients typically receiving the services of the dentist anesthesiologists, including dental phobics, children with special needs, adults with intellectual disabilities, patients with local anesthesia problems, patients who require invasive procedures, and patients with chronic orofacial pain who cannot tolerate dental care while conscious. Each of these categories of special needs is described in detail, including a set of conditions where anesthesia services are warranted, and is accompanied by literature
references and studies to demonstrate the incidence and/or prevalence of each condition as it relates to the need for dental care.

The need for the services of dentist anesthesiologists comes from the following groups: children with special needs, adults with intellectual disabilities, geriatric and medically complex patients, and patients with local anesthesia problems, chronic pain, invasive and stressful procedures. The application states there is a growing need for anesthesia services especially among children. The management of uncooperative children is changing as the use of physical restraints is becoming unacceptable and many parents are more accepting of general anesthesia in order to provide a positive experience for their children. The application notes that by the year 2020, the number of children with neuropsychiatric disorders is “projected to rise by proportionally 50%” according to the World Health Organization. As the life span of special needs children is increasing and many are living into adulthood, the need for anesthesia services in these populations will continue.

As noted previously, the demand for the services of dentist anesthesiologists comes mainly from pediatric dental specialists and general practitioners. An American Academy of Pediatric Dentistry survey in 1997 found that 38.6% of pediatric dentists utilized in-office deep sedation/general anesthesia for their patients. The availability of dentist anesthesiologists has increased in the last 15 years and there are practitioners in many states and Canada. As stated in the application, “As operating room charges are sky-rocking, it is likely that the percentage of pediatric dentists utilizing the service of dentist anesthesiologists will increase.” In addition, demographic trends show the need for dental care for the underserved population is increasing. Improving access to dental care can occur by improving the profession’s approach to advanced pain and anxiety control techniques.

The application states that “dentist anesthesiologists significantly contribute to knowledge in the field of anesthesiology similar to that of the clinically oriented dental specialties.” An extensive list of publications and presentations of ASDA members was presented in Appendices 11 and 12 of the application. Included in the application are the results of a recent study by Ganzberg, et al., looking specifically at the contributions of dentist anesthesiologists to research in the field. Ganzberg’s study used the Hirsch Index which looks at the quantity and quality of a researcher’s publications and is based on the number of times the papers are cited in other publications. Results of the study indicate that the output of the top three dentist anesthesiologist researchers was not significantly different than the output of the top three dentist researchers in other clinically oriented dental specialties studied. The study also found that of the “273 of dentist anesthesiologists identified, 70% had published at least one article.” The study also stated the research output of dentist anesthesiologists is “notable as there are only two dental schools with dedicated anesthesiology departments.”

Several new and emerging trends were identified in the application. First, there is growing opposition by non-dentists groups to dentistry’s “operator-anesthetist model” for the provision of deep sedation or general anesthesia, a “long-standing” mode of delivery of anesthesia in dentistry. ASDA believes a specialty in anesthesia could have impact on this movement. Another trend is the “increased use of oral sedatives to achieve moderate sedation, rather than minimal sedation.” However, the application points out this has not been without risk and suggests that the “benefits of oral sedation be balanced by an appropriate amount of training and prudence on the part of the dentist practitioner.” Lastly, the application cited a 2007 ADA survey that found that of the dentists who use sedation in their practices, over 70% reported using inhalation sedation/nitrous oxide for sedation. Approximately 8% of dentists provide deep sedation/general anesthesia. Of this group, almost three-quarters are oral and maxillofacial surgeons who limit their practices to oral surgery. These facts indicate that the dentist anesthesiologist can have a significant practice and education roles in the use of sedation.

The application summarized and itemized the number of individuals who devote the majority (greater than 50%) of time to the practice of the discipline. To the best knowledge of the ASDA, of the “273 two-year trained dentist anesthesiologists, at least 188 (almost 70%) are practicing anesthesia at least 50% of the time.” These practitioners can be found in many states and Canada. The projected need for practitioners in the specialty over the next five years, taking into account disease trends, demographic changes and other
pertinent factors, is great. The projected need does not reconcile the effect of the growing number of medical
anesthesiologists, many of whom are providing “office-based anesthesia” services. However, a recent article
in the Physician’s Weekly discussed the Rand Study which looked at the manpower in medical anesthesia
and concluded that if “current trends continue, a dramatic shortage of anesthesiologists is projected by 2020.”
(Warner, MA, Efforts Needed to Meet Anesthesiologist Demand, Physician’s Weekly (online), July 5, 2011,
No.25.)

Dentist anesthesiologists contribute to the educational needs of the profession at the predoctoral,
postdoctoral, and continuing education levels in real and significant ways in the areas of local anesthesia,
sedation, general anesthesia, clinical medicine, general and dental pharmacology, emergency medicine, pain
management as well as other disciplines. This is spelled out in terms of not only the impact of dental
anesthesiology on the training of postgraduate students in the discipline itself, but in other disciplines such as
Oral and Maxillofacial Surgery, Pediatric Dentistry and elsewhere.

The application demonstrates that dentist anesthesiologists actively contribute to new knowledge in the field,
contribute to professional education, contribute to the research needs of the profession, and provide oral
health services for the public, all of which are currently not being met by non-general anesthesia-trained
general practitioners or dental specialists.

Comments From Communities of Interest: Those who commented that Requirement 4 is met believe that
dentist anesthesiologists provide services that are not being met by general practitioners or specialists,
practice at a high level of skill and have ability to manage patients with complex condition. Many of the
comments include the statement that “using anesthesiologists makes treatment easier and less traumatic for
patients.” The majority of comments were submitted by pediatric dentists followed by general practitioners.
Other specialists supporting this requirement included endodontists, oral and maxillofacial surgeons,
orthodontists and periodontists. The general practitioners and specialists who commented on Requirement 4
were from more than 20 states.

Those who commented that Requirement 4 is not met believe that that data does not support the need for
dentist anesthesiologists, but that general practitioners, oral surgeons, medical anesthesiologists and nurse
anesthetists can meet existing needs. Some believe ASDA does not contribute to new knowledge in the field
and the number of practitioners is too small and regional.

Committee Conclusion: Following review of all the information provided, the Committee believes that the
application provided evidence demonstrating that the proposed dental specialty actively contributes to new
knowledge in the field; actively contributes to professional education; actively contributes to research needs of
the profession; and provides oral health services for the public; all of which are currently not being met by
general practitioners or dental specialists. Accordingly, the Committee believes that dental anesthesiology
meets Requirement 4.

Requirement 5: A proposed specialty must directly benefit some aspect of clinical patient care.

To comply with this requirement, the Council requires the applicant to identify the principle health services
provided and to identify the setting in which these services are customarily provided.

ASDA Application: The application identifies the following as the principle health services of dental
anesthesiology:

(1) The physical evaluation, physiologic monitoring, and anesthetic management
of patients during the perioperative period of surgical, operative, prophylactic, and
diagnostic procedures.

(2) The perioperative management of:
   a. pain, fear, anxiety, phobia and dysfunctional behavior;
b. physiologic manifestations of emotional and physiologic stress;

c. the patient with systemic disease;

d. the special care patient with mental, physical, or emotional disability; and

e. alterations or disruptions of homeostasis.

(3) The diagnosis and management of acute and chronic orofacial pain."

Anesthesia in dentistry is primarily provided in private dental office settings. The private, fully equipped dental office is the ideal place to bridge the gap between the availability of dental treatments and provision of advanced anesthesiology services for groups of children and adult patients that are in need of this service. Dentist anesthesiologists also provide services in ambulatory surgicenters, hospitals and dental schools.

Pediatric dental specialists are the most dependent on the services of dentist anesthesiologists. The availability of dentist anesthesiologists has increased greatly in the last 15 years. At the same time, operating room charges have increased. Because of these changes, it is likely that the percentage of pediatric dentists utilizing the services of a dentist anesthesiologist will increase in the private dental office setting. The application cites a 1997 survey conducted by the American Academy of Pediatric Dentistry that found 38.6% of pediatric dentists utilized in-office deep sedation/general anesthesia for their pediatric patients. It is not surprising to find that a significant portion of the comments received in support of the application were submitted by pediatric dentists.

The services of dentist anesthesiologists in the private office setting are needed in order to expand the opportunity for dental care for those individuals that need to be managed because of anxiety, pain, medical complexities and special needs. Dentist anesthesiologists, with their expertise and knowledge and proficiency, can assist general practitioners and specialists providing care for patient groups that require management in pain, anxiety and behavior management through pharmacologic and other interventions.

Dental care for small children, patients with mental and/or physical challenges and those that avoid dentists due to severe, often incapacitating dental phobias need access to sedation/general anesthesiology specialty services so that they can comfortably receive the dental procedures required to maintain their oral health. Oral and maxillofacial surgeons do not routinely support general dentists and specialists in the provision of anesthesia services for these patients. However, dentist anesthesiologists routinely provide anesthesia services for both general dentists and specialists.

Comments From Communities of Interest: Those who commented that Requirement 5 is met believe that dentist anesthesiologists provide a more cost effective service for patients. The cost of dental services delivered in an office/clinic setting is less than delivery of that same care in a hospital operatory. Dentist-operators will be working in their own familiar space with the equipment they need for procedures. Dentist anesthesiologists understand the dental procedures involved in the treatment and can more readily anticipate the dentist-operator's needs.

Those who commented that Requirement 5 is not met believe that there is no or limited benefit to patient care for this specialty. They believe that the need for anesthesia services can be provided by medical anesthesiologists or nurse anesthetists. Some suggest ASDA is a small group of dentists who could better benefit from American Dental Society of Anesthesiology in terms of continuing education, research and advancement of the field. Some responders expressed concern regarding the ability of itinerant dental anesthesiologists to practice safely and comfortably in a dental office.

Committee Conclusion: Following review of all the information provided, the Committee believes that the services provided by the dental anesthesiologist directly benefit aspects of clinical patient care. Accordingly, the Committee believes that dental anesthesiology meets Requirement 5.
**Requirement 6:** Formal advanced education programs of at least two years beyond the predoctoral dental curriculum as defined by the Commission on Dental Accreditation must exist to provide the special knowledge and skills required for practice of the proposed specialty.

To comply with this requirement, the Council requires the applicant to identify all currently operational advanced education programs in the proposed specialty, to provide a description of the minimum curricula requirements for advanced education programs in the proposed specialty and provide a representative sample of curricula used in several existing advanced education programs in the proposed specialty.

**ASDA Application:** At the time the application was submitted, nine U.S. institutions and one Canadian institution were offering advanced educational programs in the area of dental anesthesiology. All of these programs are at least two years in duration; three of the programs are 26-36 months in length. Two programs lead to Master’s degrees while the remaining programs offer certificates. The names, degrees, and educational backgrounds of each of the program directors were provided. Institutional letters of verification of program sponsorship were submitted. A letter submitted by Indiana University indicated that a program was in the developmental stages and that the institution anticipated enrolling residents in fall 2011. Initial accreditation was granted to this program in February 2012; however, students have not yet been enrolled.

The application identifies 273 dentists practicing in the United States with two or more years of formal advanced education in dental anesthesiology. An additional 27 dentists with two or more years of advanced education in dental anesthesiology subsequently obtained medical degrees and currently practice medical anesthesiology or another medical specialty. Fourteen dentists with two or more years of advanced education in dental anesthesiology currently practice in another of the ADA recognized dental specialties. Finally, 35 dentists in Canada have received two or more years of training in dental anesthesiology. The application indicates an increase in the number of advanced education programs from six in 2006 to 10 in 2010. At current enrollment levels, 26 anesthesia-trained dentists will complete programs each year for a total of 130 new anesthesia-trained dentists potentially entering the field over the next five years. The application states that this will be an insufficient number of new practitioners to meet the future needs of the specialty in terms of demand for services and that additional training program will be required.

The application refers to the CODA Accreditation Standards for Advanced General Dentistry Programs in Dental Anesthesiology for a description of the minimum biomedical, behavioral and clinical science requirements that provide the advanced knowledge and skills for the practice of dental anesthesiology. The statement that all of the listed U.S.-based dental anesthesiology programs should be CODA accredited in 2011 is offered as evidence that curricular requirements of training programs adequately provide the knowledge and skills required. As of February 2012, 10 U.S.-based advanced education programs in dental anesthesiology were accredited by CODA.

The application presented curricula from three programs. One of the programs is hospital based while the other two are dental school based. The descriptions of each of the three vary somewhat in terms of the depth and complexity presented, although the ability to contrast these three curricula does provide evidence regarding varying but successful methods and approaches to structure and delivery of curricula in CODA-approved programs in a variety of educational settings.

The application offers additional information in support of compliance with this requirement. ASDA states that efforts to attain CODA accreditation for all of the dental anesthesiology training programs exemplifies the intent of the sponsoring organization and the practitioners in this field to manage dental patients who require sedation and general anesthesia services. Contributions to the education of residents in other dental specialty programs in regard to the anesthesia components of their curricula, especially in the hospital setting, are also cited. It is ASDA’s belief that ADA recognition of dental anesthesiology as a specialty would provide a significant impetus for the development of new and reactivation of dormant training programs. Such recognition will contribute to more opportunities for training in anesthesia for dentists to meet the future needs of dental patients including patients with special needs, medically complex patients and patients with intellectual and/or physical disabilities.
Comments From Communities of Interest: Those who commented that Requirement 6 is met believe that dental anesthesiology residency programs are evidence of a strong and growing specialized practice area. Further, the CODA-approved residency programs established in academic settings demonstrate that dental anesthesiology is accepted as a bona fide advanced education academic program area.

The comment that Requirement 6 is not met noted that the curricular elements "did not reveal advanced training in any dental diagnosis or treatment."

Committee Conclusion: Following review of the curricular information, current program enrollments and other information provided, the Committee believes that dental anesthesiology meets Requirement 6.

Council’s Final Summary and Recommendations

The Council thoroughly discussed the report and conclusions of the Committee on Recognition. The Council had an extensive discussion related to Requirement 3(a) and whether dental anesthesiology is separate and distinct from any recognized dental specialty or combination of recognized dental specialties. In regards to Requirement 4(d), the Council also discussed at some length dental anesthesiologists’ provision of oral health services for the public and whether those services are met by general practitioners or dental specialists.

Following careful review and discussion of the application for recognition of dental anesthesiology as a dental specialty, the Council agreed with the Committee on Recognition and concluded that:

- The ASDA has demonstrated that dental anesthesiology is represented by a sponsoring organization: (a) whose membership is reflective of the special area of dental practice; and (b) that demonstrates the ability to establish a certifying board.
- The ASDA has demonstrated that dental anesthesiology is a distinct and well-defined field, which requires unique knowledge and skills beyond those commonly possessed by dental school graduates as defined by the predoctoral accreditation standards.
- The ASDA has demonstrated that the scope of dental anesthesiology requires advanced knowledge and skills that: (a) are separate and distinct from any recognized dental specialty or combination of recognized dental specialties; and (b) cannot be accommodated through minimal modification of a recognized dental specialty or combination of recognized dental specialties.
- The ASDA has demonstrated scientifically, by valid and reliable statistical evidence/studies, that dental anesthesiology: (a) actively contributes to new knowledge in the field; (b) actively contributes to professional education; (c) actively contributes to research needs of the profession; and (d) provides oral health services for the public; all of which are currently not being met by general practitioners or dental specialists.
- The ASDA has demonstrated that dental anesthesiology directly benefits some aspect of clinical care.
- The ASDA has demonstrated that formal advanced education programs of at least two years beyond the predoctoral dental curriculum as defined by the Commission on Dental Accreditation exist to provide the special knowledge and skill required for the practice of dental anesthesiology.

Accordingly, the Council recommends that the following resolution be adopted by the 2012 House of Delegates:

Resolved, that the American Society of Dentist Anesthesiologists’ request for recognition of dental anesthesiology as a dental specialty be approved.
AMENDMENT TO THE REQUIREMENTS FOR RECOGNITION OF DENTAL SPECIALTIES AND NATIONAL CERTIFYING BOARDS FOR DENTAL SPECIALISTS

Background: (Reports:72) The following is the pertinent information from the Council on Dental Education and Licensure's annual report.

Responses to House of Delegates Resolutions


By adopting Resolution 48H-2011, the ADA House of Delegates directed the Council on Dental Education and Licensure to review the Requirements for Recognition of Dental Specialties and National Certifying Boards for Dental Specialists with a particular focus on Requirement 1(a). The current Requirements were adopted by the ADA House of Delegates in October 2009 (Appendix).

The requirements were used by CDEL as a basis for its Periodic Review of Dental Specialty Education and Practice that was reported to the 2011 House of Delegates. Although CDEL unanimously agreed that all the currently recognized dental specialties meet the spirit of these criteria, Council members did voice concern that Requirement 1(a), in particular, is vague and difficult to apply in a consistent manner across all specialties. This opinion was shared in extensive correspondence from the Eighth Trustee District, which subsequently offered Resolution 48 to the House of Delegates as a potential solution. The ADA Board of Trustees agreed with the Eighth Trustee District and unanimously recommended approval of substitute Resolution 48B that was adopted by the House of Delegates as Resolution 48H-2011:

48H-2011. Resolved, that the Council on Dental Education and Licensure (CDEL) review the criteria and process for the recognition of specialty sponsoring organizations, and be it further

Resolved, that this review consider Requirement 1(a) in the Requirements for Recognition of Dental Specialties and National Certifying Boards for Dental Specialists which states that a recognized specialty sponsoring organization's membership should be reflective of the special area of dental practice (as defined by the ADA Code of Ethics, Section 55.H., General Standards, for announcing specialization or limitation of practice), and be it further

Resolved, that CDEL consider interpreting “reflective” to mean that only specialist dentist members be able to vote and to hold office, and be it further

Resolved, that any additional recommendations for change be reported to the 2012 House of Delegates.
As directed, CDEL has carefully deliberated on this issue and considered the recommendation of its Committee on Recognition of Specialty Groups and Interest Areas in General Dentistry. CDEL also has considered the input received by the two specialty groups that responded to its call for comment.

CDEL offers the following rationale for its recommendation:

- The recognized specialties of dentistry are a vital part of the profession and must be maintained at the highest standards.
- A dentist who represents himself/herself as a specialist must adhere to a set of rigorous ethical standards contained in the *ADA Principles of Ethics and Code of Professional Conduct*.
- Those standards dictate that—at a minimum—a dental specialist must be a dentist who has completed the requisite education and training in that specialty.
- Consequently, the organization that sponsors a dental specialty must be controlled by dentists who have at least that same level of education and training.
- The Council also places great weight on the sense of the House of Delegates and the Board of Trustees as elucidated in Resolution 48H-2011.
- The Council strongly supports the right of any specialty sponsoring organization to maintain one or more affiliate membership categories that foster its ability for cross-discipline collaboration—provided that such membership categories do not include the privilege to vote or hold office in the specialty sponsoring organization.

Thus, the Council on Dental Education and Licensure recommends that the following resolution be adopted by the 2012 House of Delegates.

**Resolution**

17. **Resolved**, that Requirement (1) of the Requirements for Recognition of Dental Specialties be revised as follows (additions are underscored; deletions are stricken):

(1) In order for an area to become and/or remain recognized as a dental specialty, it must be represented by a sponsoring organization: (a) whose membership is reflective of the special area of that proposed or recognized dental specialty practice; (b) in which the privileges to vote and hold office are reserved for dentists who have either completed a CODA-accredited residency program in that proposed or recognized specialty or a formal advanced education program as defined in Requirement (6); and (bc) that demonstrates the ability to establish a certifying board.

and be it further

Resolved, that the introductory paragraph of the Requirements for Recognition of National Certifying Boards for Dental Specialists be revised as follows (additions are underlined; deletions are stricken):

In order to become, and remain, eligible for recognition by the American Dental Association as a national certifying board for a special area of practice dental specialty, the area specialty shall have a sponsoring or parent organization whose membership is reflective of the recognized special area of dental practice that meets all the elements of Requirement (1) of the Requirements for Recognition of Dental Specialties. A close working relationship shall be maintained between the parent organization and the board. Additionally, the following requirements must be fulfilled.

and be it further

Resolved, that requirement (2) in the section on Organization of Boards be revised as follows (additions are underscored; deletions are stricken):
(2) Each board shall submit in writing to the Council on Dental Education and Licensure a program sufficiently comprehensive in scope to meet the requirements established by the American Dental Association for the operation of a certifying board. This statement should include evidence of sponsorship of the board by a national organization representing dental practitioners interested in that special area of practice that meets all the elements of Requirement (1) of the Requirements for Recognition of Dental Specialties.

and be it further

Resolved, that the sponsoring organizations representing the currently recognized dental specialties be given until July 1, 2015, to demonstrate compliance with this revised requirement, and be it further

Resolved, that the Council on Dental Education and Licensure develop and implement a procedure to certify compliance by each sponsoring organization representing a currently recognized dental specialty and report its findings to the 2015 House of Delegates.

BOARD RECOMMENDATION: Vote Yes.

Board Vote: Resolution 17

| BLANTON  | Yes | GOUNARDES  | Yes | NORMAN  | Yes | SUMMERHAYS  | Yes |
| DOW      | Yes | HAGENBRUCH | Yes | RICH    | No  | VIGNA       | Yes |
| ENGEL    | Yes | ISRAELSON  | Yes | ROBERTS | Yes | WEBER       | Yes |
| FAIELLA  | Yes | KIESLING   | Yes | SEAGO   | Yes | VERSMAN     | Yes |
| FEINBERG | Yes | LOW        | Yes | STEFFEL | Yes | YONEMOTO    | Yes |

File 03 Resolution 17
WORKSHEET ADDENDUM

COUNCIL ON DENTAL EDUCATION AND LICENSURE

POLICY TO BE AMENDED

Requirements for Recognition of Dental Specialties and
National Certifying Boards for Dental Specialists

Adopted as Amended by the ADA House of Delegates, October 2009

Introduction

A specialty is an area of dentistry that has been formally recognized by the American Dental Association as meeting the "Requirements for Recognition of Dental Specialists" specified in this document. Dental specialties are recognized by the Association to protect the public, nurture the art and science of dentistry, and improve the quality of care. It is the Association's belief that the needs of the public are best served if the profession is oriented primarily to general practice. Specialties are recognized in those areas where advanced knowledge and skills are essential to maintain or restore oral health.*

Not all areas in dentistry will satisfy the requirements for specialty recognition. However, the public and profession benefit substantially when non-specialty groups develop and advance areas of interest through education, practice and research. The contributions of such groups are acknowledged by the profession and their endeavors are encouraged.

The sponsoring organization must submit to the Council on Dental Education and Licensure a formal application which demonstrates compliance with all the requirements for specialty recognition. The Council will submit its recommendation for approval or denial of the proposed specialty to the Association's House of Delegates.

Following approval by the House of Delegates, the sponsoring organization must establish a national board for certifying diplomates in accordance with the "Requirements for National Certifying Boards for Dental Specialists" as specified in this document. Additionally, the Commission on Dental Accreditation develops educational requirements and establishes an accreditation program for advanced educational programs in the specialty. The Council on Dental Education and Licensure and the sponsoring organization monitors the administrative standards and operation of the certifying board.

* Association policies regarding ethical announcement of specialization and limitation of practice are contained in the ADA Principles of Ethics and Code of Professional Conduct.
Requirements for Recognition of Dental Specialties

A sponsoring organization seeking specialty recognition for an area must document that the discipline satisfies all the requirements specified in this section.

(1) In order for an area to be recognized as a specialty, it must be represented by a sponsoring organization: (a) whose membership is reflective of the special area of dental practice; and (b) that demonstrates the ability to establish a certifying board.

(2) A proposed specialty must be a distinct and well-defined field which requires unique knowledge and skills beyond those commonly possessed by dental school graduates as defined by the predoctoral accreditation standards. *

(3) The scope of the proposed specialty requires advanced knowledge and skills that: (a) are separate and distinct from any recognized dental specialty or combination of recognized dental specialties; and (b) cannot be accommodated through minimal modification of a recognized dental specialty or combination of recognized dental specialties.

(4) The specialty applicant must document scientifically, by valid and reliable statistical evidence/studies, that it: (a) actively contributes to new knowledge in the field; (b) actively contributes to professional education; (c) actively contributes to research needs of the profession; and (d) provides oral health services for the public; all of which are currently not being met by general practitioners or dental specialists.

(5) A proposed specialty must directly benefit some aspect of clinical patient care.

(6) Formal advanced education programs of at least two years beyond the predoctoral dental curriculum as defined by the Commission on Dental Accreditation must exist to provide the special knowledge and skills required for practice of the proposed specialty.

* Predoctoral accreditation standards are contained in the Commission on Dental Accreditation’s document Accreditation Standards for Dental Education Programs.
Requirements for Recognition of National Certifying Boards for Dental Specialists

In order to become, and remain, eligible for recognition by the American Dental Association as a national certifying board for a special area of practice, the area shall have a sponsoring or parent organization whose membership is reflective of the recognized special area of dental practice. A close working relationship shall be maintained between the parent organization and the board. Additionally, the following requirements must be fulfilled.

Organization of Boards:

(1) Each Board shall have no less than five or more than 12 voting directors designated on a rotation basis in accordance with a method approved by the Council on Dental Education and Licensure. Although the Council does not prescribe a single method for selecting directors of boards, members may not serve for more than a total of nine years. Membership on the board shall be in accordance with a prescribed method endorsed by the sponsoring organization. All board directors shall be diplomates of that board and only the parent organizations of boards may establish additional qualifications if they so desire.

(2) Each board shall submit in writing to the Council on Dental Education and Licensure a program sufficiently comprehensive in scope to meet the requirements established by the American Dental Association for the operation of a certifying board. This statement should include evidence of sponsorship of the board by a national organization representing dental practitioners interested in that special area of practice.

(3) Each board shall submit to the Council on Dental Education and Licensure evidence of adequate financial support to conduct its program of certification.

(4) Each board may select suitable consultants or agencies to assist in its operations, such as the preparation and administration of examinations and the evaluation of records and examinations of candidates. Consultants who participate in clinical examinations should be diplomates.

Operation of Boards:

(1) Each board shall certify qualified dentists as diplomates only in the special area of dental practice approved by the American Dental Association for such certification. No more than one board shall be recognized by the Association for the certification of diplomates in a single area of practice.

(2) Each board, except by waiver of the Council on Dental Education and Licensure, shall give at least one examination in each calendar year and shall announce such examination at least six months in advance.

(3) Each board shall maintain a current list of its diplomates.

(4) Each board shall submit annually to the Council on Dental Education and Licensure data relative to its financial operations, applicant admission and examination procedures, and results thereof. A diplomate may, upon request, obtain a copy of the annual financial report of the board.

(5) Each board shall encourage its diplomates engage in lifelong learning and continuous quality improvement.

(6) Each board shall provide periodically to the Council on Dental Education and Licensure evidence of its examination and certification of a significant number of additional dentists in order to warrant its continuing approval by the American Dental Association.
(7) Each board shall bear full responsibility for the conduct of its program, the evaluation of the qualifications and competence of those it certifies as diplomates, and the issuance of certificates.

(8) Each board shall require an annual registration fee from each of its diplomates intended to assist in supporting financially the continued program of the board.

Certification Requirements:

(1) Each board shall use, in the evaluation of its candidates, standards of education and experience approved by the Commission on Dental Accreditation.

(2) Each board shall require, for eligibility for certification as a diplomate, the successful completion of an educational program accredited by the Commission on Dental Accreditation of two or more academic years in length, as specified by the Commission.*

Although desirable, the period of advanced study need not be continuous, nor completed within successive calendar years. An advanced educational program equivalent to two academic years in length, successfully completed on a part-time basis over an extended period of time as a graduated sequence of educational experience not exceeding four calendar years, may be considered acceptable in satisfying this requirement. Short continuation and refresher courses and teaching experience in specialty departments in dental schools will not be accepted in meeting any portion of this requirement.

Each board may establish an exception to the qualification requirement of completion of an advanced specialty education program accredited by the Commission on Dental Accreditation for the unique candidate who has not met this requirement per se, but can demonstrate to the satisfaction of the certifying board, equivalent advanced specialty education. A certifying board must petition the Council on Dental Education and Licensure for permission to establish such a policy. If granted, the provisions of the certifying board’s policy shall be reported to the House of Delegates in the Annual Report of the Council on Dental Education and Licensure.

*The following interpretation for educational eligibility was provided by the 1975 House of Delegates of the American Dental Association (Trans.1975: 690).

Candidates for board certification who graduated after January 1, 1967, must have successfully completed an accredited advanced specialty program. Candidates for board certification who completed the prescribed length of education for board certification in a program of an institution then listed by the Council on Dental Education and Licensure prior to 1967, and who have announced ethically limitation of practice in one of the recognized dental specialties, are considered educationally qualified.

(3) Each board shall establish its minimum requirements for years of practice in the area for which it grants certificates. The years of advanced education in this area may be accepted toward fulfillment of this requirement.

(4) Each board, in cooperation with its parent organization, shall prepare and publicize its recommendations on the educational program and experience requirements which candidates will be expected to meet.
1 **Founding Boards and Waivers:** Members of a founding board in an area of practice not recognized
2 previously by the American Dental Association shall be exempt from certifying examination. Newly recognized
3 boards may petition the Council on Dental Education and Licensure for permission to waive the formal
4 education requirements for candidates who apply for examination. If granted, the provisions of the waiver
5 shall be reported to the House of Delegates in the Annual Report of the Council on Dental Education and
6 Licensure.
Policies to be Maintained as Recommended by the Council on Dental Education and Licensure

**Background:** (Reports: 74)

The Council on Dental Education and Licensure concluded that the following ADA policies should be maintained. The full text of each policy is appended.

**Resolution**

18. Resolved, that the following policies be maintained:

- ADA Policy Statement: The Use of Sedation and General Anesthesia by Dentists (*Trans.* 2007:384)
- Definition of Curriculum Integrated Format (*Trans.* 2007:389)
- Definition of Continuing Competency (*Trans.* 1999:939)
- Policy on Licensure of Dental Assistants (*Trans.* 2000:474)
- Dental Practice by Unqualified Persons (*Trans.* 1959:207)
- Acceptance of Formal Continuing Medical Education Courses Offered by ACCME Accredited CE Providers (*Trans.* 2010:576)
- Policy Statement on Lifelong Learning (*Trans.* 2000:467)
- Lifelong Continuing Education (*Trans.* 1999:941)
- Cardiopulmonary Resuscitation Instruction (*Trans.* 1976:860)
- Promotion of Continuing Dental Education (*Trans.* 1968:257)

**Board Recommendation:** Vote Yes.

**Board Vote:** UNANIMOUS. (Board of Trustees Consent Calendar Action—No Board Discussion)
American Dental Association Policy Statement: The Use of Sedation and General Anesthesia by Dentists (Trans.2007:384)

Introduction
The administration of sedation and general anesthesia has been an integral part of dental practice since the 1840s. Dentists have a legacy and a continuing interest and expertise in providing anesthetic and sedative care to their patients. It was the introduction of nitrous oxide by Horace Wells, a Hartford, Connecticut dentist, and the demonstration of anesthetic properties of ether by William Morton, Wells’ student, that gave the gift of anesthesia to medicine and dentistry. Dentistry has continued to build upon this foundation and has been instrumental in developing safe and effective sedative and anesthetic techniques that have enabled millions of people to access dental care. Without these modalities, many patient populations such as young children, physically and mentally challenged individuals and many other dental patients could not access the comprehensive care that relieves pain and restores form and function. The use of sedation and anesthesia by appropriately trained dentists in the dental office continues to have a remarkable record of safety. It is very important to understand that anxiety, cooperation and pain can be addressed by both psychological and pharmacological techniques and local anesthetics, which are the foundation of pain control in dentistry. Sedation may diminish fear and anxiety, but do not obliterate the pain response and therefore, expertise and in-depth knowledge of local anesthetic techniques and pharmacology is necessary. General anesthesia, by definition, produces an unconscious state totally obtunding the pain response.

Anxiety and pain can be modified by both psychological and pharmacological techniques. In some instances, psychological approaches are sufficient. However, in many instances, pharmacological approaches are required.

Local anesthetics are used to control regional pain. Sedative drugs and techniques may control fear and anxiety, but do not by themselves fully control pain, and thus, are commonly used in conjunction with local anesthetics. General anesthesia provides complete relief from both anxiety and pain.

This policy statement addresses the use of minimal, moderate and deep sedation and general anesthesia, as defined in the Association’s Guidelines for the Use of Sedation and General Anesthesia by Dentists. These terms refer to the effects upon the central nervous system and are not dependent upon the route of administration.

The use of sedation and general anesthesia in dentistry is safe and effective when properly administered by trained individuals. The American Dental Association strongly supports the right of appropriately trained dentists to use these modalities in the treatment of dental patients and is committed to their safe and effective use.

Education
Training to competency in minimal and moderate sedation techniques may be acquired at the predoctoral, postgraduate, graduate, or continuing education level. Dentists who wish to utilize minimal or moderate sedation are expected to successfully complete formal training which is structured in accordance with the Association’s Guidelines for Teaching Pain Control and Sedation for to Dentists and Dental Students. The knowledge and skills required for the administration of deep sedation and general anesthesia are beyond the scope of predoctoral and continuing education. Only dentists who have completed an advanced education program accredited by the Commission on Dental Accreditation
(CODA) that provides training in deep sedation and general anesthesia are considered educationally qualified to use these modalities in practice.  

The dental profession’s continued ability to control anxiety and pain effectively is dependent on a strong educational foundation in the discipline. The Association supports efforts to expand the availability of courses and programs at the predoctoral, advanced and continuing educational levels that are structured in accordance with its Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students. The ADA urges dental practitioners to regularly participate in continuing education in the areas of sedation and anesthesia.

Safe Practice

Dentists administering sedation and anesthesia should be familiar with the ADA Guidelines for the Use of Sedation and General Anesthesia by Dentists. Dentists who are qualified to utilize sedation and general anesthesia have a responsibility to minimize risk to patients undergoing dental treatment by:

- Using only those drugs and techniques in which they have been appropriately trained;
- Limiting use of these modalities to patients who require them;
- Conducting a preoperative evaluation of each patient consisting of at least a thorough review of medical and dental history, a focused clinical examination and consultation, when indicated, with appropriate medical and dental personnel;
- Conducting physiologic and visual monitoring of the patient;
- Having available appropriate emergency drugs, equipment and facilities and maintaining competency in their use;
- Maintaining fully documented records of drugs used, dosage, vital signs monitored, adverse reactions, recovery from the anesthetic, and, if applicable, emergency procedures employed;
- Utilizing sufficient support personnel who are properly trained for the functions they are assigned to perform;
- Treating high-risk patients in a setting equipped to provide for their care.

The Association expects that patient safety will be the foremost consideration of dentists who use sedation and general anesthesia.

State Regulation

Appropriate permitting of dentists utilizing moderate sedation, deep sedation and general anesthesia is highly recommended. State dental boards have the responsibility to ensure that only qualified dentists use sedation and general anesthesia. State boards set acceptable standards for safe and appropriate delivery of sedation and anesthesia care, as outlined in this policy and in the ADA Guidelines for the Use of Sedation and General Anesthesia by Dentists.

The Association recognizes that office-based, ambulatory sedation and anesthesia play an integral role in the management of anxiety and pain control for dental patients. It is in the best interest of the public and the profession that access to these cost-effective services be widely available.

Research

The use of minimal, moderate and deep sedation and general anesthesia in dentistry will be significantly affected by research findings and advances in these areas. The Association strongly supports the expansion of both basic and clinical research in anxiety and pain control. It urges institutions and agencies that fund and sponsor research to place a high priority on this type of research, which should include: 1) epidemiological studies that provide data on the number of these procedures performed and on morbidity and mortality rates, 2) clinical studies of drug safety and efficacy, 3) basic research on the

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1 Until the CODA accreditation cycles for those advanced education programs in deep sedation and general anesthesia are completed, the 2005 ADA Guidelines for Teaching remain in effect.
development of safer and more effective drugs and techniques, 4) studies on improving patient
monitoring, and 5) research on behavioral and other non-pharmacological approaches to anxiety and pain
control.

Definition of Curriculum Integrated Format (Trans.2007:389)

Resolved, that the American Dental Association adopt the following definition:

Curriculum Integrated Format: An initial clinical licensure process that provides candidates an
opportunity to successfully complete an independent “third party” clinical assessment prior to
graduation from a dental education program accredited by the ADA Commission on Dental
Accreditation.

If such a process includes patient care as part of the assessment, it should be performed by
candidates on patients of record, whenever possible, within an appropriately sequenced treatment
plan. The competencies assessed by the clinical examining agency should be selected components
of current dental education program curricula.

All portions of this assessment are available at multiple times within each institution during dental
school to ensure that patient care is accomplished within an appropriate treatment plan and to allow
candidates to remediate and retake any portions of the assessment which they have not successfully
completed.

Definition of Continuing Competency (Trans.1999:939)

Resolved, that the following definition of continuing competency be adopted.

Continuing competency: The continuance of the appropriate knowledge and skills by the dentist in
order to maintain and improve the oral health care of his or her patients in accordance with the ethical
principles of dentistry.


The following policies of the American Dental Association were adopted with the knowledge,
understanding and agreement that they are guidelines for each individual state and are to be
implemented at the discretion of each constituent society and state board of dental examiners. The
American Dental Association recommends:

1. that the state board of dentistry in each state should be the sole licensing and regulating authority
for all dental personnel, including dental specialists;
2. that each state continue to require of all candidates for licensure satisfactory performance on the
National Board Dental Examinations, Parts I and II;
3. that each state accepts satisfactory performance on National Board examinations as a
requirement of satisfactory performance on a written examination for licensure;
4. that each state continue to require of all candidates for initial licensure satisfactory performance
on an individual state or regional clinical examination, or successful completion of a postgraduate
program in general dentistry that contains competency assessments or in an ADA recognized
dental specialty at least one year in length that is accredited by the ADA Commission on Dental
Accreditation.
5. that each state consider active participation in regional clinical examinations;
6. that each state consider requiring dentists to maintain records to show evidence of continuing
education as a condition for re-registration of their licenses;
7. that states consider including in their practice acts provisions to require for licensure maintenance, proof of remedial study for those dentists identified through properly constituted peer review mechanisms as being deficient; and
8. that state dental associations, state boards of dentistry and dental schools work in close cooperation to provide supplemental education opportunities for those dentists who lack clinical proficiency but are otherwise eligible for a dental license.

Policy on Licensure of Dental Assistants (Trans.2000:474)
Resolved, that it is the policy of the American Dental Association that licensure of dental assistants is not warranted.

Dental Practice by Unqualified Persons (Trans.1959:207)
Resolved, that the efforts of untrained and unqualified persons to gain a limited or unqualified right to serve the public directly in the field of dental practice be opposed as detrimental to the health, safety and welfare of the public.

Acceptance of Formal Continuing Medical Education Courses Offered by ACCME Accredited CE Providers (Trans.2010:576)
Resolved, that the American Dental Association urges state boards of dentistry to accept for licensure renewal purposes dentists’ participation in formal continuing medical education courses offered by continuing education providers accredited by the Accreditation Council for Continuing Medical Education (ACCME).

Definition of Continuing Dental Education: Continuing dental education consists of educational activities designed to review existing concepts and techniques, to convey information beyond the basic dental education and to update knowledge on advances in scientific, clinical, and non-clinical related subject matter, including evidence-based dentistry and ethics. The objective is to improve the knowledge, skills and ability of the individual to provide the highest quality of service to the public and the profession. All continuing dental education should strengthen the habits of critical inquiry, balanced judgment and ethics that denote the truly professional and scientific person and should make it possible for new knowledge to be incorporated into the practice of dentistry as it becomes available.

Continuing education programs are designed for part-time enrollment and are usually of short duration, although longer programs with structured, sequential curricula may also be included within this definition. In contrast to accredited advanced dental education programs, continuing dental education programs do not lead to eligibility for ethical announcements or certification in a specialty recognized by the American Dental Association. Continuing dental education should be a part of a lifelong continuum of learning.

Acceptable Subject Matter: In order for specific course subject material to be acceptable for credit, the stated course objectives, overall curriculum design or topical outlines should be clearly stated. The information presented should enable the dental professional to enhance the dental health of the public, either directly or through improved effectiveness of operations in dental practice, or through expansion of present knowledge through research. The dental professional should be able to apply the knowledge gained within his or her professional capacity.

Acceptable Activities: Continuing education activities are conducted in a wide variety of forms using many methods and techniques which are sponsored by a diverse group of institutions and organizations. State boards and/or legislatures may specify acceptable activities or content. The Association urges the
state boards to allow maximum flexibility for an individual to choose content and learning activities based on individual preferences, needs, interests and resources. Additionally, clinical credit should be awarded for all activities related to the delivery of dental procedures including those with ethical components and self-study activities.

Acceptable forms might include but are not limited to:

- Attendance at and/or delivery of a formal continuing education course (a didactic and/or participatory presentation to review or update knowledge of new or existing concepts and techniques)
- General attendance at a multi-day convention type meeting (a meeting held at the national, state or regional level which involves a variety of concurrent educational experiences)
- Authorship of publications (e.g., a book, a chapter of a book or an article or paper published in a professional journal)
- Completion of self-study activities such as online courses and research, webinars, journal articles and downloadable books (individualized course of study which is structured and organized, but is available on an unscheduled and unsupervised basis; a method of providing feedback to the learner on performance or comprehension must be incorporated into the self-study activity)
- Enrollment in a preceptor program (an independent course of study with a formally structured, preplanned and prescheduled curriculum where the participant observes and provides patient treatment using criteria and guidelines provided by the instructors; this type of study does not lead to an academic degree)
- Academic service (e.g., instruction, administration or research related to undergraduate, postgraduate or graduate dental or allied dental training programs)
- Presenting posters or table clinic
- Participation on a state dental board, a board complaint investigation, peer review or quality care review procedures
- Successful completion of part ii of the national board dental examination, a recognized dental specialty examination or the national board dental hygiene examination if taken after initial licensure
- Test development for written and clinical dental, dental hygiene and dental specialty examinations
- Volunteering pro bono dental services or community oral health activities through instruction at a public health facility
- Participation in dental research as a principal investigator or research assistant

Policy Statement on Lifelong Learning (Trans.2000:467)

The Association advocates lifelong learning to enhance and update the knowledge base of dentists, to stimulate ongoing professional growth and development and to improve professional skills. Dentists have a responsibility to pursue lifelong learning throughout their professional careers. The Association recognizes that its members represent a broad community of interest and possess highly diverse learning styles that can be accommodated by a variety of educational methods. Members are encouraged to identify individual needs and develop and implement a plan to meet these needs. This plan may include, but not be limited to, staying current with professional literature, seeking current information applicable to one’s practice, and participating in formal continuing dental education activities. The increasing pace of change in technology and skills necessary to practice dentistry necessitates the continuous deliberate acquisition of knowledge and skills to provide the highest quality of oral health care. A professional should address a broad spectrum of topics to update his or her knowledge and skills in all appropriate areas of the profession.

The Association is committed to serving as a supportive resource to facilitate the lifelong learning process and to assist members in identifying appropriate sources and mechanisms for meeting this responsibility for the benefit of the public and the profession.
Lifelong Continuing Education (Trans.1999:941)

Resolved, that the American Dental Association supports lifelong continuing education of its members and encourages various methods of demonstrating continuing competency through the oversight of dental practitioners by state boards of dentistry and peer review, and be it further

Resolved, that the Association discourages methods such as mandated periodic in-office audits and/or comprehensive written examinations as a means of measuring or assessing the continuing competency of dentists or as a requirement for license renewal, and be it further

Resolved, that the Association encourages the investigation of new methods of supporting continuing competency of its members, and be it further

Resolved, that the American Dental Association promote and defend this policy in any and all discussions concerning the issue of competency.

Cardiopulmonary Resuscitation Instruction (Trans.1976:860)

Resolved, that constituent and component societies be encouraged to make regularly available to their members and their auxiliary personnel continuing education in cardiopulmonary resuscitation.

Promotion of Continuing Education (Trans.1968:257)

Resolved, that constituent dental societies, in consultation with state boards of dentistry, are urged to develop mechanisms to foster the continued education of dentists licensed in their jurisdiction.
**Resolution 19**

Dental Education, Science and Related Matters

Resolution No. 19

Report: N/A

Date Submitted: July 2012

Submitted By: Council on Dental Education and Licensure

Reference Committee: Dental Education, Science and Related Matters

Total Net Financial Implication: None

Net Dues Impact: None

Amount One-time None Amount On-going None FTE 0

ADA Strategic Plan Goal: Members (Required)

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**RESCSSION OF THE POLICY, COMMUNICATION BETWEEN STATE BOARDS OF DENTISTRY**

**Background:** (Reports:74)

The Council on Dental Education and Licensure reviewed the policy “Communication Between State Boards of Dentistry” (Trans.1989:527) and recommends rescission because it is unnecessary. State boards communicate well through the American Association of Dental Boards and have access to the AADB Clearinghouse for Board Actions. The full text of the policy is included in Appendix 4 of the CDEL annual report.

**Resolution**


**BOARD RECOMMENDATION:** Vote Yes.

**Board Vote: Resolution 19**

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File 05 Resolution 19
Communication Between State Boards of Dentistry (*Trans.*1989:527)

Resolved, that the ADA urge state boards of dentistry to work towards a more effective communication among themselves, and be it further

Resolved, that disciplinary action including, but not limited to, consent orders, agreed orders, consent agreements and stipulations of a dental board should be accessible to any dental board that makes a formal inquiry when it considers the credentials of an applicant for licensure.
Resolution No. 20

Report: N/A

Date Submitted: July 2012

Submitted By: Council on Dental Education and Licensure

Reference Committee: Dental Education, Science and Related Matters

Total Net Financial Implication: None

Net Dues Impact: Amount One-time Amount On-going FTE 0

ADA Strategic Plan Goal: Members (Required)

AMENDMENT OF THE POLICY, MONITORING CLINICAL DENTAL LICENSURE EXAMINATIONS

Background: (Reports: 74)

The Council on Dental Education and Licensure believes that the policy “Monitoring Clinical Dental Licensure Examinations” should be amended to strengthen it as ADA policy rather than as a directive to another agency and to provide clarification on the ADA’s position on the issue. The Board supports Resolution 20 with the minor editorial change presented in Resolution 20B, removing the term “valid,” so as not to be redundant.

Resolution

20. Resolved, that the ADA policy “Monitoring Clinical Dental Licensure Examinations” (Trans. 2005:333) be amended in the second resolving clause as follows (additions are underscored; deletions are stricken):

Resolved, that the ADA encourage the clinical testing agencies to supports the use of good testing practices in the development, administration and scoring of their licensing examinations that produce results which are reliable, valid and with the highest validity possible.

so the amended policy reads:

Monitoring Clinical Dental Licensure Examinations

Resolved, that the appropriate agency of the ADA continue to monitor activities of the clinical testing agencies and report annually to the House of Delegates on its findings, and be it further

Resolved, that the ADA supports the use of testing practices in the development, administration and scoring of licensing examinations that produce results which are reliable, valid and with the highest validity possible.

BOARD COMMENT: The Board proposed the following substitute resolution.

20B. Resolved, that the ADA policy “Monitoring Clinical Dental Licensure Examinations” (Trans. 2005:333) be amended in the second resolving clause as follows (additions are underscored; deletions are stricken):

Resolved, that the ADA encourage the clinical testing agencies to supports the use of good testing practices in the development, administration and scoring of their licensing examinations that produce results which are reliable and with the highest validity possible.
so the amended policy reads:

Monitorings Clinical Dental Licensure Examinations

Resolved, that the appropriate agency of the ADA continue to monitor activities of the clinical testing agencies and report annually to the House of Delegates on its findings, and be it further

Resolved, that the ADA supports the use of testing practices in the development, administration and scoring of licensing examinations that produce results which are reliable and with the highest validity possible.

BOARD RECOMMENDATION: Vote Yes on the Substitute.

BOARD VOTE: UNANIMOUS.
Resolution No. 21

Report: N/A Date Submitted: July 2012

Submitted By: Council on Dental Education and Licensure

Reference Committee: Dental Education, Science and Related Matters

Total Net Financial Implication: None Net Dues Impact: None

ADA Strategic Plan Goal: Members (Required)

AMENDMENT OF THE POLICY, CLINICAL LICENSURE EXAMINATIONS IN DENTAL SCHOOLS

Background: (Reports:75)

The Council on Dental Education and Licensure believes that the policy “Clinical Licensure Examinations in Dental Schools” should be amended to make it consistent with the ADA policy “Definition of Integrated Format” (Trans.2007:389) and to delete the reference to Resolution 89H-2001 which was rescinded in 2003.

Resolution

21. Resolved, that the ADA policy “Clinical Licensure Examinations in Dental Schools” (Trans.2003:368) be amended as follows:

- In the first resolving clause, after the word “schools” delete the words “to senior dental students” and insert the words “using a curriculum integrated format.”

- In the second resolving clause, after the word “given” delete the words “early enough in the senior year to allow those who do not pass the board examinations to be remediated in time for a second examination to be given prior to graduation” and insert the words “frequently enough within each institution to allow candidates to remediate and retake any portions of the examination that they have not completed successfully.”

- Delete the words “and be it further” in the second resolving clause and the entire third resolving clause as the 2003 House of Delegates’ action rescinded Resolution 89H-2001.

so the amended policy “Clinical Licensure Examinations in Dental Schools” reads (additions are underscored; deletions are stricken):

Clinical Licensure Examinations in Dental Schools

Resolved, that the Association encourages all dental licensing agencies to collaborate with dental educators to offer a clinical licensing examination on patients within dental schools to senior dental students using a curriculum integrated format, and be it further

Resolved, that these examinations be given early enough in the senior year to allow those who do not pass the board examinations to be remediated in time for a second examination to be given prior to graduation, frequently enough within each institution to allow candidates to remediate and retake any portions of the examination that they have not completed successfully, and be it further
Resolved, that Resolution 89H-2001 (Trans. 2001:411) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
AMENDMENT OF THE POLICY, STATE BOARD SUPPORT FOR CDA AS RESPONSIBLE TO 
EVALUATE DENTAL EDUCATION PROGRAMS

Background: (Reports: 75)

The Council on Dental Education and Licensure believes that the policy “State Board Support for CDA as Responsible to Evaluate Dental Education Programs” should be amended to more accurately reflect current terminology and the role of CODA.

Resolution

22. Resolved, that the ADA policy “State Board Support for CDA as Responsible to Evaluate Dental Education Programs” (Trans.2003:367) be amended as follows (additions are underscored; deletions are stricken):

State Board Support for CDA CODA as Responsible to Evaluate Accredit Dental Education Programs

Resolved, that the Association urge state boards of dentistry to continue to support the role of the Commission on Dental Accreditation as the agency responsible for the evaluation accreditation of dental education programs.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
Resolution 23

Dental Education, Science and Related Matters

Resolution No. 23
Report: N/A
Date Submitted: July 2012
Submitted By: Council on Dental Education and Licensure
Reference Committee: Dental Education, Science and Related Matters
Total Net Financial Implication: None
Net Dues Impact: AMOUNT ONE-TIME
Amount On-going
FTE

ADA Strategic Plan Goal: Members (Required)

AMENDMENT OF THE POLICY ON ONE STANDARD OF COMPETENCY: STATE BOARDS REVIEW LIMITED LICENSURE GRADUATES OF NONACCRREDITED DENTAL SCHOOLS FOR PROVIDING ACCESS TO CARE FOR UNDERSERVED POPULATIONS

Background: (Reports: 76)
The Council on Dental Education and Licensure believes that the "Policy on One Standard of Competency: State Boards Review Limited Licensure Graduates of Nonaccredited Dental Schools for Providing Access to Care for Underserved Populations" should be amended to give the policy broader applicability and to strengthen it as ADA policy rather than House directives to other agencies.

Resolution

23. Resolved, that the ADA policy, "Policy on One Standard of Competency: State Boards Review Limited Licensure Graduates of Nonaccredited Dental Schools for Providing Access to Care for Underserved Populations," be amended as follows (additions are underscored; deletions are stricken):

Policy on One Standard of Competency: State Boards Review Limited Licensure Graduates of Nonaccredited Dental Schools for Providing Access to Care for Underserved Populations

Resolved, that it be is the policy of the Association that there is one standard of competency for licensure in order to provide quality oral health care to the public, and be it further
Resolved, that this policy be forwarded with appropriate background information provided from the ADA to state boards of dentistry, requesting them to review the full implications of using limited licensure graduates of non-accredited dental schools as a mechanism for providing access to dental care for underserved populations, and be it further
Resolved, that the constituent societies be urged that when necessary, use this information with their state legislature.

so the amended policy reads:

Policy on One Standard of Competency

Resolved, that it is the policy of the Association that there is one standard of competency for licensure in order to provide quality oral health care to the public.
BOARD RECOMMENDATION: Vote Yes.

Board Vote: Resolution 23

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File 09 Resolution 23
AMENDMENT OF THE POLICY ON DUAL DEGREED DENTISTS

Background: (Reports:76)

The Council on Dental Education and Licensure believes that the ADA “Policy on Dual Degreed Dentists” should be amended to strengthen it as policy rather than be a directive to other agencies.

Resolution

24. Resolved, that the ADA “Policy on Dual Degreed Dentists” (Trans.2003:367) be amended in the first resolving clause by deleting the words “and be it further” and by deleting the second, third and fourth resolving clauses in their entirety, so the amended policy reads as follows (additions are underscored; deletions are stricken):  

Policy on Dual Degreed Dentists

Resolved, that in order to protect the health, welfare and safety of the public, the American Dental Association believes that individuals who possess both a medical degree and a dental degree and elect to practice dentistry should be required to obtain a dental license issued by the jurisdiction in which they practice, and that oversight for their practice of dentistry should fall under the purview of their state dental practice act and their state boards of dentistry, and be it further

Resolved, that constituent dental societies be urged to promote this concept to their respective state boards of dentistry, and be it further

Resolved, that constituent dental societies be urged to promote to their respective state boards of dentistry the guidelines for specialty licensure and specialty licensure by credentials as stated in the ADA policy Guidelines for Licensure (Trans.1976:919; 1977:923; 1989:529; 1992:632; 1999:936; 2002:401), and be it further

Resolved, that the ADA constituent dental societies be urged to support changes in legislation or regulation as may be necessary to accomplish this purpose.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
Resolution No. 25

Report: N/A  Date Submitted: July 2012

Submitted By: Council on Dental Education and Licensure

Reference Committee: Dental Education, Science and Related Matters

Total Net Financial Implication: None

Net Dues Impact: None

Amount One-time  Amount On-going  FTE 0

ADA Strategic Plan Goal: Members (Required)

AMENDMENT OF THE POLICY, ENDORSEMENT OF RECOMMENDATIONS OF THE ADA GUIDELINES FOR LICENSURE BY CREDENTIALS

Background: (Reports:77)

The Council on Dental Education and Licensure believes that the policy “Endorsement of Recommendations of the ADA Guidelines for Licensure by Credentials” (Trans.1992:628, 2009:447) should be amended to more accurately reflect the intent of the statement.

Resolution

25. Resolved, that the ADA policy “Endorsement of Recommendations of the ADA Guidelines for Licensure by Credentials” (Trans.1992:628, 2009:447) be amended in the second resolving clause by deleting the word “endorsement” and inserting the word “use” so the amended policy reads as follows (additions are underscored; deletions are stricken):

Endorsement of Recommendations of the ADA Guidelines for Licensure by Credentials

Resolved, that the ADA actively endorse and urge all dental licensing jurisdictions to utilize the ADA Guidelines for Licensure by Credentials, and be it further

Resolved, that the ADA Council on Dental Education and Licensure monitor the endorsement use of these recommendations by the dental licensing jurisdictions and report annually to the House of Delegates.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

File 11 Resolution 25
Resolution No. 26  

New

Report: N/A  

Date Submitted: July 2012

Submitted By: Council on Dental Education and Licensure

Reference Committee: Dental Education, Science and Related Matters

Total Net Financial Implication: None  

Net Dues Impact: Amount One-time 

Amount On-going 

FTE 0

ADA Strategic Plan Goal: Members (Required)

AMENDMENT OF THE POLICY ON LICENSURE OF GRADUATES OF NONACREDITED DENTAL SCHOOLS

Background: (Reports:77)

The Council on Dental Education and Licensure believes that the “Policy on Licensure of Graduates of Nonaccredited Dental Schools” (Trans.1984:539) should be amended to eliminate language that is no longer current because CODA now has a process for accreditation of international dental programs in place and to reflect correct terminology; CODA accredits dental programs, not schools. Further, it would strengthen this as ADA policy rather than being a directive to another agency.

Resolution

26. Resolved, that the ADA “Policy on Licensure of Graduates of Nonaccredited Dental Schools” be amended as follows (additions are underscored; deletions are stricken):

Policy on Licensure of Graduates of Nonaccredited Dental Schools-Programs

The United States has a long and proud tradition of affording opportunities to immigrants. The American Dental Association fully supports application of this principle in dentistry, but not at the expense of the standards of dental practice in this country. State licensure is a critical element in preserving that standard of practice and for the protection of citizens of the state.

Although licensing provisions vary among U.S. licensing jurisdictions, all jurisdictions have the same three types of requirements: an educational requirement, a written examination requirement and a clinical examination requirement. The traditional educational requirement is graduation from an accredited dental school a dental education program accredited by the Commission on Dental Accreditation (CODA). Only dental schools in the United States and Canada are recognized as accredited. Extending accreditation to schools in other countries is not feasible.

In the absence of accreditation, an educational requirement for dental licensure has limited significance. The Association questions whether written and clinical examinations alone provide sufficient verification of competence to serve the purpose of licensure. Thus, the Association urges jurisdictions to require ADA believes that any graduate of a nonaccredited school program should be required to obtain supplementary education in an accredited school program prior to licensure. The amount of additional training needed by graduates of nonaccredited schools programs may vary. While some flexibility is needed, the licensure process requires well-defined minimum standards. Recommended minimum educational standards for licensure of a graduate of a nonaccredited school program are:
1. Completion of an accredited supplementary predoctoral education program at an accredited dental school. A supplementary education program of at least two academic years is required.

2. Certification by the dean of the accredited dental school that the candidate has achieved the same level of didactic and clinical competence as expected of a graduate of the school program.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
AMENDMENT OF THE POLICY, GUIDELINES FOR LICENSURE

Background: (Reports:78)

The Council on Dental Education and Licensure believes that the “Guidelines for Licensure” (Trans.1976:919, 1977:923, 1989:529, 1992:632, 1999:938, 2000:401, 2003:340) should be amended to reflect current terminology. Further, the Council believes that it would be beneficial for the ADA to have policy in support of volunteer licensure. The ADA supports and encourages volunteerism by members and the Principles of Ethics and Code of Professional Conduct reminds members of the obligation to help those who may not have access to care. Rather than a stand-alone policy, the Committee believes a new section should be incorporated at the end of the existing policy, Guidelines for Licensure.

Resolution


- In the section “Licensure by Credentials, item “a,” delete “school” wherever it appears and replace with “program.” In item “g” change AADE Clearing House for Disciplinary Information to AADB Clearing House for Board Actions.
- In the section addressing “Possible documentation…”.item #1, after the word “accredited” and before the word “general,” insert the words “advanced education program in general dentistry or.” Further, delete the words “or dental internship.”
- Add a new section, “Volunteer Licensure”

so the amended policy reads (additions are underscored; deletions are stricken):

Guidelines for Licensure

Dental licensure is intended to ensure that only qualified individuals provide dental treatment to the public. Among qualifications deemed essential are satisfactory theoretical knowledge of basic biomedical and dental sciences and satisfactory clinical skill. It is essential that each candidate for an initial license be required to demonstrate these attributes on examination, a written examination for theoretical knowledge and a clinical examination for clinical skill. The clinical examination requirement may also be met by successful completion of a postgraduate program in general dentistry that contains competency assessments or in an ADA recognized dental specialty, at least one year in length, which is accredited by the Commission on Dental Accreditation. These guidelines suggest alternate mechanisms for evaluating the theoretical knowledge and clinical skill of an applicant for licensure who holds a dental license in another jurisdiction. Requiring a candidate who is seeking
licensure in several jurisdictions to demonstrate his or her theoretical knowledge and clinical skill on separate examinations for each jurisdiction seems unnecessary duplication.

**Licensure by Examination:** Written examination programs conducted by the Joint Commission on National Dental Examinations have achieved broad recognition by state boards of dentistry. National Board dental examinations are conducted in two parts. Part I covers basic biomedical sciences; Part II covers dental sciences. It is recommended that satisfactory performance on Part II of the National Board dental examinations within five years prior to applying for a state dental license be considered adequate testing of theoretical knowledge. National Board regulations require a candidate to pass Part I before participating in Part II. Consequently, this recommendation excludes Part I only from the time limit.

No clinical examination has achieved as broad recognition as have National Board written examinations. Clinical examinations used for dental licensure are conducted by individual state boards of dentistry and by regional clinical testing services. It is recommended that satisfactory performance within the last five years on any state or regional clinical examination at least equivalent in quality and difficulty to the state’s own clinical examination be considered adequate testing for clinical skill provided that the candidate for licensure:

a. is currently licensed in another jurisdiction.
b. has been in practice since being examined.
c. is endorsed by the state board of dentistry in the state of his or her current practice.
d. has not been the subject to final or pending disciplinary action in any state in which he or she is or has been licensed.
e. has not failed the clinical examination of the state to which he or she is applying within the last three years.

**Licensure by Credentials:** The American Dental Association believes that an evaluation of a practicing dentist’s theoretical knowledge and clinical skill based on his or her performance record can provide as much protection to the public as would an evaluation based on examination. Issuing a license using a performance record in place of examinations is termed licensure by credentials.

All candidates for licensure by credentials are required to fulfill basic education and practice requirements. Further, it is recommended that licensure by credentials be available only to a candidate who:

a. has graduated from a dental school program accredited by the Commission on Dental Accreditation, or has completed a supplementary predoctoral education program of at least two academic years in an accredited dental school program and has been certified by the dean of an accredited dental school as having achieved the same level of didactic and clinical competence as expected of a graduate of the school program, or has completed an educational experience that is recognized by the respective state dental board as equivalent to the above.
b. is currently licensed by a licensing jurisdiction in a state, the District of Columbia, the Commonwealth of Puerto Rico or a dependency of the United States.
c. has been in practice or full-time dental education immediately prior to applying.
d. is endorsed by the state board of dentistry in the state of current practice.
e. has not been the subject of final or pending disciplinary action in any state in which he or she is or has been licensed.
f. has not failed the clinical examination of the state to which he or she is applying within the last three years.
Additional criteria to determine the professional competence of a licensed dentist could include:

- g. Information from the National Practitioner Data Bank and/or the AADE-AADB Clearinghouse for Disciplinary Information Board Actions.
- h. Questioning under oath.
- i. Results of peer review reports from constituent societies and/or federal dental services.
- j. Substance abuse testing/treatment.
- k. Background checks for criminal or fraudulent activities.
- l. Participation in continuing education.
- m. A current certificate in cardiopulmonary resuscitation.
- n. Recent patient case reports and/or oral defense of diagnosis and treatment plans.
- o. No physical or psychological impairment that would adversely affect the ability to deliver quality dental care.
- p. Agreement to initiate practice in the credentialing jurisdiction within a reasonable period of time to ensure that licensure is based on credentials that are current at the time practice is initiated.
- q. Proof of professional liability coverage and that such coverage has not been refused, declined, canceled, nonrenewed or modified.

Alternate ways that current theoretical knowledge might be documented follow. It is recommended that for a candidate who meets eligibility requirements for licensure by credentials, these methods be considered as possible alternatives to the written examination requirement.

1. Successful completion of an accredited advanced dental education program in the last ten years.
2. A total of at least 180 hours of acceptable, formal scientific continuing education in the last ten years, with a maximum credit of 60 hours for each two-year period.
3. Successful completion of a recognized specialty board examination in the last ten years.
4. Teaching experience of at least one day per week or its equivalent in an accredited dental education program for at least six of the last ten years.

Possible documentation for current clinical skill appears in the following list. Provided that eligibility requirements for licensure by credentials are met, it is recommended that these methods be considered as possible alternatives to satisfactory performance on a clinical examination.

1. Successful completion of an accredited advanced education program in general dentistry or general practice residency or dental internship within the last ten years.
2. Successful completion of an accredited dental specialty education program in a clinical discipline within the last ten years.
3. A total of at least 180 hours of acceptable clinically-oriented continuing education in the last ten years, with a maximum credit of 60 hours for each two-year period.
4. Clinical teaching of at least one day per week or its equivalent in an accredited dental education program, including a hospital-based advanced dental education program, for at least six of the last ten years.
5. Presenting case histories of patients treated by the candidate in the last five years, with preoperative and postoperative radiographs, covering procedures required on the state clinical examination, for discussion with the state board.

**Licensure by Credentials for Internationally Trained Dentists:** It is ADA policy that internationally trained dentists, who were licensed by their respective jurisdictions prior to implementation of the requirement of a two-year supplementary education program in an accredited dental school, be granted the same benefits of freedom of movement as any other member of the Association.

**Specialty Licensure:** The American Dental Association urges constituent dental societies and state dental boards to implement specialty licensure by credentials and/or specialty licensure as a top
priority. The Association urges states to consider the following provisions regarding specialty licensure by credentials:

a. All specialists should be required to have passed a state dental board approved general dentistry examination and have an entry-level dental license issued by a state or a U.S. territory before being eligible to be credentialed or to take a specialty examination in another state.

b. Specialists should not be required to pass an additional general dentistry examination when applying for a license to practice the specialty.

c. Specialists who have passed a specialty licensure examination in another state should be granted licensure by credentials without further clinical examination.

d. States should be urged to enact provisions by which a dental specialist licensed in another jurisdiction may be issued a license by credentials to allow the specialist who holds diplomate status from an ADA-recognized dental specialty certifying board or who has completed an advanced specialty education program accredited by the Commission on Dental Accreditation to practice the specific specialty.

e. Specialists who hold diplomate status from an ADA-recognized dental specialty certifying board or who have completed an advanced specialty education program accredited by the Commission on Dental Accreditation and meet all other state requirements for licensure should not be required to take any additional general dentistry examinations.

f. Specialty licensure examinations and criteria for credentialing should be reviewed annually for reliability and validity and updated regularly to protect the public.

Volunteer Licensure: The ADA supports and encourages volunteerism by members. The Principles of Ethics and Code of Professional Conduct require members to recognize the obligation to help those who may not have access to care. A limited or volunteer license by credentials should be available to dentists who wish to provide services to indigent or critical needs populations within a state without compensation. Often, the expense of initial licensure, licensure renewal and liability insurance prevent many dentists from volunteering services. The Association urges states to consider the following provisions regarding limited/volunteer licensure for dentists:

1. Allow dentists to provide services to indigent or critical need populations within a state without compensation.

2. Waive any associated fees for limited or volunteer licenses so long as the dentist continues to provide services without compensation.

3. Grant sovereign immunity for dentists when providing services to indigent or critical need patients without compensation.

4. Require the same standards for education and training as for initial licensure in that jurisdiction.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
AMENDMENT OF THE POSITION STATEMENT ON FEDERAL INTERVENTION IN LICENSURE

Background: (Reports:81)

The Council on Dental Education and Licensure believes that the ADA “Position Statement on Federal Intervention in Licensure” (Trans.1975:187, 718) should be amended to reflect correct terminology.

Resolution

28. Resolved, that the “Position Statement on Federal Intervention in Licensure” (Trans.1975:187, 718) be amended in the section, Influence on the Dental Curriculum, by deleting the word “schools” wherever it appears and inserting in its place the words “education programs,” so the amended section reads (additions are underscored; deletions are stricken):

Influence on the Dental Curriculum: Dental schools education programs have a responsibility to graduate individuals capable of practicing dentistry. Since meeting licensure requirements is a prerequisite to practice, dental schools education programs also prepare students to pass licensure examinations. Consequently, the agency that establishes licensure standards can have an influence over dental curriculums. Under the state licensure system this influence is shared among 53 jurisdictions, and thus moderated. With a single federal agency setting standards, the influence of licensure examinations might become excessive and virtually dictate the content and emphasis for all dental curriculums. This centralization would tend to make a static situation that would inhibit evolution and change. Also, the cooperation that has developed among educators, examiners and the practicing profession at the state level has been effective in dealing with the relationship between licensure requirements and the dental curriculum. The same degree of cooperation could not be expected at the federal level.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
Resolution No. 29  

Report: N/A  Date Submitted: July 2012

Submitted By: Council on Dental Education and Licensure

Reference Committee: Dental Education, Science and Related Matters

Total Net Financial Implication: None  Net Dues Impact: ________

Amount One-time ________ Amount On-going ________ FTE 0

ADA Strategic Plan Goal: Members (Required)

**AMENDMENT OF THE POLICY, ELIMINATING USE OF HUMAN SUBJECTS IN BOARD EXAMINATIONS**

**Background:** (Reports: 81)

The Council on Dental Education and Licensure believes that the policies “Eliminating Use of Human Subjects in Board Examinations” (Trans. 2005:335) and “Use of Human Subject in Clinical Licensure Exams” (Trans. 1996:712) should be combined into one comprehensive policy since they both address the issue of use of patients in clinical examinations. This would eliminate redundancies.

**Eliminating Use of Human Subjects in Board Examinations**

Resolved, that the Association supports the elimination of human subjects/patients in the clinical licensure examination process with the exception of the curriculum integrated format within dental schools, and be it further

Resolved, that the Association encourages all states to adopt methodologies for licensure that are consistent with this policy.

**Use of Human Subject in Clinical Licensure Exams**

Resolved, that the Association supports the concept of dental students providing direct patient care under the direct and indirect supervision of qualified faculty as a method of learning clinical skills and patient care including the ability to deal with the anxiety, fears, reflexes and other emotions of the “human” aspects of dental treatment, and be it further

Resolved, that the House strongly supports the position of the Council on Ethics, Bylaws and Judicial Affairs as stated in the Council’s annual report to the 1993 House of Delegates (Trans. 1993:109) that, although the use of human subjects in licensure examinations raises certain ethical concerns, the practice is not in and of itself unethical, and be it further

Resolved, that the Association urges the clinical testing agencies to adopt policies to ensure that follow-up care is available for patient procedures performed during clinical licensure examinations.

**Resolution**

29. **Resolved**, that the ADA policy “Eliminating Use of Human Subjects in Board Examinations” (Trans. 2005:335) be amended by inserting language from the policy “Use of Human Subject in Clinical Licensure Exams” before the first resolving clause of the policy so the new, comprehensive
policy “Eliminating Use of Human Subjects in Board Examinations” reads: (additions are underscored):

Eliminating Use of Human Subjects in Board Examinations

Resolved, that dental students providing patient care under the direct and/or indirect supervision of qualified faculty is an essential method of learning clinical skills including the ability to manage the anxieties, fears, reflexes and other emotions related to dental treatment, and be it further

Resolved, that although the use of human subjects in licensure examinations raises certain ethical concerns, the practice is not in and of itself unethical as determined by the ADA Council on Ethics, Bylaws and Judicial Affairs (Trans.1993:109), and be it further

Resolved, that the Association supports the elimination of human subjects/patients in the clinical licensure examination process with the exception of the curriculum integrated format within dental schools, and be it further

Resolved, that the Association encourages all states to adopt methodologies for licensure that are consistent with this policy and be it further


BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
Use of Human Subject in Clinical Licensure Exams (*Trans.*1996:712)

Resolved, that the Association supports the concept of dental students providing direct patient care under the direct and indirect supervision of qualified faculty as a method of learning clinical skills and patient care including the ability to deal with the anxiety, fears, reflexes and other emotions of the “human” aspects of dental treatment, and be it further

Resolved, that the House strongly supports the position of the Council on Ethics, Bylaws and Judicial Affairs as stated in the Council’s annual report to the 1993 House of Delegates (*Trans.*1993:109) that, although the use of human subjects in licensure examinations raises certain ethical concerns, the practice is not in and of itself unethical, and be it further

Resolved, that the Association urges the clinical testing agencies to adopt policies to ensure that follow-up care is available for patient procedures performed during clinical licensure examinations.
Resolution No. 30  

Report: N/A  

Date Submitted: July 2012  

Submitted By: Council on Dental Education and Licensure  

Reference Committee: Dental Education, Science and Related Matters  

Total Net Financial Implication: None  

Net Dues Impact:  

Amount One-time  

Amount On-going  

FTE 0  

ADA Strategic Plan Goal: Members (Required)  

1

AMENDMENT OF THE POLICY, ACCEPTANCE OF RESULTS OF REGIONAL BOARDS

Background: (Reports: 82)


Acceptance of Results of Regional Boards

Resolved, that the Association supports efforts to create substantial similarities in the administration, content and scoring of the clinical examinations so as to increase acceptance of results by state boards of any state or regional examination, and be it further

Resolved, that the ADA encourage constituent societies in those states that participate in regional boards to promote to their state’s licensing agency the acceptance, with appropriate review of credentials, of the clinical examination results of each regional board, and thereby facilitate freedom of movement for dental professionals.

Acceptance of Successful Completion of State or Regional Licensure Examinations by State Boards of Dentistry

Resolved, that all constituents of the American Dental Association be urged to submit formal proposals to their respective state dental licensing agencies that would provide for acceptance of successful completion of a licensure examination administered by any recognized individual state or regional testing agency for the purpose of licensure in their state.

Standardization of State Dental Licensure Examinations

Resolved, that the Association, in cooperation with the American Association of Dental Examiners, actively support standardization of dental and dental hygiene licensure clinical examinations by continuing to encourage state boards of dentistry to accept a common core of requirements and guidelines for clinical examinations.

Resolution

30. Resolved, that the ADA policy “Acceptance of Results of Regional Boards” (Trans.1992:630) be amended by incorporating concepts from the language in the policies “Acceptance of Successful
Acceptance of Results of Regional Boards

Resolved, that the Association supports efforts to create substantial similarities in the administration, content and scoring of the dental and dental hygiene clinical examinations by continuing to encourage state boards of dentistry to accept a common core of requirements and guidelines for clinical examinations, so as to increase acceptance of results by state boards of any state or regional examination, and be it further

Resolved, that the ADA encourage constituent societies in those states that participate in regional boards to promote to their state’s licensing agency the acceptance, with appropriate review of credentials, of the clinical examination results of each regional board for the purpose of licensure in their state, and thereby facilitate freedom of movement for dental professionals, and be it further

Resolved, that Resolution 56H-1998 “Acceptance of Successful Completion of State or Regional Licensure Examinations by State Boards of Dentistry” (Trans.1998:725) be rescinded, and be it further


BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
Acceptance of Successful Completion of State or Regional Licensure Examinations by State Boards of Dentistry (Trans.1998:725)

Resolved, that all constituents of the American Dental Association be urged to submit formal proposals to their respective state dental licensing agencies that would provide for acceptance of successful completion of a licensure examination administered by any recognized individual state or regional testing agency for the purpose of licensure in their state.

Standardization of State Dental Licensure Examinations (Trans.1992:629)

Resolved, that the Association, in cooperation with the American Association of Dental Examiners, actively support standardization of dental and dental hygiene licensure clinical examinations by continuing to encourage state boards of dentistry to accept a common core of requirements and guidelines for clinical examinations.
AMENDMENT OF THE ADA GUIDELINES FOR THE USE OF SEDATION AND GENERAL ANESTHESIA BY DENTISTS

Background: (Reports: 83)

The Council on Dental Education and Licensure believes that the “Guidelines for the Use of Sedation and General Anesthesia by Dentists” (Trans.2007:282) should be amended. The majority of the proposed amendments are for editorial or clarifying purposes. A summary of the proposed amendments is provided here:

Section II. Definitions
- Added definitions for “conscious sedation” and “combination inhalation-ental conscious sedation” to reflect that, though not current terminology, the terms appear in many states’ rules and regulations.
- Language added under the definition of “minimal sedation” provides clarification regarding the use of preoperative sedatives for children prior to arrival in dental office.

Section III. Educational Requirements
- Under B. Moderate Sedation and C. Deep Sedation and General Anesthesia, language added to clarify that 1) completion of an appropriate airway course for dentists is acceptable, not certification in such course because few, if any, emergency airway courses for dentists provide certification, and 2) completion of such a course should be on the same re-certification cycle that is required for ACLS.
- Language added at the end of Section III clarifies that though a dentist might be grandfathered by a state dental board for the educational criteria, the dentist still should comply with Section IV. Clinical Guidelines.

Section IV. Clinical Guidelines
- B. Moderate Sedation
  - Language added under item 4. Monitoring and Documentation, Documentation, to clarify what a time-oriented record should include. Also, language added to indicate proper documentation during moderate sedation.
  - Language added under item 5. Recovery and Discharge to clarify the importance of longer monitoring of a patient if a pharmacological reversal agent is administered.
- C. Deep Sedation and General Anesthesia
  - Language added under item 3. Equipment to indicate that a capnograph must be used if a volatile anesthetic agent is utilized.
Resolution 31

Resolved, that the “ADA Guidelines for the Use of Sedation and General Anesthesia by Dentists” (Trans.2007:282) be amended as it appears in Appendix 5 of the Council’s annual report.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

File 17 Resolution 31
WORKSHEET ADDENDUM

COUNCIL ON DENTAL EDUCATION AND LICENSURE

Proposed Amendments to the Guidelines for the Use of Sedation and General Anesthesia by Dentists

The Council recommends that the below policy be amended by deletion and addition as follows (additions are underscored; deletions are stricken).

Proposed Amendments to the Guidelines for the Use of Sedation and General Anesthesia by Dentists (Trans.2007:282)

I. Introduction

The administration of local anesthesia, sedation and general anesthesia is an integral part of dental practice. The American Dental Association is committed to the safe and effective use of these modalities by appropriately educated and trained dentists. The purpose of these guidelines is to assist dentists in the delivery of safe and effective sedation and anesthesia.

Dentists providing sedation and anesthesia in compliance with their state rules and/or regulations prior to adoption of this document are not subject to Section III. Educational Requirements.

II. Definitions

Methods of Anxiety and Pain Control

analgesia - the diminution or elimination of pain.

conscious sedation¹ - a minimally depressed level of consciousness that retains the patient's ability to independently and continuously maintain an airway and respond appropriately to physical stimulation or verbal command and that is produced by a pharmacological or non-pharmacological method or a combination thereof.

In accord with this particular definition, the drugs and/or techniques used should carry a margin of safety wide enough to render unintended loss of consciousness unlikely. Further, patients whose only response is reflex withdrawal from repeated painful stimuli would not be considered to be in a state of conscious sedation.

combination inhalation–enteral conscious sedation (combined conscious sedation) - conscious sedation using inhalation and enteral agents.

When the intent is anxiolysis only, and the appropriate dosage of agents is administered, then the definition of enteral and/or combination inhalation-enteral conscious sedation (combined conscious sedation) does not apply.

local anesthesia - the elimination of sensation, especially pain, in one part of the body by the topical application or regional injection of a drug.

Note: Although the use of local anesthetics is the foundation of pain control in dentistry and has a long record of safety, dentists must be aware of the maximum, safe dosage limits for each patient. Large doses of local anesthetics in themselves may result in central nervous system depression, especially in combination with sedative agents.

¹ Parenteral conscious sedation may be achieved with the administration of a single agent or by the administration of more than one agent.
minimal sedation - a minimally depressed level of consciousness, produced by a pharmacological method, that retains the patient's ability to independently and continuously maintain an airway and respond normally to tactile stimulation and verbal command. Although cognitive function and coordination may be modestly impaired, ventilatory and cardiovascular functions are unaffected.²

Note: In accord with this particular definition, the drug(s) and/or techniques used should carry a margin of safety wide enough never to render unintended loss of consciousness. Further, patients whose only response is reflex withdrawal from repeated painful stimuli would not be considered to be in a state of minimal sedation.

When the intent is minimal sedation for adults, the appropriate initial dosing of a single enteral drug is no more than the maximum recommended dose (MRD) of a drug that can be prescribed for unmonitored home use.

The use of preoperative sedatives for children (aged 12 and under) prior to arrival in the dental office, except in extraordinary situations, must be avoided due to the risk of unobserved respiratory obstruction during transport by untrained individuals.

Children (aged 12 and under) can become moderately sedated despite the intended level of minimal sedation; should this occur, the guidelines for moderate sedation apply.

For children 12 years of age and under, the American Dental Association supports the use of the American Academy of Pediatrics/American Academy of Pediatric Dentists Dentistry Guidelines for Monitoring and Management of Pediatric Patients During and After Sedation for Diagnostic and Therapeutic Procedures.

Nitrous oxide/oxygen may be used in combination with a single enteral drug in minimal sedation.

Nitrous oxide/oxygen when used in combination with sedative agent(s) may produce minimal, moderate, deep sedation or general anesthesia.

The following definitions apply to administration of minimal sedation:
maximum recommended (MRD) - maximum FDA-recommended dose of a drug, as printed in FDA-approved labeling for unmonitored home use.

incremental dosing - administration of multiple doses of a drug until a desired effect is reached, but not to exceed the maximum recommended dose (MRD).

supplemental dosing - during minimal sedation, supplemental dosing is a single additional dose of the initial dose of the initial drug that may be necessary for prolonged procedures. The supplemental dose should not exceed one-half of the initial dose and should not be administered until the dentist has determined the clinical half-life of the initial dosing has passed. The total aggregate dose must not exceed 1.5x the MRD on the day of treatment.

moderate sedation - a drug-induced depression of consciousness during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions

² Portions excerpted from Continuum of Depth of Sedation: Definition of General Anesthesia and Levels of Sedation/Analgesia, 2004, of the American Society of Anesthesiologists (ASA). A copy of the full text can be obtained from ASA, 520 N. Northwest Highway, Park Ridge, IL 60068-2573.
are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained.³

Note: In accord with this particular definition, the drugs and/or techniques used should carry a margin of safety wide enough to render unintended loss of consciousness unlikely. Repeated dosing of an agent before the effects of previous dosing can be fully appreciated may result in a greater alteration of the state of consciousness than is the intent of the dentist. Further, a patient whose only response is reflex withdrawal from a painful stimulus is not considered to be in a state of moderate sedation.

The following definition applies to the administration of moderate or greater sedation:

titration—administration of incremental doses of a drug until a desired effect is reached. Knowledge of each drug’s time of onset, peak response and duration of action is essential to avoid over sedation.

Although the concept of titration of a drug to effect is critical for patient safety, when the intent is moderate sedation one must know whether the previous dose has taken full effect before administering an additional drug increment.

depth sedation - a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained.²

general anesthesia - a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.

Because sedation and general anesthesia are a continuum, it is not always possible to predict how an individual patient will respond. Hence, practitioners intending to produce a given level of sedation should be able to diagnose and manage the physiologic consequences (rescue) for patients whose level of sedation becomes deeper than initially intended.²

For all levels of sedation, the practitioner must have the training, skills, drugs and equipment to identify and manage such an occurrence until either assistance arrives (emergency medical service) or the patient returns to the intended level of sedation without airway or cardiovascular complications.

Routes of Administration

ental - any technique of administration in which the agent is absorbed through the gastrointestinal (GI) tract or oral mucosa [i.e., oral, rectal, sublingual].

parenteral - a technique of administration in which the drug bypasses the gastrointestinal (GI) tract [i.e., intramuscular (IM), intravenous (IV), intranasal (IN), submucosal (SM), subcutaneous (SC), intraosseous (IO)].

transdermal - a technique of administration in which the drug is administered by patch or iontophoresis through skin.

³ Excerpted from Continuum of Depth of Sedation: Definition of General Anesthesia and Levels of Sedation/Analgesia, 2004, of the American Society of Anesthesiologists (ASA). A copy of the full text can be obtained from ASA, 520 N. Northwest Highway, Park Ridge, IL 60068-2573.
transmucosal - a technique of administration in which the drug is administered across mucosa such as intranasal, sublingual, or rectal.

inhalation - a technique of administration in which a gaseous or volatile agent is introduced into the lungs and whose primary effect is due to absorption through the gas/blood interface.

Terms

qualified dentist - meets the educational requirements for the appropriate level of sedation in accordance with Section III of these Guidelines, or a dentist providing sedation and anesthesia in compliance with their state rules and/or regulations prior to adoption of this document.

must/shall - indicates an imperative need and/or duty; an essential or indispensable item; mandatory.

should - indicates the recommended manner to obtain the standard; highly desirable.

may - indicates freedom or liberty to follow a reasonable alternative.

continual - repeated regularly and frequently in a steady succession.

continuous - prolonged without any interruption at any time.

time-oriented anesthesia record - documentation at appropriate time intervals of drugs, doses and physiologic data obtained during patient monitoring.

immediately available – on site in the facility and available for immediate use.

American Society of Anesthesiologists (ASA) Patient Physical Status Classification

ASA I - A normal healthy patient.
ASA II - A patient with mild systemic disease.
ASA III - A patient with severe systemic disease.
ASA IV - A patient with severe systemic disease that is a constant threat to life.
ASA V - A moribund patient who is not expected to survive without the operation.
ASA VI - A declared brain-dead patient whose organs are being removed for donor purposes.
E - Emergency operation of any variety (used to modify one of the above classifications, i.e., ASA III-E).

III. Educational Requirements

A. Minimal Sedation

1. To administer minimal sedation the dentist must have successfully completed:

a. training to the level of competency in minimal sedation consistent with that prescribed in the ADA Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students, or a comprehensive training program in moderate sedation that satisfies the requirements described in the Moderate Sedation section of the ADA Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students at the time training was commenced,
b. an advanced education program accredited by the ADA Commission on Dental Accreditation that affords comprehensive and appropriate training necessary to administer and manage minimal sedation commensurate with these guidelines; and
c. a current certification in Basic Life Support for Healthcare Providers.

2. Administration of minimal sedation by another qualified dentist or independently practicing qualified anesthesia healthcare provider requires the operating dentist and his/her clinical staff to maintain current certification in Basic Life Support for Healthcare Providers.

B. Moderate Sedation

1. To administer moderate sedation, the dentist must have successfully completed:
   a. a comprehensive training program in moderate sedation that satisfies the requirements described in the Moderate Sedation section of the ADA Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students at the time training was commenced, or
   b. an advanced education program accredited by the ADA Commission on Dental Accreditation that affords comprehensive and appropriate training necessary to administer and manage moderate sedation commensurate with these guidelines; and
   c. 1) a current certification in Basic Life Support for Healthcare Providers and 2) either current certification in Advanced Cardiac Life Support (ACLS) or completion of an appropriate dental sedation/anesthesia emergency management course on the same recertification cycle that is required for ACLS.

2. Administration of moderate sedation by another qualified dentist or independently practicing qualified anesthesia healthcare provider requires the operating dentist and his/her clinical staff to maintain current certification in Basic Life Support for Healthcare Providers.

C. Deep Sedation or General Anesthesia

1. To administer deep sedation or general anesthesia, the dentist must have completed:
   a. an advanced education program accredited by the ADA Commission on Dental Accreditation that affords comprehensive and appropriate training necessary to administer and manage deep sedation or general anesthesia, commensurate with Part IV.C of these guidelines; and
   b. 1) a current certification in 1) Basic Life Support for Healthcare Providers and 2) either current certification in Advanced Cardiac Life Support (ACLS) or completion of an appropriate dental sedation/anesthesia emergency management course on the same re-certification cycle that is required for ACLS.

2. Administration of deep sedation or general anesthesia by another qualified dentist or independently practicing qualified anesthesia healthcare provider requires the operating dentist and his/her clinical staff to maintain current certification in Basic Life Support (BLS) Course for the Healthcare Provider.

For all levels of sedation and anesthesia, dentists, who are currently providing sedation and anesthesia in compliance with their state rules and/or regulations prior to adoption of this document, are not subject to these educational requirements. However, all dentists providing sedation and general anesthesia in their offices or the offices of other dentists should comply with the Clinical Guidelines in this document.

IV. Clinical Guidelines

A. Minimal sedation
1. Patient Evaluation

Patients considered for minimal sedation must be suitably evaluated prior to the start of any sedative procedure. In healthy or medically stable individuals (ASA I, II) this may consist of a review of their current medical history and medication use. However, patients with significant medical considerations (ASA III, IV) may require consultation with their primary care physician or consulting medical specialist.

2. Pre-Operative Preparation

- The patient, parent, guardian or care giver must be advised regarding the procedure associated with the delivery of any sedative agents and informed consent for the proposed sedation must be obtained.
- Determination of adequate oxygen supply and equipment necessary to deliver oxygen under positive pressure must be completed.
- Baseline vital signs must be obtained unless the patient's behavior prohibits such determination.
- A focused physical evaluation must be performed as deemed appropriate.
- Preoperative dietary restrictions must be considered based on the sedative technique prescribed.
- Pre-operative verbal and written instructions must be given to the patient, parent, escort, guardian or care giver.

3. Personnel and Equipment Requirements

**Personnel:**
- At least one additional person trained in Basic Life Support for Healthcare Providers must be present in addition to the dentist.

**Equipment:**
- A positive-pressure oxygen delivery system suitable for the patient being treated must be immediately available.
- When inhalation equipment is used, it must have a fail-safe system that is appropriately checked and calibrated. The equipment must also have either (1) a functioning device that prohibits the delivery of less than 30% oxygen or (2) an appropriately calibrated and functioning in-line oxygen analyzer with audible alarm.
- An appropriate scavenging system must be available if gases other than oxygen or air are used.

4. Monitoring and Documentation

**Monitoring:** A dentist, or at the dentist’s direction, an appropriately trained individual, must remain in the operatory during active dental treatment to monitor the patient continuously until the patient meets the criteria for discharge to the recovery area. The appropriately trained individual must be familiar with monitoring techniques and equipment. Monitoring must include

**Oxygenation:**
- Color of mucosa, skin or blood must be evaluated continually.
- Oxygen saturation by pulse oximetry may be clinically useful and should be considered.

**Ventilation:**
- The dentist and/or appropriately trained individual must observe chest excursions continually.
- The dentist and/or appropriately trained individual must verify respirations continually.
Circulation:
- Blood pressure and heart rate should be evaluated pre-operatively, post-operatively and intraoperatively as necessary (unless the patient is unable to tolerate such monitoring).

Documentation: An appropriate sedative record must be maintained, including the names of all drugs administered, including local anesthetics, dosages, and monitored physiological parameters.

5. Recovery and Discharge
- Oxygen and suction equipment must be immediately available if a separate recovery area is utilized.
- The qualified dentist or appropriately trained clinical staff must monitor the patient during recovery until the patient is ready for discharge by the dentist.
- The qualified dentist must determine and document that level of consciousness, oxygenation, ventilation and circulation are satisfactory prior to discharge.
- Post-operative verbal and written instructions must be given to the patient, parent, escort, guardian or care giver.

6. Emergency Management
- If a patient enters a deeper level of sedation than the dentist is qualified to provide, the dentist must stop the dental procedure until the patient returns to the intended level of sedation.
- The qualified dentist is responsible for the sedative management, adequacy of the facility and staff, diagnosis and treatment of emergencies related to the administration of minimal sedation and providing the equipment and protocols for patient rescue.

7. Management of Children

For children 12 years of age and under, the American Dental Association supports the use of the American Academy of Pediatrics/American Academy of Pediatric Dentistry Guidelines for Monitoring and Management of Pediatric Patients During and After Sedation for Diagnostic and Therapeutic Procedures.

B. Moderate Sedation

1. Patient Evaluation

Patients considered for moderate sedation must be suitably evaluated prior to the start of any sedative procedure. In healthy or medically stable individuals (ASA I, II) this should consist of at least a review of their current medical history and medication use. However, patients with significant medical considerations (e.g., ASA III, IV) may require consultation with their primary care physician or consulting medical specialist.

2. Pre-operative Preparation
- The patient, parent, guardian or care giver must be advised regarding the procedure associated with the delivery of any sedative agents and informed consent for the proposed sedation must be obtained.
- Determination of adequate oxygen supply and equipment necessary to deliver oxygen under positive pressure must be completed.
- Baseline vital signs must be obtained unless the patient's behavior prohibits such determination.
- A focused physical evaluation must be performed as deemed appropriate.
• Preoperative dietary restrictions must be considered based on the sedative technique prescribed.
• Pre-operative verbal or written instructions must be given to the patient, parent, escort, guardian
  or care giver.

3. Personnel and Equipment Requirements

Personnel:
• At least one additional person trained in Basic Life Support for Healthcare Providers must be
  present in addition to the dentist.

Equipment:
• A positive-pressure oxygen delivery system suitable for the patient being treated must be
  immediately available.
• When inhalation equipment is used, it must have a fail-safe system that is appropriately checked
  and calibrated. The equipment must also have either (1) a functioning device that prohibits the
  delivery of less than 30% oxygen or (2) an appropriately calibrated and functioning in-line oxygen
  analyzer with audible alarm.
• An appropriate scavenging system must be available if gases other than oxygen or air are used.
• The equipment necessary to establish intravenous access must be available.

4. Monitoring and Documentation

Monitoring: A qualified dentist administering moderate sedation must remain in the operatory room
  to monitor the patient continuously until the patient meets the criteria for recovery. When active
  treatment concludes and the patient recovers to a minimally sedated level a qualified auxiliary may
  be directed by the dentist to remain with the patient and continue to monitor them as explained in the
  guidelines until they are discharged from the facility. The dentist must not leave the facility until the
  patient meets the criteria for discharge and is discharged from the facility. Monitoring must include:

Consciousness:
• Level of consciousness (e.g., responsiveness to verbal command) must be continually assessed.

Oxygenation:
• Color of mucosa, skin or blood must be evaluated continually.
• Oxygen saturation must be evaluated by pulse oximetry continuously.

Ventilation:
• The dentist must observe chest excursions continually.
• The dentist must monitor ventilation. This can be accomplished by auscultation of breath sounds,
  monitoring end-tidal CO\textsubscript{2} or by verbal communication with the patient.

Circulation:
• The dentist must continually evaluate blood pressure and heart rate (unless the patient is unable
  to tolerate and this is noted in the time-oriented anesthesia record).
• Continuous ECG monitoring of patients with significant cardiovascular disease should be
  considered.

Documentation:
Appropriate time-oriented anesthetic record must be maintained, including the names of all drugs, dosages and their administration times administered, including local anesthetics, dosages and monitored physiological parameters. (See Additional Sources of Information for sample of a time-oriented anesthetic record).

- Pulse oximetry, heart rate, respiratory rate and blood pressure and level of consciousness must be recorded continually.

5. Recovery and Discharge

- Oxygen and suction equipment must be immediately available if a separate recovery area is utilized.
- The qualified dentist or appropriately trained clinical staff must continually monitor the patient’s blood pressure, heart rate, oxygenation and level of consciousness.
- The qualified dentist must determine and document that level of consciousness; oxygenation, ventilation and circulation are satisfactory for discharge.
- Post-operative verbal and written instructions must be given to the patient, parent, escort, guardian or care giver.
- If a pharmacological reversal agent is administered before discharge criteria have been met, the patient must be monitored until recovery is assured for a longer period than usual before discharge, since re-sedation may occur once the effects of the reversal agent have waned.

6. Emergency Management

- If a patient enters a deeper level of sedation than the dentist is qualified to provide, the dentist must stop the dental procedure until the patient returns to the intended level of sedation.
- The qualified dentist is responsible for the sedative management, adequacy of the facility and staff, diagnosis and treatment of emergencies related to the administration of moderate sedation and providing the equipment, drugs and protocol for patient rescue.

7. Management of Children

For children 12 years of age and under, the American Dental Association supports the use of the American Academy of Pediatrics/American Academy of Pediatric Dentistry Guidelines for Monitoring and Management of Pediatric Patients During and After Sedation for Diagnostic and Therapeutic Procedures.

C. Deep Sedation or General Anesthesia

1. Patient Evaluation

Patients considered for deep sedation or general anesthesia must be suitably evaluated prior to the start of any sedative procedure. In healthy or medically stable individuals (ASA I, II) this must consist of at least a review of their current medical history and medication use and NPO status. However, patients with significant medical considerations (e.g., ASA III, IV) may require consultation with their primary care physician or consulting medical specialist.

2. Pre-operative Preparation

- The patient, parent, guardian or care giver must be advised regarding the procedure associated with the delivery of any sedative or anesthetic agents and informed consent for the proposed sedation/anesthesia must be obtained.
- Determination of adequate oxygen supply and equipment necessary to deliver oxygen under positive pressure must be completed.
Baseline vital signs must be obtained unless the patient's behavior prohibits such determination.
A focused physical evaluation must be performed as deemed appropriate.
Preoperative dietary restrictions must be considered based on the sedative/anesthetic technique prescribed.
Pre-operative verbal and written instructions must be given to the patient, parent, escort, guardian or care giver.
An intravenous line, which is secured throughout the procedure, must be established except as provided in part IV. C.6. Pediatric and Special Needs Patients.

3. Personnel and Equipment Requirements

Personnel: A minimum of three (3) individuals must be present.

- A dentist qualified in accordance with part III. C. of these Guidelines to administer the deep sedation or general anesthesia.
- Two additional individuals who have current certification of successfully completing a Basic Life Support (BLS) Course for the Healthcare Provider.
- When the same individual administering the deep sedation or general anesthesia is performing the dental procedure, one of the additional appropriately trained team members must be designated for patient monitoring.

Equipment:

- A positive-pressure oxygen delivery system suitable for the patient being treated must be immediately available.
- When inhalation equipment is used, it must have a fail-safe system that is appropriately checked and calibrated. The equipment must also have either (1) a functioning device that prohibits the delivery of less than 30% oxygen or (2) an appropriately calibrated and functioning in-line oxygen analyzer with audible alarm.
- An appropriate scavenging system must be available if gases other than oxygen or air are used.
- The equipment necessary to establish intravenous access must be available.
- Equipment and drugs necessary to provide advanced airway management, and advanced cardiac life support must be immediately available.
- If volatile anesthetic agents are utilized, a capnograph must be utilized and an inspired agent analysis monitor and capnograph should be considered.
- Resuscitation medications and an appropriate defibrillator must be immediately available.

4. Monitoring and Documentation

Monitoring: A qualified dentist administering deep sedation or general anesthesia must remain in the operatory room to monitor the patient continuously until the patient meets the criteria for recovery. The dentist must not leave the facility until the patient meets the criteria for discharge and is discharged from the facility. Monitoring must include:

Oxygenation:
- Color of mucosa, skin or blood must be continually evaluated.
- Oxygenation saturation must be evaluated continuously by pulse oximetry.

Ventilation:
- Intubated patient: End-tidal CO₂ must be continuously monitored and evaluated.
- Non-intubated patient: Breath sounds via auscultation and/or end-tidal CO₂ must be continually monitored and evaluated.
- Respiration rate must be continually monitored and evaluated.
Circulation:
- The dentist must continuously evaluate heart rate and rhythm via ECG throughout the procedure, as well as pulse rate via pulse oximetry.
- The dentist must continually evaluate blood pressure.

Temperature:
- A device capable of measuring body temperature must be readily available during the administration of deep sedation or general anesthesia.
- The equipment to continuously monitor body temperature should be available and must be performed whenever triggering agents associated with malignant hyperthermia are administered.

Documentation:
- Appropriate time-oriented anesthetic record must be maintained, including the names of all drugs, administered dosages and their administration times, including local anesthetics, doses and monitored physiological parameters. (See Additional Sources of Information for sample of a time-oriented anesthetic record)
- Pulse oximetry and end-tidal CO\textsubscript{2} measurements (if taken), heart rate, respiratory rate and blood pressure must be recorded continually at appropriate intervals.

5. Recovery and Discharge
- Oxygen and suction equipment must be immediately available if a separate recovery area is utilized.
- The dentist or clinical staff must continually monitor the patient’s blood pressure, heart rate, oxygenation and level of consciousness.
- The dentist must determine and document that level of consciousness, oxygenation, ventilation and circulation are satisfactory for discharge.
- Post-operative verbal and written instructions must be given to the patient, parent, escort, guardian or care giver.

6. Pediatric Patients and Those with Special Needs Patients
Because many dental patients undergoing deep sedation or general anesthesia are mentally and/or physically challenged, it is not always possible to have a comprehensive physical examination or appropriate laboratory tests prior to administering care. When these situations occur, the dentist responsible for administering the deep sedation or general anesthesia should document the reasons preventing the recommended preoperative management.

In selected circumstances, deep sedation or general anesthesia may be utilized without establishing an indwelling intravenous line. These selected circumstances may include very brief procedures or periods of time, which, for example, may occur in some pediatric patients; or the establishment of intravenous access after deep sedation or general anesthesia has been induced because of poor patient cooperation.

7. Emergency Management
The qualified dentist is responsible for sedative/anesthetic management, adequacy of the facility and staff, diagnosis and treatment of emergencies related to the administration of deep sedation or general anesthesia and providing the equipment, drugs and protocols for patient rescue.

V. Additional Sources of Information


7. American Society of Anesthesiologists (ASA). *Practice Guidelines for Sedation and Analgesia by Non-Anesthesiologists.* Available at [http://www.asahq.org/publicationsAndServices/practiceparam.htm#sedation](http://www.asahq.org/publicationsAndServices/practiceparam.htm#sedation). The ASA has other anesthesia resources that might be of interest to dentists. For more information, go to [http://www.asahq.org/publicationsAndServices/sgstoc.htm](http://www.asahq.org/publicationsAndServices/sgstoc.htm).


AMENDMENT OF THE ADA GUIDELINES FOR TEACHING PAIN CONTROL AND SEDATION TO DENTISTS AND DENTAL STUDENTS

Background: (Reports: 84)

The Council on Dental Education and Licensure believes that the “Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students” (Trans. 2007: 282) should be amended. The majority of the proposed amendments are for editorial or clarifying purposes. A summary of the proposed amendments is provided here:

Section II. Definitions:
- Added definitions for “conscious sedation” and “combination inhalation-enteral conscious sedation” to reflect that, though not current terminology, the terms appear in many states’ rules and regulations.
- Language added under the definition of “minimal sedation” regarding pediatric patients to be consistent with the Definitions section in the Guidelines for the Use of Sedation and General Anesthesia by Dentists.

Section III. Teaching Pain Control
- In section C. Sequence of Pain Control Didactic and Clinical Instruction, third paragraph, changed “pediatric and special needs patients” to “pediatric patients and those with special needs” to be more politically correct.

Section V. Teaching Administration of Moderate Sedation
- In section C. Moderate Enteral Sedation Course Duration and Moderate Parenteral Sedation Course Duration added language to clarify that those enrolling in these courses must first have completed a competency course in nitrous oxide to be consistent with requirements for those enrolling in minimal sedation enteral and/or combination inhalation-enteral sedation courses.

Section VI. Additional Sources of Information
- Added a reference regarding a sample time-oriented anesthesia record.
- Deleted an outdated reference.

Editorial amendments to agency names, American Academy of Pediatric Dentistry and American Society of Anesthesiologists.
Resolution

32. Resolved, that the “ADA Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students” (Trans.2007:282) be amended as it appears in Appendix 6 of the Council’s annual report.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
WORKSHEET ADDENDUM

COUNCIL ON DENTAL EDUCATION AND LICENSURE

Proposed Amendments to the
Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students

The Council recommends that the below policy be amended by deletion and addition as follows (additions are underscored; deletions are stricken).

Proposed Amendments to the Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students (Trans.2007:282)

I. Introduction

The administration of local anesthesia, sedation and general anesthesia is an integral part of the practice of dentistry. The American Dental Association is committed to the safe and effective use of these modalities by appropriately educated and trained dentists.

Anxiety and pain control can be defined as the application of various physical, chemical and psychological modalities to the prevention and treatment of preoperative, operative and postoperative patient anxiety and pain to allow dental treatment to occur in a safe and effective manner. It involves all disciplines of dentistry and, as such, is one of the most important aspects of dental education. The intent of these Guidelines is to provide direction for the teaching of pain control and sedation to dentists and can be applied at all levels of dental education from predoctoral through continuing education. They are designed to teach initial competency in pain control and minimal and moderate sedation techniques.

These Guidelines recognize that many dentists have acquired a high degree of competency in the use of anxiety and pain control techniques through a combination of instruction and experience. It is assumed that this has enabled these teachers and practitioners to meet the educational criteria described in this document.

It is not the intent of the Guidelines to fit every program into the same rigid educational mold. This is neither possible nor desirable. There must always be room for innovation and improvement. They do, however, provide a reasonable measure of program acceptability, applicable to all institutions and agencies engaged in predoctoral and continuing education.

The curriculum in anxiety and pain control is a continuum of educational experiences that will extend over several years of the predoctoral program. It should provide the dental student with the knowledge and skills necessary to provide minimal sedation to alleviate anxiety and control pain without inducing detrimental physiological or psychological side effects. Dental schools whose goal is to have predoctoral students achieve competency in techniques such as local anesthesia and nitrous oxide inhalation and minimal sedation must meet all of the goals, prerequisites, didactic content, clinical experiences, faculty and facilities, as described in these Guidelines.

Techniques for the control of anxiety and pain in dentistry should include both psychological and pharmacological modalities. Psychological strategies should include simple relaxation techniques for the anxious patient and more comprehensive behavioral techniques to control pain. Pharmacological strategies should include not only local anesthetics but also sedatives, analgesics and other useful agents. Dentists should learn indications and techniques for administering these drugs enterally, parenterally and by inhalation as supplements to local anesthesia.

The predoctoral curriculum should provide instruction, exposure and/or experience in anxiety and pain control, including minimal and moderate sedation. The predoctoral program must also provide the knowledge
and skill to enable students to recognize and manage any emergencies that might arise as a consequence of
treatment. Predoctoral dental students must complete a course in Basic Life Support for the Healthcare
Provider. Though Basic Life Support courses are available online, any course taken online should be followed
up with a hands-on component and be approved by the American Heart Association or the American Red
Cross.

Local anesthesia is the foundation of pain control in dentistry. Although the use of local anesthetics in
dentistry has a long record of safety, dentists must be aware of the maximum safe dosage limit for each
patient, since large doses of local anesthetics may increase the level of central nervous system depression
with sedation. The use of minimal and moderate sedation requires an understanding of local anesthesia and
the physiologic and pharmacologic implications of the local anesthetic agents when combined with the
dedative agents.

The knowledge, skill and clinical experience required for the safe administration of deep sedation and/or
general anesthesia are beyond the scope of predoctoral and continuing education programs. Advanced
education programs that teach deep sedation and/or general anesthesia to competency have specific
teaching requirements described in the Commission on Dental Accreditation requirements for those advanced
programs and represent the educational and clinical requirements for teaching deep sedation and/or general
anesthesia in dentistry.

The objective of educating dentists to utilize pain control, sedation and general anesthesia is to enhance their
ability to provide oral health care. The American Dental Association urges dentists to participate regularly in
continuing education update courses in these modalities in order to remain current.

All areas in which local anesthesia and sedation are being used must be properly equipped
with suction, physiologic monitoring equipment, a positive pressure oxygen delivery system suitable for the
patient being treated and emergency drugs. Protocols for the management of emergencies must be
developed and training programs held at frequent intervals.

II. Definitions

Methods of Anxiety and Pain Control

analgesia - the diminution or elimination of pain.

consciously sedation - a minimally depressed level of consciousness that retains the patient's ability to
independently and continuously maintain an airway and respond appropriately to physical stimulation or
verbal command and that is produced by a pharmacological or non-pharmacological method or a combination
thereof.

In accord with this particular definition, the drugs and/or techniques used should carry a margin of safety wide
enough to render unintended loss of consciousness unlikely. Further, patients whose only response is reflex
withdrawal from repeated painful stimuli would not be considered to be in a state of conscious sedation.

combination inhalation–enteral conscious sedation (combined conscious sedation) - conscious sedation
using inhalation and enteral agents.

When the intent is anxiolysis only, and the appropriate dosage of agents is administered, then the definition of
enteral and/or combination inhalation-ental conscious sedation (combined conscious sedation) does not
apply.

1 Parenteral conscious sedation may be achieved with the administration of a single agent or by the administration of more than one
agent.
local anesthesia - the elimination of sensation, especially pain, in one part of the body by the topical application or regional injection of a drug.

Note: Although the use of local anesthetics is the foundation of pain control in dentistry and has a long record of safety, dentists must always be aware of the maximum, safe dosage limits for each patient. Large doses of local anesthetics in themselves may result in central nervous system depression especially in combination with sedative agents.

minimal sedation - a minimally depressed level of consciousness, produced by a pharmacological method, that retains the patient’s ability to independently and continuously maintain an airway and respond normally to tactile stimulation and verbal command. Although cognitive function and coordination may be modestly impaired, ventilatory and cardiovascular functions are unaffected. 

Note: In accord with this particular definition, the drug(s) and/or techniques used should carry a margin of safety wide enough never to render unintended loss of consciousness. Further, patients whose only response is reflex withdrawal from repeated painful stimuli would not be considered to be in a state of minimal sedation.

When the intent is minimal sedation for adults, the appropriate initial dosing of a single enteral drug is no more than the maximum recommended dose (MRD) of a drug that can be prescribed for unmonitored home use.

The use of preoperative sedatives for children (aged 12 and under) prior to arrival in the dental office, except in extraordinary situations, must be avoided due to the risk of unobserved respiratory obstruction during transport by untrained individuals.

Children (aged 12 and under) can become moderately sedated despite the intended level of minimal sedation; should this occur, the guidelines for moderate sedation apply.

For children 12 years of age and under, the American Dental Association supports the use of the American Academy of Pediatrics/American Academy of Pediatric Dentistry Guidelines for Monitoring and Management of Pediatric Patients During and After Sedation for Diagnostic and Therapeutic Procedures.

Nitrous oxide/oxygen may be used in combination with a single enteral drug in minimal sedation.

Nitrous oxide/oxygen when used in combination with sedative agent(s) may produce minimal, moderate, deep sedation or general anesthesia.

The following definitions apply to administration of minimal sedation:

maximum recommended dose (MRD) - maximum FDA-recommended dose of a drug as printed in FDA-approved labeling for unmonitored home use.

incremental dosing - administration of multiple doses of a drug until a desired effect is reached, but not to exceed the maximum recommended dose (MRD).

supplemental dosing - during minimal sedation, supplemental dosing is a single additional dose of the initial dose of the initial drug that may be necessary for prolonged procedures. The supplemental dose should not exceed one-half of the initial total dose and should not be

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2 Portions excerpted from Continuum of Depth of Sedation: Definition of General Anesthesia and Levels of Sedation/Analgesia, 2004, of the American Society of Anesthesiologists (ASA). A copy of the full text can be obtained from ASA, 520 N. Northwest Highway, Park Ridge, IL 60068-2573.
administered until the dentist has determined the clinical half-life of the initial dosing has passed. The total aggregate dose must not exceed 1.5x the MRD on the day of treatment.

**moderate sedation** - a drug-induced depression of consciousness during which patients respond *purposefully* to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained. 3

*Note:* In accord with this particular definition, the drugs and/or techniques used should carry a margin of safety wide enough to render unintended loss of consciousness unlikely. Repeated dosing of an agent before the effects of previous dosing can be fully appreciated may result in a greater alteration of the state of consciousness than is the intent of the dentist. Further, a patient whose only response is reflex withdrawal from a painful stimulus is not considered to be in a state of moderate sedation.

The following definition applies to administration of moderate and deeper levels of sedation:

**titration** - administration of incremental doses of a drug until a desired effect is reached. Knowledge of each drug’s time of onset, peak response and duration of action is essential to avoid over sedation. Although the concept of titration of a drug to effect is critical for patient safety, when the intent is moderate sedation one must know whether the previous dose has taken full effect before administering an additional drug increment.

**deep sedation** - a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained. 2

**general anesthesia** – a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.

Because sedation and general anesthesia are a continuum, it is not always possible to predict how an individual patient will respond. Hence, practitioners intending to produce a given level of sedation should be able to diagnose and manage the physiologic consequences (rescue) for patients whose level of sedation becomes deeper than initially intended. 2

For all levels of sedation, the practitioner must have the training, skills, drugs and equipment to identify and manage such an occurrence until either assistance arrives (emergency medical service) or the patient returns to the intended level of sedation without airway or cardiovascular complications.

**Routes of Administration**

*enteral* - any technique of administration in which the agent is absorbed through the gastrointestinal (GI) tract or oral mucosa [i.e., oral, rectal, sublingual].

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3 Excerpted from Continuum of Depth of Sedation: Definition of General Anesthesia and Levels of Sedation/Analgesia, 2004, of the American Society of Anesthesiologists (ASA). A copy of the full text can be obtained from ASA, 520 N. Northwest Highway, Park Ridge, IL 60068-2573.
parenteral - a technique of administration in which the drug bypasses the gastrointestinal (GI) tract [i.e., intramuscular (IM), intravenous (IV), intranasal (IN), submucosal (SM), subcutaneous (SC), intraosseous (IO)].

transdermal - a technique of administration in which the drug is administered by patch or iontophoresis through skin.

transmucosal – a technique of administration in which the drug is administered across mucosa such as intranasal, sublingual, or rectal.

inhalation - a technique of administration in which a gaseous or volatile agent is introduced into the lungs and whose primary effect is due to absorption through the gas/blood interface.

Terms

qualified dentist – meets the educational requirements for the appropriate level of sedation in accordance with Section III of these Guidelines, or a dentist providing sedation and anesthesia in compliance with their state rules and/or regulations prior to adoption of this document.

must/shall - indicates an imperative need and/or duty; an essential or indispensable item; mandatory.

should -indicates the recommended manner to obtain the standard; highly desirable.

may - indicates freedom or liberty to follow a reasonable alternative.

continual - repeated regularly and frequently in a steady succession.

continuous - prolonged without any interruption at any time.

time-oriented anesthesia record - documentation at appropriate time intervals of drugs, doses and physiologic data obtained during patient monitoring.

immediately available – on site in the facility and available for immediate use.

Levels of Knowledge

familiarity - a simplified knowledge for the purpose of orientation and recognition of general principles.

in-depth - a thorough knowledge of concepts and theories for the purpose of critical analysis and the synthesis of more complete understanding (highest level of knowledge).

Levels of Skill

exposed - the level of skill attained by observation of or participation in a particular activity.

competent - displaying special skill or knowledge derived from training and experience.

proficient - the level of skill attained when a particular activity is accomplished with repeated quality and a more efficient utilization of time (highest level of skill).
American Society of Anesthesiologists (ASA) Patient Physical Status Classification

ASA I - A normal healthy patient.
ASA II - A patient with mild systemic disease.
ASA III - A patient with severe systemic disease.
ASA IV - A patient with severe systemic disease that is a constant threat to life.
ASA V - A moribund patient who is not expected to survive without the operation.
ASA VI - A declared brain-dead patient whose organs are being removed for donor purposes.
E - Emergency operation of any variety (used to modify one of the above classifications, i.e., ASA III-E).

Education Courses

Education may be offered at different levels (competency, update, survey courses and advanced education programs). A description of these different levels follows:

1. Competency Courses are designed to meet the needs of dentists who wish to become knowledgeable and proficient in the safe and effective administration of local anesthesia, minimal and moderate sedation. They consist of lectures, demonstrations and sufficient clinical participation to assure the faculty that the dentist understands the procedures taught and can safely and effectively apply them so that mastery of the subject is achieved. Faculty must assess and document the dentist’s competency upon successful completion of such training. To maintain competency, periodic update courses must be completed.

2. Update Courses are designed for persons with previous training. They are intended to provide a review of the subject and an introduction to recent advances in the field. They should be designed didactically and clinically to meet the specific needs of the participants. Participants must have completed previous competency training (equivalent, at a minimum, to the competency course described in this document) and have current experience to be eligible for enrollment in an update course.

3. Survey Courses are designed to provide general information about subjects related to pain control and sedation. Such courses should be didactic and not clinical in nature, since they are not intended to develop clinical competency.

4. Advanced Education Courses are a component of an advanced dental education program, accredited by the ADA Commission on Dental Accreditation in accord with the Accreditation Standards for advanced dental education programs. These courses are designed to prepare the graduate dentist or postdoctoral student in the most comprehensive manner to be knowledgeable and proficient in the safe and effective administration of minimal, moderate and deep sedation and general anesthesia.

III. Teaching Pain Control

These Guidelines present a basic overview of the recommendations for teaching pain control.

A. General Objectives: Upon completion of a predoctoral curriculum in pain control the dentist must:

ASA Physical Status Classification System is reprinted with permission of the American Society of Anesthesiologists, 520 N. Northwest Highway, Park Ridge, IL 60068-2573.
1. have an in-depth knowledge of those aspects of anatomy, physiology, pharmacology and psychology involved in the use of various anxiety and pain control methods;

2. be competent in evaluating the psychological and physical status of the patient, as well as the magnitude of the operative procedure, in order to select the proper regimen;

3. be competent in monitoring vital functions;

4. be competent in prevention, recognition and management of related complications;

5. be familiar with the appropriateness of and the indications for medical consultation or referral;

6. be competent in the maintenance of proper records with accurate chart entries recording medical history, physical examination, vital signs, drugs administered and patient response.

B. Pain Control Curriculum Content:

1. Philosophy of anxiety and pain control and patient management, including the nature and purpose of pain

2. Review of physiologic and psychologic aspects of anxiety and pain

3. Review of airway anatomy and physiology

4. Physiologic monitoring
   a. Observation
      (1) Central nervous system
      (2) Respiratory system
         a. Oxygenation
         b. Ventilation
      (3) Cardiovascular system
   b. Monitoring equipment

5. Pharmacologic aspects of anxiety and pain control
   a. Routes of drug administration
   b. Sedatives and anxiolytics
   c. Local anesthetics
   d. Analgesics and antagonists
   e. Adverse side effects
   f. Drug interactions
   g. Drug abuse

6. Control of preoperative and operative anxiety and pain
   a. Patient evaluation
      (1) Psychological status
      (2) ASA physical status
      (3) Type and extent of operative procedure
   b. Nonpharmacologic methods
      (1) Psychological and behavioral methods
         (a) Anxiety management
         (b) Relaxation techniques
         (c) Systematic desensitization
      (2) Interpersonal strategies of patient management
      (3) Hypnosis
      (4) Electronic dental anesthesia
      (5) Acupuncture/Acupressure
      (6) Other
Local anesthesia

(1) Review of related anatomy, and physiology
(2) Pharmacology
   (i) Dosing
   (ii) Toxicity
   (iii) Selection of agents
(3) Techniques of administration
   (i) Topical
   (ii) Infiltration (supraperiosteal)
   (iii) Nerve block – maxilla-to include:
      (aa) Posterior superior alveolar
      (bb) Infraorbital
      (cc) Nasopalatine
      (dd) Greater palatine
      (ee) Maxillary (2nd division)
      (ff) Other blocks
   (iv) Nerve block – mandible-to include:
      (aa) Inferior alveolar-lingual
      (bb) Mental-incisive
      (cc) Buccal
      (dd) Gow-Gates
      (ee) Closed mouth
   (v) Alternative injections-to include:
      (aa) Periodontal ligament
      (bb) Intraosseous

Prevention, recognition and management of complications and emergencies

C. Sequence of Pain Control Didactic and Clinical Instruction: Beyond the basic didactic instruction in local anesthesia, additional time should be provided for demonstrations and clinical practice of the injection techniques. The teaching of other methods of anxiety and pain control, such as the use of analgesics and enteral, inhalation and parenteral sedation, should be coordinated with a course in pharmacology. By this time the student also will have developed a better understanding of patient evaluation and the problems related to prior patient care. As part of this instruction, the student should be taught the techniques of venipuncture and physiologic monitoring. Time should be included for demonstration of minimal and moderate sedation techniques.

Following didactic instruction in minimal and moderate sedation, the student must receive sufficient clinical experience to demonstrate competency in those techniques in which the student is to be certified. It is understood that not all institutions may be able to provide instruction to the level of clinical competence in pharmacologic sedation modalities to all students. The amount of clinical experience required to achieve competency will vary according to student ability, teaching methods and the anxiety and pain control modality taught.

Clinical experience in minimal and moderate sedation techniques should be related to various disciplines of dentistry and not solely limited to surgical cases. Typically, such experience will be provided in managing healthy adult patients. The sedative care of pediatric patients and those with special needs requires advanced didactic and clinical training.

Throughout both didactic and clinical instruction in anxiety and pain control, psychological management of the patient should also be stressed. Instruction should emphasize that the need for sedative techniques is directly related to the patient’s level of anxiety, cooperation, medical condition and the planned procedures.

D. Faculty: Instruction must be provided by qualified faculty for whom anxiety and pain control are areas of major proficiency, interest and concern.
E. Facilities: Competency courses must be presented where adequate facilities are available for proper patient care, including drugs and equipment for the management of emergencies.

IV. Teaching Administration of Minimal Sedation

The faculty responsible for curriculum in minimal sedation techniques must be familiar with the ADA Policy Statement: Guidelines for the Use of Sedation and General Anesthesia by Dentists, and the Commission on Dental Accreditation’s Accreditation Standards for dental education programs.

These Guidelines present a basic overview of the recommendations for teaching minimal sedation. These include courses in nitrous oxide/oxygen sedation, enteral sedation, and combined inhalation/enteral techniques.

General Objectives: Upon completion of a competency course in minimal sedation, the dentist must be able to:

1. Describe the adult and pediatric anatomy and physiology of the respiratory, cardiovascular and central nervous systems, as they relate to the above techniques.
2. Describe the pharmacological effects of drugs.
3. Describe the methods of obtaining a medical history and conduct an appropriate physical examination.
4. Apply these methods clinically in order to obtain an accurate evaluation.
5. Use this information clinically for ASA classification and risk assessment.
6. Choose the most appropriate technique for the individual patient.
7. Use appropriate physiologic monitoring equipment.
8. Describe the physiologic responses that are consistent with minimal sedation.
9. Understand the sedation/general anesthesia continuum.

Inhalation Sedation (Nitrous Oxide/Oxygen)

A. Inhalation Sedation Course Objectives: Upon completion of a competency course in inhalation sedation techniques, the dentist must be able to:

1. Describe the basic components of inhalation sedation equipment.
2. Discuss the function of each of these components.
3. List and discuss the advantages and disadvantages of inhalation sedation.
4. List and discuss the indications and contraindications of inhalation sedation.
5. List the complications associated with inhalation sedation.
6. Discuss the prevention, recognition and management of these complications.
7. Administer inhalation sedation to patients in a clinical setting in a safe and effective manner.
8. Discuss the abuse potential, occupational hazards and other untoward effects of inhalation agents.

B. Inhalation Sedation Course Content:

1. Historical, philosophical and psychological aspects of anxiety and pain control.
2. Patient evaluation and selection through review of medical history taking, physical diagnosis and psychological considerations.
4. Description of the stages of drug-induced central nervous system depression through all levels of consciousness and unconsciousness, with special emphasis on the distinction between the conscious and the unconscious state.
5. Review of pediatric and adult respiratory and circulatory physiology and related anatomy.
6. Pharmacology of agents used in inhalation sedation, including drug interactions and incompatibilities.
7. Indications and contraindications for use of inhalation sedation.
8. Review of dental procedures possible under inhalation sedation.
9. Patient monitoring using observation and monitoring equipment, with particular attention to vital
    signs and reflexes related to pharmacology of nitrous oxide.
10. Importance of maintaining proper records with accurate chart entries recording medical history, 
    physical examination, vital signs, drugs and doses administered and patient response.
12. Administration of local anesthesia in conjunction with inhalation sedation techniques.
13. Description and use of inhalation sedation equipment.
14. Introduction to potential health hazards of trace anesthetics and proposed techniques for limiting 
    occupational exposure.
15. Discussion of abuse potential.

C. Inhalation Sedation Course Duration: While length of a course is only one of the many factors to be 
considered in determining the quality of an educational program, the course should be a minimum of 14 
hours, including a clinical component during which competency in inhalation sedation technique is achieved. 
The inhalation sedation course most often is completed as a part of the predoctoral dental education program. 
However, the course may be completed in a postdoctoral continuing education competency course.

D. Participant Evaluation and Documentation of Inhalation Sedation Instruction: Competency courses 
in inhalation sedation techniques must afford participants with sufficient clinical experience to enable them to 
achieve competency. This experience must be provided under the supervision of qualified faculty and must be 
evaluated. The course director must certify the competency of participants upon satisfactory completion of 
training. Records of the didactic instruction and clinical experience, including the number of patients treated 
by each participant must be maintained and available.

E. Faculty: The course should be directed by a dentist or physician qualified by experience and training. This 
individual should have had at least three years of experience, including the individual’s formal postdoctoral 
training in anxiety and pain control. In addition, the participation of highly qualified individuals in related fields, 
such as anesthesiologists, pharmacologists, internists, and cardiologists and psychologists, should be 
encouraged.

A participant-faculty ratio of not more than ten-to-one when inhalation sedation is being used allows for 
adequate supervision during the clinical phase of instruction; a one-to-one ratio is recommended during the 
early state of participation.

The faculty should provide a mechanism whereby the participant can evaluate the performance of those 
individuals who present the course material.

F. Facilities: Competency courses must be presented where adequate facilities are available for proper 
patient care, including drugs and equipment for the management of emergencies.

Enteral and/or Combination Inhalation-Enteral Minimal Sedation

A. Enteral and/or Combination Inhalation-Enteral Minimal Sedation Course Objectives: Upon 
completion of a competency course in enteral and/or combination inhalation-enteral minimal sedation 
techniques, the dentist must be able to:
1. Describe the basic components of inhalation sedation equipment.
2. Discuss the function of each of these components.
3. List and discuss the advantages and disadvantages of enteral and/or combination inhalation-enteral 
    minimal sedation (combined minimal sedation).
4. List and discuss the indications and contraindications for the use of enteral and/or combination 
    inhalation-enteral minimal sedation (combined minimal sedation).
5. List the complications associated with enteral and/or combination inhalation-enteral minimal sedation 
    (combined minimal sedation).
6. Discuss the prevention, recognition and management of these complications.
7. Administer enteral and/or combination inhalation-ental sedation (combined minimal sedation) to patients in a clinical setting in a safe and effective manner.
8. Discuss the abuse potential, occupational hazards and other effects of enteral and inhalation agents.
9. Discuss the pharmacology of the enteral and inhalation drugs selected for administration.
10. Discuss the precautions, contraindications and adverse reactions associated with the enteral and inhalation drugs selected.
11. Describe a protocol for management of emergencies in the dental office and list and discuss the emergency drugs and equipment required for management of life-threatening situations.
12. Demonstrate the ability to manage life-threatening emergency situations, including current certification in Basic Life Support for Healthcare Providers.
13. Discuss the pharmacological effects of combined drug therapy, their implications and their management. Nitrous oxide/oxygen when used in combination with sedative agent(s) may produce minimal, moderate, deep sedation or general anesthesia.

B. Enteral and/or Combination Inhalation-Enteral Minimal Sedation Course Content:
1. Historical, philosophical and psychological aspects of anxiety and pain control.
2. Patient evaluation and selection through review of medical history taking, physical diagnosis and psychological profiling.
4. Description of the stages of drug-induced central nervous system depression through all levels of consciousness and unconsciousness, with special emphasis on the distinction between the conscious and the unconscious state.
5. Review of pediatric and adult respiratory and circulatory physiology and related anatomy.
6. Pharmacology of agents used in enteral and/or combination inhalation-ental minimal sedation, including drug interactions and incompatibilities.
7. Indications and contraindications for use of enteral and/or combination inhalation-ental minimal sedation (combined minimal sedation).
8. Review of dental procedures possible under enteral and/or combination inhalation-ental minimal sedation.
9. Patient monitoring using observation, monitoring equipment, with particular attention to vital signs and reflexes related to consciousness.
10. Maintaining proper records with accurate chart entries recording medical history, physical examination, informed consent, time-oriented anesthesia record, including the names of all drugs administered including local anesthetics, doses, and monitored physiological parameters.
12. Administration of local anesthesia in conjunction with enteral and/or combination inhalation-ental minimal sedation techniques.
13. Description and use of inhalation sedation equipment.
14. Introduction to potential health hazards of trace anesthetics and proposed techniques for limiting occupational exposure.
15. Discussion of abuse potential.

C. Enteral and/or Combination Inhalation-Enteral Minimal Sedation Course Duration: Participants must be able to document current certification in Basic Life Support for Healthcare Providers and have completed a nitrous oxide competency course to be eligible for enrollment in this course. While length of a course is only one of the many factors to be considered in determining the quality of an educational program, the course should include a minimum of 16 hours, plus clinically-oriented experiences during which competency in enteral and/or combined inhalation-ental minimal sedation techniques is demonstrated. Clinically-oriented experiences may include group observations on patients undergoing enteral and/or combination inhalation-ental minimal sedation. Clinical experience in managing a compromised airway is critical to the prevention of life-threatening emergencies. The faculty should schedule participants to return for additional clinical experience if competency has not been achieved in the time allotted. The educational course may be
completed in a predoctoral dental education curriculum or a postdoctoral continuing education competency course.

These Guidelines are not intended for the management of enteral and/or combination inhalation-enteral minimal sedation in children, which requires additional course content and clinical learning experience.

D. Participant Evaluation and Documentation of Instruction: Competency courses in combination inhalation-enteral minimal sedation techniques must afford participants with sufficient clinical understanding to enable them to achieve competency. The course director must certify the competency of participants upon satisfactory completion of the course. Records of the course instruction must be maintained and available.

E. Faculty: The course should be directed by a dentist or physician qualified by experience and training. This individual should have had at least three years of experience, including the individual’s formal postdoctoral training in anxiety and pain control. Dental faculty with broad clinical experience in the particular aspect of the subject under consideration should participate. In addition, the participation of highly qualified individuals in related fields, such as anesthesiologists, pharmacologists, internists, and cardiologists and psychologists, should be encouraged. The faculty should provide a mechanism whereby the participant can evaluate the performance of those individuals who present the course material.

F. Facilities: Competency courses must be presented where adequate facilities are available for proper patient care, including drugs and equipment for the management of emergencies.

V. Teaching Administration of Moderate Sedation

These Guidelines present a basic overview of the requirements for a competency course in moderate sedation. These include courses in enteral moderate sedation and parenteral moderate sedation. The teaching guidelines contained in this section on moderate sedation differ slightly from documents in medicine to reflect the differences in delivery methodologies and practice environment in dentistry. For this reason, separate teaching guidelines have been developed for moderate enteral and moderate parenteral sedation.

A. Course Objectives: Upon completion of a course in moderate sedation, the dentist must be able to:

1. List and discuss the advantages and disadvantages of moderate sedation.
2. Discuss the prevention, recognition and management of complications associated with moderate sedation.
3. Administer moderate sedation to patients in a clinical setting in a safe and effective manner.
4. Discuss the abuse potential, occupational hazards and other untoward effects of the agents utilized to achieve moderate sedation.
5. Describe and demonstrate the technique of intravenous access, intramuscular injection and other parenteral techniques.
6. Discuss the pharmacology of the drug(s) selected for administration.
7. Discuss the precautions, indications, contraindications and adverse reactions associated with the drug(s) selected.
8. Administer the selected drug(s) to dental patients in a clinical setting in a safe and effective manner.
9. List the complications associated with techniques of moderate sedation.
10. Describe a protocol for management of emergencies in the dental office and list and discuss the emergency drugs and equipment required for the prevention and management of emergency situations.
11. Discuss principles of advanced cardiac life support or an appropriate dental sedation/anesthesia emergency course equivalent.
12. Demonstrate the ability to manage emergency situations.
B. Moderate Sedation Course Content:

1. Historical, philosophical and psychological aspects of anxiety and pain control.
2. Patient evaluation and selection through review of medical history taking, physical diagnosis and psychological considerations.
4. Description of the sedation anesthesia continuum, with special emphasis on the distinction between the conscious and the unconscious state.
5. Review of pediatric and adult respiratory and circulatory physiology and related anatomy.
6. Pharmacology of local anesthetics and agents used in moderate sedation, including drug interactions and contraindications.
7. Indications and contraindications for use of moderate sedation.
9. Patient monitoring using observation and monitoring equipment, with particular attention to vital signs and reflexes related to consciousness.
10. Maintaining proper records with accurate chart entries recording medical history, physical examination, informed consent, time-oriented anesthesia record, including the names of all drugs administered including local anesthetics, doses, and monitored physiological parameters.
11. Prevention, recognition and management of complications and emergencies.
12. Description and use of moderate sedation monitors and equipment.
15. Prevention, recognition and management of complications of venipuncture and other parenteral techniques.
16. Description and rationale for the technique to be employed.
17. Prevention, recognition and management of systemic complications of moderate sedation, with particular attention to airway maintenance and support of the respiratory and cardiovascular systems.

C. Moderate Enteral Sedation Course Duration: A minimum of 24 hours of instruction, plus management of at least 10 adult case experiences by the enteral and/or enteral-nitrous oxide/oxygen route are required to achieve competency. These ten cases must include at least three live clinical dental experiences managed by participants in groups no larger than five. The remaining cases may include simulations and/or video presentations, but must include one experience in returning (rescuing) a patient from deep to moderate sedation. Participants combining enteral moderate sedation with nitrous oxide-oxygen must have first completed a nitrous oxide competency course.

Participants should be provided supervised opportunities for clinical experience to demonstrate competence in airway management. Clinical experience will be provided in managing healthy adult patients; this course in moderate enteral sedation is not designed for the management of children (aged 12 and under). Additional supervised clinical experience is necessary to prepare participants to manage medically compromised adults and special needs patients. This course in moderate enteral sedation does not result in competency in moderate parenteral sedation. The faculty should schedule participants to return for additional didactic or clinical exposure if competency has not been achieved in the time allotted.

Moderate Parenteral Sedation Course Duration: A minimum of 60 hours of instruction, plus management of at least 20 patients by the intravenous route per participant, is required to achieve competency in moderate sedation techniques. Participants combining parenteral moderate sedation with nitrous oxide-oxygen must have first completed a nitrous oxide competency course.

Clinical experience in managing a compromised airway is critical to the prevention of emergencies. Participants should be provided supervised opportunities for clinical experience to demonstrate competence in management of the airway. Typically, clinical experience will be provided in managing healthy adult patients. Additional supervised clinical experience is necessary to prepare participants to manage children (aged 12 and under) and medically compromised adults. Successful completion of this course
D. Participant Evaluation and Documentation of Instruction: Competency courses in moderate sedation techniques must afford participants with sufficient clinical experience to enable them to achieve competency. This experience must be provided under the supervision of qualified faculty and must be evaluated. The course director must certify the competency of participants upon satisfactory completion of training in each moderate sedation technique, including instruction, clinical experience and airway management. Records of the didactic instruction and clinical experience, including the number of patients managed by each participant in each anxiety and pain control modality must be maintained and available for review.

E. Faculty: The course should be directed by a dentist or physician qualified by experience and training. This individual should have had at least three years of experience, including formal postdoctoral training in anxiety and pain control. Dental faculty with broad clinical experience in the particular aspect of the subject under consideration should participate. In addition, the participation of highly qualified individuals in related fields, such as anesthesiologists, pharmacologists, internists, cardiologists and psychologists, should be encouraged.

A participant-faculty ratio of not more than five-to-one when moderate enteral sedation is being taught allows for adequate supervision during the clinical phase of instruction. A participant-faculty ratio of not more than three-to-one when moderate parenteral sedation is being taught allows for adequate supervision during the clinical phase of instruction; a one-to-one ratio is recommended during the early stage of participation.

The faculty should provide a mechanism whereby the participant can evaluate the performance of those individuals who present the course material.

F. Facilities: Competency courses in moderate sedation must be presented where adequate facilities are available for proper patient care, including drugs and equipment for the management of emergencies. These facilities may include dental and medical schools/offices, hospitals and surgical centers.

VI. Additional Sources of Information


American Academy of Pediatric Dentists (AAPD). Guidelines for Monitoring and Management of Pediatric Patients During and After Sedation for Diagnostic and Therapeutic Procedures: An Update. Developed through a collaborative effort between the American Academy of Pediatrics and the AAPD. Available at http://www.aapd.org/media/policies.asp


The ASA has other anesthesia resources that might be of interest to dentists. For more information, go to [http://www.asahq.org/publicationsAndServices/sgstoc.htm](http://www.asahq.org/publicationsAndServices/sgstoc.htm)


AMENDMENT OF THE POLICY STATEMENT ON EVIDENCE-BASED DENTISTRY

Background: (Reports: 190)

The CSA reviewed the “Policy Statement on Evidence-Based Dentistry” and recommends that it be amended to reflect new developments, information and organizational changes.

Resolution

52. Resolved, that the 2001 “Policy Statement on Evidence-Based Dentistry” (Trans. 2001:462) be amended by deletion and addition as presented in Appendix 1 of this annual report.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
WORKSHEET ADDENDUM

COUNCIL ON SCIENTIFIC AFFAIRS

Policy Statement on Evidence-Based Dentistry (Trans.2001:462)

The Council recommends that the below policy be amended by deletion and addition as follows (additions are underscored; deletions are stricken).

Introduction: Dentistry has evolved as a profession that has uniquely and successfully combined science with the art of healing. Building on this foundation, the dental profession has maintained a strong commitment to sound science, public service and an ethical obligation to protect the patient's health.

Over the last few decades, a process for reviewing scientific evidence emerged in medicine and other health fields that relies on systematic approaches to summarize the large volume of literature that health care providers need to assimilate into clinical practice. With rapidly evolving science and technology, dentistry has also faced the complex demands of integrating and effectively implementing changes in treatment modalities that can arise from new scientific evidence.

To address these challenges, the dental profession has endorsed an evidence-based approach to clinical practice and oral health care, which is commonly known as evidence-based dentistry (EBD). The American Dental Association (ADA) continues to pursue a leadership role in the field of EBD to help clinicians interpret and apply the best available evidence in everyday practice.

The American Dental Association (ADA) has a long history of identifying and supporting scientific advances in dentistry. During the 20th century, the ADA emerged as the leading dental organization in the world, and, by 1930, established rigorous guidelines for testing and advertising of dental products. The Association, through the Council on Scientific Affairs' Seal of Acceptance Program, continues to provide practitioners and consumers with information on safe, effective dental materials, devices and therapeutic agents. The Council's actions are based upon available scientific evidence and are subject to reconsideration at any time that significant new evidence becomes available. The Association also relies on available scientific evidence in its commitment to using credible scientific data and analyses in policymaking, and its communications with the dental profession and the public.

During the 1990s, a new process for reviewing scientific evidence emerged in medicine and other health fields that relies on systematic approaches to summarize the large volume of literature that health care providers need to assimilate into their practices. Since health care providers do not have the time to read the thousands of articles published each year, the "evidence-based medicine" (EBM) process uses a systematic approach to review and publish the evidence relevant to specific clinical questions.

Definition of Evidence-based Dentistry: The ADA American Dental Association defines the term "evidence-based dentistry" as follows:

Evidence-based dentistry (EBD) is an approach to oral health care that requires the judicious integration of systematic assessments of clinically relevant scientific evidence, relating to the patient's oral and medical condition and history, with the dentist's clinical expertise and the patient's treatment needs and preferences. (Trans. 2001:462)
In adopting this definition for EBD, the ADA recognizes that treatment recommendations should be determined for each patient by his or her dentist, and that patient preferences should be considered in all decisions. Dentist experience and other circumstances, such as patients’ characteristics, should also be considered in treatment planning. EBD does not provide a "cookbook" that dentists must follow, nor does it establish a standard of care. The EBD process must not be used to interfere in the dentist/patient relationship, nor is it to be used solely as a cost-containment tool by third-party payers.

Elements of the EBD Process

The EBD process is not a rigid methodological evaluation of scientific evidence that dictates what practitioners should or should not do. Rather, the EBD process is based on integrating the scientific basis for clinical care, using thorough, unbiased reviews and the best available scientific evidence at any one time, with clinical and patient factors to make the best possible decision(s) about appropriate health care for specific clinical circumstances. EBD relies on the role of individual professional judgment in this process.

The EBD process consists of four steps. The first step is to define a clinically relevant and focused question in the interest of finding the best available evidence to promote the oral health of patients. "Best evidence" is a term that refers to information obtained from randomized controlled clinical trials, non-randomized controlled clinical trials, cohort studies, case-control studies, crossover studies, cross-sectional studies, case studies, or the consensus opinion of experts in appropriate fields of research or clinical practice.

The second step focuses on systematically conducting searches for all studies and databases, published or unpublished, that may help to answer a clinically relevant question. After selecting, summarizing, and synthesizing all relevant studies that directly answer the focused clinical question, the strength of the available scientific evidence is graded using predefined criteria, and qualitative or quantitative analyses are conducted. Conclusions on the quality and strength of evidence are made, and gaps in the knowledge base that require further research are identified.

The third step of the EBD process is focused on translating the findings from systematic reviews for use by practitioners.

The final step of the EBD process involves assessing the health care outcomes following the findings of the previously outlined steps. This evaluation is conducted as part of the outcome assessment that health care providers integrate into their practices. This four-step process aims to help practitioners make the best-informed decisions with their patients.

ADA Center for Evidence-Based Dentistry: The Association supports the concept of evidence-based dentistry developed through systematic examination of the best available scientific data..., and will use this information to help shape the Association’s Research Agenda. As such, the Association envisions developing clinical questions, setting protocols for systematic reviews, working with collaborative groups to conduct systematic reviews, critically appraising the reviews and policies developed by other organizations, and developing mechanisms for translating and disseminating information to the membership. In 2007, the Association established the ADA Center for Evidence-Based Dentistry to provide leadership in implementing ADA programs and initiatives related to EBD.

To realize its vision of disseminating the best available evidence and helping practitioners implement EBD, the ADA Center for Evidence-Based Dentistry works in collaboration with the Council on Scientific Affairs to convene expert panels that review the collective research evidence and develop evidence-based recommendations on key clinical issues. The Association will continue developing evidence-based clinical recommendations and working with collaborative groups to conduct systematic reviews, critically appraising the reviews and policies developed by other organizations, and developing mechanisms for translating and disseminating information to the membership.
Practicing Evidence-Based Dentistry: The goal of the EBM-EBD process is to help practitioners provide the best care for their patients. This process uses clinical and methodological experts to synthesize all of the evidence relative to a defined “question of interest.” This information from and is published as a systematic review is made available to practitioners for integration. The evidence is integrated with their clinical experience and other factors relevant to specific patient needs and preferences. This characteristic of the EBM-EBD process is clearly explained in the classical definition of evidence-based medicine as “the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research” (Sackett DL, Rosenberg WMC, Gray JAM, Haynes RB, Richardson WS. 1996. Evidence based medicine: what it is and what it isn’t. BMJ 312: 71–2. Sackett D, et al. http://cebm.jr2.ox.ac.uk/ebmismisnt.html#coredef). Simply stated, evidence-based medicine is “the integration of the best research evidence with clinical expertise and patient values” (Sackett et al. Evidence-based Medicine. New York: Churchill Livingstone; 2000). Though this process was originally developed in medicine, its principles apply to all health care fields, including dentistry, and they are followed rigorously by the ADA Center for EBD.

The EBD process is time-consuming and thorough. The current approach in medicine and other health care fields is to rely on collaborative networks of experts in systematic review methods, statisticians, clinicians and funding agencies to conduct systematic reviews that can be used by professional associations or organizations. Currently there are collaborative research networks that conduct systematic reviews (e.g., the Cochrane Collaboration; Evidence-based Practice Centers (EPCs), funded by the U.S. Agency for Healthcare Research and Quality (AHRQ); and the University of York National Health Service (NHS) Centre for Reviews and Dissemination (CRD)). In the AHRQ-sponsored reviews, it is required that health care organizations (such as the ADA) play an active role in defining the questions for review and in evaluating the research findings. The ADA may elect to collaborate with these large networks of reviewers to conduct systematic reviews of clinically relevant questions.

The Role of the ADA in the EBD Process: The Association supports the concept of evidence-based dentistry developed through systematic examination of the best available scientific data, and will use this information to help shape the Association’s Research Agenda. As such, the Association envisions developing clinical questions, setting protocols for systematic reviews, working with collaborative groups to conduct systematic reviews, critically appraising the reviews and policies developed by other organizations, and developing mechanisms for translating and disseminating information to the membership.

EBD Resources: Detailed information on EBD, evidence-based clinical recommendations, systematic reviews, critical summaries of systematic reviews, EBD terminology, courses/workshops and other resources are available at the website of the ADA Center of Evidence-Based Dentistry (http://ebd.ada.org/). Concise, user-friendly EBD resources from the ADA Center for EBD and other organizations are useful informational resources that can assist practitioners with integrating the best available evidence with clinical expertise and the needs and preferences of the individual dental patient.

Glossary of Terms Relating to Evidence-based Dentistry^  

This glossary is designed to assist dental professionals and public policymakers in developing a common language for discussion of issues pertaining to evidence-based dental care.

[^]: Some of the definitions are based on information provided in the glossary of the NHS Research and Development Centre for Evidence-based Medicine (http://cebm.jr2.ox.ac.uk/docs/glossary.html).
**Best evidence** is a term that refers to information obtained from randomized controlled clinical trials, non-randomized controlled clinical trials, cohort studies, case-control studies, crossover studies, cross-sectional studies, case studies or, in the absence of scientific evidence, the consensus opinion of experts in the appropriate fields of research or clinical practice. The strength of the evidence follows the order of the studies or opinions listed above.

**Case-control study** involves identifying subjects with a clinical condition (cases) and subjects free from the condition (controls), and investigating if the two groups have similar or different exposures to risk indicator(s) of factor(s) associated with the disease.

**Case-series** is a report on a series of patients with an outcome of interest. No control group is involved.

**Clinical practice guideline** (parameter of care) is a systematically developed statement designed to assist both practitioner and patient with decisions about appropriate health care for specific clinical circumstances.

**Clinical protocol** is a step-by-step decision-making tool that describes how a health condition is diagnosed and managed.

**Cohort study** involves identifying two groups (cohorts) of subjects, one that did receive the exposure of interest and another that did not, and following these cohorts forward for the outcome of interest.

**Controlled clinical trial** is a study that uses the same design features of a randomized controlled clinical trial (see definition below), but, for reasons beyond the control of the investigators, the subjects are assigned using a non-random process into control or experimental groups.

**Crossover study design** is the administration of two or more experimental therapies, one after the other in a specified or random order, to the same group of patients.

**Cross-sectional study** is the observation of a defined population at a single point in time or in a specified time interval. Exposure and outcome are determined simultaneously.

**Evidence-based dentistry** is an approach to oral health care that requires the judicious integration of systematic assessments of clinically relevant scientific evidence, relating to the patient's oral and medical condition and history, with the dentist's clinical expertise and the patient's treatment needs and preferences.

**Evidence-based health care** extends the application of the principles of evidence-based medicine (see below) to all professions associated with health care, including purchasing and management.

**Evidence-based medicine** is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research.

**Meta-analysis** is a review that uses quantitative methods to combine the statistical measures from two or more studies and generates a weighted average of the effect of an intervention, degree of association between a risk factor and a disease, or accuracy of a diagnostic test.

**Probability of success** is a ratio of the number of patients who benefit from an intervention to all those who receive an intervention. A probability figure, such as 0.5 or 50%, means that out of 100 patients, 50 would benefit from an intervention and 50 would not benefit. Neither the dentist nor the patient can determine beforehand to which of the two groups a patient will belong.
**Randomized controlled clinical trial** is a study that randomizes a group of subjects into an experimental group and a control group. The experimental group receives the new intervention and the control group receives a placebo or standard intervention. These groups are followed up for the outcomes of interest.

**Systematic review** is a process of systematically locating, appraising and synthesizing evidence from scientific studies in order to obtain a reliable overview. The aim is to ensure a review process that is comprehensive and unbiased. Findings from systematic reviews may be used for decision-making about research and the provision of health care.
Resolution 53

Background: (Reports: 190)

The CSA reviewed the “Comprehensive Policy on Hazard Classification and Communication” and recommends that it be amended. The updated draft policy deletes directive language and clarifies that the ADA provides access to current information and resources to assist member dentists.

Resolution

53. Resolved, that the “Comprehensive Policy on Hazard Classification and Communication” (Trans. 2003:389) be amended by deletion and addition as follows (additions are underscored; deletions are stricken):

Resolved, that it is the position of the American Dental Association that encourage its members, in an effort to promote a safe workplace, to use only those materials in the dental office that have been appropriately labeled by the manufacturer or distributor to comply with OSHA’s Hazard Communication Standard and for which the manufacturer/distributor has supplied a current material safety data sheet (MSDS), and be it further

Resolved, that the appropriate agencies of the ADA supports the continued to provide members with updated by providing access to current information, forms and prototypes as needed to help them comply with changes in OSHA requirements affecting dental offices., and be it further

Resolved, that the American Dental Association requests all manufacturers and distributors of materials used in the dental office to abide by all relevant federal standards, guidelines and policies regarding the appropriate labeling of hazardous chemicals and the provision of current MSDSs, and be it further

Resolved, that the American Dental Association inform its members of their right to report to OSHA the names of any manufacturer or distributor that fails to properly label its product or fails to provide a MSDS to the dentist as required by OSHA, and be it further

Resolved, that those companies that fail to comply with the labeling and MSDS requirements of the OSHA Hazard Communication Standard, and who seek the ADA Seal of Acceptance for the product, be denied such Acceptance, and be it further

Resolved, that the following Association policies be rescinded:
Prototype Hazard Communication Program (Trans.1987:492)

Hazard Communication Standard Compliance (Trans.1993:718)

Dental Product Labeling to Satisfy OSHA Requirements (Trans.1992:645)

Labeling Requirements for Manufacturers of Dental Products (Trans.1992:645)


BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
 Resolution No. 54  
Report: N/A  
Date Submitted: July 2012  
Submitted By: Council on Scientific Affairs  
Reference Committee: Dental Education, Science and Related Matters  
Total Net Financial Implication: None  
Net Dues Impact:  
Amount One-time  
Amount On-going  
FTE 0  
ADA Strategic Plan Goal: Public Health  

AMENDMENT OF THE POLICY STATEMENT ON INTRAORAL/PERIORAL PIERCING AND TONGUE SPLITTING

Background: (Reports: 191)
The CSA reviewed the “Policy Statement on Intraoral/Perioral Piercing and Tongue Splitting” and recommends that it be amended to reflect new information and remove unnecessary content on oral piercing procedures.

Resolution


BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
WORKSHEET ADDENDUM

COUNCIL ON SCIENTIFIC AFFAIRS

Policy Statement on Intraoral/Perioral Piercing and Tongue Splitting

The Council recommends that the below policy be amended by deletion and addition as follows (additions are underscored; deletions are stricken).

Introduction

Piercing and tongue splitting is becoming a more prevalent forms of body art and self-expression in today’s society. However, oral piercings, which involve the tongue (the most common site),

1-3 lips, cheeks, uvula or a combination of sites, and tongue splitting have been implicated in can be associated with a number of adverse oral and systemic conditions. 1-3

Patients typically undergo piercing procedures without anesthetic. In tongue piercing, for example, a barbell-shaped piece of jewelry typically is placed to transverse the thickness of the tongue at the midline in its anterior one-third using a needle. Initially, a temporary device longer than the jewelry of choice is placed to accommodate postpiercing swelling. The free end of the barbell stem then is inserted into the hole in a ventral-dorsal direction. The recipient grasps the free end of the shank between the maxillary and mandibular anterior teeth and screws the ball onto the stem. The barbell also can be placed laterally, with the studs on the dorsolateral lingual surface. In the absence of complications, healing takes four to six weeks.

Tongue splitting is considered by some to be a form of body art. The process literally splits a person's tongue into two pieces, creating a "forked" appearance. Reports in the public press indicate that various primitive techniques are used by lay people for splitting tongues. For example, without anesthesia, a scalpel may be used followed by a cautering pen, or fishing line may be threaded through the pierced tongue and pulled forward, severing the anterior aspect. Individuals regularly pull the two tongue pieces apart to maintain the split so it does not "heal" back together. Once healed, additional surgery may be required to repair the "split" should the individual decide reversal is desired.

In lip or cheek piercing, jewelry position (usually a labrette) is determined primarily by aesthetics with consideration to where the jewelry will rest intraorally. Once position is determined, a cork is usually placed inside the mouth to support the tissue as it is pierced with a needle. The needle is inserted through the tissue and into the cork backing. The needle then is replaced with the labrette stud, and the disc backing is screwed into place. Healing time can range from weeks to months.

Common symptoms followingAs with any puncture wound or incision, piercing and tongue splitting can cause include pain,

1,5 swelling, 2,6 and infection and increased salivary flow. 4,5,7 Potential complications of intraoral and perioral piercings specifically are numerous, although available scientific literature is rather limited and consists mainly of case reports. Possible adverse outcomes secondary to oral piercing include increased salivary flow; 5,8 gingival injury or recession, 2,6,9-13 damage to teeth, 1,2,5,6,14 restorations and fixed porcelain prostheses; interference with speech, 3,4 mastication 3,4 or deglutition; 4 scar-tissue formation; 5 and development of metal hypersensitivities. 15,16 Because of the tongue's vascular nature, prolonged bleeding can result if vessels are punctured during the piercing procedure. 17 In addition, the technique for inserting tongue jewelry may abrade or fracture anterior dentition, 1,2,5,7,14 and digital manipulation of the jewelry can significantly increase the potential for infection. 1,5,7 Airway obstruction due to pronounced edema 2-5 or aspiration of jewelry poses another risk, and aspirated or ingested jewelry could present a hazard to respiratory or digestive organs. 3,6 In addition, oral ornaments can compromise dental diagnosis by obscuring anatomy and defects in radiographs. There have been reports of the jewelry becoming embedded in surrounding tissue, requiring surgical removal. 3,9 It also has been speculated that galvanic
Secondary infection from oral piercing can be serious. The National Institutes of Health has identified piercing as a possible vector for bloodborne hepatitis (hepatitis B, C, D and G) transmission.\textsuperscript{18,20} Disease transmission (e.g., hepatitis B, tetanus, localized tuberculosis) has been associated with ear piercing. Cases of endocarditis also have been linked to oral piercing.\textsuperscript{21,22} Secondary infection from oral piercing can be serious. In addition, the recent British Dental Journal reported a case of Ludwig’s angina, a rapidly spreading cellulitis involving the submandibular, sublingual and submental fascial spaces bilaterally, that manifested four days after a 25-year-old patient had her tongue pierced.\textsuperscript{23} Intubation was necessary to secure the airway. When antibiotic therapy failed to resolve the condition, surgical intervention was required to remove the barbell-shaped jewelry and decompress the swelling in the floor of the mouth. In another case, a healthy 19-year-old woman contracted herpes simplex virus, presumably through a recent tongue piercing. The infection progressed to fulminant hepatitis and subsequent death.\textsuperscript{24}

Although reports describing the morbidity and mortality associated with tongue splitting are currently not available in the literature, the risk of complications secondary to surgical procedures (including pain, swelling and infection) is well known. Therefore, the Association recommends that its members discourage patients who request the procedure by educating them of the risks associated with this surgery.

Because of its potential for numerous negative sequelae, the American Dental Association opposes the practice of intraoral/perioral piercing and tongue splitting.

References


RESCISSION OF THE POLICY, FLUORIDE VARNISHES

55. Resolved, that the ADA policy entitled “Fluoride Varnishes” (Trans.2004:311) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
Fluoride Varnishes (*Trans.*2004:311)

Resolved, that the ADA supports the use of fluoride varnishes as safe and efficacious within a caries prevention program that includes caries diagnosis, risk assessment, and regular dental care, and be it further

Resolved, that the ADA encourages the FDA to consider approving professionally applied fluoride varnish for reducing dental caries, based on the substantial amount of available data supporting the safety and effectiveness of this indication.
RESCESSION OF THE POLICY STATEMENT ON HIV/AIDS AS AN INFECTIOUS AND COMMUNICABLE DISEASE

Background: (Reports:191)

The Council also reviewed the 1999 ADA policy “HIV/AIDS as an Infectious and Communicable Disease,” presented in Appendix 3, and recommends rescission for this policy. HIV is universally recognized as a bloodborne pathogen, and prevention of HIV transmission is covered in the 2003 CDC recommendations for infection control and OSHA’s bloodborne pathogen standard. HIV/AIDS is also covered in other ADA policies addressing treatment of HIV-positive patients in the dental office, such as the Policy on Bloodborne Pathogens, Infection Control and the Practice of Dentistry, which addresses the classification of bloodborne pathogens (HIV, HBV, HCV, others). Ethical perspectives regarding the treatment of patients with HIV/AIDS are also addressed in the ADA Principles of Ethics and Code of Professional Conduct. Given these and other considerations, the Council presents the following draft resolution to rescind the 1999 HIV/AIDS policy, which is redundant with the 2003 ADA Bloodborne Pathogens policy and other ADA resources.

Resolution


BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

Resolved, that the American Dental Association take every appropriate opportunity to publicly state the current ADA policy which supports the classification of HIV (AIDS) as an infectious and communicable disease.
COUNCIL ON SCIENTIFIC AFFAIRS SUPPLEMENTAL REPORT 1 TO THE HOUSE OF DELEGATES:
PROPOSED POLICY ACTION AND COUNCIL UPDATE

Policy Review and Recommendations: In accordance with Resolution 111H-2010, Regular Comprehensive Policy Review, the CSA reviewed a number of ADA policies in 2012. In addition to the recommendations forwarded to the House in its annual report, the Council recommends the existing policy on bloodborne pathogens be rescinded and replaced by a new policy on infection control.

The CSA reviewed the “Policy Statement on Bloodborne Pathogens, Infection Control and the Practice of Dentistry” (Trans.1999:977, 983; 2004:300; 2008:453) with input from CAPIR, CEBJA, CGA and the ADA legal division (Worksheet 5101). The Council recommends that the policy should be rescinded because its content includes a significant amount of directive language and redundant information found in the ADA Code of Ethics, other policies or government regulations and laws. The Council, therefore, proposes the following resolution:


However, infection control is an extremely important tenet in the practice of dentistry and in healthcare generally. Given this, and the efforts of ADA, the Centers for Disease Control and Prevention (CDC) and other agencies to enhance patient and dental health care worker safety by implementing infection control practices, the Council recommends the following policy be adopted:

Infection Control in the Practice of Dentistry.

102. Resolved, that it be ADA policy to support the implementation of standard precautions and infection control recommendations appropriate to the clinical setting, per the 2003 Guidelines for Infection Control in Dental Health Care Settings from the Centers for Disease Control and Prevention (CDC), and be it further

Resolved, that this policy includes implementation of CDC recommendations for vaccination and the prevention and management of exposure incidents such as needlesticks or other sharps injuries.


Caries Classification System: According to its plan on this project the Council recently reviewed preliminary results from validation testing conducted in a practice-based research setting, including data on sensitivity, specificity, and reliability. The CSA approved the current version of the ADA Caries Classification System
(CCS) for release to selected organizations for beta testing. The Council believes this additional testing is needed to support a new system of this scope that will require extensive coordination and cooperation among numerous internal and external stakeholders, including academia, industry, research and dental practitioners.

**Resolutions**

See Resolution 101; Worksheet:5100

See Resolution 102; Worksheet:5106
Resolution No. 101  
Report: CSA Supplemental Report 1  
Date Submitted: September 2012  
Submitted By: Council on Scientific Affairs  
Reference Committee: Dental Education, Science and Related Matters  
Total Net Financial Implication: None  
Net Dues Impact:  
Amount One-time  
Amount On-going  
FTE 0  
ADA Strategic Plan Goal: Members (Required)

RESCISSION OF ADA POLICY ENTITLED, POLICY STATEMENT ON BLOODBORNE PATHOGENS, INFECTION CONTROL AND THE PRACTICE OF DENTISTRY

Background: (See CSA Supplemental Report 1 to the House of Delegates, Worksheet:5098)

Resolution


BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.

The dental office is a safe place to provide and receive dental care. Current and generally accepted epidemiological information supports the conclusion that there is no significant risk of contracting bloodborne diseases through the provision of dental treatment when appropriate infection control procedures are followed.

The dental profession in the United States has a long tradition of providing appropriate and compassionate care to the public, including individuals with special needs. The American Dental Association (ADA) believes that it has the responsibility to articulate a clear position on issues related to bloodborne pathogens and diseases and to formulate policy based on current and generally accepted scientific knowledge and accepted moral, ethical and legal imperatives.

This policy statement, addressing bloodborne pathogens, infection control and the practice of dentistry, will be reviewed on a regular basis and may be modified as scientific knowledge of bloodborne pathogen transmission and prevention in health care settings evolves. The Association urges dentists, other dental workers who may participate or assist in dental procedures, and dental laboratories to follow all ADA policies that deal with bloodborne pathogens.

A key element of infection control is the concept of standard precautions, introduced by the Centers for Disease Control and Prevention (CDC) as a means to reduce the risk of bloodborne pathogen transmission (e.g., the Human Immunodeficiency Virus [HIV], Hepatitis B Virus [HBV] and others) in healthcare settings. The primary principle behind standard precautions centers on the premise that medical history and examination cannot reliably identify all patients infected with bloodborne pathogens. All patients, therefore, must be regarded as potentially infectious. As such, applying standard precautions requires that infection control procedures (e.g., HBV vaccination, routine handwashing, use of protective barriers and care in the use and disposal of needles and other sharp instruments) are used for every patient.

Most studies suggest that the prevalence of HCV infection among dentists is similar to that among the general population. Furthermore, data historically indicate a higher HBV seroprevalence rate among dentists than the general population; however, declining overall seroprevalence rates and significantly lower rates among dentists under age 40 reaffirm the safety and efficacy of currently recommended infection control measures with respect to bloodborne pathogens. The dental profession, therefore, is strongly urged to continue to adhere to current infection control recommendations as set forth by the ADA and the CDC.

Since the implementation of standard precautions in the United States as a main element of infection control, and with the exception of the Florida case-cluster where HIV may have been transmitted from a dentist to six patients, there have been no documented cases of HIV transmission from dentist to patient, patient to dentist, or patient to patient as a result of dental treatment. Similarly, since 1987 and the implementation of standard precautions, there have been no documented outbreaks of HBV or HCV associated with the practice of dentistry.
Patient Issues

Infection Control: Patients infected with bloodborne pathogens can be safely treated in the private dental office. Current epidemiological evidence indicates that there is no significant risk of contracting bloodborne diseases through the provision of dental treatment when standard precautions are routinely followed. The practice of standard precautions is an effective means of reducing blood contacts that can result in bloodborne pathogen transmission, minimizing even further the already low risk of disease transmission in the dental office.

Vaccination: The Association urges dentists and other dental workers who may be at reasonable risk for infection to take advantage of the hepatitis B vaccine and other vaccines to protect themselves and patients from infectious organisms. In addition, the Association supports having all dental, advanced dental and allied dental education programs encourage the vaccination of students, faculty and staff against infectious organisms.

Referral for Medical Evaluation: Dentists should be alert to signs and symptoms of bloodborne disease that may be identified during the provision of dental care. Patients with medical histories or conditions possibly indicative of infection should be referred to their physicians for diagnostic procedures, counseling and medical follow-up.

Patient Disclosure: The Association believes that all patients infected with a bloodborne pathogen(s) should disclose their bloodborne pathogen status as part of their medical history; dentists, like physicians, need to know every patient’s medical history in order to make appropriate treatment decisions that are in the best interests of the patient.

Access to Care: The Association believes that individuals infected with a bloodborne pathogen(s) should be treated with compassion and dignity and should have access to dental treatment. Treatment considerations should be based on current and generally accepted scientific knowledge. A dentist should not refuse to provide oral health care that is within the dentist’s current realm of competence solely because the patient is infected with a bloodborne pathogen.

Furthermore, the ADA’s Principles of Ethics and Code of Professional Conduct states that a dentist has the general obligation to provide care to those in need. A decision not to provide treatment to an individual based solely on the fact that the individual is infected with a bloodborne pathogen is unethical.

Professional Judgment: The ADA supports the right and responsibility of each dentist to exercise his or her best professional judgment, based on current and generally accepted scientific knowledge and the ethics of the profession, in all situations regarding when and how to treat and whether to refer each patient.

Exposure Incidents: The Association recommends that dentists be familiar with current CDC postexposure protocols for the management of occupational exposures to bloodborne pathogens and that dentists institute office policies to ensure appropriate and efficient management of exposure incidents. The ADA recommends that the costs associated with postexposure prophylaxis and exposure sequelae be a benefit of Workers’ Compensation insurance coverage.

Confidentiality: The Association urges dentists to maintain strict confidentiality of a patient’s bloodborne pathogen status and medical condition. Under the Association’s Principles of Ethics and Code of Professional Conduct, dentists are ethically obligated to safeguard the confidentiality of patient records and to maintain patient records in a manner consistent with the protection of the welfare of the patient. This does not prevent dentists from sharing information about the patient’s bloodborne pathogen status and medical condition with the patient’s other health care providers when allowed by state or federal law. Dentists are encouraged to have an office protocol, in accordance with applicable laws, for the confidential handling of information about patients infected with a bloodborne pathogen(s).
Provider Issues

Practice Restrictions/Disclosure: The ADA affirms that dentists infected with bloodborne pathogens can safely provide dental care, and that bloodborne pathogen infection alone does not justify the limiting of professional duties or automatically mandate disclosure provided proper infection control procedures are implemented. Infected dental health care workers must practice in compliance with CDC or equivalent infection-control recommendations, as required by applicable law.

If the government mandates testing for bloodborne pathogen infection and disclosure for health care workers who test positive, the ADA Council on Government Affairs will investigate and pursue national legislative possibilities of a government-sponsored insurance program that would guarantee reasonable financial compensation to health care workers who may be discriminated against upon disclosure of their disease status.

Infection Control: Current epidemiological evidence indicates that there is no significant risk of contracting bloodborne diseases through the provision of dental treatment when standard precautions and recommended infection control procedures are routinely followed. Practicing standard precautions is an effective means of reducing blood contacts that can result in bloodborne pathogen transmission, minimizing even further the already low risk of disease transmission in the dental office.

However, because the foremost concern of the dental profession must continue to be protection of the patient, the Association strongly encourages all dental health care workers to undergo personal evaluation and assess their need to determine their bloodborne pathogen status. Furthermore, dental health care workers who believe they are at risk for bloodborne pathogen infection should regularly monitor their status.

All dental health care workers testing positive for a bloodborne pathogen must practice only in strict compliance with the current infection-control recommendations of the CDC for infected providers or their equivalent, as required by applicable law; this includes submitting to, and adhering to any objective and appropriate restrictions imposed by expert review panels with competent jurisdiction, as outlined by the CDC.

The high ethical standards of the dental profession establish the welfare of the patient as the dentist’s primary ethical obligation. The Association’s Council on Ethics, Bylaws and Judicial Affairs has stated in an advisory opinion to the ADA Principles of Ethics and Code of Professional Conduct that a dentist who contracts any disease or becomes impaired in any way that might endanger patients or dental staff shall, with consultation and advice from a qualified physician or other authority, limit the activities of practice to those areas that do not endanger patients or other health care providers.

Exposure Incidents: The Association’s Principles of Ethics and Code of Professional Conduct requires that all dentists, regardless of their known bloodborne pathogen status, have an ethical obligation to immediately inform any patient they suspect may have been exposed to blood or other potentially infectious material in the dental office of the need for postexposure evaluation and follow-up and to refer the patient, as needed, to a qualified healthcare practitioner who can provide postexposure services. The dentist’s ethical obligation in the event of an exposure incident extends to providing information concerning the dentist’s own bloodborne pathogen status to the evaluating health care practitioner, if the dentist is the source individual, and submitting to testing that will assist in the evaluation of the patient. If a staff member or other third person is the source individual, the dentist should encourage that person to cooperate as needed for the patient’s evaluation. Dentists should document in the patient’s record the actions they have taken in response to a patient’s exposure to blood or other potentially infectious material. Care should be taken not to include in the patient record confidential medical information about the dentist or a staff member, to avoid unauthorized disclosure of this information with the patient record.

Insurance Coverage: If a dentist infected with a bloodborne pathogen discontinues the practice of dentistry because of a legal requirement to disclose his/her bloodborne pathogen status to patients, the Association believes the dentist to be totally disabled with respect to the practice of dentistry. The ADA will assist and
support infected dentists in sustaining meaningful professional careers and will encourage insurance carriers to provide disability benefits for such dentists.

Education

Public Information and Education: Appropriate agencies of the Association should continue efforts to educate the public about both the efficacy of standard precautions and the absence of a significant epidemiological risk of contracting bloodborne diseases through the provision of dental treatment when recommended infection control procedures are routinely followed.

The healthcare and communications communities also should work together, in consultation with government agencies, to develop public service announcements and other educational messages regarding bloodborne diseases. Public education to increase awareness of how bloodborne diseases are transmitted should include information aimed at diminishing irrational fears about transmission of such diseases through dental treatment.

Professional Education: The Principles of Ethics and Code of Professional Conduct of the ADA states that the privilege of dentists to be accorded professional status rests primarily in the knowledge, skill and experience with which they serve their patients and society. All dentists, therefore, have the obligation of keeping their knowledge and skill current.

The Association recommends the development of national educational programs for the dental team that address infection control recommendations for preventing bloodborne pathogen transmission in health care settings as well as programs that address the management of the oral and systemic implications of bloodborne diseases. The Association further recommends that dental schools, dental auxiliary schools and advanced dental education programs incorporate these programs in curriculum content and clinical activities. The Association will further assist the profession in addressing bloodborne disease issues by assuring the widespread dissemination of current infection-control recommendations and information on bloodborne diseases to the dental community through Association publications, conferences and videotapes.

Legal and Legislative Issues

Antidiscrimination: The ADA supports clarifying or amending antidiscrimination laws and regulations, either legislatively or through the courts, in consideration of the rights of the patient to be free from acts of prejudice and the rights of others to be protected against an unreasonable risk of disease.

The Association also strongly supports state and federal legislation that protects a dentist from charges of discrimination if a dentist, in a sincere effort to protect a patient’s health, elects to refrain from performing a dental procedure on a patient who fails to disclose medical information that, in the dentist’s professional judgment and based on current and generally accepted scientific knowledge, may significantly impact the patient’s treatment. The Association further strongly supports state and federal legislation that gives an infected patient’s health care providers the right to share, when medically indicated, knowledge of the patient’s bloodborne pathogen status and current medical condition without risking a violation of state or federal antidiscrimination laws and confidentiality laws.

Professional Judgment: The Association, where appropriate, will pursue legal and legislative means to effect changes to existing statutes, regulations, guidelines and interpretations which impose inappropriate restraint on the exercise of the dentist’s professional judgment in the treatment of persons with disabilities and/or infectious diseases.

Classification of Bloodborne Pathogens: The ADA supports the classification of bloodborne pathogens as infectious and communicable disease agents and, as such, will take every appropriate opportunity to publicly support such classification.
National Policies: The Association supports initiatives to develop national policies on bloodborne disease/infection that can become the basis for coordinated efforts by the public and private sectors. The oral health aspects of bloodborne disease/infection and issues related to the practice of dentistry should be included in national policies.

Mandatory Testing: The ADA opposes any laws or regulations that require mandatory testing of dentists and other health care workers to determine their bloodborne pathogen status.

Enforcement of Infection Control Guidelines: Enforcement of CDC or equivalent infection-control guidelines should be assigned to state boards of dentistry.

Statement on Infection Control Standards of Care and Compliance: The ADA encourages and supports infection control standards of care, provided those standards are based on and justified by scientific research, and advocates and pursues fair systems of compliance as well as appropriate penalties for noncompliance.
Resolution No. 102

Report: CSA Supplemental Report 1

Date Submitted: September 2012

Submitted By: Council on Scientific Affairs

Reference Committee: Dental Education, Science and Related Matters

Total Net Financial Implication: None

Net Dues Impact: None

Amount One-time

Amount On-going

FTE 0

ADA Strategic Plan Goal: Members (Required)

INFECTION CONTROL IN THE PRACTICE OF DENTISTRY

Background: (See CSA Supplemental Report 1 to the House of Delegates, Worksheet:5098)

Resolution

102. Resolved, that it be ADA policy to support the implementation of standard precautions and infection control recommendations appropriate to the clinical setting, per the 2003 Guidelines for Infection Control in Dental Health Care Settings from the Centers for Disease Control and Prevention (CDC) (appended), and be it further

Resolved, that this policy includes implementation of CDC recommendations for vaccination and the prevention and management of exposure incidents such as needlesticks or other sharps injuries.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Guidelines for Infection Control in Dental Health-Care Settings — 2003

INSIDE: Continuing Education Examination
Guidelines for Infection Control in Dental Health-Care Settings — 2003

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Summary
This report consolidates previous recommendations and adds new ones for infection control in dental settings. Recommendations are provided regarding 1) educating and protecting dental health-care personnel; 2) preventing transmission of bloodborne pathogens; 3) hand hygiene; 4) personal protective equipment; 5) contact dermatitis and latex hypersensitivity; 6) sterilization and disinfection of patient-care items; 7) environmental infection control; 8) dental unit waterlines, biofilm, and water quality; and 9) special considerations (e.g., dental handpieces and other devices, radiology, parenteral medications, oral surgical procedures, and dental laboratories). These recommendations were developed in collaboration with and after review by authorities on infection control from CDC and other public agencies, academia, and private and professional organizations.

Introduction
This report consolidates recommendations for preventing and controlling infectious diseases and managing personnel health and safety concerns related to infection control in dental settings. This report 1) updates and revises previous CDC recommendations regarding infection control in dental settings (1,2); 2) incorporates relevant infection-control measures from other CDC guidelines; and 3) discusses concerns not addressed in previous recommendations for dentistry. These updates and additional topics include the following:

- application of standard precautions rather than universal precautions;
- work restrictions for health-care personnel (HCP) infected with or occupationally exposed to infectious diseases;
- management of occupational exposures to bloodborne pathogens, including postexposure prophylaxis (PEP) for work exposures to hepatitis B virus (HBV), hepatitis C virus (HCV); and human immunodeficiency virus (HIV);
- selection and use of devices with features designed to prevent sharps injury;
- hand-hygiene products and surgical hand antisepsis;
- contact dermatitis and latex hypersensitivity;
- sterilization of unwrapped instruments;
- dental water-quality concerns (e.g., dental unit waterline biofilms; delivery of water of acceptable biological quality for patient care; usefulness of flushing waterlines; use of sterile irrigating solutions for oral surgical procedures; handling of community boil-water advisories);
- dental radiology;
- aseptic technique for parenteral medications;
- preprocedural mouth rinsing for patients;
- oral surgical procedures;
- laser/electrosurgery plumes;
- tuberculosis (TB);
- Creutzfeldt-Jakob disease (CJD) and other prion-related diseases;
- infection-control program evaluation; and
- research considerations.

These guidelines were developed by CDC staff members in collaboration with other authorities on infection control. Draft documents were reviewed by other federal agencies and professional organizations from the fields of dental health care, public health, and hospital epidemiology and infection control. A Federal Register notice elicited public comments that were considered in the decision-making process. Existing guidelines and published research pertinent to dental infection-control prin-
principles and practices were reviewed. Wherever possible, recommendations are based on data from well-designed scientific studies. However, only a limited number of studies have characterized risk factors and the effectiveness of prevention measures for infections associated with dental health-care practices.

Some infection-control practices routinely used by health-care practitioners cannot be rigorously examined for ethical or logistical reasons. In the absence of scientific evidence for such practices, certain recommendations are based on strong theoretical rationale, suggestive evidence, or opinions of respected authorities based on clinical experience, descriptive studies, or committee reports. In addition, some recommendations are derived from federal regulations. No recommendations are offered for practices for which insufficient scientific evidence or lack of consensus supporting their effectiveness exists.

**Background**

In the United States, an estimated 9 million persons work in health-care professions, including approximately 168,000 dentists, 112,000 registered dental hygienists, 218,000 dental assistants (3), and 53,000 dental laboratory technicians (4). In this report, dental health-care personnel (DHCP) refers to all paid and unpaid personnel in the dental health-care setting who might be occupationally exposed to infectious materials, including body substances and contaminated supplies, equipment, environmental surfaces, water, or air. DHCP include dentists, dental hygienists, dental assistants, dental laboratory technicians (in-office and commercial), students and trainees, contractual personnel, and other persons not directly involved in patient care but potentially exposed to infectious agents (e.g., administrative, clerical, housekeeping, maintenance, or volunteer personnel). Recommendations in this report are designed to prevent or reduce potential for disease transmission from patient to DHCP, from DHCP to patient, and from patient to patient. Although these guidelines focus mainly on outpatient, ambulatory dental health-care settings, the recommended infection-control practices are applicable to all settings in which dental treatment is provided.

Dental patients and DHCP can be exposed to pathogenic microorganisms including cytomegalovirus (CMV), HBV, HCV, herpes simplex virus types 1 and 2, HIV, Mycobacterium tuberculosis, staphylococci, streptococci, and other viruses and bacteria that colonize or infect the oral cavity and respiratory tract. These organisms can be transmitted in dental settings through 1) direct contact with blood, oral fluids, or other patient materials; 2) indirect contact with contaminated objects (e.g., instruments, equipment, or environmental surfaces); 3) contact of conjunctival, nasal, or oral mucosa with droplets (e.g., spatter) containing microorganisms generated from an infected person and propelled a short distance (e.g., by coughing, sneezing, or talking); and 4) inhalation of airborne microorganisms that can remain suspended in the air for long periods (5).

Infection through any of these routes requires that all of the following conditions be present:

- a pathogenic organism of sufficient virulence and in adequate numbers to cause disease;
- a reservoir or source that allows the pathogen to survive and multiply (e.g., blood);
- a mode of transmission from the source to the host;
- a portal of entry through which the pathogen can enter the host; and
- a susceptible host (i.e., one who is not immune).

Occurrence of these events provides the chain of infection (6). Effective infection-control strategies prevent disease transmission by interrupting one or more links in the chain.

Previous CDC recommendations regarding infection control for dentistry focused primarily on the risk of transmission of bloodborne pathogens among DHCP and patients and use of universal precautions to reduce that risk (1,2,7,8). Universal precautions were based on the concept that all blood and body fluids that might be contaminated with blood should be treated as infectious because patients with bloodborne infections can be asymptomatic or unaware they are infected (9,10). Preventive practices used to reduce blood exposures, particularly percutaneous exposures, include 1) careful handling of sharp instruments, 2) use of rubber dams to minimize blood spattering; 3) handwashing; and 4) use of protective barriers (e.g., gloves, masks, protective eyewear, and gowns).

The relevance of universal precautions to other aspects of disease transmission was recognized, and in 1996, CDC expanded the concept and changed the term to standard precautions. Standard precautions integrate and expand the elements of universal precautions into a standard of care designed to protect HCP and patients from pathogens that can be spread by blood or any other body fluid, excretion, or secretion (11). Standard precautions apply to contact with 1) blood; 2) all body fluids, secretions, and excretions (except sweat), regardless of whether they contain blood; 3) nonintact skin; and 4) mucous membranes. Saliva has always been considered a potentially infectious material in dental infection control; thus, no operational difference exists in clinical dental practice between universal precautions and standard precautions.

In addition to standard precautions, other measures (e.g., expanded or transmission-based precautions) might be necessary to prevent potential spread of certain diseases (e.g., TB, influenza, and varicella) that are transmitted through airborne,
droplet, or contact transmission (e.g., sneezing, coughing, and contact with skin) (11). When acutely ill with these diseases, patients do not usually seek routine dental outpatient care. Nonetheless, a general understanding of precautions for diseases transmitted by all routes is critical because 1) some DHCP are hospital-based or work part-time in hospital settings; 2) patients infected with these diseases might seek urgent treatment at outpatient dental offices; and 3) DHCP might become infected with these diseases. Necessary transmission-based precautions might include patient placement (e.g., isolation), adequate room ventilation, respiratory protection (e.g., N-95 masks) for DHCP, or postponement of nonemergency dental procedures.

DHCP should be familiar also with the hierarchy of controls that categorizes and prioritizes prevention strategies (12). For bloodborne pathogens, engineering controls that eliminate or isolate the hazard (e.g., puncture-resistant sharps containers or needle-retraction devices) are the primary strategies for protecting DHCP and patients. Where engineering controls are not available or appropriate, work-practice controls that result in safer behaviors (e.g., one-hand needle recapping or not using fingers for cheek retraction while using sharp instruments or suturing), and use of personal protective equipment (PPE) (e.g., protective eyewear, gloves, and mask) can prevent exposure (13). In addition, administrative controls (e.g., policies, procedures, and enforcement measures targeted at reducing the risk of exposure to infectious persons) are a priority for certain pathogens (e.g., *M. tuberculosis*), particularly those spread by airborne or droplet routes.

Dental practices should develop a written infection-control program to prevent or reduce the risk of disease transmission. Such a program should include establishment and implementation of policies, procedures, and practices (in conjunction with selection and use of technologies and products) to prevent work-related injuries and illnesses among DHCP as well as health-care-associated infections among patients. The program should embody principles of infection control and occupational health, reflect current science, and adhere to relevant federal, state, and local regulations and statutes. An infection-control coordinator (e.g., dentist or other DHCP) knowledgeable or willing to be trained should be assigned responsibility for coordinating the program. The effectiveness of the infection-control program should be evaluated on a day-to-day basis and over time to help ensure that policies, procedures, and practices are useful, efficient, and successful (see Program Evaluation).

Although the infection-control coordinator remains responsible for overall management of the program, creating and maintaining a safe work environment ultimately requires the commitment and accountability of all DHCP. This report is designed to provide guidance to DHCP for preventing disease transmission in dental health-care settings, for promoting a safe working environment, and for assisting dental practices in developing and implementing infection-control programs. These programs should be followed in addition to practices and procedures for worker protection required by the Occupational Safety and Health Administration’s (OSHA) standards for occupational exposure to bloodborne pathogens (13), including instituting controls to protect employees from exposure to blood or other potentially infectious materials (OPIM), and requiring implementation of a written exposure-control plan, annual employee training, HBV vaccinations, and postexposure follow-up (13). Interpretations and enforcement procedures are available to help DHCP apply this OSHA standard in practice (14). Also, manufacturer’s Material Safety Data Sheets (MSDS) should be consulted regarding correct procedures for handling or working with hazardous chemicals (15).

**Previous Recommendations**

This report includes relevant infection-control measures from the following previously published CDC guidelines and recommendations:

- CDC. Guidelines for the prevention of intravascular catheter-related infections. MMWR 2002;51(No. RR-10).
- CDC. Updated U.S. Public Health Service guidelines for the management of occupational exposures to HBV, HCV, and HIV and recommendations for postexposure prophylaxis. MMWR 2001;50(No. RR-11).
- Bolyard EA, Tablan OC, Williams WW, Pearson ML, Shapiro CN, Deitchman SD, Hospital Infection Control Practices Advisory Committee. Guideline for infection...

- CDC. Immunization of health-care workers: recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Hospital Infection Control Practices Advisory Committee (HICPAC). MMWR 1997;46(No. RR-18).


- CDC. Recommendations for preventing transmission of human immunodeficiency virus and hepatitis B virus to patients during exposure-prone invasive procedures. MMWR 1991;40(No. RR-8).


**Selected Definitions**

*Alcohol-based hand rub:* An alcohol-containing preparation designed for reducing the number of viable microorganisms on the hands.

*Antimicrobial soap:* A detergent containing an antiseptic agent.

*Antiseptic:* A germicide used on skin or living tissue for the purpose of inhibiting or destroying microorganisms (e.g., alcohols, chlorhexidine, chlorine, hexachlorophene, iodine, chloroxylenol [PCMX], quaternary ammonium compounds, and triclosan).

*Bead sterilizer:* A device using glass beads 1.2–1.5 mm diameter and temperatures 217°C–232°C for brief exposures (e.g., 45 seconds) to inactivate microorganisms. (This term is actually a misnomer because it has not been cleared by the Food and Drug Administration [FDA] as a sterilizer).

*Bioburden:* Microbiological load (i.e., number of viable organisms in or on an object or surface) or organic material on a surface or object before decontamination, or sterilization. Also known as *bioload* or *microbial load*.

*Colony-forming unit (CFU):* The minimum number (i.e., tens of millions) of separable cells on the surface of or in semi-solid agar medium that give rise to a visible colony of progeny. CFUs can consist of pairs, chains, clusters, or as single cells and are often expressed as colony-forming units per milliliter (CFUs/mL).

*Decontamination:* Use of physical or chemical means to remove, inactivate, or destroy pathogens on a surface or item so that they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

*Dental treatment water:* Nonsterile water used during dental treatment, including irrigation of nonsurgical operative sites and cooling of high-speed rotary and ultrasonic instruments.

*Disinfectant:* A chemical agent used on inanimate objects (e.g., floors, walls, or sinks) to destroy virtually all recognized pathogenic microorganisms, but not necessarily all microbial forms (e.g., bacterial endospores). The U.S. Environmental Protection Agency (EPA) groups disinfectants on the basis of whether the product label claims limited, general, or hospital disinfectant capabilities.

*Disinfection:* Destruction of pathogenic and other kinds of microorganisms by physical or chemical means. Disinfection is less lethal than sterilization, because it destroys the majority of recognized pathogenic microorganisms, but not necessarily all microbial forms (e.g., bacterial spores). Disinfection does not ensure the degree of safety associated with sterilization processes.

*Droplet nuclei:* Particles ≤ 5 μm in diameter formed by dehydration of airborne droplets containing microorganisms that can remain suspended in the air for long periods of time.

*Droplets:* Small particles of moisture (e.g., spatter) generated when a person coughs or sneezes, or when water is converted to a fine mist by an aerator or shower head. These particles, intermediate in size between drops and droplet nuclei, can contain infectious microorganisms and tend to quickly settle from the air such that risk of disease transmission is usually limited to persons in close proximity to the droplet source.

*Endotoxin:* The lipopolysaccharide of gram-negative bacteria, the toxic character of which resides in the lipid protein. Endotoxins can produce pyrogenic reactions in persons exposed to their bacterial component.

*Germicide:* An agent that destroys microorganisms, especially pathogenic organisms. Terms with the same suffix (e.g., *virusicide, fungicide, bactericide, tuberculicide,* and *sporicide*) indi-
cate agents that destroy the specific microorganism identified by the prefix. Germicides can be used to inactivate microorganisms in or on living tissue (i.e., antiseptics) or on environmental surfaces (i.e., disinfectants).

Hand hygiene: General term that applies to handwashing, antiseptic handwash, antiseptic hand rub, or surgical hand antisepsis.

Health-care–associated infection: Any infection associated with a medical or surgical intervention. The term health-care–associated replaces nosocomial, which is limited to adverse infectious outcomes occurring in hospitals.

Hepatitis B immune globulin (HBIG): Product used for prophylaxis against HBV infection. HBIG is prepared from plasma containing high titers of hepatitis B surface antibody (anti-HBs) and provides protection for 3–6 mos.

Hepatitis B surface antigen (HBsAg): Serologic marker on the surface of HBV detected in high levels during acute or chronic hepatitis. The body normally produces antibodies to surface antigen as a normal immune response to infection.

Hepatitis B e antigen (HBeAg): Secreted product of the nucleocapsid gene of HBV found in serum during acute and chronic HBV infection. Its presence indicates that the virus is replicating and serves as a marker of increased infectivity.

Hepatitis B surface antibody (anti-HBs): Protective antibody against HBsAg. Presence in the blood can indicate past infection with, and immunity to, HBV, or immune response from hepatitis B vaccine.

Heterotrophic bacteria: Those bacteria requiring an organic carbon source for growth (i.e., deriving energy and carbon from organic compounds).

High-level disinfection: Disinfection process that inactivates vegetative bacteria, mycobacteria, fungi, and viruses but not necessarily high numbers of bacterial spores. FDA further defines a high-level disinfectant as a sterilant used for a shorter contact time.

Hospital disinfectant: Germicide registered by EPA for use on inanimate objects in hospitals, clinics, dental offices, and other medical-related facilities. Efficacy is demonstrated against Salmonella choleraesuis, Staphylococcus aureus, and Pseudomonas aeruginosa.

Iatrogenic: Induced inadvertently by HCP, medical (including dental) treatment, or diagnostic procedures. Used particularly in reference to an infectious disease or other complication of treatment.

Immunization: Process by which a person becomes immune, or protected against a disease. Vaccination is defined as the process of administering a killed or weakened infectious organism or a toxoid; however, vaccination does not always result in immunity.

Implantable device: Device placed into a surgically or naturally formed cavity of the human body and intended to remain there for ≥30 days.

Independent water reservoir: Container used to hold water or other solutions and supply it to handpieces and air and water syringes attached to a dental unit. The independent reservoir, which isolates the unit from the public water system, can be provided as original equipment or as a retrofitted device.

Intermediate-level disinfection: Disinfection process that inactivates vegetative bacteria, the majority of fungi, mycobacteria, and the majority of viruses (particularly enveloped viruses) but not bacterial spores.

Intermediate-level disinfectant: Liquid chemical germicide registered with EPA as a hospital disinfectant and with a label claim of potency as tuberculocidal (Appendix A).

Latex: Milky white fluid extracted from the rubber tree Hevea brasiliensis that contains the rubber material cis-1,4 polyisoprene.

Low-level disinfection: Process that inactivates the majority of vegetative bacteria, certain fungi, and certain viruses, but cannot be relied on to inactivate resistant microorganisms (e.g., mycobacteria or bacterial spores).

Low-level disinfectant: Liquid chemical germicide registered with EPA as a hospital disinfectant. OSHA requires low-level hospital disinfectants also to have a label claim for potency against HIV and HBV if used for disinfecting clinical contact surfaces (Appendix A).

Microfilter: Membrane filter used to trap microorganisms suspended in water. Filters are usually installed on dental unit waterlines as a retrofit device. Microfiltration commonly occurs at a filter pore size of 0.03–10 µm. Sediment filters commonly found in dental unit water regulators have pore sizes of 20–90 µm and do not function as microbiological filters.

Nosocomial: Infection acquired in a hospital as a result of medical care.

Occupational exposure: Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or OPIM that can result from the performance of an employee’s duties.

OPIM: Other potentially infectious materials. OPIM is an OSHA term that refers to 1) body fluids including semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures; any body fluid visibly contaminated with blood; and all body fluids in situations where differentiating between body fluids is difficult or impossible; 2) any unfixed tissue or organ (other than intact skin) from a human (living or dead); and 3) HIV-containing cell or tissue cultures, organ
cultures; HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

**Parenteral:** Means of piercing mucous membranes or skin barrier through such events as needlesticks, human bites, cuts, and abrasions.

**Persistent activity:** Prolonged or extended activity that prevents or inhibits proliferation or survival of microorganisms after application of a product. This activity can be demonstrated by sampling a site minutes or hours after application and demonstrating bacterial antimicrobial effectiveness when compared with a baseline level. Previously, this property was sometimes termed residual activity.

**Prion:** Protein particle lacking nucleic acid that has been implicated as the cause of certain neurodegenerative diseases (e.g., scrapie, CJD, and bovine spongiform encephalopathy [BSE]).

**Retraction:** Entry of oral fluids and microorganisms into waterlines through negative water pressure.

**Seroconversion:** The change of a serological test from negative to positive indicating the development of antibodies in response to infection or immunization.

**Sterile:** Free from all living microorganisms; usually described as a probability (e.g., the probability of a surviving microorganism being 1 in 1 million).

**Sterilization:** Use of a physical or chemical procedure to destroy all microorganisms including substantial numbers of resistant bacterial spores.

**Surfactants:** Surface-active agents that reduce surface tension and help cleaning by loosening, emulsifying, and holding soil in suspension, to be more readily rinsed away.

**Ultrasonic cleaner:** Device that removes debris by a process called cavitation, in which waves of acoustic energy are propagated in aqueous solutions to disrupt the bonds that hold particulate matter to surfaces.

**Vaccination:** See immunization.

**Vaccine:** Product that induces immunity, therefore protecting the body from the disease. Vaccines are administered through needle injections, by mouth, and by aerosol.

**Washer-disinfector:** Automatic unit that cleans and thermally disinfects instruments, by using a high-temperature cycle rather than a chemical bath.

**Wicking:** Absorption of a liquid by capillary action along a thread or through the material (e.g., penetration of liquids through undetected holes in a glove).

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**Review of Science Related to Dental Infection Control**

**Personnel Health Elements of an Infection-Control Program**

A protective health component for DHCP is an integral part of a dental practice infection-control program. The objectives are to educate DHCP regarding the principles of infection control, identify work-related infection risks, institute preventive measures, and ensure prompt exposure management and medical follow-up. Coordination between the dental practice's infection-control coordinator and other qualified health-care professionals is necessary to provide DHCP with appropriate services. Dental programs in institutional settings, (e.g., hospitals, health centers, and educational institutions) can coordinate with departments that provide personnel health services. However, the majority of dental practices are in ambulatory, private settings that do not have licensed medical staff and facilities to provide complete on-site health service programs. In such settings, the infection-control coordinator should establish programs that arrange for site-specific infection-control services from external health-care facilities and providers before DHCP are placed at risk for exposure. Referral arrangements can be made with qualified health-care professionals in an occupational health program of a hospital, with educational institutions, or with health-care facilities that offer personnel health services.

**Education and Training**

Personnel are more likely to comply with an infection-control program and exposure-control plan if they understand its rationale (5,13,16). Clearly written policies, procedures, and guidelines can help ensure consistency, efficiency, and effective coordination of activities. Personnel subject to occupational exposure should receive infection-control training on initial assignment, when new tasks or procedures affect their occupational exposure, and at a minimum, annually (13). Education and training should be appropriate to the assigned duties of specific DHCP (e.g., techniques to prevent cross-contamination or instrument sterilization). For DHCP who perform tasks or procedures likely to result in occupational exposure to infectious agents, training should include 1) a description of their exposure risks; 2) review of prevention strategies and infection-control policies and procedures; 3) discussion regarding how to manage work-related illness and injuries, including PEP; and 4) review of work restrictions for the exposure or infection. Inclusion of DHCP with minimal exposure risks (e.g., administrative employees) in education and training programs might enhance facilitywide understand-
ing of infection-control principles and the importance of the program. Educational materials should be appropriate in content and vocabulary for each person’s educational level, literacy, and language, as well as be consistent with existing federal, state, and local regulations (5,13).

**Immunization Programs**

DHCP are at risk for exposure to, and possible infection with, infectious organisms. Immunizations substantially reduce both the number of DHCP susceptible to these diseases and the potential for disease transmission to other DHCP and patients (5,17). Thus, immunizations are an essential part of prevention and infection-control programs for DHCP, and a comprehensive immunization policy should be implemented for all dental health-care facilities (17,18). The Advisory Committee on Immunization Practices (ACIP) provides national guidelines for immunization of HCP, which includes DHCP (17). Dental practice immunization policies should incorporate current state and federal regulations as well as recommendations from the U.S. Public Health Service and professional organizations (17) (Appendix B).

On the basis of documented health-care–associated transmission, HCP are considered to be at substantial risk for acquiring or transmitting hepatitis B, influenza, measles, mumps, rubella, and varicella. All of these diseases are vaccine-preventable. ACIP recommends that all HCP be vaccinated or have documented immunity to these diseases (5,17). ACIP does not recommend routine immunization of HCP against TB (i.e., inoculation with bacille Calmette-Guérin vaccine) or hepatitis A (17). No vaccine exists for HCV. ACIP guidelines also provide recommendations regarding immunization of HCP with special conditions (e.g., pregnancy, HIV infection, or diabetes) (5,17).

Immunization of DHCP before they are placed at risk for exposure remains the most efficient and effective use of vaccines in health-care settings. Some educational institutions and infection-control programs provide immunization schedules for students and DHCP. OSHA requires that employers make hepatitis B vaccination available to all employees who have potential contact with blood or OPIM. Employers are also required to follow CDC recommendations for vaccinations, evaluation, and follow-up procedures (13). Nonpatient-care staff (e.g., administrative or housekeeping) might be included, depending on their potential risk of coming into contact with blood or OPIM. Employers are also required to ensure that employees who decline to accept hepatitis B vaccination sign an appropriate declination statement (13). DHCP unable or unwilling to be vaccinated as required or recommended should be educated regarding their exposure risks, infection-control policies and procedures for the facility, and the management of work-related illness and work restrictions (if appropriate) for exposed or infected DHCP.

**Exposure Prevention and Postexposure Management**

Avoiding exposure to blood and OPIM, as well as protection by immunization, remain primary strategies for reducing occupationally acquired infections, but occupational exposures can still occur (19). A combination of standard precautions, engineering, work practice, and administrative controls is the best means to minimize occupational exposures. Written policies and procedures to facilitate prompt reporting, evaluation, counseling, treatment, and medical follow-up of all occupational exposures should be available to all DHCP. Written policies and procedures should be consistent with federal, state, and local requirements addressing education and training, postexposure management, and exposure reporting (see Preventing Transmission of Bloodborne Pathogens).

DHCP who have contact with patients can also be exposed to persons with infectious TB, and should have a baseline tuberculin skin test (TST), preferably by using a two-step test, at the beginning of employment (20). Thus, if an unprotected occupational exposure occurs, TST conversions can be distinguished from positive TST results caused by previous exposures (20,21). The facility’s level of TB risk will determine the need for routine follow-up TSTs (see Special Considerations).

**Medical Conditions, Work-Related Illness, and Work Restrictions**

DHCP are responsible for monitoring their own health status. DHCP who have acute or chronic medical conditions that render them susceptible to opportunistic infection should discuss with their personal physicians or other qualified authority whether the condition might affect their ability to safely perform their duties. However, under certain circumstances, health-care facility managers might need to exclude DHCP from work or patient contact to prevent further transmission of infection (22). Decisions concerning work restrictions are based on the mode of transmission and the period of infectivity of the disease (5) (Table 1). Exclusion policies should 1) be written, 2) include a statement of authority that defines who can exclude DHCP (e.g., personal physicians), and 3) be clearly communicated through education and training. Policies should also encourage DHCP to report illnesses or exposures without jeopardizing wages, benefits, or job status.

With increasing concerns regarding bloodborne pathogens and introduction of universal precautions, use of latex gloves among HCP has increased markedly (7,23). Increased use of these gloves has been accompanied by increased reports of allergic reactions to natural rubber latex among HCP, DHCP, and patients
<table>
<thead>
<tr>
<th>Disease/problem</th>
<th>Work restriction</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conjunctivitis</td>
<td>Restrict from patient contact and contact with patient’s environment.</td>
<td>Until discharge ceases</td>
</tr>
<tr>
<td>Cytomegalovirus infection</td>
<td>No restriction</td>
<td></td>
</tr>
<tr>
<td>Diarrheal disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute stage (diarrhea with other symptoms)</td>
<td>Restrict from patient contact, contact with patient’s environment, and food-handling.</td>
<td>Until symptoms resolve</td>
</tr>
<tr>
<td>Convalescent stage, Salmonella species</td>
<td>Restrict from care of patients at high risk.</td>
<td>Until symptoms resolve; consult with local and state health authorities regarding need for negative stool cultures</td>
</tr>
<tr>
<td>Enteroviral infection</td>
<td>Restrict from care of infants, neonates, and immunocompromised patients and their environments.</td>
<td>Until symptoms resolve</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>Restrict from patient contact, contact with patient’s environment, and food-handling.</td>
<td>Until 7 days after onset of jaundice</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>No restriction†, refer to state regulations. Standard precautions should always be followed.</td>
<td></td>
</tr>
<tr>
<td>Personnel with acute or chronic hepatitis B surface antigenemia who do not perform exposure-prone procedures</td>
<td>No restriction †</td>
<td></td>
</tr>
<tr>
<td>Personnel with acute or chronic hepatitis B e antigenemia who perform exposure-prone procedures</td>
<td>Do not perform exposure-prone invasive procedures until counsel from a review panel has been sought; panel should review and recommend procedures that personnel can perform, taking into account specific procedures as well as skill and technique. Standard precautions should always be observed. Refer to state and local regulations or recommendations.</td>
<td>Until hepatitis B e antigen is negative</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>No restrictions on professional activity. † HCV-positive health-care personnel should follow aseptic technique and standard precautions.</td>
<td></td>
</tr>
<tr>
<td>Herpes simplex</td>
<td>No restriction</td>
<td></td>
</tr>
<tr>
<td>Genital</td>
<td>Restrict from patient contact and contact with patient’s environment.</td>
<td>Until lesions heal</td>
</tr>
<tr>
<td>Hands (herpetic whitlow)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orofacial</td>
<td>Evaluate need to restrict from care of patients at high risk.</td>
<td></td>
</tr>
<tr>
<td>Human immunodeficiency virus; personnel who perform exposure-prone procedures</td>
<td>Do not perform exposure-prone invasive procedures until counsel from an expert review panel has been sought; panel should review and recommend procedures that personnel can perform, taking into account specific procedures as well as skill and technique. Standard precautions should always be observed. Refer to state and local regulations or recommendations.</td>
<td></td>
</tr>
<tr>
<td>Measles</td>
<td>Exclude from duty</td>
<td>Until 7 days after the rash appears</td>
</tr>
<tr>
<td>Active</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postexposure (susceptible personnel)</td>
<td>Exclude from duty</td>
<td>From fifth day after first exposure through twenty-first day after last exposure, or 4 days after rash appears</td>
</tr>
<tr>
<td>Meningococcal infection</td>
<td>Exclude from duty</td>
<td>Until 24 hours after start of effective therapy</td>
</tr>
<tr>
<td>Mumps</td>
<td>Exclude from duty</td>
<td>Until 9 days after onset of parotitis</td>
</tr>
<tr>
<td>Active</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postexposure (susceptible personnel)</td>
<td>Exclude from duty</td>
<td>From twelfth day after first exposure through twenty-sixth day after last exposure, or until 9 days after onset of parotitis</td>
</tr>
</tbody>
</table>


* Modified from recommendations of the Advisory Committee on Immunization Practices (ACIP).
† Unless epidemiologically linked to transmission of infection.
‡ Those susceptible to varicella and who are at increased risk of complications of varicella (e.g., neonates and immunocompromised persons of any age).
§ Patients at high risk as defined by ACIP for complications of influenza.
TABLE 1. (Continued) Suggested work restrictions for health-care personnel infected with or exposed to major infectious diseases in health-care settings, in the absence of state and local regulations *

<table>
<thead>
<tr>
<th>Disease/problem</th>
<th>Work restriction</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediculosis</td>
<td>Restrict from patient contact</td>
<td>Until treated and observed to be free of adult and immature lice</td>
</tr>
<tr>
<td>Pertussis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>Exclude from duty</td>
<td>From beginning of catarrhal stage through third week after onset of paroxysms, or until 5 days after start of effective antibiotic therapy</td>
</tr>
<tr>
<td>Postexposure (asymptomatic personnel)</td>
<td>No restriction, prophylaxis recommended</td>
<td></td>
</tr>
<tr>
<td>Postexposure (symptomatic personnel)</td>
<td>Exclude from duty</td>
<td>Until 5 days after start of effective antibiotic therapy</td>
</tr>
<tr>
<td>Rubella</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>Exclude from duty</td>
<td>Until 5 days after rash appears</td>
</tr>
<tr>
<td>Postexposure (susceptible personnel)</td>
<td>Exclude from duty</td>
<td>From seventh day after first exposure through twenty-first day after last exposure</td>
</tr>
<tr>
<td>Staphylococcus aureus infection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active, draining skin lesions</td>
<td>Restrict from contact with patients and patient’s environment or food handling.</td>
<td>Until lesions have resolved</td>
</tr>
<tr>
<td>Carrier state</td>
<td>No restriction unless personnel are epidemiologically linked to transmission of the organism</td>
<td></td>
</tr>
<tr>
<td>Streptococcal infection, group A</td>
<td>Restrict from patient care, contact with patient’s environment, and food-handling.</td>
<td>Until 24 hours after adequate treatment started</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active disease</td>
<td>Exclude from duty</td>
<td>Until proved noninfectious</td>
</tr>
<tr>
<td>PPD converter</td>
<td>No restriction</td>
<td></td>
</tr>
<tr>
<td>Varicella (chicken pox)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>Exclude from duty</td>
<td>Until all lesions dry and crust</td>
</tr>
<tr>
<td>Postexposure (susceptible personnel)</td>
<td>Exclude from duty</td>
<td>From tenth day after first exposure through twenty-first day after last exposure; or, if varicella occurs, when lesions crust and dry</td>
</tr>
<tr>
<td>Zoster (shingles)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Localized, in healthy person</td>
<td>Cover lesions, restrict from care of patients at high risk</td>
<td>Until all lesions dry and crust</td>
</tr>
<tr>
<td>Generalized or localized in immunosuppressed person</td>
<td>Restrict from patient contact</td>
<td>Until all lesions dry and crust</td>
</tr>
<tr>
<td>Postexposure (susceptible personnel)</td>
<td>Restrict from patient contact</td>
<td>From tenth day after first exposure through twenty-eighth day if varicella-zoster immune globulin (VZIG) administered after last exposure; or, if varicella occurs, when lesions crust and dry</td>
</tr>
<tr>
<td>Viral respiratory infection, acute febrile</td>
<td>Consider excluding from the care of patients at high risk or contact with such patients’ environments during community outbreak of respiratory syncytial virus and influenza</td>
<td>Until acute symptoms resolve</td>
</tr>
</tbody>
</table>

* Modified from recommendations of the Advisory Committee on Immunization Practices (ACIP).  
† Those susceptible to varicella and who are at increased risk of complications of varicella (e.g., neonates and immunocompromised persons of any age).  
‡ Patients at high risk as defined by ACIP for complications of influenza.
(24–30), as well as increased reports of irritant and allergic contact dermatitis from frequent and repeated use of hand-hygiene products, exposure to chemicals, and glove use.

DHCP should be familiar with the signs and symptoms of latex sensitivity (5,31–33). A physician should evaluate DHCP exhibiting symptoms of latex allergy, because further exposure could result in a serious allergic reaction. A diagnosis is made through medical history, physical examination, and diagnostic tests. Procedures should be in place for minimizing latex-related health problems among DHCP and patients while protecting them from infectious materials. These procedures should include 1) reducing exposures to latex-containing materials by using appropriate work practices, 2) training and educating DHCP, 3) monitoring symptoms, and 4) substituting nonlatex products where appropriate (32) (see Contact Dermatitis and Latex Hypersensitivity).

**Maintenance of Records, Data Management, and Confidentiality**

The health status of DHCP can be monitored by maintaining records of work-related medical evaluations, screening tests, immunizations, exposures, and postexposure management. Such records must be kept in accordance with all applicable state and federal laws. Examples of laws that might apply include the Privacy Rule of the Health Insurance Portability and Accountability Act (HIPAA) of 1996, 45 CFR 160 and 164, and the OSHA Occupational Exposure to Bloodborne Pathogens; Final Rule 29 CFR 1910.1030(h)(1)(i–iv) (34,13). The HIPAA Privacy Rule applies to covered entities, including certain defined health providers, health-care clearinghouses, and health plans. OSHA requires employers to ensure that certain information contained in employee medical records is 1) kept confidential; 2) not disclosed or reported without the employee’s express written consent to any person within or outside the workplace except as required by the OSHA standard; and 3) maintained by the employer for at least the duration of employment plus 30 years. Dental practices that coordinate their infection-control program with off-site providers might consult OSHA’s Bloodborne Pathogen standard and employee Access to Medical and Exposure Records standard, as well as other applicable local, state, and federal laws, to determine a location for storing health records (13,35).

**Preventing Transmission of Bloodborne Pathogens**

Although transmission of bloodborne pathogens (e.g., HBV, HCV, and HIV) in dental health-care settings can have serious consequences, such transmission is rare. Exposure to infected blood can result in transmission from patient to DHCP, from DHCP to patient, and from one patient to another. The opportunity for transmission is greatest from patient to DHCP, who frequently encounter patient blood and blood-contaminated saliva during dental procedures.

Since 1992, no HIV transmission from DHCP to patients has been reported, and the last HBV transmission from DHCP to patients was reported in 1987. HCV transmission from DHCP to patients has not been reported. The majority of DHCP infected with a bloodborne virus do not pose a risk to patients because they do not perform activities meeting the necessary conditions for transmission. For DHCP to pose a risk for bloodborne virus transmission to patients, DHCP must 1) be viremic (i.e., have infectious virus circulating in the bloodstream); 2) be injured or have a condition (e.g., weeping dermatitis) that allows direct exposure to their blood or other infectious body fluids; and 3) enable their blood or infectious body fluid to gain direct access to a patient’s wound, traumatized tissue, mucous membranes, or similar portal of entry. Although an infected DHCP might be viremic, unless the second and third conditions are also met, transmission cannot occur.

The risk of occupational exposure to bloodborne viruses is largely determined by their prevalence in the patient population and the nature and frequency of contact with blood and body fluids through percutaneous or per mucosal routes of exposure. The risk of infection after exposure to a bloodborne virus is influenced by inoculum size, route of exposure, and susceptibility of the exposed HCP (12). The majority of attention has been placed on the bloodborne pathogens HBV, HCV, and HIV, and these pathogens present different levels of risk to DHCP.

**Hepatitis B Virus**

HBV is a well-recognized occupational risk for HCP (36,37). HBV is transmitted by percutaneous or mucosal exposure to blood or body fluids of a person with either acute or chronic HBV infection. Persons infected with HBV can transmit the virus for as long as they are HBsAg-positive. The risk of HBV transmission is highly related to the HBeAg status of the source person. In studies of HCP who sustained injuries from needles contaminated with blood containing HBV, the risk of developing clinical hepatitis if the blood was positive for both HBsAg and HBeAg was 22%–31%; the risk of developing serologic evidence of HBV infection was 37%–62% (19). By comparison, the risk of developing clinical hepatitis from a needle contaminated with HBsAg-positive, HBeAg-negative blood was 1%–6%, and the risk of developing serologic evidence of HBV infection, 23%–37% (38).
Blood contains the greatest proportion of HBV infectious particle titers of all body fluids and is the most critical vehicle of transmission in the health-care setting. HBsAg is also found in multiple other body fluids, including breast milk, bile, cerebrospinal fluid, feces, nasopharyngeal washings, saliva, semen, sweat, and synovial fluid. However, the majority of body fluids are not efficient vehicles for transmission because they contain low quantities of infectious HBV, despite the presence of HBsAg. The concentration of HBsAg in body fluids can be 100–1,000-fold greater than the concentration of infectious HBV particles.

Although percutaneous injuries are among the most efficient modes of HBV transmission, these exposures probably account for only a minority of HBV infections among HCP. In multiple investigations of nosocomial hepatitis B outbreaks, the majority of infected HCP could not recall an overt percutaneous injury, although in certain studies, approximately one third of infected HCP recalled caring for a patient who was HBsAg-positive. In addition, HBV has been demonstrated to survive in dried blood at room temperature on environmental surfaces for ≥1 week. Thus, HBV infections that occur in HCP with no history of nonoccupational exposure or occupational percutaneous injury might have resulted from direct or indirect blood or body fluid exposures that inoculated HBV into cutaneous scratches, abrasions, burns, other lesions, or on mucosal surfaces. The potential for HBV transmission through contact with environmental surfaces has been demonstrated in investigations of HBV outbreaks among patients and HCP in hemodialysis units.

Since the early 1980s, occupational infections among HCP have declined because of vaccine use and adherence to universal precautions. Among U.S. dentists, >90% have been vaccinated, and serologic evidence of past HBV infection decreased from prevaccine levels of 14% in 1972 to approximately 9% in 1992. During 1993–2001, levels remained relatively unchanged. Infection rates can be expected to decline further as vaccination rates remain high among young dentists and as older dentists with lower vaccination rates and higher rates of infection retire.

Although the potential for transmission of bloodborne infections from DHCP to patients is considered limited, precise risks have not been quantified by carefully designed epidemiologic studies. Reports published during 1970–1987 describe nine clusters in which patients were thought to be infected with HBV through treatment by an infected DHCP. However, transmission of HBV from dentist to patient has not been reported since 1987, possibly reflecting such factors as 1) adoption of universal precautions, 2) routine glove use, 3) increased levels of immunity as a result of hepatitis B vaccination of DHCP, 4) implementation of the 1991 OSHA bloodborne pathogen standard, and 5) incomplete ascertainment and reporting. Only one case of patient-to-patient transmission of HBV in the dental setting has been documented (CDC, unpublished data, 2003). In this case, appropriate office infection-control procedures were being followed, and the exact mechanism of transmission was undetermined.

Because of the high risk of HBV infection among HCP, DHCP who perform tasks that might involve contact with blood, blood-contaminated body substances, other body fluids, or sharps should be vaccinated. Vaccination can protect both DHCP and patients from HBV infection and, whenever possible, should be completed when dentists or other DHCP are in training and before they have contact with blood.

Prevaccination serological testing for previous infection is not indicated, although it can be cost-effective where prevalence of infection is expected to be high in a group of potential vaccinees (e.g., persons who have emigrated from areas with high rates of HBV infection). DHCP should be tested for anti-HBs 1–2 months after completion of the 3-dose vaccination series. DHCP who do not develop an adequate antibody response (i.e., anti-HBs <10 mIU/mL) to the primary vaccine series should complete a second 3-dose vaccine series or be evaluated to determine if they are HBsAg-positive. Revaccinated persons should be retested for anti-HBs at the completion of the second vaccine series. Approximately half of nonresponders to the primary series will respond to a second 3-dose series. If no antibody response occurs after the second series, testing for HBsAg should be performed. Persons who prove to be HBsAg-positive should be counseled regarding how to prevent HBV transmission to others and regarding the need for medical evaluation. Nonresponders to vaccination who are HBsAg-negative should be considered susceptible to HBV infection and should be counseled regarding precautions to prevent HBV infection and the need to obtain HBIG prophylaxis for any known or probable parenteral exposure to HBsAg-positive blood.

Vaccine-induced antibodies decline gradually over time, and 60% of persons who initially respond to vaccination will lose detectable antibodies over 12 years. Even so, immunity continues to prevent clinical disease or detectable viral infection. Booster doses of vaccine and periodic serologic testing to monitor antibody concentrations after completion of the vaccine series are not necessary for vaccine responders.
**Hepatitis D Virus**

An estimated 4% of persons with acute HBV infection are also infected with hepatitis Delta virus (HDV). Discovered in 1977, HDV is a defective bloodborne virus requiring the presence of HBV to replicate. Patients coinfected with HBV and HDV have substantially higher mortality rates than those infected with HBV alone. Because HDV infection is dependent on HBV for replication, immunization to prevent HBV infection, through either pre- or postexposure prophylaxis, can also prevent HDV infection (70).

**Hepatitis C Virus**

Hepatitis C virus appears not to be transmitted efficiently through occupational exposures to blood. Follow-up studies of HCP exposed to HCV-infected blood through percutaneous or other sharps injuries have determined a low incidence of seroconversion (mean: 1.8%; range, 0%–7%) (71–74). One study determined transmission occurred from hollow-bore needles but not other sharps (72). Although these studies have not documented seroconversion associated with mucous membrane or nonintact skin exposure, at least two cases of HCV transmission from a blood splash to the conjunctiva (75,76) and one case of simultaneous transmission of HCV and HIV after nonintact skin exposure have been reported (77).

Data are insufficient to estimate the occupational risk of HCV infection among HCP, but the majority of studies indicate the prevalence of HCV infection among dentists, surgeons, and hospital-based HCP is similar to that among the general population, approximately 1%–2% (78–86). In a study that evaluated risk factors for infection, a history of unintentional needlesticks was the only occupational risk factor independently associated with HCV infection (80).

No studies of transmission from HCV-infected DHCP to patients have been reported, and the risk for such transmission appears limited. Multiple reports have been published describing transmission from HCV-infected surgeons, which apparently occurred during performance of invasive procedures; the overall risk for infection averaged 0.17% (87–90).

**Human Immunodeficiency Virus**

In the United States, the risk of HIV transmission in dental settings is extremely low. As of December 2001, a total of 57 cases of HIV seroconversion had been documented among HCP, but none among DHCP, after occupational exposure to a known HIV-infected source (91). Transmission of HIV to six patients of a single dentist with AIDS has been reported, but the mode of transmission could not be determined (2,92,93). As of September 30, 1993, CDC had information regarding test results of >22,000 patients of 63 HIV-infected HCP, including 33 dentists or dental students (55,93). No additional cases of transmission were documented.

Prospective studies worldwide indicate the average risk of HIV infection after a single percutaneous exposure to HIV-infected blood is 0.3% (range: 0.2%–0.5%) (94). After an exposure of mucous membranes in the eye, nose, or mouth, the risk is approximately 0.1% (76). The precise risk of transmission after skin exposure remains unknown but is believed to be even smaller than that for mucous membrane exposure.

Certain factors affect the risk of HIV transmission after an occupational exposure. Laboratory studies have determined if needles that pass through latex gloves are solid rather than hollow-bore, or are of small gauge (e.g., anesthetic needles commonly used in dentistry), they transfer less blood (36). In a retrospective case-control study of HCP, an increased risk for HIV infection was associated with exposure to a relatively large volume of blood, as indicated by a deep injury with a device that was visibly contaminated with the patient’s blood, or a procedure that involved a needle placed in a vein or artery (95). The risk was also increased if the exposure was to blood from patients with terminal illnesses, possibly reflecting the higher titer of HIV in late-stage AIDS.

**Exposure Prevention Methods**

Avoiding occupational exposures to blood is the primary way to prevent transmission of HBV, HCV, and HIV to HCP in health-care settings (19,96,97). Exposures occur through percutaneous injury (e.g., a needlestick or cut with a sharp object), as well as through contact between potentially infectious blood, tissues, or other body fluids and mucous membranes of the eye, nose, mouth, or nonintact skin (e.g., exposed skin that is chapped, abraded, or shows signs of dermatitis).

Observational studies and surveys indicate that percutaneous injuries among general dentists and oral surgeons occur less frequently than among general and orthopedic surgeons and have decreased in frequency since the mid-1980s (98–102). This decline has been attributed to safer work practices, safer instrumentation or design, and continued DHCP education (103,104). Percutaneous injuries among DHCP usually 1) occur outside the patient’s mouth, thereby posing less risk for recontact with patient tissues; 2) involve limited amounts of blood; and 3) are caused by burs, syringe needles, laboratory knives, and other sharp instruments (99–102,105,106). Injuries among oral surgeons might occur more frequently during fracture reductions using wires (104,107). Experience, as measured by years in practice, does not appear to affect the risk of injury among general dentists or oral surgeons (100,104,107).
The majority of exposures in dentistry are preventable, and methods to reduce the risk of blood contacts have included use of standard precautions, use of devices with features engineered to prevent sharp injuries, and modifications of work practices. These approaches might have contributed to the decrease in percutaneous injuries among dentists during recent years (98–100,103). However, needlesticks and other blood contacts continue to occur, which is a concern because percutaneous injuries pose the greatest risk of transmission.

Standard precautions include use of PPE (e.g., gloves, masks, protective eyewear or face shield, and gowns) intended to prevent skin and mucous membrane exposures. Other protective equipment (e.g., finger guards while suturing) might also reduce injuries during dental procedures (104).

Engineering controls are the primary method to reduce exposures to blood and OPIM from sharp instruments and needles. These controls are frequently technology-based and often incorporate safer designs of instruments and devices (e.g., self-sheathing anesthetic needles and dental units designed to shield burs in handpieces) to reduce percutaneous injuries (101,103,108).

Work-practice controls establish practices to protect DHCP whose responsibilities include handling, using, assembling, or processing sharp devices (e.g., needles, scalers, laboratory utility knives, burs, explorers, and endodontic files) or sharps disposal containers. Work-practice controls can include removing burs before disassembling the handpiece from the dental unit, restricting use of fingers in tissue retraction or palpation during suturing and administration of anesthesia, and minimizing potentially uncontrolled movements of such instruments as scalers or laboratory knives (101,105).

As indicated, needles are a substantial source of percutaneous injury in dental practice, and engineering and work-practice controls for needle handling are of particular importance. In 2001, revisions to OSHA's bloodborne pathogens standard as mandated by the Needlestick Safety and Prevention Act of 2000 became effective. These revisions clarify the need for employers to consider safer needle devices as they become available and to involve employees directly responsible for patient care (e.g., dentists, hygienists, and dental assistants) in identifying and choosing such devices (109). Safer versions of sharp devices used in hospital settings have become available (e.g., blunt suture needles, phlebotomy devices, and butterfly needles), and their impact on reducing injuries has been documented (110–112). Aspirating anesthetic syringes that incorporate safety features have been developed for dental procedures, but the low injury rates in dentistry limit assessment of their effect on reducing injuries among DHCP.

Work-practice controls for needles and other sharps include placing used disposable syringes and needles, scalpels, and other sharp items in appropriate puncture-resistant containers located as close as feasible to where the items were used (2,7,13,113–115). In addition, used needles should never be recapped or otherwise manipulated by using both hands, or any other technique that involves directing the point of a needle toward any part of the body (2,7,13,97,113,114). A one-handed scoop technique, a mechanical device designed for holding the needle cap to facilitate one-handed recapping, or an engineered sharps injury protection device (e.g., needles with resheathing mechanisms) should be employed for recapping needles between uses and before disposal (2,7,13,113,114). DHCP should never bend or break needles before disposal because this practice requires unnecessary manipulation. Before attempting to remove needles from nondisposable aspirating syringes, DHCP should recap them to prevent injuries. For procedures involving multiple injections with a single needle, the practitioner should recap the needle between injections by using a one-handed technique or use a device with a needle-resheathing mechanism. Passing a syringe with an unsheathed needle should be avoided because of the potential for injury.

Additional information for developing a safety program and for identifying and evaluating safer dental devices is available at:
- http://www.cdc.gov/OralHealth/infectioncontrol/forms.htm (forms for screening and evaluating safer dental devices), and

Postexposure Management and Prophylaxis

Postexposure management is an integral component of a complete program to prevent infection after an occupational exposure to blood. During dental procedures, saliva is predictably contaminated with blood (7,114). Even when blood is not visible, it can still be present in limited quantities and therefore is considered a potentially infectious material by OSHA (13,19). A qualified health-care professional should evaluate any occupational exposure incident to blood or OPIM, including saliva, regardless of whether blood is visible, in dental settings (13).

Dental practices and laboratories should establish written, comprehensive programs that include hepatitis B vaccination and postexposure management protocols that 1) describe the types of contact with blood or OPIM that can place DHCP at risk for infection; 2) describe procedures for promptly reporting and evaluating such exposures; and 3) identify a health-
Hand hygiene (e.g., handwashing, hand antisepsis, or surgical hand antisepsis) substantially reduces potential pathogens on the hands and is considered the single most critical measure for reducing the risk of transmitting organisms to patients and HCP (120–123). Hospital-based studies have demonstrated that noncompliance with hand hygiene practices is associated with health-care–associated infections and the spread of multiresistant organisms. Noncompliance also has been a major contributor to outbreaks (123). The prevalence of health-care–associated infections decreases as adherence of HCP to recommended hand hygiene measures improves (124–126).

The microbial flora of the skin, first described in 1938, consist of transient and resident microorganisms (127). Transient flora, which colonize the superficial layers of the skin, are easier to remove by routine handwashing. They are often acquired by HCP during direct contact with patients or contaminated environmental surfaces; these organisms are most frequently
associated with health-care–associated infections. Resident flora attached to deeper layers of the skin are more resistant to removal and less likely to be associated with such infections.

The preferred method for hand hygiene depends on the type of procedure, the degree of contamination, and the desired persistence of antimicrobial action on the skin (Table 2). For routine dental examinations and nonsurgical procedures, handwashing and hand antisepsis is achieved by using either a plain or antimicrobial soap and water. If the hands are not visibly soiled, an alcohol-based hand rub is adequate.

The purpose of surgical hand antisepsis is to eliminate transient flora and reduce resident flora for the duration of a procedure to prevent introduction of organisms in the operative wound, if gloves become punctured or torn. Skin bacteria can rapidly multiply under surgical gloves if hands are washed with soap that is not antimicrobial (127,128). Thus, an antimicrobial soap or alcohol hand rub with persistent activity should be used before surgical procedures (129–131).

Agents used for surgical hand antisepsis should substantially reduce microorganisms on intact skin, contain a nonirritating antimicrobial preparation, have a broad spectrum of activity, be fast-acting, and have a persistent effect (121,132–135). Persistence (i.e., extended antimicrobial activity that prevents or inhibits survival of microorganisms after the product is applied) is critical because microorganisms can colonize on hands in the moist environment underneath gloves (122).

Alcohol hand rubs are rapidly germicidal when applied to the skin but should include such antiseptics as chlorhexidine, quaternary ammonium compounds, octenidine, or triclosan to achieve persistent activity (130). Factors that can influence the effectiveness of the surgical hand antisepsis in addition to the choice of antiseptic agent include duration and technique of scrubbing, as well as condition of the hands, and techniques used for drying and gloving. CDC’s 2002 guideline on hand hygiene in health-care settings provides more complete information (123).

### Selection of Antiseptic Agents

Selecting the most appropriate antiseptic agent for hand hygiene requires consideration of multiple factors. Essential performance characteristics of a product (e.g., the spectrum and persistence of activity and whether or not the agent is fast-acting) should be determined before selecting a product. Delivery system, cost per use, reliable vendor support and supply are also considerations. Because HCP acceptance is a major factor regarding compliance with recommended hand hygiene protocols (122,123,147,148), considering DHCP needs is critical and should include possible chemical allergies.

### TABLE 2. Hand-hygiene methods and indications

<table>
<thead>
<tr>
<th>Method</th>
<th>Agent</th>
<th>Purpose</th>
<th>Duration (minimum)</th>
<th>Indication*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine handwash</td>
<td>Water and nonantimicrobial soap (e.g., plain soap†)</td>
<td>Remove soil and transient microorganisms</td>
<td>15 seconds§</td>
<td>Before and after treating each patient (e.g., before glove placement and after glove removal). After barehanded touching of inanimate objects likely to be contaminated by blood or saliva. Before leaving the dental operatory or the dental laboratory. When visibly soiled. Before regloving after removing gloves that are torn, cut, or punctured.</td>
</tr>
<tr>
<td>Antiseptic handwash</td>
<td>Water and antimicrobial soap (e.g., chlorhexidine, iodine and iodophors, chloroxylenol [PCMX], triclosan)</td>
<td>Remove or destroy transient microorganisms and reduce resident flora</td>
<td>15 seconds§</td>
<td>Rub hands until the agent is dry§</td>
</tr>
<tr>
<td>Antiseptic hand rub</td>
<td>Alcohol-based hand rub¶</td>
<td>Remove or destroy transient microorganisms and reduce resident flora</td>
<td>2–6 minutes</td>
<td>Follow manufacturer instructions for surgical hand-scrub product with persistent activity**</td>
</tr>
<tr>
<td>Surgical antisepsis</td>
<td>Water and antimicrobial soap (e.g., chlorhexidine, iodine and iodophors, chloroxylenol [PCMX], triclosan)</td>
<td>Remove or destroy transient microorganisms and reduce resident flora (persistent effect)</td>
<td>Follow manufacturer instructions for surgical hand-scrub product with persistent activity**</td>
<td>Before donning sterile surgeon’s gloves for surgical procedures††</td>
</tr>
<tr>
<td></td>
<td>Water and non-antimicrobial soap (e.g., plain soap†) followed by an alcohol-based surgical hand-scrub product with persistent activity</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

† Pathogenic organisms have been found on or around bar soap during and after use (139). Use of liquid soap with hands-free dispensing controls is preferable.

§ Time reported as effective in removing most transient flora from the skin. For most procedures, a vigorous rubbing together of all surfaces of premoistened lathered hands and fingers for >15 seconds, followed by rinsing under a stream of cool or tepid water is recommended (9,120,123,140,141). Hands should always be dried thoroughly before donning gloves.

¶ Alcohol-based hand rubs should contain 60%–95% ethanol or isopropanol and should not be used in the presence of visible soil or organic material. If using an alcohol-based hand rub, apply adequate amount to palm of one hand and rub hands together, covering all surfaces of the hands and fingers, until hands are dry. Follow manufacturer’s recommendations regarding the volume of product to use. If hands feel dry after rubbing them together for 10–15 seconds, an insufficient volume of product likely was applied. The drying effect of alcohol can be reduced or eliminated by adding 1%–3% glycerol or other skin-conditioning agents (128).

** After application of alcohol-based surgical hand-scrub product with persistent activity as recommended, allow hands and forearms to dry thoroughly and immediately don sterile surgeon’s gloves (144,145). Follow manufacturer instructions (122,123,137,148).

†† Before beginning surgical hand scrub, remove all arm jewelry and any hand jewelry that may make donning gloves more difficult, cause gloves to tear more readily (142,143), or interfere with glove usage (e.g., ability to wear the correct-sized glove or altered glove integrity).
skin integrity after repeated use, compatibility with lotions used, and offensive agent ingredients (e.g., scent). Discussing specific preparations or ingredients used for hand antisepsis is beyond the scope of this report. DHCP should choose from commercially available HCP handwashes when selecting agents for hand antisepsis or surgical hand antisepsis.

Storage and Dispensing of Hand Care Products

Handwashing products, including plain (i.e., non-antimicrobial) soap and antiseptic products, can become contaminated or support the growth of microorganisms (122). Liquid products should be stored in closed containers and dispensed from either disposable containers or containers that are washed and dried thoroughly before refilling. Soap should not be added to a partially empty dispenser, because this practice of topping off might lead to bacterial contamination (149,150). Store and dispense products according to manufacturers’ directions.

Lotions

The primary defense against infection and transmission of pathogens is healthy, unbroken skin. Frequent handwashing with soaps and antiseptic agents can cause chronic irritant contact dermatitis among DHCP. Damage to the skin changes skin flora, resulting in more frequent colonization by staphylococci and gram-negative bacteria (151,152). The potential of detergents to cause skin irritation varies considerably, but can be reduced by adding emollients. Lotions are often recommended to ease the dryness resulting from frequent handwashing and to prevent dermatitis from glove use (153,154). However, petroleum-based lotion formulations can weaken latex gloves and increase permeability. For that reason, lotions that contain petroleum or other oil emollients should only be used at the end of the work day (122,155). Dental practitioners should obtain information from lotion manufacturers regarding interaction between lotions, gloves, dental materials, and antimicrobial products.

Fingernails and Artificial Nails

Although the relationship between fingernail length and wound infection is unknown, keeping nails short is considered key because the majority of flora on the hands are found under and around the fingernails (156). Fingernails should be short enough to allow DHCP to thoroughly clean underneath them and prevent glove tears (122). Sharp nail edges or broken nails are also likely to increase glove failure. Long artificial or natural nails can make donning gloves more difficult and can cause gloves to tear more readily. Hand carriage of gram-negative organisms has been determined to be greater among wearers of artificial nails than among nonwearers, both before and after handwashing (157–160). In addition, artificial fingernails or extenders have been epidemiologically implicated in multiple outbreaks involving fungal and bacterial infections in hospital intensive-care units and operating rooms (161–164). Freshly applied nail polish on natural nails does not increase the microbial load from periungual skin if fingernails are short; however, chipped nail polish can harbor added bacteria (165,166).

Jewelry

Studies have demonstrated that skin underneath rings is more heavily colonized than comparable areas of skin on fingers without rings (167–170). In a study of intensive-care nurses, multivariable analysis determined rings were the only substantial risk factor for carriage of gram-negative bacilli and Staphylococcus aureus, and the concentration of organisms correlated with the number of rings worn (170). However, two other studies demonstrated that mean bacterial colony counts on hands after handwashing were similar among persons wearing rings and those not wearing rings (169,171). Whether wearing rings increases the likelihood of transmitting a pathogen is unknown; further studies are needed to establish whether rings result in higher transmission of pathogens in health-care settings. However, rings and decorative nail jewelry can make donning gloves more difficult and cause gloves to tear more readily (142,143). Thus, jewelry should not interfere with glove use (e.g., impair ability to wear the correct-sized glove or alter glove integrity).

Personal Protective Equipment

PPE is designed to protect the skin and the mucous membranes of the eyes, nose, and mouth of DHCP from exposure to blood or OPIM. Use of rotary dental and surgical instruments (e.g., handpieces or ultrasonic scalers) and air-water syringes creates a visible spray that contains primarily large-particle droplets of water, saliva, blood, microorganisms, and other debris. This spatter travels only a short distance and settles out quickly, landing on the floor, nearby operatory surfaces, DHCP, or the patient. The spray also might contain certain aerosols (i.e., particles of respirable size, <10 µm). Aerosols can remain airborne for extended periods and can be inhaled. However, they should not be confused with the large-particle spatter that makes up the bulk of the spray from handpieces and ultrasonic scalers. Appropriate work practices, including use of high-velocity air evacuation, should minimize dissemination of droplets, spatter, and aerosols (2).
clothing (e.g., gowns and jackets). All PPE should be removed before DHCP leave patient-care areas (13). Reusable PPE (e.g., clinician or patient protective eyewear and face shields) should be cleaned with soap and water, and when visibly soiled, disinfected between patients, according to the manufacturer’s directions (2,13). Wearing gloves, surgical masks, protective eyewear, and protective clothing in specified circumstances to reduce the risk of exposures to bloodborne pathogens is mandated by OSHA (13). General work clothes (e.g., uniforms, scrubs, pants, and shirts) are neither intended to protect against a hazard nor considered PPE.

**Masks, Protective Eyewear, Face Shields**

A surgical mask that covers both the nose and mouth and protective eyewear with solid side shields or a face shield should be worn by DHCP during procedures and patient-care activities likely to generate splashes or sprays of blood or body fluids. Protective eyewear for patients shields their eyes from spatter or debris generated during dental procedures. A surgical mask protects against microorganisms generated by the wearer, with >95% bacterial filtration efficiency, and also protects DHCP from large-particle droplet spatter that might contain bloodborne pathogens or other infectious microorganisms (173). The mask’s outer surface can become contaminated with infectious droplets from spray of oral fluids or from touching the mask with contaminated fingers. Also, when a mask becomes wet from exhaled moist air, the resistance to airflow through the mask increases, causing more airflow to pass around edges of the mask. If the mask becomes wet, it should be changed between patients or even during patient treatment, when possible (2,174).

When airborne infection isolation precautions (expanded or transmission-based) are necessary (e.g., for TB patients), a National Institute for Occupational Safety and Health (NIOSH)-certified particulate-filter respirator (e.g., N95, N99, or N100) should be used (20). N95 refers to the ability to filter 1-µm particles in the unloaded state with a filter efficiency of >95% (i.e., filter leakage <5%), given flow rates of ≤50 L/min (i.e., approximate maximum airflow rate of HCP during breathing). Available data indicate infectious droplet nuclei measure 1–5 µm; therefore, respirators used in healthcare settings should be able to efficiently filter the smallest particles in this range.

The majority of surgical masks are not NIOSH-certified as respirators, do not protect the user adequately from exposure to TB, and do not satisfy OSHA requirements for respiratory protection (174,175). However, certain surgical masks (i.e., surgical N95 respirator) do meet the requirements and are certified by NIOSH as respirators. The level of protection a respirator provides is determined by the efficiency of the filter material for incoming air and how well the face piece fits or seals to the face (e.g., qualitatively or quantitatively tested in a reliable way to obtain a face-seal leakage of <10% and to fit the different facial sizes and characteristics of HCP).

When respirators are used while treating patients with diseases requiring airborne-transmission precautions (e.g., TB), they should be used in the context of a complete respiratory protection program (175). This program should include training and fit testing to ensure an adequate seal between the edges of the respirator and the wearer’s face. Detailed information regarding respirator programs, including fit-test procedures are available at http://www.cdc.gov/niosh/99-143.html (174,176).

**Protective Clothing**

Protective clothing and equipment (e.g., gowns, lab coats, gloves, masks, and protective eyewear or face shield) should be worn to prevent contamination of street clothing and to protect the skin of DHCP from exposures to blood and body substances (2,7,10,11,13,137). OSHA bloodborne pathogens standard requires sleeves to be long enough to protect the forearms when the gown is worn as PPE (i.e., when spatter and spray of blood, saliva, or OPIM to the forearms is anticipated) (13,14). DHCP should change protective clothing when it becomes visibly soiled and as soon as feasible if penetrated by blood or other potentially infectious fluids (2,13,14,137). All protective clothing should be removed before leaving the work area (13).

**Gloves and Gloving**

DHCP wear gloves to prevent contamination of their hands when touching mucous membranes, blood, saliva, or OPIM, and also to reduce the likelihood that microorganisms present on the hands of DHCP will be transmitted to patients during surgical or other patient-care procedures (1,2,7,10). Medical gloves, both patient examination and surgeon’s gloves, are manufactured as single-use disposable items that should be used for only one patient, then discarded. Gloves should be changed between patients and when torn or punctured.

Wearing gloves does not eliminate the need for handwashing. Hand hygiene should be performed immediately before donning gloves. Gloves can have small, unapparent defects or can be torn during use, and hands can become contaminated during glove removal (122,177–187). These circumstances increase the risk of operative wound contamination and exposure of the DHCP’s hands to microorganisms from patients. In addition, bacteria can multiply rapidly in the moist environments underneath gloves, and thus, the hands should be dried thoroughly before donning gloves and washed again immediately after glove removal.
Types of Gloves

Because gloves are task-specific, their selection should be based on the type of procedure to be performed (e.g., surgery or patient examination) (Table 3). Sterile surgeon’s gloves must meet standards for sterility assurance established by FDA and are less likely than patient examination gloves to harbor pathogens that could contaminate an operative wound (188). Appropriate gloves in the correct size should be readily accessible (13).

Glove Integrity

Limited studies of the penetrability of different glove materials under conditions of use have been conducted in the dental environment. Consistent with observations in clinical medicine, leakage rates vary by glove material (e.g., latex, vinyl, and nitrile), duration of use, and type of procedure performed (182,184,186,189–191), as well as by manufacturer (192–194). The frequency of perforations in surgeon’s gloves used during outpatient oral surgical procedures has been determined to range from 6% to 16% (181,185,195,196).

Studies have demonstrated that HCP and DHCP are frequently unaware of minute tears in gloves that occur during use (186,190,191,197). These studies determined that gloves developed defects in 30 minutes–3 hours, depending on type of glove and procedure. Investigators did not determine an optimal time for changing gloves during procedures.

During dental procedures, patient examination and surgeon’s gloves commonly contact multiple types of chemicals and materials (e.g., disinfectants and antiseptics, composite resins, and bonding agents) that can compromise the integrity of latex as well as vinyl, nitrile, and other synthetic glove materials (198–206). In addition, latex gloves can interfere with the setting of vinyl polysiloxane impression materials (207–209), although the setting is apparently not adversely affected by synthetic vinyl gloves (207,208). Given the diverse selection of dental materials on the market, dental practitioners should consult glove manufacturers regarding the chemical compatibility of glove materials.

If the integrity of a glove is compromised (e.g., punctured), it should be changed as soon as possible (13,210,211). Washing latex gloves with plain soap, chlorhexidine, or alcohol can lead to the formation of glove micropunctures (177,212,213) and subsequent hand contamination (138). Because this condition, known as wicking, can allow penetration of liquids through undetected holes, washing gloves is not recommended. After a hand rub with alcohol, the hands should be thoroughly

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**TABLE 3. Glove types and indications**

<table>
<thead>
<tr>
<th>Glove</th>
<th>Indication</th>
<th>Comment</th>
<th>Commercially available glove materials*</th>
<th>Attributes†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient examination gloves°</td>
<td>Patient care, examinations, other nonsurgical procedures involving contact with mucous membranes, and laboratory procedures</td>
<td>Medical device regulated by the Food and Drug Administration (FDA).</td>
<td>Natural-rubber latex (NRL)</td>
<td>1, 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nonsterile and sterile single-use disposable. Use for one patient and discard appropriately.</td>
<td>Nitrile</td>
<td>2, 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Nitrile and chloroprene (neoprene) blends</td>
<td>2, 3</td>
</tr>
<tr>
<td>Surgical procedures</td>
<td>Surgical procedures</td>
<td>Medical device regulated by the FDA.</td>
<td>Butadiene methyl methacrylate</td>
<td>2, 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sterile and single-use disposable. Use for one patient and discard appropriately.</td>
<td>Polyvinyl chloride (PVC, vinyl)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Polyurethane</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Styrene-based copolymer</td>
<td>4, 5</td>
</tr>
<tr>
<td>Nonmedical gloves</td>
<td>Housekeeping procedures (e.g., cleaning and disinfection)</td>
<td>Not a medical device regulated by the FDA.</td>
<td>Nitrile</td>
<td>2, 3</td>
</tr>
<tr>
<td></td>
<td>Handling contaminated sharps or chemicals</td>
<td>Commonly referred to as utility, industrial, or general purpose gloves. Should be puncture- or chemical-resistant, depending on the task. Latex gloves do not provide adequate chemical protection.</td>
<td>Chloroprene (neoprene)</td>
<td>2, 3</td>
</tr>
<tr>
<td></td>
<td>Not for use during patient care</td>
<td>Sanitize after use.</td>
<td>Nitrile</td>
<td>2, 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Butyl rubber</td>
<td>2, 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fluoroelastomer</td>
<td>3, 4, 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Polyethylene and ethylene vinyl alcohol copolymer</td>
<td>3, 4, 6</td>
</tr>
</tbody>
</table>

* Physical properties can vary by material, manufacturer, and protein and chemical composition.

1 contains allergenic NRL proteins.

2 vulcanized rubber, contains allergenic rubber processing chemicals.

3 likely to have enhanced chemical or puncture resistance.

4 nonvulcanized and does not contain rubber processing chemicals.

5 inappropriate for use with methacrylates.

6 resistant to most methacrylates.

Medical or dental gloves include patient-examination gloves and surgeon’s (i.e., surgical) gloves and are medical devices regulated by the FDA. Only FDA-cleared medical or dental patient-examination gloves and surgical gloves can be used for patient care.
dried before gloving, because hands still wet with an alcohol-based hand hygiene product can increase the risk of glove perforation (192).

FDA regulates the medical glove industry, which includes gloves marketed as sterile surgeon’s and sterile or nonsterile patient examination gloves. General-purpose utility gloves are also used in dental health-care settings but are not regulated by FDA because they are not promoted for medical use. More rigorous standards are applied to surgeon’s than to examination gloves. FDA has identified acceptable quality levels (e.g., maximum defects allowed) for glove manufacturers (214), but even intact gloves eventually fail with exposure to mechanical (e.g., sharps, fingernails, or jewelry) and chemical (e.g., dimethyacrylates) hazards and over time. These variables can be controlled, ultimately optimizing glove performance, by 1) maintaining short fingernails, 2) minimizing or eliminating hand jewelry, and 3) using engineering and work-practice controls to avoid injuries with sharps.

Sterile Surgeon’s Gloves and Double-Gloving During Oral Surgical Procedures

Certain limited studies have determined no difference in postoperative infection rates after routine tooth extractions when surgeons wore either sterile or nonsterile gloves (215,216). However, wearing sterile surgeon’s gloves during surgical procedures is supported by a strong theoretical rationale (2,7,137). Sterile gloves minimize transmission of microorganisms from the hands of surgical DHCP to patients and prevent contamination of the hands of surgical DHCP with pathogens and body fluids (137). In addition, sterile surgeon’s gloves are more rigorously regulated by FDA and therefore might provide an increased level of protection for the provider if exposure to blood is likely.

Although the effectiveness of wearing two pairs of gloves in preventing disease transmission has not been demonstrated, the majority of studies among HCP and DHCP have demonstrated a lower frequency of inner glove perforation and visible blood on the surgeon’s hands when double gloves are worn (181,185,195,196,198,217–219). In one study evaluating double gloves during oral surgical and dental hygiene procedures, the perforation of outer latex gloves was greater during longer procedures (i.e., >45 minutes), with the highest rate (10%) of perforation occurring during oral surgery procedures (196). Based on these studies, double gloving might provide additional protection from occupational blood contact (220). Double gloving does not appear to substantially reduce either manual dexterity or tactile sensitivity (221–223). Additional protection might also be provided by specialty products (e.g., orthopedic surgical gloves and glove liners) (224).

Contact Dermatitis and Latex Hypersensitivity

Occupationally related contact dermatitis can develop from frequent and repeated use of hand hygiene products, exposure to chemicals, and glove use. Contact dermatitis is classified as either irritant or allergic. Irritant contact dermatitis is common, nonallergic, and develops as dry, itchy, irritated areas on the skin around the area of contact. By comparison, allergic contact dermatitis (type IV hypersensitivity) can result from exposure to accelerators and other chemicals used in the manufacture of rubber gloves (e.g., natural rubber latex, nitrile, and neoprene), as well as from other chemicals found in the dental practice setting (e.g., methacrylates and glutaraldehyde). Allergic contact dermatitis often manifests as a rash beginning hours after contact and, similar to irritant dermatitis, is usually confined to the area of contact.

Latex allergy (type I hypersensitivity to latex proteins) can be a more serious systemic allergic reaction, usually beginning within minutes of exposure but sometimes occurring hours later and producing varied symptoms. More common reactions include runny nose, sneezing, itchy eyes, scratchy throat, hives, and itchy burning skin sensations. More severe symptoms include asthma marked by difficult breathing, coughing spells, and wheezing; cardiovascular and gastrointestinal ailments; and in rare cases, anaphylaxis and death (32,225). The American Dental Association (ADA) began investigating the prevalence of type I latex hypersensitivity among DHCP at the ADA annual meeting in 1994. In 1994 and 1995, approximately 2,000 dentists, hygienists, and assistants volunteered for skin-prick testing. Data demonstrated that 6.2% of those tested were positive for type I latex hypersensitivity (226). Data from the subsequent 5 years of this ongoing cross-sectional study indicated a decline in prevalence from 8.5% to 4.3% (227). This downward trend is similar to that reported by other studies and might be related to use of latex gloves with lower allergen content (228–230).

Natural rubber latex proteins responsible for latex allergy are attached to glove powder. When powdered latex gloves are worn, more latex protein reaches the skin. In addition, when powdered latex gloves are donned or removed, latex protein/powder particles become aerosolized and can be inhaled, contacting mucous membranes (231). As a result, allergic patients and DHCP can experience cutaneous, respiratory, and conjunctival symptoms related to latex protein exposure. DHCP can become sensitized to latex protein with repeated exposure (232–236). Work areas where only powder-free, low-allergen latex gloves are used demonstrate low or undetectable amounts of latex allergy-causing proteins (237–239) and fewer symptoms among HCP related to natural rubber latex allergy.
Because of the role of glove powder in exposure to latex protein, NIOSH recommends that if latex gloves are chosen, HCP should be provided with reduced protein, powder-free gloves (32). Nonlatex (e.g., nitrile or vinyl) powder-free and low-protein gloves are also available (31,240). Although rare, potentially life-threatening anaphylactic reactions to latex can occur; dental practices should be appropriately equipped and have procedures in place to respond to such emergencies.

DHCP and dental patients with latex allergy should not have direct contact with latex-containing materials and should be in a latex-safe environment with all latex-containing products removed from their vicinity (31). Dental patients with histories of latex allergy can be at risk from dental products (e.g., prophylaxis cups, rubber dams, orthodontic elastics, and medication vials) (241). Any latex-containing devices that cannot be removed from the treatment environment should be adequately covered or isolated. Persons might also be allergic to chemicals used in the manufacture of natural rubber latex and synthetic rubber gloves as well as metals, plastics, or other materials used in dental care. Taking thorough health histories for both patients and DHCP, followed by avoidance of contact with potential allergens can minimize the possibility of adverse reactions. Certain common predisposing conditions for latex allergy include previous history of allergies, a history of spina bifida, urogenital anomalies, or allergies to avocados, kiwis, nuts, or bananas. The following precautions should be considered to ensure safe treatment for patients who have possible or documented latex allergy:

- Be aware that latent allergens in the ambient air can cause respiratory or anaphylactic symptoms among persons with latex hypersensitivity. Patients with latex allergy can be scheduled for the first appointment of the day to minimize their inadvertent exposure to airborne latex particles.
- Communicate with other DHCP regarding patients with latex allergy (e.g., by oral instructions, written protocols, and posted signage) to prevent them from bringing latex-containing materials into the treatment area.
- Frequently clean all working areas contaminated with latex powder or dust.

- Have emergency treatment kits with latex-free products available at all times.
- If latex-related complications occur during or after a procedure, manage the reaction and seek emergency assistance as indicated. Follow current medical emergency response recommendations for management of anaphylaxis (32).

### Sterilization and Disinfection of Patient-Care Items

Patient-care items (dental instruments, devices, and equipment) are categorized as critical, semicritical, or noncritical, depending on the potential risk for infection associated with their intended use (Table 4) (242). Critical items used to penetrate soft tissue or bone have the greatest risk of transmitting infection and should be sterilized by heat. Semicritical items touch mucous membranes or nonintact skin and have a lower risk of transmission; because the majority of semicritical items in dentistry are heat-tolerant, they also should be sterilized by using heat. If a semicritical item is heat-sensitive, it should, at a minimum, be processed with high-level disinfection (2).

Noncritical patient-care items pose the least risk of transmission of infection, contacting only intact skin, which can serve as an effective barrier to microorganisms. In the majority of cases, cleaning, or if visibly soiled, cleaning followed by disinfection with an EPA-registered hospital disinfectant is adequate. When the item is visibly contaminated with blood or OPIM, an EPA-registered hospital disinfectant with a tuberculocidal claim (i.e., intermediate-level disinfectant) should be used (2,243,244). Cleaning or disinfection of certain noncritical patient-care items can be difficult or damage the surfaces; therefore, use of disposable barrier protection of these surfaces might be a preferred alternative.

FDA-cleared sterilant/high-level disinfectants and EPA-registered disinfectants must have clear label claims for intended use, and manufacturer instructions for use must be followed (245). A more complete description of the regulatory framework in the United States by which liquid chemical germicides are evaluated and regulated is included (Appendix A).

### TABLE 4. Infection-control categories of patient-care instruments

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Dental instrument or item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical</td>
<td>Penetrates soft tissue, contacts bone, enters into or contacts the bloodstream or other normally sterile tissue.</td>
<td>Surgical instruments, periodontal scalers, scalpel blades, surgical dental burs</td>
</tr>
<tr>
<td>Semicritical</td>
<td>Contacts mucous membranes or nonintact skin; will not penetrate soft tissue, contact bone, enter into or contact the bloodstream or other normally sterile tissue.</td>
<td>Dental mouth mirror, amalgam condenser, reusable dental impression trays, dental handpieces*</td>
</tr>
<tr>
<td>Noncritical</td>
<td>Contacts intact skin.</td>
<td>Radiograph head/cone, blood pressure cuff, facebow, pulse oximeter</td>
</tr>
</tbody>
</table>

*Although dental handpieces are considered a semicritical item, they should always be heat-sterilized between uses and not high-level disinfected (246). See Dental Handpieces and Other Devices Attached to Air or Waterlines for detailed information.
Three levels of disinfection, high, intermediate, and low, are used for patient-care devices that do not require sterility and two levels, intermediate and low, for environmental surfaces (242). The intended use of the patient-care item should determine the recommended level of disinfection. Dental practices should follow the product manufacturer’s directions regarding concentrations and exposure time for disinfectant activity relative to the surface to be disinfected (245). A summary of sterilization and disinfection methods is included (Appendix C).

**Transporting and Processing Contaminated Critical and Semicritical Patient-Care Items**

DHCP can be exposed to microorganisms on contaminated instruments and devices through percutaneous injury, contact with nonintact skin on the hands, or contact with mucous membranes of the eyes, nose, or mouth. Contaminated instruments should be handled carefully to prevent exposure to sharp instruments that can cause a percutaneous injury. Instruments should be placed in an appropriate container at the point of use to prevent percutaneous injuries during transport to the instrument processing area (13).

Instrument processing requires multiple steps to achieve sterilization or high-level disinfection. Sterilization is a complex process requiring specialized equipment, adequate space, qualified DHCP who are provided with ongoing training, and regular monitoring for quality assurance (247). Correct cleaning, packaging, sterilizer loading procedures, sterilization methods, or high-level disinfection methods should be followed to ensure that an instrument is adequately processed and safe for reuse on patients.

**Instrument Processing Area**

DHCP should process all instruments in a designated central processing area to more easily control quality and ensure safety (248). The central processing area should be divided into sections for 1) receiving, cleaning, and decontamination; 2) preparation and packaging; 3) sterilization; and 4) storage. Ideally, walls or partitions should separate the sections to control traffic flow and contain contaminants generated during processing. When physical separation of these sections cannot be achieved, adequate spatial separation might be satisfactory if the DHCP who process instruments are trained in work practices to prevent contamination of clean areas (248). Space should be adequate for the volume of work anticipated and the items to be stored (248).

**Receiving, Cleaning, and Decontamination**

Reusable instruments, supplies, and equipment should be received, sorted, cleaned, and decontaminated in one section of the processing area. Cleaning should precede all disinfection and sterilization processes; it should involve removal of debris as well as organic and inorganic contamination. Removal of debris and contamination is achieved either by scrubbing with a surfactant, detergent, and water, or by an automated process (e.g., ultrasonic cleaner or washer-disinfector) using chemical agents. If visible debris, whether inorganic or organic matter, is not removed, it will interfere with microbial inactivation and can compromise the disinfection or sterilization process (244, 249–252). After cleaning, instruments should be rinsed with water to remove chemical or detergent residue. Splashing should be minimized during cleaning and rinsing (13). Before final disinfection or sterilization, instruments should be handled as though contaminated.

Considerations in selecting cleaning methods and equipment include 1) efficacy of the method, process, and equipment; 2) compatibility with items to be cleaned; and 3) occupational health and exposure risks. Use of automated cleaning equipment (e.g., ultrasonic cleaner or washer-disinfector) does not require presoaking or scrubbing of instruments and can increase productivity, improve cleaning effectiveness, and decrease worker exposure to blood and body fluids. Thus, using automated equipment can be safer and more efficient than manually cleaning contaminated instruments (253).

If manual cleaning is not performed immediately, placing instruments in a puncture-resistant container and soaking them with detergent, a disinfectant/detergent, or an enzymatic cleaner will prevent drying of patient material and make cleaning easier and less time-consuming. Use of a liquid chemical sterilant/high-level disinfectant (e.g., glutaraldehyde) as a holding solution is not recommended (244). Using work-practice controls (e.g., long-handled brush) to keep the scrubbing hand away from sharp instruments is recommended (14). To avoid injury from sharp instruments, DHCP should wear puncture-resistant, heavy-duty utility gloves when handling or manually cleaning contaminated instruments and devices (6). Employees should not reach into trays or containers holding sharp instruments that cannot be seen (e.g., sinks filled with soapy water in which sharp instruments have been placed). Work-practice controls should include use of a strainer-type basket to hold instruments and forceps to remove the items. Because splashing is likely to occur, a mask, protective eyewear or face shield, and gown or jacket should be worn (13).

**Preparation and Packaging**

In another section of the processing area, cleaned instruments and other dental supplies should be inspected, assembled into sets or trays, and wrapped, packaged, or placed into container systems for sterilization. Hinged instruments should be processed open and unlocked. An internal chemical indicator should be placed in every package. In addition, an external
chemical indicator (e.g., chemical indicator tape) should be used when the internal indicator cannot be seen from outside the package. For unwrapped loads, at a minimum, an internal chemical indicator should be placed in the tray or cassette with items to be sterilized (254) (see Sterilization of Unwrapped Instruments). Dental practices should refer to the manufacturer's instructions regarding use and correct placement of chemical indicators (see Sterilization Monitoring). Critical and semicritical instruments that will be stored should be wrapped or placed in containers (e.g., cassettes or organizing trays) designed to maintain sterility during storage (2,247,255–257).

Packaging materials (e.g., wraps or container systems) allow penetration of the sterilization agent and maintain sterility of the processed item after sterilization. Materials for maintaining sterility of instruments during transport and storage include wrapped perforated instrument cassettes, peel pouches of plastic or paper, and sterilization wraps (i.e., woven and nonwoven). Packaging materials should be designed for the type of sterilization process being used (256–259).

**Sterilization**

The sterilization section of the processing area should include the sterilizers and related supplies, with adequate space for loading, unloading, and cool down. The area can also include incubators for analyzing spore tests and enclosed storage for sterile items and disposable (single-use) items (260) (see Sterilization of Unwrapped Instruments). Critical and semicritical instruments that are not sensitive to heat and moisture (260). Steam sterilization requires exposure of each item to direct steam contact at a required temperature and pressure for a specified time needed to kill microorganisms. Two basic types of steam sterilizers are the gravity displacement and the high-speed prevacuum sterilizer.

The majority of tabletop sterilizers used in a dental practice are gravity displacement sterilizers, although prevacuum sterilizers are becoming more widely available. In gravity displacement sterilizers, steam is admitted through steam lines, a steam generator, or self-generation of steam within the chamber. Unsaturated air is forced out of the chamber through a vent in the chamber wall. Trapping of air is a concern when using saturated steam under gravity displacement; errors in packaging items or overloading the sterilizer chamber can result in cool air pockets and items not being sterilized.

Prevacuum sterilizers are fitted with a pump to create a vacuum in the chamber and ensure air removal from the sterilizing chamber before the chamber is pressurized with steam. Relative to gravity displacement, this procedure allows faster and more positive steam penetration throughout the entire load. Prevacuum sterilizers should be tested periodically for adequate air removal, as recommended by the manufacturer. Air not removed from the chamber will interfere with steam contact. If a sterilizer fails the air removal test, it should not be used until inspected by sterilizer maintenance personnel and it passes the test (243,247). Manufacturer's instructions, with specific details regarding operation and user maintenance information, should be followed.

**Unsaturated Chemical-Vapor Sterilization.** Unsaturated chemical-vapor sterilization involves heating a chemical solution of primarily alcohol with 0.23% formaldehyde in a closed pressurized chamber. Unsaturated chemical vapor sterilization of carbon steel instruments (e.g., dental burs) causes less corrosion than steam sterilization because of the low level of water present during the cycle. Instruments should be dry before sterilizing. State and local authorities should be consulted for hazardous waste disposal requirements for the sterilizing solution.

**Dry-Heat Sterilization.** Dry heat is used to sterilize materials that might be damaged by moist heat (e.g., burs and certain orthodontic instruments). Although dry heat has the advantages of low operating cost and being noncorrosive, it is
a prolonged process and the high temperatures required are not suitable for certain patient-care items and devices (261).

Dry-heat sterilizers used in dentistry include static-air and forced-air types.

- The static-air type is commonly called an oven-type sterilizer. Heating coils in the bottom or sides of the unit cause hot air to rise inside the chamber through natural convection.
- The forced-air type is also known as a rapid heat-transfer sterilizer. Heated air is circulated throughout the chamber at a high velocity, permitting more rapid transfer of energy from the air to the instruments, thereby reducing the time needed for sterilization.

**Sterilization of Unwrapped Instruments.** An unwrapped cycle (sometimes called *flash sterilization*) is a method for sterilizing unwrapped patient-care items for immediate use. The time required for unwrapped sterilization cycles depends on the type of sterilizer and the type of item (i.e., porous or non-porous) to be sterilized (243). The unwrapped cycle in tableau-top sterilizers is preprogrammed by the manufacturer to a specific time and temperature setting and can include a drying phase at the end to produce a dry instrument with much of the heat dissipated. If the drying phase requirements are unclear, the operation manual or manufacturer of the sterilizer should be consulted. If the unwrapped sterilization cycle in a steam sterilizer does not include a drying phase, or has only a minimal drying phase, items retrieved from the sterilizer will be hot and wet, making aseptic transport to the point of use more difficult. For dry-heat and chemical-vapor sterilizers, a drying phase is not required.

Unwrapped sterilization should be used only under certain conditions: 1) thorough cleaning and drying of instruments precedes the unwrapped sterilization cycle; 2) mechanical monitors are checked and chemical indicators used for each cycle; 3) care is taken to avoid thermal injury to DHCP or patients; and 4) items are transported aseptically to the point of use to maintain sterility (134,258,262). Because all implantable devices should be quarantined after sterilization until the results of biological monitoring are known, unwrapped or flash sterilization of implantable items is not recommended (134).

Critical instruments sterilized unwrapped should be transferred immediately by using aseptic technique, from the sterilizer to the actual point of use. Critical instruments should not be stored unwrapped (260). Semicritical instruments that are sterilized unwrapped on a tray or in a container system should be used immediately or within a short time. When sterile items are open to the air, they will eventually become contaminated. Storage, even temporary, of unwrapped semicritical instruments is discouraged because it permits exposure to dust, airborne organisms, and other unnecessary contamination before use on a patient (260). A carefully written protocol for minimizing the risk of contaminating unwrapped instruments should be prepared and followed (260).

**Other Sterilization Methods.** Heat-sensitive critical and semicritical instruments and devices can be sterilized by immersing them in liquid chemical germicides registered by FDA as sterilants. When using a liquid chemical germicide for sterilization, certain poststerilization procedures are essential. Items need to be 1) rinsed with sterile water after removal to remove toxic or irritating residues; 2) handled using sterile gloves and dried with sterile towels; and 3) delivered to the point of use in an aseptic manner. If stored before use, the instrument should not be considered sterile and should be sterilized again just before use. In addition, the sterilization process with liquid chemical sterilants cannot be verified with biological indicators (263).

Because of these limitations and because liquid chemical sterilants can require approximately 12 hours of complete immersion, they are almost never used to sterilize instruments. Rather, these chemicals are more often used for high-level disinfection (249). Shorter immersion times (12–90 minutes) are used to achieve high-level disinfection of semicritical instruments or items. These powerful, sporidical chemicals (e.g., glutaraldehyde, peracetic acid, and hydrogen peroxide) are highly toxic (244,264,265). Manufacturer instructions (e.g., regarding dilution, immersion time, and temperature) and safety precautions for using chemical sterilants/high-level disinfectants must be followed precisely (15,245). These chemicals should not be used for applications other than those indicated in their label instructions. Misapplications include use as an environmental surface disinfectant or instrument-holding solution.

When using appropriate precautions (e.g., closed containers to limit vapor release, chemically resistant gloves and aprons, goggles, and face shields), glutaraldehyde-based products can be used without tissue irritation or adverse health effects. However, dermatologic, eye irritation, respiratory effects, and skin sensitization have been reported (266–268). Because of their lack of chemical resistance to glutaraldehydes, medical gloves are not an effective barrier (200,269,270). Other factors might apply (e.g., room exhaust ventilation or 10 air exchanges/hour) to ensure DHCP safety (266,271). For all of these reasons, using heat-sensitive semicritical items that must be processed with liquid chemical germicides is discouraged; heat-tolerant or disposable alternatives are available for the majority of such items.

Low-temperature sterilization with ethylene oxide gas (ETO) has been used extensively in larger health-care facilities. Its primary advantage is the ability to sterilize heat- and moisture-sensitive patient-care items with reduced deleterious effects. However, extended sterilization times of 10–48 hours...
and potential hazards to patients and DHCP requiring stringent health and safety requirements (272–274) make this method impractical for private-practice settings. Handpieces cannot be effectively sterilized with this method because of decreased penetration of ETO gas flow through a small lumen (250,275). Other types of low-temperature sterilization (e.g., hydrogen peroxide gas plasma) exist but are not yet practical for dental offices.

Bead sterilizers have been used in dentistry to sterilize small metallic instruments (e.g., endodontic files). FDA has determined that a risk of infection exists with these devices because of their potential failure to sterilize dental instruments and has required their commercial distribution cease unless the manufacturer files a premarket approval application. If a bead sterilizer is employed, DHCP assume the risk of employing a dental device FDA has deemed neither safe nor effective (276).

**Sterilization Monitoring.** Monitoring of sterilization procedures should include a combination of process parameters, including mechanical, chemical, and biological (247,248,277). These parameters evaluate both the sterilizing conditions and the procedure’s effectiveness.

Mechanical techniques for monitoring sterilization include assessing cycle time, temperature, and pressure by observing the gauges or displays on the sterilizer and noting these parameters for each load (243,248). Some tabletop sterilizers have recording devices that print out these parameters. Correct readings do not ensure sterilization, but incorrect readings can be the first indication of a problem with the sterilization cycle.

Chemical indicators, internal and external, use sensitive chemicals to assess physical conditions (e.g., time and temperature) during the sterilization process. Although chemical indicators do not prove sterilization has been achieved, they allow detection of certain equipment malfunctions, and they can help identify procedural errors. External indicators applied to the outside of a package (e.g., chemical indicator tape or special markings) change color rapidly when a specific parameter is reached, and they verify that the package has been exposed to the sterilization process. Internal chemical indicators should be used inside each package to ensure the sterilizing agent has penetrated the packaging material and actually reached the instruments inside. A single-parameter internal chemical indicator provides information regarding only one sterilization parameter (e.g., time or temperature). Multiparameter internal chemical indicators are designed to react to ≥2 parameters (e.g., time and temperature; or time, temperature, and the presence of steam) and can provide a more reliable indication that sterilization conditions have been met (254). Multiparameter internal indicators are available only for steam sterilizers (i.e., autoclaves).

Because chemical indicator test results are received when the sterilization cycle is complete, they can provide an early indication of a problem and where in the process the problem might exist. If either mechanical indicators or internal or external chemical indicators indicate inadequate processing, items in the load should not be used until reprocessed (134).

Biological indicators (BIs) (i.e., spore tests) are the most accepted method for monitoring the sterilization process (278,279) because they assess it directly by killing known highly resistant microorganisms (e.g., *Geobacillus* or *Bacillus* species), rather than merely testing the physical and chemical conditions necessary for sterilization (243). Because spores used in BIs are more resistant and present in greater numbers than the common microbial contaminants found on patient-care equipment, an inactivated BI indicates other potential pathogens in the load have been killed (280).

Correct functioning of sterilization cycles should be verified for each sterilizer by the periodic use (at least weekly) of BIs (2,9,134,243,278,279). Every load containing implantable devices should be monitored with such indicators (248), and the items quarantined until BI results are known. However, in an emergency, placing implantable items in quarantine until spore tests are known to be negative might be impossible.

Manufacturer’s directions should determine the placement and location of BI in the sterilizer. A control BI, from the same lot as the test indicator and not processed through the sterilizer, should be incubated with the test BI; the control BI should yield positive results for bacterial growth.

In-office biological monitoring is available; mail-in sterilization monitoring services (e.g., from private companies or dental schools) can also be used to test both the BI and the control. Although some DHCP have expressed concern that delays caused by mailing specimens might cause false-negatives, studies have determined that mail delays have no substantial effect on final test results (281,282).

Procedures to follow in the event of a positive spore test have been developed (243,247). If the mechanical (e.g., time, temperature, and pressure) and chemical (i.e., internal or external) indicators demonstrate that the sterilizer is functioning correctly, a single positive spore test probably does not indicate sterilizer malfunction. Items other than implantable devices do not necessarily need to be recalled; however the spore test should be repeated immediately after correctly loading the sterilizer and using the same cycle that produced the failure. The sterilizer should be removed from service, and all records reviewed of chemical and mechanical monitoring since the last negative BI test. Also, sterilizer operating procedures should be reviewed, including packaging, loading, and spore testing, with all persons who work with the sterilizer to determine whether operator error could be responsible (9,243,247).
Overloading, failure to provide adequate package separation, and incorrect or excessive packaging material are all common reasons for a positive BI in the absence of mechanical failure of the sterilizer unit (260). A second monitored sterilizer in the office can be used, or a loaner from a sales or repair company obtained, to minimize office disruption while waiting for the repeat BI.

If the repeat test is negative and chemical and mechanical monitoring indicate adequate processing, the sterilizer can be put back into service. If the repeat BI test is positive, and packaging, loading, and operating procedures have been confirmed as performing correctly, the sterilizer should remain out of service until it has been inspected, repaired, and rechallenged with BI tests in three consecutive empty chamber sterilization cycles (9,243). When possible, items from suspect loads dating back to the last negative BI should be recalled, rewrapped, and resterilized (9,283).

A more conservative approach has been recommended (247) in which any positive spore test is assumed to represent sterilizer malfunction and requires that all materials processed in that sterilizer, dating from the sterilization cycle having the last negative biologic indicator to the next cycle indicating satisfactory biologic indicator results, should be considered nonsterile and retrieved, if possible, and reprocessed or held in quarantine until the results of the repeat BI are known. This approach is considered conservative because the margin of safety in steam sterilization is sufficient enough that infection risk, associated with items in a load indicating spore growth, is minimal, particularly if the item was properly cleaned and the temperature was achieved (e.g., as demonstrated by acceptable chemical indicator or temperature chart) (243). Published studies are not available that document disease transmission through a nonretrieved surgical instrument after a steam sterilization cycle with a positive biological indicator (243). This more conservative approach should always be used for sterilization methods other than steam (e.g., dry heat, unsaturated chemical vapor, ETO, or hydrogen peroxide gas plasma) (243).

Results of biological monitoring should be recorded and sterilization monitoring records (i.e., mechanical, chemical, and biological) retained long enough to comply with state and local regulations. Such records are a component of an overall dental infection-control program (see Program Evaluation).

Storage of Sterilized Items and Clean Dental Supplies

The storage area should contain enclosed storage for sterile items and disposable (single-use) items (173). Storage practices for wrapped sterilized instruments can be either date- or event-related. Packages containing sterile supplies should be inspected before use to verify barrier integrity and dryness. Although some health-care facilities continue to date every sterilized package and use shelf-life practices, other facilities have switched to event-related practices (243). This approach recognizes that the product should remain sterile indefinitely, unless an event causes it to become contaminated (e.g., torn or wet packaging) (284). Even for event-related packaging, minimally, the date of sterilization should be placed on the package, and if multiple sterilizers are used in the facility, the sterilizer used should be indicated on the outside of the packaging material to facilitate the retrieval of processed items in the event of a sterilization failure (247). If packaging is compromised, the instruments should be recleaned, packaged in new wrap, and sterilized again.

Clean supplies and instruments should be stored in closed or covered cabinets, if possible (285). Dental supplies and instruments should not be stored under sinks or in other locations where they might become wet.

Environmental Infection Control

In the dental operatory, environmental surfaces (i.e., a surface or equipment that does not contact patients directly) can become contaminated during patient care. Certain surfaces, especially ones touched frequently (e.g., light handles, unit switches, and drawer knobs) can serve as reservoirs of microbial contamination, although they have not been associated directly with transmission of infection to either DHCP or patients. Transfer of microorganisms from contaminated environmental surfaces to patients occurs primarily through DHCP hand contact (286,287). When these surfaces are touched, microbial agents can be transferred to instruments, other environmental surfaces, or to the nose, mouth, or eyes of workers or patients. Although hand hygiene is key to minimizing this transferal, barrier protection or cleaning and disinfecting of environmental surfaces also protects against health-care–associated infections.

Environmental surfaces can be divided into clinical contact surfaces and housekeeping surfaces (249). Because housekeeping surfaces (e.g., floors, walls, and sinks) have limited risk of disease transmission, they can be decontaminated with less rigorous methods than those used on dental patient–care items and clinical contact surfaces (244). Strategies for cleaning and disinfecting surfaces in patient-care areas should consider the 1) potential for direct patient contact; 2) degree and frequency of hand contact; and 3) potential contamination of the surface with body substances or environmental sources of microorganisms (e.g., soil, dust, or water).

Cleaning is the necessary first step of any disinfection process. Cleaning is a form of decontamination that renders the environmental surface safe by removing organic matter, salts,
and visible soils, all of which interfere with microbial inactivation. The physical action of scrubbing with detergents and surfactants and rinsing with water removes substantial numbers of microorganisms. If a surface is not cleaned first, the success of the disinfection process can be compromised. Removal of all visible blood and inorganic and organic matter can be as critical as the germicidal activity of the disinfecting agent (249). When a surface cannot be cleaned adequately, it should be protected with barriers (2).

**Clinical Contact Surfaces**

Clinical contact surfaces can be directly contaminated from patient materials either by direct spray or spatter generated during dental procedures or by contact with DHCP’s gloved hands. These surfaces can subsequently contaminate other instruments, devices, hands, or gloves. Examples of such surfaces include:

- light handles,
- switches,
- dental radiograph equipment,
- dental chairside computers,
- reusable containers of dental materials,
- drawer handles,
- faucet handles,
- countertops,
- pens,
- telephones, and
- doorknobs.

Barrier protection of surfaces and equipment can prevent contamination of clinical contact surfaces, but is particularly effective for those that are difficult to clean. Barriers include clear plastic wrap, bags, sheets, tubing, and plastic-backed paper or other materials impervious to moisture (260,288). Because such coverings can become contaminated, they should be removed and discarded between patients, while DHCP are still gloved. After removing the barrier, examine the surface to make sure it did not become soiled inadvertently. The surface needs to be cleaned and disinfected only if contamination is evident. Otherwise, after removing gloves and performing hand hygiene, DHCP should place clean barriers on these surfaces before the next patient (1,2,288).

If barriers are not used, surfaces should be cleaned and disinfected between patients by using an EPA-registered hospital disinfectant with an HIV, HBV claim (i.e., low-level disinfectant) or a tuberculocidal claim (i.e., intermediate-level disinfectant). Intermediate-level disinfectant should be used when the surface is visibly contaminated with blood or OPIM (2,244). Also, general cleaning and disinfection are recommended for clinical contact surfaces, dental unit surfaces, and countertops at the end of daily work activities and are required if surfaces have become contaminated since their last cleaning (13). To facilitate daily cleaning, treatment areas should be kept free of unnecessary equipment and supplies.

Manufacturers of dental devices and equipment should provide information regarding material compatibility with liquid chemical germicides, whether equipment can be safely immersed for cleaning, and how it should be decontaminated if servicing is required (289). Because of the risks associated with exposure to chemical disinfectants and contaminated surfaces, DHCP who perform environmental cleaning and disinfection should wear gloves and other PPE to prevent occupational exposure to infectious agents and hazardous chemicals. Chemical- and puncture-resistant utility gloves offer more protection than patient examination gloves when using hazardous chemicals.

**Housekeeping Surfaces**

Evidence does not support that housekeeping surfaces (e.g., floors, walls, and sinks) pose a risk for disease transmission in dental health-care settings. Actual, physical removal of microorganisms and soil by wiping or scrubbing is probably as critical, if not more so, than any antimicrobial effect provided by the agent used (244,290). The majority of housekeeping surfaces need to be cleaned only with a detergent and water or an EPA-registered hospital disinfectant/detergent, depending on the nature of the surface and the type and degree of contamination. Schedules and methods vary according to the area (e.g., dental operatory, laboratory, bathrooms, or reception rooms), surface, and amount and type of contamination.

Floors should be cleaned regularly, and spills should be cleaned up promptly. An EPA-registered hospital disinfectant/detergent designed for general housekeeping purposes should be used in patient-care areas if uncertainty exists regarding the nature of the soil on the surface (e.g., blood or body fluid contamination versus routine dust or dirt). Unless contamination is reasonably anticipated or apparent, cleaning or disinfecting walls, window drapes, and other vertical surfaces is unnecessary. However, when housekeeping surfaces are visibly contaminated by blood or OPIM, prompt removal and surface disinfection is appropriate infection-control practice and required by OSHA (13).

Part of the cleaning strategy is to minimize contamination of cleaning solutions and cleaning tools (e.g., mop heads or cleaning cloths). Mops and cloths should be cleaned after use and allowed to dry before reuse, or single-use, disposable mop heads and cloths should be used to avoid spreading contamination. Cost, safety, product-surface compatibility, and acceptability by housekeepers can be key criteria for selecting a cleaning agent or an EPA-registered hospital disinfectant/detergent.
detergent. PPE used during cleaning and housekeeping procedures followed should be appropriate to the task.

In the cleaning process, another reservoir for microorganisms can be dilute solutions of detergents or disinfectants, especially if prepared in dirty containers, stored for long periods of time, or prepared incorrectly (244). Manufacturers’ instructions for preparation and use should be followed. Making fresh cleaning solution each day, discarding any remaining solution, and allowing the container to dry will minimize bacterial contamination. Preferred cleaning methods produce minimal mists and aerosols or dispersion of dust in patient-care areas.

**Cleaning and Disinfection Strategies for Blood Spills**

The majority of blood contamination events in dentistry result from spatter during dental procedures using rotary or ultrasonic instrumentation. Although no evidence supports that HBV, HCV, or HIV have been transmitted from a housekeeping surface, prompt removal and surface disinfection of an area contaminated by either blood or OPIM are appropriate infection-control practices and required by OSHA (13,291).

Strategies for decontaminating spills of blood and other body fluids differ by setting and volume of the spill (113,244). Blood spills on either clinical contact or housekeeping surfaces should be contained and managed as quickly as possible to reduce the risk of contact by patients and DHCP (244,292). The person assigned to clean the spill should wear gloves and other PPE as needed. Visible organic material should be removed with absorbent material (e.g., disposable paper towels discarded in a leak-proof, appropriately labeled container). Nonporous surfaces should be cleaned and then decontaminated with either an EPA-registered hospital disinfectant effective against HBV and HIV or an EPA-registered hospital disinfectant with a tuberculocidal claim (i.e., intermediate-level disinfectant). If sodium hypochlorite is chosen, an EPA-registered sodium hypochlorite product is preferred. However, if such products are unavailable, a 1:100 dilution of sodium hypochlorite (e.g., approximately ¼ cup of 5.25% household chlorine bleach to 1 gallon of water) is an inexpensive and effective disinfecting agent (113).

**Carpeting and Cloth Furnishings**

Carpeting is more difficult to clean than nonporous hard-surface flooring, and it cannot be reliably disinfected, especially after spills of blood and body substances. Studies have documented the presence of diverse microbial populations, primarily bacteria and fungi, in carpeting (293–295). Cloth furnishings pose similar contamination risks in areas of direct patient care and places where contaminated materials are managed (e.g., dental operatory, laboratory, or instrument processing areas). For these reasons, use of carpeted flooring and fabric-upholstered furnishings in these areas should be avoided.

**Nonregulated and Regulated Medical Waste**

Studies have compared microbial load and diversity of microorganisms in residential waste with waste from multiple health-care settings. General waste from hospitals or other health-care facilities (e.g., dental practices or clinical/research laboratories) is no more infective than residential waste (296,297). The majority of soiled items in dental offices are general medical waste and thus can be disposed of with ordinary waste. Examples include used gloves, masks, gowns, lightly soiled gauze or cotton rolls, and environmental barriers (e.g., plastic sheets or bags) used to cover equipment during treatment (298).

Although any item that has had contact with blood, exudates, or secretions might be infective, treating all such waste as infective is neither necessary nor practical (244). Infectious waste that carries a substantial risk of causing infection during handling and disposal is regulated medical waste. A complete definition of regulated waste is included in OSHA’s bloodborne pathogens standard (13).

Regulated medical waste is only a limited subset of waste: 9%–15% of total waste in hospitals and 1%–2% of total waste in dental offices (298,299). Regulated medical waste requires special storage, handling, neutralization, and disposal and is covered by federal, state, and local rules and regulations (6,297,300,301). Examples of regulated waste found in dental-practice settings are solid waste soaked or saturated with blood or saliva (e.g., gauze saturated with blood after surgery), extracted teeth, surgically removed hard and soft tissues, and contaminated sharp items (e.g., needles, scalpel blades, and wires) (13).

Regulated medical waste requires careful containment for treatment or disposal. A single leak-resistant biohazard bag is usually adequate for containment of nonsharp regulated medical waste, provided the bag is sturdy and the waste can be discarded without contaminating the bag’s exterior. Exterior contamination or puncturing of the bag requires placement in a second biohazard bag. All bags should be securely closed for disposal. Puncture-resistant containers with a biohazard label, located at the point of use (i.e., sharps containers), are used as containment for scalpel blades, needles, syringes, and unused sterile sharps (13).

Dental health-care facilities should dispose of medical waste regularly to avoid accumulation. Any facility generating regulated medical waste should have a plan for its management that complies with federal, state, and local regulations to ensure health and environmental safety.
Discharging Blood or Other Body Fluids to Sanitary Sewers or Septic Tanks

All containers with blood or saliva (e.g., suctioned fluids) can be inactivated in accordance with state-approved treatment technologies, or the contents can be carefully poured down a utility sink, drain, or toilet (6). Appropriate PPE (e.g., gloves, gown, mask, and protective eyewear) should be worn when performing this task (13). No evidence exists that bloodborne diseases have been transmitted from contact with raw or treated sewage. Multiple bloodborne pathogens, particularly viruses, are not stable in the environment for long periods (302), and the discharge of limited quantities of blood and other body fluids into the sanitary sewer is considered a safe method for disposing of these waste materials (6). State and local regulations vary and dictate whether blood or other body fluids require pretreatment or if they can be discharged into the sanitary sewer and in what volume.

Dental Unit Waterlines, Biofilm, and Water Quality

Studies have demonstrated that dental unit waterlines (i.e., narrow-bore plastic tubing that carries water to the high-speed handpiece, air/water syringe, and ultrasonic scaler) can become colonized with microorganisms, including bacteria, fungi, and protozoa (303–309). Protected by a polysaccharide slime layer known as a glycocalyx, these microorganisms colonize and replicate on the interior surfaces of the waterline tubing and form a biofilm, which serves as a reservoir that can amplify the number of free-floating (i.e., planktonic) microorganisms in water used for dental treatment. Although oral flora (303,310,311) and human pathogens (e.g., *Pseudomonas aeruginosa* [303,305,312,313], *Legionella* species [303,306,313], and nontuberculous *Mycobacterium* species [303,304]), have been isolated from dental water systems, the majority of organisms recovered from dental waterlines are common heterotrophic water bacteria (305,314,315). These exhibit limited pathogenic potential for immunocompetent persons.

Clinical Implications

Certain reports associate waterborne infections with dental water systems, and scientific evidence verifies the potential for transmission of waterborne infections and disease in hospital settings and in the community (306,312,316). Infection or colonization caused by *Pseudomonas* species or nontuberculous mycobacteria can occur among susceptible patients through direct contact with water (317–320) or after exposure to residual waterborne contamination of inadequately reprocessed medical instruments (321–323). Nontuberculous mycobacteria can also be transmitted to patients from tap water aerosols (324). Health-care-associated transmission of pathogenic agents (e.g., *Legionella* species) occurs primarily through inhalation of infectious aerosols generated from potable water sources or through use of tap water in respiratory therapy equipment (325–327). Disease outbreaks in the community have also been reported from diverse environmental aerosol-producing sources, including whirlpool spas (328), swimming pools (329), and a grocery store mist machine (330). Although the majority of these outbreaks are associated with species of *Legionella* and *Pseudomonas* (329), the fungus *Cladosporium* (331) has also been implicated.

Researchers have not demonstrated a measurable risk of adverse health effects among DHCP or patients from exposure to dental water. Certain studies determined DHCP had altered nasal flora (332) or substantially greater titers of *Legionella* antibodies in comparisons with control populations; however, no cases of legionellosis were identified among exposed DHCP (333,334). Contaminated dental water might have been the source for localized *Pseudomonas aeruginosa* infections in two immunocompromised patients (312). Although transient carriage of *P. aeruginosa* was observed in 78 healthy patients treated with contaminated dental treatment water, no illness was reported among the group. In this same study, a retrospective review of dental records also failed to identify infections (312).

Concentrations of bacterial endotoxin ≤1,000 endotoxin units/mL from gram-negative water bacteria have been detected in water from colonized dental units (335). No standards exist for an acceptable level of endotoxin in drinking water, but the maximum level permissible in United States Pharmacopeia (USP) sterile water for irrigation is only 0.25 endotoxin units/mL (336). Although the consequences of acute and chronic exposure to aerosolized endotoxin in dental health-care settings have not been investigated, endotoxin has been associated with exacerbation of asthma and onset of hypersensitivity pneumonitis in other occupational settings (329,337).

Dental Unit Water Quality

Research has demonstrated that microbial counts can reach ≤200,000 colony-forming units (CFU)/mL within 5 days after installation of new dental unit waterlines (305), and levels of microbial contamination ≤10⁶ CFU/mL of dental unit water have been documented (309,338). These counts can occur because dental unit waterline factors (e.g., system design, flow rates, and materials) promote both bacterial growth and development of biofilm.

Although no epidemiologic evidence indicates a public health problem, the presence of substantial numbers of pathogens in dental unit waterlines generates concern. Exposing patients or DHCP to water of uncertain microbiological quality, despite
the lack of documented adverse health effects, is inconsistent with accepted infection-control principles. Thus in 1995, ADA addressed the dental water concern by asking manufacturers to provide equipment with the ability to deliver treatment water with $\leq 200$ CFU/mL of unfiltered output from waterlines (339). This threshold was based on the quality assurance standard established for dialysate fluid, to ensure that fluid delivery systems in hemodialysis units have not been colonized by indigenous waterborne organisms (340).

Standards also exist for safe drinking water quality as established by EPA, the American Public Health Association (APHA), and the American Water Works Association (AWWA); they have set limits for heterotrophic bacteria of $\leq 500$ CFU/mL of drinking water (341, 342). Thus, the number of bacteria in water used as a coolant/irrigant for nonsurgical dental procedures should be as low as reasonably achievable and, at a minimum, $\leq 500$ CFU/mL, the regulatory standard for safe drinking water established by EPA and APHA/AWWA.

**Strategies To Improve Dental Unit Water Quality**

In 1993, CDC recommended that dental waterlines be flushed at the beginning of the clinic day to reduce the microbial load (2). However, studies have demonstrated this practice does not affect biofilm in the waterlines or reliably improve the quality of water used during dental treatment (315, 338, 343). Because the recommended value of $\leq 500$ CFU/mL cannot be achieved by using this method, other strategies should be employed. Dental unit water that remains untreated or unfiltered is unlikely to meet drinking water standards (303–309). Commercial devices and procedures designed to improve the quality of water used in dental treatment are available (316); methods demonstrated to be effective include self-contained water systems combined with chemical treatment, in-line microfilters, and combinations of these treatments. Simply using source water containing $\leq 500$ CFU/mL of bacteria (e.g., tap, distilled, or sterile water) in a self-contained water system will not eliminate bacterial contamination in treatment water if biofilms in the water system are not controlled. Removal or inactivation of dental waterline biofilms requires use of chemical germicides.

Patient material (e.g., oral microorganisms, blood, and saliva) can enter the dental water system during patient treatment (311, 344). Dental devices that are connected to the dental water system and that enter the patient’s mouth (e.g., handpieces, ultrasonic scalers, or air/water syringes) should be operated to discharge water and air for a minimum of 20–30 seconds after each patient (2). This procedure is intended to physically flush out patient material that might have entered the turbine, air, or waterlines. The majority of recently manufactured dental units are engineered to prevent retraction of oral fluids, but some older dental units are equipped with antiretraction valves that require periodic maintenance. Users should consult the owner’s manual or contact the manufacturer to determine whether testing or maintenance of antiretraction valves or other devices is required. Even with antiretraction valves, flushing devices for a minimum of 20–30 seconds after each patient is recommended.

**Maintenance and Monitoring of Dental Unit Water**

DHCP should be trained regarding water quality, biofilm formation, water treatment methods, and appropriate maintenance protocols for water delivery systems. Water treatment and monitoring products require strict adherence to maintenance protocols, and noncompliance with treatment regimens has been associated with persistence of microbial contamination in treated systems (345). Clinical monitoring of water quality can ensure that procedures are correctly performed and that devices are working in accordance with the manufacturer’s previously validated protocol.

Dentists should consult with the manufacturer of their dental unit or water delivery system to determine the best method for maintaining acceptable water quality (i.e., $\leq 500$ CFU/mL) and the recommended frequency of monitoring. Monitoring of dental water quality can be performed by using commercial self-contained test kits or commercial water-testing laboratories. Because methods used to treat dental water systems target the entire biofilm, no rationale exists for routine testing for such specific organisms as *Legionella* or *Pseudomonas*, except when investigating a suspected waterborne disease outbreak (244).

**Delivery of Sterile Surgical Irrigation**

Sterile solutions (e.g., sterile saline or sterile water) should be used as a coolant/irrigation in the performance of oral surgical procedures where a greater opportunity exists for entry of microorganisms, exogenous and endogenous, into the vascular system and other normally sterile areas that support the oral cavity (e.g., bone or subcutaneous tissue) and increased potential exists for localized or systemic infection (see Oral Surgical Procedures). Conventional dental units cannot reliably deliver sterile water even when equipped with independent water reservoirs because the water-bearing pathway cannot be reliably sterilized. Delivery devices (e.g., bulb syringe or sterile, single-use disposable products) should be used to deliver sterile water (2, 121). Oral surgery and implant handpieces, as well as ultrasonic scalers, are commercially available that bypass the dental unit to deliver sterile water or other solutions by using single-use disposable or sterilizable tubing (316).
Boil-Water Advisories

A boil-water advisory is a public health announcement that the public should boil tap water before drinking it. When issued, the public should assume the water is unsafe to drink. Advisories can be issued after 1) failure of or substantial interruption in water treatment processes that result in increased turbidity levels or particle counts and mechanical or equipment failure; 2) positive test results for pathogens (e.g., Cryptosporidium, Giardia, or Shigella) in water; 3) violations of the total coliform rule or the turbidity standard of the surface water treatment rule; 4) circumstances that compromise the distribution system (e.g., watermain break) coupled with an indication of a health hazard; or 5) a natural disaster (e.g., flood, hurricane, or earthquake) (346). In recent years, increased numbers of boil-water advisories have resulted from contamination of public drinking water systems with waterborne pathogens. Most notable was the outbreak of cryptosporidiosis in Milwaukee, Wisconsin, where the municipal water system was contaminated with the protozoan parasite Cryptosporidium parvum. An estimated 403,000 persons became ill (347,348).

During a boil-water advisory, water should not be delivered to patients through the dental unit, ultrasonic scaler, or other dental equipment that uses the public water system. This restriction does not apply if the water source is isolated from the municipal water system (e.g., a separate water reservoir or other water treatment device cleared for marketing by FDA). Patients should rinse with bottled or distilled water until the boil-water advisory has been cancelled. During these advisory periods, tap water should not be used to dilute germicides or for hand hygiene unless the water has been brought to a rolling boil for ≥1 minute and cooled before use (346,349–351). For hand hygiene, antimicrobial products that do not require water (e.g., alcohol-based hand rubs) can be used until the boil-water notice is cancelled. If hands are visibly contaminated, bottled water and soap should be used for handwashing; if bottled water is not immediately available, an antiseptic towelette should be used (13,122).

When the advisory is cancelled, the local water utility should provide guidance for flushing of waterlines to reduce residual microbial contamination. All incoming waterlines from the public water system inside the dental office (e.g., faucets, waterlines, and dental equipment) should be flushed. No consensus exists regarding the optimal duration for flushing procedures after cancellation of the advisory; recommendations range from 1 to 5 minutes (244,346,351,352). The length of time needed can vary with the type and length of the plumbing system leading to the office. After the incoming public water system lines are flushed, dental unit waterlines should be disinfected according to the manufacturer’s instructions (346).

Special Considerations

Dental Handpieces and Other Devices Attached to Air and Waterlines

Multiple semicritical dental devices that touch mucous membranes are attached to the air or waterlines of the dental unit. Among these devices are high- and low-speed handpieces, prophylaxis angles, ultrasonic and sonic scaling tips, air abrasion devices, and air and water syringe tips. Although no epidemiologic evidence implicates these instruments in disease transmission (353), studies of high-speed handpieces using dye expulsion have confirmed the potential for retracting oral fluids into internal compartments of the device (354–358). This determination indicates that retained patient material can be expelled intraorally during subsequent uses. Studies using laboratory models also indicate the possibility for retention of viral DNA and viable virus inside both high-speed handpieces and prophylaxis angles (356,357,359). The potential for contamination of the internal surfaces of other devices (e.g., low-speed handpieces and ultrasonic scalers), has not been studied, but restricted physical access limits their cleaning. Accordingly, any dental device connected to the dental air/water system that enters the patient’s mouth should be run to discharge water, air, or a combination for a minimum of 20–30 seconds after each patient (2). This procedure is intended to help physically flush out patient material that might have entered the turbine and air and waterlines (2,356,357).

Heat methods can sterilize dental handpieces and other intraoral devices attached to air or waterlines (246,275,356,357,360). For processing any dental device that can be removed from the dental unit air or waterlines, neither surface disinfection nor immersion in chemical germicides is an acceptable method. Ethylene oxide gas cannot adequately sterilize internal components of handpieces (250,275). In clinical evaluations of high-speed handpieces, cleaning and lubrication were the most critical factors in determining performance and durability (361–363). Manufacturer’s instructions for cleaning, lubrication, and sterilization should be followed closely to ensure both the effectiveness of the process and the longevity of handpieces.

Some components of dental instruments are permanently attached to dental unit waterlines and although they do not enter the patient’s oral cavity, they are likely to become contaminated with oral fluids during treatment procedures. Such components (e.g., handles or dental unit attachments of saliva ejectors, high-speed air evacuators, and air/water syringes) should be covered with impervious barriers that are changed after each use. If the item becomes visibly contaminated during use, DHCP should clean and disinfect with an EPA-
Registered hospital disinfectant (intermediate-level) before use on the next patient.

**Saliva Ejectors**

Backflow from low-volume saliva ejectors occurs when the pressure in the patient’s mouth is less than that in the evacuator. Studies have reported that backflow in low-volume suction lines can occur and microorganisms be present in the lines retracted into the patient’s mouth when a seal around the saliva ejector is created (e.g., by a patient closing lips around the tip of the ejector, creating a partial vacuum) (364–366). This backflow can be a potential source of cross-contamination; occurrence is variable because the quality of the seal formed varies between patients. Furthermore, studies have demonstrated that gravity pulls fluid back toward the patient’s mouth whenever a length of the suction tubing holding the tip is positioned above the patient’s mouth, or during simultaneous use of other evacuation (high-volume) equipment (364–366). Although no adverse health effects associated with the saliva ejector have been reported, practitioners should be aware that in certain situations, backflow could occur when using a saliva ejector.

**Dental Radiology**

When taking radiographs, the potential to cross-contaminate equipment and environmental surfaces with blood or saliva is high if aseptic technique is not practiced. Gloves should be worn when taking radiographs and handling contaminated film packets. Other PPE (e.g., mask, protective eyewear, and gowns) should be used if spattering of blood or other body fluids is likely (11,13,367). Heat-tolerant versions of intraoral radiograph accessories are available and these semicritical items (e.g., film-holding and positioning devices) should be heat-sterilized before patient use.

After exposure of the radiograph and before glove removal, the film should be dried with disposable gauze or a paper towel to remove blood or excess saliva and placed in a container (e.g., disposable cup) for transport to the developing area. Alternatively, if FDA-cleared film barrier pouches are used, the film packets should be carefully removed from the pouch to avoid contamination of the outside film packet and placed in the clean container for transport to the developing area.

Various methods have been recommended for aseptic transport of exposed films to the developing area, and for removing the outer film packet before exposing and developing the film. Other information regarding dental radiography infection control is available (260,367,368). However, care should be taken to avoid contamination of the developing equipment. Protective barriers should be used, or any surfaces that become contaminated should be cleaned and disinfected with an EPA-registered hospital disinfectant of low- (i.e., HIV and HBV claim) to intermediate-level (i.e., tuberculocidal claim) activity. Radiography equipment (e.g., radiograph tubehead and control panel) should be protected with surface barriers that are changed after each patient. If barriers are not used, equipment that has come into contact with DHCP’s gloved hands or contaminated film packets should be cleaned and then disinfected after each patient use.

Digital radiography sensors and other high-technology instruments (e.g., intraoral camera, electronic periodontal probe, occlusal analyzers, and lasers) come into contact with mucous membranes and are considered semicritical devices. They should be cleaned and ideally heat-sterilized or high-level disinfected between patients. However, these items vary by manufacturer or type of device in their ability to be sterilized or high-level disinfected. Semicritical items that cannot be reprocessed by heat sterilization or high-level disinfection should, at a minimum, be barrier protected by using an FDA-cleared barrier to reduce gross contamination during use. Use of a barrier does not always protect from contamination (369–374). One study determined that a brand of commercially available plastic barriers used to protect dental digital radiography sensors failed at a substantial rate (44%). This rate dropped to 6% when latex finger cots were used in conjunction with the plastic barrier (375). To minimize the potential for device-associated infections, after removing the barrier, the device should be cleaned and disinfected with an EPA-registered hospital disinfectant (intermediate-level) after each patient. Manufacturers should be consulted regarding appropriate barrier and disinfection/sterilization procedures for digital radiography sensors, other high-technology intraoral devices, and computer components.

**Aseptic Technique for Parenteral Medications**

Safe handling of parenteral medications and fluid infusion systems is required to prevent health-care–associated infections among patients undergoing conscious sedation. Parenteral medications can be packaged in single-dose ampules, vials or prefilled syringes, usually without bacteriostatic/preservative agents, and intended for use on a single patient. Multidose vials, used for more than one patient, can have a preservative, but both types of containers of medication should be handled with aseptic techniques to prevent contamination.

Single-dose vials should be used for parenteral medications whenever possible (376,377). Single-dose vials might pose a risk for contamination if they are punctured repeatedly. The leftover contents of a single-dose vial should be discarded and
never combined with medications for use on another patient (376,377). Medication from a single-dose syringe should not be administered to multiple patients, even if the needle on the syringe is changed (378).

The overall risk for extrinsic contamination of multidose vials is probably minimal, although the consequences of contamination might result in life-threatening infection (379). If necessary to use a multidose vial, its access diaphragm should be cleansed with 70% alcohol before inserting a sterile device into the vial (380,381). A multidose vial should be discarded if sterility is compromised (380,381).

Medication vials, syringes, or supplies should not be carried in uniform or clothing pockets. If trays are used to deliver medications to individual patients, they should be cleaned between patients. To further reduce the chance of contamination, all medication vials should be restricted to a centralized medication preparation area separate from the treatment area (382).

All fluid infusion and administration sets (e.g., IV bags, tubing, and connections) are single-patient use because sterility cannot be guaranteed when an infusion or administration set is used on multiple patients. Aseptic technique should be used when preparing IV infusion and administration sets, and entry into or breaks in the tubing should be minimized (378).

### Single-Use or Disposable Devices

A single-use device, also called a disposable device, is designed to be used on one patient and then discarded, not reprocessed for use on another patient (e.g., cleaned, disinfected, or sterilized) (383). Single-use devices in dentistry are usually not heat-tolerant and cannot be reliably cleaned. Examples include syringe needles, prophylaxis cups and brushes, and plastic orthodontic brackets. Certain items (e.g., prophylaxis angles, saliva ejectors, high-volume evacuator tips, and air/water syringe tips) are commonly available in a disposable form and should be disposed of appropriately after each use. Single-use devices and items (e.g., cotton rolls, gauze, and irrigating syringes) for use during oral surgical procedures should be sterile at the time of use.

Because of the physical construction of certain devices (e.g., burs, endodontic files, and broaches) cleaning can be difficult. In addition, deterioration can occur on the cutting surfaces of some carbide/diamond burs and endodontic files during processing (384) and after repeated processing cycles, leading to potential breakage during patient treatment (385–388). These factors, coupled with the knowledge that burs and endodontic instruments exhibit signs of wear during normal use, might make it practical to consider them as single-use devices.

### Preprocedural Mouth Rinses

Antimicrobial mouth rinses used by patients before a dental procedure are intended to reduce the number of microorganisms the patient might release in the form of aerosols or spatter that subsequently can contaminate DHCP and equipment operatory surfaces. In addition, preprocedural rinsing can decrease the number of microorganisms introduced in the patient’s bloodstream during invasive dental procedures (389,390).

No scientific evidence indicates that preprocedural mouth rinsing prevents clinical infections among DHCP or patients, but studies have demonstrated that a preprocedural rinse with an antimicrobial product (e.g., chlorhexidine gluconate, essential oils, or povidone-iodine) can reduce the level of oral microorganisms in aerosols and spatter generated during routine dental procedures with rotary instruments (e.g., dental handpieces or ultrasonic scalers) (391–399). Preprocedural mouth rinses can be most beneficial before a procedure that requires using a prophylaxis cup or ultrasonic scaler because rubber dams cannot be used to minimize aerosol and spatter generation and, unless the provider has an assistant, high-volume evacuation is not commonly used (173).

The science is unclear concerning the incidence and nature of bacteremias from oral procedures, the relationship of these bacteremias to disease, and the preventive benefit of antimicrobial rinses. In limited studies, no substantial benefit has been demonstrated for mouth rinsing in terms of reducing oral microorganisms in dental-induced bacteremias (400,401). However, the American Heart Association’s recommendations regarding preventing bacterial endocarditis during dental procedures (402) provide limited support concerning preprocedural mouth rinsing with an antimicrobial as an adjunct for patients at risk for bacterial endocarditis. Insufficient data exist to recommend preprocedural mouth rinses to prevent clinical infections among patients or DHCP.

### Oral Surgical Procedures

The oral cavity is colonized with numerous microorganisms. Oral surgical procedures present an opportunity for entry of microorganisms (i.e., exogenous and endogenous) into the vascular system and other normally sterile areas of the oral cavity (e.g., bone or subcutaneous tissue); therefore, an increased potential exists for localized or systemic infection. Oral surgical procedures involve the incision, excision, or reflection of tissue that exposes the normally sterile areas of the oral cavity. Examples include biopsy, periodontal surgery, apical surgery, implant surgery, and surgical extractions of teeth (e.g., removal of erupted or nonerupted tooth requiring elevation of mucoperiosteal flap, removal of bone or section of tooth,
Handling of Biopsy Specimens

To protect persons handling and transporting biopsy specimens, each specimen must be placed in a sturdy, leakproof container with a secure lid for transportation (13). Care should be taken when collecting the specimen to avoid contaminating the outside of the container. If the outside of the container becomes visibly contaminated, it should be cleaned and disinfected or placed in an impervious bag (2,13). The container must be labeled with the biohazard symbol during storage, transport, shipment, and disposal (13,14).

Handling of Extracted Teeth

Disposal

Extracted teeth that are being discarded are subject to the containerization and labeling provisions outlined by OSHA’s bloodborne pathogens standard (13). OSHA considers extracted teeth to be potentially infectious material that should be disposed in medical waste containers. Extracted teeth sent to a dental laboratory for shade or size comparisons should be cleaned, surface-disinfected with an EPA-registered hospital disinfectant with intermediate-level activity (i.e., tuberculocidal claim), and transported in a manner consistent with OSHA regulations. However, extracted teeth can be returned to patients on request, at which time provisions of the standard no longer apply (14). Extracted teeth containing dental amalgam should not be placed in a medical waste container that uses incineration for final disposal. Commercial metal-recycling companies also might accept extracted teeth with metal restorations, including amalgam. State and local regulations should be consulted regarding disposal of the amalgam.

Educational Settings

Extracted teeth are occasionally collected for use in preclinical educational training. These teeth should be cleaned of visible blood and gross debris and maintained in a hydrated state in a well-constructed closed container during transport. The container should be labeled with the biohazard symbol (13,14). Because these teeth will be autoclaved before clinical exercises or study, use of the most economical storage solution (e.g., water or saline) might be practical. Liquid chemical germicides can also be used but do not reliably disinfect both external surface and interior pulp tissue (403,404).

Before being used in an educational setting, the teeth should be heat-sterilized to allow safe handling. Microbial growth can be eliminated by using an autoclave cycle for 40 minutes (405), but because preclinical educational exercises simulate clinical experiences, students enrolled in dental programs should still follow standard precautions. Autoclaving teeth for preclinical laboratory exercises does not appear to alter their physical properties sufficiently to compromise the learning experience (405,406). However, whether autoclave sterilization of extracted teeth affects dentinal structure to the point that the chemical and microchemical relationship between dental materials and the dentin would be affected for research purposes on dental materials is unknown (406).

Use of teeth that do not contain amalgam is preferred in educational settings because they can be safely autoclaved (403,405). Extracted teeth containing amalgam restorations should not be heat-sterilized because of the potential health hazard from mercury vaporization and exposure. If extracted teeth containing amalgam restorations are to be used, immersion in 10% formalin solution for 2 weeks should be effective in disinfecting both the internal and external structures of the teeth (403). If using formalin, manufacturer MSDS should be reviewed for occupational safety and health concerns and to ensure compliance with OSHA regulations (15).

Dental Laboratory

Dental prostheses, appliances, and items used in their fabrication (e.g., impressions, occlusal rims, and bite registrations) are potential sources for cross-contamination and should be handled in a manner that prevents exposure of DHCP patients, or the office environment to infectious agents. Effective communication and coordination between the laboratory and dental practice will ensure that appropriate cleaning and disinfection procedures are performed in the dental office or laboratory, materials are not damaged or distorted because of disinfectant overexposure, and effective disinfection procedures are not unnecessarily duplicated (407,408).

When a laboratory case is sent off-site, DHCP should provide written information regarding the methods (e.g., type of disinfectant and exposure time) used to clean and disinfect the material (e.g., impression, stone model, or appliance) (2,407,409). Clinical materials that are not decontaminated are subject to OSHA and U.S. Department of Transportation regulations regarding transportation and shipping of infectious materials (13,410).

Appliances and prostheses delivered to the patient should be free of contamination. Communication between the laboratory and the dental practice is also key at this stage to determine which one is responsible for the final disinfection process. If the dental laboratory staff provides the disinfection, an EPA-registered hospital disinfectant (low to intermediate) should be used, written documentation of the disinfection method
provided, and the item placed in a tamper-evident container before returning it to the dental office. If such documentation is not provided, the dental office is responsible for final disinfection procedures.

Dental prostheses or impressions brought into the laboratory can be contaminated with bacteria, viruses, and fungi (411,412). Dental prostheses, impressions, orthodontic appliances, and other prosthetic materials (e.g., occlusal rims, temporary prostheses, bite registrations, or extracted teeth) should be thoroughly cleaned (i.e., blood and bioburden removed), disinfected with an EPA-registered hospital disinfectant with a tuberculocidal claim, and thoroughly rinsed before being handled in the in-office laboratory or sent to an off-site laboratory (2,244,249,407). The best time to clean and disinfect impressions, prostheses, or appliances is as soon as possible after removal from the patient’s mouth before drying of blood or other bioburden can occur. Specific guidance regarding cleaning and disinfecting techniques for various materials is available (260,413–416). DHCP are advised to consult with manufacturers regarding the stability of specific materials during disinfection.

In the laboratory, a separate receiving and disinfecting area should be established to reduce contamination in the production area. Bringing untreated items into the laboratory increases chances for cross infection (260). If no communication has been received regarding prior cleaning and disinfection of a material, the dental laboratory staff should perform cleaning and disinfection procedures before handling. If during manipulation of a material or appliance a previously undetected area of blood or bioburden becomes apparent, cleaning and disinfection procedures should be repeated. Transfer of oral microorganisms into and onto impressions has been documented (417–419). Movement of these organisms onto dental casts has also been demonstrated (420). Certain microbes have been demonstrated to remain viable within gypsum cast materials for ≤7 days (421). Incorrect handling of contaminated impressions, prostheses, or appliances, therefore, offers an opportunity for transmission of microorganisms (260). Whether in the office or laboratory, PPE should be worn until disinfection is completed (1,2,7,10,13).

If laboratory items (e.g., burs, polishing points, rag wheels, or laboratory knives) are used on contaminated or potentially contaminated appliances, prostheses, or other material, they should be heat-sterilized, disinfected between patients, or discarded (i.e., disposable items should be used) (260,407). Heat-tolerant items used in the mouth (e.g., metal impression tray or face bow fork) should be heat-sterilized before being used on another patient (2,407). Items that do not normally contact the patient, prosthetic device, or appliance but frequently become contaminated and cannot withstand heat-sterilization (e.g., articulators, case pans, or lathes) should be cleaned and disinfected between patients and according to the manufacturer’s instructions. Pressure pots and water baths are particularly susceptible to contamination with microorganisms and should be cleaned and disinfected between patients (422). In the majority of instances, these items can be cleaned and disinfected with an EPA-registered hospital disinfectant. Environmental surfaces should be barrier-protected or cleaned and disinfected in the same manner as in the dental treatment area.

Unless waste generated in the dental laboratory (e.g., disposable trays or impression materials) falls under the category of regulated medical waste, it can be discarded with general waste. Personnel should dispose of sharp items (e.g., burs, disposable blades, and orthodontic wires) in puncture-resistant containers.

### Laser/Electrosurgery Plumes or Surgical Smoke

During surgical procedures that use a laser or electrosurgical unit, the thermal destruction of tissue creates a smoke byproduct. Laser plumes or surgical smoke represent another potential risk for DHCP (423–425). Lasers transfer electromagnetic energy into tissues, resulting in the release of a heated plume that includes particles, gases (e.g., hydrogen cyanide, benzene, and formaldehyde), tissue debris, viruses, and offensive odors. One concern is that aerosolized infectious material in the laser plume might reach the nasal mucosa of the laser operator and adjacent DHCP. Although certain viruses (e.g., varicella-zoster virus and herpes simplex virus) do not appear to aerosolize efficiently (426,427), other viruses and various bacteria (e.g., human papilloma virus, HIV, coagulase-negative Staphylococcus, Corynebacterium species, and Neisseria species) have been detected in laser plumes (428–434). However, the presence of an infectious agent in a laser plume might not be sufficient to cause disease from airborne exposure, especially if the agent’s normal mode of transmission is not airborne. No evidence indicates that HIV or HBV have been transmitted through aerosolization and inhalation (435). Although continuing studies are needed to evaluate the risk for DHCP of laser plumes and electrosurgery smoke, following NIOSH recommendations (425) and practices developed by the Association of periOperative Registered Nurses (AORN) might be practical (436). These practices include using 1) standard precautions (e.g., high-filtration surgical masks and possibly full face shields) (437); 2) central room suction units with in-line filters to collect particulate matter from minimal plumes; and 3) dedicated mechanical smoke exhaust systems with a high-efficiency filter to remove substantial amounts of laser plume particles. Local smoke evacuation systems have been recom-
mended by consensus organizations, and these systems can improve the quality of the operating field. Employers should be aware of this emerging problem and advise employees of the potential hazards of laser smoke (438). However, this concern remains unresolved in dental practice and no recommendation is provided here.

M. tuberculosis

Patients infected with M. tuberculosis occasionally seek urgent dental treatment at outpatient dental settings. Understanding the pathogenesis of the development of TB will help DHCP determine how to manage such patients.

M. tuberculosis is a bacterium carried in airborne infective droplet nuclei that can be generated when persons with pulmonary or laryngeal TB sneeze, cough, speak, or sing (439). These small particles (1–5 µm) can stay suspended in the air for hours (440). Infection occurs when a susceptible person inhales droplet nuclei containing M. tuberculosis, which then travel to the alveoli of the lungs. Usually within 2–12 weeks after initial infection with M. tuberculosis, immune response prevents further spread of the TB bacteria, although they can remain alive in the lungs for years, a condition termed latent TB infection. Persons with latent TB infection usually exhibit a reactive tuberculin skin test (TST), have no symptoms of active disease, and are not infectious. However, they can develop active disease later in life if they do not receive treatment for their latent infection.

Approximately 5% of persons who have been recently infected and not treated for latent TB infection will progress from infection to active disease during the first 1–2 years after infection; another 5% will develop active disease later in life. Thus, approximately 90% of U.S. persons with latent TB infection do not progress to active TB disease. Although both latent TB infection and active TB disease are described as TB, only the person with active disease is contagious and presents a risk of transmission. Symptons of active TB disease include a productive cough, night sweats, fatigue, malaise, fever, and unexplained weight loss. Certain immunocompromising medical conditions (e.g., HIV) increase the risk that TB infection will progress to active disease at a faster rate (441).

Overall, the risk borne by DHCP for exposure to a patient with active TB disease is probably low (20.21). Only one report exists of TB transmission in a dental office (442), and TST conversions among DHCP are also low (443, 444). However, in certain cases, DHCP or the community served by the dental facility might be at relatively high risk for exposure to TB.

Surgical masks do not prevent inhalation of M. tuberculosis droplet nuclei, and therefore, standard precautions are not sufficient to prevent transmission of this organism. Recommendations for expanded precautions to prevent transmission of M. tuberculosis and other organisms that can be spread by airborne, droplet, or contact routes have been detailed in other guidelines (5,11,20).

TB transmission is controlled through a hierarchy of measures, including administrative controls, environmental controls, and personal respiratory protection. The main administrative goals of a TB infection-control program are early detection of a person with active TB disease and prompt isolation from susceptible persons to reduce the risk of transmission. Although DHCP are not responsible for diagnosis and treatment of TB, they should be trained to recognize signs and symptoms to help with prompt detection. Because potential for transmission of M. tuberculosis exists in outpatient settings, dental practices should develop a TB control program appropriate for their level of risk (20.21).

- A community risk assessment should be conducted periodically, and TB infection-control policies for each dental setting should be based on the risk assessment. The policies should include provisions for detection and referral of patients who might have undiagnosed active TB; management of patients with active TB who require urgent dental care; and DHCP education, counseling, and TST screening.
- DHCP who have contact with patients should have a baseline TST; preferably by using a two-step test at the beginning of employment. The facility's level of TB risk will determine the need for routine follow-up TST.
- While taking patients’ initial medical histories and at periodic updates, dental DHCP should routinely ask all patients whether they have a history of TB disease or symptoms indicative of TB.
- Patients with a medical history or symptoms indicative of undiagnosed active TB should be referred promptly for medical evaluation to determine possible infectiousness. Such patients should not remain in the dental-care facility any longer than required to evaluate their dental condition and arrange a referral. While in the dental health-care facility, the patient should be isolated from other patients and DHCP, wear a surgical mask when not being evaluated, or be instructed to cover their mouth and nose when coughing or sneezing.
- Elective dental treatment should be deferred until a physician confirms that a patient does not have infectious TB, or if the patient is diagnosed with active TB disease, until confirmed the patient is no longer infectious.
- If urgent dental care is provided for a patient who has, or is suspected of having active TB disease, the care should be provided in a facility (e.g., hospital) that provides airborne infection isolation (i.e., using such engineering con-
Prions exhibit unusual resistance to conventional chemical and physical decontamination procedures. Considering this resistance and the invariably fatal outcome of CJD, procedures for disinfecting and sterilizing instruments potentially contaminated with the CJD prion have been controversial for years. Scientific data indicate the risk, if any, of sporadic CJD transmission during dental and oral surgical procedures is low to nil. Until additional information exists regarding the transmissibility of CJD or vCJD, special precautions in addition to controls as TB isolation rooms, negatively pressured relative to the corridors, with air either exhausted to the outside or HEPA-filtered if recirculation is necessary). Standard surgical face masks do not protect against TB transmission; DHCP should use respiratory protection (e.g., fitted, disposable N-95 respirators).

- Settings that do not require use of respiratory protection because they do not treat active TB patients and do not perform cough-inducing procedures on potential active TB patients do not need to develop a written respiratory protection program.
- Any DHCP with a persistent cough (i.e., lasting >3 weeks), especially in the presence of other signs or symptoms compatible with active TB (e.g., weight loss, night sweats, fatigue, bloody sputum, anorexia, or fever), should be evaluated promptly. The DHCP should not return to the workplace until a diagnosis of TB has been excluded or the DHCP is on therapy and a physician has determined that the DHCP is noninfectious.

**Creutzfeldt-Jakob Disease and Other Prion Diseases**

Creutzfeldt-Jakob disease (CJD) belongs to a group of rapidly progressive, invariably fatal, degenerative neurological disorders, transmissible spongiform encephalopathies (TSEs) that affect both humans and animals and are thought to be caused by infection with an unusual pathogen called a prion. Prions are isoforms of a normal protein, capable of self-propagation although they lack nucleic acid. Prion diseases have an incubation period of years and are usually fatal within 1 year of diagnosis.

Among humans, TSEs include CJD, Gerstmann-Straussler-Scheinker syndrome, fatal familial insomnia, kuru, and variant CJD (vCJD). Occurring in sporadic, familial, and acquired (i.e., iatrogenic) forms, CJD has an annual incidence in the United States and other countries of approximately 1 case/million population (445–448). In approximately 85% of affected patients, CJD occurs as a sporadic disease with no recognizable pattern of transmission. A smaller proportion of patients (5%–15%) experience familial CJD because of inherited mutations of the prion protein gene (448).

vCJD is distinguishable clinically and neuropathologically from classic CJD, and strong epidemiologic and laboratory evidence indicates a causal relationship with bovine spongiform encephalopathy (BSE), a progressive neurological disorder of cattle commonly known as mad cow disease (449–451). vCJD was reported first in the United Kingdom in 1996 (449) and subsequently in other European countries (452). Only one case of vCJD has been reported in the United States, in an immigrant from the United Kingdom (453). Compared with CJD patients, those with vCJD are younger (28 years versus 68 years median age at death), and have a longer duration of illness (13 months versus 4.5 months). Also, vCJD patients characteristically exhibit sensory and psychiatric symptoms that are uncommon with CJD. Another difference includes the ease with which the presence of prions is consistently demonstrated in lymphoreticular tissues (e.g., tonsil) in vCJD patients by immunohistochemistry (454).

CJD and vCJD are transmissible diseases, but not through the air or casual contact. All known cases of iatrogenic CJD have resulted from exposure to infected central nervous tissue (e.g., brain and dura mater), pituitary, or eye tissue. Studies in experimental animals have determined that other tissues have low or no detectable infectivity (243,455,456). Limited experimental studies have demonstrated that scrapie (a TSE in sheep) can be transmitted to healthy hamsters and mice by exposing oral tissues to infectious homogenate (457,458). These animal models and experimental designs might not be directly applicable to human transmission and clinical dentistry, but they indicate a theoretical risk of transmitting prion diseases through perioral exposures.

According to published reports, iatrogenic transmission of CJD has occurred in humans under three circumstances: after use of contaminated electroencephalography depth electrodes and neurosurgical equipment (459); after use of extracted pituitary hormones (460,461); and after implant of contaminated corneal (462) and dura mater grafts (463,464) from humans. The equipment-related cases occurred before the routine implementation of sterilization procedures used in healthcare facilities.

Case-control studies have found no evidence that dental procedures increase the risk of iatrogenic transmission of TSEs among humans. In these studies, CJD transmission was not associated with dental procedures (e.g., root canals or extractions), with convincing evidence of prion detection in human blood, saliva, or oral tissues, or with DHCP becoming occupationally infected with CJD (465–467). In 2000, prions were tested, disposable N-95 respirators).

- Any DHCP with a persistent cough (i.e., lasting >3 weeks), especially in the presence of other signs or symptoms compatible with active TB (e.g., weight loss, night sweats, fatigue, bloody sputum, anorexia, or fever), should be evaluated promptly. The DHCP should not return to the workplace until a diagnosis of TB has been excluded or the DHCP is on therapy and a physician has determined that the DHCP is noninfectious.

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Among humans, TSEs include CJD, Gerstmann-Straussler-Scheinker syndrome, fatal familial insomnia, kuru, and variant CJD (vCJD). Occurring in sporadic, familial, and acquired (i.e., iatrogenic) forms, CJD has an annual incidence in the United States and other countries of approximately 1 case/million population (445–448). In approximately 85% of affected patients, CJD occurs as a sporadic disease with no recognizable pattern of transmission. A smaller proportion of patients (5%–15%) experience familial CJD because of inherited mutations of the prion protein gene (448).

vCJD is distinguishable clinically and neuropathologically from classic CJD, and strong epidemiologic and laboratory evidence indicates a causal relationship with bovine spongiform encephalopathy (BSE), a progressive neurological disorder of cattle commonly known as mad cow disease (449–451). vCJD was reported first in the United Kingdom in 1996 (449) and subsequently in other European countries (452). Only one case of vCJD has been reported in the United States, in an immigrant from the United Kingdom (453). Compared with CJD patients, those with vCJD are younger (28 years versus 68 years median age at death), and have a longer duration of illness (13 months versus 4.5 months). Also, vCJD patients characteristically exhibit sensory and psychiatric symptoms that are uncommon with CJD. Another difference includes the ease with which the presence of prions is consistently demonstrated in lymphoreticular tissues (e.g., tonsil) in vCJD patients by immunohistochemistry (454).

CJD and vCJD are transmissible diseases, but not through the air or casual contact. All known cases of iatrogenic CJD have resulted from exposure to infected central nervous tissue (e.g., brain and dura mater), pituitary, or eye tissue. Studies in experimental animals have determined that other tissues have low or no detectable infectivity (243,455,456). Limited experimental studies have demonstrated that scrapie (a TSE in sheep) can be transmitted to healthy hamsters and mice by exposing oral tissues to infectious homogenate (457,458). These animal models and experimental designs might not be directly applicable to human transmission and clinical dentistry, but they indicate a theoretical risk of transmitting prion diseases through perioral exposures.

According to published reports, iatrogenic transmission of CJD has occurred in humans under three circumstances: after use of contaminated electroencephalography depth electrodes and neurosurgical equipment (459); after use of extracted pituitary hormones (460,461); and after implant of contaminated corneal (462) and dura mater grafts (463,464) from humans. The equipment-related cases occurred before the routine implementation of sterilization procedures used in healthcare facilities.

Case-control studies have found no evidence that dental procedures increase the risk of iatrogenic transmission of TSEs among humans. In these studies, CJD transmission was not associated with dental procedures (e.g., root canals or extractions), with convincing evidence of prion detection in human blood, saliva, or oral tissues, or with DHCP becoming occupationally infected with CJD (465–467). In 2000, prions were not found in the dental pulps of eight patients with neuropathologically confirmed sporadic CJD by using electrophoresis and a Western blot technique (468).

Prions exhibit unusual resistance to conventional chemical and physical decontamination procedures. Considering this resistance and the invariably fatal outcome of CJD, procedures for disinfecting and sterilizing instruments potentially contaminated with the CJD prion have been controversial for years. Scientific data indicate the risk, if any, of sporadic CJD transmission during dental and oral surgical procedures is low to nil. Until additional information exists regarding the transmissibility of CJD or vCJD, special precautions in addition to controls as TB isolation rooms, negatively pressured relative to the corridors, with air either exhausted to the outside or HEPA-filtered if recirculation is necessary). Standard surgical face masks do not protect against TB transmission; DHCP should use respiratory protection (e.g., fitted, disposable N-95 respirators).

- Any DHCP with a persistent cough (i.e., lasting >3 weeks), especially in the presence of other signs or symptoms compatible with active TB (e.g., weight loss, night sweats, fatigue, bloody sputum, anorexia, or fever), should be evaluated promptly. The DHCP should not return to the workplace until a diagnosis of TB has been excluded or the DHCP is on therapy and a physician has determined that the DHCP is noninfectious.

**Creutzfeldt-Jakob Disease and Other Prion Diseases**

Creutzfeldt-Jakob disease (CJD) belongs to a group of rapidly progressive, invariably fatal, degenerative neurological disorders, transmissible spongiform encephalopathies (TSEs) that affect both humans and animals and are thought to be caused by infection with an unusual pathogen called a prion. Prions are isoforms of a normal protein, capable of self-propagation although they lack nucleic acid. Prion diseases have an incubation period of years and are usually fatal within 1 year of diagnosis.

Among humans, TSEs include CJD, Gerstmann-Straussler-Scheinker syndrome, fatal familial insomnia, kuru, and variant CJD (vCJD). Occurring in sporadic, familial, and acquired (i.e., iatrogenic) forms, CJD has an annual incidence in the United States and other countries of approximately 1 case/million population (445–448). In approximately 85% of affected patients, CJD occurs as a sporadic disease with no recognizable pattern of transmission. A smaller proportion of patients (5%–15%) experience familial CJD because of inherited mutations of the prion protein gene (448).

vCJD is distinguishable clinically and neuropathologically from classic CJD, and strong epidemiologic and laboratory evidence indicates a causal relationship with bovine spongiform encephalopathy (BSE), a progressive neurological disorder of cattle commonly known as mad cow disease (449–451). vCJD was reported first in the United Kingdom in 1996 (449) and subsequently in other European countries (452). Only one case of vCJD has been reported in the United States, in an
standard precautions might be indicated when treating known CJD or vCJD patients; the following list of precautions is provided for consideration without recommendation (243, 249, 277, 469):

- Use single-use disposable items and equipment whenever possible.
- Consider items difficult to clean (e.g., endodontic files, broaches, and carbide and diamond burs) as single-use disposables and discard after one use.
- To minimize drying of tissues and body fluids on a device, keep the instrument moist until cleaned and decontaminated.
- Clean instruments thoroughly and steam-autoclave at 134ºC for 18 minutes. This is the least stringent of sterilization methods offered by the World Health Organization. The complete list (469) is available at http://www.who.int/emc-documents/tse/whocdscsraph2003c.html.
- Do not use flash sterilization for processing instruments or devices.

Potential infectivity of oral tissues in CJD or vCJD patients is an unresolved concern. CDC maintains an active surveillance program on CJD. Additional information and resources are available at http://www.cdc.gov/ncidod/diseases/cjd/cjd.htm.

Program Evaluation

The goal of a dental infection-control program is to provide a safe working environment that will reduce the risk of health-care–associated infections among patients and occupational exposures among DHCP. Medical errors are caused by faulty systems, processes, and conditions that lead persons to make mistakes or fail to prevent errors being made by others (470). Effective program evaluation is a systematic way to ensure procedures are useful, feasible, ethical, and accurate. Program evaluation is an essential organizational practice; however, such evaluation is not practiced consistently across program areas, nor is it sufficiently well-integrated into the day-to-day management of the majority of programs (471).

A successful infection-control program depends on developing standard operating procedures, evaluating practices, routinely documenting adverse outcomes (e.g., occupational exposures to blood) and work-related illnesses in DHCP, and monitoring health-care–associated infections in patients. Strategies and tools to evaluate the infection-control program can include periodic observational assessments, checklists to document procedures, and routine review of occupational exposures to bloodborne pathogens. Evaluation offers an opportunity to improve the effectiveness of both the infection-control program and dental-practice protocols. If deficiencies or problems in the implementation of infection-control procedures are identified, further evaluation is needed to eliminate the problems. Examples of infection-control program evaluation activities are provided (Table 5).

<table>
<thead>
<tr>
<th>TABLE 5. Examples of methods for evaluating infection-control programs</th>
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<td><strong>Program element</strong></td>
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<td>Appropriate immunization of dental health-care personnel (DHCP).</td>
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<tr>
<td>Assessment of occupational exposures to infectious agents.</td>
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<tr>
<td>Comprehensive postexposure management plan and medical follow-up program after occupational exposures to infectious agents.</td>
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<tr>
<td>Adherence to hand hygiene before and after patient care.</td>
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<td>Proper use of personal protective equipment to prevent occupational exposures to infectious agents.</td>
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<td>Routine and appropriate sterilization of instruments using a biologic monitoring system.</td>
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<tr>
<td>Evaluation and implementation of safer medical devices.</td>
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<td>Compliance of water in routine dental procedures with current drinking U.S. Environmental Protection Agency water standards (fewer than 500 CFU of heterotrophic water bacteria).</td>
</tr>
<tr>
<td>Proper handling and disposal of medical waste.</td>
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<tr>
<td>Health-care–associated infections.</td>
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Infection-Control Research Considerations

Although the number of published studies concerning dental infection control has increased in recent years, questions regarding infection-control practices and their effectiveness remain unanswered. Multiple concerns were identified by the working group for this report, as well as by others during the public comment period (Box). This list is not exhaustive and does not represent a CDC research agenda, but rather is an effort to identify certain concerns, stimulate discussion, and provide direction for determining future action by clinical, basic science, and epidemiologic investigators, as well as health and professional organizations, clinicians, and policy makers.

BOX. Dental infection-control research considerations

Education and promotion
- Design strategies to communicate, to the public and providers, the risk of disease transmission in dentistry.
- Promote use of protocols for recommended postexposure management and follow-up.
- Educate and train dental health-care personnel (DHCP) to screen and evaluate safer dental devices by using tested design and performance criteria.

Laboratory-based research
- Develop animal models to determine the risk of transmitting organisms through inhalation of contaminated aerosols (e.g., influenza) produced from rotary dental instruments.
- Conduct studies to determine the effectiveness of gloves (i.e., material compatibility and duration of use).
- Develop devices with passive safety features to prevent percutaneous injuries.
- Study the effect of alcohol-based hand-hygiene products on retention of latex proteins and other dental allergens (e.g., methylmethacrylate, glutaraldehyde, thiurams) on the hands of DHCP after latex glove use.
- Investigate the applicability of other types of sterilization procedures (e.g., hydrogen peroxide gas plasma) in dentistry.
- Encourage manufacturers to determine optimal methods and frequency for testing dental-unit waterlines and maintaining dental-unit water-quality standards.
- Determine the potential for internal contamination of low-speed handpieces, including the motor, and other devices connected to dental air and water supplies, as well as more efficient ways to clean, lubricate, and sterilize handpieces and other devices attached to air or waterlines.
- Investigate the infectivity of oral tissues in Creutzfeldt-Jakob disease (CJD) or variant CJD patients.
- Determine the most effective methods to disinfect dental impression materials.
- Investigate the viability of pathogenic organisms on dental materials (e.g., impression materials, acrylic resin, or gypsum materials) and dental laboratory equipment.
- Determine the most effective methods for sterilization or disinfection of digital radiology equipment.
- Evaluate the effects of repetitive reprocessing cycles on burs and endodontic files.
- Investigate the potential infectivity of vapors generated from the various lasers used for oral procedures.

Clinical and population-based epidemiologic research and development
- Continue to characterize the epidemiology of blood contacts, particularly percutaneous injuries, and the effectiveness of prevention measures.
- Further assess the effectiveness of double gloving in preventing blood contact during routine and surgical dental procedures.
- Continue to assess the stress placed on gloves during dental procedures and the potential for developing defects during different procedures.
- Develop methods for evaluating the effectiveness and cost-effectiveness of infection-control interventions.
- Determine how infection-control guidelines affect the knowledge, attitudes, and practices of DHCP.
Recommendations

Each recommendation is categorized on the basis of existing scientific data, theoretical rationale, and applicability. Rankings are based on the system used by CDC and the Healthcare Infection Control Practices Advisory Committee (HICPAC) to categorize recommendations:

**Category IA.** Strongly recommended for implementation and strongly supported by well-designed experimental, clinical, or epidemiologic studies.

**Category IB.** Strongly recommended for implementation and supported by experimental, clinical, or epidemiologic studies and a strong theoretical rationale.

**Category IC.** Required for implementation as mandated by federal or state regulation or standard. When IC is used, a second rating can be included to provide the basis of existing scientific data, theoretical rationale, and applicability. Because of state differences, the reader should not assume that the absence of a IC implies the absence of state regulations.

**Category II.** Suggested for implementation and supported by suggestive clinical or epidemiologic studies or a theoretical rationale.

**Unresolved issue.** No recommendation. Insufficient evidence or no consensus regarding efficacy exists.

**I. Personnel Health Elements of an Infection-Control Program**

**A. General Recommendations**

1. Develop a written health program for DHCP that includes policies, procedures, and guidelines for education and training; immunizations; exposure prevention and postexposure management; medical conditions, work-related illness, and associated work restrictions; contact dermatitis and latex hypersensitivity; and maintenance of records, data management, and confidentiality (IB) (5,16–18,22).

2. Establish referral arrangements with qualified health-care professionals to ensure prompt and appropriate provision of preventive services, occupationally related medical services, and postexposure management with medical follow-up (IB, IC) (5,13,19,22).

**B. Education and Training**

1. Provide DHCP 1) on initial employment, 2) when new tasks or procedures affect the employee’s occupational exposure, and 3) at a minimum, annually, with education and training regarding occupational exposure to potentially infectious agents and infection-control procedures/protocols appropriate for and specific to their assigned duties (IB, IC) (5,11,13,14,16,19,22).

2. Provide educational information appropriate in content and vocabulary to the educational level, literacy, and language of DHCP (IB, IC) (5,13).

**C. Immunization Programs**

1. Develop a written comprehensive policy regarding immunizing DHCP, including a list of all required and recommended immunizations (IB) (5,17,18).

2. Refer DHCP to a prearranged qualified health-care professional or to their own health-care professional to receive all appropriate immunizations based on the latest recommendations as well as their medical history and risk for occupational exposure (IB) (5,17).

**D. Exposure Prevention and Postexposure Management**

1. Develop a comprehensive postexposure management and medical follow-up program (IB, IC) (5,13,14,19).

   a. Include policies and procedures for prompt reporting, evaluation, counseling, treatment, and medical follow-up of occupational exposures.

   b. Establish mechanisms for referral to a qualified health-care professional for medical evaluation and follow-up.

   c. Conduct a baseline TST, preferably by using a two-step test, for all DHCP who might have contact with persons with suspected or confirmed infectious TB, regardless of the risk classification of the setting (IB) (20).

**E. Medical Conditions, Work-Related Illness, and Work Restrictions**

1. Develop and have readily available to all DHCP comprehensive written policies regarding work restriction and exclusion that include a statement of authority defining who can implement such policies (IB) (5,22).

2. Develop policies for work restriction and exclusion that encourage DHCP to seek appropriate preventive and curative care and report their illnesses, medical conditions, or treatments that can render them more susceptible to opportunistic infection or exposures; do not penalize DHCP with loss of wages, benefits, or job status (IB) (5,22).
3. Develop policies and procedures for evaluation, diagnosis, and management of DHCP with suspected or known occupational contact dermatitis (IB) (32).

4. Seek definitive diagnosis by a qualified healthcare professional for any DHCP with suspected latex allergy to carefully determine its specific etiology and appropriate treatment as well as work restrictions and accommodations (IB) (32).

F. Records Maintenance, Data Management, and Confidentiality
1. Establish and maintain confidential medical records (e.g., immunization records and documentation of tests received as a result of occupational exposure) for all DHCP (IB, IC) (5,13).

2. Ensure that the practice complies with all applicable federal, state, and local laws regarding medical recordkeeping and confidentiality (IC) (13,34).

II. Preventing Transmission of Bloodborne Pathogens
A. HBV Vaccination
1. Offer the HBV vaccination series to all DHCP with potential occupational exposure to blood or other potentially infectious material (IA, IC) (2,13,14,19).

2. Always follow U.S. Public Health Service/CDC recommendations for hepatitis B vaccination, serologic testing, follow-up, and booster dosing (IA, IC) (13,14,19).

3. Test DHCP for anti-HBs 1–2 months after completion of the 3-dose vaccination series (IA, IC) (14,19).

4. DHCP should complete a second 3-dose vaccine series or be evaluated to determine if they are HBsAg-positive if no antibody response occurs to the primary vaccine series (IA, IC) (14,19).

5. Retest for anti-HBs at the completion of the second vaccine series. If no response to the second 3-dose series occurs, nonresponders should be tested for HBsAg (IC) (14,19).

6. Counsel nonresponders to vaccination who are HBsAg-negative regarding their susceptibility to HBV infection and precautions to take (IA, IC) (14,19).

7. Provide employees appropriate education regarding the risks of HBV transmission and the availability of the vaccine. Employees who decline the vaccination should sign a declination form to be kept on file with the employer (IC) (13).

B. Preventing Exposures to Blood and OPIM
1. General recommendations
   a. Use standard precautions (OSHA’s bloodborne pathogen standard retains the term universal precautions) for all patient encounters (IA, IC) (11,13,19,53).

   b. Consider sharp items (e.g., needles, scalers, burs, lab knives, and wires) that are contaminated with patient blood and saliva as potentially infective and establish engineering controls and work practices to prevent injuries (IB, IC) (6,13,113).

   c. Implement a written, comprehensive program designed to minimize and manage DHCP exposures to blood and body fluids (IB, IC). (13,14,19,97).

2. Engineering and work-practice controls
   a. Identify, evaluate, and select devices with engineered safety features at least annually and as they become available on the market (e.g., safer anesthetic syringes, blunt suture needle, retractable scalpel, or needleless IV systems) (IC) (13,97,110–112).

   b. Place used disposable syringes and needles, scalpel blades, and other sharp items in appropriate puncture-resistant containers located as close as feasible to the area in which the items are used (IA, IC) (2,7,13,19,113,115).

   c. Do not recap used needles by using both hands or any other technique that involves directing the point of a needle toward any part of the body. Do not bend, break, or remove needles before disposal (IA, IC) (2,7,8,13,97,113).

   d. Use either a one-handed scoop technique or a mechanical device designed for holding the needle cap when recapping needles (e.g., between multiple injections and before removing from a nondisposable aspirating syringe) (IA, IC) (2,7,8,13,14,113).

3. Postexposure management and prophylaxis
   a. Follow CDC recommendations after percutaneous, mucous membrane, or nonintact skin exposure to blood or other potentially infectious material (IA, IC) (13,14,19).
III. Hand Hygiene

A. General Considerations

1. Perform hand hygiene with either a nonantimicrobial or antimicrobial soap and water when hands are visibly dirty or contaminated with blood or other potentially infectious material. If hands are not visibly soiled, an alcohol-based hand rub can also be used. Follow the manufacturer’s instructions (IA) (123).

2. Indications for hand hygiene include
   a. when hands are visibly soiled (IA, IC);
   b. after barehanded touching of inanimate objects likely to be contaminated by blood, saliva, or respiratory secretions (IA, IC);
   c. before and after treating each patient (IB);
   d. before donning gloves (IB); and
   e. immediately after removing gloves (IB, IC) (7–9,11,13,120–123,125,126,138).

3. For oral surgical procedures, perform surgical hand antisepsis before donning sterile surgeon’s gloves. Follow the manufacturer’s instructions by using either an antimicrobial soap and water, or soap and water followed by drying hands and application of an alcohol-based surgical hand-scrub product with persistent activity (IB) (121–123,127–133,144,145).

4. Store liquid hand-care products in either disposable closed containers or closed containers that can be washed and dried before refilling. Do not add soap or lotion to (i.e., top off) a partially empty dispenser (IA) (9,120,122,149,150).

B. Special Considerations for Hand Hygiene and Glove Use

1. Use hand lotions to prevent skin dryness associated with handwashing (IA) (153,154).

2. Consider the compatibility of lotion and antiseptic products and the effect of petroleum or other oil emollients on the integrity of gloves during product selection and glove use (IB) (2,14,122,155).

3. Keep fingernails short with smooth, filed edges to allow thorough cleaning and prevent glove tears (II) (122,123,156).

4. Do not wear artificial fingernails or extenders when having direct contact with patients at high risk (e.g., those in intensive care units or operating rooms) (IA) (123,157–160).

5. Use of artificial fingernails is usually not recommended (II) (157–160).

6. Do not wear hand or nail jewelry if it makes donning gloves more difficult or compromises the fit and integrity of the glove (II) (123,142,143).

IV. PPE

A. Masks, Protective Eyewear, and Face Shields

1. Wear a surgical mask and eye protection with solid side shields or a face shield to protect mucous membranes of the eyes, nose, and mouth during procedures likely to generate splashing or spattering of blood or other body fluids (IB, IC) (1,2,7,8,11,13,137).

2. Change masks between patients or during patient treatment if the mask becomes wet (IB) (2).

3. Clean with soap and water, or if visibly soiled, clean and disinfect reusable facial protective equipment (e.g., clinician and patient protective eyewear or face shields) between patients (II) (2).

B. Protective Clothing

1. Wear protective clothing (e.g., reusable or disposable gown, laboratory coat, or uniform) that covers personal clothing and skin (e.g., forearms) likely to be soiled with blood, saliva, or OPIM (IB, IC) (7,8,11,13,137).

2. Change protective clothing if visibly soiled (134); change immediately or as soon as feasible if penetrated by blood or other potentially infectious fluids (IB, IC) (13).

3. Remove barrier protection, including gloves, mask, eyewear, and gown before departing work area (e.g., dental patient care, instrument processing, or laboratory areas) (IC) (13).

C. Gloves

1. Wear medical gloves when a potential exists for contacting blood, saliva, OPIM, or mucous membranes (IB, IC) (1,2,7,8,13).

2. Wear a new pair of medical gloves for each patient, remove them promptly after use, and wash hands immediately to avoid transfer of microorganisms to other patients or environments (IB) (1,7,8,123).

3. Remove gloves that are torn, cut, or punctured as soon as feasible and wash hands before regloving (IB, IC) (13,210,211).

4. Do not wash surgeon’s or patient examination gloves before use or wash, disinfect, or sterilize gloves for reuse (IB, IC) (13,138,177,212,213).
5. Ensure that appropriate gloves in the correct size are readily accessible (IC) (13).
6. Use appropriate gloves (e.g., puncture- and chemical-resistant utility gloves) when cleaning instruments and performing housekeeping tasks involving contact with blood or OPIM (IB, IC) (7,13,15).
7. Consult with glove manufacturers regarding the chemical compatibility of glove material and dental materials used (II).

D. Sterile Surgeon’s Gloves and Double Gloving During Oral Surgical Procedures
1. Wear sterile surgeon’s gloves when performing oral surgical procedures (IB) (2,8,137).
2. No recommendation is offered regarding the effectiveness of wearing two pairs of gloves to prevent disease transmission during oral surgical procedures. The majority of studies among HCP and DHCP have demonstrated a lower frequency of inner glove perforation and visible blood on the surgeon’s hands when double gloves are worn; however, the effectiveness of wearing two pairs of gloves in preventing disease transmission has not been demonstrated (Unresolved issue).

V. Contact Dermatitis and Latex Hypersensitivity
A. General Recommendations
1. Educate DHCP regarding the signs, symptoms, and diagnoses of skin reactions associated with frequent hand hygiene and glove use (IB) (5,31,32).
2. Screen all patients for latex allergy (e.g., take health history and refer for medical consultation when latex allergy is suspected) (IB) (32).
3. Ensure a latex-safe environment for patients and DHCP with latex allergy (IB) (32).
4. Have emergency treatment kits with latex-free products available at all times (II) (32).

VI. Sterilization and Disinfection of Patient-Care Items
A. General Recommendations
1. Use only FDA-cleared medical devices for sterilization and follow the manufacturer’s instructions for correct use (IB) (248).
2. Clean and heat-sterilize critical dental instruments before each use (IA) (2,137,243,244, 246,249,407).
3. Clean and heat-sterilize semicritical items before each use (IB) (2,249,260,407).
4. Allow packages to dry in the sterilizer before they are handled to avoid contamination (IB) (247).
5. Use of heat-stable semicritical alternatives is encouraged (IB) (2).
6. Reprocess heat-sensitive critical and semi-critical instruments by using FDA-cleared sterilant/high-level disinfectants or an FDA-cleared low-temperature sterilization method (e.g., ethylene oxide). Follow manufacturer’s instructions for use of chemical sterilants/high-level disinfectants (IB) (243).
7. Single-use disposable instruments are acceptable alternatives if they are used only once and disposed of correctly (IB, IC) (243,383).
8. Do not use liquid chemical sterilants/high-level disinfectants for environmental surface disinfection or as holding solutions (IB, IC) (243,245).
9. Ensure that noncritical patient-care items are barrier-protected or cleaned, or if visibly soiled, cleaned and disinfected after each use with an EPA-registered hospital disinfectant. If visibly contaminated with blood, use an EPA-registered hospital disinfectant with a tuberculocidal claim (i.e., intermediate level) (IB) (2,243,244).
10. Inform DHCP of all OSHA guidelines for exposure to chemical agents used for disinfection and sterilization. Using this report, identify areas and tasks that have potential for exposure (IC) (15).

B. Instrument Processing Area
1. Designate a central processing area. Divide the instrument processing area, physically or, at a minimum, spatially, into distinct areas for 1) receiving, cleaning, and decontamination; 2) preparation and packaging; 3) sterilization; and 4) storage. Do not store instruments in an area where contaminated instruments are held or cleaned (II) (173,247,248).
2. Train DHCP to employ work practices that prevent contamination of clean areas (II).

C. Receiving, Cleaning, and Decontamination Work Area
1. Minimize handling of loose contaminated instruments during transport to the instrument processing area. Use work-practice controls (e.g., carry instruments in a covered container) to minimize exposure potential (II). Clean all visible blood and other contamination from dental instruments and devices before sterilization or disinfection procedures (IA) (243,249–252).
2. Use automated cleaning equipment (e.g., ultrasonic cleaner or washer-disinfector) to remove...
debris to improve cleaning effectiveness and decrease worker exposure to blood (IB) (2,253).
3. Use work-practice controls that minimize contact with sharp instruments if manual cleaning is necessary (e.g., long-handled brush) (IC) (14).
4. Wear puncture- and chemical-resistant/heavy-duty utility gloves for instrument cleaning and decontamination procedures (IB) (7).
5. Wear appropriate PPE (e.g., mask, protective eyewear, and gown) when splashing or spraying is anticipated during cleaning (IC) (13).

D. Preparation and Packaging

1. Use an internal chemical indicator in each package. If the internal indicator cannot be seen from outside the package, also use an external indicator (II) (243,254,257).
2. Use a container system or wrapping compatible with the type of sterilization process used and that has received FDA clearance (IB) (243,247,256).
3. Before sterilization of critical and semicritical instruments, inspect instruments for cleanliness, then wrap or place them in containers designed to maintain sterility during storage (e.g., cassettes and organizing trays) (IA) (2,247,255,256).

E. Sterilization of Unwrapped Instruments

1. Clean and dry instruments before the unwrapped sterilization cycle (IB) (248).
2. Use mechanical and chemical indicators for each unwrapped sterilization cycle (i.e., place an internal chemical indicator among the instruments or items to be sterilized) (IB) (243,258).
3. Allow unwrapped instruments to dry and cool in the sterilizer before they are handled to avoid contamination and thermal injury (II) (260).
4. Semicritical instruments that will be used immediately or within a short time can be sterilized unwrapped on a tray or in a container system, provided that the instruments are handled aseptically during removal from the sterilizer and transport to the point of use (II).
5. Critical instruments intended for immediate reuse can be sterilized unwrapped if the instruments are maintained sterile during removal from the sterilizer and transport to the point of use (e.g., transported in a sterile covered container) (IB) (258).
6. Do not store critical instruments unwrapped (IB) (248).

F. Sterilization Monitoring

1. Use mechanical, chemical, and biological monitors according to the manufacturer’s instructions to ensure the effectiveness of the sterilization process (IB) (248,278,279).
2. Monitor each load with mechanical (e.g., time, temperature, and pressure) and chemical indicators (II) (243,248).
3. Place a chemical indicator on the inside of each package. If the internal indicator is not visible from the outside, also place an exterior chemical indicator on the package (II) (243,254,257).
4. Place items/packages correctly and loosely into the sterilizer so as not to impede penetration of the sterilant (IB) (243).
5. Do not use instrument packs if mechanical or chemical indicators indicate inadequate processing (IB) (243,247,248).
6. Monitor sterilizers at least weekly by using a biological indicator with a matching control (i.e., biological indicator and control from same lot number) (IB) (2,9,243,247,278,279).
7. Use a biological indicator for every sterilizer load that contains an implantable device. Verify results before using the implantable device, whenever possible (IB) (243,248).
8. The following are recommended in the case of a positive spore test:
   a. Remove the sterilizer from service and review sterilization procedures (e.g., work practices and use of mechanical and chemical indicators) to determine whether operator error could be responsible (II) (8).
   b. Retest the sterilizer by using biological, mechanical, and chemical indicators after correcting any identified procedural problems (II).
   c. If the repeat spore test is negative, and mechanical and chemical indicators are within normal limits, put the sterilizer back in service (II) (9,243).
9. The following are recommended if the repeat spore test is positive:
   a. Do not use the sterilizer until it has been inspected or repaired or the exact reason for the positive test has been determined (II) (9,243).
b. Recall, to the extent possible, and reprocess all items processed since the last negative spore test (II) (9,243,283).

c. Before placing the sterilizer back in service, rechallenge the sterilizer with biological indicator tests in three consecutive empty chamber sterilization cycles after the cause of the sterilizer failure has been determined and corrected (II) (9,243,283).

10. Maintain sterilization records (i.e., mechanical, chemical, and biological) in compliance with state and local regulations (IB) (243).

G. Storage Area for Sterilized Items and Clean Dental Supplies

1. Implement practices on the basis of date- or event-related shelf-life for storage of wrapped, sterilized instruments and devices (IB) (243, 284).

2. Even for event-related packaging, at a minimum, place the date of sterilization, and if multiple sterilizers are used in the facility, the sterilizer used, on the outside of the packaging material to facilitate the retrieval of processed items in the event of a sterilization failure (IB) (243,247).

3. Examine wrapped packages of sterilized instruments before opening them to ensure the barrier wrap has not been compromised during storage (II) (243,284).

4. Reclean, repack, and resterilize any instrument package that has been compromised (II).

5. Store sterile items and dental supplies in covered or closed cabinets, if possible (II) (285).

VII. Environmental Infection Control

A. General Recommendations

1. Follow the manufacturers’ instructions for correct use of cleaning and EPA-registered hospital disinfecting products (IB, IC) (243–245).

2. Do not use liquid chemical sterilants/high-level disinfectants for disinfection of environmental surfaces (clinical contact or housekeeping) (IB, IC) (243–245). 

3. Use PPE, as appropriate, when cleaning and disinfecting environmental surfaces. Such equipment might include gloves (e.g., puncture- and chemical-resistant utility), protective clothing (e.g., gown, jacket, or lab coat), and protective eyewear/face shield, and mask (IC) (13,113).

B. Clinical Contact Surfaces

1. Use surface barriers to protect clinical contact surfaces, particularly those that are difficult to clean (e.g., switches on dental chairs) and change surface barriers between patients (II) (1,2,260, 288).

2. Clean and disinfect clinical contact surfaces that are not barrier-protected, by using an EPA-registered hospital disinfectant with a low- (i.e., HIV and HBV label claims) to intermediate-level (i.e., tuberculocidal claim) activity after each patient. Use an intermediate-level disinfectant if visibly contaminated with blood (IB) (2,243,244).

C. Housekeeping Surfaces

1. Clean housekeeping surfaces (e.g., floors, walls, and sinks) with a detergent and water or an EPA-registered hospital disinfectant/detergent on a routine basis, depending on the nature of the surface and type and degree of contamination, and as appropriate, based on the location in the facility, and when visibly soiled (IB) (243,244).

2. Clean mops and cloths after use and allow to dry before reuse; or use single-use, disposable mop heads or cloths (II) (243,244).

3. Prepare fresh cleaning or EPA-registered disinfecting solutions daily and as instructed by the manufacturer. (II) (243,244).

4. Clean walls, blinds, and window curtains in patient-care areas when they are visibly dusty or soiled (II) (9,244).

D. Spills of Blood and Body Substances

1. Clean spills of blood or OPIM and decontaminate surface with an EPA-registered hospital disinfectant with low- (i.e., HBV and HIV label claims) to intermediate-level (i.e., tuberculocidal claim) activity, depending on size of spill and surface porosity (IB, IC) (13,113).

E. Carpet and Cloth Furnishings

1. Avoid using carpeting and cloth-upholstered furnishings in dental operatories, laboratories, and instrument processing areas (II) (9,293–295).

F. Regulated Medical Waste

1. General Recommendations

a. Develop a medical waste management program. Disposal of regulated medical waste must follow federal, state, and local regulations (IC) (13,301).

b. Ensure that DHCP who handle and dispose of regulated medical waste are trained in appropriate handling and disposal methods
and informed of the possible health and safety hazards (IC) (13).

2. Management of Regulated Medical Waste in Dental Health-Care Facilities
   a. Use a color-coded or labeled container that prevents leakage (e.g., biohazard bag) to contain nonsharp regulated medical waste (IC) (13).
   b. Place sharp items (e.g., needles, scalpel blades, orthodontic bands, broken metal instruments, and burs) in an appropriate sharps container (e.g., puncture resistant, color-coded, and leakproof). Close container immediately before removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping (IC) (2,8,13,113,115).
   c. Pour blood, suctioned fluids or other liquid waste carefully into a drain connected to a sanitary sewer system, if local sewage discharge requirements are met and the state has declared this an acceptable method of disposal. Wear appropriate PPE while performing this task (IC) (7,9,13).

VIII. Dental Unit Waterlines, Biofilm, and Water Quality
   A. General Recommendations
      1. Use water that meets EPA regulatory standards for drinking water (i.e., ≤500 CFU/mL of heterotrophic water bacteria) for routine dental treatment output water (IB, IC) (341,342).
      2. Consult with the dental unit manufacturer for appropriate methods and equipment to maintain the recommended quality of dental water (II) (339).
      3. Follow recommendations for monitoring water quality provided by the manufacturer of the unit or waterline treatment product (II).
      4. Discharge water and air for a minimum of 20–30 seconds after each patient, from any device connected to the dental water system that enters the patient’s mouth (e.g., handpieces, ultrasonic scalers, and air/water syringes) (II) (2,311,344).
      5. Consult with the dental unit manufacturer on the need for periodic maintenance of antiretraction mechanisms (IB) (2,311).
   B. Boil-Water Advisories
      1. The following apply while a boil-water advisory is in effect:
         a. Do not deliver water from the public water system to the patient through the dental operative unit, ultrasonic scaler, or other dental equipment that uses the public water system (IB, IC) (341,342,346,349,350).
         b. Do not use water from the public water system for dental treatment, patient rinsing, or handwashing (IB, IC) (341,342,346,349,350).
         c. For handwashing, use antimicrobial-containing products that do not require water for use (e.g., alcohol-based hand rubs). If hands are visibly contaminated, use bottled water, if available, and soap for handwashing or an antiseptic towelette (IB, IC) (13,122).
   2. The following apply when the boil-water advisory is cancelled:
      a. Follow guidance given by the local water utility regarding adequate flushing of waterlines. If no guidance is provided, flush dental waterlines and faucets for 1–5 minutes before using for patient care (IC) (244,346,351,352).
      b. Disinfect dental waterlines as recommended by the dental unit manufacturer (II).

IX. Special Considerations
   A. Dental Handpieces and Other Devices Attached to Air and Waterlines
      1. Clean and heat-sterilize handpieces and other intraoral instruments that can be removed from the air and waterlines of dental units between patients (IB, IC) (2,246,275,356,357,360,407).
      2. Follow the manufacturer’s instructions for cleaning, lubrication, and sterilization of handpieces and other intraoral instruments that can be removed from the air and waterlines of dental units (IB) (361–363).
      3. Do not surface-disinfect, use liquid chemical sterilants, or ethylene oxide on handpieces and other intraoral instruments that can be removed from the air and waterlines of dental units (IB) (361–363).
      4. Do not advise patients to close their lips tightly around the tip of the saliva ejector to evacuate oral fluids (II) (364–366).
   B. Dental Radiology
      1. Wear gloves when exposing radiographs and handling contaminated film packets. Use other PPE (e.g., protective eyewear, mask, and gown) as appropriate if spattering of blood or other body fluids is likely (IA, IC) (11,13).
2. Use heat-tolerant or disposable intraoral devices whenever possible (e.g., film-holding and positioning devices). Clean and heat-sterilize heat-tolerant devices between patients. At a minimum, high-level disinfect semicritical heat-sensitive devices, according to manufacturer’s instructions (IB) (243).

3. Transport and handle exposed radiographs in an aseptic manner to prevent contamination of developing equipment (II).

4. The following apply for digital radiography sensors:
   a. Use FDA-cleared barriers (IB) (243).
   b. Clean and heat-sterilize, or high-level disinfect, between patients, barrier-protected semicritical items. If the item cannot tolerate these procedures then, at a minimum, protect with an FDA-cleared barrier and clean and disinfect with an EPA-registered hospital disinfectant with intermediate-level (i.e., tuberculocidal claim) activity, between patients. Consult with the manufacturer for methods of disinfection and sterilization of digital radiology sensors and for protection of associated computer hardware (IB) (243).

C. Aseptic Technique for Parenteral Medications

1. Do not administer medication from a syringe to multiple patients, even if the needle on the syringe is changed (IA) (378).
2. Use single-dose vials for parenteral medications when possible (II) (376,377).
3. Do not combine the leftover contents of single-use vials for later use (IA) (376,377).
4. The following apply if multidose vials are used:
   a. Cleanse the access diaphragm with 70% alcohol before inserting a device into the vial (IA) (380,381).
   b. Use a sterile device to access a multiple-dose vial and avoid touching the access diaphragm. Both the needle and syringe used to access the multidose vial should be sterile. Do not reuse a syringe even if the needle is changed (IA) (380,381).
   c. Keep multidose vials away from the immediate patient treatment area to prevent inadvertent contamination by spray or spatter (II).
   d. Discard the multidose vial if sterility is compromised (IA) (380,381).

5. Use fluid infusion and administration sets (i.e., IV bags, tubings and connections) for one patient only and dispose of appropriately (IB) (378).

D. Single-Use (Disposable) Devices

1. Use single-use devices for one patient only and dispose of them appropriately (IC) (383).

E. Preprocedural Mouth Rinses

1. No recommendation is offered regarding use of preprocedural antimicrobial mouth rinses to prevent clinical infections among DHCP or patients. Although studies have demonstrated that a preprocedural antimicrobial rinse (e.g., chlorhexidine gluconate, essential oils, or povidone-iodine) can reduce the level of oral microorganisms in aerosols and spatter generated during routine dental procedures and can decrease the number of microorganisms introduced in the patient’s bloodstream during invasive dental procedures (391–399), the scientific evidence is inconclusive that using these rinses prevents clinical infections among DHCP or patients (see discussion, Preprocedural Mouth Rinses) (Unresolved issue).

F. Oral Surgical Procedures

1. The following apply when performing oral surgical procedures:
   a. Perform surgical hand antisepsis by using an antimicrobial product (e.g., antimicrobial soap and water, or soap and water followed by alcohol-based hand scrub with persistent activity) before donning sterile surgeon’s gloves (IB) (127–132,137).
   b. Use sterile surgeon’s gloves (IB) (2,7,121,123,137).
   c. Use sterile saline or sterile water as a cool-ant/irrigant when performing oral surgical procedures. Use devices specifically designed for delivering sterile irrigating fluids (e.g., bulb syringe, single-use disposable products, and sterilizable tubing) (IB) (2,121).

G. Handling of Biopsy Specimens

1. During transport, place biopsy specimens in a sturdy, leakproof container labeled with the biohazard symbol (IC) (2,13,14).
2. If a biopsy specimen container is visibly contaminated, clean and disinfect the outside of a
container or place it in an impervious bag labeled with the biohazard symbol, (IC) (2,13).

H. Handling of Extracted Teeth

1. Dispose of extracted teeth as regulated medical waste unless returned to the patient (IC) (13,14).
2. Do not dispose of extracted teeth containing amalgam in regulated medical waste intended for incineration (II).
3. Clean and place extracted teeth in a leakproof container, labeled with a biohazard symbol, and maintain hydration for transport to educational institutions or a dental laboratory (IC) (13,14).
4. Heat-sterilize teeth that do not contain amalgam before they are used for educational purposes (IB) (403,405,406).

I. Dental Laboratory

1. Use PPE when handling items received in the laboratory until they have been decontaminated (IA, IC) (2,7,11,13,113).
2. Before they are handled in the laboratory, clean, disinfect, and rinse all dental prostheses and prosthodontic materials (e.g., impressions, bite registrations, occlusal rims, and extracted teeth) by using an EPA-registered hospital disinfectant having at least an intermediate-level (i.e., tuberculocidal claim) activity (IB) (2,249,252,407).
3. Consult with manufacturers regarding the stability of specific materials (e.g., impression materials) relative to disinfection procedures (II).
4. Include specific information regarding disinfection techniques used (e.g., solution used and duration), when laboratory cases are sent off-site and on their return (II) (2,407,409).
5. Clean and heat-sterilize heat-tolerant items used in the mouth (e.g., metal impression trays and face-bow forks) (IB) (2,407).
6. Follow manufacturers’ instructions for cleaning and sterilizing or disinfecting items that become contaminated but do not normally contact the patient (e.g., burs, polishing points, rag wheels, articulators, case pans, and lathes). If manufacturer instructions are unavailable, clean and heat-sterilize heat-tolerant items or clean and disinfect with an EPA-registered hospital disinfectant with low- (HIV, HBV effectiveness claim) to intermediate-level (tuberculocidal claim) activity, depending on the degree of contamination (II).

J. Laser/Electrosurgery Plumes/Surgical Smoke

1. No recommendation is offered regarding practices to reduce DHCP exposure to laser plumes/surgical smoke when using lasers in dental practice. Practices to reduce HCP exposure to laser plumes/surgical smoke have been suggested, including use of a) standard precautions (e.g., high-filtration surgical masks and possibly full face shields) (437); b) central room suction units with in-line filters to collect particulate matter from minimal plumes; and c) dedicated mechanical smoke exhaust systems with a high-efficiency filter to remove substantial amounts of laser-plume particles. The effect of the exposure (e.g., disease transmission or adverse respiratory effects) on DHCP from dental applications of lasers has not been adequately evaluated (see previous discussion, Laser/Electrosurgery Plumes or Surgical Smoke) (Unresolved issue).

K. Mycobacterium tuberculosis

1. General Recommendations
   a. Educate all DHCP regarding the recognition of signs, symptoms, and transmission of TB (IB) (20,21).
   b. Conduct a baseline TST, preferably by using a two-step test, for all DHCP who might have contact with persons with suspected or confirmed active TB, regardless of the risk classification of the setting (IB) (20).
   c. Assess each patient for a history of TB as well as symptoms indicative of TB and document on the medical history form (IB) (20,21).
   d. Follow CDC recommendations for 1) developing, maintaining, and implementing a written TB infection-control plan; 2) managing a patient with suspected or active TB; 3) completing a community risk-assessment to guide employee TSTs and follow-up; and 4) managing DHCP with TB disease (IB) (2,21).

2. The following apply for patients known or suspected to have active TB:
   a. Evaluate the patient away from other patients and DHCP. When not being evaluated, the patient should wear a surgical mask or be instructed to cover mouth and nose when coughing or sneezing (IB) (20,21).
   b. Defer elective dental treatment until the patient is noninfectious (IB) (20,21).

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c. Refer patients requiring urgent dental treatment to a previously identified facility with TB engineering controls and a respiratory protection program (IB) (20,21).

L. Creutzfeldt-Jakob Disease (CJD) and Other Prion Diseases

1. No recommendation is offered regarding use of special precautions in addition to standard precautions when treating known CJD or vCJD patients. Potential infectivity of oral tissues in CJD or vCJD patients is an unresolved issue. Scientific data indicate the risk, if any, of sporadic CJD transmission during dental and oral surgical procedures is low to nil. Until additional information exists regarding the transmissibility of CJD or vCJD during dental procedures, special precautions in addition to standard precautions might be indicated when treating known CJD or vCJD patients; a list of such precautions is provided for consideration without recommendation (see Creutzfeldt-Jakob Disease and Other Prion Diseases) (Unresolved issue).

M. Program Evaluation

1. Establish routine evaluation of the infection-control program, including evaluation of performance indicators, at an established frequency (II) (470-471).

Infection-Control Internet Resources

Advisory Committee on Immunization Practices
http://www.cdc.gov/nip/ACIP/default.htm

American Dental Association
http://www.ada.org

American Institute of Architects Academy of Architecture for Health
http://www.aahaia.org

American Society of Heating, Refrigeration, Air-conditioning Engineers
http://www.ashrae.org

Association for Professionals in Infection Control and Epidemiology, Inc.
http://www.apic.org/resc/guidlist.cfm

CDC, Division of Healthcare Quality Promotion
http://www.cdc.gov/ncidod/hip

CDC, Division of Oral Health, Infection Control
http://www.cdc.gov/oralhealth/infectioncontrol/index.htm

CDC, Morbidity and Mortality Weekly Report
http://www.cdc.gov/mmwr

CDC, NIOSH
http://www.cdc.gov/niosh/homepage.html

CDC Recommends, Prevention Guidelines System
http://www.phppo.cdc.gov/cdcRecommends/AdvSearchV.asp

EPA, Antimicrobial Chemicals
http://www.epa.gov/oppad001/chemregindex.htm

FDA
http://www.fda.gov

Immunization Action Coalition
http://www.immunize.org/acip

Infectious Diseases Society of America
http://www.idsociety.org/PG/toc.htm

OSHA, Dentistry, Bloodborne Pathogens

Organization for Safety and Asepsis Procedures
http://www.osap.org

Society for Healthcare Epidemiology of America, Inc., Position Papers
http://www.shea-online.org/PositionPapers.html

Acknowledgement

The Division of Oral Health thanks the working group as well as CDC and other federal and external reviewers for their efforts in developing and reviewing drafts of this report and acknowledges that all opinions of the reviewers might not be reflected in all of the recommendations.

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2. CDC. Recommended infection-control practices for dentistry, 1993. MMWR 1993;42(No. RR-8).


10. CDC. Recommendations for prevention of HIV transmission in healthcare settings. MMWR 1987;36(suppl No. 25).


14. US Department of Labor, Occupational Safety and Health Administration. OSHA instruction: enforcement procedures for the occupational exposure to bloodborne pathogens. Washington, DC: US Department of Labor, Occupational Safety and Health Administration, 2001; directive no. CPL 2.2.69.


17. CDC. Immunization of health-care workers: recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Hospital Infection Control Practices Advisory Committee (HICPAC). MMWR 1997;46(No. RR-18).


19. CDC. Updated U.S. Public Health Service guidelines for the management of occupational exposures to HBV, HCV, and HIV and recommendations for postexposure prophylaxis. MMWR 2001;50(No. RR-11).


93. CDC. Investigations of patients who have been treated by HIV-infected health-care workers—United States. MMWR 1993;42:329–31, 337.


113. CDC. Recommendations for prevention of HIV transmission in healthcare settings. MMWR 1987;36(No. S2).


116. CDC. Public Health Service statement on management of occupational exposure to human immunodeficiency virus, including considerations regarding zidovudine postexposure use. MMWR 1990;39 (No. RR-1).


118. CDC. Public Health Service guidelines for the management of healthcare worker exposures to HIV and recommendations for postexposure prophylaxis. MMWR 1998;47(No. RR-7).


266. CDC. Epidemiologic notes and reports: symptoms of irritation associated with exposure to glutaraldehyde—Colorado. MMWR 1987;36:190–1.


381. CDC. Recommendations for preventing transmission of infections among chronic hemodialysis patients. MMWR 2001;50(No. RR-5).


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Appendix A

Regulatory Framework for Disinfectants and Sterilants

When using the guidance provided in this report regarding use of liquid chemical disinfectants and sterilants, dental health-care personnel (DHCP) should be aware of federal laws and regulations that govern the sale, distribution, and use of these products. In particular, DHCPs should know what requirements pertain to them when such products are used. Finally, DHCP should understand the relative roles of the U.S. Environmental Protection Agency (EPA), the U.S. Food and Drug Administration (FDA), the Occupational Safety and Health Administration (OSHA) and CDC.

The choice of specific cleaning or disinfecting agents is largely a matter of judgment, guided by product label claims and instructions and government regulations. A single liquid chemical germicide might not satisfy all disinfection requirements in a given dental practice or facility. Realistic use of liquid chemical germicides depends on consideration of multiple factors, including the degree of microbial killing required; the nature and composition of the surface, item, or device to be treated; and the cost, safety, and ease of use of the available agents. Selecting one appropriate product with a higher degree of potency to cover all situations might be more convenient.

In the United States, liquid chemical germicides (disinfectants) are regulated by EPA and FDA (A-1–A-3). In healthcare settings, EPA regulates disinfectants that are used on environmental surfaces (housekeeping and clinical contact surfaces), and FDA regulates liquid chemical sterilants/high-level disinfectants (e.g., glutaraldehyde, hydrogen peroxide, and peracetic acid) used on critical and semicritical patient-care devices. Disinfectants intended for use on clinical contact surfaces (e.g., light handles, radiographic-ray heads, or drawer knobs) or housekeeping surfaces (e.g., floors, walls, or sinks) are regulated in interstate commerce by the Antimicrobials Division, Office of Pesticide Programs, EPA, under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) of 1947, as amended in 1996 (A-4). Under FIFRA, any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any pest, including microorganisms but excluding those in or on living man or animals, must be registered before sale or distribution. To obtain a registration, a manufacturer must submit specific data regarding the safety and the effectiveness of each product.

EPA requires manufacturers to test formulations by using accepted methods for microbicidal activity, stability, and toxicity to animals and humans. Manufacturers submit these data to EPA with proposed labeling. If EPA concludes a product may be used without causing unreasonable adverse effects, the product and its labeling are given an EPA registration number, and the manufacturer may then sell and distribute the product in the United States. FIFRA requires users of products to follow the labeling directions on each product explicitly. The following statement appears on all EPA-registered product labels under the Directions for Use heading: "It is a violation of federal law to use this product inconsistent with its labeling." This means that DHCP must follow the safety precautions and use directions on the labeling of each registered product. Not following the specified dilution, contact time, method of application, or any other condition of use is considered misuse of the product.

FDA, under the authority of the 1976 Medical Devices Amendment to the Food, Drug, and Cosmetic Act, regulates chemical germicides if they are advertised and marketed for use on specific medical devices (e.g., dental unit waterline or flexible endoscope). A liquid chemical germicide marketed for use on a specific device is considered, for regulatory purposes, a medical device itself when used to disinfect that specific medical device. Also, this FDA regulatory authority over a particular instrument or device dictates that the manufacturer is obligated to provide the user with adequate instructions for the safe and effective use of that device. These instructions must include methods to clean and disinfect or sterilize the item if it is to be marketed as a reusable medical device.

OSHA develops workplace standards to help ensure safe and healthful working conditions in places of employment. OSHA is authorized under Pub. L. 95-251, and as amended, to enforce these workplace standards. In 1991, OSHA published Occupational Exposure to Bloodborne Pathogens; final rule [29 CFR Part 1910.1030] (A-5). This standard is designed to help prevent occupational exposures to blood or other potentially infectious substances. Under this standard, OSHA has interpreted that, to decontaminate contaminated work surfaces, either an EPA-registered hospital tuberculocidal disinfectant or an EPA-registered hospital disinfectant labeled as effective against human immunodeficiency virus (HIV) and hepatitis B virus (HBV) is appropriate. Hospital disinfectants with such HIV and HBV claims can be used, provided surfaces are not contaminated with agents or concentration of agents for which higher level (i.e., intermediate-level) disinfection is recommended. In addition, as with all disinfectants, effectiveness is governed by strict adherence to the label instructions for intended use of the product.
CDC is not a regulatory agency and does not test, evaluate, or otherwise recommend specific brand-name products of chemical germicides. This report is intended to provide overall guidance for providers to select general classifications of products based on certain infection-control principles. In this report, CDC provides guidance to practitioners regarding appropriate application of EPA- and FDA-registered liquid chemical disinfectants and sterilants in dental health-care settings.

CDC recommends disinfecting environmental surfaces or sterilizing or disinfecting medical equipment, and DHCP should use products approved by EPA and FDA unless no such products are available for use against certain microorganisms or sites. However, if no registered or approved products are available for a specific pathogen or use situation, DHCP are advised to follow the specific guidance regarding unregistered or unapproved (e.g., off-label) uses for various chemical germicides. For example, no antimicrobial products are registered for use specifically against certain emerging pathogens (e.g., Norwalk virus), potential terrorism agents (e.g., variola major or *Yersinia pestis*), or Creutzfeldt-Jakob disease agents.

One point of clarification is the difference in how EPA and FDA classify disinfectants. FDA adopted the same basic terminology and classification scheme as CDC to categorize medical devices (i.e., critical, semicritical, and noncritical) and to define antimicrobial potency for processing surfaces (i.e., sterilization, and high-, intermediate- and low-level disinfection) (A-6). EPA registers environmental surface disinfectants based on the manufacturer's microbiological activity claims when registering its disinfectant. This difference has led to confusion on the part of users because the EPA does not use the terms intermediate- and low-level disinfectants as used in CDC guidelines.

CDC designates any EPA-registered hospital disinfectant without a tuberculocidal claim as a low-level disinfectant and any EPA-registered hospital disinfectant with a tuberculocidal claim as an intermediate-level disinfectant. To understand this comparison, one needs to know how EPA registers disinfectants. First, to be labeled as an EPA hospital disinfectant, the product must pass Association of Official Analytical Chemists (AOAC) effectiveness tests against three target organisms: *Salmonella choleraesuis* for effectiveness against gram-negative bacteria; *Staphylococcus aureus* for effectiveness against gram-positive bacteria; and *Pseudomonas aeruginosa* for effectiveness against a primarily nosocomial pathogen. Substantiated label claims of effectiveness of a disinfectant against specific microorganisms other than the test microorganisms are permitted, but not required, provided that the test microorganisms are likely to be present in or on the recommended use areas and surfaces. Therefore, manufacturers might also test specifically against organisms of known concern in health-care practices (e.g., HIV, HBV, hepatitis C virus [HCV], and herpes) although it is considered likely that any product satisfying AOAC tests for hospital disinfectant designation will also be effective against these relatively fragile organisms when the product is used as directed by the manufacturer.

Potency against *Mycobacterium tuberculosis* has been recognized as a substantial benchmark. However, the tuberculocidal claim is used only as a benchmark to measure germicidal potency. Tuberculosis is not transmitted via environmental surfaces but rather by the airborne route. Accordingly, use of such products on environmental surfaces plays no role in preventing the spread of tuberculosis. However, because mycobacteria have among the highest intrinsic levels of resistance among the vegetative bacteria, viruses, and fungi, any germicide with a tuberculocidal claim on the label is considered capable of inactivating a broad spectrum of pathogens, including such less-resistant organisms as bloodborne pathogens (e.g., HBV, HCV, and HIV). It is this broad-spectrum capability, rather than the product's specific potency against mycobacteria, that is the basis for protocols and regulations dictating use of tuberculocidal chemicals for surface disinfection.

EPA also lists disinfectant products according to their labeled use against these organisms of interest as follows:

- **List B.** Tuberculocide products effective against *Mycobacterium* species.
- **List C.** Products effective against human HIV-1 virus.
- **List D.** Products effective against human HIV-1 virus and HBV.
- **List E.** Products effective against *Mycobacterium* species, human HIV-1 virus, and HBV.
- **List F.** Products effective against HCV.

Microorganisms vary in their resistance to disinfection and sterilization, enabling CDC's designation of disinfectants as high-, intermediate-, and low-level, when compared with EPA's designated organism spectrum (Figure). However, exceptions to this general guide exist, and manufacturer's label claims and instructions should always be followed.
FIGURE. Decreasing order of resistance of microorganisms to germicidal chemicals

<table>
<thead>
<tr>
<th>Organism</th>
<th>Processing Level Required</th>
<th>Sterilization</th>
</tr>
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<tbody>
<tr>
<td>Bacterial spores</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geobacillus stearothermophilus</td>
<td>FDA sterilant/high-level disinfectant</td>
<td></td>
</tr>
<tr>
<td>Bacillus atrophaeus</td>
<td>( = CDC sterilant/high-level disinfectant)</td>
<td></td>
</tr>
<tr>
<td>Mycobacteria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mycobacterium tuberculosis</td>
<td>EPA hospital disinfectant with tuberculocidal claim</td>
<td></td>
</tr>
<tr>
<td>Nonlipid or small viruses</td>
<td></td>
<td>( = CDC intermediate-level disinfectant)</td>
</tr>
<tr>
<td>Polio virus</td>
<td>EPA hospital disinfectant ( = CDC low-level disinfectant)</td>
<td></td>
</tr>
<tr>
<td>Coxsackie virus</td>
<td></td>
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<tr>
<td>Rhinovirus</td>
<td></td>
<td></td>
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<tr>
<td>Fungi</td>
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</tr>
<tr>
<td>Aspergillus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Candida</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetative bacteria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staphylococcus species</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pseudomonos species</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salmonella species</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lipid or medium-sized viruses</td>
<td></td>
<td></td>
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<tr>
<td>Human immunodeficiency virus</td>
<td></td>
<td></td>
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<tr>
<td>Herpes simplex virus</td>
<td></td>
<td></td>
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<tr>
<td>Hepatitis B and hepatitis C</td>
<td></td>
<td></td>
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<tr>
<td>Coronavirus</td>
<td></td>
<td></td>
</tr>
</tbody>
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References
# Appendix B

## Immunizations Strongly Recommended for Health-Care Personnel (HCP)

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Dose schedule</th>
<th>Indications</th>
<th>Major precautions and contraindications</th>
<th>Special considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B recombinant vaccine*</td>
<td>Three-dose schedule administered intramuscularly (IM) in the deltoid; 0.1 mL</td>
<td>Health-care personnel (HCP) at risk for exposure to blood and body fluids.</td>
<td>History of anaphylactic reaction to common baker’s yeast. Pregnancy is not a contraindication.</td>
<td>No therapeutic or adverse effects on hepatitis B virus (HBV)-infected persons; cost-</td>
</tr>
<tr>
<td></td>
<td>second dose administered 1 month after first dose; third dose administered 4 months after second. Booster doses are not necessary for persons who have developed adequate antibodies to hepatitis B surface antigen (anti-HBs).</td>
<td></td>
<td></td>
<td>effectiveness of pre-vaccination screening for susceptibility to HBV depends on costs of vaccination and antibody testing and prevalence of immunity in the group of potential vaccinees; health-care personnel who have ongoing contact with patients or blood should be tested 1–2 months after completing the vaccination series to determine serologic response. If vaccination does not induce adequate anti-HBs (&gt;10 mIU/mL), a second vaccine series should be administered.</td>
</tr>
<tr>
<td>Influenza vaccine (inactivated)*</td>
<td>Annual single-dose vaccination IM with current vaccine.</td>
<td>HCP who have contact with patients at high risk or who work in chronic-care facilities; HCP aged ≥50 years or who have high-risk medical conditions.</td>
<td>History of anaphylactic hypersensitivity to eggs or to other components of the vaccine.</td>
<td>Recommended for women who will be in the second or third trimesters of pregnancy during the influenza season and women in any stage of pregnancy who have chronic medical conditions that are associated with an increased risk of influenza.</td>
</tr>
<tr>
<td>Measles live-virus vaccine</td>
<td>One dose administered subcutaneously (SC); second dose 3 weeks later.</td>
<td>HCP who were born during or after 1957 without documentation of 1) receipt of 2 doses of live vaccine on or after their first birthday; 2) physician-diagnosed measles, or 3) laboratory evidence of immunity. Vaccine should also be considered for all HCP who have no proof of immunity, including those born before 1957.</td>
<td>Pregnancy; immunocompromised† state (including human immunodeficiency virus [HIV]-infected persons with severe immunosuppression); history of anaphylactic reactions after gelatin ingestion or receipt of neomycin; or recent receipt of antibody-containing blood products.</td>
<td>Measles, mumps, rubella (MMR) is the recommended vaccine. Persons immunocompromised because of immune deficiencies, HIV infection, leukemia, lymphoma, generalized malignancy; or persons receiving immunosuppressive therapy with corticosteroids, alkylating drugs, antimetabolites; or persons receiving radiation.</td>
</tr>
<tr>
<td>Mumps live-virus vaccine</td>
<td>One dose SC; no booster.</td>
<td>HCP believed susceptible can be vaccinated; adults born before 1957 can be considered immune.</td>
<td>Pregnancy; immunocompromised† state; history of anaphylactic reaction after gelatin ingestion or receipt of neomycin.</td>
<td>MMR is the recommended vaccine.</td>
</tr>
<tr>
<td>Rubella live-virus vaccine</td>
<td>One dose SC; no booster.</td>
<td>HCP, both male and female, who lack documentation of receipt of live vaccine on or after their first birthday, or lack of laboratory evidence of immunity can be vaccinated. Adults born before 1957 can be considered immune, except women of childbearing age.</td>
<td>Pregnancy; immunocompromised† state; history of anaphylactic reaction after receipt of neomycin.</td>
<td>Women pregnant when vaccinated or who become pregnant within 4 weeks of vaccination should be counseled regarding theoretic risks to the fetus; however, the risk of rubella vaccine-associated malformations among these women is negligible. MMR is the recommended vaccine.</td>
</tr>
<tr>
<td>Varicella-zoster live-virus vaccine</td>
<td>Two 0.5 mL doses SC 4–8 weeks apart if aged ≥13 years.</td>
<td>HCP without reliable history of varicella or laboratory evidence of varicella immunity.</td>
<td>Pregnancy; immunocompromised† state; history of anaphylactic reaction after receipt of neomycin or gelatin; recent receipt of antibody-containing blood products; salicylate use should be avoided for 6 weeks after vaccination.</td>
<td>Because 71%–93% of U.S.-born persons without a history of varicella are immune, serologic testing before vaccination might be cost-effective.</td>
</tr>
</tbody>
</table>


CDC. Immunization of health-care workers: recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Hospital Infection Control Practices Advisory Committee (HICPAC). MMWR 1997;46(No. RR-16).


* A federal standard issued in December 1991 under the Occupational Safety and Health Act mandates that hepatitis B vaccine be made available at the employer’s expense to all HCP occupationally exposed to blood or other potentially infectious materials. The Occupational Safety and Health Administration requires that employers make available hepatitis B vaccinations, evaluations, and follow-up procedures in accordance with current CDC recommendations.

† Persons immunocompromised because of immune deficiencies, HIV infection, leukemia, lymphoma, generalized malignancy; or persons receiving immunosuppressive therapy with corticosteroids, alkylating drugs, antimetabolites; or persons receiving radiation.

§ Vaccination of pregnant women after the first trimester might be preferred to avoid coincidental association with spontaneous abortions, which are most common during the first trimester. However, no adverse fetal effects have been associated with influenza vaccination.

‖ A live attenuated influenza vaccine (LAIV) is FDA-approved for healthy persons aged 5–49 years. Because of the possibility of transmission of vaccine viruses from recipients of LAIV to other persons and in the absence of data on the risk of illness and among immunocompromised persons infected with LAIV viruses, the inactivated influenza vaccine is preferred for HCP who have close contact with immunocompromised persons.
# Appendix C

## Methods for Sterilizing and Disinfecting Patient-Care Items and Environmental Surfaces*

<table>
<thead>
<tr>
<th>Process</th>
<th>Result</th>
<th>Health-care application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sterilization</td>
<td>Destroys all microorganisms, including bacterial spores.</td>
<td>Examples</td>
</tr>
<tr>
<td></td>
<td>Heat-automated</td>
<td>Steam, dry heat, unsaturated chemical vapor</td>
</tr>
<tr>
<td></td>
<td>Liquid immersion†</td>
<td>Chemical sterilants, Glutaraldehyde, glutaraldehydes with phenol, hydrogen peroxide, hydrogen peroxide with peracetic acid, peracetic acid</td>
</tr>
<tr>
<td>High-level disinfection</td>
<td>Destroys all microorganisms, but not necessarily high numbers of bacterial spores.</td>
<td>Heat-sensitive semicritical</td>
</tr>
<tr>
<td></td>
<td>Liquid immersion†</td>
<td>Chemical sterilants/high-level disinfectants, Glutaraldehyde, glutaraldehyde with phenol, hydrogen peroxide, hydrogen peroxide with peracetic acid, ortho-phthalaldehyde</td>
</tr>
<tr>
<td>Intermediate-level disinfection</td>
<td>Destroys vegetative bacteria and the majority of fungi and viruses.</td>
<td>U.S. Environmental Protection Agency (EPA)-registered hospital disinfectant with label claim of tuberculocidal activity (e.g., chlorine-containing products, quaternary ammonium compounds with alcohol, phenolics, iodophors, EPA-registered chlorine-based product†)</td>
</tr>
<tr>
<td>Low-level disinfection</td>
<td>Destroys the majority of vegetative bacteria, certain fungi, and viruses. Does not inactivate Mycobacterium bovis.§</td>
<td>EPA-registered hospital disinfectant with no label claim regarding tuberculocidal activity.**</td>
</tr>
</tbody>
</table>

### Notes:
* EPA and the Food and Drug Administration (FDA) regulate chemical germicides used in health-care settings. FDA regulates chemical sterilants used on critical and semicritical medical devices, and the EPA regulates gaseous sterilants and liquid chemical disinfectants used on noncritical surfaces. FDA also regulates medical devices, including sterilizers. More information is available at 1) [http://www.epa.gov/opppad001/chemregindex.htm](http://www.epa.gov/opppad001/chemregindex.htm), 2) [http://www.fda.gov/cdrh/index.html](http://www.fda.gov/cdrh/index.html), and 3) [http://www.fda.gov/cdrh/ode/germlab.html](http://www.fda.gov/cdrh/ode/germlab.html).
† Contact time is the single critical variable distinguishing the sterilization process from high-level disinfection with FDA-cleared liquid chemical sterilants. FDA defines a high-level disinfectant as a sterilant used under the same contact conditions as sterilization except for a shorter immersion time (C-1).‡ The tuberculocidal claim is used as a benchmark to measure germicidal potency. Tuberculosis (TB) is transmitted via the airborne route rather than by environmental surfaces. Because mycobacteria have among the highest intrinsic levels of resistance among vegetative bacteria, viruses, and fungi, any germicide with a tuberculocidal claim on the label (i.e., an intermediate-level disinfectant) is considered capable of inactivating a broad spectrum of pathogens, including much less resistant organisms, including bloodborne pathogens (e.g., HBV, hepatitis C virus [HCV], and HIV). It is this broad-spectrum capability, rather than the product’s specific potency against mycobacteria, that is the basis for protocols and regulations dictating use of tuberculocidal chemicals for surface disinfection.¶ Chlorine-based products that are EPA-registered as intermediate-level disinfectants are available commercially. In the absence of an EPA-registered chlorine-based product, a fresh solution of sodium hypochlorite (e.g., household bleach) is an inexpensive and effective intermediate-level germicide. Concentrations ranging from 500 ppm to 800 ppm of chlorine (1:100 dilution of 5.25% bleach and tap water, or approximately ¼ cup of 5.25% bleach to 1 gallon of water) are effective on environmental surfaces that have been cleaned of visible contamination. Appropriate personal protective equipment (e.g., gloves and goggles) should be worn when preparing hypochlorite solutions (C-2; C-3). Caution should be exercised, because chlorine solutions are corrosive to metals, especially aluminum.** Germicides labeled as “hospital disinfectant” without a tuberculocidal claim pass potency tests for activity against three representative microorganisms: *Pseudomonas aeruginosa*, *Staphylococcus aureus*, and *Salmonella choleraesuis*.

## References


INSTRUCTIONS

By Internet
1. Read this MMWR (Vol. 52, RR-17), which contains the correct answers to the questions beginning on the next page.
2. Go to the MMWR Continuing Education Internet site at <http://www.cdc.gov/mmwr/cme/conted.html>.
3. Select which exam you want to take and select whether you want to register for CME, CEU, or CNE credit.
4. Fill out and submit the registration form.
5. Select exam questions. To receive continuing education credit, you must answer all of the questions. Questions with more than one correct answer will instruct you to “Indicate all that apply.”
7. Immediately print your Certificate of Completion for your records.

By Mail or Fax
1. Read this MMWR (Vol. 52, RR-17), which contains the correct answers to the questions beginning on the next page.
2. Complete all registration information on the response form, including your name, mailing address, phone number, and e-mail address, if available.
3. Indicate whether you are registering for CME, CEU, or CNE credit.
4. Select your answers to the questions, and mark the corresponding letters on the response form. To receive continuing education credit, you must answer all of the questions. Questions with more than one correct answer will instruct you to “Indicate all that apply.”
5. Sign and date the response form or a photocopy of the form and send no later than December 19, 2006, to Fax: 404-639-4198  Mail: MMWR CE Credit
   Office of Scientific and Health Communications
   Epidemiology Program Office, MS C-08
   Centers for Disease Control and Prevention
   1600 Clifton Rd, N.E.
   Atlanta, GA 30333
6. Your Certificate of Completion will be mailed to you within 30 days.

ACCREDITATION

Continuing Medical Education (CME). CDC is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. CDC designates this educational activity for a maximum of 2.0 hours in category 1 credit toward the AMA Physician’s Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

Continuing Education Unit (CEU). CDC has been approved as an authorized provider of continuing education and training programs by the International Association for Continuing Education and Training and awards 0.2 Continuing Education Units (CEUs).

Continuing Nursing Education (CNE). This activity for 2.2 contact hours is provided by CDC, which is accredited as a provider of continuing education in nursing by the American Nurses Credentialing Center’s Commission on Accreditation.
Goal and Objectives

This MMWR provides recommendations regarding infection control practices for dentistry settings. These recommendations were prepared by CDC staff after consultation with staff from other federal agencies and specialists in dental infection control. The goal of this report is to minimize the risk of disease transmission in dental health-care settings through improved understanding and practice of evidence-based infection control strategies. Upon completion of this continuing education activity, the reader should be able to 1) list the major components of a personnel health infection control program in the dental setting; 2) list key measures for preventing transmission of bloodborne pathogens; 3) describe key elements of instrument processing and sterilization; 4) describe dental water quality concepts; and 5) demonstrate the importance of developing an infection-control program evaluation.

To receive continuing education credit, please answer all of the following questions.

1. The components of a personnel health infection control program in a dental setting should include which of the following?  
   A. Infection control education and training for dental staff.  
   B. Appropriate immunizations against vaccine-preventable diseases.  
   C. Exposure prevention and postexposure management strategies.  
   D. Policies regarding work-related illness and work restrictions.  
   E. Confidentiality of work-related medical evaluations for dental staff.  
   F. All of the above.

2. Which of the following is true regarding standard infection-control precautions?  
   A. Standard precautions are strategies used to reduce the risk of transmission of pathogens in the health-care setting.  
   B. Standard precautions should be used in caring for all patients, regardless of their infectious status.  
   C. Expanded or transmission-based precautions are used beyond standard precautions to interrupt the spread of certain pathogens.  
   D. Standard precautions apply to exposure to blood, all body fluids and secretions (except sweat), nonintact skin, and mucous membranes.  
   E. All of the above.  
   F. None of the above.

3. Factors to consider in assessing need for follow-up after an occupational blood or body fluid exposure include . . .  
   A. the type of exposure.  
   B. the type of body fluid.  
   C. the bloodborne pathogen infection status of the source.  
   D. the susceptibility of the exposed person.  
   E. all of the above.  
   F. none of the above.

4. Which of the following is not usually worn as personal protective equipment when anticipating spatter of blood or body fluids?  
   A. Jacket with long sleeves.  
   B. Gloves.  
   C. Head covering.  
   D. Protective eyewear or face shield.  
   E. Face mask.

5. Which of the following is not true regarding gloves?  
   A. Certain hand lotions can affect the integrity of gloves.  
   B. Wearing gloves replaces the need for handwashing.  
   C. Sterile surgical gloves are recommended for oral surgical procedures.  
   D. The Food and Drug Administration (FDA) has identified glove failure rates for manufacturers.  
   E. Certain glove materials can interfere with the setting of impression materials.  

6. Which of the following statements regarding processing of contaminated instruments is true?  
   A. Instruments should be processed in an area separate from where clean instruments are stored.  
   B. Personnel should wear heavy-duty utility gloves.  
   C. Instruments only need cleaning if they have visible contamination.  
   D. Instruments should be heat-sterilized unless they are heat-sensitive.  
   E. Cleaning an instrument precedes all sterilization and disinfection processes.  
   F. A, B, D, and E are correct.

7. Which of the following statements is true regarding monitoring the correct functioning of a sterilizer?  
   A. A chemical indicator should be placed in a visible area of the package before sterilization processing.  
   B. A biological indicator spore test should be processed through a sterilizer cycle at least once a week.  
   C. A biological indicator control test matching the same lot of the spore test should be submitted with the sterilizer spore test.  
   D. Mechanical assessments of sterilizer cycle time and temperature should be monitored.  
   E. All of the above.

8. Low- to intermediate–level disinfectants used to clean environmental surfaces . . . (Indicate all that apply)  
   A. rapidly inactivate human immunodeficiency virus and hepatitis B virus on clinical contact and housekeeping surfaces.  
   B. must be FDA-registered.  
   C. are used after prompt removal of blood or body substance contamination on a surface.  
   D. are appropriate to disinfect floors, depending on type of contamination.  
   E. all of the above.  
   F. A, C, and D are correct.

9. Which of the following statements is true regarding dental unit waterlines?  
   A. If municipal water is the source that enters the dental unit waterline, output will always meet drinking water quality.  
   B. Flushing the waterlines for ≥2 minutes at the beginning of the day reduces the biofilm in the waterlines.  
   C. Dentists should consult with the manufacturer of the dental unit or water delivery system to determine the best method for maintaining optimal water quality.  
   D. Dental unit waterlines can reliably deliver optimal water quality when used for irrigation during a surgical procedure.  
   E. All of the above.  
   F. A, B, and D are correct.

10. Which of the following is true regarding a dental clinic infection control program evaluation?  
    A. A method to ensure a safe working environment should be in place to reduce the risk of health-care–associated infections among patients and occupational exposures among dental health-care personnel.  
    B. Evaluation of a program should include documenting periodic observational assessments, reviewing completed checklists, and reviewing occupational exposures.  
    C. An evaluation program does not improve an infection control program.  
    D. A and B are correct.  
    E. A and C are correct.  
    F. All of the above.

11. Indicate your work setting.  
    A. Private dental practice.  
    B. Hospital dental setting.  
    C. Academic institution.  
    D. Laboratory.  
    E. Other public health setting.  
    F. Other.
12. Which best describes your professional activities?
A. Dentist.
B. Dental hygienist.
C. Dental laboratory staff.
D. Dental office staff.
E. Other medical profession.

13. I plan to use these recommendations as the basis for . . . (Indicate all that apply.)
A. health education materials.
B. insurance reimbursement policies.
C. local practice guidelines.
D. public policy.
E. other.

14. Each month, approximately how many dental patients do you treat?
A. None.
B. 1–10.
C. 11–50.
D. 51–100.
F. >200.

15. How much time did you spend reading this report and completing the exam?
A. <2.0 hours.
B. >2.0 hours but <3.0 hours.
C. >3.0 hours but <4.0.
D. >4.0 hours.

16. After reading this report, I am confident I can list the major components of a personnel health infection control program in the dental setting.
A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

17. After reading this report, I am confident I can list key measures for preventing transmission of bloodborne pathogens.
A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

18. After reading this report, I am confident I can describe key elements of instrument processing and sterilization.
A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

19. After reading this report, I am confident I can describe dental water quality concepts.
A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

20. After reading this report, I am confident I can demonstrate the importance of developing an infection-control program evaluation.
A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

21. The objectives are relevant to the goal of this report.
A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

(Continued on pg CE-4)
22. The teaching strategies used in this report (text, figures, boxes, and tables) were useful.
   A. Strongly agree.  D. Disagree.
   B. Agree.  E. Strongly disagree.
   C. Neither agree nor disagree.

23. Overall, the presentation of the report enhanced my ability to understand the material.
   A. Strongly agree.  D. Disagree.
   B. Agree.  E. Strongly disagree.
   C. Neither agree nor disagree.

24. These recommendations will affect my practice.
   A. Strongly agree.  D. Disagree.
   B. Agree.  E. Strongly disagree.
   C. Neither agree nor disagree.

25. The content of this activity was appropriate for my educational needs.
   A. Strongly agree.  D. Disagree.
   B. Agree.  E. Strongly disagree.
   C. Neither agree nor disagree.

26. The availability of continuing education credit influenced my decision to read this report.
   A. Strongly agree.  D. Disagree.
   B. Agree.  E. Strongly disagree.
   C. Neither agree nor disagree.

27. How did you learn about this continuing education activity?
   A. Internet.
   B. Advertisement (e.g., fact sheet, MMWR cover, newsletter, or journal).
   C. Coworker/supervisor.
   D. Conference presentation.
   E. MMWR subscription.
   F. Other.
o·ri·g·i·nal: adj
(ə-'rij-ən-əl) 1: being the first instance or source from which a copy, reproduction, or translation can be made; see also *MMWR.*
Executive Summary: The ADA Bylaws state that the Joint Commission on National Dental Examinations (JCNE) is to provide and conduct written examinations, exclusive of clinical demonstrations for the purpose of assisting state boards of dental examiners in determining qualifications of dentists who seek license to practice in any state or other jurisdiction of the United States. The JCNE Standing Rules (Rules) contain important policies and procedures pertaining to JCNE operations (e.g., roles of committees operating within the JCNE, criteria for selecting test constructors, reporting considerations in the handling of irregularities) in support of this charge. Resolution 108 addresses recommended revisions to the Rules to permit the reporting of scores when an irregularity has occurred, and when circumstances warrant such action. Additional revisions are also offered to improve the language within the document and provide greater clarity.

Background: The JCNE has adopted various policies and procedures to address the occurrence of irregularities within examinations. Irregularities can occur, for example, when candidates fail to comply with Examination Regulations, Rules of Conduct, and/or Test Center Procedures and are subsequently caught by test administrators. When such irregularities occur they cast doubt on the accuracy of exam results as a reflection of the knowledge and skills of the candidate. Similarly, irregularities can also be detected after the examination, through the application of complex statistical procedures designed to detect statistical aberrations. In these situations, the Rules indicate that the Joint Commission may choose to withhold a candidate’s test results, thereby preventing the candidate from benefitting from the irregularity through the achievement of a passing score. In reviewing the Rules, it was noted that it might be prudent to consider reporting examination results when the candidate has failed the examination and can thus obtain no benefit through the reporting.

April 25, 2012 Joint Commission Meeting: At the April 25, 2012 Joint Commission meeting, the JCNE, ADA Legal, and Joint Commission staff revisited this issue. Subsequent to this discussion, the JCNE concluded that under certain circumstances it might be appropriate to report examination results, as opposed to simply withholding them. This could be the case, for example, if the candidate failed the examination and would benefit from having a low test score withheld. Under this circumstance, reporting the examination results would simply reflect the fact that the candidate did not possess the written knowledge necessary to safely practice dentistry. The changes to the document that correspond to this issue appear under “Criteria for Withholding Scores” (Worksheet:5123, lines 4-11).

In the proposed revisions to the Rules, the JCNE also changed the address of the Joint Commission to clarify that correspondence should be sent to the American Dental Association (ADA) Building, as opposed to the ADA itself. The remaining changes to the document simply reflect editorial corrections to improve document language.
According to the ADA Bylaws, Chapter XIV. COMMISSIONS, Section 120. Power to Adopt Rules and Section 130, Duties, amendments to the Rules must be submitted to the ADA House of Delegates for approval by majority vote. In accordance with the Bylaws, the following resolution is forwarded to the 2012 ADA House of Delegates, recommending approval of the revised Rules.

Resolution

108. Resolved, that the Standing Rules of the Joint Commission on National Dental Examinations be approved as revised (Appendix 1).

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
APPENDIX 1: STANDING RULES OF THE JOINT COMMISSION ON DENTAL EXAMINATIONS

STANDING RULES

PROPOSED CHANGES TO DOCUMENT

Underline indicates text that has been inserted.
Strikeout indicates text that has been deleted.

April 2012

A publication of the Joint Commission on National Dental Examinations
American Dental Association Building
211 East Chicago Avenue, Suite 600
Chicago, Illinois 60611-2637

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The Joint Commission on National Dental Examinations operates within the limits imposed by three documents, listed here in order of precedence:

1. Bylaws of the American Dental Association
2. Bylaws of the Joint Commission on National Dental Examinations
3. Standing Rules for Councils and Commissions

Subject to constraints defined in these documents, the Joint Commission is free to establish its own policies and procedures for the conduct of its business. Such policies and procedures as have been adopted are compiled here.
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ELECTION OF A PUBLIC MEMBER

The Joint Commission is charged with electing a public member to serve as a commissioner. Policies relating to election are as follows.

Qualifications

The public member shall not be a(n):

a. Dentist
b. Dental hygienist
c. Dental student
d. Dental hygiene student
e. Faculty member of an accredited dental school or dental hygiene program
f. Employee of the Joint Commission
g. Member of another health profession
h. Professional who has represented the Joint Commission, dental profession, or dental hygiene profession for a fee in the last five years
i. Spouse of any of the above

Not more than five percent of the public member’s income shall be derived from the Joint Commission, dentistry, or dental hygiene.

It is suggested that the public member not be employed by a firm with a substantial interest in dentistry or dental hygiene, and that the public member be experienced in health issues, testing, credentialing, or advocating the interest of the public.

Term

The public member will serve a single four-year term.

Identification of Nominees

When a new public member is needed, nominations will be requested from appropriate agencies, such as state boards of dentistry and public service organizations. Each nominee will be requested to supply a summary of his or her qualifications. At least two qualified nominees will be identified prior to conduct of an election.

ROLES OF COMMITTEES

Four standing committees meet in conjunction with the annual meeting of the Joint Commission. They are:

a. Committee on Administration
b. Committee on Dental Hygiene
c. Committee on Examination Development
d. Committee on Research and Development
Each committee is assigned a portion of the materials to be considered by the Joint Commission and is responsible for formulating specific recommendations for Joint Commission action.

**Assignments**

Assignment of topics to specific committees is the responsibility of the Joint Commissions Chair, but this responsibility may be delegated in part or in total to the Secretary. Listed and discussed below are examples of topics that are typically assigned to each committee.

A topic may be assigned to more than one committee. In addition, provided that it completes its assigned items, a committee may consider a topic assigned to a different committee.

**Committee on Administration**

This committee’s responsibility relates to both National Board Dental Examinations and the National Board Dental Hygiene Examination. The committee deals with operations. Specific topics to be considered include:

- a. Examination security, including procedures for examination administration
- b. Examination regulations
- c. Joint Commission Bylaws and Standing Rules
- d. Finances, including an annual comparison of income and expenses

**Committee on Dental Hygiene**

This committee’s responsibility relates primarily to the National Board Dental Hygiene Examination. Specific topics to be considered include:

- a. Examination content and specifications
- b. Test construction procedures, including nomination of test constructors
- c. Information circulated to publicize or explain the testing program
- d. Portions of Examination Regulations that affect dental hygiene candidates
- e. Matters pertaining to finances, ADA and Joint Commission Bylaws, and Joint Commission Standing Rules that affect the National Board Dental Hygiene Examination

**Committee on Examination Development**

This committee’s responsibility relates primarily to National Board Dental Examinations. Specific topics to be considered include:

- a. Examination content and specifications
- b. Test construction procedures, including nomination of test constructors
- c. Information circulated to publicize or explain the testing program
Committee on Research and Development

This committee's responsibility relates to both the National Board Dental Examinations and the National Board Dental Hygiene Examination. Topics considered by this Committee include any research or developmental activities related to the Examinations.

Committee Actions

A committee is expected to consider and report on all assigned topics. For most topics, committee actions are to be presented in the form of recommendations for Joint Commission action. Following are three exceptions:

a. A decision about the manner in which a committee approaches its assignment - for example, a change in the personal data form for potential test constructors - need not be reported.

b. Identification of background requested for future deliberations may be reported as information without an accompanying recommendation. If compilation of needed background requires substantial resources, however, a specific recommendation for action is appropriate.

c. A decision not to act may be reported as an informational item. If the topic has generated substantial outside interest, however, a recommendation not to act is appropriate so as to allow the Joint Commission to affirm the committee's decision.

Reporting

Background information prepared for Committee deliberations is circulated to all Commissioners and all Committee members. Exceptions are: information about a nominee to a test construction committee provided only to the committee charged with screening nominees and technical reports provided as background for the Committee on Research and Development.

Committee reports are provided to the Joint Commission in written or electronic form. Topics are discussed in the order they are listed on the Joint Commission's agenda, and background information related to each topic is identified. For each recommendation, a report should include a brief summary of or rationale. An exception is made in that no rationale is expected for appointment of a test constructor. Instead, an alternate is named for each newly proposed test constructor.

Preparation and presentation of a committee's report is the responsibility of each committee's Chair. Preparation may be delegated to a staff secretary assigned to the committee. If the committee Chair is not a commissioner or if, for some other reason, the committee Chair is not present at the Joint Commission’s annual meeting, responsibility for presenting the report may be delegated to a commissioner who has served on that committee.

Committee reports are presented orally, stopping for action as needed. At each stop for action, the presenter represents the committee’s views through his or her answers to questions. Only after ensuring that the committee’s views have been represented adequately may the presenter impart any personal views.
CRITERIA FOR DENTAL TEST CONSTRUCTORS

The Joint Commission selects consultants to serve on its Dental and Dental Hygiene Test Construction Committees. A test constructor is appointed for a one-year term and may be reappointed to four consecutive terms. To be considered for appointment, a person must possess appropriate qualifications and must submit a completed personal data form. Someone who has completed five years of service on a committee will not be considered for reappointment to the same committee.

The following are the criteria for test constructors on Anatomic Sciences, Biochemistry-Physiology, Microbiology-Pathology, Dental Materials, Pharmacology, Patient Management, and Testlet Development Committees:

a. Dentist with a masters degree in that biomedical science OR a professional with a doctoral degree in that biomedical science.

b. Three years of experience within the last five years teaching or in research in that biomedical science.

The following are the criteria for test constructors on Dental Anatomy and Occlusion, Operative Dentistry, Prosthodontics, Oral and Maxillofacial Surgery-Pain Control, Orthodontics-Pediatric Dentistry, Endodontics, Periodontics, and Oral Diagnosis Committees:

a. Dentist

b. In the case of special areas of dentistry, graduation from an accredited advanced education program in that specialty.

Part I (Component A) Test Construction Committees

Anatomic Sciences

This five member committee includes the following. At least one of the four subject-matter experts must be a dentist.

a. Gross anatomists (2)

b. Histologists (2); including one whose expertise is embryology and one whose expertise is neuroanatomy

c. Full-time practitioner (1)

Biochemistry/Physiology

This five member committee includes the following. At least one of the four subject-matter experts must be a dentist.

a. Biochemists (2)

b. Physiologists (1)

c. Full-time practitioner (1)
Microbiology/Pathology

This five member committee includes the following. At least one of the four subject-matter experts must be a dentist.

- Microbiologists (2); including one whose expertise is immunology
- Pathologists (2)
- Full-time practitioner (1)

Dental Anatomy and Occlusion

This four member committee consists of 4 dentists who are:

- Dental anatomists (3)
- Full-time practitioner (1)

Part I (Component B) Test Construction Committees

Testlet Development

This nine member committee consists of:

- Dental educators representing the various discipline areas, and all of who should already have served on a Part I discipline-based committee. (5)
- Dental practitioners representing each of the discipline-based Part I committees. (4)

Consultant Review

This committee is responsible for reviewing the discipline-based (Component A) and testlet-based (Component B) components of the Comprehensive Part I examinations to ensure the examinations adhere to test specifications and item guidelines outlined by the Joint Commission. The composition of this two member committee varies between the dental discipline experts and practitioners. Members of this committee should already have served on a Component A committee.

Part II (Component A) Test Construction Committees

Operative Dentistry

This five member committee consists of:

- Restorative/operative dentists (3)
- Expert in dental materials (1)
- Full-time practitioner (1)
Pharmacology

This four member committee consists of:

a. Pharmacologists (3), one who is a dentist
b. Full-time practitioner (1)

Prosthodontics

This six member committee consists of:

a. Prosthodontists (4), two with expertise in fixed prosthodontics and two with expertise in removable partial/complete prosthodontics
b. Expert in dental materials (1)
c. Full-time practitioner (1)

Oral and Maxillofacial Surgery/Pain Control

This four member committee consists of:

a. Oral and maxillofacial surgeons (3), at least one with expertise in pain control
b. Full-time practitioner (1)

Orthodontics/Pediatric Dentistry

This six member committee consists of:

a. Orthodontists (3)
b. Pediatric dentists (2)
c. Full-time practitioner (1)

Endodontics

This four member committee consists of:

a. Endodontists (3)
b. Full-time practitioner (1)

Periodontics

This four member committee consists of:

a. Periodontists (3)
b. Full-time practitioner (1)
Oral Diagnosis

This six member committee consists of:

- Oral pathologists (2)
- Oral and maxillofacial radiologists (2)
- Dentist with advanced education in oral diagnosis (1)
- Full-time practitioner (1)

Patient Management

This eight member committee consists of:

- Dental public health specialists (2)
- Dentist with advanced education in special needs (1)
- Behavioral scientists (3), at least one who must be a dentist
- Full-time practitioners (2)

Full-time Practitioners

A full-time practitioner is a currently licensed dentist (not necessarily a specialist) in the United States, practicing dentistry full-time (30 to 40 hours per week) for at least 10 years.

Part II (Component B) Test Construction Committee

Component B

This committee develops the case-based items for the Comprehensive Part II examination. This thirteen member committee consists of:

- Members representing the dental disciplines, all of who have served on a Part II Component A committee (10)
- General practitioners with experience in preparing educational or licensure examinations (2)
- Behavioral scientist (1)

Case Selection

As an adjunct to the Component B committee, this committee does the preliminary work of screening new patient cases, and identifying suitable cases. This committee drafts and reviews the patient histories, dental charts, and treatment plans associated with the cases. The composition of this 4-member committee varies between dental discipline experts and practitioners.

Consultant Review

This committee is responsible for reviewing the discipline-based (Component A) and case-based (Component B) components of the Comprehensive Part II examinations to ensure the examinations adhere to test specifications and item guidelines outlined by the Joint
CRITERIA FOR DENTAL HYGIENE TEST CONSTRUCTORS

The National Board Dental Hygiene Examination is constructed by committees of consultants with subject matter expertise in the following eight areas.

Basic Sciences

The basic sciences include anatomy, histology, biochemistry and nutrition, physiology, microbiology and immunology, pathology, pharmacology, and oral biology.

a. Doctoral degree in a biomedical science, or a dentist or dental hygienist with an advanced degree in a biomedical or dental science.

b. At least three years experience within the last five years teaching a biomedical or dental science to dental hygiene students.

Radiology

a. Dentist or dental hygienist with a baccalaureate degree from an accredited program.
b. An oral and maxillofacial radiologist or a dental hygienist with formal education in dental radiology beyond what was provided in dental hygiene program.
c. At least three years experience within the last five years teaching radiology.

Periodontics

a. Graduate of an accredited dental or dental hygiene program with advanced formal education or training in periodontics.
b. At least three years experience within the last five years teaching or practicing periodontics.

Oral Medicine/Oral Diagnosis

a. Dentist with advanced clinical training.
b. At least three years of experience within the last five years teaching oral medicine/oral diagnosis.

Special Needs Professional

a. Dentist or dental hygienist with advanced clinical training.
b. At least three years of experience within the last five years teaching a clinical science.

Dental Hygiene Curriculum

a. Dental hygienist who has graduated from an accredited program.
b. Advanced degree, preferably in dental hygiene.
c. Experience in curriculum design as a dental hygiene program director, member of a
dental hygiene curriculum committee, or accreditation consultant for dental hygiene.
d. At least three years experience within the last five years teaching to dental hygiene
students.

Clinical Dental Hygiene

a. Dental hygienist who has graduated from an accredited program.
b. Baccalaureate degree in dental hygiene, education, or a biomedical science.
c. At least three years experience within the last five years teaching and practicing clinical
dental hygiene; full-time or part-time in private practice or faculty practice.

Community Dental Health

a. Dentist or dental hygienist who has graduated from an accredited program.
b. Advanced degree in public health or related field.
c. At least three years experience within the last five years in a public health position or
teaching community and public health courses to dental or dental hygiene students.

Dental Hygiene Test Construction Committees

Three dental hygiene Component A committees (total of 15 members) and a dental hygiene
Component B committee (8 members) construct the National Board Dental Hygiene Examination.

Component A Committees

Dental Hygiene I

a. Basic science experts (3)
b. Dental hygiene curriculum expert (1)

Dental Hygiene II

a. Periodontists (3), at least one who must be a dentist
b. Dental hygiene curriculum expert (1)
c. Clinical dental hygiene experts (2)
d. Oral and Maxillofacial Radiologist or dental hygienist with formal education in
radiology (1)

Dental Hygiene III

a. Dental Hygiene Curriculum expert (1)
b. Clinical Dental Hygiene expert (1)
c. Community Dental Health experts (2)
Component B Committees

Component B

a. Basic science expert (1)
b. Dental hygiene curriculum expert (1)
c. Clinical dental hygiene expert (1)
d. Community dental health expert (1)  
e. Oral medicine/oral diagnosis expert (1)
f. Periodontist (1)
g. Oral and Maxillofacial radiologist or dental hygienist with formal education in radiology (1)  
h. Special needs expert (1)

Case Selection

Members from various dental hygiene disciplines (4)

Consultant Review

Members from the various dental hygiene disciplines, one of which must be a dentist (4)

Members on these Component B committees should have already served on a Dental Hygiene Component A committee.

Definitions

The Joint Commission is responsible for protecting the integrity of National Board Examination scores. One method used is to withhold scores that reflect unrealistic response patterns. Procedures for withholding scores are listed in the Examination Regulations for National Board Examinations.

Statistical criteria for withholding scores are based on the response patterns of candidates or the performance of candidates on the overall examination. Potential irregularities may include, but are not limited to, the following:

Aberrant results: Inconsistent response patterns as measured by response aberrance index (e.g., answering difficult questions correctly and missing easy questions).

Latency aberrance: Candidates with inconsistent or inappropriate use of time in responding to items.

Perfect tests: Two or more candidates with identical test results or perfect tests.

Unrealistic similarity: Two or more candidates who have more identical wrong answers than different wrong answers.
Unusual gain in scores: Candidates with unusual or artificial gains in scores in comparison to previous testing attempts.

Criteria for Withholding Scores

Candidate’s scores may be withheld or, as circumstances may warrant, reported when aberrant response patterns or aberrant examination performance is detected through forensic analyses or other information that supports the possibility that the candidate has given or received confidential information concerning examination content during or prior to the examination. Similarly, scores may be withheld or reported if compelling information is available that suggests, or that the candidate was, not testing for the intended purpose.

LIMITED RIGHT OF APPEALS FOR EXAMINATION CANDIDATES

The Joint Commission recognizes that strict application of the Examination Regulations for National Board Examinations may, because of unusual circumstances, impose an unusual burden on one or more candidates. In these situations, the Joint Commission may consider an appeal for special consideration.

Requests for an appeal pertaining to test results must be initiated within 30 days of receiving test results or, in the case of withheld scores, within 30 days of receiving written notice that scores are being withheld. In the event that the Joint Commission has given notice that previously released scores are to be invalidated or voided, the request for appeal must be submitted within 30 days. In this case, a request for appeal will stay the action to invalidate or void the score until such time as the appeal is decided or the time for submitting a request for appeal has expired. A request for an appeal must be submitted in writing and must include adequate documentation. The request for an appeal must indicate the specific relief requested.

A request for an appeal will first be screened by the Chair. The Chair, in his/her sole discretion, may 1) allow an appeal (if the Chair believes that there is a reasonable basis for the review of the facts of the case and the procedures applied thereto), 2) deny an appeal, or 3) recommend, in consultation with the secretary, to release scores.

When considering an appeal, the Joint Commission will strive to ensure that the candidates have an opportunity to gain National Board certification equal to, but not greater than, the opportunity provided other candidates.

If the issue presented in an appeal is likely to recur, the Joint Commission may consider a change in regulations. Granting of an appeal will be considered a precedent only if a change in regulations is also adopted. The candidate will be notified of the Joint Commission action within 60 days after receipt of the written request for the appeal.

The Chair of the JCNDE, in consultation with the secretary of the JCNDE, may grant an appeal when additional, convincing information becomes available early in the appeal process that indicates an error was made in the decision to withhold scores.
CONFLICT OF INTEREST POLICY

Policies and procedures used in National Board testing programs should provide for fairness and impartiality in the conduct of examinations and treatment of all candidates. Central to the fairness of the JNCDE’s operations and the impartiality of its decision-making process is an organizational and personal duty to avoid real or perceived conflicts of interest. The potential for a conflict of interest arises when one’s duty to make decisions in the public’s interest is compromised by competing interest of a personal or private nature, including but not limited to pecuniary interests.

Conflict of interest is considered to be:

1) Any relationship with a candidate for National Board certification, or

2) A partiality or bias which might interfere with objectivity in the decision-making with respect to policy or the evaluation of individual appeals to the Joint Commission.

The Joint Commission strives to avoid conflict of interest or the appearance of a conflict in decisions regarding examination policy or individual candidate appeals. Potential conflicts of interest of Commissioners include, but are not limited to:

- A professional or personal relationship or affiliation with the individual or organization that may create a conflict or the appearance of a conflict.

- Being an officer or administrator in a dental education program, testing agency or board of dentistry with related decision-making influence regarding a candidate for National Board certification.

To safeguard the objectivity of the Joint Commission, it is the responsibility of any Commissioner to disclose any potential conflicts. Any member with a direct conflict of interest must recuse himself/herself from the decision-making process regarding candidate appeals or policies that impact the fairness and impartiality of the JCNDE’s examination programs.

ASSISTANCE TO OTHER AGENCIES

One of the duties of the Joint Commission is to serve as a resource for the dental profession in the area of developing written examinations for licensure. The charge is fulfilled by providing assistance to state boards of dentistry and to national and international dental organizations. This policy statement describes limitations on availability.

Availability

Operation of National Board examinations is the Joint Commission’s primary charge. Assistance is provided to a state board of dentistry or national dental organization only upon request and only if the Joint Commission possesses the resources to fulfill the request.

If the Joint Commission is forced to select agencies to receive assistance, highest priority will be given to state boards of dentistry that accept National Board scores. For dental organizations in the U.S. and its territories, assistance is limited to consultation and sharing general information about Joint Commission policies and procedures. Requests for testing services will be referred
to the ADA Department of Testing Services or other organizations or individuals that provide such services.
REPORT OF THE WORKGROUP ON RESOLUTION 42H-2010 TO THE 2012 HOUSE OF DELEGATES:
UPDATE ON RFP PROCESS FOR PORTFOLIO-STYLE CLINICAL EXAMINATION

Background: The 2010 ADA House of Delegates adopted Resolution 42H-2010:

42H. Resolved, that a Request for Proposals (RFP) process be initiated calling for the development of a portfolio-style examination for licensure purposes designed to assess a candidate’s clinical competence with a third-party assessment that is valid and reliable psychometrically, including a complementary written/interactive examination to assess issues not deemed adequately addressed in the portfolio model, such as ethics and professionalism, and be it further

Resolved, that a new workgroup composed of two representatives from the Board of Trustees, three from the Council on Dental Education and Licensure (one appointee each from the ADA, ADEA and AADB), one from the Committee on the New Dentist, and one from the American Student Dental Association be appointed to oversee the development and announcement of the RFP process in 2011 and consideration of the received proposals in 2012, and be it further

Resolved, that appropriate progress reports be made available to both the 2011 and 2012 House of Delegates.

Workgroup Appointed: President Raymond Gist appointed the following individuals to serve on the 2010-2011 42H-2010 Workgroup: Dr. Samuel Low, Seventeenth District Trustee, chair; Dr. Edward Vigna, Tenth District Trustee; Dr. Brian Kennedy (CDEL-ADA); Dr. Patrick Lloyd (CDEL-ADEA); Dr. David Perkins (CDEL-AADB); Dr. Chris Salerno (NDC), and Ms. Brittany Bensch (ASDA). President William Calnon reappointed these individuals to serve in 2011-2012.

Key Issues:

- The Workgroup members spent considerable time discussing concepts to be included in the RFP. They determined the examination should:

  1. Be ethical and professional—use patients of record within the school’s current system of evaluation (Curriculum Integrated Format); candidate must have done work independently without faculty assistance;
  2. Have oversight by respective state licensing jurisdiction – examiners should make final determination of competency, not faculty,*
  3. Assess clinical competencies;
  4. Be psychometrically sound (valid and reliable);
  5. Be cost effective and feasible—should not require additional resources from students, schools or state licensing jurisdictions and should minimize disruption;
6. Have a built-in system for external audit;
7. Have mechanisms to assess outcomes;
8. Enable portability among states while respecting states’ rights; and
9. Have a remediation process.

*There was lengthy discussion around the actual competency assessment and the resulting portfolio evaluation. The Workgroup discussed the pros and cons in having calibrated faculty associated with the respective school versus independent outside evaluators performing the direct competency assessments. Using independent outside evaluators would be more costly. The Workgroup concluded that the RFP should call for creative methodologies by which a student is evaluated for individual competencies possibly by a calibrated faculty member but with a process that can be audited by an external reviewer. All agreed that the portfolio assessment should be conducted by an external evaluator.

- The Workgroup also identified the following proposed competencies/domains that should be included:
  1. Endodontics
  2. Direct restoration (amalgam, composite)
  3. Indirect restoration/fixed prosthodontics (inlays, onlays, crowns, bridges, veneers)
  4. Removable prosthodontics
  5. Periodontics
  6. Oral Surgery
  7. Anesthesia, Infection control, diagnosis and treatment planning - to be observed during completion of the above listed competencies

- Appendix 1 provides a timeline for the activity as developed by the Workgroup. The RFP (Appendix 2) was released on October 31, 2011 to the five regional dental clinical testing agencies and five private companies with expertise in examination development.

- The ADA received a proposal from Prometric, a company that provides comprehensive testing and assessment services throughout the world. The ADA Joint Commission on National Dental Examinations, the Dental Admissions Test and the Optometry Admissions Test use the services of Prometric for their examinations.

- In addition, the ADA received letters from the licensing community (sixteen state dental boards and one regional testing agency) expressing concerns about and opposition to the ADA’s involvement in the state licensure process. The letters noted that licensing examinations and processes are the responsibility of state dental boards, not a professional organization, and urged the ADA to withdraw its RFP and cease its attempt to be involved in this process. Further, some state boards indicated that they would not accept a portfolio-style examination for licensure in their states.

- The proposal received outlines a two-phase activity. The first activity would be the development of the process and protocol for the portfolio assessment. The second activity calls for piloting and implementing the process and protocols developed.

The proposal suggests the following steps:

1. Establish a steering committee to represent the interests of all the stakeholders directly or indirectly involved with the endeavor (e.g., faculty, administrators, practitioners, state boards). The steering committee is expected to meet for one 2.5-day session, plus three to five web-based conferences or telephone conferences to discuss issues that arise throughout the process.
2. Define the architecture of the portfolio submission process, including standard requirements for the materials to be provided and the submission procedures, guidance on ethical treatment of patients, initial guidance on an appropriate scoring approach and descriptions of topic panels.

3. Recruit 8-10 subject matter experts for each of the seven topic area panels (competencies).

4. Conduct a workshop with each panel to develop details for each of the submissions, link the submission to the defined competency and define the preliminary scoring rubric.

5. Develop a process to collect pilot responses to validate the assessment as designed.

6. Delineate a plan for scoring the pilot responses.

The project would begin in December 2012 and be completed by November 2013.

Prometric’s proposed budget includes costs for exam development ($134,000), piloting ($59,000) and scoring the pilot responses ($82,000). In addition, the ADA would be responsible directly for costs associated with the steering committee and expert panel meetings. Travel, hotel and daily stipend expenses for seven, one-day meetings with 10 subject matter experts each plus three agency staff would be $65,100. Costs associated with a 2.5-day steering committee meeting with 12-members plus three agency staff is approximately $22,230. Indirect costs of 37.5% also are included. This brings the total potential cost to $498,204.

<table>
<thead>
<tr>
<th>EXPENSES RELATED TO DEVELOPING PORTFOLIO EXAMINATION</th>
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<tbody>
<tr>
<td><strong>ACTIVITY</strong></td>
</tr>
<tr>
<td>Exam Development</td>
</tr>
<tr>
<td>Piloting of Exam</td>
</tr>
<tr>
<td>Scoring Pilot</td>
</tr>
<tr>
<td>Seven, one-day meetings for 10 volunteers. (one hotel night, one daily stipend, airline, luggage and ground transportation, in-house meals for one day)</td>
</tr>
<tr>
<td>One 2.5-day meeting for 15 volunteers (three hotel nights, three daily stipends, airline, luggage, ground transportation, in-house meals for 3 days.)</td>
</tr>
<tr>
<td>Subtotal</td>
</tr>
<tr>
<td>Indirect Costs, including staff time (37.5%)</td>
</tr>
<tr>
<td><strong>TOTAL COSTS</strong></td>
</tr>
</tbody>
</table>
Workgroup Recommendation: The Workgroup enlisted the assistance of expert reviewers in the evaluation of the Prometric proposal and subsequently sought additional information from Prometric. The Workgroup noted the following:

- The Workgroup was satisfied with the additional information from the agency.
- Based on the proposal received, most members of the Workgroup believed development of a portfolio-style examination is feasible; however, costs associated with the process are very high. Given the Association’s current financial challenges, the ADA may not be in a position to allocate its resources to this activity in 2013.
- California is still in the process of developing its portfolio-style examination. The Workgroup believed that it could be beneficial to monitor the process in California before ADA proceeds with developing a similar examination. Some Workgroup members noted differences in the California and ADA models.
- Resistance to development of the portfolio examination came from 16 state dental boards and one regional testing agency. Based on the comments received, the workgroup expressed concern that the dental licensing community would not support an examination if the ADA was involved in its development.

The Workgroup concluded that the proposal submitted meets the intent of Resolution 42H-2010 demonstrating that it is possible to develop a valid and reliable portfolio-style examination designed to evaluate a candidate’s clinical competency with third party assessment. The Workgroup believes that a portfolio-style clinical examination should be an option available to candidates for initial licensure, but that the Association should continue to monitor California’s progress and learn from that experience. There are no costs associated with this approach. Additionally, due to the projected financial commitment of almost $500,000 to develop the model, the Workgroup is reluctant to recommend that the House pursue the development of the portfolio-style examination model in 2013.

Resolution

110. Resolved, that the ADA continue to monitor the Dental Board of California’s development of the portfolio examination option and provide a report back to the 2013 House of Delegates.

BOARD RECOMMENDATION: Vote Yes.
# Appendix 1: Proposed Timeline

## Process for Developing a Portfolio-Style Clinical Examination

<table>
<thead>
<tr>
<th>Month</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Develop and Announce Request for Proposals</td>
<td>Review Proposals and Submit Report to 2012 House of Delegates with Recommendations</td>
<td>Selected RFP Implemented</td>
</tr>
<tr>
<td>January</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>February</td>
<td></td>
<td>Outside reviewers submit report to Workgroup for consideration.</td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>First meeting of the 42H-2010 Workgroup</td>
<td>Workgroup meets to review the RFP submissions and report from outside reviewers</td>
<td>Grantee to submit progress report to Workgroup</td>
</tr>
<tr>
<td>April</td>
<td></td>
<td>Interviews with individuals from top rated responses to the RFP</td>
<td></td>
</tr>
<tr>
<td>May-June</td>
<td>Development of RFP</td>
<td>Selected proposal(s) in response to the RFP announced</td>
<td>Grantee to submit progress report to Workgroup</td>
</tr>
<tr>
<td>July-August</td>
<td>Development of RFP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>Report transmitted to Board of Trustees and House of Delegates</td>
<td>Report transmitted to Board of Trustees and House of Delegates</td>
<td>Grantee to submit progress report to Workgroup</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Progress Report transmitted to House of Delegates</td>
</tr>
<tr>
<td>October</td>
<td>Report considered by House of Delegates</td>
<td>Report considered by House of Delegates</td>
<td>Progress report considered by House of Delegates</td>
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<tr>
<td></td>
<td>Announce RFP</td>
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<td>November</td>
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<td>If approved with funding, award grant to selected agency</td>
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<tr>
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<td>Grantee begins work on portfolio-style exam</td>
<td>Final project due to the ADA</td>
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<td>Send RFPs to outside reviewers</td>
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Appendix 2

Development of a Portfolio-Style Assessment of Clinical Skills for the Purposes of State Dental Licensure

REQUEST FOR PROPOSAL

Release Date: October 31, 2011

American Dental Association
211 East Chicago Avenue
Chicago, Illinois 60611
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1. INTRODUCTION/STATEMENT OF PURPOSE
The American Dental Association (ADA) is soliciting proposals in response to an October 2010 ADA House of Delegates directive to develop a portfolio-style examination for licensure purposes that could assess clinical competence of candidates for initial licensure via a psychometrically valid and reliable third-party assessment process. This directive also calls for a complementary written/interactive examination to assess issues not deemed adequately addressed in the portfolio model, such as ethics and professionalism. This RFP requests proposals from agencies that could develop an examination process using a portfolio-style assessment for the ADA as directed by the House of Delegates.

a. Eligibility Criteria: Applicants are encouraged to apply, who are affiliated with a qualified organization, knowledgeable and experienced in educational measurement, and knowledgeable and experienced in certification and/or licensure testing. Examples of qualified organizations include: testing service agencies and organizations, clinical examination agencies, and corporations and individuals with expertise in test development and psychometric principles.

2. BACKGROUND AND GENERAL INFORMATION

a. About the American Dental Association. Founded in 1859, the American Dental Association (ADA) is the oldest national association of dentists in the United States. It is a non-profit corporation organized under the laws of the State of Illinois. The ADA is a voluntary organization of dentists whose objective is to promote the art and science of dentistry and to encourage the improvement of the health of the public. The membership of the ADA includes 157,000 professionals making it the largest national association of dentists. ADA members have access to a wide variety of benefits, products and services ranging from scientific and clinical resources, insurance and retirement programs, continuing education, meetings and publications such as the Journal of the American Dental Association (JADA). The governing body of the ADA is the House of Delegates composed of representative ADA member dentists and representative dental students in ADA Commission on Dental Accreditation-accredited education (DDS/DMD) programs. The administrative body of the ADA is the Board of Trustees composed of active, dues-paying members of the ADA.

b. The Existing Dental Licensing Process. Dental licensing is the responsibility of the individual jurisdiction’s (state) government. This responsibility is usually delegated to the jurisdiction’s board of dentistry, also known as state board of dental examiners. Specific dental licensure requirements vary among jurisdictions, but all jurisdictions have three common requirements for initial licensure: an educational requirement, a written (theoretical) examination requirement and a clinical (performance) examination requirement.

The educational requirement for nearly all licensing jurisdictions is graduation from a dental education program accredited by the ADA Commission on Dental Accreditation (CODA). Only one jurisdiction (MN) does not require graduation from an accredited program, but rather reviews graduates of non-accredited (international)
programs on a case-by-case basis and makes a determination if the program they attended is equivalent to a CODA-accredited program.

The written (theoretical) examination requirement is the National Board Dental Examinations (Parts I and II) that is administered by the Joint Commission on National Dental Examinations (JCNDE) of the American Dental Association. These examinations are designed to assist the state boards of dentistry in determining whether or not a candidate for licensure has assimilated the theoretical basis of biomedical and dental sciences taught in those schools to a level of competency that protects the health, welfare and safety of the public. Part I is focused on the basic sciences (anatomic sciences, biochemistry, physiology, microbiology, pathology, dental anatomy and occlusion) and students usually take this examination at the end of their second year of dental school. Part II tests the dental sciences and includes a case-based component that asks questions related to patient care. Dental students usually take Part II during their fourth year of dental school. The JCNDE is currently in the process of developing an integrated examination that is intended to replace the current Parts I and II. This new examination is expected to be ready for implementation within the next five years.

The clinical patient-based examination requirement serves as a capstone assessment of a candidate’s clinical skills to assist states in determining whether initial licensure candidates can demonstrate critical competencies necessary for safely providing oral health services to the public. Currently, there are five regional dental clinical testing agencies and four independent states administering clinical examinations (Attachment A). State dental boards contract with/become members of one or more of these regional testing agencies to administer the clinical examination requirement for initial licensure in their states. The five regional testing agencies are Central Regional Dental Testing Service (CRDTS), Council of Interstate Testing Agencies (CITA), North East Regional Examining Board (NERB), Southern Regional Testing Agency (SRTA) and the Western Regional Examining Board (WREB). Four jurisdictions (DE, FL, NV and the VI) administer exams independently of a regional testing agency. Some states may also accept examination results from testing agencies in which they are not members.

In spring 2005, the American Board of Dental Examiners (ADEX) was established as an examination development agency with the intent of developing a common examination that all state boards would utilize and accept. Initially, the majority of state and regional testing agencies participated in development of the examination, but when the ADEX Dental and Dental Hygiene Examinations were ready for use in fall 2005, only NERB and CRDTS administered the ADEX Examinations. In 2009, CRDTS withdrew from ADEX leaving NERB the only regional testing agency and Nevada the only independent state using the ADEX Examinations. In 2011, the

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1 ADEX is a private not for profit consortium of state and regional dental boards throughout the United States and its territories that provides for the ongoing development of a series of common, national dental licensing examinations that are uniformly administered by individual state or regional testing agencies on behalf of their participating and recognizing licensing jurisdictions.
Florida legislature eliminated its own clinical examination and approved the use of the ADEX Examinations effective October 1, 2011. As of this writing, NERB and the Nevada, Hawaii and Florida state dental boards administer the ADEX Examinations, while the remaining state and regional testing agencies administer their own exams.

The lack of one common clinical examination that is accepted by all state dental boards presents a challenge to dentists seeking licensure and to state dental boards alike. Dentist provider mobility between states is negatively affected, which in certain geographic areas presents a significant challenge to the public in accessing care from a dentist. Other challenges related to clinical examinations have for many years created discussion and disagreement among the dental practicing, education and licensing communities. These challenges include that the clinical examination is only a snapshot of candidate’s competence, exams are not standardized due to patient variability and examiner variability and calibration, and there is potential difficulty in finding patients with standard, appropriate conditions for the examinations. Some of these challenges present ethical dilemmas for students, such as patient brokering and delaying a patient’s needed treatment as much as a year in order to use that patient for the clinical examination. The ADA encourages testing agencies, dental education programs and students to adhere to its position statement, Ethical Considerations When Using Human Subjects/Patients in the Examination Process (Attachment B).

For the reasons noted above, states have begun to look at alternatives to the current clinical examination. For example, New York eliminated the clinical examination requirement for initial licensure in 2001 and mandated completion of a postdoctoral residency program accredited by the ADA Commission on Dental Accreditation that is at least one year in length (PGY-1). Several other states (CT, MN, WA, CA) grant licensure applicants the option of completing the PGY-1 in lieu of a clinical examination. However, the examination community is concerned that this option lacks an objective assessment of the PGY-1 resident. The widespread lack of confidence on the part of various state boards with regard to the programs’ perceived inability to dismiss residents for poor academic performance is a barrier to acceptance of the PGY-1 pathway by the examining community. The PGY-1 concept is accepted in the policies of the ADA, American Student Dental Association and the American Dental Education Association. Currently, only the American Association of Dental Boards opposes this approach.

Another alternative pathway for initial licensure is the two-part examination of the National Dental Examining Board of Canada (NDEB). The Minnesota Board of Dentistry adopted this pathway in 2010 for graduates of the University of Minnesota. This examination consists of a written examination that tests the ability to apply basic and clinical science knowledge in assessing and planning care for patients and an Objective Structured Clinical Examination (OSCE) that employs clinical scenarios to test clinical decision making. To date, Minnesota is the only state utilizing this model.

Lastly, California conducted an extensive study of alternative models and ultimately agreed to pursue the portfolio model. (Comira, Psychometric Services Division,
prepared a complete report for the Dental Board of California - Alternative Pathways for Initial Licensure for General Dentists, Final Report, February 2009). In 2010, the governor signed into law a new school-based portfolio initial licensure examination option; this is in addition to the existing options of taking the Western Regional Examining Board clinical examination or completing a one-year general practice residency. The California portfolio examination can be described as a series of examinations administered in a series of patient encounters in several competency domains as outlined below. Students are rated according to standardized rating scales by faculty examiners who are formally trained in their use. The new law became effective January 1, 2011. The Dental Board is in the process of adopting regulations containing the specific details of the process before the option can be made available.

3. SCOPE OF WORK, SPECIFICATIONS & REQUIREMENTS

a. Description of Work: The agency should develop, pilot, validate and recommend an implementation process for a portfolio model examination to assess the clinical competency of students enrolled or graduating from an accredited dental education program via an independent third party for the purpose of state licensure. Competencies/domains to be included are:

- Endodontics
- Direct restoration (e.g., amalgam, composite)
- Indirect restoration/fixed prosthodontics (e.g., inlays, onlays, crowns, bridges, veneers)
- Removable prosthodontics
- Periodontics
- Oral Surgery
- Anesthesia, infection control, diagnosis and treatment planning - to be observed/assessed in conjunction with the above listed competencies/domains

Proposals should adhere to the following concepts - the model portfolio examination process should:

- Be ethical and professional—use patients of record within the school’s current system of evaluation [curriculum integrated format (CIF)]²; candidate must perform services independently without faculty or examiner assistance;

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² Curriculum Integrated Format: An initial clinical licensure process that provides candidates an opportunity to successfully complete an independent “third party” clinical assessment prior to graduation from a dental education program accredited by the ADA Commission on Dental Accreditation.

If such a process includes patient care as part of the assessment, it should be performed by candidates on patients of record, whenever possible, within an appropriately sequenced treatment plan. The competencies assessed by the clinical examining agency should be selected components of current dental education program curricula.

All portions of this assessment are available at multiple times within each institution during dental school to ensure that patient care is accomplished within an appropriate treatment plan and to allow candidates to remediate and retake any portions of the assessment which they have not successfully completed.
• Have oversight by respective state licensing jurisdiction – examiners should make final determination of competency, not faculty; (Be conducted by an independent 3rd party)
• Assess clinical competencies;
• Be psychometrically sound (valid and reliable);
• Be cost effective and feasible—should not require additional resources from students, schools or state licensing jurisdictions and should minimize disruption;
• Have a built-in system for external audit;
• Have mechanisms to assess outcomes of the portfolio process;
• Enable portability among states while respecting states’ rights; and
• Have a remediation process.

Proposals may consider the following as an example of a potential process for evaluating a competency:

1. Allow mechanisms for state boards to audit process at their discretion to ensure integrity of process/exam
2. A proposed process:
   a. The student/candidate will designate a procedure for his competency/assessment and work with a designated, calibrated faculty member.
   b. A computer program will record all required data generated during the competency exam.
   c. The patient’s medical history, pre-op radiograph and digital photograph, pre-op digital recording of the tooth selected as well as any other relevant material will be entered into a computer data base.
   d. The candidate will prepare the selected tooth to “ideal” and record another digital reading of the preparation. The candidate will determine if the preparation needs to be altered for any reason and document any requests for alterations in writing specifying the exact location, amount of tooth structure needed to be removed and the reason for the request. The faculty/examiner will review the request and evaluate the appropriateness for the modifications. The faculty/examiner will grant or deny each request. No further information is given to the student. The faculty/examiner will note into the database the reason for denial. Any requests with no clinical justification or that demonstrate a complete lack of clinical judgment or knowledge could result in the termination of the exam and temporization. When the student has completed his/her preparation to his/her satisfaction s/he will then take another digital recording of the preparation. If caries remains or an unrecognized pulp exposure is present the tooth should be temporized. If all caries has been removed and there has not been a pulp exposure then the student may restore the tooth. A digital recording should then be taken of the final restoration. A digital photograph of each critical stage should also be included in the database.
   e. The student will decide if s/he wants to submit this case for portfolio evaluation to an independent third party evaluation prior to any “feedback” by the faculty/examiner.

b. Requirements.
Materials to include in the proposal:
- Applicant qualifications for this project
- Model portfolio examination, process and protocols
- Plan outlining timelines to submit deliverables
- Proposed software applications and any related technology requirements for the model examination and implementation
- Budget for design and implementation of the model examination
- Examination administration, scoring and security requirements

c. Timelines and Deliverables.

Timelines. The following is a tentative timeline that will apply to the RFP, but may change in accordance with the ADA’s needs or unforeseen circumstances. Changes will be communicated by e-mail to all applicants.

October 24, 2011  Issue request for proposal  
December 26, 2011  Deadline for receipt of proposals  
May 18, 2012  Announcement of selected RFP(s)  
October 22, 2012  Report and funding request submitted to ADA House of Delegates for Approval  
November 1, 2012  Approved agency notified  
December 1, 2012  Project start date  
December 1, 2013  Project due date

During the course of the project, quarterly status updates via conference call or e-mail will be expected.

Deliverables: The proposal shall include a highly detailed project description containing an executive summary. The proposal shall include:

- Components of the portfolio examination.
- Technical Specifications.
  The proposal should be delivered so it can be viewed using desktop operating system – Windows 7 and software application system – Microsoft Office Word and Excel. The proposal should contain software applications and any related technology requirements for the model examination and implementation.
  Scoring Methods. The proposal shall provide psychometrically sound procedures for scoring and score reporting as it relates to purpose of this Project, including criteria for scoring, software requirements, method and materials for calibration of examiners and remediation policies.
  Security. The proposal shall describe in a clear and concise manner the protocols used in the administration of the portfolio examination and the adequacy of those methods for the security of the content of the examinations and confidentiality of candidate personal information and results.
- Pilot. The proposal shall include a description of the process for piloting the portfolio examination.
Financial Implications. The proposal shall include a detailed list of anticipated costs which correspond to the total proposed sum to be paid to the applicant(s).

Significant Dates. The proposal shall include the dates when significant steps in the Project will be completed.

d. **Communication.** Inquiries, questions and requests for clarification related to this RFP are to be directed in writing (mail, e-mail or fax) and directed to:

American Dental Association  Phone: 312-440-2694
Attn: Ms. Lois Haglund  Fax: 312-440-2915
211 E. Chicago Avenue  E-mail: haglundl@ada.org
Chicago, IL 60611

The ADA will make a good faith effort to respond in writing to each question and request for clarification within 10 business days.

4. **PROPOSAL FORMAT**

a. **Understanding the RFP.** This section should contain a description of the applicant’s understanding of the objective of the project and its scope. In responding to this RFP, the applicant accepts full responsibility to understand the RFP in its entirety, including making any inquiries to the ADA as necessary.

b. **Experience and Qualifications.** This section should demonstrate that the consultant has the experience, qualifications, and resources to meet the requirements of the RFP. If the consultant is part of a consulting organization, a detailed explanation of the organization should be submitted. The consultant, including the individual(s) assigned to the project, should hold a Ph.D. in Educational Psychology or Educational Measurement and should have experience in consulting for certification or licensure examinations within the past 5 years. Resumes or curriculum vitae of consultants, or individuals assigned to this project by the consulting organization, are to be included with the proposal. These documents should include the names and references of clients to whom these individuals have provided consulting services within the past five years.

c. **Proposal Submission.** An application cover sheet and complete proposal preparation instructions are provided at the end of this RFP. Submitted proposals must include the required items listed under “Deliverables” on page 8.

Proposals may be submitted in electronic format, CD or print form. Electronic proposals are to be submitted to haglundl@ada.org. If submitted in CD or print form, please provide ten (10) copies. All proposals must be submitted by December 26, 2011 to:

Ms. Lois Haglund  
Portfolio RFP  
American Dental Association
5. EVALUATION

a. Criteria for Selection. The proposals will initially be evaluated by outside, independent reviewers engaged by the ADA for this purpose. An ADA Review Committee comprised of members of the ADA Board of Trustees, the ADA’s Council on Dental Education and Licensure (CDEL), the New Dentist Committee and the American Student Dental Association will review the outside reviewers’ evaluations of the proposals. The Committee will make the final selection based on the reviewers’ reports and on the following:

- the overall experience and qualifications of the applicant with work of a similar nature, including computer software to be used to capture all required data generated during the portfolio exam;
- potential of applicant to develop materials as defined;
- capacity to pilot the examination;
- willingness to work with the ADA to assess pilots and make revisions, as appropriate; and
- demonstrated mechanisms for participants to evaluate the examination process and evaluators
- appropriateness and competitiveness of the budget, timetable and other key factors.

b. Notification. The selected applicant(s) will be notified in writing on May 18, 2012. A funding request to move forward with the development of the portfolio-style assessment will be considered by the 2012 ADA House of Delegates.

6. CONTRACT INFORMATION

A contract, incorporating the terms of the RFP and the proposal of the applicant(s), will be provided by the American Dental Association.

The services of the applicant(s) shall be required as stipulated in the RFP and the Proposal. The term of the contract may be modified by mutual consent of both the applicant(s) and the American Dental Association. Modifications must be in writing and signed by both parties to be binding.

The American Dental Association reserves the right to terminate any contract awarded related or pursuant to this RFP upon thirty (30) days written notice.

All materials submitted in response to this RFP with the exception of copyrighted examination materials, questions, answers and clinical material reproductions utilized in the examination materials will become the property of the American Dental Association. Proposals not selected will be considered confidential and will not be disclosed.
The resulting contract will be for the amount specified in the selected proposal and approved by the 2012 ADA House of Delegates.

All services shall be performed between December 1, 2012 and December 31.

The Final Report, when submitted, shall become the property of the American Dental Association.

All costs incurred in meeting the requirements of this project will be the responsibility of the applicant(s). Two payments will be made to the applicant(s). A payment of thirty percent (30%) of the total cost will be paid within two weeks of the signing of the contract. A final payment, the unpaid balance of the amount agreed upon in the proposal, will be made to the applicant(s) upon acceptance of the Final Report by the American Dental Association.

7. TERMS AND CONDITIONS

Neither this RFP nor any responses hereto shall be considered a binding offer or agreement. If ADA and any responding Respondent decide to pursue a business relationship for any or all of the services or equipment specified in this RFP, the parties will negotiate the terms and conditions of a definitive, binding written agreement which shall be executed by the parties. Until and unless a definitive written agreement is executed, ADA shall have no obligation with respect to any Respondent in connection with this RFP.

This RFP is not an offer to contract, but rather an invitation to a Respondent to submit a bid. Submission of a proposal or bid in response to this RFP does not obligate ADA to award a contract to a Respondent or to any Respondent, even if all requirements stated in this RFP are met. ADA reserves the right to contract with a Respondent for reasons other than lowest price. Any final agreement between ADA and Respondent will contain additional terms and conditions regarding the provision of services or equipment described in this RFP. Any final agreement shall be a written instrument executed by duly authorized representatives of the parties.

Respondent’s RFP response shall be an offer by Respondent which may be accepted by ADA. The pricing, terms, and conditions stated in Respondent’s response must remain valid for a period of one hundred twenty (120) days after submission of the RFP to ADA.

This RFP and Respondent’s response shall be deemed confidential ADA information. Any discussions that the Respondent may wish to initiate regarding this RFP should be undertaken only between the Respondent and ADA. Respondents are not to share any information gathered either in conversation or in proposals with any third parties, including but not limited to other business organizations, subsidiaries, partners or competitive companies without prior written permission from ADA.

ADA reserves the right to accept or reject a Respondent’s bid or proposal to this RFP for any reason and to enter into discussions and/or negotiations with one or more qualified Respondents at the same time, if such action is in the best interest of ADA.
ADA reserves the right to select a limited number of Respondents to make a “Best and Final Offer” for the services or equipment which are the subject of this RFP. Respondents selected to provide a “Best and Final Offer” shall be based on Respondent qualifications and responsiveness as determined solely by ADA.

All Respondent’s costs and expenses incurred in the preparation and delivery of any bids or proposals (response) in response to this RFP are Respondent’s sole responsibility.

ADA reserves the right to award contracts to more than one Respondent for each of the services identified in this RFP. If Respondent’s bid or proposal is based on a group purchase, Respondents must specifically identify this in their response.

All submissions by Respondents shall become the sole and exclusive property of ADA and will not be returned by ADA to Respondents.

8. ATTACHMENTS

A. Regional Testing Agency Membership Chart
B. ADA Statement on Ethical Use of Patients
Attachment A: State Membership in the Clinical Testing Agencies

This table contains information known at the time of publication about states’ affiliations with the clinical testing agencies. Some states may also accept examination results from testing agencies in which they are not members. This information is subject to change. Candidates seeking licensure in a specific state should contact that state’s board of dentistry to obtain the most up-to-date information about which examination results are accepted in the state prior to registering for any clinical examination. For state dental board contact information go to www.dentalboards.org. May 2011

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<td>340-774-0117</td>
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1 Washington is a member of WREB. Only the dental examination falls under CRDTS.
2 California. California is a WREB member and administers its own state board examination.
3 New York accepts NERB dental hygiene examination. No longer requires a clinical examination for initial dental licensure; applicants must complete an accredited postgraduate program at least one year in length (PGY-1).
4 Nevada is not a member of any clinical testing agency but is a member of ADEX and administers the ADEX Dental and Dental Hygiene Examinations. Nevada also accepts WREB results.
5 Florida is not a member of any clinical testing agency but is a member of ADEX and administers the ADEX Dental and Dental Hygiene Examinations.
6 ADEX – ADEX is a private not for profit consortium of state and regional dental boards throughout the United States and its territories that provides for the ongoing development of a series of common, national dental licensing examinations that are uniformly administered by individual state or regional testing agencies on behalf of their participating and recognizing licensing jurisdictions.
Attachment B: Ethical Considerations When Using Human Subjects/Patients in the Examination Process: American Dental Association Council on Ethics, Bylaws and Judicial Affairs

The following information is intended to assist dental licensure candidates, as well as examiners and educators involved in the testing process, in recognizing ethical considerations when patients are part of the clinical licensure process.

Background: Dental licensure is intended to ensure that only qualified individuals are licensed to provide dental treatment to the public. Most licensing jurisdictions have three general requirements: an educational requirement—graduation from a dental education program accredited by the Commission on Dental Accreditation; a written (theoretical) examination—to determine whether the applicant has achieved the theoretical bases at a level of competence that protects the health, welfare and safety of the public; and a clinical examination in which a candidate demonstrates the clinical knowledge, skills and abilities necessary to safely practice dentistry.

Anecdotal information and experiences reported in the literature by licensees and educators have raised ethical considerations when human subjects/patients are used in the examination process. While others disagree, it is recognized that the profession must ensure that the welfare of patients is safeguarded in every step of the clinical licensure examination process.

The licensure examination process is evolving. Many clinical examination agencies continue to monitor developments for applicability and affordability of alternatives to human subjects/patients in providing valid and reliable assessment of clinical competence.

The ADA has voiced its position regarding the use of human subjects/patients in clinical examinations through a series of resolutions culminating with the adoption of the 2005 House of Delegates’ Resolution 20H-2005. This resolution reaffirms ADA support for the elimination of human subjects/patients in the clinical licensure examination process while giving exception to a more recent methodology for testing known as the curriculum-integrated format (CIF). The 2006 ADA House of Delegates directed the ADA Council on Dental Education and Licensure to develop a definition of CIF and present it to the 2007 House of Delegates. The 2007 House adopted the following definition (1H:2007):

Curriculum Integrated Format: An initial clinical licensure process that provides candidates an opportunity to successfully complete an independent “third party” clinical assessment prior to graduation from a dental education program accredited by the ADA Commission on Dental Accreditation.

If such a process includes patient care as part of the assessment, it should be performed by candidates on patients of record, whenever possible, within an appropriately sequenced treatment plan. The competencies assessed by the clinical examining agency should be selected components of current dental education program curricula.

All portions of this assessment are available at multiple times within each institution during dental school to ensure that patient care is accomplished within an appropriate
treatment plan and to allow candidates to remediate and retake any portions of the assessment which they have not successfully completed.

Given that currently there are no new technologies that completely eliminate the use of human subjects/patients in the clinical examination processes, the ADA Council on Ethics, Bylaws and Judicial Affairs (CEBJA) \(^{11}\) called on major stakeholders, including the ADA’s Council on Dental Education and Licensure (CDEL), to provide input for the development of a statement that would identify key ethical considerations and provide guidance to help ensure the welfare of the patient remains paramount.

### Ethical Considerations When Using Human Subjects/Patients in the Examination Process

1. **Soliciting and Selecting Patients:** The ADA Principles of Ethics and Code of Professional Conduct\(^{12}\) (ADA Code), Section 3, Principle: Beneficence states that the “dentist’s primary obligation is service to the patient” and to provide “competent and timely delivery of dental care within the bounds of clinical circumstances presented by the patient, with due consideration given to the needs, desires and values of the patient.” The current examination processes require candidates to perform restorative and periodontal treatments on patients. In light of the principle stated above, this may create an ethical dilemma for the candidate when seeking patients to sit for the exam. Candidates should refrain from the following:
   1. Reimbursements between candidates and patients in excess of that which would be considered reasonable (remuneration for travel, lodging and meals).
   2. Remuneration for acquiring patients between licensure applicants.
   3. Utilizing patient brokering companies.
   4. Delaying treatment beyond that which would be considered acceptable in a typical treatment plan (e.g. delaying treatment of a carious lesion for 24 months).

2. **Patient Involvement and Consent:** The ADA Code, Section 1, Principle: Patient Autonomy states that “the dentist's primary obligations include involving patients in treatment decisions in a meaningful way, with due consideration being given to the patient’s needs, desires and abilities.” Candidates and dental examiners support patient involvement in the clinical examination process by having a written consent form that minimally contains the following basic elements:
   1. A statement that the patient is a participant in a clinical licensure examination, that the candidate is not a licensed dentist, a description of the procedures to be followed and an explanation that the care received might not be complete.
   2. A description of any reasonably foreseeable risks or discomforts to the patient.
   3. A description of any benefits to the patient or to others which may reasonably be expected as a result of participation.
   4. A disclosure of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to the patient.
   5. An explanation of whom to contact for answers to pertinent questions about the care received.
   6. A statement that participation is voluntary and that the patient may discontinue participation at any time without penalty or loss of benefits to which the patient is otherwise entitled.
3. Patient Care: The ADA Code, Section 3, Principle: Beneficence states that the dentist has a "duty to promote the patient's welfare." Candidates can do this by ensuring that the interests of their patient are of primary importance while taking the exam. Examiners contribute to this by ensuring that candidates are adequately monitored during the exam process such that the following treatment does not occur:
   1. Unnecessary treatment of incipient caries.
   2. Unnecessary patient discomfort.
   3. Unnecessarily delaying examination and treatment during the test.

4. Follow-Up Treatment: The ADA Code, Section 2, Principle: Nonmaleficence states that "professionals have a duty to protect the patient from harm." To ensure that the patient's oral health is not jeopardized in the event that he/she requires follow-up care, candidates and dental examiners should make certain that the patient receives the following:
   1. A clear explanation of what treatment was performed as well as what follow-up care may be necessary.
   2. Contact information for pain management.
   3. Complete referral information for patients in need of additional dental care.
   4. Complete follow-up care ensured by the mechanism established by the testing agency to address care given during the examination that may need additional attention.

Sources:
1. Dr. Lloyd A. George Nov. 3, 2005 Letter to Dr. James W. Antoon, chair CEBJA
2. CEBJA March 2, 2006 Strategic Issue Discussion – Use of Patients in Clinical Licensure Examinations
5. “The Agenda for Change,” Objectives Developed at the Invitational Conference for Dental Clinical Testing Agencies by representatives of the clinical testing agencies and other organizations with an interest in dental licensure sponsored by the American Dental Association. It is considered informational and does not represent policy of the ADA. March 4, 1997
6. ASDA Resolution 202RC-2005, Revision of Policy L-1 Initial Licensure Pathways
8. ADA HOD Resolution 34-2006, Definition of Curriculum Integrated Format
10. ADA House of Delegates (HOD) Resolution 64H-2000, Elimination of the Use of Human Subjects in Clinical Licensure/Board Examinations
11. CEBJA is the ADA agency responsible for providing guidance and advice and for formulating and disseminating materials on ethical and professional conduct in the practice and promotion of dentistry.
12. The entire text of the ADA Principles of Ethics and Code of Professional Conduct can be found on the ADA website at www.ada.org.

October 2008
Application Cover Sheet

1. Applicant/Agency/Institution/Affiliation:
   __________________________________________

2. Please attach one electronic copy of the applicant agency/institution/affiliation’s tax
   exempt status (e.g. IRS 501 (c) (3), other certification of immunity from taxation, or W-9
   form) to this application.

3. Total Project Duration: From ____________________ to ____________________

4. Budget request: $_______________________________

5. Name and Title of Project Leader: _______________________________________
   Address: _____________________________________________________________
   City: _________________________________________________________________
   State: ______  Zip: __________
   Telephone: _______________  Fax: __________________
   E-mail: ______________________________________________

6. Name and title of Applicant’s Authorized Representative, if relevant.
   Name:  _____________________________________________________________
   Address: _____________________________________________________________
   City: _________________________________________________________________
   State: _______  Zip : __________
   Telephone: _______________  Fax : __________________
   E-mail: ______________________________________________

7. Signature of Project Leader: ______________________________  Date: ________

Only the original signatures of the designated individuals are acceptable. Signatures verify that
all information in this application is true, complete and accurate to the best of the individual’s
knowledge.
Proposal Preparation and Instructions

Submission Deadline: December 26, 2011

Contact: Lois Haglund  
Portfolio RFP  
American Dental Association  
211 East Chicago Avenue  
Chicago, IL 60611  
haglundl@ada.org  
312-440-2694

Items A through F are required materials to be included, in order, in your proposal. The completed proposal in electronic format must be submitted by December 26, 2011 to haglundl@ada.org. If electronic submission is not available, please mail 10 (ten) CDs or hard copies by December 26, 2011 to the above address.

A. Cover sheet
B. Table of Contents that labels each of the following sections of the proposal:
   1. An abstract of the proposed project. The abstract should serve as a concise and accurate description of the proposed work when it is separated from other application materials.
   2. A Proposal Narrative that includes the information listed below. This section of the application should be no more than 10 pages, double-spaced in 11-point type with one-inch margins. All pertinent figures, charts, tables should be included in this section.
      a. Relevant background information for the proposed activity, highlighting how the proposed project meets the objective of the RFP.
      b. The model, process and protocols for the project, including administration, scoring and security.
      c. A description of the software technology and any related technology requirements for the exam and implementation to be employed in the project including
         i. A clear description of how any data is to be collected and how it is to be organized to facilitate the production of sample reports, and
         ii. The details of proposed analytic methods, statistical tools or software applications to be used.
C. Proposed Budget including a breakdown of the details of each expenditure category for which the funds are requested.
D. The qualifications of the principal investigator and other key members of the project team (including consultants) should be briefly described in the Proposal Narrative and included on the Biographical Data Form.
E. Brief description of the adequacy of the project's timetable and of other key project resources to reach the stated objectives.
F. Appendices are to be used only as necessary, but should include
   a. Literature cited, including complete titles and all authors
   b. Current biographical data forms for key project team members
c. For proposals that include the participation or collaboration of organizations or individuals outside of the applicant agency, a letter of agreement documenting each agency’s and any consultant’s willingness to cooperate, should be included. The letter must include a description of their roles in the project.
d. Contact information for five references (if possible) from projects similar in size, application and scope and a brief description of their implementation.
Resolution No. 112

Report: Coda Supplemental Report 1

Date Submitted: September 2012

Submitted By: Commission on Dental Accreditation

Reference Committee: Dental Education, Science and Related Matters

Total Net Financial Implication: None

Net Dues Impact: 

Amount One-time 

Amount On-going 

FTE 0

ADA Strategic Plan Goal: Collaboration (Required)

COMMISSION ON DENTAL ACCREDITATION SUPPLEMENTAL REPORT 1 TO THE HOUSE OF DELEGATES: CODA RULES REVISION

Executive Summary: The Commission on Dental Accreditation (CODA) is the nationally recognized accrediting agency for the accreditation of predoctoral dental education programs, advanced dental education programs, and allied dental education programs. Recommendation #28 of the 2008 ADA Task Force on CODA Report and Recommendations urged the Commission to “…use an outside facilitator to design and support its strategic planning efforts. CODA’s strategic planning efforts should examine (but not be limited to) the following:

- Development and implementation of an ongoing strategic planning process and the establishment of a committee to continue effective strategic planning.
- Reassessment of its meeting format in light of its primary focus of accreditation decisions.
- Consideration of the concept of flexible review cycles.
- Consideration of other models for site visits, such as the use of professional site visitors or the use of fewer site visitors used more frequently to enhance consistency and reliability.
- Consideration of important changes that may affect its operations including expansion of scope and international issues.
- Consideration of its continuing effectiveness and the appropriateness of its structure.”

In accord with the Task Force recommendation, the Commission utilized an outside facilitator to develop a strategic plan at the February and August 2012 meetings, which included revising the Commission’s mission statement. As the Commission’s mission statement is part of the preamble to the Rules, and revision of the Rules must be approved by majority vote of the House of Delegates, the Commission recommends adoption of the revised mission statement in the Rules.

Background: The 1973 ADA House of Delegates approved the establishment of the Commission on Dental Accreditation as the agency responsible for the profession’s accreditation program with sufficient autonomy to develop and approve educational standards, policies and procedures affecting the accreditation program (Trans.1973:695). The Commission was granted operational independence as it relates to accreditation affairs. The Constitution and Bylaws of the American Dental Association provides for the Commission to develop rules for the conduct of its business, contingent on approval by the House of Delegates. Since the approval of the Rules of the Commission on Dental Accreditation by the House of Delegates in 1973, revisions were approved in 1982, 1987, 1997, 2002, and 2010.

At the January 29, 2009 meeting, the Commission received the ADA Task Force on the Commission on Dental Accreditation Report and Recommendations. The ADA report was discussed at great length and each of the 34 recommendations was reviewed. The Commission considered the report in the spirit of improving the structure, governance, policies, operating procedures, functionality and use of best practices. There were
several recommendations related to quality assurance and strategic planning. In particular, recommendation
#28 stated that "CODA should use an outside facilitator to design and support its strategic planning efforts.
CODA’s strategic planning efforts should examine (but not be limited to) the following: development and
implementation of an ongoing strategic planning process and the establishment of a committee to continue
effective strategic planning; reassessment of its meeting format in light of its primary focus of accreditation
decisions; consideration of the concept of flexible review cycles; consideration of other models for site visits,
such as the use of professional site visitors or the use of fewer site visitors used more frequently to enhance
consistency and reliability; consideration of important changes that may affect its operations including
expansion of scope and international issues; consideration of its continuing effectiveness and the
appropriateness of its structure.” The Commission noted that the implementation of this recommendation had
financial implications and that ADA resources, including the use of the ADA in-house strategic planning team,
were not available at the time. At the August 2010 Commission meeting, in an effort to begin the process of
implementing this recommendation, the Commission did restructure the Standing Committees of the
Commission, including the formation of a new Standing Committee on Quality Assurance and Strategic
Planning.

At the August 2011 meeting, the Commission reviewed the progress to date in implementing the 34 ADA
recommendations. The Commission noted that the ADA Task Force Report suggested the Commission utilize
financial resources beyond regularly budgeted expenses to hire outside expertise to aid the Commission in
developing a communications and marketing plan, and to develop a strategic plan. The Commission
concluded that in order to appropriately address these unmet recommendations, additional resources should
be requested of the 2011 House of Delegates. The House agreed, adopting a resolution to provide funds to
hire outside facilitation to assist the Commission in developing a strategic plan.

**Commission Strategic Planning:** The Commission obtained the services of Mr. Bennett Napier, CAE, Chief
Staff Executive of the National Association of Dental Laboratories, to facilitate the strategic planning process.
The Standing Committee on Quality Assurance and Strategic Planning (QASP) was tasked with developing a
draft strategic plan for the Commission’s consideration. The QASP met on February 1, 2012 and developed a
draft mission statement, vision statement, and values statement, along with a draft strategic plan. Input on the
drafts was solicited for a period of three months from all members of the Commission. The QASP met on
August 8, 2012 to consider all input on the draft documents and to finalize documents for discussion at the
August 2012 Commission meeting. At the August 9, 2012 Commission meeting, the Commission adopted a
revised mission statement, along with vision and values statements and five strategic plan goals. Detailed
information on the Commission strategic plan can be found in CODA Supplemental Report 2 to the House of
Delegates.

According to the ADA *Bylaws*, Chapter XIV. COMMISSIONS, Section 120. Power to Adopt Rules and Section
130, Duties, amendments to the *Rules* must be submitted to the ADA House of Delegates for approval by
majority vote either through or in cooperation with the Council on Dental Education and Licensure (CDEL).
Therefore, the Commission requested CDEL consider the amended document; CDEL supported the revised
*Rules* (Appendix 1). The Commission submits the following resolution to the 2012 ADA House of Delegates,
recommending approval of the revised *Rules*. The resolution is submitted in cooperation with CDEL.

**Summary:** This report details the proposed revision to the *Rules*, incorporating a revised mission statement
that was adopted by the Commission at the August 2012 meeting. The Commission recommends adoption of
the following resolution.
Resolution

112. Resolved, that the Rules of the Commission on Dental Accreditation be approved as revised in Appendix 1 (proposed deletions are struck; proposed additions are underlined).

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Appendix 1. Rules of the Commission on Dental Accreditation

Article I. MISSION

The Commission on Dental Accreditation serves the public by establishing, maintaining and applying standards that ensure the quality and continuous improvement of dental and dental-related education and reflect the evolving practice of dentistry. The scope of the Commission on Dental Accreditation encompasses dental, advanced dental and allied dental education programs. The Commission on Dental Accreditation serves the oral health care needs of the public through the development and administration of standards that foster continuous quality improvement of dental and dental related educational programs.

Article II. BOARD OF COMMISSIONERS

Section 1. LEGISLATIVE AND MANAGEMENT BODY: The legislative and management body of the Commission shall be the Board of Commissioners.

Section 2. COMPOSITION: The Board of Commissioners shall consist of:

Four (4) members shall be selected from nominations open to all trustee districts from the active, life or retired members of this association, no one of whom shall be a faculty member working more than one day per week of a school of dentistry or a member of a state board of dental examiners or jurisdictional dental licensing agency. These members shall be nominated by the Board of Trustees and elected by the American Dental Association House of Delegates.

Four (4) members who are active, life or retired members of the American Dental Association shall be selected by the American Association of Dental Boards from the active membership of that body, no one of whom shall be a member of a faculty of a school of dentistry.

Four (4) members who are active, life or retired members of the American Dental Association shall be selected by the American Dental Education Association from its active membership. These members shall hold positions of professorial rank in dental schools accredited by the Commission on Dental Accreditation and shall not be members of any state board of dental examiners.

The remaining Commissioners shall be selected as follows: one (1) certified dental assistant selected by the American Dental Assistants Association from its active or life membership, one (1) licensed dental hygienist selected by the American Dental Hygienists' Association, one (1) certified dental laboratory technician selected by the National Association of Dental Laboratories, one (1) student selected jointly by the American Student Dental Association and the Council of Students of the American Dental Education Association, one (1) dentist for each ADA recognized dental specialty who is board certified in the respective special area of practice and is selected by the respective specialty sponsoring organization, one (1) dentist representing postdoctoral general dentistry who is jointly appointed by the American Dental Education Association and the American Association of Hospital Dentists and four (4) consumers who are neither dentists nor allied dental personnel nor teaching in a dental or allied dental education institution and who are selected by the Commission, based on established and publicized criteria. In the event a Commission member sponsoring organization fails to select a Commissioner, it shall be the responsibility of the Commission to select an appropriate representative to serve as a Commissioner. A member of the Standing Committee on the New Dentist (when assigned by the ADA Board of Trustees) and the Director of the Commission shall be ex-officio members of the Board without the right to vote.

Section 3. TERM OF OFFICE: The term of office of the members of the Board of Commissioners shall be one four (4) year term except that the member jointly selected by the American Dental Education Association and the American Student Dental Association shall serve only one two (2) year term.
Section 4. POWERS:
A. The Board of Commissioners shall be vested with full power to conduct all business of the Commission subject to the laws of the State of Illinois, these Rules and the Constitution and Bylaws of the American Dental Association.

B. The Board of Commissioners shall have the power to establish rules and regulations not inconsistent with these Rules to govern its organization and procedures.

Section 5. DUTIES:
A. The Board of Commissioners shall prepare a budget at its winter meeting each year for carrying on the activities of the Commission for the ensuing fiscal year and shall submit said budget to the Board of Trustees of the American Dental Association for funding in accordance with Chapter XIV of the Bylaws of the American Dental Association.

B. The Board of Commissioners shall submit an annual report of the Commission's activities to the House of Delegates of the American Dental Association and interim reports, on request, to the Board of Trustees of the American Dental Association.

C. The Board of Commissioners shall appoint special committees of the Commission for the purpose of performing duties not otherwise assigned by these Rules.

D. The Board of Commissioners shall appoint consultants to assist in developing accreditation standards and conducting accreditation evaluations, including on-site reviews of predoctoral, advanced dental educational and allied dental educational programs and to assist with other duties of the Commission from time to time as needed.

Section 6. MEETINGS:
A. REGULAR MEETINGS: There shall be two (2) regular meetings of the Board of Commissioners each year.

B. SPECIAL MEETINGS: Special meetings of the Board of Commissioners may be called at any time by the Chairman of the Commission. The Chairman shall call such meetings on request of a majority of the voting members of the Board provided at least ten (10) days notice is given to each member of the Board in advance of the meeting. No business shall be considered except that provided in the call unless by unanimous consent of the members of the Board present and voting.

C. LIMITATION OF ATTENDANCE DURING MEETINGS: In keeping with the confidential nature of the deliberations regarding the accreditation status of individual educational programs, a portion of the meetings of the Commission, and its committees shall be designated as confidential, with attendance limited to members, the American Dental Association Trustee Liaison, selected staff of the Commission and affiliated accreditors. During this part of the meeting, only confidential accreditation actions may be considered.

Section 7. QUORUM: A majority of the voting members of the Board of Commissioners shall constitute a quorum.

Article III. APPEAL BOARD

Section 1. APPEAL BOARD: The appellate body of the Commission shall be the Appeal Board which shall have the authority to hear and decide appeals filed by predoctoral and advanced dental educational and allied dental educational programs from decisions rendered by the Board of Commissioners of the Commission denying or revoking accreditation.

Section 2. COMPOSITION: The Appeal Board shall consist of four (4) permanent members. The four (4) permanent members of the Appeal Board shall be selected as follows: one (1) selected by the Board of Trustees of the American Dental Association from the active, life or retired membership of the American Dental Association giving special consideration whenever possible to former members of the Council on
Dental Education and Licensure, one (1) member selected by the American Association of Dental Boards from the active membership of that body, one (1) member selected by the American Dental Education Association from the active membership of that body and one (1) consumer member who is neither a dentist nor an allied dental personnel nor teaching in a dental or allied dental educational program and who is selected by the Commission, based on established and publicized criteria. In addition, a representative from either an allied or advanced education discipline would be included on the Appeal Board depending upon the type and character of the appeal. Such special members shall be selected by the appropriate allied or specialty organization. Since there is no national organization for general practice residencies and advanced education programs in general dentistry, representatives of these areas shall be selected by the American Dental Education Association and the American Association of Hospital Dentists. One (1) member of the Appeal Board shall be appointed annually by the Chairman of the Commission to serve as the Chairman and shall preside at all meetings of the Appeal Board. If the Chairman is unable to attend any given meeting of the Appeal Board, the other members of the Appeal Board present and voting shall elect by majority vote an acting Chairman for that meeting only. The Director of the Commission shall provide assistance to the Appeal Board.

Section 3. TERM OF OFFICE: The term of office of members on the Appeal Board shall be one four (4) year term.

Section 4. MEETINGS: The Appeal Board shall meet at the call of the Director of the Commission, provided at least ten (10) days notice is given to each member of the Appeal Board in advance of the meeting. Such meetings shall be called by the Director only when an appeal to the appellate body has been duly filed by a predoctoral or advanced dental educational or allied dental educational program.

Section 5. QUORUM: A majority of the voting members of the Appeal Board shall constitute a quorum.

Section 6. VACANCIES:
A. In the event of a vacancy in the membership of the Appeal Board of the Commission, the Chairman of the Commission shall appoint a member of the same organization, or in the case of a consumer of the general public, possessing the same qualifications as established by these Rules, to fill such vacancy until a successor is selected by the respective representative organization.

B. If the term of the vacated position has less than fifty percent (50%) of a full four-year term remaining at the time the successor member is appointed, the successor member shall be eligible for a new, consecutive four-year term. If fifty percent (50%) of more of the vacated term remains to be served at the time of the appointment, the successor member shall not be eligible for another term.

Article IV. ACCREDITATION PROGRAM

Section 1. ACCREDITATION STANDARDS: The Commission, acting through the Board of Commissioners, shall establish and publish specific accreditation standards for the accreditation of predoctoral and advanced dental educational and allied dental educational programs.

Section 2. EVALUATION: Predoctoral and advanced dental educational and allied dental educational programs shall be evaluated for accreditation status by the Board of Commissioners on the basis of the information and data provided on survey forms and secured by the members of, and consultants to, the Board of Commissioners during site evaluations.

If the Board of Commissioners decides to deny, for the first time, accreditation to a new educational program or to withdraw accreditation from an existing program, the Board of Commissioners shall first notify the educational program of its intent to deny or withdraw accreditation. Such notice, together with announcement of the date of the next meeting of the Board of Commissioners, shall be sent to the educational program by certified mail, return receipt requested, within fourteen (14) days following the intent to deny or withdraw decision of the Board of Commissioners. Within thirty (30) days after receipt of such notice, the educational
program may, in writing, request a hearing before the Board of Commissioners at its next meeting. Within fifteen (15) days after receipt of the request, the Board of Commissioners shall schedule a hearing and notify the educational program of the date, time and place of such hearing. A request for a hearing due to the Board of Commissioner's decision to deny for the first time, accreditation to a new program, shall automatically stay the decision to deny accreditation. In the event the educational program that has been denied initial accreditation for the first time does not make a timely request for a hearing, the Board of Commissioners’ findings and proposed decision to deny accreditation shall become final.

Section 3. HEARING: Upon completion of an evaluation for accreditation status, the Board of Commissioners shall notify the predoctoral, advanced or allied dental educational program (hereinafter called “educational program”) of its findings and decision regarding the program’s accreditation status. Two types of hearings can be held to review the appropriateness of the decision made by the Commission:

A. CHALLENGE: This type of hearing is available to a program/institution that wishes to challenge the decision of the Commission to change its accreditation status or to a new program that wishes to challenge the decision of the Commission to deny, for the first time, initial accreditation. When an institution/program believes that the Commission has made an error in judgment, a hearing may be requested. The hearing before the Commission would be held at the next regularly scheduled meeting. Representatives of the institution/program may present arguments that the Commission, based on the information available when the decision was made, made an error in judgment in determining the accreditation status of the program. The educational program need not appear in person or by its representatives at the hearing. Legal counsel may represent the educational program at the hearing. During the hearing, the educational program may offer evidence and argument in writing or orally or both tending to refute or overcome the factual findings of the Board of Commissioners. The Director of the Board of Commissioners must receive any written evidence or argument at least thirty (30) days prior to the hearing. No new information regarding correction of the deficiencies may be presented.

B. SUPPLEMENT: An institution/program may request a hearing in order to supplement written information, which has already been submitted to the Commission. A representative of the institution would be permitted to appear in person before the Commission to present this additional information. When a hearing to provide supplemental information is desired, a written request is to be made to the Director of the Commission thirty (30) days prior to the meeting. The chairman and the Director of the Commission determine the disposition of the request and inform the requestor of the date, hour and amount of time which will be allocated for the hearing.

Section 4. APPEAL: In the event the final decision of the Board of Commissioners is a denial or withdrawal of accreditation, the educational program shall be informed of this decision within fourteen (14) days following the Commission meeting. Within fourteen (14) days after receipt of the final decision of the Board of Commissioners, the educational program may appeal the decision of the Board of Commissioners by filing a written appeal with the Director of the Board of Commissioners. The filing of an appeal shall automatically stay the final decision of the Board of Commissioners. The Appeal Board of the Commission shall convene and hold its hearing within sixty (60) days after the appeal is filed. The educational program filing the appeal may be represented by legal counsel and shall be given the opportunity at such hearing to offer evidence and argument in writing or orally or both tending to refute or overcome the findings and decision of the Board of Commissioners. No new information regarding correction of the deficiencies may be presented with the exception of review of new financial information if all of the following conditions are met: (i) The financial information was unavailable to the institution or program until after the decision subject to appeal was made. (ii) The financial information is significant and bears materially on the financial deficiencies identified by the Commission. The criteria of significance and materiality are determined by the Commission. (iii) The only remaining deficiency cited by the Commission in support of a final adverse action decision is the institution’s or program’s failure to meet the Commission’s standard pertaining to finances. An institution or program may seek the review of new financial information described in this section only once and any determination by the Commission made with respect to that review does not provide a basis for an appeal. The educational program need not appear in person or by its representative at the appellate hearing. The Appeal Board may
make the following decisions: to affirm, amend, remand, or reverse the adverse actions of the Commission. A decision to affirm, amend or reverse the adverse action is implemented by the Commission. In a decision to remand the adverse action for further consideration, the Appeal Board will identify specific issues that the Commission must address. The Commission must act in a manner consistent with the Appeal Board’s decisions or instructions. The Appeal Board shall advise the appellant educational program of the Appeal Board’s decision in writing by registered or certified mail. The decision rendered by the Appeal Board shall be final and binding. In the event the educational program does not file a timely appeal of the Board of Commissioners’ findings and decision, the Board of Commissioners’ decision shall become final.

Section 5. HEARING AND APPEAL COSTS: If a hearing is held before the Board of Commissioners, the costs of the Commission respecting such hearing shall be borne by the Commission. If an appeal is heard by the Appeal Board, the costs of the Commission respecting such appeal shall be shared equally by the Commission and the appellant educational program filing the appeal except in those instances where equal sharing would cause a financial hardship to the appellant. However, each educational program shall bear the cost of its representatives for any such hearing or appeal.

Article V. OFFICERS

Section 1. OFFICERS: The officers of the Commission shall be a Chair, Vice-Chair and a Director and such other officers as the Board of Commissioners may authorize. The Chair and Vice-Chair shall be elected by the members of the Commission. The Chair and Vice-Chair shall be active, life or retired member of the American Dental Association.

Section 2. DUTIES: The duties of the officers are as follows:

A. CHAIR: The Chair shall preside at all meetings of the Board of Commissioners.

B. VICE-CHAIR: If the Chair is unable to attend any given meeting of the Board of Commissioners, the Vice-Chair shall preside at the meeting. If the Vice-chair is unable to attend the meeting, the other members of the Board of Commissioners present and voting shall elect by majority vote an acting chair for the purpose of presiding at that meeting only.

C. DIRECTOR: The Director shall keep the minutes of the meetings of the Board of Commissioners, prepare an agenda for each meeting, see that all notices are duly given in accordance with the provisions of these Rules or as required by law, be the custodian of the Commission's records, and in general shall perform all duties incident to the office of Director.

Article VI. MISCELLANEOUS

The rules contained in the current edition of the American Institute of Parliamentarians Standard Code of Parliamentary Procedure shall govern the deliberations of the Board of Commissioners and Appeal Board in all instances where they are applicable and not in conflict with the Rules or the previously established rules and regulations of the Board of Commissioners.

Article VII. AMENDMENTS

These Rules may be amended at any meeting of the Board of Commissioners by majority vote of the members of the Board present and voting subject to the subsequent approval of the House of Delegates of the American Dental Association.

Revised: 8/10, 10/02, 10/97, 10/87, 11/82

Adopted by the Commission on Dental Accreditation, February 1, 2002. Approved by the ADA House of Delegates, October 2002.

Revisions adopted by the Commission on Dental Accreditation, August 2010. Approved by the ADA House of Delegates, October 2010.

Background: In response to growing concern over the amount of debt that dental students incur throughout their education and the role that dental education programs may have in addressing the student debt issue, the 2011 House of Delegates passed Resolutions 66H-2011 and 91H-2011:

66H-2011. Resolved, that the Board of Trustees with the assistance of appropriate councils and expert consultants, study, document and analyze the current and future economics of dental education, student debt and the impact on dental practice and access to care, utilizing existing environmental scan and other available data, and be it further

Resolved, that the Board with the assistance of CDEL and consultants with expertise in dental education identify innovations in dental education that reduce costs without diminishing quality and recognize barriers to broader implementation, and be it further

Resolved, that the Board, with the assistance of consultants with expertise in practice economics and subsidized care, consider the role educational institutions, students, residents and new graduates have played in the dental “safety net,” and innovative ideas to improve that function while reducing student debt, and be it further

Resolved, that the Board prepare a detailed report including short term and long range action recommendations to reduce dental student debt for consideration at the 2012 House of Delegates.

91H-2011. Resolved, that the appropriate councils and ADA agencies investigate the development and implementation of a student loan repayment grant program for dentists working in a non-profit community dental clinic, and report to the 2012 House of Delegates.

In addition, the Board of Trustees adopted Resolution B-204-2011 at its December 2011 meeting in support of Resolution 66H-2011:

B-204-2011. Resolved, that per the HOD Directive 66H-2011, the ADA President appoint a Task Force made up of three members of the Board of Trustees; two members of the Council on Dental Education and Licensure; one member of the Committee on the New Dentist; and other appropriate councils and expert consultants, which task force may engage external consultants as deemed necessary for the study outlined in Resolution 66H-2011, and monitor the study’s progress, and be it further
Resolved, that the Board prepare a detailed report including short term and long range action recommendations to reduce dental student debt for consideration by the 2012 House of Delegates.

Workgroup Appointed: In response to Resolution B-204-2011, in March 2012, Dr. William R. Calnon, president, appointed members to the workgroup as follows: Dr. Ken Rich, chair (6th district), Dr. Maxine Feinberg (4th district), Dr. Gary S. Yonemoto (14th district), Dr. James M. Boyle (CDEL Representative); Dr. Teresa A. Dolan (CDEL Representative); and Dr. Brian M. Schwab (New Dentist Committee Representative). Ms. Karen Hart, director of CDEL, Marko Vujicic, Ph.D., managing vice president, HPRC, and Dr. Anthony J. Ziebert, senior vice president, Education/Professional Affairs are providing staff support for the workgroup.

Progress Report on Task Force Activities: The ADA House of Delegates, through Resolution 66H-2011 and 91H-2011, requested a comprehensive analysis of the current and future economics of dental education, including student debt and how this is impacting both dental practice, particularly among newer graduates, and access to care for vulnerable groups.

The Board Taskforce on Dental Education Economics and Student Debt met via conference call on Wednesday, April 18, 2012. Meeting minutes are attached as Appendix 1. The Taskforce came to the consensus that following proposed study questions need to be addressed:

1. What are the operating costs of a dental school? Does institutional setting matter? How are these operating costs financed (e.g. tuition, government) and how has the financing pattern changed over time?
2. What are the trends in dental student debt? How does this compare to higher education in general?
3. What innovations have dental schools pursued to reduce operating costs?
4. How many loan forgiveness programs are available to dental students? How effective are these programs in reducing student debt and improving access to care for the underserved?
5. What impact does student debt have on graduates' employment choices?
6. What is the role of educational institutions, students, residents and new graduates in the dental 'safety net' and what innovations are there in recent years?
7. What innovations could dental schools do in collaboration with the American Dental Association to reduce student debt?
8. What are dental schools doing in regards to teaching debt management in regards to student loans.

A detailed table of the research questions; the data requirements (existing within current ADA, CODA and/or ADEA data or developed via new surveys by the Health Policy Resource Center); whether outside consultants will be required; and potential collaborators is attached as Appendix 2.

The Task Force learned that many of these issues on economics of dental education and student debt raised in Resolutions 66H-2011 and 91H-2011 are also the subject of a proposed study by the American Dental Education Association (ADEA). On July 8, 2011, the ADA received a request from the ADEA for non-aggregated, Association confidential survey data (non-de minimis), in particular, Group I, II, and III Surveys of Pre-doctoral Dental Education and Distribution of Dentists in the United States by Region and State. Resolution 48H-2008 requires that non-de minimis requests for Association intellectual property of potential significance must first be considered by the relevant council or Commission, and then be approved by the ADA Officers or Board of Trustees. As the educational surveys are used primarily for accreditation, the Commission on Dental Accreditation considered and approved the request from the ADEA. The Taskforce regarded the request by ADEA as an opportunity for collaboration in the specific research questions to be addressed and on proposed research methodologies. Collaboration with ADEA may also reduce redundancy in collecting data, and in addition, may produce more powerful results. At the June 2012 meeting of the Board of Trustees, the Task Force presented a resolution for consideration and the Board of Trustees approved the ADEA data request (B-50-2012).

Timeline for Completion of Studies: The Task Force discussed whether the timeline for the study, as specified by Resolution 66H-2011 is realistic, considering the amount of data that must be collected and
analyzed on such complex issues. The Taskforce determined that for the 2012 House of Delegates, a preliminary report with a timeline for completion of the study should be provided. Further, recognizing that the $230,000 in funding allocated by the 2012 House of Delegates has not been spent and will be returned to the general fund, the Board urges the House to allocate the $230,000 to the 2013 budget for completion of the study.

The proposed timeline for the study is as follows:

- **October 1, 2012**: Consultants identified
- **November 1, 2012**: Consultants contracted; draft methodology, including any new surveys required reviewed by Task Force
- **January 4 and 5, 2013**: Task Force meets in Chicago in conjunction with the National Roundtable for Dental Collaboration (NRDC) meeting
- **February 28, 2013**: Task Force review of preliminary findings
- **April, 2013**: National Symposium with formulation of action plan by the Task Force
- **September 2013**: Final Report to the BOT and HOD summarizing findings and recommendations for action

The Board presents the following resolution to the House of Delegates:

**Resolution**

113. **Resolved**, that the Board of Trustees’ Taskforce on Dental Education Economics and Student Debt conduct the research as outlined in its 2012 report and report findings to the 2013 House of Delegates, and be it further

**Resolved**, that any unspent amount from the $230,000 from the 2012 budget be returned to the Reserves and funding for completion of the study in 2013 come from the Reserve Account.

**BOARD RECOMMENDATION:** Vote Yes.

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Appendix 1. Minutes of the Task Force on Dental Education Economics and Student Debt
(Resolutions 66H-2011 and B-204-2011)
Wednesday, April 18, 2012

Call to Order: The Chair, Dr. Ken Rich, called a meeting of the Task Force on Dental Education Economics and Student Debt to order at 7:01 P.M. (Central Time) on Wednesday, April 18, 2012, via conference call.

Roll Call: Dr. Ken Rich (6th District), chair; Dr. Maxine Feinberg (4th District); Dr. Gary S. Yonemoto (14th District); Dr. James (Jim) M. Boyle (CDEL Representative); Dr. Teresa A. Dolan (CDEL Representative); and Dr. Brian M. Schwab (New Dentist Committee Representative).

ADA Staff: Ms. Karen M. Hart, director, Council on Dental Education and Licensure; Marko Vujicic, Ph.D., managing vice president, HPRC and Dr. Anthony J. Ziebert, senior vice president, Education/Professional Affairs.

Conflict of Interest Reminder: Dr. Rich read the following statement:

In accordance with the ADA Disclosure Policy, at this time anyone present at this meeting is obligated to disclose any personal or business relationship that they or their immediate family may have with a company or individual doing business with the ADA, when such company is being discussed. This includes, but is not limited to insurance companies, sponsors, exhibitors, vendors and contractors.

Review of the Workgroup Charge: Dr. Rich noted the Taskforce’s charge, reviewing House of Delegates Resolution 66H-2011 and Board of Trustees Resolution B-204-2011. He referred to an outline document provided to Taskforce members prior to the call and suggested that the members review the document and proposed potential study questions and objectives, one resolving clause at a time. The Taskforce members agreed.

Discussion of Resolution 66H-2011 Resolving Clause #1:

Resolved, that the Board of Trustees with the assistance of appropriate councils and expert consultants, study, document and analyze the current and future economics of dental education, student debt and the impact on dental practice and access to care, utilizing existing environmental scan and other available data…

The Taskforce reviewed the following potential questions that could be addressed by a study:

1. Why is dental school capacity increasing? Will it continue? There is a need for an analysis of supply and demand forces in the dental education market.
   - The Taskforce members agreed that this question needs to be studied. In particular, there is the perception that new schools are opening because they are “profit centers” for the sponsoring university.

2. What are the trends in student debt? There is a need for analysis of student indebtedness related to both higher education and dental education.
   - In addition to trends in student debt, the Taskforce came to the consensus that a trend analysis of the availability and the means of financing (government and foundation loan programs vs. private means of financing) should be addressed.

3. What are the operating costs of a dental school? Does institutional setting matter?
   - The Taskforce agreed that this question needs to be studied. There is currently no accurate data.
4. What is the average cost of a dental education and what percentage does tuition cover in the overall cost of dental education?
   - The Taskforce agreed that these questions need to be studied, but in particular, the question of actual cost to educate a dentist may be hard to determine and may vary a great deal from institution to institution. There is currently no accurate data.

5. Identify current loan forgiveness programs/incentives available to dental students.
   - The Taskforce agreed that this question needs to be studied and it should include military programs and scholarships.

6. What impact does/will student debt have on graduates’ employment choices?
   a. Education: Seek advanced training? General dentistry or a specialty?
   b. Practice Type: Owner or associate? Private sole practice, private group practice, community health center? Academia? Research?
   c. Federal dental service
   d. Practice Location: Urban? Rural? Underserved?

   - This data is difficult to get because graduates are very mobile, especially at 1, 3 and 5 years out of school. This question addresses the crux of the concern: that graduates no longer have the option of going into traditional, solo private practice due to their debt and instead, they are forced into corporate and group practices. As there are many business models for group practices, it may not be possible to gather data on all the potential business models. The Task Force felt that looking at broad categories of practice options to include owners; associates; and employees might yield more relevant results.

Discussion of Resolution 66H-2011 Resolving Clause #2:

Resolved, that the Board with the assistance of CDEL and consultants with expertise in dental education identify innovations in dental education that reduce costs without diminishing quality and recognize barriers to broader implementation, and be it further...

   What innovations have dental schools pursued to reduce costs?
   a. Identify schools that utilize extended campus facilities.
   b. Identify schools that utilize community-based clinics for clinical experience.
   c. Identify schools that participate (or not) in Medicaid or other safety net programs.
   d. Identify schools that changed course/content delivery systems to reduce costs (e.g., University of the Pacific; AT Still University School of Oral Health Sciences).

   - The most challenging part of this question is to define innovation. There was the suggestion that innovation in the basic sciences education and clinical sciences education should be considered separately.

Discussion of Resolution 66H-2011 Resolving Clause #3:

Resolved, that the Board, with the assistance of consultants with expertise in practice economics and subsidized care, consider the role educational institutions, students, residents and new graduates have played in the dental “safety net,” and innovative ideas to improve that function while reducing student debt, and be it further.....
1. Identify schools that recruit students committed to practicing in underserved communities.

2. What percent of the underserved receive dental care from dental students, residents and recent graduates?

3. How is this accomplished?

4. How could dental student, resident and recent graduate availability be increased to treat more underserved patients?

- The Taskforce was concerned that this is a complex issue, tying the reduction of student debt to impacting the access issue. There are dental education models at the predoctoral and postdoctoral level in which one of the primary missions of the programs is serving the underserved populations. A good example of this model is the numerous Lutheran Medical postdoctoral general dentistry and pediatric dentistry distance sites, many of which are located in underserved areas. The Indian Health Service model is another example of a loan forgiveness/debt reduction program for providing services on American Indian Reservations. It seems though, that the extent of these types of programs, and whether the numbers of these types of programs is increasing, has not been well-documented. Finally, there does not seem to be any definitive study on whether students and/or residents will settle in underserved areas if they have had a significant experience in underserved areas during their clinical training.

Discussion of Resolution 66H-2011 Resolving Clause #4:

Resolved, that the Board prepare a detailed report including short term and long range action recommendations to reduce dental student debt for consideration at the 2012 House of Delegates.

- Dr. Rich reported that ADEA is interested in doing a significant study on many of the same questions that were considered by the Taskforce in the first two resolving clauses. ADEA has data that the Taskforce needs, and the ADA has data that ADEA needs in order to complete a valid study. Collaboration with ADEA may reduce redundancy in collecting data, and in addition, may produce more powerful results if it comes from both organizations. The Taskforce passed the following motion unanimously:

  The ADA should collaborate with ADEA in a comprehensive study of the issues outlined by the Taskforce on Dental Education Economics and Student Debt in the first two resolving clauses of Resolution 66H-2011

The Taskforce discussed whether the timeline for the study was realistic, considering the amount of data that must be collected and analyzed on such complex issues. For the 2012 House of Delegates, a preliminary report with a timeline for completion of the study might be the most appropriate.

Next Steps:

1. Staff to draft a plan to collect the data. Conference call with Dr. Rick Valachovic on May 10, 2012 to discuss collaborative efforts.

2. Selection of date for a late summer meeting, possibly a symposium, once initial data has been collected and preliminary analysis has been performed.

Adjournment: The meeting adjourned at 8:15 PM.
Appendix 2. Economics of Dental Education and Student Debt

Proposed Policy Research Agenda

**Background:** The ADA House of Delegates, through Resolution 66H, requested a comprehensive analysis of the current and future economics of dental education, including student debt and how this is impacting both dental practice, particularly among newer graduates, and access to care for vulnerable groups. This document summarizes the specific research questions to be addressed, early ideas on proposed methodologies, and the collaborative arrangement with ADEA.

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<th>Research Question(s)</th>
<th>Details</th>
<th>Data and Approach</th>
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<td>What are the operating costs of a dental school? Does institutional setting matter? How are these operating costs financed (e.g., tuition, government) and how has the financing pattern changed over time?</td>
<td>Financial data on schools are very weak in the ADA surveys. Analysis would collect better data and compare schools.</td>
<td>Primary data collection from schools. Audited financial statements might be an option.</td>
<td>Primarily ADA though CODA (Vol 5) survey. Vol 5 survey to be reviewed and discussed at ADEA BFACA meeting in October 2012. Overall responsibility: ADA</td>
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<td>What are the trends in dental student debt? How does this compare to higher education in general?</td>
<td>Requires an analysis of student-level data on debt at graduation, debt at select points post-graduation and a comparison to other professions.</td>
<td>ADEA senior survey. Might require primary data collection on debt levels for those dentists 5 and 10 years out of school.</td>
<td>ADEA and ADA to collaborate, with ADA leading the analysis. Primary source of data is ADEA senior survey. Will need new survey of dentists 5, 10 years out of school. Overall responsibility: ADA</td>
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<td>What innovations have dental schools pursued to reduce operating costs?</td>
<td>Requires an analysis (e.g., case studies) of schools that utilize extended campus facilities, community-based clinics for clinical experience, participate in Medicaid or other safety net programs, innovations to content delivery systems to reduce costs (e.g., University of the Pacific, AT Still University School of Oral Health Sciences).</td>
<td>Primary data collection from select schools to produce case studies. ECU a good example: change in incentives for faculty; community education models.</td>
<td>ADA to collect data; however, collaboration with ADEA needed to ensure that dental schools will supply data and to help with analysis. Possible expert consultants: 1. Howard Bailit 2. Dom Di Paolo 3. Alex White Overall responsibility: ADA</td>
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<td>How many loan forgiveness programs are available to dental students? How effective are these programs in reducing student debt and improving access to care for the underserved?</td>
<td>Requires an inventory of key information on the various loan forgiveness schemes available to dentists as well as an evaluation of their impact on attracting dentists to rural and underserved areas.</td>
<td>Description of current programs available, applicants, recipients, key informant interviews. May require some additional primary data collection from agencies that administer programs and possibly from recipients.</td>
<td>Primarily ADA data collection and analysis. Source of data may be ADA government affairs division; state government affairs. Overall responsibility: ADA</td>
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<td>What impact does student debt have on graduates’ employment choices?</td>
<td>Requires isolating the role of student debt in choices of graduates over general vs. specialty training, ownership vs. employee status, solo vs. group practice, public setting vs. private practice, rural vs. urban location.</td>
<td>Analysis of ADEA senior survey, ADA new dentist survey. May require primary data collection.</td>
<td>ADEA and ADA data. Lit review may also yield information. Overall responsibility: ADA</td>
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<td>What is the role of educational institutions, students, residents and new graduates in the dental ‘safety net’ and what innovations are there in recent years?</td>
<td>Requires an analysis of the direct contribution to the safety net (e.g. what percent of the underserved receive dental care from dental students, residents) and indirect (e.g. what percent of new graduates participate in the dental safety net). Requires an analysis of how schools accomplish this (e.g. are students from underserved population recruited into training programs) and how this can be expanded.</td>
<td>Requires primary data collection from all schools plus select case studies of innovators.</td>
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<td>Requires primary data collection, probably through joint ADA-ADEA effort. Investigation of potential of nation-wide PGY-1 year.</td>
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<td>What innovations could dental schools do in collaboration with the American Dental Association to reduce student debt?</td>
<td>Requires survey of dental schools to determine barriers to innovations and whether the ADA has the expertise to help schools overcome the barriers.</td>
<td>Overall responsibility: ADA</td>
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<td>What are dental schools doing in regards to teaching debt management in regards to student loans.</td>
<td>There are no accreditation standards related directly to this question; although schools must have an overall practice management curriculum in place. In addition, there are federal requirements on disclosure of repayment terms, etc. on student loans. The specific question regarding the financial and debt management curriculum of dental schools requires a new survey.</td>
<td>Overall responsibility: ADA</td>
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The following resolution was adopted by the Eighth Trustee District and submitted on September 12, 2012, by Mr. Greg A. Johnson, executive director, Illinois State Dental Society.

**Background:** The ADA Library opened in 1927 and it has grown to be the premier library for the dental profession in the United States. It may be the largest, most comprehensive source for information related to dentistry in the world. The library is open to anyone seeking information about dental practice, dental procedures, dental materials, oral health, etc. It is staffed by professional librarians who serve the needs of researchers, academicians, article and book authors, and the general and specialty memberships of the dental profession in the United States and around the world. Dentists from around the country and the world visit the ADA Library when they come to Chicago.

Visitors to the library can peruse the extensive book and journal collections that span from the mid-1800s to the present. Journals are available from around the world. Members may borrow books, either in person or by phone or e-mail request. Searches can be requested and reference packets of articles e-mailed. The library staff identifies articles and develops search strategies for EBD, conducts MedLine searches, and provides many other services to support lifelong learning for the dental profession.

The ADA Library is facing a 60% budget reduction in 2013. More than half the staff will be out of jobs at the end of this calendar year, the library will be housed in smaller quarters, and it is presently questionable whether there will be any direct access to its materials by ADA members or the public. Member book loan services are proposed to be eliminated and most of the book collection will be dispersed to presently unknown or yet to be determined places. The journals budget may be reduced and funding for the Cochrane Library of EBD reviews is uncertain. Depending on the decision of the 2012 House of Delegates, all ADA Library services may be sunset, officially beginning in January 2013, but the downsizing process has already begun.

None of the library’s book collection is electronic. The library’s digital access to journal articles is not available to ADA members outside of the library, as outside-use licenses for that are prohibitively expensive. ADA member access to library computers is expected to be ending. For all intents and purposes, the ADA Library is being closed. In its place will be a limited information service, housed in much smaller quarters. A professional library is an invaluable resource that cannot be measured simply in monetary terms. It is an obligation of the dental profession to maintain a professional library as we are obligated to be perpetual students of dentistry. We have a world-class library at the ADA. It is a priceless, irreplaceable resource. It is estimated that $660,000 will need to be added to the ADA budget to restore the necessary funding of the ADA Library.

The ADA Board of Trustees issued a statement on the library funding on August 30, 2012 confirming that walk-in and library loans of material would be discontinued and that they have not yet determined what digital
services may be able to be offered to members. They are only now exploring potential partnerships with regional medical libraries. Also, there has been no discussion or plan made known as to the relocation or disposition of the vast number of historically significant documents or books contained within the library. The ADA should have a definitive plan before proposing dramatic changes and until that time the ADA Library should remain funded and operational for the benefit of our profession.

Resolution

159. Resolved, that funding of the ADA Library be increased in the 2013 budget in the amount of $660,000 to restore it to the 2012 funding level, and be it further

Resolved, that the ADA provide the membership additional information in the ADA News regarding the ADA Library and its resources so that this ADA member benefit can be more fully appreciated and utilized.

BOARD COMMENT: The Board is not supportive of this resolution. In considering the long-term financial sustainability of the ADA, the Board knew that decisive action was needed. The Board considered the cost and the value of all ADA programs as part of the budget process and ranked programs in terms of alignment with the ADA Strategic Plan in order to best allocate financial resources. Sun-setting of some programs was deemed necessary for expenses to match current and future revenues and present a balanced budget for 2013. After a thorough assessment and ranking of all programs of the ADA, some aspects of library use were determined to be of lower wide-spread usage and the Board agreed it was prudent to sunset those in 2013.

Last year, less than 1% of members used the library. As the methods of research and library use continue to evolve, the ADA must repurpose the library for more contemporary use. There is a growing trend from medical and other associations for online catalogs in place of hard copy materials. Library services will be narrowed in scope to those services that are most used and most impactful. Access to journal articles will continue in the same manner as they are available now, either in PDF format or in print by request. Archive use will also be unaffected; however, walk in services, including library loans of materials, will be discontinued. ADA Administration is currently researching how and where the extensive book collection will reside. The goal is to keep the collection intact, with a mechanism for access for members.

The library staff has always received high praise for their wonderful service to the members, and this will not lapse even though the method of the service delivery will change. There will still be library staff to respond to a variety of inquiries via telephone and email.

BOARD RECOMMENDATION: Vote No.

Board Vote: Resolution 159

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File 11 Resolution 159
NOMINATING NON-PROFESSIONAL (PUBLIC) MEMBERS OF CODA

The following resolution was adopted by the Fourteenth Trustee District and transmitted on September 14, 2012, by Dr. Thomas Schripsema, chair, Resolutions Committee.

Background: The Commission on Dental Accreditation consists of dentists, dental hygienists, dental educators, dental regulators and members of the general public. While the professional members of the Commission are selected by appropriate agencies, including the ADA, the public members are elected by the Commission itself. While public members need to maintain their independence, identifying candidates of integrity and responsibility is in the best interest of both the public and the professions. Providing the Commission with qualified candidates to consider beyond their own personal experience can only improve the process. Utilizing the resources of the Association to identify and vet potential candidates will assure wide geographic and demographic consideration.

Resolution

161. Resolved, that the ADA provide the Commission on Dental Accreditation (CODA) with qualified nominees to fill vacancies and expired terms of non-professional members of the Commission, and be it further

Resolved, that the Council on Dental Education and Licensure monitor CODA for changes in membership and provide the Board of Trustees with resumes of appropriate candidates for nomination in a manner timely to submit candidates for CODA consideration.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
The following resolution was adopted by the First Trustee District and submitted on September 16, 2012, by Dr. Judith M. Fisch, caucus chair.

**Background:** During the past decade or so, New York state adopted legislation requiring no less than PGY-1 for dental licensure. Connecticut, Minnesota and a growing number of states have allowed licensure with completion of PGY-1 in lieu of clinical examination. Several other states are considering this approach. This is in compliance with ADA policy regarding PGY-1 in lieu of clinical examination for licensure.

During this same period, there has been a significant increase in the number of PGY-1 positions created. American post graduate general dental programs currently offer from two to many dozens of placements. Most residency programs provide teamed experiences, in which residents learn in close proximity with dental staff, often interact with a range of medical residents and staff physicians. Some programs place residents in distant and solo settings, an isolated resident connected by tele-dentistry, with lectures provided over the internet and clinical supervision often indirect. These positions have little in common to experiences expected in hospitals or other academic/clinical settings.

This wide variability presently found in general dental residency programs, coupled with their evolving role in licensure by credentials, makes it important to ask whether all program designs are suitable, as they relate to licensure by credentials, as it was envisioned by the ADA when the policy was adopted.

**Resolution**

164. **Resolved,** that the ADA urges CODA, to examine the accreditation criteria for post graduate dentistry programs, as they currently relate to credentialing policy regarding PGY-1 in lieu of regional board examinations for state licensure. Specific concerns include but are not limited to the issue of supervision and assessment of postgraduate students in programs that are in locations remote from the sponsoring institutions, be it further

Resolved, that an update report on this issue be brought to the 2013 ADA House of Delegates.

**BOARD COMMENT:** The methods, means, and requirements for initial licensure to practice dentistry are determined by each state dental board and are not the purview of the Commission on Dental Accreditation. The Commission assesses the quality of dental education programs and whether those programs meet the accreditation standards. The Commission does not have an accreditation standard or policy related to a “preferred” method of state credentialing policy for individuals seeking licensure. Further, ADA Policy supports the concept of PGY-1 as a valid and reliable alternative to regional board examinations for licensure.
The Board is aware that CODA is reviewing Commission policy, procedure, and standards for education programs that extensively utilize distance sites for the clinical education portion of the curriculum. The Commission believes there may be concerns with the type of information received from programs when reporting additional off-campus sites. There are different types of off-campus site experiences that require different reporting requirements.

The Commission and its review committees are developing guidelines for reporting the addition of off-campus sites to ensure that the appropriate information is provided by the programs and considering whether off-site coordinators should be required to possess the same qualifications as program directors.

The Commission will consider this matter at its Winter 2013 meeting. Actions taken by the Commission will be reported to the communities of interest and the 2013 House of Delegates. While the Board is pleased to see CODA addressing this topic, it believes the Association’s concern about this issue should be formally noted through adoption of the following substitute resolution.

**164B. Resolved, that the ADA encourage CODA to examine accreditation criteria for faculty supervision and site coordinators of postgraduate dentistry programs that are in locations remote from the sponsoring institutions, and be it further**

**Resolved, that CODA be requested to provide a report on this issue to the 2013 House of Delegates.**

**BOARD RECOMMENDATION: Vote Yes on the substitute.**

**Board Vote: Resolution 164B**

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File 13 Resolutions 164 and 164B
COMMISSION ON DENTAL ACCREDITATION SUPPLEMENTAL REPORT 2 TO THE HOUSE OF DELEGATES: UPDATE ON ADA TASK FORCE ON CODA RECOMMENDATIONS

Background: As directed by Resolution 37H-2008 (Trans.2008:422), this report provides a progress report of the Commission on Dental Accreditation (CODA) in implementing recommendations from the 2008 Report of the Task Force on CODA. At its January, 29, 2009 meeting, the Commission received the ADA Task Force on the Commission on Dental Accreditation Report and Recommendations. The ADA report was discussed at great length and the 34 recommendations were reviewed. The Commission considered the report in the spirit of improving the structure, governance, policies, operating procedures, functionality and use of best practices. The consensus was that this could best be accomplished through the appointment of an ad hoc Subcommittee by the Commission chair, Dr. James Koelbl. In addition, the Subcommittee would interact directly with the ADA Monitoring Committee established by the House of Delegates through Resolution 37H-2008 at the 2008 ADA annual session.

Meetings in 2009 and 2010: At a joint meeting on July 31, 2009, the Subcommittee and the ADA Monitoring Committee formed a Joint Workgroup to study recommendations relating to the structure and finances of CODA. The Joint Workgroup held five conference call meetings in late fall of 2009 and winter of 2010. Ultimately, the Joint Workgroup concluded that the current CODA structure should be retained. In addition to the predominant advantages of this structure, the Joint Workgroup believed this recommendation was warranted by its observation of the changes that CODA had already implemented since receiving the CODA Task Force Report and recommendations. Regarding the recommendation on Commission financing, Workgroup members concurred that ADA has traditionally valued education and will likely need to support approximately half the cost of accreditation to maintain a strong educational system for the profession. Accordingly, the Joint Workgroup recommended a funding model with a goal of CODA assuming responsibility for 50% of total expenses, including both direct and indirect expenses. This will require successive increases in program annual fees at a rate of approximately 7.2% per year for six years, a rate approximately 3% higher than CODA’s anticipated annual cost-of-living increases.

The Subcommittee met twice at the ADA Headquarters Building in 2010. At the first meeting on February 4, 2010, the CODA Subcommittee provided input to the Joint Workgroup on Commission Structure and Finances. In addition, implementation status of the ADA recommendations was reviewed. At its second meeting on August 5, 2010, the CODA Subcommittee made recommendations to the Commission on implementation of the following ADA Task Force on CODA recommendations: 1, 2, 3, 6, 10, 13, 17, 19 and 23. At the August 6, 2010 meeting, the Commission reviewed the verbal report of the CODA Subcommittee, including the progress to date in implementing the 34 recommendations and a summary of the five conference calls of the Joint Restructure Workgroup. The Commission took the following actions
in response to the report:

- The Commission recommended retaining its current structure in conjunction with implementation of changes in functionality that has already been initiated (recommendation #’s 1, 2, and 3).
- The Commission adopted a funding model in which total expenses, direct and indirect, are shared equally by ADA and the Commission. The Commission will make annual adjustments to its fees over the next six years to achieve this balance (recommendation #’s 3 and 4).
- The Commission approved the definitions of accreditation, certification, recognition, credentialing, and licensure developed by the CDEL/CEBJA/CODA Workgroup on Definitions and these definitions were included the 2010 Supplemental Report of the Commission to the House of Delegates (recommendation #6).
- The Commission expressed its support for the CDEL Resolution to the 2010 HOD on CDEL recognition of interest areas in general dentistry. Further, the Commission determined that post-doctoral general dentistry education programs in Dental Anesthesia, Orofacial Pain and Oral Medicine continue to be eligible for accreditation by the Commission (recommendation #6).
- The Commission directed that new Commissioner Appointees be identified one year in advance of their term of service by the sponsoring organizations and participate in orientation activities that include attendance and observation at Commission meetings, appropriate Review Committee meetings and an accreditation site visit. The Commission will be responsible for covering the expenses associated with attending the Commission meetings, the Review Committee meetings and an accreditation site visit (recommendation #11).
- The Commission will solicit proposals from individuals or agencies to assess current Commission on Dental Accreditation communication efforts and assist in the development of and implementation of a detailed communications and public relations plan as outlined in the “Communication RFP” (recommendation #23).
- The Commission will investigate extending the site visit schedule from seven to eight years, in conjunction with a revision of the CODA Annual Surveys of Dental Education Programs. Revisions will take into account the need for interim monitoring of educational programs (recommendation #29).
- The Commission recommended the new Commission chair appoint an appropriate number of new members to the CODA Subcommittee and reappoint an appropriate number of current members to the CODA Subcommittee for an additional year to continue to evaluate and develop implementation plans for any outstanding and ongoing ADA Task Force on CODA recommendations. Furthermore, the Commission supported the reappointment of an ADA Monitoring Committee to assist the Commission in the evaluation and implementation of the ADA Task Force on CODA Recommendations.

ADA House of Delegates Adoption of Resolutions Related to the Commission on Dental Accreditation (2010): The following resolutions relating to the ADA Task Force on CODA Report and Recommendations were adopted by the 2010 ADA House of Delegates (HOD) in Orlando, Florida:

- Resolution 75H-2010—The HOD adopted the Commission and the ADA Monitoring Committee’s recommendation that the Commission maintain its current structure.
- Resolution 76H-2010—The HOD adopted the Commission and the ADA Monitoring Committee’s recommendation that Commission appointees be identified one year in advance of the start of their four-year term by their respective sponsoring organizations for additional training, including attending a Commission meeting, a relevant review committee meeting and a site visit as an observer. Both the Commission and the Monitoring Committee have noted that there is a steep learning curve for newly appointed
Commissioners. The HOD determined that the sponsoring organizations should pay the travel expenses associated with attendance at these meetings.

- Resolution 77H-2010—The HOD adopted the Commission and the ADA Monitoring Committee recommendation that the Commission adopt a funding model in which total expenses of the Commission, including direct and indirect, are shared equally by the ADA and the Commission. This will require the Commission to make annual adjustments to its fees to achieve this balance, decreasing ADA support from approximately 60% to 50% of total expenses. Annual fees will be increased by approximately 7% over the next six years, and to address this potential financial impact on the educational programs, the HOD recommends the Commission investigate extending the site visit schedule from seven to eight years, with the implementation of addition procedures for interim monitoring of programs.

- Resolution 11H-2010—The HOD revised the CDEL Bylaws to reflect that Council duties will include the recognition of interest areas in General Dentistry.

- Resolution 12H-2010—The HOD adopted the “Criteria for Recognition of Interest Areas in General Dentistry.”

Meetings in 2011: At the February 4, 2011 meeting, the Commission reviewed the verbal report of the CODA Subcommittee, including the progress to date in implementing the 34 ADA recommendations. In addition, the Commission reviewed a summary of the actions of the 2010 ADA House of Delegates relating to the ADA Task Force on CODA Report and Recommendations. The Commission took the following actions in response to ADA Task Force on CODA Report and Recommendations and in response to the resolutions adopted by the 2010 ADA HOD:

- The Commission adopted a six-month training period in 2012 for all new Commissioners whose appointments begin in 2013, which will include attendance at a Commission meeting, at the discipline-specific review committee meeting, and at an appropriate site visit. The Commission further directed that the effectiveness of the training period be evaluated at the end of the first cycle to determine if the length is sufficient to accomplish intended goals (recommendation #11).

- The Commission directed that all expenses associated with the six-month training period for new Commissioners be included in the Commission’s annual budget (recommendation #11).

- The Commission directed the annual accreditation fees and application fees for 2012 be increased 5.75%. This is less than the 7.2% increase proposed to meet the equitable split in expenses between the ADA and the Commission by 2016. This is due to an anticipated decrease in expenses from 2011 and an increase in revenue from initial accreditation applications over 2011 (recommendation #’s 3 and 4).

On August 4, 2011, both the CODA Standing Committee on Communication and Technology and the CODA Standing Committee on Quality Assurance and Strategic Planning met prior to the August 5, 2011 Commission meeting. Both Standing Committees extensively discussed the ADA Task Force on CODA recommendations relevant to the charges of each committee. In particular, the Committee on Quality Assurance and Strategic Planning noted that the majority of the strategic planning recommendations had yet to be addressed, as the recommendations called for the hiring of outside expertise to facilitate the Commission’s strategic planning process. While strategic planning expertise was available within the ADA at the time of the release of the ADA Task Force Report, this expertise was no longer available. The Committee considered attempting to strategic plan without outside facilitation; however, after further discussion, the committee came to the consensus that there was insufficient expertise among current Commission staff and volunteers to meet the intent of the strategic planning recommendations. In addition, as strategic planning processes are the same across disciplines and institutions, hiring an outside facilitator would efficiently allow the committee to focus its expertise on a strategic plan with measurable outcomes specifically for the Commission. The Committee on Quality Assurance and Strategic Planning also discussed recommendation #12 on unannounced site visits and determined that additional information was needed before a recommendation on implementation can be made to the Commission. The committee directed staff to contact
those agencies that use unannounced visits for information on the criteria for conducting an unannounced visit, policies related to unannounced visits, and the agencies' experience in conducting those visits.

At the August 5, 2011 Commission Meeting, progress to date in implementing the 34 ADA recommendations was reviewed. The Commission took the following actions in response to ADA Task Force on CODA Report and Recommendations from the CODA Standing Committee on Communication and Technology:

- The Commission directed the circulation of the electronic newsletter (CODA Communicator) to the CODA Standing Committee on Communication and Technology for review prior to each publication.
- The Commission directed CODA staff to refine the distribution process used to disseminate the newsletter to create smaller distribution groups; and directed CODA staff to better emphasize the importance of adding the CODA to the recipient’s address book to alleviate loss of the newsletter in spam filters (recommendation #21).
- The Commission directed the establishment of a “Question and Answer Room” beginning at the 2012 American Dental Education Association Annual Session, with the goal of providing an opportunity for program administrators and faculty to meet CODA staff and Commissioners to increase accessibility to the Commission and provide one-on-one time for questions and discussion (recommendation #22).
- The Commission directed CODA staff to submit to the ADA Communications and Marketing Division the CODA Strategic Communication’s Plan worksheet to initiate the process of developing a CODA-specific communication and marketing strategy. The Commission further directs that the Standing Committee engage with the Communications and Marketing Division to establish the proposed plan and provide future updates to the Commission (recommendation #23).
- The Commission directed the Standing Committee on Communication and Technology to further study the feasibility of a system for continuous monitoring of programs, including development of criteria and guidelines and determining the methods and frequency for continuous monitoring. Further, the Standing Committee could present an update report on this topic, including a framework for continuous monitoring of programs, at a future Commission meeting (recommendation #29).
- The Commission directed the CODA Standing Committee on Communication and Technology to continue to monitor enhancements in technology for the purpose of streamlining the self-study and accreditation process (recommendation #30).
- Based on the recommendation from the Committee on Quality Assurance and Strategic Planning, and in order to begin the strategic planning process as outlined in recommendation #28, the Commission adopted a resolution to request financial resources from the 2011 ADA House of Delegates to hire outside facilitation to assist the Commission in developing a strategic plan.

The CODA Subcommittee and the ADA Monitoring Committee met jointly following the open portion of the Commission meeting on August 5, 2011. The committees reviewed the Commission actions related to the recommendations from the Committee on Communication and Technology and the Committee on Quality Assurance and Strategic Planning. The ADA Monitoring Committee members were supportive of all the Commission actions in response to the committee recommendations, including the Commission request for funding to hire an outside, strategic planning facilitator. In addition, the committees considered the reappointment of an ADA Monitoring Committee to assist the Commission in the evaluation and implementation of the ADA Task Force on CODA Recommendations. While the committees acknowledged that the working relationship between the ADA Monitoring Committee and the Subcommittee has been highly effective in assisting the Commission in implementation of the ADA Task Force Recommendations, the changes initiated by the Commission regarding transparency in communication have made it feasible to utilize the ADA Council on Dental Education and Licensure (CDEL) as the on-going mechanism for communication and awareness between the ADA and the Commission, in addition to the ADA Board Liaisons. It was also noted that ADA Bylaws duties of CDEL includes:

- Act as the agency of the Association in matters related to the evaluation and accreditation of all dental educational, dental auxiliary educational and associated subjects.
- Study and make recommendations including the formulation and recommendation on policy on:
(1) Dental education and dental auxiliary education.

(6) Associated subjects that affect all dental, dental auxiliary and related education.

The CDEL budget for 2012 would have to be increased to accommodate CDEL member travel to the two yearly Commission meetings; however, there would be no overall impact on the ADA budget, as the ADA Monitoring Committee would no longer require travel funding.

ADA House of Delegates Adoption of Resolutions Related to the Commission on Dental Accreditation (2011): The following resolutions relating to the ADA Task Force on CODA Report and Recommendations were adopted by the 2011 ADA House of Delegates (HOD) in Las Vegas, NV:

- Resolution 39H-2011—The HOD adopted the Commission and the ADA Monitoring Committee’s recommendation that the ADA Monitoring Committee be sunset, and that the Council on Dental Education and Licensure, as well as the ADA Trustee Liaisons to CODA and CDEL, serve as the ongoing mechanism for monitoring and communicating accreditation matters among ADA agencies and the Commission.

- Resolution 40H-2011—The HOD adopted the Commission’s request that the ADA allocate funding up to $23,750 for the Commission on Dental Accreditation to engage an outside facilitator to design and support its strategic planning efforts as directed by the 2008 ADA Task Force on CODA Report and Recommendations.

Meetings in 2012: As directed by the Commission, an ad hoc Committee on Alternative Site Visits of the Standing Committee on Communication and Technology was formed. The purpose of the ad hoc Committee was to advise the Standing Committee on a potential pilot project related to alternative site visits, including collecting information, conceptualizing the project and determining an action plan. The ad hoc Committee was composed of site visit consultants and Standing Committee members and met via teleconference on July 9, 2012. Potential benefits and potential complications were discussed related to the alternative site visit process using technology in place of on-site visits. Concerns were primarily related to privacy, HIPAA, technology support, transmission of information, United States Department of Education regulations requiring an on-site accreditation site visit, and consistency of the accreditation process. The ad hoc Committee came to the conclusion that alternative methods, such as video conferencing or teleconferencing, could be most appropriately used by the consultants who are on-site to conduct interviews of personnel at off-campus sites. The ad hoc Committee did not believe that alternative methods should be used as a substitute to the on-site visit of additional sites, if the Commission must conduct program reviews of the off-campus sites beyond interviewing off-site personnel. Further, the ad hoc Committee recommended that CODA not move forward with a pilot study at this time; however, the ad hoc Committee felt that a survey should be sent to program director, deans/CAO’s and CEO’s of accredited programs/institutions to gather data on the program’s ability to comply with necessary privacy and infrastructure requirements that may be necessary.

At its July 24, 2012 meeting, the Standing Committee on Communication and Technology concurred with the ad hoc Committee’s recommendations. The Standing Committee also reviewed the Communication Plan that was submitted by the ADA’s Communication and Marketing Division (recommendation #21 and #23). The Standing Committee learned that CODA staff had participated in several meetings with the Communications staff, who recommended that a communications survey be developed and circulated to CODA’s communities of interest to gauge the effectiveness of current CODA communications. The Standing Committee reviewed and approved the proposed survey with slight modification. The Committee believed that the survey could be circulated over the next year and data analyzed for review at the summer 2013 meeting of the Commission.

The Standing Committee reviewed the comments from the Commission’s education review committees related to continuous monitoring of programs (recommendation #29), noting that most review committees requested clarity on the expectation of a continuous monitoring process. The Committee also reviewed the United States Department of Education regulations related to this topic, as well as the various policies and procedures currently in place to continuously monitor programs. The Committee discussed the use of Aptify technology, as a way to continuously monitor programs in the future. The Committee also noted that the Commission’s Annual Survey of Accredited Programs as well as the CODA policies on program change,
authorized enrollment, teach-out, off-campus sites, complaints, and third party comment provide several
mechanisms through which programs would continuously update the commission on program changes, thus
providing a robust continuous monitoring process.

The Committee learned that the Annual Surveys of Accredited Programs are currently under significant
revision by the Liaison Committee on Surveys and Reports. One of the goals of the revision of the surveys is
to develop questions that will enhance the ability of the Commission to continuously monitor programs. The
Committee noted, however, that many programs are not fully aware of the expectation of some policies such
as the policy on program change or the requirement to note changes in the annual survey and also report the
change directly to the CODA office. It was believed that further explanation of the expectations regarding
each policy could ensure that programs inform the Commission of changes on an ongoing basis to facilitate
continuous monitoring. Following lengthy discussion, the Standing Committee concluded that CODA’s
current methods for continuous monitoring of programs provides good oversight of program change and
should be maintained, though it may be necessary to further educate programs regarding the expectation of
keeping the Commission informed of changes through various CODA policy.

CODA staff reported to the Standing Committee that the ADA Information Technology Division is working with
Aptify developers to construct a web-based platform that will serve the business needs of the ADA’s various
departments. For CODA, Aptify development is to begin in 2013 or 2014 and will likely enable CODA to
collect program reports and self-study documents through an electronic platform. There may also be
functionality to enable site visit teams to communicate through private discussion areas on the site. CODA
staff will continue to inform the committee as plans are underway to develop CODA’s usage of Aptify
(recommendation #30).

At the August 9, 2012 meeting, the Commission adopted the following recommendations of the Standing
Committee on Technology and Communication related to the ADA Task Force on CODA Report and
Recommendations:

- The development of a communications plan will be monitored and Resolution 55 will be resubmitted,
  requesting a dedicated staff position for communication initiatives, upon completion of the
  communications plan (recommendations #’s 21, 23, and 24).

- The Question and Answer Room at annual American Dental Education Association meetings will be
  continued and the feasibility of funding additional Question and Answer Rooms at annual meetings of
dental organizations during the period of standards revisions will be explored (recommendation #21).

- CODA staff are directed to refine the distribution and receipt process for the CODA electronic
  newsletter (CODA Communicator) (recommendation #21).

- CODA staff, with support from the ADA Communication and Marketing Department, will distribute the
  survey on CODA communication to the communities of interest and the Standing Committee will
  analyze the data at its Summer 2013 meeting, with a report to the Commission at the same meeting
  (recommendation #21 and #23).

- CODA staff are directed to monitor enhancements in technology related to streamlining the self-study
  and accreditation process, including the utilization of Aptify (recommendation #29 and #30).

- CODA staff are directed to maintain the current continuous monitoring process, with reports to
  CODA’s review committees when program compliance is questioned or when policy dictates CODA
  action. CODA staff are directed to inform accredited programs of the expectation of reporting, per the
  specific guidelines of each CODA policy, as a mechanism for continuous monitoring of programs
  (recommendation #29).

- The study of alternative methods for conducting site visits is discontinued. The Commission will
  continue to monitor educational and accreditation practices, which may allow for a revisiting of this
  topic at a future date. The Commission affirmed the practice of using video conferencing or
  teleconferencing by consultants who are stationed at the program’s home site to conduct interviews,
  only, of personnel at off-campus sites (recommendation #30).
The Standing Committee on Quality Assurance and Strategic Planning was charged with developing a strategic plan for the Commission’s consideration in response to ADA Task Force on CODA recommendation #28. The Commission obtained the services of Mr. Bennett Napier, CAE, Chief Staff Executive of the National Association of Dental Laboratories, to facilitate the strategic planning process. The Committee on Quality Assurance and Strategic Planning met on February 1, 2012 and developed a draft mission statement, vision statement, and values statement, along with a draft strategic plan. The draft plan was submitted to the Commission at the February 3, 2012 meeting, with Commissioners given the opportunity to provide input until June 1, 2012. Following the comment period, the Committee on Quality Assurance and Strategic Planning met on August 8, 2012 to consider all input on the draft documents and to finalize documents for discussion at the upcoming Commission meeting. The draft mission, vision, and values statements, along with the draft strategic plan, were finalized and adopted by the Commission at the August 9, 2012 meeting (Appendix 1).

Summary of Progress on Implementation of ADA Task Force on CODA Recommendations:

1-CODA should restructure to better meet the current and future needs of the dental profession and the public. (Structure)

2-CODA should conduct a comprehensive investigation of appropriate structures. This investigation should build on and extend the work of the Task Force. (Structure)

3-CODA should develop a detailed business plan, complete with timelines and fiscal implications for implementing any recommendations regarding structure. (Structure)

- At the 2010 ADA Annual Session, the HOD adopted the Commission and the ADA Monitoring Committee’s recommendation that the Commission maintain its current structure.
- At the 2010 ADA Annual Session, the HOD adopted the Commission and the ADA Monitoring Committee recommendation that the Commission adopt a funding model in which total expenses of the Commission, including direct and indirect, are shared equally by the ADA and the Commission. This will require the Commission to make annual adjustments to its fees to achieve this balance, decreasing ADA support from approximately 60% to 50% of total expenses.

4-CODA and the ADA should maintain their current legal and fiscal relationship. (Governance)

- The legal and fiscal relationship is currently defined in the Bylaws of the American Dental Association and the Rules of the Commission on Dental Accreditation. This relationship is described as, “…in the best interests of the dental community” in the ADA Task Force on CODA Report. Neither the Commission, nor the ADA Task Force, has recommended any changes in the CODA-ADA legal relationship. In regards to the fiscal relationship, the HOD adopted the Commission and the ADA Monitoring Committee recommendation that the Commission adopt a funding model in which total expenses of the Commission, including direct and indirect, are shared equally by the ADA and the Commission (see the implementation of recommendation #3 above). In addition, the Commission will clearly report the full extent (direct and indirect expenses) of ADA financial support when determining its annual budget.
- In 2011, the Commission covered approximately 53% of total expenses due to a greater than anticipated increase in the number of applications for initial accreditation and a decrease in expenses due to four unfilled staff positions.
- For 2013, the ADA has requested the Commission continue to cover at least 53% of expenses through an increase in annual fees of 8%. The agreement between the Commission and the House of Delegates in 2010 was to achieve a 50%-50% split in expenses with the ADA by 2016.

5-CODA and the ADA should clarify their respective roles, responsibilities and expectations and communicate these to their communities of interest. (Governance)

- The ADA Task Force on CODA “…investigated the advantages and disadvantages of creating a formal Memorandum of Understanding (MOU) that defines the respective roles and responsibilities of
the ADA and CODA. While this option works for several other accreditation agency/professional association models, the Task Force believes that an MOU for the ADA and CODA may become too cumbersome, too inflexible, and too broad and that it may also result in unintended consequences."

The Commission affirmed that CODA is an agency of the ADA and agreed with the ADA Monitoring Committee that the term “arms-length” should not be used. As part of the communities of interest, ADA input on policy decisions should be considered due to its prominence in representing a significant proportion of the profession and employers of graduates of education programs, while it would not be appropriate for ADA to have influence on accreditation decisions regarding individual education programs. The Commission has a written policy on conflict of interest that has recently been reviewed and updated. This policy is contained in its Evaluation and Operational Policies and Procedures (EOPP) document that is publicly available. The Conflict of Interest Policy is extensively covered in both CODA orientation sessions and information sessions for communities of interest. There are USDE criteria regarding the relationship between a sponsoring organization and its accrediting agency, which includes the requirement that there be a conflict of interest policy that provides for protection from undue influence from any one group and a requirement that CODA must listen to all stakeholders, including the ADA.

- At its September 2011 meeting, the ADA Board of Trustees adopted Resolution B-175 which states:

B-175. Resolved, that the BOT create a BOT Workgroup to review current ADA and CODA relationships as to accreditation and recognition responsibilities as related to all present and new dental education programs with a report back to the December 2011 BOT meeting.

In particular, the Workgroup was formed to study the issues associated with the Commission’s decision in August 2011 to begin developing accreditation standards for dental therapy education programs. The Workgroup came to the consensus, and reported to the ADA Board of Trustees, that a Memorandum of Understanding (MOU) between the ADA and CODA should be developed in an effort to minimize future communication problems. While understanding that a MOU would take a fair amount of effort, the Workgroup maintained that a MOU has the potential to be proactive and could serve to diffuse divisive issues.

- The Commission has included the development of a MOU with the ADA in its strategic plan (see Appendix 1).

- CODA should openly collaborate with its communities of interest to resolve the issue of perceptions versus realities of CODA accrediting educational programs in non-recognized specialty areas of general dentistry and publicize the results of this process. (Governance)

- The Commission, CDEL, and CEBJA each endorsed the definitions of the terms accreditation, certification, recognition, credentialing and licensure. These definitions were disseminated through the CODA Supplemental Report to the 2010 House of Delegates and the ADA Monitoring Committee annual report to the 2010 House of Delegates. These definitions are also posted on the CDEL and CODA portions of the ADA website where appropriate.

- The term "non-recognized specialty areas of General Dentistry" is no longer used to describe interest areas of General Dentistry that are not ADA-recognized specialties. The use of the words "non-recognized specialty" has led to misunderstandings among the Commission’s communities of interest. The most accurate term is: "interest areas of General Dentistry." The Commission policy and procedures has been revised to reflect this change.

- At the 2010 ADA Annual Session, the HOD revised the CDEL Bylaws to reflect that Council duties will include the recognition of interest areas in General Dentistry. The HOD also adopted the “Criteria for Recognition of Interest Areas in General Dentistry.”

- CODA should extend its meeting format to allow more time for discussion regarding accreditation decisions. (Policies)
At the January 2009 Commission meeting, the closed portion of the meeting was moved to the afternoon of the first day, which allowed significantly more time for accreditation discussions and decisions. In addition, detailed, written explanations of outstanding recommendations are provided for all programs that face adverse actions (i.e., intent to withdraw or withdrawal) or for programs reporting a major change. The written explanations have triggered additional questions and discussion of individual programs by the Commissioners.

8-CODA should define the composition of the specialty review committees regarding the number of content experts, and should develop procedures for determining that a critical threshold of generalist, specialist and public members is available for each decision at the review committee level. (Note: The ADA Task Force is not recommending any changes in review committee composition for predoctoral, dental hygiene, dental assisting, dental laboratory technicians and advanced educational general dentistry/graduate programs.)

(Policies)

- The composition of each review committee is defined in the Commission’s Evaluation and Operational Policy and Procedures (EOPP) manual. The policy and procedures regarding the critical threshold of the various categories of RC members is also defined in EOPP. There is a process for adding additional content experts to advanced specialty review committees when the workload of the RC warrants the additional members.

9-CODA should continue to include a public member on each review committee. (Policies)

- Each review committee has a public member. There are no plans to change this policy.

10-CODA should establish a system to permit an academic program to postpone its review if a critical threshold of generalist, specialist and public members is not available at that review committee meeting.

(Policies)

- At the August 6, 2010 Commission meeting, the Commission approved the following addition to the “Summary of Review Committee Structure” as outlined in EOPP: “10. The Review Committee chairperson may reschedule the date of the Review Committee meeting if there is not an adequate number of content experts on the assigned date of the meeting.”

11-CODA should change the term of commissioners from the current policy of one four-year term to the possibility of two three-year terms if desired by the sponsoring agency and by CODA. (Policies)

- In-depth analysis by the Joint Workgroup on CODA Structure and Finances determined that this recommendation is linked with recommendations #1 and #2 on CODA structure and presents significant complications to the functioning of the Commission. The Joint Workgroup noted that three-year terms would be inconsistent with the practices of other ADA agencies and external appointing organizations. The reappointment process for two sequential terms and the 50% rule for filling vacancies would present challenges. The growth in expertise among Commissioners could be compromised if individuals do not continue with the second term. For these reasons, the Joint Workgroup came to the conclusion that changing the terms of commissioners would not be in the best interest of the Commission at this time and both the Commission and the ADA Monitoring Committee agreed with this conclusion.

- The Commission has noted that even with the current in-house training for new Commissioners prior to the start of their term, it still takes a number of meetings for Commissioners to develop sufficient expertise in Commission philosophy, policy and procedure. The Commission agreed that the intent of this ADA Task Force recommendation is to allow Commissioners to utilize the expertise which they have developed over a longer period of time. To this end, the Commission considered different ways of implementing this recommendation without having to change the actual terms of the Commissioners. At the February 2011 Commission meeting, the Commission adopted a six-month training period in 2012 for all new Commissioners whose appointments begin in 2013, which will include attendance at a Commission meeting, at the discipline-specific review committee meeting,
and at an appropriate site visit. The Commission directed that all expenses associated with the six-month training period for new Commissioners be included in the Commission's annual budget due to concerns on the budgetary impact of this requirement on the smaller sponsoring organizations.

12-CODA should consider site visit flexibility including the authority to conduct unannounced site visits when deemed necessary. However, the Task Force does not support the concept of routinely conducting unannounced site visits at this time. (Policies)

• The Standing Committee on Quality Assurance and Strategic Planning considered policy and procedures regarding site visit flexibility, including a review of logistics and the implications on both the Commission and the educational programs, of unannounced site visits prior to the August 2011 Commission meeting. The Committee reviewed policy in this regard from other accrediting agencies, including the circumstances under which an unannounced site visit would take place. The Committee concluded that the ill-will generated by conducting unannounced site visits would outweigh the potential benefit of such a policy. The Committee noted that the Commission can be timely in the decision-making process through the use of mail ballots. While a policy on unannounced site visits would be useful in the instances of a breach of integrity, such breaches are quite rare. The Integrity Policy already allows for immediate withdrawal of accreditation if:

The Commission concludes that the program has engaged in illegal conduct or is deliberately misrepresenting itself or presenting false information to the faculty, staff, students, the public or the Commission; or “the program fails to provide fully and truthfully all pertinent information and materials requested by the Commission.”

13-CODA should enhance its pre-nomination education process that provides information regarding expectations and duties of commissioners, review committee members and site visitors. This information should be made available by CODA to all communities of interest and interested individuals. (Operating Procedures)

• A cover letter detailing information regarding expectations and duties of commissioners, review committee members and site visitors will be disseminated in the following ways: 1) Attached to all nomination forms; 2) Posted on the CODA portion of the ADA website; 3) Provided at the ADA and ADEA open hearings along with other written materials; 4) Verbally referenced at the beginning of open hearings at the ADA and ADEA meetings; 5) Hyperlinked from the CODA Communicator.

14-CODA should continue the nomination process it has initiated. This process calls for multiple nominations from each group with nominations to be evaluated by CODA’s Nominating Committee based on criteria developed by CODA. The nomination process should be strongly articulated to all nominating communities. (Operating Procedures)

• The Commission adopted a revised policy on nominations to specialty or discipline specific positions on review committees at the July 2009 meeting. The revised policy states that nominating organizations must submit at least two (2) individuals for the Standing Committee on Nominations to consider. Organizations may rank their nominees in order of preference; however, the ranking is just one factor in considering the nominations. In addition, if fewer than two nominees are submitted, the appointment process will be delayed until such time as the minimum number of required nominations is received. The requirement of at least two nominations is clearly outlined in the letters sent by the Commission soliciting nominees.

15-CODA commissioners, review committee members, site visitors and volunteers should serve the interest of CODA without personal or member organization profiles or agendas. This policy should be clearly articulated internally, and strongly articulated externally to all relevant organizations that supply persons for positions on CODA or any of its working committees. (Operating Procedures)
The Commission strengthened the existing portion of the “Conflict of Interest Policy” by implementing the following at the July 2009 Commission meeting: 1) At the beginning of the closed session of each Commission and Review Committee meeting, the Commission/Review Committee chair will reiterate that Commissioners are expected to evaluate each accreditation action, policy decision or standard adoption for the overall good of the public. Although Commissioners and most Review Committee members are appointed by designated communities of interest, their duty of loyalty is first and foremost to the Commission. 2) At the beginning of the open session of each Commission and Review Committee meeting, the Commission/Review Committee chair will read a statement emphasizing that members’ duty of loyalty is first and foremost to the Commission. 3) Commissioners and Review Committee members will no longer refer to the sponsoring organizations that have appointed them when introducing themselves at meetings. The Commission meetings now open with the roll call and introduction of Commissioners by name and home location rather than by the organization they represented. 4) Case studies on conflict of interest presented at orientation sessions for new members have been expanded and emphasized. 5) Information and a case study for group discussion on this topic will continue to be an emphasized topic at future community of interest training sessions.

16-CODA should continue to develop and improve an orientation and training process for volunteers after the volunteer is selected but before the volunteer assumes the responsibilities of the position. (Operating Procedures)

New site visitor training, new Review Committee member training, and new Commissioner training have been expanded in a workshop format facilitated by Commission staff and experienced volunteers. Prior to the workshops, volunteers are required to complete six online training/assessment modules. Commission staff continues to refine and modify the training, based on input from the participants solicited after the training session is completed. In addition, new site visitors who are unable to attend the in-house training session must observe an experienced consultant on a site visit prior to being assigned as a site visitor. See also the response to ADA recommendation # 11 regarding the “redshirt year.”

New Commissioners are now required to also observe a site visit within their first year of service on the Commission.

17-CODA should require all review committee members to observe at least one site visit. (Operating Procedures)

This recommendation was implemented by the Commission at the August 2010 meeting through minor changes in existing policy. The requirement that all review committee members observe at least one site visit was added to the “Summary of Review Committee Structure” as outlined in EOPP: “9. Review Committee members who have been on a site visit within the last two (2) years prior to their appointment on a Review Committee should observe at least one site visit within their first year of service on the Review Committee.”

New Commissioners are now required to also observe a site visit within their first year of service on the Commission.

18-CODA should require that all specialty areas of practice continue to be responsible for funding the formal training of site visitors and should provide content expertise for the training curricula. CODA staff should continue to conduct the training and assure that the training is well organized and consistent across all specialty areas. (Operating Procedures)

The Commission currently is responsible for the formal training of site visitors and provides content expertise for the training curricula. New site visitors from each discipline are required to attend an in-house training session at the ADA Headquarters, with the entire group attending lectures on general policies and procedures, and discipline-specific breakout groups doing exercises on report-writing.
and standards review. CODA staff conducts the training, and post-training surveys show a significant majority of participants regard the training as well-organized.

- CODA staff conduct supplemental site visitor training upon request of the dental specialty sponsoring organizations.

19-CODA should require that all site visitors not participating in site visits at least every two years should participate in a training exercise. (Operating Procedures)

- This recommendation was implemented by the Commission at the August 2010 meeting through minor changes in existing policy. The requirement that all site visitors not participating in site visits at least every two years should participate in a training exercise was added to the “Policy Statement on Consultant Training” as outlined in EOPP: “Consultants who have not been assigned on a site visit during the previous two years must re-attend the in-house training provided to new consultants; observe a site visit in the appropriate discipline; or attend the regularly scheduled update sessions at the American Dental Education Association (ADEA) Annual Meeting, before being assigned to evaluate a program on a site visit.”

20-CODA should establish a system by which all members of site visit teams, including the chair, are evaluated. (Operating Procedures)

- Evaluation forms for all members of site visit teams, including the chair, have been revised, expanded, and made more comprehensive. These forms were implemented starting with the fall 2009 site visits. Evaluations are done anonymously and electronically through the ADA Survey Center. In addition, the forms are pre-populated with relevant information to reduce the time burden on the program, institutional personnel, and CODA volunteers that are requested to complete the evaluations. Discussion and evaluation of survey results is now a regular agenda item for each January review committee meeting and is reported to the Commission at the Winter meeting via the review committee minutes.

21-CODA should communicate more effectively with its communities of interest by improving the quality and content of its communications. The processes of communication should also be improved. (Functionality)

- Recommendation #21 is being considered together with recommendation #s 23 and 24. The Commission’s Standing Committee on Communication and Technology is currently working with the ADA Division of Communication to develop an effective communication strategy to improve the quality and the content of Commission communications with the communities of interest.

- At the August 9, 2012 meeting, the Commission took several actions to address the effectiveness of its’ communication efforts, including: monitoring the development of a communications plan with the intent of resubmitting Resolution 55 requesting a dedicated staff position for communication initiatives, upon completion of the communications plan; maintaining the Question and Answer Room at annual American Dental Education Association meetings and exploring the feasibility of funding additional Question and Answer Rooms at annual meetings of dental organizations during the period of standards revisions; directing CODA staff to refine the distribution and receipt process related to distribution of the CODA electronic newsletter (CODA Communicator); and directed the distribution of the survey on CODA communication to the communities of interest and analysis of the data by the Standing Committee at its Summer 2013 meeting, with a report to the Commission at the same meeting.

22-CODA should focus its communications efforts on increasing transparency and accountability as well as communicating the value/outcomes of accreditation. (Functionality)

- Recommendation #22 was considered together with recommendation #25. The Commission has implemented the following strategies in order to address these recommendations: 1) The Commission will continue to utilize time at the beginning of open hearings at the ADA and ADEA annual meetings to communicate the value and outcomes of accreditation. This was implemented at the 2009 ADA
Annual Session Open Hearings and the 2010 ADEA Annual Session Open Hearing. In addition, at the 2010 ADA Annual Session Open Hearing, copies of a pamphlet developed by the Council for Higher Education Accreditation (CHEA) entitled “The Value of Accreditation” was available. 2) The Commission will continue to conduct two open hearings at the ADA Annual Session. The format of the open hearings has been expanded to allow for questions and comments on Commission policy and procedure. 3) The community of interest training session will continue to be conducted on a regular basis. 4) All information sent to the communities of interest will be sent to the members of the House of Delegates; however, the Commission was informed that e-mail addresses of delegates and alternates cannot be provided, per ADA policy. 5) The Commission meetings now open with the roll call and introduction of Commissioners by name and home location rather than by the organization they represent, an example of the cultural change that will be emphasized at the beginning of each CODA meeting. 6) The annual report will be sent to the Executive Director of the ADA for distribution to the HOD and alternates, also, reports will be posted on the “delegates only” portion of the ADA website.

23-CODA should use outside expertise to assess its current communications efforts and assist in the development and implementation of a detailed communications and public relations plan. (Functionality)

- See response to recommendation #21. In an effort to utilize resources in an efficient manner, the Commission is working with the ADA Division of Communication to develop a detailed communications and public relations plan.

24-CODA should create a dedicated staff position requiring specific expertise in communications to sustain the implementation of its communications plan and to assist in cultural change. (Functionality)

- The Commission has determined that a more appropriate timeframe for the hiring of a new Commission staff person dedicated to implementing the communications and strategic plan would be after the Commission has communication plans in place. As the planning will most likely take place during 2012 and 2013, a budget request for an additional Commission staff person would have a better likelihood of success of being approved by the HOD in 2013.

25-CODA should view this effort toward cultural change not just as increasing communication but as a change in its culture regarding transparency, accountability, and responsiveness. This cultural change should be emphasized at the beginning of each CODA meeting. (Functionality)

- The Commission meetings now open with the roll call and introduction of Commissioners by name and home location rather than by the organization they represent, an example of the cultural change that will be emphasized at the beginning of each CODA meeting. See response to recommendation #22 above.

26-CODA should establish ongoing evaluation measures to systematically monitor the use of CODA accreditation and its perceived value. This implies the use of an ongoing quality management program tied to strategic planning. (Best Practices)

- Recommendations # 26, # 27 and # 28 are being considered together, as the establishment of an ongoing quality management program tied to strategic planning (recommendation #26) is dependent on the recommendations to hire an outside consultant in both the design and facilitation of strategic planning efforts (recommendation #s 27 and 28). The Commission noted that the implementation of these three recommendations has financial implications. In an effort to begin the process of implementing this recommendation, the Commission restructured the Standing Committees of the Commission, including the formation of a Standing Committee on Quality Assurance and Strategic Planning, at the August 2010 Commission meeting. The charge of this committee is as follows: (1) Develop and implement an ongoing strategic planning process. (2) Develop and implement a formal program of outcomes assessment tied to strategic planning. (3) Use results of the assessment
processes to evaluate the effectiveness of the Commission and make recommendations for appropriate changes, including the appropriateness of its structure. (4) Monitor USDE, and other quality assurance organizations (CHEA, ANSI/ISO, and INQAAHE) for trends and changes in parameters of quality assurance. (5) Monitor and make recommendations to the Commission regarding changes that may affect its operations, including expansion of scope and international issues. The formation of a Standing Committee on Strategic Planning ties an ongoing quality management program to strategic planning, as suggested in ADA recommendation #26; establishes an ongoing strategic planning process and a committee to continue effective strategic planning, as suggested in ADA recommendation #28; establishes a standing committee charged specifically with monitoring other quality assurance organizations, as suggested in ADA recommendation #'s 32, 33, and 34; and shows the Commission regards strategic planning as a priority.

27-CODA should design and implement a quality management system and seek outside assistance in the design as needed from a quality management system expert. (Best Practices)

- See response to #26 above.

28-CODA should use an outside facilitator to design and support its strategic planning efforts. CODA’s strategic planning efforts should examine (but not be limited to) the following: development and implementation of an ongoing strategic planning process and the establishment of a committee to continue effective strategic planning; reassessment of its meeting format in light of its primary focus of accreditation decisions; consideration of the concept of flexible review cycles; consideration of other models for site visits, such as the use of professional site visitors or the use of fewer site visitors used more frequently to enhance consistency and reliability; consideration of important changes that may affect its operations including expansion of scope and international issues; consideration of its continuing effectiveness and the appropriateness of its structure. (Best Practices)

- At the 2011 ADA Annual Session, the HOD allocated funding up to $23,750 for the Commission on Dental Accreditation to engage an outside facilitator to design and support its strategic planning efforts. The Commission obtained the services of Mr. Bennett Napier, CAE, Chief Staff Executive of the National Association of Dental Laboratories, to facilitate the strategic planning process. The draft mission, vision, and values statements, along with the draft strategic plan, were finalized and adopted by the Commission at the August 9, 2012 meeting (Appendix 1).

29-CODA should explore alternative methods, including the use of enhanced technology for monitoring programs’ continuous compliance with the standards. (Best Practices)

- Recommendation #29 and recommendation #30 are being considered together, as they both concern the use of technology and its impact on Commission policies and procedures. In an effort to further begin the process of implementing this recommendation, the Commission restructured the Standing Committees of the Commission, including the formation of a Standing Committee on Communication and Technology at the August 2010 Commission meeting. The charge of this committee is as follows: evaluate and recommend alternative methods, including the use of enhanced technology, for monitoring programs’ continuous compliance with the standards; evaluate and recommend new technological advances in accreditation for reporting and management of information, allowing accreditation to move toward the concepts of continuous assessment, data collection, and readiness; monitor technological trends in alternative site visit methods; develop and implement strategies to increase the effectiveness, quality, content, and processes of communication with all the Commission’s communities of interest; ensure that Commission communications strategies allow for transparency and accountability; and oversee the publication of the e-newsletter, the CODA Communicator, with emphasis on communicating the value/outcomes of accreditation. The formation of the a Standing Committee on Communication and Technology will enable the Commission to review technology issues on an ongoing basis, due to rapid changes and improvements in this area over time.
At the August 9, 2012 meeting, the Commission took several actions to address technology issues and continuous monitoring of educational programs, including: directed CODA staff to maintain the current continuous monitoring process, with reports to CODA’s review committees when program compliance is questioned or when policy dictates CODA action; directed CODA staff to inform accredited programs of the expectation of reporting, per the specific guidelines of each CODA policy, as a mechanism for continuous monitoring of programs; affirmed the practice of using video conferencing or teleconferencing by consultants who are stationed at the program’s home site to conduct interviews, only, of personnel at off-campus sites; and directed CODA staff to continue to monitor enhancements in technology related to streamlining the self-study and accreditation process, including the utilization of Aptify.

The Liaison Committee on Surveys and Reports is currently revising the Annual Surveys of Accredited Programs. One of the goals of the revision of the surveys is to develop questions that will enhance the ability of the Commission to continuously monitor programs.

CODA should evaluate and adopt new technological advances in accreditation for reporting and management of information. This could reduce the burden on CODA as well as the programs it accredits, and thus allow accreditation to move toward the concepts of continuous assessment, data collection, and readiness. (Best Practices)

See response to #29 above.

CODA should maintain its recognition by USDE. (USDE Affiliation)

Recommendation #31, #32, #33 and #34 are being considered together. In June of 2011, the Commission was advised that application for renewal of its listing by the Secretary as a nationally recognized accrediting agency, or compliance report, was scheduled to be reviewed at the Spring 2012 meeting of the National Advisory Committee on Institutional Quality and Integrity (NACIQI). The Commission submitted its petition documenting Commission compliance with USDE recognition criteria by the January 9, 2012 deadline. The Commission chair and vice-chair appeared before the NACIQI on June 25, 2012 for the petition hearing and on August 2, 2012, the Commission received written confirmation that the U.S. Secretary of Education accepted both the USDE staff recommendation and the NACIQI recommendation for re-recognition. The Commission anticipates compliance with the three criteria cited in the final analyst report will be demonstrated by the December 2012 NACIQI meeting.

The Commission will continue to monitor the relative requirements, benefits, risks, obligations, advantages and disadvantages of recognition by USDE. This monitoring, including government funding of educational programs under the Commission’s purview, will be a regular item on the agenda of the Commission’s Standing Committee on Quality Assurance and Strategic Planning and it will also be part of the Commission’s strategic planning process. The CODA Subcommittee will analyze information relating to alternative recognition processes by CHEA and ANSI as advised by recommendation #33 and #34.

CODA should monitor how USDE recognition influences funding for dental education programs. (USDE Affiliation)

See response to #31 above.

CODA should explore advantages of recognition by additional agencies such as CHEA. CODA decision(s) regarding recognition by another agency should not be in lieu of USDE recognition. (USDE Affiliation)

CODA continues to monitor and assess whether recognition by additional agencies, such as CHEA, is in the best interest of dental education and the Commission. The director of the Commission attended a CHEA Workshop on Eligibility and Recognition on July 19, 2010 in Chicago. CHEA
eligibility requirements state that in order to be eligible for CHEA recognition, a majority (50% +1) of the programs accredited by the agency must grant higher education degrees. The Commission does not meet this eligibility criterion, as the Commission accredits 753 certificate programs in postdoctoral advanced specialty and general dentistry, as opposed to 695 degree-granting programs in predoctoral general dentistry, dental hygiene, dental assisting and dental laboratory technology.

34-CODA should monitor the progress of the proposed ANSI recognition system for accreditation agencies as it develops, and, if appropriate, investigate the advantages and disadvantages of also becoming recognized under this system. (USDE Affiliation)

- See response to #31 above.

**Summary:** This report details the progress of the Commission on Dental Accreditation (CODA) in implementing recommendations from the 2008 Report of the Task Force on the Commission on Dental Accreditation. The Commission previously appointed a Subcommittee to develop implementation strategies for each of the 34 ADA Task Force recommendations. Of the 34 ADA recommendations, 33 have been implemented or are in the process of being implemented. Several ADA recommendations require ongoing Commission review and evaluation. The only recommendation that has not been addressed concerns the hiring of an additional Commission staff person.
Appendix 1
Commission on Dental Accreditation
Mission, Vision and Values Statements
Strategic Plan 2012-2016

**Background:** The 2008 ADA Task Force on CODA Report and Recommendations made three recommendations related to strategic planning and quality assurance. Recommendation #28 states:

“CODA should use an outside facilitator to design and support its strategic planning efforts. CODA’s strategic planning efforts should examine (but not be limited to) the following: development and implementation of an ongoing strategic planning process and the establishment of a committee to continue effective strategic planning; reassessment of its meeting format in light of its primary focus of accreditation decisions; consideration of the concept of flexible review cycles; consideration of other models for site visits, such as the use of professional site visitors or the use of fewer site visitors used more frequently to enhance consistency and reliability; consideration of important changes that may affect its operations including expansion of scope and international issues; consideration of its continuing effectiveness and the appropriateness of its structure. (Best Practices)”

In an effort to begin the process of implementing this recommendation, the Commission restructured the Standing Committees of the Commission, including the formation of a Standing Committee on Quality Assurance and Strategic Planning, at the August 2010 Commission meeting. The charge of this committee is as follows: (1) Develop and implement an ongoing strategic planning process. (2) Develop and implement a formal program of outcomes assessment tied to strategic planning. (3) Use results of the assessment processes to evaluate the effectiveness of the Commission and make recommendations for appropriate changes, including the appropriateness of its structure. (4) Monitor USDE, and other quality assurance organizations (CHEA, ANSI/ISO, and INQAAHE) for trends and changes in parameters of quality assurance. (5) Monitor and make recommendations to the Commission regarding changes that may affect its operations, including expansion of scope and international issues.

At the time of its formation, the Standing Committee noted that the majority of the strategic planning recommendations had yet to be addressed, as the recommendations called for the hiring of outside expertise to facilitate the Commission’s strategic planning process and required funding over and above the operational budget of the Commission. While strategic planning expertise was available within the ADA at the time of the release of the ADA Task Force Report, that expertise was no longer available in 2010. The Standing Committee considered attempting to strategic plan without outside facilitation; however, after further discussion, the Standing Committee came to the consensus that there was insufficient expertise among current Commission staff and volunteers to meet the intent of the strategic planning recommendations. In addition, as strategic planning processes are the same across disciplines and institutions, hiring an outside facilitator would efficiently allow the committee to focus its expertise on a strategic plan with measurable outcomes specifically for the Commission. Based on the recommendation from the Committee on Quality Assurance and Strategic Planning, and in order to begin the strategic planning process as outlined in recommendation #28, the Commission adopted a resolution at the August 2011 meeting to request financial resources from the 2011 ADA House of Delegates to hire outside facilitation to assist the Commission in developing a strategic plan. Through Resolution 40H-2011, the House of Delegates adopted the Commission’s request that the ADA allocate funding up to $23,750 for the Commission on Dental Accreditation to engage an outside facilitator to design and support its strategic planning efforts as directed by the 2008 ADA Task Force on CODA Report and Recommendations.
The Commission obtained the services of Mr. Bennett Napier, CAE, Chief Staff Executive of the National Association of Dental Laboratories, to facilitate the strategic planning process. The Committee on Quality Assurance and Strategic Planning met on February 1, 2012 and developed a draft mission statement, vision statement, and values statement, along with a draft strategic plan. The draft plan was submitted to the Commission at the February 3, 2012 meeting, with Commissioners given the opportunity to provide input until June 1, 2012. Following the comment period, the Committee on Quality Assurance and Strategic Planning met on August 8, 2012 to consider all input on the draft documents and to finalize documents for discussion at the upcoming Commission meeting. The draft mission, vision, and values statements, along with the draft strategic plan, were finalized and adopted by the Commission at the August 9, 2012 meeting.

**Mission Statement**

The Commission on Dental Accreditation serves the oral health care needs of the public through the development and administration of standards that foster continuous quality improvement of dental and dental related educational programs.

**Vision Statement**

The Commission on Dental Accreditation will be a globally recognized leader for accrediting dental and dental related educational programs and will accomplish this by establishing quality standards that reflect the ever changing delivery of oral health care.

**Values Statement**

- Transparent
- Objective and Collegial Accreditation Process
- Subject Matter Expertise
- Independent
- Innovative
- Financially Stable
Strategic Plan 2012-2016

Goal #1 – CODA will transition to an operational structure where it has independent authority to meet its mission.

Objective #1 - By January 1, 2016, CODA will have the sole authority to set and administer its own operating budget.

Action Items:

- CODA develops a white paper on the rationale for moving towards this structure. Spring 2013.
- CODA will submit a draft Memorandum of Understanding (MOU) to the ADA Board of Trustees by summer 2013 that outlines agreed upon and duties and expectations of each party.
- Health Policy Research Group to conduct a survey to the communities of interest by Summer 2013 on whether Goal #1 would be supported by the communities of interest.
- Based on survey responses from communities of interest, CODA will submit to the 2013 House of Delegates a proposed ADA Bylaws revision.

Objective #2 - By January 1, 2016, CODA shall have sole authority to make changes in the Rules of the Commission on Dental Accreditation that ensure CODA meets its mission.

Action Items:

- CODA will submit to the 2013 House of Delegates a proposed ADA Bylaws revision.

Rationale: While the Commission has a robust conflict of interest policy, there are perceptions among the communities of interest, including two former public members of the Commission, that the ADA continues to have an undue influence on CODA policy decisions. In June 2012, the president of the ADHA testified at the Commission’s renewal of recognition hearing before the USDE and cited several examples of a potential undue influence of the ADA and bias in the decision-making process. The Commission noted that in the recent past, the USDE determined that there was undue influence and bias related to the advanced specialty education review committees. The USDE subsequently imposed a review committee restructuring on the Commission to address this issue. In addition, there is the perception among some members of the ADA that there should be a quid pro quo for the financial support that the ADA has given to the Commission over the years. The requirement that the House of Delegates approve both the Commission’s yearly operating budget and any revision to the Commission’s Rules, restricts the ability of the Commission to be flexible in its decision-making process and enhances the perception that the ADA can “control” the Commission.

An advantage for the ADA in allowing the Commission to set and administer its own budget is that CODA will be able to pursue other means of financial support, significantly lessening the burden on the ADA. This would not change the ability of the ADA to provide input on accreditation and dental education matters (as it does currently); nor would it change the number of ADA appointees to the Commission; nor would it adversely impact the enhanced communication methodologies between the ADA and CODA that have been implemented in response to the ADA Task Force on CODA Report and Recommendations.
The ADA Task Force on CODA “…investigated the advantages and disadvantages of creating a formal Memorandum of Understanding (MOU) that defines the respective roles and responsibilities of the ADA and CODA. While this option works for several other accreditation agency/professional association models, a MOU for the ADA and CODA may become too cumbersome, too inflexible, and too broad and that it may also result in unintended consequences.” However, misperceptions remain among all communities of interest regarding the ADA and CODA roles, responsibilities and expectations, in spite of numerous attempts to communicate these to their communities of interest. The ADA Board of Trustees has urged the Commission to develop a MOU in an effort to minimize future communication problems. While understanding that a MOU would take a fair amount of effort, the Board of Trustee maintained that a MOU has the potential to be proactive and could serve to diffuse divisive issues. The Commission has included the development of a MOU between the ADA and CODA as one of its action items for this strategic planning goal. The MOU could also be used to outline the Commission transition to sole authority and administration of the budget, with timelines and milestones mutually agreed upon by CODA and the ADA.

Goal #2 – CODA will have sufficient resources to meet its mission.

**Objective #1** - CODA should undergo a comparative analysis (American Society of Association Executives or other related entity) to benchmark financial and operating ratios to determine if CODA revenues and expenses are comparable with other similar accreditation agencies to ensure that current and future resources are sufficient for CODA to meet its mission.

**Action Items:**

- Research benchmarking studies or services to provide such information. Timeline – May 2013
- CODA staff would submit an RFP to qualified vendors or services. June 2013.
- Submit a request for voluntary contributions to a broad array of communities of interest, which could include the HOD that would provide up to $20K one time expenditure to undergo a comparative analysis in 2013. Summer 2013.
- Summer 2014 receive benchmarking report
- August 2014 Commission receive and review report and take or recommend subsequent actions

**Objective #2** - CODA should undergo a technology needs assessment to ensure its current technology platform for operational and accreditation needs are adequate to maximize efficiency.

**Action Items:**

- Communications and Technology Committee will continue to provide support to the Survey and Liaison Committee and other relevant committees for the purposes of CODA work
- Research service providers that conduct operational technology needs assessments. – May 2013
- CODA staff will develop a request for proposal and submit to qualified vendors or service providers – June 2013
• Submit a request for voluntary contributions to a broad array of communities of interest, which could include the HOD that would provide up to $20K one time expenditure to undergo a comparative analysis in 2013 – Summer 2013
• Fall 2013 receive assessment report
• CODA review report and determine subsequent actions or financial needs related to purchase or secure necessary technology to fulfill mission and vision. This would also include refinement of existing expectations of technology audits. August 2013

Rationale: The ADA currently funds approximately 50% of CODA operations related to accreditation, with annual fees charged to accredited programs funding the other 50% of operations. Due to financial pressures at the ADA, the ADA in-kind support of the Commission budget has steadily declined for the past three years. The only mechanism the Commission has to account for the lost budgetary support is to raise annual fees. Since 2009, the Commission has raised annual fees well beyond the rate of inflation in order to ensure that the accreditation program can continue to be effectively managed. The Commission believes that relying on only two sources of revenue (annual fees and the in-kind support of the ADA) is an unsustainable business model; however, under the current budget approval process, the Commission cannot pursue additional sources of revenue in an effective manner.

In regards to information technology infrastructure, the Commission believes that it is falling behind other comparable accrediting agencies in the use of electronic and web-based means to conduct the accreditation program. While understanding that the ADA would prefer to maximize the efficiency and cost-effectiveness of the information technology infrastructure through Association-wide applications of hardware and software, there are unique requirements of the accreditation program that require customized solutions.

Goal #3 - CODA will become a globally recognized leader for accrediting dental and dental related educational programs

Objective: CODA shall continue to develop and expand accreditation services to international programs.

Action Items:

• CODA shall continue to develop policies and procedures for all types of international programs - Ongoing
• Develop an outcomes assessment to evaluate the effectiveness of meeting the objective. Spring 2014
• Staff to develop a definition or scope of work for consulting related services to ensure a universal standard of quality assurance – Present to CODA by August 2013
• Finance Committee develop a fee structure for such services – by August 2013

Rationale: The accreditation system that has developed in the United States is the gold standard for the world. The Commission continues to receive requests to establish a process of accreditation for dental education programs beyond the predoctoral level. Expansion of the international program not only will enhance the image of the Commission as a global leader, but also may generate additional revenue.
Goal #4 - CODA shall actively evaluate mechanisms for educational delivery to ensure high standards are maintained.

Objective #1: Refine CODA polices and procedures to address off campus training sites and ensure integrity of the programs.

Action Items:

- Documentation and Policy Review Committee is working on improving definitions related to “significant experience” i.e. – Committee to report to CODA in August 2012.
- Monitor technology applications that would allow CODA to evaluate off site campus training sites.

Objective #2: CODA should analyze its current operating policies and procedures to determine room for improvement in addressing increased off site training programs.

Action Items:

- Continue to review the policy on program changes.

Rationale: Clinical educational experiences beyond the “traditional” dental school or hospital-based clinic continue to evolve in response to access to care issues; changes in treatment modalities and settings; and revisions to accreditation standards related to interprofessional relations, community service, and overall competency in the treatment of patients. All these factors require programs to provide a broader experience for their students and residents; however, this does not diminish the Commission’s obligation to ensure that students and residents are being provided with a quality education program.

Goal #5 - CODA should have an ongoing communications/marketing program to promote its mission to broad communities of interest

Objective: Provide accurate and thorough information to broad communities of interest

Action Items:

- Continue to conduct open hearings – As needed
- Presentations to the Board of Trustees – As needed
- Maintain presence at appropriate meetings - Ongoing
- Conduct a survey to communities of interest to assess effectiveness of current communication outreach to CODA (August 2012). Contingent upon survey responses, CODA will consider further actions.
- Develop a recruitment and retention plan that provides for action steps for follow up on programs that approach CODA on becoming accredited or those that drop accreditation.

Rationale: The Commission agrees with Task Force recommendation #22-CODA should focus its communications efforts on increasing transparency and accountability as well as communicating the value/outcomes of accreditation. Communication, transparency, and accurate dissemination of information is an integral part of the accreditation process.
The Council on Scientific Affairs Supplemental Report 2 (pages 5193 and 5194) and the Appendix to that report are being distributed solely via ADA Connect because of the sensitivity of the documents. Please go to the House of Delegates community on ADA Connect to view the report. It is located in the Restricted Documents section of the site.

Please note that due to the confidential nature of the report the Board of Trustees determined that the report should only be accessible to ADA delegates and alternates, past presidents, members of the Board of Trustees, and constituent society executive directors.
SUBSTITUTE TO RESOLUTION 16: RECOGNITION OF DENTAL ANESTHESIOLOGY AS A DENTAL SPECIALTY

The following substitute for Resolution 16 (Worksheet:5198) was adopted by the Fourth Trustee District and submitted on October 21, 2012, by Dr. Barbara Rich, delegate.

Resolution

16S-1. Resolved, that with regard to the application of the American Society of Dentist Anesthesiologists for specialty recognition for dental anesthesiology, that each of the six requirements for specialty recognition be debated separately and individually, and be it further

Resolved, that the House of Delegates discuss and vote on each requirement individually, and be it further

Resolved, that the request be granted or denied in accord with these votes.
Legal, Legislative and Public Affairs Matters
AMENDMENT OF THE ADA BYLAWS REGARDING AUTONOMY OF THE ADA EDITOR

1 Background: (Reports:152)

Amendment of the ADA Bylaws Regarding Autonomy of the ADA Editor: As presently written, the ADA Bylaws give the Board of Trustees the power to “cause to be published in, or to be omitted from, any official publication of the Association any article in whole or in part” (Chapter VII. BOARD OF TRUSTEES, Section 90 POWERS, Subsection D). The Board’s editorial control of The Journal of the American Dental Association (JADA) is at odds with current guidelines promulgated by the World Association of Medical Editors (WAME), which call for editors having complete editorial autonomy over their journals’ content. Consequently, the 2011 House of Delegates passed 72H-2011, calling for a review of the ADA Bylaws to suggest language to make the Bylaws consistent with the WAME guidelines, and to submit those suggestions to the 2012 House of Delegates:

Resolved, that the appropriate ADA agency review Chapter VII, Board of Trustees, Section 90. Powers: paragraph D of the ADA Bylaws to suggest new language for the bylaws consistent with the principles supported by the World Association of Medical Editors, and be it further

Resolved, that the changes be submitted to the 2012 ADA House of Delegates.

The resolution was referred to the Council on Ethics, Bylaws and Judicial Affairs. The Council’s deliberations and review of the authority and autonomy of the editor of JADA focused on: (1) the current standards to be met by scientific journals today; and (2) JADA’s role with respect to the ADA. The Council noted that JADA’s strength and the trust put in The Journal are built on the integrity of JADA and its content. Autonomy of the editor enhances the integrity of The Journal, as does publication of opinions and views via the “Letters to the Editor” section of The Journal. After its review, the Council came to a consensus that the JADA editor should be given editorial autonomy over the scientific content of The Journal. The Council was also in agreement, however, that because JADA serves as the “official journal” of the ADA (ADA Bylaws, Chapter XVII., Section 10.A.), unlimited autonomy over the entirety of JADA’s content should not be granted to the editor. Rather, the Council agreed that the editor’s autonomy should be limited to allow the Board of Trustees to retain the power to “cause to be published in, or to be omitted from, any official publication of the Association any article in whole or in part” relating to ADA policy, ADA advocacy efforts and/or the ADA’s legislative agenda.

As indicated above, the current standards set by the WAME indicate that the editor of JADA, rather than the Board of Trustees, should have the autonomy to determine editorial content. According to WAME, editors-in-chief should have full authority over the editorial content of the journal, generally referred to as “editorial independence.” Editorial content includes original research, opinion articles and news reports, both in print or electronic format, and how and when information is published. Owners should not interfere in the evaluation,
selection or editing of individual articles, either directly or by creating an environment in which editorial
decisions are strongly influenced.¹

However, the Council noted that JADA is not just a scientific journal, but is also “the official publication of the
Association (ADA Bylaws, Chapter XVII. PUBLICATIONS, Section 10. OFFICIAL JOURNAL, Subsection A:

A. TITLE. This Association shall publish or cause to be published an official journal under the title of The
Journal of the American Dental Association…

As “the official journal” of the Association, JADA’s objective is to “report, chronicle and evaluate activities of
scientific and professional interest to members of the dental profession” (ADA Bylaws, Chapter XVII.
PUBLICATIONS, Section 10. OFFICIAL JOURNAL, Subsection B. OBJECT). Consequently, in fulfillment of
the role as the “official journal” of the ADA, JADA reports on matters relating to ADA policy and the ADA’s
legislative agenda and advocacy efforts as well as matters of scientific interest to the members of the
Association.

CEBJA recognizes that the editor of JADA should have editorial autonomy over the scientific-based content of
JADA, and that the trust, authority and credibility of JADA in matters relating to science and scientific research
will be maintained, and perhaps burnedished, by allowing the JADA editor to have editorial autonomy over such
material. However, the policies of the ADA and the Association’s advocacy efforts and legislative agenda are
matters that are peculiarly within the purview of the House of Delegates and the Board of Trustees. Thus,
these subjects are distinctly different than reports of scientific advances. Thus, CEBJA is concerned about
extending the editor’s autonomy in matters relating to ADA policy and the Association’s advocacy efforts and
legislative agenda, and believes the better course of action would be to leave decisions concerning
publication of content regarding those matters within the purview of the Board of Trustees.

In addition, CEBJA agrees that the authority of the editor to set the editorial policy of JADA should not rest
within the office of the editor alone. Rather, as suggested by the WAME guidelines, written editorial policy for
JADA should be established by the editor with the assistance of the JADA editorial board.

Based on the considerations summarized above, the Council on Ethics, Bylaws and Judicial Affairs
recommends the adoption of the following resolution:

Resolution

48. Resolved, that the ADA Bylaws, Chapter VII. BOARD OF TRUSTEES, Section 90. POWERS,
Subsections D. through K., be amended as set forth below (additions underscored):

Chapter VII. BOARD OF TRUSTEES, Section 90. POWERS:

D. Cause to be published in, or to be omitted from, any official publication of the Association any
article in whole or in part relating to ADA policies, advocacy efforts and legislative agendas.
E. Appoint an editor of The Journal of the American Dental Association.
F. Appoint an editorial board whose members have been nominated by the editor of The Journal of
the American Dental Association.
and that Chapter VII, Section 90 Subsections currently lettered E. through K. be re-lettered as G.
through M., respectively.

and be it further

¹ The Relationship Between Journal Editors-in-Chief and Owners (formerly titled “Editorial Independence”). Originally posted June 19,
Resolved, that the ADA Bylaws, Chapter XVII. PUBLICATIONS, Section 10. OFFICIAL JOURNAL, be amended as set forth below (additions underscored):

Chapter XVII. PUBLICATIONS, Section 10. OFFICIAL JOURNAL:

D. EDITOR OF THE JOURNAL. Except as otherwise provided in the powers of the Board of Trustees under these Bylaws, as provided in Chapter VII, Section 90D, the editor of The Journal of the American Dental Association shall have the authority to determine the editorial content of The Journal and shall, with the assistance of an editorial board nominated by the editor and appointed by the Board of Trustees, establish and maintain a written editorial policy for The Journal.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
AMENDMENT OF THE ADA BYLAWS REGARDING FILLING OF COUNCIL VACANCIES

Background: (Reports:154)

Amendment of the ADA Bylaws Regarding Filling of Council Vacancies: As presently written, the ADA Bylaws give the President the authority to appoint a member of the Association to fill a Council vacancy. If 50% or more of the vacated term remains to be served, the appointed member is ineligible to serve an additional term (Chapter X. COUNCILS, Section 70. VACANCY). Due to the fact that members filling a partial term with 50% or more of a term remaining are ineligible to serve an additional term, councils have reported difficulty in filling these partial term vacancies on ADA councils. Consequently, the 2011 House of Delegates passed 73H-2011 calling for proposed revision of the ADA Bylaws to suggest language to amend the Bylaws to eliminate the limitation prohibiting a member from serving a full four-year term if the member has been appointed to fill a vacancy for two years or longer:

Resolved, that the eligibility of appointment to fill vacated council positions be evaluated by the appropriate council, and be it further

Resolved, that the changes be submitted to the 2012 House of Delegates.

At the start of its evaluative process, the Council on Ethics, Bylaws, and Judicial Affairs (the Council) desired to determine the pervasiveness of the problem of filling council vacancies. A survey of the councils and commissions was done and it was discovered that all but one of the councils had at least one vacancy in the last five years, and several councils had multiple vacancies during that period. Under the current Bylaws, Chapter X, Section 70. VACANCY “If fifty percent (50%) or more of the vacated term remains to be served at the time of the appointment or election, the successor member shall not be eligible for another term.” It has been reported that this prohibition makes filling council vacancies difficult when the vacancy extends beyond two years because of the desire to have complete, four year council terms.

As the next step in the evaluation of the issue, five options were identified for discussion: (1) making no change to the existing Bylaws; (2) eliminating the limitation which prohibits a full four-year term if filling a vacancy for two years or longer; (3) permitting those filling the vacancy to serve a full four-year term; (4) allowing a past council member to fill the vacancy no more than one time; or (5) measuring the duration of the vacancy from the date the vacancy is filled rather than the actual vacancy to reduce the number of vacancies that are two years or longer. After the advantages and disadvantages of each option were examined and discussed, the Council initially found options (1) and (2) to be the most viable. The Council subsequently determined, however, that a combination of options (2) and (4) would best satisfy the concerns raised by the current process for filling council vacancies.

Consequently, the Council recommends passage of the following resolution amending the second paragraph of Chapter X. COUNCILS, Section 70. VACANCY, of the ADA Bylaws:
Resolution

49. Resolved, that the second paragraph of Chapter X. COUNCILS, Section 70. VACANCY of the ADA Bylaws be amended as follows (additions underscored; deletions stricken):

If the term of the vacated council position has less than fifty percent (50%) of a full four year term remaining at the time the successor member is appointed or elected, the successor member shall be eligible for election to a new, consecutive four-year term. If fifty percent (50%) or more of the vacated term remains to be served at the time of the appointment or election, the successor member shall not be eligible for another term. In the event of a vacated council position, the successor member serving on that council for the first time shall complete the vacated term and shall be eligible to serve a subsequent four-year term. Alternatively, the successor to be appointed to fill a council vacancy may be a former member of that council, provided that the former member has not previously filled a vacancy on that council and is not serving as a member of another council. Time served on a council is limited to one full term and one partial term.

BOARD COMMENT: The Board of Trustees believes the present Bylaws provision for filling Council vacancies is a fair and equitable solution, and sees no reason to change that provision.

BOARD RECOMMENDATION: Vote No.

Board Vote: Resolution 49

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Resolution No. 61

Report: NA  Date Submitted: July 2012

Submitted By: Board of Trustees

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None  Net Dues Impact: None

Amount One-time  Amount On-going  FTE 0

ADA Strategic Plan Goal: Financial (Required)

ELECTRONIC BALLOTING REVISIONS BYLAWS CHANGE

Background: During the March 2012 Board of Trustees meeting resolutions were adopted with regard to revisions to the ADA Bylaws, Organization and Rules of the Board of Trustees and the Standing Rules for Councils and Commissions concerning the electronic balloting system development and recent revisions in the Illinois General Not For Profit Corporation Act regarding balloting.

Chapter VII, BOARD OF TRUSTEES, Section 90. POWERS, Subsection J., currently recites that the Board may transact its business by mail ballot in accordance with the laws of the State of Illinois, and to authorize councils, committees and commissions to transact their business by mail ballot. Illinois law has broadened, allowing business to be conducted by means additional to mail ballot. Striking the reference to the Board’s conducting business by mail ballot will, in effect, allow the Board to transact its business to the full extent permitted by Illinois law, by virtue of Chapter VII, Section 90.A. of the Bylaws (Conduct all business of the Association, subject to the laws of the State of Illinois …). The replacement language will authorize the Board to set rules and procedures for councils, commissions and committees to transact business by ballot without a meeting without reciting that balloting be by mail ballot.

The following resolution was approved by the Board of Trustees for transmitting to the 2012 House of Delegates for consideration.

Resolution

61. Resolved, that the ADA Bylaws, Chapter VII, BOARD OF TRUSTEES, Section 90. POWERS, Subsection J, be stricken in its entirety and replaced with the following new subsection:

J. Establish rules and procedures authorizing the councils, commissions and committees of this Association to transact business by ballot without a meeting.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
Background: Pursuant to CHAPTER X. COUNCILS, Section 120. DUTIES, Subsection G. COUNCIL ON ETHICS, BYLAWS AND JUDICIAL AFFAIRS, paragraphs g. and h. of the ADA Bylaws, the Council on Ethics, Bylaws and Judicial Affairs (the Council) periodically conducts a review to keep the ADA Bylaws consistent, clear and in a uniform style and to keep the Bylaws consistent with the Association’s program. Such a review was conducted by the Council during the 2011-2012 term, leading the Council to propose several revisions to the ADA Bylaws as set forth below.

Analysis:

CHAPTER VIII. ELECTIVE OFFICERS, Section 90. DUTIES, Subsection F. TREASURER:

This portion of the ADA Bylaws is inconsistent with the remaining sections of the Bylaws, in that CHAPTER VIII., Section 90, Subsection F. fails to indicate that the Treasurer serves as an ex officio member of the House of Delegates and Board of Trustees (compare CHAPTER VIII., Section 90, Subsection F. with CHAPTER VIII., Section 90, Subsection B.). With the recommended amendment, the Treasurer’s enumerated duties will include serving as ex officio members of the House of Delegates and Board of Trustees.

Recommendation. The Council recommends adoption of the following resolution:

62. Resolved, that Chapter VIII. ELECTIVE OFFICERS, Section 90. DUTIES, Subsection F, TREASURER, of the Bylaws be amended as indicated (additions underscored, deletions stricken):

F. TREASURER. It shall be the duty of the Treasurer to:

a. Serve as custodian of all monies, securities and deeds belonging to the Association which may come into the Treasurer’s possession.
b. Hold, invest and disburse all monies, securities and deeds, subject to the direction of the Board of Trustees.
c. Design a budgetary process in concert with the Board of Trustees.
d. Oversee Association finances and budget development.
e. Serve as the principal resource person for the budget reference committee in the House of Delegates and to help interpret the Association’s finances for the membership.
f. Review all financial information and data and report on financial matters to the Board of Trustees on a quarterly basis.
g. Review travel reimbursement for the elective officers, trustees and Executive Director.
h. Serve as an ex officio member of the House of Delegates without the right to vote.
i. Serve as an *ex officio* member of the Board of Trustees without the right to vote.

b). Perform such other duties as may be provided in these *Bylaws*.

### CHAPTER XVIII. FINANCES, Section 40. SPECIAL ASSESSMENTS:

This section of the *Bylaws* omits the federal dental services and the American Student Dental Association when defining groups that receive notice of special assessments. The proposed amendment will provide for dissemination of proposals to levy special assessments to all voting delegates.

**Recommendation.** The Council recommends adoption of the following resolution:

#### 63. Resolved, that CHAPTER XVIII. FINANCES, Section 40. SPECIAL ASSESSMENTS, of the ADA *Bylaws* be amended as indicated (additions underscored, deletions stricken):

*Section 40. SPECIAL ASSESSMENTS:* In addition to the payment of dues required in Chapter I, Section 20 of these *Bylaws*, a special assessment may be levied by the House of Delegates upon active, active life, retired and associate members of this Association as provided in Chapter I, Section 20 of these *Bylaws*, for the purpose of funding a specific project of limited duration. Such an assessment may be levied at any annual or special session of the House of Delegates by a two-thirds (2/3) affirmative vote of the delegates present and voting, provided notice of the proposed assessment has been presented in writing at least ninety (90) days prior to the first day of the session of the House of Delegates at which it is to be considered. Notice of such a resolution shall be sent by a certifiable method of delivery to each constituent society, federal dental service and the American Student Dental Association not less than ninety (90) days before such session to permit prompt, adequate notice by each constituent society, federal dental service and the American Student Dental Association to its/their delegates and alternate delegates to the House of Delegates of this Association, and shall be announced to the general membership in an official publication of this Association at least sixty (60) days in advance of the session. The specific project to be funded by the proposed assessment, the time frame of the project, and the amount and duration of the proposed assessment shall be clearly presented in giving notice to the members of this Association. Revenue from a special assessment and any earnings thereon shall be deposited in a separate fund as provided in Chapter XVII, Section 30 of these *Bylaws*. The House of Delegates may amend the main motion to levy a special assessment only if the amendment is germane and adopted by a two-thirds (2/3) affirmative vote of the delegates present and voting. The House of Delegates may consider only one (1) specific project to be funded by a proposed assessment at a time. However, if properly adopted by the House of Delegates, two (2) or more special assessments may be in force at the same time. Any resolution to levy a special assessment that does not meet the notice requirements set forth in the previous paragraph also may be adopted by a unanimous vote of the House of Delegates, provided the resolution has been presented in writing at a previous meeting of the same session.

### CHAPTER XXII. AMENDMENTS, Section 20. AMENDMENT AFFECTING THE PROCEDURE FOR CHANGING THE DUES OF ACTIVE MEMBERS, First Paragraph:

This portion of the *Bylaws* omits reference to the federal dental services and the American Student Dental Association. The proposed amendment will provide for dissemination of proposals for amendments to the *Bylaws* affecting the procedure for changing the dues of active members to all voting delegates.

**Recommendation.** The Council recommends adoption of the following resolution:

#### 64. Resolved, that Chapter XXII, AMENDMENTS, Section 20. AMENDMENT AFFECTING THE PROCEDURE FOR CHANGING THE DUES OF ACTIVE MEMBERS, Paragraph 1, of the *Bylaws* be amended as indicated (additions underscored, deletions stricken):
Section 20. AMENDMENT AFFECTING THE PROCEDURE FOR CHANGING THE DUES OF
ACTIVE MEMBERS: An amendment of these Bylaws affecting the procedure for changing the dues
of active members may be adopted only if the proposed amendment has been presented in writing at
least ninety (90) days prior to the first day of the session of the House of Delegates at which it is to be
considered. Notice of such a resolution shall be sent by a certifiable method of delivery to each
constituent society, federal dental service and the American Student Dental Association not less than
ninety (90) days before such session to permit prompt, adequate notice by each constituent society, federal
dental service and the American Student Dental Association to its their delegates and
alternate delegates to the House of Delegates of this Association, and shall be announced to the
general membership in an official publication of the Association at least sixty (60) days in advance of
the annual session.

CHAPTER IV. TRUSTEE DISTRICTS, Section 30. COMPOSITION and CHAPTER X. COUNCILS, Section
20. MEMBERS, SELECTIONS, NOMINATIONS AND ELECTIONS, Subsection B (footnotes)
(Informational Only):

Following consultation with the Speaker of the House of Delegates, the Council approved, by unanimous vote
pursuant to CHAPTER X. COUNCILS, Section 120. DUTIES, Subsection G. COUNCIL ON ETHICS,
BYLAWS AND JUDICIAL AFFAIRS, Paragraph i. of the ADA Bylaws, the deletion of the footnotes in
CHAPTER IV. TRUSTEE DISTRICTS, Section 30. COMPOSITION and CHAPTER X., COUNCILS, Section
20. MEMBERS, SELECTIONS, NOMINATIONS AND ELECTIONS, Subsection B, of the ADA Bylaws as
moot. Those deletions are shown below:

CHAPTER IV. TRUSTEE DISTRICTS, Section 30. COMPOSITION:

Section 30. COMPOSITION: The trustee districts are numbered and composed as follows:

DISTRICT 1
Connecticut State Dental Association, The
Maine Dental Association
Massachusetts Dental Society
New Hampshire Dental Society
Rhode Island Dental Association
Vermont State Dental Society

DISTRICT 2
New York State Dental Association

DISTRICT 3
Pennsylvania Dental Association

DISTRICT 4
Air Force Dental Corps
Army Dental Corps
Delaware State Dental Society
District of Columbia Dental Society, The
Maryland State Dental Association
Navy Dental Corps
New Jersey Dental Association
Public Health Service
Puerto Rico, Colegio de Cirujanos Dentistas de
Veterans Affairs
Virgin Islands Dental Association

DISTRICT 5
Alabama Dental Association
Mississippi Dental Association, The
DISTRICT 6
Kentucky Dental Association
Missouri Dental Association
Tennessee Dental Association
West Virginia Dental Association
DISTRICT 7
Indiana Dental Association
Ohio Dental Association
DISTRICT 8
Illinois State Dental Society
DISTRICT 9
Michigan Dental Association
Wisconsin Dental Association
DISTRICT 10
Iowa Dental Association
Minnesota Dental Association
Nebraska Dental Association, The
North Dakota Dental Association
South Dakota Dental Association
DISTRICT 11
Alaska Dental Society
Idaho State Dental Association
Montana Dental Association
Oregon Dental Association
Washington State Dental Association
DISTRICT 12
Arkansas State Dental Association
Kansas Dental Association
Louisiana Dental Association, The
Oklahoma Dental Association
DISTRICT 13
California Dental Association
DISTRICT 14
Arizona Dental Association
Colorado Dental Association
Hawaii Dental Association
Nevada Dental Association
New Mexico Dental Association
Utah Dental Association
Wyoming Dental Association
DISTRICT 15
Texas Dental Association
DISTRICT 16
North Carolina Dental Society, The
South Carolina Dental Association
Virginia Dental Association
DISTRICT 17:
Florida Dental Association

CHAPTER X., COUNCILS, Section 20. MEMBERS, SELECTIONS, NOMINATIONS AND ELECTIONS,
Subsection B:

B. Nominations for all councils shall be made by the Board of Trustees except as otherwise provided in
these Bylaws. The Board of Trustees shall adhere to the systems of nominations provided in Chapter X,
Section 20A of these Bylaws. The House of Delegates may make additional nominations pursuant to the
systems for council nominations provided in Chapter X, Section 20A of these Bylaws. The elective and
appointive officers and the trustees of this Association shall not serve as members of councils. Members
of councils shall be elected by the House of Delegates in accordance with Chapter V, Section 150 except
as otherwise provided in these Bylaws.

* In order to establish the required pattern of four, four, four and five members respectively retiring from
councils and commissions each year, members of councils and commissions from the new 5th and 17th
districts who are in office at the time this footnote becomes effective shall finish their terms in accordance
with their scheduled term completion dates. Councils and commissions that have incumbent members
from the new 5th district shall add a new member from the 17th district to a full four-year term. Councils
and commissions that have incumbent members from the new 17th district shall add a new member from
the new 5th district to a full four-year term.

Resolutions

(Resolution 62:Worksheet:6011)
(Resolution 63:Worksheet:6012)
(Resolution 64:Worksheet:6014)
Resolution No. 62

Report: CEBJA Supplemental Report 1

Date Submitted: July 2012

Submitted By: Council on Ethics, Bylaws and Judicial Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: 

Amount One-time 

Amount On-going 

FTE 0

ADA Strategic Plan Goal: Financial (Required)

**AMENDMENT OF THE ADA BYLAWS REGARDING TREASURER**

**Background:** (See CEBJA Supplemental Report 1, Worksheet:6006)

**Resolution**

62. Resolved, that Chapter VIII. ELECTIVE OFFICERS, Section 90. DUTIES, Subsection F, TREASURER, of the Bylaws be amended as indicated (additions underscored, deletions struck):

F. TREASURER. It shall be the duty of the Treasurer to:

a. Serve as custodian of all monies, securities and deeds belonging to the Association which may come into the Treasurer’s possession.

b. Hold, invest and disburse all monies, securities and deeds, subject to the direction of the Board of Trustees.

c. Design a budgetary process in concert with the Board of Trustees.

d. Oversee Association finances and budget development.

e. Serve as the principal resource person for the budget reference committee in the House of Delegates and to help interpret the Association’s finances for the membership.

f. Review all financial information and data and report on financial matters to the Board of Trustees on a quarterly basis.

g. Review travel reimbursement for the elective officers, trustees and Executive Director.

h. Serve as an ex officio member of the House of Delegates without the right to vote.

i. Serve as an ex officio member of the Board of Trustees without the right to vote.

hj. Perform such other duties as may be provided in these Bylaws.

**BOARD RECOMMENDATION:** Vote Yes.

**BOARD VOTE:** UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
Resolution No. 63

Report: CEBJA Supplemental Report 1

Date Submitted: July 2012

Submitted By: Council on Ethics, Bylaws and Judicial Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: Amount One-time Amount On-going FTE

ADA Strategic Plan Goal: Financial (Required)

AMENDMENT OF THE ADA BYLAWS REGARDING SPECIAL ASSESSMENTS

Background: (See CEBJA Supplemental Report 1, Worksheet:6007)

Resolution

63. Resolved, that CHAPTER XVIII. FINANCES, Section 40. SPECIAL ASSESSMENTS, of the ADA Bylaws be amended as indicated (additions underscored, deletions stricken):

Section 40. SPECIAL ASSESSMENTS: In addition to the payment of dues required in Chapter I, Section 20 of these Bylaws, a special assessment may be levied by the House of Delegates upon active, active life, retired and associate members of this Association as provided in Chapter I, Section 20 of these Bylaws, for the purpose of funding a specific project of limited duration. Such an assessment may be levied at any annual or special session of the House of Delegates by a two-thirds (2/3) affirmative vote of the delegates present and voting, provided notice of the proposed assessment has been presented in writing at least ninety (90) days prior to the first day of the session at which it is to be considered. Notice of such a resolution shall be sent by a certifiable method of delivery to each constituent society, federal dental service and the American Student Dental Association, not less than ninety (90) days before such session to permit prompt, adequate notice by each constituent society, federal dental service and the American Student Dental Association to its delegates and alternate delegates to the House of Delegates of this Association, and shall be announced to the general membership in an official publication of this Association at least sixty (60) days in advance of the session. The specific project to be funded by the proposed assessment, the time frame of the project, and the amount and duration of the proposed assessment shall be clearly presented in giving notice to the members of this Association. Revenue from a special assessment and any earnings thereon shall be deposited in a separate fund as provided in Chapter XVII, Section 30 of these Bylaws. The House of Delegates may amend the main motion to levy a special assessment only if the amendment is germane and adopted by a two-thirds (2/3) affirmative vote of the delegates present and voting. The House of Delegates may consider only one (1) specific project to be funded by a proposed assessment at a time. However, if properly adopted by the House of Delegates, two (2) or more special assessments may be in force at the same time. Any resolution to levy a special assessment that does not meet the notice requirements set forth in the previous paragraph also may be adopted by a unanimous vote of the House of Delegates, provided the resolution has been presented in writing at a previous meeting of the same session.
BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
Resolution No. 64

Report: CEBJA Supplemental Report 1

Date Submitted: July 2012

Submitted By: Council on Ethics, Bylaws and Judicial Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: 

Amount One-time  

Amount On-going  

FTE 0

ADA Strategic Plan Goal: Financial (Required)

AMENDMENT OF THE ADA BYLAWS AFFECTING THE PROCEDURE FOR CHANGING THE DUES OF ACTIVE MEMBERS

Background: (See CEBJA Supplemental Report 1, Worksheet:6007)

Resolution

64. Resolved, that Chapter XXII, AMENDMENTS, Section 20. AMENDMENT AFFECTING THE PROCEDURE FOR CHANGING THE DUES OF ACTIVE MEMBERS, Paragraph 1, of the Bylaws be amended as indicated (additions underscored, deletions stricken):

Section 20. AMENDMENT AFFECTING THE PROCEDURE FOR CHANGING THE DUES OF ACTIVE MEMBERS: An amendment of these Bylaws affecting the procedure for changing the dues of active members may be adopted only if the proposed amendment has been presented in writing at least ninety (90) days prior to the first day of the session of the House of Delegates at which it is to be considered. Notice of such a resolution shall be sent by a certifiable method of delivery to each constituent society, federal dental service and the American Student Dental Association, to the alternate delegates to the House of Delegates of this Association, and shall be announced to the general membership in an official publication of the Association at least sixty (60) days in advance of the annual session.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)
COUNCIL ON COMMUNICATIONS SUPPLEMENTAL REPORT 1 TO THE HOUSE OF DELEGATES:
INITIATIVE TO ENHANCE THE IMAGE AND ADVANCE THE REPUTATION AND BRAND OF THE ADA

Background: In accordance with its bylaws duties, the Council on Communications is responsible for making recommendations to the ADA Board of Trustees to protect and enhance the reputation and brand of the American Dental Association. The Council created an issues management plan to provide a strategic umbrella for issues-related communications, and submitted it to the Board of Trustees for consideration at the July 2012 meeting. Given the increase in media attention to the dental profession on an array of issues, the Council perceives the reputation of the ADA to be at risk because of misinformation, and that additional resources are essential for the ADA to put in place a national communications initiative to enhance the ADA image and advance its reputation and brand. Thus, it recommends that funding be appropriated to retain an outside public relations agency. The resolution has a financial implication of $800,000.

According to the ADA’s Bylaws, the duties of the Council on Communications include (among others)

a. To identify, recommend, and maintain an external strategic communications plan for the Association to facilitate other work throughout and on behalf of the Association.
b. To advise the Association on the external image and brand implications of Association plans, programs, services and activities.
c. To provide counsel to the Association on the priority and allocation of externally focused communication resources, to advise on their implications, and to identify the areas where the greatest strategic communications impact can be achieved.

The Council developed the Strategic Communications Plan for the ADA, which was adopted by the Board in 2011. It states:

The Council on Communications provides leadership through the creation of specific initiatives to unify messages and deliver them effectively. The communications strategy includes:

- Developing targeted communications initiatives that present a united voice to both professional and public audiences.
- Aligning the communication needs identified by ADA agencies, committees and commissions to contribute to the attainment of the Strategic Plan goals.
- Integrating all communications activities under key messaging platforms based on ADA policy, science-based patient treatment and best practices.
- Developing proactive, audience-driven communications and marketing programs to advance the priorities of the Association and the perception of our member dentists.
The Council's Advisory Workgroup on Reputation Management created an issues management plan, which was approved by the Council and submitted to the Board of Trustees for consideration at its July 2012 meeting. This plan provides strong rationale for the need to retain outside resources to increase proactive communications capacity.

The ADA currently has a strong State Public Affairs program, providing financial resources to as many as 27 constituent dental societies in one year alone, and supporting 23 state societies thus far in 2012 with a budget of $3.5 million. As in previous years, the vast majority of those grants are used by state societies to retain public affairs consulting firms to support their communications and lobbying efforts on critical issues within those states. These efforts serve to disseminate accurate, credible information to key stakeholders and help positively position the dental societies as oral health leaders, and demonstrate a commitment to developing solutions that will help improve the public’s oral health. The SPA program is based on supporting state issues with potentially national implications; however there are no corresponding resources devoted to supportive public relations at the national level. Because some of these state issues are initiated by national organizations executing a comprehensive strategy, the Association would benefit by addressing those issues using a comparable wide-reaching strategy that is national in scope.

The American Dental Association needs to reinforce the dental profession’s role in providing solutions to help Americans achieve optimal oral health. The issues facing oral health are complex, and awareness of the need for oral health has increased based on an escalation of media attention. In order to have an impactful role in the healthcare system and a better position with media, legislators and the public, the ADA needs to take a stronger role in leading the conversation. This initiative will support goals to help dentists succeed and to be the trusted resource for oral health information.

Statement of Need: At a national level, the Association is faced with continuing communications challenges, including an elevation of national media coverage. Many of these challenges are directly linked to access to care issues and barriers to oral health, the association between oral health and overall health, perceived risk of technologies or materials used in dentistry such as radiographs and dental amalgam, patient financing and utilization, and the challenges to community water fluoridation, to name a few.

The ADA utilizes a two-pronged approach as reflected in the issues management plan, both proactive and responsive. Because of the increase in media attention, there is a need to increase proactive efforts to balance the high level of response required when managing major news stories.

In the beginning of 2012 alone, the ADA has faced national stories that include a study on dental x-rays linked to brain tumors, an American Heart Association Report on the oral-systemic issue, a PBS NewsHour segment on dental therapists, a New York Times feature about an increase in oral surgeries on toddlers and a Wall Street Journal story about the ADA’s congressional lobbying efforts. Because these stories originated in national, top-tier media, they see an extended effect as local media outlets run the stories, and as other journalists use the coverage for additional story angles.

Recommendation for Outside Public Relations Agency: The high level of media activity is not expected to dissipate, and misinformation may result in risk to the reputation of the ADA and the profession overall. Thus, more is needed to develop the audience-driven communications necessary to effectively position the ADA to positively impact advocacy efforts, public awareness of ADA positions and solutions and leadership among key influential stakeholders.

In further recognition of the need to enhance the image, reputation and achieve the policy objectives of the Association, the Council has received a letter from the chair of the Council on Government Affairs supporting the retention of outside resources.

An outside public relations agency will help the ADA enhance its capacity to lead the oral health conversation and deepen the Association’s position as a thought leader. It would provide increased connectivity with
media outlets, create dialogue with key stakeholders and help the ADA develop a multi-faceted approach to
deliver compelling messages to external audiences.

The Council therefore recommends that the ADA consider funding the retention of a professional national
public relations consulting firm, along with the development of programs and materials to increase the scope
of ADA communications and to enhance the capacity to deliver it effectively.

Working in direct collaboration and with supervision by the Division of Communications & Marketing, the
public relations agency would be charged with:

- Communications strategy development
- Message development,
- Proactive media relations,
- Outbound media placement and campaign development,
- Creation of toolkits for extending the use of materials to constituents and components,
- Creating multimedia materials and
- Development and production of targeted advocacy advertising, among other activities,
- Ongoing reporting on metrics to measure the impact of the implemented communications strategies
  and tactics

This is not a paid media effort that includes general market advertising. Rather, it is the extension of
resources applied to meeting both the dynamic and urgent near term and the longer term strategic
communications needs of the Association. Should the House of Delegates adopt this resolution, a
comprehensive and competitive request-for-proposal would be issued to national public relations agencies.

The Council presents the following resolution for consideration by the 2012 House of Delegates:

Resolution

75. Resolved, that ADA appropriate up to $800,000 to the Division of Communications and Marketing
2013 budget for the purpose of retaining an outside public relations firm to provide message
development, proactive media outreach, creative development and production of materials and the
execution of programs to advance the reputation and brand of the American Dental Association, to
enhance the image of the Association and position the ADA in a positive manner as the authority for oral
health issues.

BOARD COMMENT: After a lengthy discussion the Board postponed its recommendation on this resolution
until the September meeting. The Board believes that due to the significance of funding the strategic purpose
of allocating resources to message development and communications support requires additional definition
and planning. Accordingly the Board is requesting submission of a more detailed plan on the use of the
funding which includes additional investigation into the services being sought, the overall investment in
communications and public affairs efforts and further assessment of the funding level requested.

BOARD RECOMMENDATION: Pending Board Discussion in September.
ADDENDUM TO COUNCIL ON COMMUNICATIONS SUPPLEMENTAL REPORT 1 TO THE HOUSE OF DELEGATES: INITIATIVE TO ENHANCE THE IMAGE AND ADVANCE THE REPUTATION AND BRAND OF THE ADA

Background: In a supplemental report to the House of Delegates submitted in July 2012 (Worksheet:6015), the Council on Communications provided rationale and presented a resolution for the ADA to appropriate up to $800,000 to the Division of Communications and Marketing for the 2013 budget for the purpose of retaining an outside public relations firm to enhance the image and advance the reputation and brand of the ADA.

The Board of Trustees deferred commenting on the resolution until the September Board meeting and requested a public relations plan, which is provided in this addendum. As indicated in the Council’s supplemental report, should the resolution be adopted, a comprehensive request for proposal (RFP) would be issued to several national public relations firms. This plan provides a framework. The firm selected will provide a far more detailed public relations plan, including specific tactics, expenditures and metrics, during the first quarter of 2013.

Overarching Strategic Communications Objectives (as reflected in the ADA’s Strategic Communications Plan adopted by the Board in 2011) include:

- Develop targeted communications initiatives that present a united voice to both professional and public audiences
- Align the communication needs identified by ADA agencies, committees, and commissions to contribute to the attainment of the Strategic Plan goals
- Integrate all communications activities under key messaging platforms based on ADA policy, science-based patient treatment and best practices
- Develop proactive, audience-driven communications and marketing programs to advance the priorities of the Association and the perception of our member dentists

This initiative is directly intended to communicate the core position of the ADA as America’s Leading Advocate for Oral Health with all of the core audiences with whom the ADA must engage. These include first and foremost our members. Member awareness and perception of the Association’s leadership on access solutions, protection of their reputation, enhancement of the profession as essential to preventing and managing disease, and improving the knowledge and recognition of dentistry’s efforts by key stakeholders is a tangible member benefit. Expanding the capacity to more proactively drive messaging to key audiences is critically important in an environment where media attention to issues impacting dentistry has increased significantly, where regulatory and third party influence continues to increase and where economic pressures are reducing utilization of dental services.

In addition, this initiative seeks to:
- Reinforce the dental professional’s role in providing solutions to help Americans achieve optimal oral health
- Increase proactive communications by taking a stronger role in leading the conversation with media, legislators and the public on the importance of oral health, dentists as doctors of oral health, and dentists as the recognized leaders of the dental care team
- Ensure that media portrayals of dentistry are fair and accurate
- Rapidly address other communications and reputational challenges and opportunities as they arise
- Positively impact advocacy efforts and public awareness of ADA positions and solutions among key influential stakeholders
- Develop a multi-faceted approach to deliver compelling messages to external audiences
- Increase current communications capacity and connectivity with media outlets and other key stakeholders to meet both the dynamic and urgent near term and longer term strategic communications needs of the Association
- Extend consumer awareness of the importance of personal responsibility in oral health as highlighted by the launch of the ADA’s consumer website MouthHealthy.org and the public service campaign initiated by the Ad Council and the Partnership for Healthy Mouths Healthy Lives

### Key Target Audiences and Influencers:

The ADA serves many stakeholders and audiences, and both perception and reality are influenced by diverse interest groups. Clearly defined audiences are essential to developing and executing successful communications. To make the most effective use of resources, communications efforts will focus on key professional and public targets. An approach focused on core segments will allow the Association to execute larger, more impactful programs than does a fragmented approach. Those key segments are:

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<th>Professional</th>
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<td><strong>Key audiences to target</strong></td>
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<td>• ADA members, including targeted messages to new dentists, ASDA and other membership categories</td>
<td>• Parents and caregivers with children at home</td>
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<td>• Leadership</td>
<td>• High-risk adults 25 – 54</td>
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<td>o House of Delegates</td>
<td>• Adults 55+</td>
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<td>o Board of Trustees</td>
<td>• Special needs patients, the elderly and their caregivers</td>
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<td>o Tripartite</td>
<td>• Public opinion leaders</td>
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<td>o Council members</td>
<td>• Potential members, including women, minorities, and dentists trained outside the U.S. practicing here</td>
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### Messaging:
Specific message development is subject to further evaluation; however they will be driven by establishing key communication goals as well as volunteer and leadership input. Several actions have been undertaken to address those communications needs. The Board has been engaged in assessing the Association’s position as “America’s Leading Advocate for Oral Health” and how that relates to various stakeholders. Opinion research was conducted between April and July, 2012 the results of which indicate that access communications can be further refined in order to articulate the Association’s specific solutions to issues such as Medicaid reimbursement, provision of treatment to underserved populations, dentist-driven initiatives to expand preventive care, the expansion of the Community Dental Health Coordinator into more public health settings and several additional efforts. These form the basis for the positive and proactive media outreach intended to support the reputation and contributions of our member dentists and the profession as leaders of oral health thinking, programs and services.
Public messaging can also be leveraged to take advantage of the heightened communication of oral health information represented by the Ad Council effort and the growth in influence of MouthHealth.org.

It is expected that having an outside public relations agency working closely with staff will provide significant benefit in the development and the creation of key messages.

**Public Relations Agency Selection and Scope of Work:** Public Relations firms invited to bid on the RFP should have a strong presence in New York City as the national media center; offices throughout the country to integrate with the ADA’s State Public Affairs (SPA) program; offices in Washington, D.C. with a specialty in public affairs issues; and national and local media and social media contacts to drive proactive messaging.

The SPA program is based on supporting state issues with potentially national implications. The national public relations firm would review and coordinate with SPA programs in order to execute a comprehensive national public relations and public affairs strategy.

Management of the ADA’s collaboration with the national public relations firms would be provided by the Division of Communications and Marketing with volunteer oversight provided by the Council on Communications consistent with their bylaws duties to provide counsel to the Association on the priority and allocation of externally focused communications resources, to advise on their implications and to identify the areas where the greatest strategic communications impact can be achieved.

**Annual Resource Allocation Estimates:** Should the resolution be adopted, funding for the initiative would become part of the continuing base budget of the Division of Communications and Marketing beginning in 2013 subject to annual program review based upon performance in achieving established metrics.

- **$360,000** Issuance of RFP for a minimum-length contract of 2 years to give the PR firm sufficient time to establish a baseline, develop and execute strategies and tactics and measure results; selection and retention of public relations firm; communications audit during Q1 of 2013 to include immersing PR firm in ADA key issues; conducting evaluations of influencers in traditional and social media; analyzing media coverage of oral health issues, particularly advocacy issues; analyzing coverage and conversations in social media channels on key oral health issues; developing multi-year strategy based on communications audit findings that addresses media outreach and audience engagement strategies, content/message development and success metrics.

- **$65,000** Concept testing and research – Q2 of 2013 Ensure ADA is delivering strongest messages that will resonate with audiences through qualitative and quantitative research.

- **$75,000** Production/distribution of direct materials during Q2 and ongoing, such as template advocacy advertising, video packages and multimedia toolkits for extending the use of materials to constituents and components.

- **$300,000** Program support and tactical execution including a broad-reaching campaign to raise public awareness of the importance of maintaining good oral health and reinforcing the dentist as doctor of oral health; development of talking points, op/eds, social media content; spokesperson training; media pitching and story placement; issues management support including ensuring that media portrayals of dentistry are fair and accurate and rapidly addressing other communications and reputational challenges and opportunities as they arise; and monitoring/analysis of media and social media coverage during Q2 and ongoing.

- **$800,000** estimated annual cost

Examples of expenses related to some PR program elements and tactics which may be employed during the course of this effort (per use estimates; does not include potential additional agency fees).
$ 6,000 Multimedia News Release (MNR) in English and Spanish. An MNR combines text such as press releases, fact sheets, etc. and video that a variety of online, print and broadcast media can use to create stories.

$38,000 Satellite Media Tour (SMT) in English & Spanish. SMTs enable spokespersons for organizations to be interviewed by dozens of broadcast media outlets across the country during several hours on a single day from a single studio location. The recent MouthHealthy SMT resulted in reaching an audience of more than 8 million viewers in a single day.

$12,000 Radio Media Tour in English and Spanish. Similar to a SMT, a radio media tour enables spokespersons for organizations to be interviewed by multiple radio stations across the country during several hours on a single day from a single location.

$ 6,500 Mat Release (English and Spanish). A Mat release is a pre-packaged newspaper story, which is delivered to more than 10,000 suburban newsweeklies nationwide. An Ad Council’s Men’s Health mat release distributed last year in partnership with the Agency for Healthcare Research and Quality (AHRQ) generated 420 stories, reaching more than 12.7 million people.

$ 6,000 Online Communications Toolkit for constituent dental societies including design, hosting and analytics. The toolkit could serve as a multimedia resource for constituent dental societies providing template communications materials they could customize use to address key issues within their states.

$34,000 Blogger Outreach including outreach, social media messaging and blog media tour to engage in conversations on key issues and share credible information and ADA positions on key issues facing the public and the profession.

$25,000 Development of dedicated web resources and custom pages supporting particular campaign initiatives.

$8 – $25,000 Online community management services which include posting and engaging in social media environments, building Facebook “followers” and “likes” and Twitter followings.

$40,000 B-roll production/sound-byte video production package for television and website distribution. Stations use these videos to produce news and feature segments as well as community affairs programming.

**Metrics:** Specific metrics related to the initiative will be developed as part of a comprehensive Request for Proposal (RFP) and those metrics will likely be further refined once a national PR firm is selected and begins their contract. The following include examples of metrics that can be considered:

- Baseline opinion leader research at the beginning of the contract then follow up research at 18 months – 2 years to measure change
- National and specific market media coverage (quantitative and qualitative) on key ADA issues to establish a baseline with ongoing monthly tracking occurring thereafter to measure change in volume of stories and tone of coverage
- Measure social media interaction and reach; assess the impact of online influencers and the potential/outcome of engaging with them via social media; and provide continued analysis of online conversations to chart change in sentiment as a result of social efforts or to reveal areas of opportunity for outreach
- Membership survey data, including annual loyalty survey, to track member agreement with key statements including likelihood to recommend ADA membership to other dentists, likelihood to renew their own ADA membership, and overall value of ADA membership.
- State Public Affairs research will also be a key input. ADA now has a baseline of opinion leader research for that stakeholder group which can be replicated annually.
Coordination with the State Government Affairs Program: The Division of Communications and Marketing works closely with State Government Affairs on the State Public Affairs program. The utilization of a national public relations firm will further enhance the capability to support the states in key areas of legislative and public affairs activities by providing the national scope and perspective essential to give context to local actions. In essence, this provides for better local customization, more efficiency through the use of nationally-created communications templates and greater messaging consistency. Speaking with one voice in matters of policy and how it is presented to stakeholders will further strengthen the Association’s position and presence on key issues. This consistency will also magnify media efforts as messaging is integrated both nationally and locally.

SPA funding includes the retention of a public affairs firm, Chlopak, Leonard & Schlecter (CLS) which is located in Washington, DC and whose primary function is coordination with state retained public affairs firms working through SPA grants and under the management of State Government Affairs. Retention of the national public relations agency will require close cooperation with these resources. As part of the request for proposal, firms will be asked to identify their public affairs resources/affiliations in Washington as well as in markets around the country. There may be opportunities for consolidation and more efficient use of resources based on that input; however it would dependent on the resources of the actual firm selected and the assessment of capability by both Communications and State Government Affairs.

Three-Year Budget Impact: It is expected that retention of the public relations agency, creation of proactive programs, on-going requirements for materials and associated expenses is a multi-year effort. Resolution 75S-1 being brought by the Council on Communications identifies $800,000 in potential funding need for the 2013 budget year. Should the House approve that appropriation it would then become part of the Division’s base budget in subsequent years. The budget planning process requires the annual evaluation of all association programs based on their provision of member value, linkage to the strategic plan and other criteria established by the Board. This on-going funding would be subject to the same scrutiny. Additionally the retaining agency would be subject to review based on performance criteria established in the RFP and achievement of agreed measurements. For planning purposes it is assumed that the funding for the retention of the agency would remain constant with specific program expenses a variable based on funding availability established during the budget review process (a 5% expense increase is projected for these elements):

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Conclusion: Reputation management is the protection, preservation and promotion of the perception and understanding of the Association across a diverse audience of stakeholders. The positive reputation of the profession and the Association is perhaps the most important member benefit that can be provided.

As stated in the Council on Communications’ Supplemental Report (Worksheet:6015), the Association continues to be faced with a high level of national media activity on issues such as access to care and barriers to oral health, the association between oral health and overall health, perceived risk of technologies or materials used in dentistry, patient financing and utilization and community water fluoridation.

Dialogue with the media on critical issues facing dentistry must be continual, rather than limited to responding when negative coverage occurs, yet the current number of full time staff in the Division of Communications and Marketing dedicated to media relations totals just 2.5 FTEs.

Contracting with a national public relations firm allows the ADA to tap their expertise and experience. It provides increased connectivity to and contact with major media to proactively tell our story, while at the same time providing expanded capacity to act quickly and nimbly in the face of breaking news issues.
Many national healthcare associations have public relations firms on retainer, helping to ensure the associations are driving stories they want to share in addition to being responsive to stories the media is already covering.

Adoption of this resolution will provide the additional communications capacity necessarily to build a position of strategic strength and credibility for the American Dental Association among target audiences. This in turn gives the Association the ability to take the lead on challenging issues, rather than operate from a defensive, reactive posture.

Research has shown that if dentistry concentrates its communications on proposing solutions, rather than opposing other organization’s proposals, the public views the ADA much more favorably and, therefore, is much more receptive to those solutions.

Constituent dental societies, many of them using resources from the ADA’s State Public Affairs Program, have met legislative and regulatory threats head on. But the stakes are raised, and other organizations seek to erode the credibility of the ADA and the dental profession on key issues. These organizations are better resourced and better organized than ever before.

Prevention and early intervention are critical in dentistry. The ADA and its member dentists must now dedicate energy and resources toward applying those same principles to a public relations initiative in order to safeguard and promote the reputation and brand of the ADA as America’s Leading Advocate for Oral Health.

The Council presents the following substitute resolution for consideration by the 2012 House of Delegates.

Resolution

75S-1. Resolved, that ADA appropriate up to $800,000 to the Division of Communications and Marketing 2013 budget for the purpose of retaining an outside public relations firm to provide support in message development, proactive media outreach, creative development and production of materials and the execution of programs to:

- Build and enhance the reputation of dentists and the dental profession;
- Position the dentist as a fully trained doctor who leads the team that helps patients attain and maintain the best possible oral health;
- Demonstrate dentistry’s leadership in breaking down barriers to oral health for all Americans;
- Build awareness of the importance of oral health to overall health;
- Ensure that media portrayals of dentistry are fair and accurate; and
- Rapidly address other communications and reputational challenges and opportunities as they arise.

JULY BOARD COMMENT: After a lengthy discussion the Board postponed its recommendation on this resolution until the September meeting. The Board believes that due to the significance of funding the strategic purpose of allocating resources to message development and communications support requires additional definition and planning. Accordingly the Board is requesting submission of a more detailed plan on the use of the funding which includes additional investigation into the services being sought, the overall investment in communications and public affairs efforts and further assessment of the funding level requested.

BOARD COMMENT: The Board agrees with Resolution 75S-1. However, in the second bullet point the Board would like to change the word “trained” to “educated.”

75S-1B. Resolved, that ADA appropriate up to $800,000 to the Division of Communications and Marketing 2013 budget for the purpose of retaining an outside public relations firm to provide support in
message development, proactive media outreach, creative development and production of materials and
the execution of programs to:

- Build and enhance the reputation of dentists and the dental profession;
- Position the dentist as a fully educated doctor who leads the team that helps patients
attain and maintain the best possible oral health;
- Demonstrate dentistry’s leadership in breaking down barriers to oral health for all
Americans;
- Build awareness of the importance of oral health to overall health;
- Ensure that media portrayals of dentistry are fair and accurate; and
- Rapidly address other communications and reputational challenges and opportunities as
they arise.

BOARD RECOMMENDATION: Vote Yes on the Substitute.

Board Vote: Resolution 75S-1B

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COUNCIL ON COMMUNICATIONS SUPPLEMENTAL REPORT 2 TO THE HOUSE OF DELEGATES:

ADA POLICY REVIEW

Background: In accordance with Resolution 111H-2010, Regular Comprehensive Policy Review, the Council on Communications was assigned 17 ADA policies to review. This report presents a series of resolutions with recommendations to maintain, rescind or amend those policies to be presented to the 2012 House of Delegates. Of the 17 policies assigned to the Council, the Council reviewed six and tabled two in order to obtain further information. The additional policies will be reviewed within the next two years.

At its July 2012 meeting, the Council reviewed four policies and made recommendations for one policy to be maintained, one policy to be amended to make it relevant to current technologies, and two policies to be rescinded because they are redundant or no longer relevant. Policies to be maintained or rescinded are included with the appropriate resolution worksheet.

Recommendations—Policy to be Maintained

The Council concluded that the following policy should be maintained as written.

115. Resolved, that the following ADA policy be maintained:

Official Emblem for Dentistry (Trans.1965:228, 364)

Recommendations—Policy to be Amended

The Council believes that the policy “Policy Governing Use of American Dental Association Dental Health Education Statement” should be changed to reflect current media technologies.

116. Resolved, that the ADA policy, “Policy Governing Use of American Dental Association Dental Health Education Statement”, (Trans.1969:193,322) be amended as follows (additions are underscored; deletions are stricken):

Policy Governing Use of American Dental Association Dental Health Education Oral Health Information Statement

Pamphlets, educational posters, textbooks, motion pictures, videos, web content and other dental health education oral health information materials, designed for use in schools or for the general public, will be reviewed by the Department of Public Information and Education (DPIE), Council on Communications, and other appropriate councils of the American Dental Association. If the consultants approve the materials as being scientifically accurate, written permission will be given to
permit use of the American Dental Association’s dental health education statement oral health information statement:

The information on dental oral health contained in this (pamphlet, motion picture, video, etc.) is considered by the American Dental Association to be in accord with current scientific knowledge (date).

1. Request for permission to use the Association’s statement must be made on the form provided by the DPIECouncil on Communications.
2. The material must be designed and distributed to serve the best interest of the public and the profession.
3. The review of all materials, regardless of the medium, should be initiated at the manuscript stage. As one example, completed motion pictures videos will not be reviewed unless the producer is willing to rephotograph reshoot any sections found to be inaccurate by the Department Council.
4. The finished material must also be reviewed by the Department Council just as it is to be used, along with any supplementary materials which are also to be distributed. The Association’s statement shall be used in a size and style which, in the opinion of Association agencies, is appropriate to the material.
5. If the material carrying the Association’s name is printed, two copies one copy should be sent electronically to the Department Council for its files. If the material is in the form of films, slides or tapes, one copy should be deposited with the Department.
6. All information pertaining to dental oral health must be found to be consistent with available scientific evidence.
7. If the material contains statements which fall within the purview of other authoritative agencies or organizations, the Department Council may require that these statements be consistent with the standards of these agencies or organizations.
8. The material must be primarily education in nature. It should not contain promotional text for a product or service. If products are mentioned in the material, directly or indirectly, they must meet the advertising and exhibit standards of the American Dental Association. In such a case, the finished material may be required to carry an additional statement as follows: “This does not constitute an endorsement by the American Dental Association of any products or services mentioned.”
9. At any time when (a) content changes are made, or (b) new use is made of the material, reaplication must be made to the Department Council for use of the Association’s statement.
10. From time to time, the Department Council may query the producer or distributor to make certain these regulations are being observed.

Recommendations—Policies to be Rescinded

The Council believes that the policy “Marketing Strategy Statement” should be rescinded because the topic is addressed more comprehensively by the 2011 ADA Strategic Communications Plan.


The Council believes that the policy “Acknowledgement of Women in the Dental Profession” be rescinded because women are now well represented in the dental profession.
118. Resolved, that the policy “Acknowledgement of Women in the Dental Profession” (Trans.1979:645) be rescinded.

Resolutions

(Resolution 115:Worksheet:6028)
(Resolution 116:Worksheet:6030)
(Resolution 117:Worksheet:6032)
(Resolution 118:Worksheet:6034)
Resolution No. 115 ___________________________ New

Report: CC Supplemental Report 2 ___________________________ Date Submitted: September 2012

Submitted By: Council on Communications

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None Net Dues Impact: ____________

Amount One-time ______________ Amount On-going ______________ FTE 0

ADA Strategic Plan Goal: Members (Required)

ASSOCIATION POLICY TO BE MAINTAINED RECOMMENDED BY THE COUNCIL ON COMMUNICATIONS

Background: The Council concluded that the following policy should be maintained as written.

Resolution

115. Resolved, that the following ADA policy be maintained:

Official Emblem for Dentistry (Trans.1965:228, 364)

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
OFFICIAL EMBLEM FOR DENTISTRY (Trans.1965:228, 364)

1. Official Emblem for Dentistry (Trans.1965:228, 364)

2. Resolved, that the design or insigne for dentistry as described and portrayed in the report of the Bureau of Library and Indexing Service be reapproved as the official emblem for dentistry in the United States of America.

3. 

4. 

5. 

6. 

7. 

8. 

9. 

File 04 Pages 6028-6029 Resolution 115
Resolution No. 116

Report: CC Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Communications

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: None

Amount One-time None Amount On-going None FTE 0

ADA Strategic Plan Goal: Members

(Required)

AMENDMENT OF "POLICY GOVERNING USE OF AMERICAN DENTAL ASSOCIATION DENTAL HEALTH EDUCATION STATEMENT"

Background: The Council believes that the policy "Policy Governing Use of American Dental Association Dental Health Education Statement" should be changed to reflect current media technologies.

Resolution

116. Resolved, that the ADA policy, "Policy Governing Use of American Dental Association Dental Health Education Statement", (Trans.1969:193,322) be amended as follows (additions are underscored; deletions are stricken):

Policy Governing Use of American Dental Association Dental Health Education Oral Health Information Statement

Pamphlets, educational posters, textbooks, motion pictures videos, web content and other dental health education oral health information materials, designed for use in schools or for the general public, will be reviewed by the Department of Public Information and Education (DPIE), Council on Communications, and other appropriate councils of the American Dental Association. If the consultants approve the materials as being scientifically accurate, written permission will be given to permit use of the American Dental Association's dental health education statement oral health information statement:

The information on dental oral health contained in this (pamphlet, motion picture, video, etc.) is considered by the American Dental Association to be in accord with current scientific knowledge (date).

1. Request for permission to use the Association’s statement must be made on the form provided by the DPIECouncil on Communications.
2. The material must be designed and distributed to serve the best interest of the public and the profession.
3. The review of all materials, regardless of the medium, should be initiated at the manuscript stage. As one example, completed motion pictures videos will not be reviewed unless the producer is willing to rerephotograph reshoot any sections found to be inaccurate by the Department Council.
4. The finished material must also be reviewed by the Department Council just as it is to be used, along with any supplementary materials which are also to be distributed. The Association’s statement shall be used in a size and style which, in the opinion of Association agencies, is appropriate to the material.
5. If the material carrying the Association’s name is printed, two copies should be sent electronically to the Department Council for its files. If the material is in the form of films, slides or tapes, one copy should be deposited with the Department.

6. All information pertaining to dental oral health must be found to be consistent with available scientific evidence.

7. If the material contains statements which fall within the purview of other authoritative agencies or organizations, the Department Council may require that these statements be consistent with the standards of these agencies or organizations.

8. The material must be primarily education in nature. It should not contain promotional text for a product or service. If products are mentioned in the material, directly or indirectly, they must meet the advertising and exhibit standards of the American Dental Association. In such a case, the finished material may be required to carry an additional statement as follows: “This does not constitute an endorsement by the American Dental Association of any products or services mentioned.”

9. At any time when (a) content changes are made, or (b) new use is made of the material, reapplication must be made to the Department Council for use of the Association’s statement.

10. From time to time, the Department Council may query the producer or distributor to make certain these regulations are being observed.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Resolution No. 117

Report: CC Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Communications

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: None

Amount One-time
Amount On-going
FTE 0

ADA Strategic Plan Goal: Members (Required)

RESCISSION OF POLICY ON MARKETING STRATEGY STATEMENT

Background: The Council believes that the policy "Marketing Strategy Statement" should be rescinded because the topic is addressed more comprehensively by the 2011 ADA Strategic Communications Plan.

Resolution

117. Resolved, that the policy "Marketing Strategy Statement" (Trans.1981:569) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Resolved, to better accomplish its constitutional objectives, the ADA will employ the following strategies:

- Develop, implement and maintain a marketing orientation among staff, leadership, the Board of Trustees, House of Delegates and general membership;
- Design action-oriented programs in support of objectives based upon the needs and wants of the membership (as determined by periodic surveys);
- Define the appropriate roles and scope of activity for the individual practitioner and for each level of the three-tier structure of the ADA and implement programs and recommendations accordingly;
- Encourage cooperation with allied and affiliated professional associations; and
- Adhere to the ethical and professional standards of the dental profession.
RESCISSION OF POLICY ON ACKNOWLEDGEMENT OF WOMEN IN THE DENTAL PROFESSION

Background: The Council believes that the policy “Acknowledgement of Women in the Dental Profession” be rescinded because women are now well represented in the dental profession.

Resolution

118. Resolved, that the policy “Acknowledgement of Women in the Dental Profession” (Trans.1979:645) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Acknowledgement of Women in the Dental Profession (Trans.1979:645)

Resolved, that as part of the encouragement for the participation of women dentists in organized dentistry, the officers, trustees, members and staff of the American Dental Association make a concerted effort to include in their written and verbal statements the appropriate acknowledgment of women in the dental profession.
COUNCIL ON ETHICS, BYLAWS AND JUDICIAL AFFAIRS SUPPLEMENTAL REPORT 2 TO THE
HOUSE OF DELEGATES: PROPOSED BYLAWS REVISION TO CHAPTER I, MEMBERSHIP, SECTION
30. DEFINITION OF "IN GOOD STANDING"

Background: CHAPTER I, MEMBERSHIP, Section 50. DUES OR SPECIAL ASSESSMENT RELATED
ISSUES, Subsection A. PAYMENT DATE AND INSTALLMENT PAYMENTS, of the ADA Bylaws expressly
allow members to pay dues and special assessments throughout the year using installment payment plans:

A. PAYMENT DATE AND INSTALLMENT PAYMENTS. Dues and any special assessment of all
members are payable January 1 of each year, except for active and active life members who may participate
in an installment payment plan. Such plan shall be sponsored by the members' respective constituent or
component dental societies, or by this Association if the active or active life members are in the exclusive
employ of, or are serving on active duty in, one of the federal dental services. The plan shall require monthly
installment payments that conclude with the current dues and any special assessment amount fully paid by
December 15. Transactional costs may be imposed, prorated to this Association and the constituent or
component dental society. The installment plan shall provide for the expeditious transfer of member dues and
any special assessment to this Association and the applicable constituent or component dental society.

CHAPTER I, MEMBERSHIP, Section 30. DEFINITION OF “IN GOOD STANDING,” of the ADA Bylaws
contains language that creates an ambiguity as to whether members who pay outstanding dues and special
assessments through the installment payment plans permitted by Bylaws are considered to be in good
standing, as that section of the Bylaws defines as member in good standing as one “whose dues and any
special assessment for the current year have been paid” (emphasis supplied):

Section 30. DEFINITION OF “IN GOOD STANDING.” A member of this Association whose dues and any
special assessment for the current year have been paid shall be in good standing. To remain in good
standing, a member may be required under the bylaws of the member’s constituent or component society,
to meet standards of continuing education, pay any special assessment, cooperate with peer review
bodies or committees on ethics, or attend, if a newly admitted active member, a stated number of
membership meetings between the date of admission and the completion of the first calendar year of
active membership. If under a disciplinary sentence of suspension, such member shall be designated as
“in good standing temporarily under suspension” until the disciplinary sentence has terminated.

The requirement of paying current dues does not apply to retired life, honorary and those members of this
Association who pursuant to Section 50 of this Chapter have been granted dues waivers for the purpose of
determining their good standing. The requirement of paying any special assessment does not apply to
retired life, honorary, affiliate, student and those members of this Association who pursuant to Section 50
of this Chapter have been granted any special assessment waivers for purposes of determining their good
standing.
To rectify this ambiguity, an amendment to CHAPTER I, MEMBERSHIP, Section 30. DEFINITION OF “IN GOOD STANDING,” of the ADA Bylaws is being proposed. By the proposed amendment a sentence to Section 30 would be added indicating that members paying dues and special assessments through an available installment payment plan are deemed to be in good standing if their installment payments are current.

Recommendation: The Council on Ethics, Bylaws and Judicial Affairs recommends the adoption of the following resolution:

Resolution

119. Resolved, that CHAPTER I, MEMBERSHIP, Section 30. DEFINITION OF “IN GOOD STANDING,” of the ADA Bylaws be amended as follows (additions underscored):

Section 30. DEFINITION OF “IN GOOD STANDING.” A member of this Association whose dues and any special assessment for the current year have been paid shall be in good standing. In addition, a member who elects to pay dues and any special assessments via an approved installment payment plan shall be in good standing provided that the installment payments are current. To remain in good standing, a member may be required under the bylaws of the member’s constituent or component society, to meet standards of continuing education, pay any special assessment, cooperate with peer review bodies or committees on ethics, or attend, if a newly admitted active member, a stated number of membership meetings between the date of admission and the completion of the first calendar year of active membership. If under a disciplinary sentence of suspension, such member shall be designated as “in good standing temporarily under suspension” until the disciplinary sentence has terminated.

The requirement of paying current dues does not apply to retired life, honorary and those members of this Association who pursuant to Section 50 of this Chapter have been granted dues waivers for the purpose of determining their good standing. The requirement of paying any special assessment does not apply to retired life, honorary, affiliate, student and those members of this Association who pursuant to Section 50 of this Chapter have been granted any special assessment waivers for purposes of determining their good standing.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Resolution No.  120                                      New
Report:  N/A                                             Date Submitted:  September 2012
Submitted By:  Eighth Trustee District
Reference Committee:  Legal, Legislative and Public Affairs Matters
Total Net Financial Implication:  $400,000              Net Dues Impact:  $3.76
Amount One-time  $400,000                                Amount On-going                       FTE  0
ADA Strategic Plan Goal:  Members (Required)

STATE PUBLIC AFFAIRS (SPA) GRANT FUNDING

The following resolution was submitted by the Eighth Trustee District and transmitted on September 10, 2012, by Mr. Greg A. Johnson, executive director, Illinois State Dental Society.

Background: The State Public Affairs (SPA) program of the ADA continues to be hugely successful in allowing our state constituent societies to deal with a variety of important state legislative issues and challenges. This program has seen changes this and last year as the initially proposed ADA budgets have been forwarded to the ADA House of Delegates with a reduction in the budget for the SPA program. Last year, the ADA House of Delegates passed Resolution 37H-2011 to increase funding for state advocacy efforts through this program. As had initially occurred last year, this year’s budget for 2013 seeks to reduce the SPA budget by $400,000 from $3,500,000 (actual 2012) to $3,100,000 (proposed 2013)—a 13% reduction.

SPA grants have been one of the ADA’s most visible signs that they were backing the states and aiding the membership to fight local issues. Kellogg is now beginning the third year of its three-year program for their Mid-level Provider initiatives. This is not the time to withdraw ADA support for the SPA program, as the results in each state could potentially affect other constituents, and give the large Foundations the impression that continued funding of these ventures on their part would be productive. The proposed resolution seeks to maintain the 2013 SPA budget at the budgetary figures passed at last years ADA House of Delegates for the 2012 ADA budget year.

Resolution

120. Resolved, that for the 2013 budget year funding of the State Public Affairs (SPA) program be increased in the amount of $400,000 to a total of $3.5 million for the 2013 budget year.

BOARD COMMENT: The Board of Trustees thanks the Eighth District for this resolution and highlighting the importance of the State Public Affairs (SPA) program. The Board also considers the SPA program to be an extremely important element of the Association’s advocacy program. However, the Board cannot support the requested additional $400,000 to the SPA budget. No new information to justify the additional money was communicated that would justify deviating from the budget decisions made during the normal budgeting process. The Board also wishes to point out that in each of the last two years, the amount budgeted for the SPA program was not completely used by operation of the program during that time.
1 **BOARD RECOMMENDATION:** Vote No.

2 **Board Vote: Resolution 120**

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COUNCIL ON GOVERNMENT AFFAIRS SUPPLEMENTAL REPORT 2 TO THE HOUSE OF DELEGATES:  
ADA POLICY REVIEW

Background: In accordance with Resolution 111H-2010, Regular Comprehensive Policy Review, the 
Council on Government Affairs reviewed Association policies under its jurisdiction.

Recommendations—Policies to be Maintained

The Council concluded that the following policies should be maintained as written.

121. Resolved, that the following ADA policies be maintained:

- Health Care Reform (Trans.2009:485)
- Universal Healthcare Reform (Trans.2008:433)
- Legislative Separation of Medicine and Dentistry (Trans.1996:715)
- Cooperation of ADA and Constituent Societies in Development of State Health Care Reform (Trans.1996:686)
- Employer Mandates (Trans.1994:645)
- Inclusion of Members of Congress in Healthcare Legislation (Trans.1993:718)
- Employer Subsidy (Trans.1993:665)
- Dentists as Providers in All Public and Private Healthcare Programs and Discrimination in Payment for Services Performed by Licensed Dentists (Trans.1990:559)
- Clarification of Support for Federal Legislation to Facilitate Formation of Association of Health Plans (Trans.2003:382)
- Reauthorization of the State Children’s Health Insurance Program (Trans.2007:451)
- Freedom of Choice in Publicly Funded Aid Programs (Trans.2006:344)
- Legislative Clarification for Medically Necessary Care (Trans.1988:474; Trans.1996:686)
- Legislation Reflecting ADA Policy on Primary Dental Health Care Provider (Trans.1990:559)
- Dentists Right to Opt Out of the Medicare Program (Trans.2001:437)
- Reduced Fee Programs for the Elderly Poor (Trans.1980:591)
- Support for Adult Medicaid Dental Services (Trans.2004:327)
- Exemption from Unemployment Insurance Liability for Active Duty Dentists (Trans.2004:321)
- Deployed Dentists and Mandatory Continuing Education Requirements (Trans.2004:314)
- Wartime Waivers for Reservists (Trans.2003:354)
Recommendations—Policies to be Amended

The Council believes that the policy, “Medical Savings Accounts” should be amended to include broader language that would encompass Medical Savings Accounts, Health Savings Accounts, Flexible Spending Accounts, or other products which may be introduced in the market.

122. Resolved, that the ADA policy on Medical Savings Accounts (Trans.1994:637) be amended by revising the title to Tax Preferred Accounts, and so that the amended policy reads as follows (additions are underscored; deletions are stricken):

Medical Savings Accounts (1994:637)-Tax Preferred Accounts

Resolved, that the American Dental Association supports the concept of medical savings accounts use of tax preferred accounts for medical and dental expenses as a component of health system reform.

The Council believes that the policy, “Freedom of Choice in Selection of Health Care Provider under Universal Health Care Reform” should be amended to be inclusive of current/future legislation.

123. Resolved, that the ADA policy on Freedom of Choice in Selection of Health Care Provider under Universal Health Care Reform (Trans.1993:717) be amended to read as follows (additions are underscored; deletions are stricken):

Freedom of Choice in Selection of Health Care Provider under Universal Health Care System Reform

Resolved, that individual freedom of choice in selection of health care provider must be made available to all recipients of benefits under the universal health care plan under any reform of the health care system.

The Council believes that the policies, “Program to Assist Dentists Temporarily Called to Active Service” and “Support for Military Members” were redundant and should be consolidated into a single policy that supports dentists temporarily called to active duty. Therefore, the following new policy is presented for approval.

124. Resolved, that the following policy titled “Support for Dentists Temporarily Called to Active Service” be adopted.

Support for Dentists Temporarily Called to Active Service

Resolved, that the American Dental Association give its utmost support to our members who may be called to active duty, and be it further

Resolved, that constituent and component dental societies be urged to develop a network of volunteer dentists to help maintain the practices of dentists who are temporarily activated into military service by practicing in the deployed dentist’s office and treating their patients, and be it further

Resolved, that the policies titled “Program to Assist Dentists Temporarily Called to Active Service” (Trans.2005:293) and “Support for Military Members” (Trans.1990:574) be rescinded.

The Council believes that the policy, “Compensation of Dental Specialists in the Federal Dental Services” should be amended to better reflect that while all recognized specialties should benefit from additional compensation the Federal Services may need to incentivize the recruiting and retention of particular specialties and at different times.
125. **Resolved**, that the ADA policy on Compensation of Dental Specialists in the Federal Dental Services (Trans.1990:557) be amended to read as follows (additions are underscored; deletions are stricken):

   *Resolved*, that the American Dental Association recommends that where special remuneration considerations are offered in the federal dental services, graduates of all eight ADA-recognized dental specialties and other Commission on Dental Accreditation-accredited two year residency programs be treated equally, eligible for special remuneration in the federal dental services.

The Council believes that the policy, “Unfair Subordination of Dentistry in the Armed Forces” should be amended to better reflect the importance that dental officers be in charge of dental activity.

126. **Resolved**, that the ADA policy on Unfair Subordination of Dentistry in the Armed Forces (Trans.1972:718) be amended with the title “Dentistry in the Armed Forces” and to read as follows (additions are underscored; deletions are stricken):

   **Unfair Subordination of Dentistry in the Armed Forces**

   *Resolved*, that in order to ensure the provision of high quality health care to those in active military service the American Dental Association sponsor and actively pursue legislation to eliminate the unfair subordination of dentistry in the armed forces, particularly to assure the dental officer’s proper role in command functions relating to the provision of oral health care and to give the supports dental corps control over the financial and other resources needed to carry out their health care missions.

The Council believes that the current policies, “Major General Rank for U.S. Air Force Director of Dental Services” and “Dental Leadership within the U.S. Air Force Medical Service” should be rescinded because they are outdated and inadequate to support the ADA’s position that dental chiefs in all branches of the federal dental services should have a 2-star equivalent rank or higher. The Council believes that a new policy, “Rank Equivalency for Chief Dental Officers of the Federal Dental Services” should be adopted to support the position that all Federal Dental Service Chiefs should be, at minimum, a 2-star equivalent.

127. **Resolved**, that the following policy titled “Rank Equivalency for Chief Dental Officers of the Federal Services” be adopted.

   **Rank Equivalency for Chief Dental Officers of the Federal Dental Services**

   *Resolved*, that the American Dental Association supports a 2-Star equivalent rank or higher for the Chief Dental Officers for the US Army, US Navy, US Air Force, US Public Health Service and the Veterans Administration, and be it further

   *Resolved*, that the policy titled “Major General Rank for U.S. Air Force Director of Dental Services” (Trans.1994:636) and “Dental Leadership within the U.S. Air Force Medical Service” (Trans.2003:383) be rescinded.

The Council believes that the policies “Dental Health Focus in Department of Health and Human Services”, “Dental Advisory Committees to Federal Agencies” and “Private Practitioners as Consultants” were redundant and should be consolidated into a single policy encouraging a dental health focus in federal health agencies. Therefore, the following new policy is presented for approval.

128. **Resolved**, that the following policy entitled “Dental Focus in Federal Health Agencies” be adopted.

   **Dental Focus in Federal Health Agencies**
Resolved, that the American Dental Association seek to establish within the Department of Health and Human Services a policy level office for dental activities with appropriate status and funding administered by dentists and in close liaison with organized dentistry, and be it further resolved,

that the ADA seek to protect and enhance the status and funding of federal dental agencies, the integrity of federal dental programs and the roles and duties of federal dental officers, and be it further resolved,

that the ADA seek to ensure that the views of organized dentistry are appropriately reflected in the work of federal advisory committees, and be it further resolved,


Recommendations—Policies to be Rescinded

The Council reviewed the policy, “Demonstration Projects for Health Care Reform” recommending rescission because this policy is no longer relevant and is outdated.


The Council reviewed the policy, “Evaluation and Monitoring of Proposals for National Health Care,” recommending rescission because this activity is done by the Division of Government Affairs regularly. The Division uses ADA policy to analyze legislation (health care/other) and any proposal that would impact the practice of dentistry or dentists as owners/employers. Communication takes place through multiple channels.

130. Resolved, that the ADA policy, Evaluation and Monitoring of Proposals for National Health Care (Trans.1992:603) be rescinded.

The Council reviewed the policy, “Unfair Legislative Advantage for Selected Health Care Delivery Systems,” recommending rescission because the Affordable Care Act has been enacted and the ADA adopted two policies to address health system reform: Health Care Reform (Trans.2009:485) and Universal Healthcare Reform (Trans.2008:433).

131. Resolved, that the ADA policy, Unfair Legislative Advantage for Selected Health Care Delivery Systems (Trans.1990:538) be rescinded.


132. Resolved, that the ADA policy, Federal Regulation of Health Care System (Trans.1974:686) be rescinded.

The Council reviewed the policy, “Dental Representation in a National Health Program” recommending rescission because ADA policy on health care reform is more current and Health Care Reform (Trans.2009:485) requires the Association to support maintaining the private health care system.

133. Resolved, that the ADA policy, Dental Representation in a National Health Program (Trans.1971:516) be rescinded.

The Council reviewed the policy, “Opposition to Pew Report Recommendations” recommending rescission because Pew has issued subsequent reports which have been evaluated by the ADA and
disseminated the information both internally and externally. The policy is not current and existing policy would require the Association to oppose any report that conflicts with such policies.

134. Resolved, that the ADA policy, Opposition to Pew Report Recommendations (Trans.1999:942) be rescinded.

The Council reviewed the policy, "Risk Assessment" recommending rescission because with the enactment of the Affordable Care Act, this is no longer relevant. ADA has updated its policies on health care reform.

135. Resolved, that the ADA policy, Risk Assessment (Trans.1994:637) be rescinded.

The Council reviewed the policy, "Legislative Opposition to Mandated Managed Care Participation" recommending rescission because other policy such as the "Freedom of Choice in Publicly Funded Aid Programs (Trans.2006:344)" addresses mandatory participation in managed care networks and linking a requirement to participation in public programs. State constituent societies monitor this type of activity in their respective state programs.

136. Resolved, that the ADA policy, Legislative Opposition to Mandated Managed Care Participation (Trans.2002:409) be rescinded.

The Council reviewed the policy, “Medicaid Dental Care for the Elderly Poor” recommending rescission because it is no longer relevant. Policy on adult dental coverage exists, “Support for Adult Medicaid Dental Services, (Trans.2004:327).”

137. Resolved, that the ADA policy, Medicaid Dental Care for the Elderly Poor (Trans.1983:548; Trans.1990:558) be rescinded.

The Council reviewed the policy, “Adult Emergency Dental Care” recommending rescission because it is similar to more current policy, "Support for Adult Medicaid Dental Services" (Trans.2004:327) and Association support reflected in health care reform policies (Trans.2009:485; Trans.2008:433).

138. Resolved, that the ADA policy, Adult Emergency Dental Care (Trans.1993:665) be rescinded.

The CGA reviewed the policy, "Support for Vehicle Passenger Safety Restraints" recommending rescission because the policy is obsolete. Today, forty-nine states and the District of Columbia have mandatory seat belt laws (the exception is New Hampshire).

139. Resolved, that the ADA policy, Support for Vehicle Passenger Safety Restraints (Trans.1988:489) be rescinded.

The Council reviewed the policy, “Legislation Protecting Civil Defense Workers” recommending rescission because the policy is redundant of more a recent policy: Liability Protection for Bioterrorism Responders (Trans.2002:398).

140. Resolved, that the ADA policy, Legislation Protecting Civil Defense Workers (Trans.1960:216) be rescinded.

The Council reviewed the policy, “Pay Parity between Physicians and Dentists in Federal Dental Services,” recommending rescission because under current policy new pay initiatives including special pay programs are now approved at the Department of Defense Health Affairs level and do not need congressional approval.

142. Resolved, that the ADA policy, Pay Parity between Physicians and Dentists in Federal Dental Services (Trans.2003:378) be rescinded.
The Council reviewed the policy, “Dental Benefits for Military Reservists,” recommending rescission because with the implementation of the TRICARE Dental Program, this resolution is obsolete.

**143. Resolved**, that the ADA policy, Dental Benefits for Military Reservists (Trans.1994:645) be rescinded.

The Council reviewed the policy, “Dental Special Pay for Federal Service Dentists,” recommending rescission because under current policy new pay initiatives including special pay programs are now approved at the Department of Defense Health Affairs level and do not need congressional approval.

**144. Resolved**, that the ADA policy, Dental Special Pay for Federal Service Dentists (Trans.1994:637) be rescinded.

The Council reviewed the policy, “Expansion of Dental Benefits for Military Retirees,” recommending rescission because with the implementation of the TRICARE Retiree Dental program, this resolution is obsolete.


The Council reviewed the policy, “Federal Dental Services Remote-Site Criteria,” recommending rescission because with the availability of the TRICARE Dental Program, the resolution on designation of “remote sites” is no longer relevant.

**146. Resolved**, that the ADA policy, Federal Dental Services Remote-Site Criteria (Trans.1993:709) be rescinded.


**147. Resolved**, that the ADA policy, Amendment of Military Dependents’ Dental Benefit Plan (Trans.1993:706) be rescinded.

The Council reviewed the policy, “Veterans Affairs Dental Treatment Fee Schedule,” recommending rescission because it conflicts with current VA policy pursuant to law with regard to claims payments.

**148. Resolved**, that the ADA policy, Veterans Affairs Dental Treatment Fee Schedule (Trans.1992:627) be rescinded.

The Council reviewed the policy, “Dental Care for Uniformed Services Dependents,” recommending rescission because with the implementation of the TRICARE Dental Program, this resolution is obsolete.

**149. Resolved**, that the ADA policy, Dental Care for Uniformed Services Dependents (Trans.1991:630) be rescinded.

The Council reviewed the policy, “Dental Services for Reserve Component Forces during Training Periods of Less Than 30 Days,” recommending rescission because policy is obsolete. Current programs address dental treatment for Guard and reserve personnel prior to their activation.

**150. Resolved**, that the ADA policy, Dental Services for Reserve Component Forces during Training Periods of Less Than 30 Days (Trans.1991:625) be rescinded.

The Council reviewed the policy, “Department of Veterans Affairs Provision of Necessary Dental Services,” recommending rescission because of current VA policy pursuant to law regarding patients authorized dental care though the VA.
151. **Resolved**, that the ADA policy, Department of Veterans Affairs Provision of Necessary Dental Services (Trans.1991:624) be rescinded.

The Council reviewed the policy, “Compensation for Reserve Dental Officers,” recommending rescission because policy is obsolete. Reserve component officers receive the same compensation including the special pays they are eligible for while on active duty.

152. **Resolved**, that the ADA policy, Compensation for Reserve Dental Officers (Trans.1990:564) be rescinded.

The Council reviewed the policy, “Regular Upgrading of Outpatient Program,” recommending rescission because of current VA policy pursuant to law regarding patients authorized dental care though the VA.

153. **Resolved**, that the ADA policy, Regular Upgrading of Outpatient Program (Trans.1979:635) be rescinded.

The Council reviewed the policy, “Special Assistant for Dental Affairs in Department of Defense,” recommending rescission because the Chief of TRICARE Dental Care Branch performs that function.

154. **Resolved**, that the ADA policy, Special Assistant for Dental Affairs in Department of Defense (Trans.1978:527) be rescinded.

The Council reviewed the policy, “Extension of Dental Benefits,” recommending rescission because the policy has been implemented by the VA pursuant to law.


The Council reviewed the policy, “Unification of Health Services,” recommending rescission because the language is obsolete and proposed new policy affirms the ADA position on the importance of dental programs under the command and control of dental professionals.

156. **Resolved**, that the ADA policy, Unification of Health Services (Trans.1962:264) be rescinded.

The Council reviewed the policy, “Compensation for Federally Employed Dentists,” recommending rescission because more recent relevant policies exist.


The Council reviewed the policy, “Support for Activated Self-Employed Dentists,” recommending rescission because this resolution appears to be superseded by more recent resolutions.

158. **Resolved**, that the ADA policy, Support for Activated Self-Employed Dentists (Trans.1992:628) be rescinded.

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**Resolutions**

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(Resolution 122:Worksheet:6057)
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ASSOCIATION POLICIES TO BE MAINTAINED RECOMMENDED BY THE COUNCIL ON GOVERNMENT AFFAIRS

Background: The Council concluded that the following policies should be maintained as written.

Resolution

121. Resolved, that the following ADA policies be maintained:

- Health Care Reform (Trans.2009:485)
- Universal Healthcare Reform (Trans.2008:433)
- Legislative Separation of Medicine and Dentistry (Trans.1996:715)
- Cooperation of ADA and Constituent Societies in Development of State Health Care Reform (Trans.1995:652)
- Employer Mandates (Trans.1994:645)
- Inclusion of Members of Congress in Healthcare Legislation (Trans.1993:718)
- Employer Subsidy (Trans.1993:665)
- Dentists as Providers in All Public and Private Healthcare Programs and Discrimination in Payment for Services Performed by Licensed Dentists (Trans.1990:559)
- Clarification of Support for Federal Legislation to Facilitate Formation of Association of Health Plans (Trans.2003:382)
- Reauthorization of the State Children’s Health Insurance Program (Trans.2007:451)
- Freedom of Choice in Publicly Funded Aid Programs (Trans.2006:344)
- Legislative Clarification for Medically Necessary Care (Trans.1988:474; Trans.1996:686)
- Legislation Reflecting ADA Policy on Primary Dental Health Care Provider (Trans.1990:559)
- Dentists Right to Opt Out of the Medicare Program (Trans.2001:437)
- Reduced Fee Programs for the Elderly Poor (Trans.1980:591)
- Exemption from Unemployment Insurance Liability for Active Duty Dentists (Trans.2004:321)
- Deployed Dentists and Mandatory Continuing Education Requirements (Trans.2004:314)
- Wartime Waivers for Reservists (Trans.2003:354)

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Limited English Proficiency (*Trans.2005:338*)

Resolved, that the Association work with the appropriate federal agencies, advocacy groups, trade associations, and other stakeholders to ensure that accommodating the language needs of English-limited patients is recognized as a shared responsibility, which cannot be fairly visited upon any one segment of a community, and be it further

Resolved, that the Association support appropriate legislation and initiatives that would enhance the ability of individuals of limited English proficiency to effectively communicate in English with their dentist and the dental office staff, and be it further

Resolved, that the Association oppose federal legislative and regulatory efforts that would unreasonably add to the administrative, financial, or legal liability of providing dental services to limited English proficient patients, such as being required to provide interpreters on demand as a condition of treating patients receiving state and/or federal benefits, and be it further

Resolved, that constituent and component dental societies be encouraged to support state, local, and private sector efforts to address the language needs of English-limited patients, and be it further

Resolved, that dental and allied dental programs be encouraged to educate students about the challenges associated with treating patients of limited English proficiency, and be it further


Health Care Reform (*Trans.2009:485*)

Resolved, that in addition to existing association policy (Universal Healthcare Reform *Trans.2008:433*), the ADA shall also advocate that any health care reform proposal:

1. Maintains the private health care system.
2. Should increase opportunities for individuals to obtain health insurance coverage in all U.S. jurisdictions;
3. Assures that insurance coverage is affordable, portable and available without regard to pre-existing health conditions;
4. Develops prevention strategies that encourage individuals to accept responsibility for maintaining their health and which may reduce costs to the health care system;
5. Be funded in a sustainable, budget neutral manner that does not include a tax on health care delivery;
6. Exempts small business employers from any mandate to provide health coverage;
7. Include incentives for individuals and employers to provide health insurance coverage;
8. Contain medical liability (tort) and insurance reforms;
9. Encourage the use of electronic health records with rigorous privacy standards; and
10. The American Dental Association supports Health Savings Accounts, Flexible Spending Accounts or any other tax incentive programs that allow alternative methods of funding health care costs.

And be it further
Resolved, that the ADA shall direct its lobbying efforts to assure that legislators fully understand the consequences of any health care reform legislation and be it further

Resolved, that the ADA direct its lobbying efforts to inform our federal legislators of the ADA’s existing health care reform policy and advocate for efforts to implement it, and be it further

Resolved, that the ADA’s Health Care Reform policy be promoted to the dental profession and the public through the ADA News, ADA Web site and other appropriate avenues of communication.

Universal Healthcare Reform (Trans.2008:433)

Resolved, that the following be adopted as the Association’s policy on oral health care for utilization during discussions on health care reform: Improving Oral Health in America

Oral Health is Essential for a Healthy America

Dental Care is Essential to Overall Health. Americans cannot be without it.

Health Care is a Shared Responsibility. No law, regulation or mandate will improve the oral health of the public unless policymakers, patients and dentists work together with a shared understanding of the importance of oral health and its relationships to overall health.

Prevention Pays. The key to improving and maintaining oral health is preventing oral disease. Community-based preventive initiatives, such as community water fluoridation and school based screening and sealant programs are proven and cost-effective measures. These should be integral to oral health programs and policies, and will provide the greatest benefit to those at the highest risk of oral disease.

Improving Oral Health Literacy Makes Patients Better Stewards of their Own Health. Patients, parents, pregnant women, caregivers and others need to understand the importance of good oral health, oral hygiene fundamentals, diet and nutritional guidelines, the need for regular dental care and, in many cases, how to navigate the system to get dental care.

Patients Need a Dental Home. All patients should have an ongoing relationship with a dentist with whom they can collaboratively determine preventive and restorative treatment appropriate to their needs and resources.

Access is a Key to Good Oral Health

Improving Oral Health in America Requires a Strong Public Health Infrastructure to Overcome Obstacles to Care. The current dental public health infrastructure is insufficient to address the needs of disadvantaged groups. Efforts to improve access to dental care require investment in the nation’s public health infrastructure. The ADA recognizes that community-based disease prevention programs must be expanded and barriers to personal oral health care eliminated, if we are to meet the needs of the population.

Reimbursement Matters. Increased access to care for people covered by government-assisted dental programs depends on fair and adequate provider reimbursement rates. The vast majority of government programs are so seriously under-funded that dentists cannot recover the cost of materials used in providing care.
Improving Access in Underserved Areas Requires Extra-Market Incentives. Federal, state and local governments must develop financial incentives, such as student loan forgiveness, tax credits or other subsidies, to encourage dentists to locate their offices in areas that cannot otherwise support private dental practice.

Patients with the Greatest Need Must Be First in Line for Care. Under-funded government programs fail to provide minimally adequate care to all they purport to cover. Funding should be prioritized so that those with the greatest need and those who will most benefit from care are first in line. For example, children, pregnant women, the vulnerable elderly and individuals with special needs, and people needing emergency care, should take precedence over other underserved groups.

Cost-Effective Allocation of Limited Government Funds is Essential. With very limited government resources, children, pregnant women, the vulnerable elderly and individuals with special needs should receive diagnostic, preventive and emergency care. Adult emergency care should also be covered. Limited government resources should allow for additional routine dental care coverage for all underserved populations as well as diagnostic and preventive for adults. With sufficient funding, complex or comprehensive care should also be covered.

The Government Must Fund Public Health Benefit Programs Adequately. Programs such as Medicaid and the Children Health Insurance Program (CHIP) must ensure that vulnerable children and adults with inadequate resources have access to essential oral health care. Programs such as Medicaid must cover dental benefits for adults. Children in low-income families who are not eligible for Medicaid must have access to essential oral health care through CHIP. Eligibility should reflect regional differences in the cost of living and purchasing power.

We Must Build on Current Successes

Open Markets Ensure Competition and Innovation. The dental private practice delivery system, which operates almost entirely separate from its medical counterpart, services the vast majority of Americans well. While a fully-functional public health infrastructure is essential, efforts to broaden access to care for people who currently are underserved would be best accomplished by bringing more people into the private practice.

Universal Dental Coverage Mandates Will Not Solve the Access to Care Problem. Many dental diseases and conditions are preventable with patient compliance and are inexpensive in relation to cost of treatment, therefore developing federal and state government programs that address not only funding but also non-economic barriers to care are necessary. The great majority of Americans already have access to dental care, and millions can afford care without having dental benefits. The government can use tax policy to encourage small employers and individuals to purchase dental benefit plans in the private sector or develop cooperative purchasing alliances for the segment of the population with privately-funded care.

Fostering the Next Generation of Dentists Must Be a Priority. Having a sufficient number of dentists to provide care to all who require it depends upon a number of critical factors, including sufficient government support of dental higher education, overcoming currently faculty shortages, providing affordable student loan programs, advanced public health training and ensuring the financial viability of dental practices.

Patients Must Receive Care From a Properly Educated and Trained Oral Health Workforce. The U.S. dental delivery system owes much of its success to the team model, which includes dental hygienists and assistants working under the supervision of a licensed dentist. While many underserved communities might benefit from the addition of trained, culturally-prepared dental support personnel, appropriate education, training and dentist supervision is essential to ensure quality dental care.

And be it further
Resolved, that the Association’s previous policy on health system reform, “The American Dental Association’s Position on Health System Reform” (Trans.1993:664, 1994:656), be rescinded.

Legislative Separation of Medicine and Dentistry (Trans.1996:715)
Resolved, that the American Dental Association work to assure that dentistry is addressed separately from medicine in any health care reform legislation.

Cooperation of ADA and Constituent Societies in Development of State Health Care Reform (Trans.1995:652)
Resolved, that the ADA work closely with constituent societies to monitor and participate, upon the invitation of the constituent society, in any development of health care reform on the state level.

Employer Mandates (Trans.1994:645)
Resolved, that the American Dental Association opposes employer mandates to purchase health care benefits for employees as a component of health system reform.

Inclusion of Members of Congress in Health Care Legislation (Trans.1993:718)
Resolved, that the American Dental Association communicate with other health care and public interest organizations the concept that all members of Congress and all federal employees must be included in any comprehensive health care legislation passed for the population as a whole.

Employer Subsidy (Trans.1993:665)
Resolved, that the Association supports the establishment of a cap on the employer’s share of the premium payment for medical benefits, and tax credits to help defray the employer’s cost of providing health coverage.

Dentists as Providers in All Public and Private Health Care Programs and Discrimination in Payment for Services Performed by Licensed Dentist (Trans.1990:559)
Resolved, that the American Dental Association, through its appropriate agencies, seek to ensure that all health legislation and all public and private health care programs that include care of a nature that a dentist is licensed to perform and traditionally renders, include dentists as providers, and be it further
Resolved, that there be no discrimination in the payment schedule or payment provision of covered services or procedures when performed by a licensed dentist and be it further,
Clarification of Support for Federal Legislation to Facilitate Formation of Association of Health Plans (Trans.2003:382)

Resolved, that the Association pursue federal legislation to facilitate the formation of association health plans if such plans benefit our members and include patient protections as outlined in H.R.597 “The Patient Protection Act of 2003”, and be it further,

Resolved, that the Association encourage constituent dental societies to support state legislation that establishes high-risk health related insurance pools.

Reauthorization of the State Children’s Health Insurance Program (Trans.2007:451)

Resolved, that the ADA support the reauthorization of the State Children’s Health Insurance Program (SCHIP) but make every effort to emphasize that funds dedicated to the program be used to provide medical and dental care to children with family income less than or equal to 200% of the federal poverty level before any expansion to children in families above that level, and that decisions to cover children beyond 200% of the federal poverty level continue to be made on a state-by-state basis.

Freedom of Choice in Publicly Funded Aid Programs (Trans.2006:344)

Resolved, that the ADA pursue regulatory or legislative action to mandate that any licensed dentist may participate in a publicly funded program without joining a third-party network that requires them to also see privately funded commercial patients under a managed care contract.

Legislative Clarification for Medically Necessary Care (Trans.1988:474; Trans.1996:686)

Resolved, that constituent dental societies be encouraged to pursue legislation or regulation at the state level to have the language in health benefit plans clarified so that medically necessary care, essential to the successful treatment of a medical or dental condition being treated by a multidisciplinary health care team, is a required extension of covered medical procedures, and be it further

Resolved, that the appropriate Association agencies seek federal legislative or regulatory actions to have the language in health benefit programs clarified so that medically necessary care, essential to the successful treatment of a medical or dental condition being treated by a multidisciplinary health care team, is a required extension of covered medical procedures.

Legislation Reflecting ADA Policy on Primary Dental Health Care Provider (Trans.1990:559)

Resolved, that the American Dental Association urge constituent societies to reinforce the intent of the policy (Trans.1981:564) to reflect by legislative initiative that the dentist is the primary dental health care provider to the public, and be it further

Resolved, that the appropriate agencies of the Association develop model legislation that will assist requesting states to enact legislation which will direct third-party payers, when paying benefits for dental services to health care providers, to do so only to a licensed dentist.
Dentists Right to Opt Out of the Medicare Program *(Trans.2001:437)*

Resolved, that the American Dental Association seek federal legislation that provides dentists with the right to opt out of the Medicare program and engage in private contracts with Medicare beneficiaries for payment of dental services.


Resolved, that agencies of the ADA continue efforts to educate the leadership of the American Association of Retired Persons (AARP) on the benefits of an acceptable oral health agenda for older Americans together with appropriate financing mechanisms.

Reduced Fee Programs for the Elderly Poor *(Trans.1980:591)*

Resolved, that constituent dental societies be encouraged to develop access programs providing reduced fee comprehensive dental care to financially distressed elderly persons.

Support for Adult Medicaid Dental Services *(Trans.2004:327)*

Resolved, that the ADA adopt policy supporting the inclusion of adult dental services in the federal Medicaid program, and be it further

Resolved, that the ADA take every opportunity to educate policy makers that, consistent with ADA’s position on health system reform *(Trans.1993:664; Trans.1994:656)* oral health is an integral part of overall health, and be it further

Resolved, adult coverage under Medicaid should not be left to the discretion of individual states but rather, should be provided consistent with all other basic health care services.

Exemption from Unemployment Insurance Liability for Active Duty Dentists *(Trans.2004:321)*

Resolved, that constituent societies be urged to review their states’ unemployment insurance statutes so that dentists who are called to active military duty and close their dental offices are not impacted adversely by the law upon returning to their active practices.

Deployed Dentists and Mandatory Continuing Education Requirements *(Trans.2004:314)*

Resolved, that it is the Association’s position that military deployment is a learning experience that provides opportunities to treat complex cases, sometimes under difficult circumstances, and be it further

Resolved, that constituent dental societies be urged to support state legislation or state board regulations that would allow deployed military dentists who are serving on active duty to have their continuing education requirements waived.
Wartime Waivers for Reservists (Trans.2003:354)

Resolved, that tripartite members in good standing who serve in the uniformed services reserves or National Guard, when called to active duty for a period of time over and above their ongoing service, are encouraged to apply for a partial or full dues waiver of membership dues as provided by the ADA Bylaws, and be it further

Resolved, that ADA component and constituent societies be encouraged to publicize the availability of the waiver process to the membership and to expedite processing of the waiver applications without financial disclosure statements when requests for these waivers are received.


Resolved, that the American Dental Association support the reinstatement of the Brigadier General rank for the position of Deputy Assistant Surgeon General for Dental Services, Army Reserves.


Resolved, that the ADA supports the existence of the Office of the U.S. Surgeon General.
AMENDMENT OF POLICY ON MEDICAL SAVINGS ACCOUNTS

Background: The Council believes that the policy, “Medical Savings Accounts” should be amended to include broader language that would encompass Medical Savings Accounts, Health Savings Accounts, Flexible Spending Accounts, or other products which may be introduced in the market.

Resolution

122. Resolved, that the ADA policy on Medical Savings Accounts (Trans.1994:637) be amended by revising the title to Tax Preferred Accounts, and so that the amended policy reads as follows (additions are underscored; deletions are stricken):


Resolved, that the American Dental Association supports the concept of medical savings accounts use of tax preferred accounts for medical and dental expenses as a component of health system reform.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Resolution No. 123

Report: CGA Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: 

Amount One-time 

Amount On-going 

FTE 0

ADA Strategic Plan Goal: Members (Required)

AMENDMENT OF POLICY ON FREEDOM OF CHOICE IN SELECTION OF HEALTH CARE PROVIDER UNDER UNIVERSAL HEALTH CARE REFORM

Background: The Council believes that the policy, "Freedom of Choice in Selection of Health Care Provider under Universal Health Care Reform" should be amended to be inclusive of current/future legislation.

Resolution

123. Resolved, that the ADA policy on Freedom of Choice in Selection of Health Care Provider under Universal Health Care Reform (Trans.1993:717) be amended to read as follows (additions are underscored; deletions are stricken):

Freedom of Choice in Selection of Health Care Provider under Universal Health Care System Reform

Resolved, that individual freedom of choice in selection of health care provider must be made available to all recipients of benefits under the universal health care plan under any reform of the health care system.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Support for Dentists Temporarily Called to Active Service

Resolved, that the American Dental Association give its utmost support to our members who may be called to active duty, and be it further

Resolved, that constituent and component dental societies be urged to develop a network of volunteer dentists to help maintain the practices of dentists who are temporarily activated into military service by practicing in the deployed dentist’s office and treating their patients, and be it further

Resolved, that the policies titled “Program to Assist Dentists Temporarily Called to Active Service” ( Trans.2005:293 ) and “Support for Military Members” ( Trans.1990:574 ) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICIES TO BE RESCINDED

1
2  Program to Assist Dentists Temporarily Called to Active Service (Trans.2005:293)
3  Resolved, that constituent and component dental societies be urged to develop a network of volunteer
dentists to help maintain the practices of dentists who are temporarily activated into military service by
practicing in the deployed dentist’s office and treating their patients.

6
7  Support for Military Members (Trans.1990:574)
8  Resolved, that the American Dental Association give its utmost support to our members who may be called
to active duty, and be it further
11
12  Resolved, that each constituent society be encouraged to implement a system in which the dental practices
of these men and women be maintained in their absence.

15
Resolution No. 125

Report: CGA Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: None

Amount One-time

Amount On-going

FTE 0

ADA Strategic Plan Goal: Members (Required)

AMENDMENT OF POLICY ON COMPENSATION OF DENTAL SPECIALISTS IN THE FEDERAL DENTAL SERVICES

Background: The Council believes that the policy, "Compensation of Dental Specialists in the Federal Dental Services" should be amended to better reflect that while all recognized specialties should benefit from additional compensation the Federal Services may need to incentivize the recruiting and retention of particular specialties and at different times.

Resolution

125. Resolved, that the ADA policy on Compensation of Dental Specialists in the Federal Dental Services (Trans.1990:557) be amended to read as follows (additions are underscored; deletions are stricken):

   Resolved, that the American Dental Association recommends that where special remuneration considerations are offered in the federal dental services, graduates of all eight ADA-recognized dental specialties and other Commission on Dental Accreditation-accredited two year residency programs be treated equally, eligible for special remuneration in the federal dental services.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Resolution No. 126

Report: CGA Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: Amount One-time Amount On-going FTE 0

ADA Strategic Plan Goal: Members (Required)

**AMENDMENT OF POLICY ON UNFAIR SUBORDINATION OF DENTISTRY IN THE ARMED FORCES**

**Background:** The Council believes that the policy, “Unfair Subordination of Dentistry in the Armed Forces” should be amended to better reflect the importance that dental officers be in charge of dental activity.

**Resolution 126.** Resolved, that the ADA policy on Unfair Subordination of Dentistry in the Armed Forces (Trans.1972:718) be amended with the title “Dentistry in the Armed Forces” and to read as follows (additions are underscored; deletions are stricken):

Unfair Subordination of Dentistry in the Armed Forces

Resolved, that in order to ensure the provision of high quality health care to those in active military service the American Dental Association sponsor and actively pursue legislation to eliminate the unfair subordination of dentistry in the armed forces, particularly to assure the dental officer’s proper role in command functions relating to the provision of oral health care and to give the supports dental corps control over the financial and other resources needed to carry out their health care missions.

**BOARD RECOMMENDATION:** Vote Yes.

**BOARD VOTE:** UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Resolution No. 127

Report: CGA Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: None

Amount One-time: None

Amount On-going: None

FTE: 0

ADA Strategic Plan Goal: Members (Required)

RANK EQUIVALENCY FOR CHIEF DENTAL OFFICERS OF THE FEDERAL DENTAL SERVICES

Background: The Council believes that the current policies, "Major General Rank for U.S. Air Force Director of Dental Services" and "Dental Leadership within the U.S. Air Force Medical Service" should be rescinded because they are outdated and inadequate to support the ADA's position that dental chiefs in all branches of the federal dental services should have a 2-star equivalent rank or higher. The Council believes that a new policy, "Rank Equivalency for Chief Dental Officers of the Federal Dental Services" should be adopted to support the position that all Federal Dental Service Chiefs should be, at minimum, a 2-star equivalent.

Resolved, that the following policy titled "Rank Equivalency for Chief Dental Officers of the Federal Dental Services" be adopted.

Rank Equivalency for Chief Dental Officers of the Federal Dental Services

Resolved, that the American Dental Association supports a 2-Star equivalent rank or higher for the Chief Dental Officers for the US Army, US Navy, US Air Force, US Public Health Service and the Veterans Administration, and be it further

Resolved, that the policy titled "Major General Rank for U.S. Air Force Director of Dental Services" (Trans.1994:636) and "Dental Leadership within the U.S. Air Force Medical Service" (Trans.2003:383) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Major General Rank for U.S. Air Force Director of Dental Services (Trans.1994:636)

Resolved, that the Association actively seek a change in the law to require that the position of chief dental officer for the United States Air Force, titled the "Air Force Director of Dental Services," be held by a dentist with the rank of Major General.

Dental Leadership within the U.S. Air Force Medical Service (Trans. 2003:383)

Resolved, that the ADA work with the Uniformed Services Dental Corps to conduct a study to investigate rank parity concerns, and be it further

Resolved, that the effort to establish rank parity continue to receive a high priority on the ADA’s legislative agenda in the future, and be it further

Resolved, that a report be given to the 2004 ADA House of Delegates, and each succeeding House, until such parity is achieved.
Resolution No. 128  

Report: CGA Supplemental Report 2  

Date Submitted: September 2012  

Submitted By: Council on Government Affairs  

Reference Committee: Legal, Legislative and Public Affairs Matters  

Total Net Financial Implication: None  

Net Dues Impact:  

Amount One-time  

Amount On-going  

FTE 0  

ADA Strategic Plan Goal: Members (Required)  

POLICIES ON DENTAL FOCUS IN FEDERAL HEALTH AGENCIES  

Background: The Council believes that the policies “Dental Health Focus in Department of Health and Human Services”, “Dental Advisory Committees to Federal Agencies” and “Private Practitioners as Consultants” were redundant and should be consolidated into a single policy encouraging a dental health focus in federal health agencies. Therefore, the following new policy is presented for approval.  

Resolution  

128. Resolved, that the following policy entitled “Dental Focus in Federal Health Agencies” be adopted.  

Dental Focus in Federal Health Agencies  

Resolved, that the American Dental Association seek to establish within the Department of Health and Human Services a policy level office for dental activities with appropriate status and funding administered by dentists and in close liaison with organized dentistry, and be it further  

Resolved, that the ADA seek to protect and enhance the status and funding of federal dental agencies, the integrity of federal dental programs and the roles and duties of federal dental officers, and be it further  

Resolved, that the ADA seek to ensure that the views of organized dentistry are appropriately reflected in the work of federal advisory committees, and be it further  


BOARD RECOMMENDATION: Vote Yes.  

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)  

*Dr. Faiella was absent.
Dental Health Focus in Department of Health and Human Services (*Trans.*1986:530)

Resolved, that the American Dental Association seek to establish within the Department of Health and Human Services a policy level office for dental activities with appropriate status and funding administered by dentists and in close liaison with organized dentistry, and be it further

Resolved, that Resolution 27H-1973 (*Trans.*1973:659) calling for a dental health agency in the HEW Department be rescinded.

Private Practitioners as Consultants (*Trans.*1986:530)

Resolved, that the American Dental Association strongly urge the U.S. Department of Health and Human Services, the U.S. Public Health Service, and similar agencies to initiate action, after consultation with the American Dental Association, to appoint dentists from private practice as consultants to all government agencies charged with identifying and solving problems of dental care.

Dental Advisory Committees to Federal Agencies (*Trans.*1973:747)

Resolved, that the appropriate Association agencies take such action as is necessary to assure that dental advisory committees to federal health agencies and programs be established and maintained and that every effort be exerted to assure that such advisory committees are regularly convened and given the opportunity to present the views of organized dentistry.
RESCISSION OF POLICY ON DEMONSTRATION PROJECTS FOR HEALTH CARE REFORM

Background: The Council reviewed the policy, “Demonstration Projects for Health Care Reform” recommending rescission because this policy is no longer relevant and is outdated.

Resolution


BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.

1. Resolved, that the American Dental Association encourage the federal government to identify seven states from different regions that are developing or have adopted health reform programs to have them serve as demonstration projects for a national health care program, and be it further

2. Resolved, that the ADA work closely with constituent societies to monitor and participate, upon the invitation of the constituent society, in any development of health care reform on a state level, and be it further

3. Resolved, that these demonstration projects be reviewed regularly in the ADA News so that the members and constituent leadership can stay apprised of their development.
Rescission of Policy on Evaluation and Monitoring of Proposals for National Health Care

Background: The Council reviewed the policy, “Evaluation and Monitoring of Proposals for National Health Care,” recommending rescission because this activity is done by the Division of Government Affairs regularly. The Division uses ADA policy to analyze legislation (health care/other) and any proposal that would impact the practice of dentistry or dentists as owners/employers. Communication takes place through multiple channels.

Resolution

130. Resolved, that the ADA policy, Evaluation and Monitoring of Proposals for National Health Care (Trans.1992:603) be rescinded.

Board Recommendation: Vote Yes.

Board Vote: Unanimous*. (Board of Trustees Consent Calendar Action—No Board Discussion)

*Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICY TO BE RESCINDED

1 Evaluation and Monitoring of Proposals for National Health Care (Trans.1992:603)

2 Resolved, that appropriate agencies of the American Dental Association evaluate and monitor proposal for national health care submitted to government agencies, and be it further

4 Resolved, that appropriate agencies of the American Dental Association vigorously oppose proposals for national health care that are contrary to Association policy, and be it further

6 Resolved, that appropriate agencies of the American Dental Association communicate and disseminate information about these proposals to the profession and be it further

8 Resolved, that Resolution 57H-1978 (Trans.1978:508), Evaluation and Monitoring of Proposals for Administration of Federal Dental Care Programs, be rescinded.
Resolution No. 131

Report: CGA Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: None

Amount One-time None Amount On-going None FTE 0

ADA Strategic Plan Goal: Members (Required)

RESCISSION OF POLICY ON UNFAIR LEGISLATIVE ADVANTAGE FOR SELECTED HEALTH CARE DELIVERY SYSTEMS

Background: The Council reviewed the policy, “Unfair Legislative Advantage for Selected Health Care Delivery Systems,” recommending rescission because the Affordable Care Act has been enacted and the ADA adopted two policies to address health system reform: Health Care Reform (Trans. 2009:485) and Universal Healthcare Reform (Trans. 2008:433).

Resolution

131. Resolved, that the ADA policy, Unfair Legislative Advantage for Selected Health Care Delivery Systems (Trans. 1990:538) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICY TO BE RESCINDED

Unfair Legislative Advantage for Selected Health Care Delivery Systems (Trans.1990:538)

Resolved, that the American Dental Association continue to actively oppose legislation that would provide selected health care delivery systems with an unfair advantage over other forms of health care delivery through federal subsidies or waiver of mandated requirements, and be it further

Resolved, that the appropriate agencies of the Association, in cooperation with constituent societies, disseminate information on this subject to the appropriate leadership at the federal and state levels, and be it further

Resolution No. 132  New

Report: CGA Supplemental Report 2  Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None  Net Dues Impact: 

Amount One-time  Amount On-going  FTE 0

ADA Strategic Plan Goal: Members (Required)

RESCISSION OF POLICY ON FEDERAL REGULATION OF HEALTH CARE SYSTEM


Resolution

132. Resolved, that the ADA policy, Federal Regulation of Health Care System (Trans.1974:686) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Federal Regulation of Health Care System (*Trans.*1974:686)

1. **Resolved,** that federal legislation proposing establishment of a national health policy which provides for a public utility type regulatory scheme for any element of the nation’s health care system be vigorously opposed.

File 22 Pages 6073-6074 Resolution 132
Resolution 133

RESCISSION OF POLICY ON DENTAL REPRESENTATION IN A NATIONAL HEALTH PROGRAM

Background: The Council reviewed the policy, “Dental Representation in a National Health Program” recommending rescission because ADA policy on health care reform is more current and Health Care Reform (Trans.2009:485) requires the Association to support maintaining the private health care system.

Resolution

133. Resolved, that the ADA policy, Dental Representation in a National Health Program (Trans.1971:516) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Dental Representation in a National Health Program (Trans.1971:516)

Resolved, that it be the policy of the American Dental Association to obtain dental representation, leadership and consultation at the highest administrative level in any ADA-approved national health care program which includes dental care.
Resolution No. 134  

Report: CGA Supplemental Report 2  
Date Submitted: September 2012

Submitted By: Council on Government Affairs
Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None  
Net Dues Impact: ____________

Amount One-time ____________ Amount On-going ____________ FTE 0

ADA Strategic Plan Goal: Members (Required)

1 RESCISSION OF POLICY ON OPPOSITION TO PEW REPORT RECOMMENDATIONS

2 Background: The Council reviewed the policy, “Opposition to Pew Report Recommendations” recommending rescission because Pew has issued subsequent reports which have been evaluated by the ADA and disseminated the information both internally and externally. The policy is not current and existing policy would require the Association to oppose any report that conflicts with such policies.

3 Resolution

4 134. Resolved, that the ADA policy, Opposition to Pew Report Recommendations (Trans.1999:942) be rescinded.

5 BOARD RECOMMENDATION: Vote Yes.

6 BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

7 *Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICY TO BE RESCINDED

1 Opposition to Pew Report Recommendations (*Trans.*1999:942)

2 Resolved, that the American Dental Association vigorously opposes the use of the October 1998 Pew Report, “Strengthening Consumer Protection: Priorities for Health Care Workforce Regulation” in developing federal legislation and/or regulations, and be it further

3 Resolved, that the Association urge its constituent societies to vigorously oppose the use of the 1998 Pew Report in developing state legislation and/or regulations.

File 24 Pages 6077-6078 Resolution 134
Resolution No. 135  

Report: CGA Supplemental Report 2  

Date Submitted: September 2012  

Submitted By: Council on Government Affairs  

Reference Committee: Legal, Legislative and Public Affairs Matters  

Total Net Financial Implication: None  

Net Dues Impact:  

Amount One-time  Amount On-going  FTE 0  

ADA Strategic Plan Goal: Members  

(REQUIRED)  

RESCISSION OF POLICY ON RISK ASSESSMENT  

Background: The Council reviewed the policy, “Risk Assessment” recommending rescission because with the enactment of the Affordable Care Act, this is no longer relevant. ADA has updated its policies on health care reform.  

Resolution  

135. Resolved, that the ADA policy, Risk Assessment (Trans.1994:637) be rescinded.  

BOARD RECOMMENDATION: Vote Yes.  

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)  

*Dr. Faiella was absent.
Risk Assessment (*Trans.1994:637*)

1. **Resolved**, that the American Dental Association be directed to support or initiate legislation requiring the appropriate federal agencies to conduct a cost analysis versus health benefits on all proposed legislation and/or changes in rules or regulations affecting dentistry and other forms of health care; such analysis shall be based upon established scientific methods, and be it further

2. **Resolved**, that the results of such analysis be made available to the public.
Resolution 136

Legal, Legislative and Public Affairs Matters

Report: CGA Supplemental Report 2  Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None  Net Dues Impact: 

Amount One-time  Amount On-going  FTE 0

ADA Strategic Plan Goal: Members

RESCISSION OF POLICY ON LEGISLATIVE OPPOSITION TO MANDATED MANAGED CARE PARTICIPATION

Background: The Council reviewed the policy, “Legislative Opposition to Mandated Managed Care Participation” recommending rescission because other policy such as the “Freedom of Choice in Publicly Funded Aid Programs (Trans.2006:344)” addresses mandatory participation in managed care networks and linking a requirement to participation in public programs. State constituent societies monitor this type of activity in their respective state programs.

Resolution

136. Resolved, that the ADA policy, Legislative Opposition to Mandated Managed Care Participation (Trans.2002:409) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICY TO BE RESCINDED

1 Legislative Opposition to Mandated Managed Care Participation (Trans.2002:409)

2 Resolved, that the American Dental Association is opposed to linking dental participation in publicly funded
dental benefit plans with mandatory participation in a managed care plan, and be it further

3 Resolved, that the American Dental Association urge state legislatures not to adopt these types of
arrangements, and be it further

4 Resolved, that the appropriate agencies in the American Dental Association compile information on existing
arrangements of publicly funded programs contracted to private insurers and disseminate this information to
the constituents, and be it further

5 Resolved, that the American Dental Association Legal Division examine whether or not grounds exist to
pursue litigation on forced participation contracts.
Rescission of Policy on Medicaid Dental Care for the Elderly Poor

Background: The Council reviewed the policy, “Medicaid Dental Care for the Elderly Poor” recommending rescission because it is no longer relevant. Policy on adult dental coverage exists, “Support for Adult Medicaid Dental Services, (Trans.2004:327).”

Resolution

137. Resolved, that the ADA policy, Medicaid Dental Care for the Elderly Poor (Trans.1983:548; Trans.1990:558) be rescinded.

Board Recommendation: Vote Yes.

Board Vote: UNANIMOUS*. (Board of Trustees Consent Calendar Action—No Board Discussion)

*Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICY TO BE RESCINDED

1 Medicaid Dental Care for the Elderly Poor (Trans.1983:548; Trans.1990:558)

2 Resolved, that the ADA work in concert with support groups for the elderly to lobby for an amendment to the
Medicaid program to promote comprehensive dental benefits for low income elderly individuals, in accordance
with Association policy, and be it further

3 Resolved, that additional adequate funding be a part of this new dental benefits program.
Resolution No. 138

Report: CGA Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: 

Amount One-time 

Amount On-going 

FTE 0

ADA Strategic Plan Goal: Members (Required)

RESCISSION OF POLICY ON ADULT EMERGENCY DENTAL CARE

1 Background: The Council reviewed the policy, “Adult Emergency Dental Care” recommending rescission because it is similar to more current policy, “Support for Adult Medicaid Dental Services” (Trans.2004:327) and Association support reflected in health care reform policies (Trans.2009:485; Trans.2008:433).

Resolution

138. Resolved, that the ADA policy, Adult Emergency Dental Care (Trans.1993:665) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICY TO BE RESCINDED

1 Adult Emergency Dental Care (Trans.1993:665)

2 Resolved, that wherever the American Dental Association seeks to promote or advocate any government
3 funded dental care program that does not include comprehensive care for adults then, at the very least,
4 emergency dental care for indigent adults shall be included, and be it further

5 Resolved, that the American Dental Association seek to have emergency dental care as a mandated benefit
6 for indigent adults under the Medicaid program.

File 28 Pages 6085-6086 Resolution 138
RESCISSION OF POLICY ON SUPPORT FOR VEHICLE PASSENGER SAFETY RESTRAINTS

Background: The CGA reviewed the policy, “Support for Vehicle Passenger Safety Restraints” recommending rescission because the policy is obsolete. Today, forty-nine states and the District of Columbia have mandatory seat belt laws (the exception is New Hampshire).

Resolution

139. Resolved, that the ADA policy, Support for Vehicle Passenger Safety Restraints (Trans.1988:489) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Support for Vehicle Passenger Safety Restraints (*Trans.*1988:489)

Resolved, that the American Dental Association supports the National Safety Council and the National Highway Traffic Safety Administration efforts to make the public aware of the effectiveness of vehicle passenger safety restraints in saving lives and reducing the incidence of injuries, and be it further

Resolved, that constituent and component dental societies be urged to cooperate with other state and local organizations in promoting these safety measures in their communities, and be it further

Resolved, that the Association and constituent and component dental societies support legislative efforts in this area of protection of the public health, and be it further

Resolution No. 140 

Report: CGA Supplemental Report 2 

Date Submitted: September 2012 

Submitted By: Council on Government Affairs 

Reference Committee: Legal, Legislative and Public Affairs Matters 

Total Net Financial Implication: None 

Net Dues Impact: 

Amount One-time 

Amount On-going 

FTE 0 

ADA Strategic Plan Goal: Members (Required) 

RESCISSION OF POLICY ON LEGISLATION PROTECTING CIVIL DEFENSE WORKERS 

Background: The Council reviewed the policy, “Legislation Protecting Civil Defense Workers” recommending rescission because the policy is redundant of more a recent policy: Liability Protection for Bioterrorism Responders (Trans.2002:398). 

Resolution 

140. Resolved, that the ADA policy, Legislation Protecting Civil Defense Workers (Trans.1960:216) be rescinded. 

BOARD RECOMMENDATION: Vote Yes. 

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION) 

*Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICY TO BE RESCINDED

1 Legislation Protecting Civil Defense Workers (*Trans.1960:216*)

2 Resolved, that the provisions of the Model State Civil Defense Act dealing with immunity from civil actions for damages and exemption from prosecution under state medical practice acts for authorized civil defense workers be endorsed, and be it further

5 Resolved, that each constituent society be urged to seek, either independently or in cooperation with other health organizations, the enactment of state legislation which will afford such immunity and exemption to its members and to other groups which have a recognized responsibility to participate in the management and treatment of casualties in emergency conditions.
Resolution No. 142

Report: CGA Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: __________

Amount One-time __________ Amount On-going __________ FTE 0

ADA Strategic Plan Goal: Members (Required)

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RESCISSION OF POLICY ON PAY PARITY BETWEEN PHYSICIANS AND DENTISTS IN FEDERAL DENTAL SERVICES

Background: The Council reviewed the policy, “Pay Parity between Physicians and Dentists in Federal Dental Services,” recommending rescission because under current policy new pay initiatives including special pay programs are now approved at the Department of Defense Health Affairs level and do not need congressional approval.

Resolution

142. Resolved, that the ADA policy, Pay Parity between Physicians and Dentists in Federal Dental Services (Trans.2003:378) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICY TO BE RESCINDED

Pay Parity between Physicians and Dentists in Federal Dental Services (*Trans.*2003:378)

1. **Resolved,** that the American Dental Association support parity of pay between physicians and dentists in the federal dental services, and be it further

2. **Resolved,** that the appropriate ADA agencies study the differences in pay between physicians and dentists in federal dental services and report to the 2004 House of Delegates with recommendations on how to achieve parity.
Resolution No. 143

Report: CGA Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: 

Amount One-time 
Amount On-going 
FTE 0

ADA Strategic Plan Goal: Members (Required)

RESCISSION OF POLICY ON DENTAL BENEFITS FOR MILITARY RESERVISTS

Background: The Council reviewed the policy, “Dental Benefits for Military Reservists,” recommending rescission because with the implementation of the TRICARE Dental Program, this resolution is obsolete.

Resolution

143. Resolved, that the ADA policy, Dental Benefits for Military Reservists (Trans.1994:645) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Dental Benefits for Military Reservists (*Trans.1994:645*)

Resolved, that the Association supports legislative initiatives intended to offer a dental benefits plan covering selected military reservists and their dependents similar to that covering active duty military dependents.
RESCISSION OF POLICY ON DENTAL SPECIAL PAY FOR FEDERAL SERVICE DENTISTS

Background: The Council reviewed the policy, “Dental Special Pay for Federal Service Dentists,” recommending rescission because under current policy new pay initiatives including special pay programs are now approved at the Department of Defense Health Affairs level and do not need congressional approval.

Resolution

144. Resolved, that the ADA policy, Dental Special Pay for Federal Service Dentists (Trans.1994:637) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Dental Special Pay for Federal Service Dentists (Trans.1994:637)

Resolved, that the ADA actively seek legislative initiatives for increased compensation for federally employed dentists.
Resolution No. 145

Report: CGA Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: None

Amount One-time None

Amount On-going None

FTE 0

ADA Strategic Plan Goal: Members (Required)

RESCISSION OF POLICY ON EXPANSION OF DENTAL BENEFITS FOR MILITARY RETIREES

Background: The Council reviewed the policy, “Expansion of Dental Benefits for Military Retirees,” recommending rescission because with the implementation of the TRICARE Retiree Dental program, this resolution is obsolete.

Resolution


BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Expansion of Dental Benefits for Military Retirees (Trans.1994:636)

Resolved, that the Association supports legislative initiatives intended to offer a dental benefits plan covering military retirees and their dependents at no cost to the federal government.
RESCISSION OF POLICY ON FEDERAL DENTAL SERVICES REMOTE-SITE CRITERIA

Background: The Council reviewed the policy, “Federal Dental Services Remote-Site Criteria,” recommending rescission because with the availability of the TRICARE Dental Program, the resolution on designation of “remote sites” is no longer relevant.

Resolution

146. Resolved, that the ADA policy, Federal Dental Services Remote-Site Criteria (Trans.1993:709) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICY TO BE RESCINDED

1 Federal Dental Services Remote-Site Criteria (Trans.1993:709)

2 Resolved, that the Association, working in conjunction with the military services where possible, take actions necessary to establish criteria to define the “remote site” designation for military installations where access to dental care for military dependents has been determined to be inadequate, and be it further

5 Resolved, in instances where a military installation has been declared a “remote site” with inadequate access to dependent dental care, the Chiefs of the Federal Dental Services be requested to notify the ADA Council on Federal and state Government Affairs and Federal Dental Services and the ADA Council on Governmental Affairs and Federal Dental Services in turn notify immediately the involved ADA constituents of such declared remote site, and that the Association conduct meetings and discussions with both military and component/constituent dental societies to resolve any real or perceived access problems in a manner consistent with Association policies.
RESCISSION OF POLICY ON AMENDMENT OF MILITARY DEPENDENTS’ DENTAL BENEFIT PLAN


Resolution

147. Resolved, that the ADA policy, Amendment of Military Dependents’ Dental Benefit Plan (Trans.1993:706) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Amendment of Military Dependents’ Dental Benefit Plan (*Trans.*1993:706)

1. Resolved, that the Washington Office initiate a legislative program to pursue amendment of the military Dependents’ Dental Benefit Plan to permit continuation of coverage to surviving dependents of deceased military personnel.

File 36 Pages 6101-6102 Resolution 147
Resolution No. 148

Report: CGA Supplemental Report 2 Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None Net Dues Impact: 

Amount One-time Amount On-going FTE 0

ADA Strategic Plan Goal: Members (Required)

RESCISSION OF POLICY ON VETERANS AFFAIRS DENTAL TREATMENT FEE SCHEDULE

Background: The Council reviewed the policy, “Veterans Affairs Dental Treatment Fee Schedule,” recommending rescission because it conflicts with current VA policy pursuant to law with regard to claims payments.

Resolution

148. Resolved, that the ADA policy, Veterans Affairs Dental Treatment Fee Schedule (Trans.1992:627) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICY TO BE RESCINDED

1. Veterans Affairs Dental Treatment Fee Schedule (Trans.1992:627)

2. Resolved, that the American Dental Association through whatever appropriate activity is necessary, engage in a course of action which will result in a VA dental treatment fee schedule which approximates the same percentile of fees which other providers of professional services receive from the federal government.
Resolution No. 149  

Report: CGA Supplemental Report 2  

Date Submitted: September 2012  

Submitted By: Council on Government Affairs  

Reference Committee: Legal, Legislative and Public Affairs Matters  

Total Net Financial Implication: None  

Net Dues Impact:  

Amount One-time  

Amount On-going  

FTE 0  

ADA Strategic Plan Goal: Members (Required)  

RESCISSION OF POLICY ON DENTAL CARE FOR UNIFORMED SERVICES DEPENDENTS  

Background: The Council reviewed the policy, “Dental Care for Uniformed Services Dependents,” recommending rescission because with the implementation of the TRICARE Dental Program, this resolution is obsolete.  

Resolution 

149. Resolved, that the ADA policy, Dental Care for Uniformed Services Dependents (Trans.1991:630) be rescinded.  

BOARD RECOMMENDATION: Vote Yes.  

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)  

*Dr. Faiella was absent.
Dental Care for Uniformed Services Dependents (Trans.1991:630)

Resolved, that the American Dental Association endorse a dental benefit program for uniformed services dependents which is, where appropriate and practical, based on the Association's Standards for Dental Benefit Plans (Trans.1988:478; 1989:547) and monitored by the appropriate agencies of the Association, and be it further

Resolved, that uniformed services dependents have freedom of choice to obtain services through a dental benefits program or military facilities on a space-available basis, and be it further

Resolved, that comprehensive services should be covered in the benefit plan with costs contained by copayments, deductibles, annual limitations on benefits, and be it further

Resolved, that when dependent care is provided at uniformed services facilities on a space-available basis, such dependent care will not impair the dental needs of the active duty forces or require additional dental staffing or other resources beyond that required for services for active duty personnel, and be it further

Resolution No. 150

Report: CGA Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: 

Amount One-time 

Amount On-going 

FTE 0

ADA Strategic Plan Goal: Members (Required)

RESCISSION OF POLICY ON DENTAL SERVICES FOR RESERVE COMPONENT FORCES DURING TRAINING PERIODS OF LESS THAN 30 DAYS

Background: The Council reviewed the policy, “Dental Services for Reserve Component Forces during Training Periods of Less Than 30 Days,” recommending rescission because policy is obsolete. Current programs address dental treatment for Guard and reserve personnel prior to their activation.

Resolution

150. Resolved, that the ADA policy, Dental Services for Reserve Component Forces during Training Periods of Less Than 30 Days (Trans.1991:625) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Dental Services for Reserve Component Forces during Training Periods of Less Than 30 Days

Resolved, that the American Dental Association work with all branches of the military to change the regulations or seek appropriate legislation regarding dental benefits for reserve component forces so that, when available, active duty or reserve component dentists may provide dental disease control treatment for reserve component personnel with dental conditions likely to result in a dental emergency within 12 months during individual duty training (IDT), active duty training (AT) or temporary duty (TDY) of less than 30 days, and be it further

Resolved, that priority for the provision of such dental care that may be available at active duty or reserve component dental facilities be given to military personnel of lower pay grades, and be it further

Resolved, that the dental needs of reserve component military forces not be impaired for rapid mobilization in times of national emergency.
Resolution No. 151

Report: CGA Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: ______

Amount One-time ________ Amount On-going ________ FTE 0

ADA Strategic Plan Goal: Members (Required)

1 RESCISSION OF POLICY ON DEPARTMENT OF VETERANS AFFAIRS PROVISION OF NECESSARY DENTAL SERVICES

2 Background: The Council reviewed the policy, “Department of Veterans Affairs Provision of Necessary Dental Services,” recommending rescission because of current VA policy pursuant to law regarding patients authorized dental care through the VA.

3 Resolution

4 151. Resolved, that the ADA policy, Department of Veterans Affairs Provision of Necessary Dental Services (Trans.1991:624) be rescinded.

5 BOARD RECOMMENDATION: Vote Yes.

6 BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

7 *Dr. Faiella was absent.
Resolved, that the American Dental Association supports the Department of Veterans Affairs provision of necessary dental services: (1) to patients in DVA hospitals and domiciliary institutions; (2) to any veteran whose dental condition has been professionally diagnosed as related to a medical condition or the treatment thereof; (3) to any patient whose dental condition has been determined to be service connected and compensable; and (4) to any veteran who has suffered an 80% service connected disability, and be it further

RESCISSION OF POLICY ON COMPENSATION FOR RESERVE DENTAL OFFICERS

Background: The Council reviewed the policy, "Compensation for Reserve Dental Officers," recommending rescission because policy is obsolete. Reserve component officers receive the same compensation including the special pays they are eligible for while on active duty.

Resolution

152. Resolved, that the ADA policy, Compensation for Reserve Dental Officers (Trans.1990:564) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
Resolved, that the appropriate agencies of the Association urge the Department of Defense and Congress to initiate changes in laws that would provide special pays to reserve dental officers whenever they are on active duty in order to bring them into pay parity with their active duty peers, and be it further

Resolved, that current Association policy on Pay of Reserve Dental Officers (Trans.1981:608) be rescinded.
Resolution No. 153

Report: CGA Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: ______

Amount One-time ________ Amount On-going ________ FTE 0

ADA Strategic Plan Goal: Members (Required)

RESCISSION OF POLICY ON REGULAR UPGRADING OF OUTPATIENT PROGRAM

Background: The Council reviewed the policy, “Regular Upgrading of Outpatient Program,” recommending rescission because of current VA policy pursuant to law regarding patients authorized dental care though the VA.

Resolution

153. Resolved, that the ADA policy, Regular Upgrading of Outpatient Program (Trans.1979:635) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICY TO BE RESCINDED

1  Regular Upgrading of Outpatient Program *(Trans. 1979:635)*

2  Resolved, that in order to ensure that military veterans receive the dental benefits to which they are entitled,
3  the Department of Veterans Affairs be urged to upgrade the outpatient program on a regular basis, including
4  equitable adjustments in compensation paid to participating dentists.

File 42 Pages 6113-6114 Resolution 153
Rescission of Policy on Special Assistant for Dental Affairs in Department of Defense

Background: The Council reviewed the policy, “Special Assistant for Dental Affairs in Department of Defense,” recommending rescission because the Chief of TRICARE Dental Care Branch performs that function.

Resolution

154. Resolved, that the ADA policy, Special Assistant for Dental Affairs in Department of Defense (Trans.1978:527) be rescinded.

Board Recommendation: Vote Yes.

Board Vote: Unanimous*. (Board of Trustees Consent Calendar Action—No Board Discussion)

*Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICY TO BE RESCINDED

1 Special Assistant for Dental Affairs in Department of Defense (Trans.1978:527)
2 Resolved, that the American Dental Association urges the Department of Defense to reestablish the position of Special Assistant for Dental Affairs within the Office of the Assistant Secretary of Defense (Health Affairs).

File 43 Pages 6115-6116 Resolution 154
Resolution No. 155

Report: CGA Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: None

Amount One-time

Amount On-going

FTE 0

ADA Strategic Plan Goal: Members

(Required)

RESCISSION OF POLICY ON EXTENSION OF DENTAL BENEFITS

Background: The Council reviewed the policy, "Extension of Dental Benefits," recommending rescission because the policy has been implemented by the VA pursuant to law.

Resolution

155. Resolved, that the ADA policy, Extension of Dental Benefits (Trans.1976:877) be rescinded.

BOARD RECOMMENDATION: Vote Yes.

BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICY TO BE RESCINDED

1 Extension of Dental Benefits (Trans.1976:877)

2 Resolved, that the Association encourage the Department of Veterans Affairs to approve the following
3 extension of dental benefits by the Department: emergency outpatient dental care for a non-service-
4 connected dental condition but only to the extent required to relieve pain and/or control infection. Major
5 restorations, therapy or prostheses would not be included.
Resolution No. 156

Report: CGA Supplemental Report 2

Date Submitted: September 2012

Submitted By: Council on Government Affairs

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: 

Amount One-time 

Amount On-going 

FTE 0

ADA Strategic Plan Goal: Members (Required)

1 RESCISSION OF POLICY ON UNIFICATION OF HEALTH SERVICES

2 Background: The Council reviewed the policy, “Unification of Health Services,” recommending rescission because the language is obsolete and proposed new policy affirms the ADA position on the importance of dental programs under the command and control of dental professionals.

3 Resolution

4 156. Resolved, that the ADA policy, Unification of Health Services (Trans.1962:264) be rescinded.

5 BOARD RECOMMENDATION: Vote Yes.

6 BOARD VOTE: UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

7 *Dr. Faiella was absent.
Unification of Health Services (*Trans.1962:264*)

1. Resolved, that the appropriate agencies of the Association be authorized to oppose any measure, either legislative or administrative, designed to merge or unify the health services of the armed forces unless such measure clearly contemplates the preservation of professional dental control over all matters directly affecting the dental programs and dental personnel of the armed forces, and be it further

2. Resolved, that such agencies be authorized to seek, if necessary, the creation of an office within the Department of Defense, under professional dental control, to guide and coordinate the research, training, procurement, recruitment, promotion and related logistical and technical programs and activities of the armed forces dental services.
Rescission of Policy on Compensation for Federally Employed Dentists

Background: The Council reviewed the policy, “Compensation for Federally Employed Dentists,” recommending rescission because more recent relevant policies exist.

Resolution

157. Resolved, that the ADA policy, Compensation for Federally Employed Dentists (Trans.1987:518) be rescinded.

Board Recommendation: Vote Yes.

Board Vote: Unanimous*. (Board of Trustees Consent Calendar Action—No Board Discussion)

*Dr. Faiella was absent.
WORKSHEET ADDENDUM
COUNCIL ON GOVERNMENT AFFAIRS
ADA POLICY TO BE RESCINDED

1 Compensation for Federally Employed Dentists (Trans.1987:518)

2 Resolved, that the American Dental Association continue its efforts to ensure adequate and equitable programs of compensation and career development for all federally employed dentists, and be it further

3 Resolved, that the following policies relating to federal dental pay be rescinded:

5 Resolution 88-1972-H (Trans.1972:723)


7 Resolution 149H-1978 (Trans.1978:538)

8 Resolution 64H-1984 (Trans.1984:546)

9 Resolution 92H-1984 (Trans.1984:547)
Rescueion of Policy on Support for Activated Self-Employed Dentists

Background: The Council reviewed the policy, “Support for Activated Self-Employed Dentists,” recommending rescission because this resolution appears to be superseded by more recent resolutions.

158. Resolved, that the ADA policy, Support for Activated Self-Employed Dentists (Trans. 1992:628) be rescinded.

Board Recommendation: Vote Yes.

Board Vote: Unanimous*. (Board of Trustees Consent Calendar Action—No Board Discussion)

*Dr Faiella was absent.
Support for Activated Self-Employed Dentists (Trans.1992:628)

Resolved, that the Council on Governmental Affairs develop and seek the enactment of a legislative proposal which provides appropriate financial relief for those self-employed dentists who are activated to full-time duty during military conflict or national emergency.
The following resolution was adopted by the Fourteenth Trustee District and transmitted on September 14, 2012, by Dr. Thomas Schripsema, chair, Resolutions Committee.

Background: It is a sad commentary on our profession and the state of our society that so many new graduate dentists find themselves in employment situations that challenge their ethics and strain their ability to succeed in a profession they have spent so much time and money to enter. While many enter into employment contracts voluntarily, they find themselves little better than indentured servants due to debt and other responsibilities. At a time in their careers when they should be nurtured and encouraged in the profession, they are exploited and abused. Instead they are schooled in questionable ethics and irresponsibility.

As the voice of the profession and advocates of quality care, our Association should lead in all aspects of professional ethics. While cognizant not to infringe on the employee-employer relationship, we have a responsibility to suggest the standards for the ethical treatment of dentist employees, in whatever setting.

The Employee Dentist's Bill of Rights is intended to be both a guide for employers and a support for employees to aid the contracting, management and supervision of employee dentists. Whether dentist employers are private practice, public clinic or corporate enterprise, it presents clear and concise guides built directly on our existing Principles of Ethics and Code of Professional Conduct. By adopting this resolution, the Association makes a clear and loud proclamation that the ethics of appropriate conduct and treatment must govern those that provide dental services, whether as practitioner or employer of one who delivers care.

Resolution

165. Resolved, that the American Dental Association adopts the following as a statement of fair practices in employing dentists:

The Employee Dentist’s Bill of Rights*

1. An employee dentist has the right not to be penalized or terminated for exercising appropriate professional judgment in patient assessment, diagnosis or treatment.

2. An employee dentist has the right to refuse to deliver a prosthetic device that he/she believes does not represent an acceptable standard of care.

3. An employee dentist has the right to participate in selecting a lab to fabricate prostheses for which they are responsible.
4. An employee dentist has the right to refuse to use materials and techniques which he/she finds unacceptable or for which they feel unqualified.

5. An employee dentist has the right and responsibility to report unethical or illegal behavior by employers and other employees with the protection of whistleblower laws.

6. An employee dentist has the right to refuse to provide care for which he/she will not be compensated.

7. An employee dentist has the right to expect appropriate and ethical billing practices by his/her employer.

8. An employee dentist has the right to expect employers to maintain facilities and equipment to accepted standards.

9. An employee dentist has the right to expect that HIPAA, OSHA and CDC guidelines are being enforced and adhered to.

10. An employee dentist has the right to perpetual access to the records of a patient he/she has treated, in the event of peer review, board complaint or lawsuit.

11. An employee dentist has the right to be a member of the professional organization of his/her choice.

12. An employee dentist has the right to abide by ADA Principles of Ethics and Code of Professional Conduct without obstruction by their employers.

13. An employee dentist has the right to refuse to perform treatment not justified by his/her own diagnosis.

* Dentists are advised that employment contracts may have provisions that conflict with these rights and the ADA recommends that dentists seek legal counsel when considering how contracts affect their professional rights and responsibilities.

and be it further

**Resolved**, that the Association will publish and promote this statement to dentist employers and employees, and be it further

**Resolved**, that the Association encourages constituent societies to utilize this statement to facilitate legislative and regulatory measures to ensure the fair and ethical treatment of dentist employees and the patients that they treat.

**BOARD RECOMMENDATION:** Vote Yes.

**BOARD VOTE:** UNANIMOUS*. (BOARD OF TRUSTEES CONSENT CALENDAR ACTION—NO BOARD DISCUSSION)

*Dr Faiella was absent.
Resolution No. 168

Report: N/A Date Submitted: September 2012

Submitted By: Board of Trustees

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None Net Dues Impact:  

Amount One-time  

Amount On-going  

FTE 0

ADA Strategic Plan Goal: Members (Required)

1

AMENDMENT OF THE RULES OF THE HOUSE OF DELEGATES

Background: In 2010, the House of Delegates directed that a comprehensive review all policies of the Association every three years:

111H-2010. Regular Comprehensive Policy Review

Resolved, that the Board of Trustees develop a timetable and protocol to allow the review of all Association policies every three years, and be it further

Resolved, that the Councils, committees, taskforce, or other Association agency assigned with the review consider the following in making recommendations:

- Relevance to current situation

- Continued need

- Consistency with other Association policies

- Appropriateness of language and terminology

and be it further

Resolved, that recommended rescissions and revisions will be brought to the House of Delegates in resolution form for debate and approval, and be it further

Resolved, that recommendations for maintaining policies unchanged will be assimilated into a single resolution, and if approved, unchanged policies will continue to carry the identifying information of their original adoption, and be it further

Resolved, that any policies that delegates remove from the reapproval consent calendar, and which after appropriate debate are amended or substituted, be automatically referred to the appropriate agency for reconsideration during the following year, and be it further

To harmonize the House’s comprehensive policy review protocol with the Standing Rules of the House of Delegates, the following resolution is proposed:

Resolution

168. Resolved, that the Rules of the House of Delegates, section titled “Presentation of Resolutions and Other Items of Business,” paragraph two, be amended as follows (new language= underscored, deletions=stricken):

Resolutions shall not be introduced in the House of Delegates which (1) merely reaffirm or restate existing policy unless proposed pursuant to Resolution 111H-2010, Regular Comprehensive Policy Review, (2) commend or congratulate an individual or organization, (3) memorialize an individual shall not be introduced in the House of Delegates.

BOARD RECOMMENDATION: Vote Yes.

Board Vote: Resolution 168

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<td>LOW</td>
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COUNCIL ON GOVERNMENT AFFAIRS SUPPLEMENTAL REPORT 1 TO THE HOUSE OF DElegates:

RECENT COUNCIL ACTIVITIES

Background: This report provides a response to 2011 House of Delegates resolutions not addressed in the council’s annual report, as well as an update of on-going Affordable Care Act implementation and Employee Retirement Income Security Act (ERISA) reform legislation.

Chair and Vice-Chair: The Council forwarded the name of Dr. Henry Fields to the Board of Trustees for approval as the Council's next chair and elected Dr. Carmine Lo Monaco as vice-chair.

The Strategic Plan of the American Dental Association: In support of the strategic plan goal to “provide support to dentists so they may succeed and excel throughout their careers,” the council submits the following supplemental report to the House of Delegates.

Affordable Care Act Implementation: The ADA was well "ahead of the curve" (beginning in January 2012) in providing constituent dental societies with the tools they need to effectively advocate for dentistry and dental patients with regard to the establishment of health benefit exchanges under the new health care reform law, the Affordable Care Act (ACA). Now that the U.S. Supreme Court upheld the constitutionality of the ACA, including the requirement that health care exchanges be established in each state by January 1, 2014, millions more children and adults will have dental coverage from private and public sector health plans, unless federal action changes things. The primary activity regarding implementation remains at the state level, however. The advocacy materials provided to constituent dental societies (on ADA Connect) have been updated accordingly and monthly calls to share “best practices” with constituent society staff continues.

ERISA Reform Legislation: The ADA is growing the number of co-sponsors for federal legislation to enact ERISA reforms as provided in the “Dental Insurance Fairness Act of 2012” (H.R. 4818). H.R. 4818, introduced by Representative Paul Gosar (R-AZ), would require all health plans that offer dental benefits to provide uniform coordination of benefits and would also require them to permit assignment of benefits. Additional coalition building and grassroots efforts underway should also help generate support for the bill.

Response to Assignments from the 2011 House of Delegates

This section contains responses to 2011 House of Delegates resolutions not addressed in the Council’s annual report.

State Public Affairs Grant Funding. Resolution 37H (Trans:2011:489) increased funding for the State Public Affairs (SPA) program to a total of $3.5 million for 2012 and authorized an additional $5 million in funding from the reserves to be available to the Board of Trustees, if necessary. As of this writing, approximately $1.8 million dollars was provided directly to states as grants for their public affairs programs. Approximately $300,000 was spent indirectly to assist all state dental associations in the following capacities: hiring
consultants to advise the ADA and state dental societies on the 2010 Patient Protection and Affordable Care Act Health insurance exchange issues; developing print, radio and billboard ad templates to be used in states where workforce is an issue; conducting research on workforce related issues; and, paying for ADA staff and contract consultant travel associated with assisting states in the program. Approximately $700,000 was paid to the national State Public Affairs Consultant, Chlopak, Leonard and Schechter (CLS) to assist both the ADA and state dental societies in designing their state public affairs programs and developing strategies regarding their programs.

The Oversight Committee may receive additional requests to directly fund grants to states prior to the end of the fiscal year. If no additional grants are requested or funds expended for the program the committee expects to return approximately $600,000 in unspent budgeted funds to the ADA General Fund. The additional $5 million authorized to be spent from reserves was not needed.

The SPA project continues to provide strategic direction, support and day-to-day oversight for public affairs activities undertaken by state dental societies in 21 states. Collectively, the project helps guide public affairs programs within the states, assisting the states in identifying their own active solutions for expanding access to oral care, helping states counter efforts to remove fluoride from municipal water supplies and providing resources to tackle these and other emerging issues for the dental profession at the state level. This ongoing engagement has helped to enhance the effectiveness of state public affairs programs and shared learning across states, while allowing each state to pursue campaigns and tackle public affairs challenges in a manner appropriate to its own needs.

- Workforce advocates have become more creative and SPA initiatives are underway in Connecticut, Michigan, and Missouri to counter the threats and demonstrate what states are doing to expand access.
- Fluoride activity has increased in Montana, Oregon, New Mexico and Wisconsin. In the coming months, we expect continued efforts by anti-fluoride activists in these states and others.
- In the past year, there has been greater attention paid to corporate ownership of dental practices as an issue.
- Regarding the Native American Project, SPA continues to manage the program’s strategic direction and ensure all states (Arizona, New Mexico, North Dakota and South Dakota) are sharing information.
- Finally, the Oversight Committee approved a request for media outreach to help expand the effects of the SPA initiatives beyond the borders of the affected states.

See Appendix 1 (Report from the State Public Affairs Oversight Committee).

*Developing the Native American Dental Workforce.* Resolution 50H (Trans.2011:489) states that the participants of the Native American Oral Health Care Project be urged to build upon existing educational programs that are consistent with ADA policy and that the ADA convene a meeting of stakeholders during the spring 2012 Pathways Into Health annual conference to recruit participants into the coalition. The coalition is asked to consider objectives that educate young Native American students about oral health care careers, promote access to education, train and develop a highly skilled and competent Native American oral health workforce that is consistent with ADA policy, and develop partnerships to provide financial sustainability for ongoing workforce development activities that are consistent with ADA policy. The ADA's State Public Affairs (SPA) program and the Association’s Washington office and Council on Access, Prevention and Interprofessional Relations will convene an initial stakeholders meeting at the 2012 “Pathways Into Health” annual conference, which will be held October 9 – 12, 2012 in Rapid City, SD. The purpose of the meeting is to identify methods to enable Native American students to enter dental school more readily and to cultivate funding mechanisms to provide the financial resources.

*Implications of the Affordable Care Act.* Resolution 83H (Trans.2011:490) provides funding for the ADA to commission a comprehensive analysis of the implications of the Affordable Care Act (ACA) on dental practice and patient care, including the impact on government programs and on exchange and private commercial
dental benefit plan coverage and delivery of care, the potential for medical/dental delivery integration and
movement toward a model of price-driven competition, as well as strategic opportunities at the federal and
state levels for ADA and constituent dental societies. The resolution also calls for the development of a
strategic approach to guide ADA’s advocacy activities and to provide assistance to constituents.

Council’s Comments: Comprehensive analyses were completed by Milliman, Inc. The Council on
Government Affairs reviewed the analyses and believes they are an invaluable resource going forward for the
CGA and other appropriate agencies to recommend appropriate action, including the development of a
strategic approach to guide ADA’s advocacy and activities and provide assistance to constituent societies.

The Council agrees that the increased number of potential dental patients in Medicaid resulting from ACA
implementation will put further pressure on an already strained dental care system. Some states may incur
increased unmet dental need as a result of the Medicaid expansion. Council members noted that some the
state-by-state information in Table I (beginning on page 24) of the Medicaid Expansion analysis was not up to
date. It was explained to the Council that the state adult Medicaid benefits are a constantly moving target, so
some inaccuracies are inevitable; however, the Table will be updated before publishing to reflect the latest
information.

Some members of the Council were surprised that the projected private market expansion was only 3 million
additional children by 2018 as a result of the individual mandate. The figure was reached by using Milliman’s
Health Care Reform Financing Model (HCRFM), which is a modeling tool that enables analysis of how health
care reform will change the number of people accessing the insurance marketplace, and the ways in which
people will access insurance. A full description of the HCRFM population modeling process is contained in
Appendix 2 (Medicaid Expansion Under the Affordable Care Act and Its Impact on Dental Delivery and
Financing – August 20, 2012).

Key Findings: These analyses address three broad questions:

- What will be the potential impact of expanded Medicaid eligibility on the dental care delivery system?
- What will be the potential impact of the establishment of state health insurance exchanges on the
dental care delivery system?
- What will be the potential impact of the growth of Accountable Care Organizations on the dental care
delivery system?

This report summarizes the key findings from the analysis. The three full analyses, including comprehensive
state-by-state data, can be found below.

Expanded Medicaid Eligibility.

The ACA is expected to have a significant impact on the number of adults enrolled in Medicaid. The impact
on children is expected to be much smaller

- These projections assume that all states will participate in the expansion to 133% of the federal
poverty level.
- ACA is expected to add 20.8 million adult enrollees to Medicaid by 2018, an 84% increase compared
to 2010. The benefits will continue to vary from state-to-state.
- ACA is expected to add 3.2 million child enrollees to Medicaid, a 10% increase compared to 2010.
Comprehensive dental benefits for children are already a required component of state Medicaid
benefits.

A significant share of the new Medicaid adult population will have no or very limited dental benefits.

- Dental benefits for adults are not mandated under Medicaid. Thus, the impact of the Medicaid
expansion on adult dental benefits will be a function of how each state’s Medicaid program covers
adult dental services going forward.
Our analysis estimates that of the 20.8 million adults gaining Medicaid coverage, 37% will have no
dental benefits, 13% will be covered for emergency care only, 20% will have limited dental benefits,
and 30% will have extensive dental benefits.

This assumes that states will neither expand nor reduce adult Medicaid dental benefits from their
current levels between now and 2018. Given the recent trend of reducing adult dental benefits, this
should be viewed as an optimistic scenario.

A significant increase in dental Medicaid expenditure is anticipated.

The Medicaid expansion population is expected to generate 6.2 million new users of dental services,
10.4 million new dental visits, and $2.4 billion in additional dental expenditures per year. This
represents a 28% increase over current Medicaid dental expenditure, and a 0.6% increase in total
Medicaid expenditure.

The above assumes the expansion Medicaid population utilizes dental services in the same pattern
as today’s Medicaid population.

The cost associated with insuring the expansion population will be largely borne by the federal
government. For the initial two expansion years the government will fully fund the cost, grading down
to a 90% federal funding rate in 2020 and beyond.

Overall, the increased number of potential dental patients in Medicaid will put further pressure on an already
strained Medicaid dental care system. Some states may incur increased unmet dental need as a result of
Medicaid expansion.

Establishment of State Health Insurance Exchanges.

Among non-Medicaid children, the individual mandate is expected to have a small positive effect on the
demand for dental care.

Pediatric oral care is part of the essential benefit package. All children must obtain dental benefits.
The number of children with dental insurance is estimated to increase by 3 million, or roughly 5%, by
2018.
States are likely to end up with a comprehensive pediatric oral care essential benefit similar to those
seen in today’s commercial dental plans, even potentially including medically necessary orthodontia.
Without the ability to utilize dollar annual or lifetime maximums on those services, dental plans will
likely need to consider cost-reducing mechanisms such as higher deductibles, higher coinsurance, or
visit limitations to keep the benefit affordable.

Among non-Medicaid adults, the individual mandate is expected to have a negligible effect on the demand for
dental care.

Oral care for adults is not part of the essential health benefit package. However, dental benefits will
still be offered on the exchange and can be purchased voluntarily.
The dental benefit offerings in the exchange will likely take on characteristics different from today’s
commercial plans in order to protect insurers against adverse selection. Unlike pediatric dental
benefits, cost-sharing restrictions such as annual and lifetime dollar maximums will still be allowable
within adult dental benefit plans. Further, dental plans may incorporate innovative approaches to
manage cost in order to lower premiums and incentivize purchase.
The net number of adults with dental insurance is expected to increase by 800,000. This accounts for
adults purchasing insurance on the exchange, offset by adults previously insured in the group
marketplace who drop dental coverage.
The overall rate of employer-sponsored dental insurance (ESI) is not expected to change significantly
as a result of the new exchange marketplace. However, pockets of the ESI market, including smaller
employers and those with a predominantly low-wage workforce, may discontinue offering benefits and
send their employees to the individual exchange to purchase insurance coverage.
Overall, the analysis estimates that for non-Medicaid adults and children, the ACA will lead to an additional 7.6 million dental visits, 17.4 million dental procedures and $1.1 billion in dental expenditure per year – a 2.1% increase in private dental expenditure and a 1.0% increase in total dental expenditure.


Integration of Dental and Medical Care through ACOs.

ACA reform is anticipated to expand the share of health care provided under the umbrella of accountable care organizations (ACOs). ACOs are designed to align provider incentives with provision of quality, coordinated care rather than volume of services, and to improve the infrastructure underlying care delivery.

According to the National Maternal and Child Oral Health Policy Center, dental care can be integrated with medical care within an ACO model in several different ways:

<table>
<thead>
<tr>
<th>Facilitated referral</th>
<th>Enabling referrals, referral tracking, and follow-ups between medical and dental providers will help to ensure optimal care by both providers.</th>
</tr>
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<tbody>
<tr>
<td>Co-location</td>
<td>By simply working out of the same location, medical and dental providers may find it easier to refer patients, to communicate with other providers, and to obtain multiple services during one visit.</td>
</tr>
<tr>
<td>Virtual integration</td>
<td>Using electronic medical record technology to allow medical and dental providers to access and edit a single set of records for a given patient will help to avoid duplication of services while giving each provider a full understanding of a patient’s history.</td>
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<tr>
<td>Shared financing</td>
<td>In this arrangement, medical and dental providers would share in the financial risk and opportunity associated with providing coordinated care. This would include reimbursing primary care providers for applying fluoride varnish to children’s teeth, as part of a process of engaging patients in better dental care and referring patients for regular dentistry. It could also include more direct arrangements such as pulling dental services into a global capitation arrangement.</td>
</tr>
<tr>
<td>Full integration</td>
<td>This model allows for dental providers to be core members of an ACO, working with an interdisciplinary team of medical specialists in a single location to provide the complete set of medical and dental services to its patients, and adhering to the same standards, reporting requirements, and financial arrangements as the ACO in total.</td>
</tr>
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</table>

Within today’s ACOs, dental care is not generally included as a core component. Where dental services are incorporated, it is mainly only at the level of facilitated referral or co-location. This is due to several reasons:

- ACOs are focused on Medicare-covered populations and Medicare does not have significant coverage for dental services.
- ACOs are focused on integrating their core medical services, particularly high-cost, high-risk procedures that have potential cost savings. Dental care is usually not viewed as a core service.
- There may be a perception that dental providers are outside the mainstream of medicine and that they have no need for health plan or ACO arrangements to stay financially stable.
- Dental providers and dental benefit plans today do not mesh with an ACO’s evidence-based care approach. Most dental providers and plans are accustomed to providing care according to frequency limits defined by dental insurance policies rather than a patient’s dental risk profile.
Looking forward, as ACOs mature it is uncertain how rapidly dental care will be integrated, if at all. Key factors affecting this include:

- Pediatric dental care is part of the essential benefits package, but not adult dental care. As a result, ACOs are likely to focus their attention on the basket of health care services that must be provided.

- For states where Medicaid provides dental benefits to adults, there may be interest in integrating dental providers into the ACO structure to better serve the Medicare/Medicaid dual-eligible population.

- Medicaid-focused ACOs may be interested in integrating dental providers into the ACO structure for pediatric dental care.

See Appendix 4 (ACOs and Their Impact on Dental Care Delivery – July 18, 2012).

**Next Step:** Because the analyses were only very recently completed, there has not been sufficient time to develop a strategic approach as called for in the resolution. This process, however, will be undertaken by appropriate agencies within the ADA as soon as feasible. The agencies will review the findings of the three analyses of the impact of the Affordable Care Act on dentistry and recommend appropriate action, including the development of a strategic approach based on the analyses that will be used to guide ADA’s advocacy and activities and provide assistance to constituent societies.

**Study of FQHC Payment Methodologies.** Resolution 87H (Trans.2011:490) directs the ADA to determine the feasibility of a study of the payment methodologies of Federally Qualified Health Centers (FQHCs) and report back to House of Delegates and Board of Trustees. FQHCs are community-based and patient-directed organizations that serve populations with limited access to health care. These include low income populations, the uninsured, those with limited English proficiency, migrant and seasonal farm workers, individuals and families experiencing homelessness, and those living in public housing. FQHCs include all organizations receiving grants under section 330 of the Public Health Service Act. Section 330 grants are administered by the Health Resources and Services Administration (HRSA) of the Department of Health and Human Services.

The latest information available (2010) indicates there were 1,124 health centers (about 75 percent of which provide on site dental services) and 8,100 service sites, providing 3,750,481 patients with dental care during 9,231,348 visits. These services were delivered by 2,882 dentists and 1,144 dental hygienists. 93 percent of the patients served are below 200 percent of the federal poverty level (FPL), 72 percent are below 100 percent of the FPL, and 38 percent are uninsured. Regarding the breath of dental services provided by FQHCs, the federal statute governing health centers requires these facilities to provide only dental screenings to determine the need for dental care and the delivery of preventive dental services. However, the HRSA guidance governing the section 330 grant processes uses the statutory authority given the DHHS Secretary to expand the definition of “primary oral health” care to include not only prevention, education, and emergency care, but also basic restorative and basic rehabilitative services that replace missing teeth. This is commonly referred to as providing comprehensive primary oral health services.

The Council on Government Affairs conducted a study on FQHC payment methodologies. FQHCs receive payments from Medicare, Medicaid, other public insurance (such as the Children’s Health Insurance Program), private insurance, as well as from the patients themselves as out-of-pocket payments. They also rely on grants and other revenue. The complete report that examines these various payment streams is attached.

See Appendix 5 (Payment Methodologies of Federally Qualified Health Centers – August 2012).

**Resolutions**

This report is informational and no resolutions are presented.
**Index of Appendix Material**

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*Appendices 1-5 can be found in the House of Delegates community of ADA Connect in the 2012 Resolutions and Reports library at [http://connect/ada.org](http://connect/ada.org) and in the House of Delegates area on ADA.org at [https://www.ada.org/members/2012hodreports.aspx](https://www.ada.org/members/2012hodreports.aspx).*
EXECUTIVE SUMMARY:

Oversight Committee History and Status
The State Public Affairs (SPA) Program is completing its fifth year of public affairs program funding in 2012. The ADA Board of Trustees created a Volunteer Oversight Committee for the program in 2009.

The SPA Volunteer Oversight Committee oversees the administration of the State Public Affairs Program (SPA). The Oversight Committee held bi-weekly conference calls during the legislative session and monthly calls during the remainder of the year. On occasion, additional calls were scheduled to address specific issues as they arose. The Committee met in May 2012 during the Washington Leadership Conference. A combined meeting of the 2012 and 2013 Committee members is planned for San Francisco during the ADA Annual Session.

During these calls, the Oversight Committee received updates on activities in the states and addressed budget issues. The Oversight Committee also developed selection criteria and approved the applications of states for participation in the SPA Program. In addition, the Oversight Committee assessed the effectiveness of each participating state through mid-year and end-of-year reviews.

Both Council on Government Affairs and Council on Communications members, along with members of the BOT, have been appointed to serve on the Committee annually. The members of the 2012 SPA Volunteer Oversight Committee are: Dr. Anita Elliott (chair), Dr. Richard Weinman (co-chair), Dr. Patricia Blanton, Dr. Carter Brown, Dr. Jeffrey Dow, Dr. Henry Fields, Dr. Joseph Hagenbruch, Dr. Matthew Neary, Dr. AJ Smith and Dr. Ed Vigna. In August, Dr. Carter Brown stepped down from the Committee and Dr. George Shepley was named as his interim replacement.

For 2013, the Board has developed a charter and new structure for the Committee. The current Committee is in the process of reviewing systems and processes as part of the ongoing oversight for the SPA Program.

Financial Summary
The 2011 ADA House of Delegates approved a budget for the program in the amount of $3,500,000.

- As of this writing, approximately $1.8 million dollars was provided directly to states as grants for their public affairs programs.
- Approximately $300,000 was spent indirectly to assist all state dental associations in the following capacities:
  - Hiring consultants to advise the ADA and state dental societies on the 2010 Patient Protection and Affordable Care Act Health Insurance Exchange issues;
  - Developing print, radio and billboard ad templates to be used in states where workforce is an issue;
  - Conducting research on workforce related issues; and,
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- ADA staff and contract consultant travel associated with assisting states in the program.
  - Approximately $700,000 was paid to the national State Public Affairs Consultant, Chlopak, Leonard and Schechter (CLS) to assist both the ADA and state dental societies in designing their state public affairs programs and developing strategies regarding their programs.

The Oversight Committee may receive additional requests to directly fund grants to states prior to the end of the fiscal year. At this time, if no additional grants are requested or funds expended for research or other SPA related purposes the program expects to return approximately $600,000 in unspent budgeted funds to the ADA General Fund.

REPORT OF STATE ACTIVITIES
The Committee submits the following report of activities in State Public Affairs participating states in 2012.

The ADA SPA project continues to provide strategic direction, support and day-to-day oversight for public affairs activities undertaken by state dental societies in 21 states. Collectively, the project helps guide public affairs programs within the states, assisting the states in identifying their own active solutions for expanding access to oral care, helping states counter efforts to remove fluoride from municipal water supplies and providing resources to tackle these and other emerging issues for the dental profession at the state level. This ongoing engagement has helped to enhance the effectiveness of state public affairs programs and shared learning across states, while allowing each state to pursue campaigns and tackle public affairs challenges in a manner appropriate to its own needs.

- Workforce advocates have become more creative and SPA initiatives are underway in Connecticut, Michigan, and Missouri to counter the threats and demonstrate what states are doing to expand access.
- Fluoride activity has increased in Montana, Oregon, New Mexico and Wisconsin. In the coming months, we expect continued efforts by anti-fluoride activists in these states and others.
- In the past year, there has been greater attention paid to corporate ownership of dental practices as an issue.
- Regarding the Native American Project, SPA continues to manage the program’s strategic direction and ensure all states (Arizona, New Mexico, North Dakota and South Dakota) are sharing information.
- Finally, the Oversight Committee approved a request for media outreach to help expand the effects of the SPA initiatives beyond the borders of the affected states.

**Workforce**
Advocates for midlevel providers continue to press their case aggressively. The Kellogg Foundation and the Pew Charitable Trusts Children’s Dental Campaign have committed millions of dollars over the next few years to organize oral health coalitions in various states and advance alternative workforce legislation. As a result of these resources and an increased aggressiveness among workforce advocates, there was a significant increase in the number of states considering workforce legislation in 2012. We
also observed an uptick in the promotion of workforce proposals by advocates through other channels including media, stakeholder outreach, dental schools and colleges and more.

Over the past year, we’ve seen workforce advocates become more creative in the ways they are pushing, and cultivating support for, new workforce models, not solely relying on the traditional legislative route. For instance:

- In Connecticut, the workforce advocates pursued an administrative channel, asking the state’s Department of Public Health to analyze their scope of practice models – ADHP. The Department’s report was released in February and highlighted the advantages and disadvantages of this and other introduced proposals. Despite a tepid response to the ADHP proposal, the Joint Legislative Public Health Committee decided to introduce legislation that sought to enact the model in conjunction with two proposed by CSDA, EFDA and Interim Therapeutic Restoratives (ITR) for dental hygienists. While the Connecticut State Dental Society supported EFDA and ITR, CSDA worked to defeat the full bill because of the ADHP provision.

- In Michigan, a professor at the University of Michigan School of Social Work has been working with the dean of the University of Detroit Mercy School of Dentistry to establish a dental therapist pilot program or unsupervised dental hygiene at the school. The program is still being formalized with the dean seeking funding sources. Working with the professor, the dean applied for a HRSA grant and may seek funding from the Kellogg Foundation, which is headquartered in the state.

- In Missouri, a dentist from Springfield who was a member of the dental board, along with the hygienists association, applied pressure to the state board of dental examiners to endorse DT and ADHP models. It was the first state board to do so. The board then turned and applied pressure on the Governor’s office to make it a legislative priority. Fortunately, the Governor’s office declined to take up the issue, but further efforts by workforce advocates are expected in 2013.

To counter these threats and demonstrate what states are doing to expand access to care, we continued to work with the states to identify proactive access solutions, provide strategic direction, offer media relations advice, and develop a number of communications materials to support the targeted states. As communication around this issue became more salient, we monitored progress, counseled on strategy and shared resources across state lines. For example, SPA developed a workforce toolkit that includes strategies and materials states can use, as well as information developed by adversaries so state dental societies know what to expect from Pew, Kellogg and their allies. The toolkit is available on ADA Connect and is periodically updated.

Additionally, we continued to conduct, bi-weekly workforce calls with SPA and non-SPA states facing threats. These calls help the states learn what to expect from Kellogg, Pew and other groups pushing workforce positions – how they buy ads, pitch Op-Eds and organize coalitions. The states have used this knowledge-sharing to draft proactive plans to address access issues and help strengthen their
communications. States targeted by Kellogg, Pew and others seeking to establish alternative workforce models are invited to join these calls.

**Fluoride**

There has been a noticeable uptick in anti-fluoride activity around the country in recent months. In some states ADA and the state associations have worked collaboratively with Pew in an effort to maintain the appropriate levels of fluoride in community water supplies. Other states, meanwhile, have supported local campaigns to add fluoride to water supplies. For instance:

- In Montana, opponents of community water fluoridation sought support for a November ballot initiative that would put fluoride in the city of Bozeman to a vote. As one of the largest cities in the state, MDA and the local dentists worked to build a broad coalition to oppose the measure. Together with Pew, the MDA and Bozeman dentists monitored the anti-fluoride coalition’s efforts as they worked to collect signatures. The MDA also developed a letter for its membership outlining the issue and providing them with guidance on what to share with patients who asked about the efforts in Bozeman. The team also agreed that if the opposition succeeded in adding the fluoridation as a ballot initiative, they would meet with relevant third-parties to provide a presentation about the facts of fluoride. Initial outreach was conducted to organizations including the nursing school and the League of Women Voters. The opposition needed to obtain 4,000 signatures for the initiative to be put on the November ballot. Ultimately they failed, having received only 199.

- In Oregon, the ODA, working with Pew and Upstream Public Health began efforts to get fluoride added to the Portland water supply. Still in its early stages, the ODA has begun outreach to the Portland City Council to garner support for legislation. Using SPA funding, the ODA, Pew and Upstream conducted two focus groups to judge public support for the fluoridation of the water supply.

- In New Mexico, opponents of water fluoridation hijacked a recent Santa Fe City Council meeting and introduced a surprise measure to remove fluoride from the city’s water supply, which passed in a 6-1 vote. The vote surprised NMDA since the amendment on the agenda for discussion during the meeting proposed only to lower levels of fluoride to align with CDC recommendations. In advance of the meeting, NMDA helped dentists pen a letter to city council members and other city leadership stressing the benefits of fluoride. NMDA and local dentists were in attendance at the meeting and were vocal in their support of fluoridation. Yet emotionally-charged arguments, as well as the staunch opposition of one city council member, were able to sway the council to vote on a new amendment to remove fluoride altogether from Santa Fe’s water supply. NMDA is working with oral health partners to form a strategy to reverse this decision, including looking into the legality of the vote since the amendment to remove fluoride completely was not on the agenda in advance of the meeting.

- In Wisconsin, a city council official in Milwaukee introduced a proposal to stop fluoride in the city’s water system. Fluoride has been in the system since 1953. The proposal was discussed during a City Council hearing May 31, 2012. After a seven hour hearing, the Council voted 5-2 to
put off a decision on the issue in an attempt to reach a compromise. The City Council is expected to vote on the proposal at the end of July.

In the coming months we anticipate continued efforts in these and other states including New Mexico and Connecticut by anti-fluoride activists.

Corporate Ownership

In the past year we saw a greater attention and focus paid to corporate dentistry and corporate ownership of dental practices at both the national and state level. The issue was addressed in a two-part piece in Bloomberg and was featured prominently in FRONTLINE’s “Dollars and Dentists” special report. Congress has also paid attention to the issue in the last year. Senator Charles Grassley (R-Iowa) announced in July that his staff is conducting an investigation into alleged abuses by corporate dental chains treating children on Medicaid.

Most notably, North Carolina received much of the attention related to dental management companies. This year, the North Carolina Dental Society (NCDS), with ADA SPA assistance, worked to pass Dental Management Arrangements legislation (SB655/HB698). The legislation was introduced to clarify the rules for dental management corporations (DMCs) and their professional relationships with dentists, and give the State Board of Dental Examiners the tools it needs to investigate suspected infractions. The NCDS legislation initially passed the Senate by a vote of 46-2. While the Speaker of the House had initially committed to having the bill heard in the House Health and Human Services Committee, as written, the bill faced a strong, vocal and well-funded opposition. The DMCs formed a coalition and took the position that the DMCs provide access to care at a lower cost.

The NCDS conducted a survey of its membership on this issue. The overall take away from the survey was positive and showed that members are supportive of the NCDS’s position on the legislation. Members also showed a willingness to contact legislators. However, overall there was very little awareness or knowledge about Dental Management Companies which gave the NCDS the opportunity to educate members and frame the discussion.

The NCDS conducted public opinion polling with the results indicating public sentiment is on the side of independent family dentists, with quality care and the ability to see their own dentist as key considerations. NCDS used this and other messaging in response video ads and in its meetings with the Speaker of the House. Ultimately, the Speaker of the House required the two sides to meet with a mediator to develop legislation. The NCDS was satisfied with the compromise language, which passed the full House of Representatives with a unanimous vote and received unanimous concurrence by the Senate. The final version of the legislation is currently with the Governor.

ADA’s Barriers to Care Role of Finance Paper

In May, the ADA released its statement “Breaking Down Barriers to Oral Health for All Americans: The Role of Finance.” The paper argues that lack of financing is a major barrier to accessing oral health care for many Americans, stating that factors such as the sluggish economy, changes to private dental insurance plans and reductions in public funding for dental programs have all contributed to fewer dentist visits since 2007.
The report was distributed to all the states and provided strategic advice on how best to market this at the local level. Constituents were provided a template press release to further leverage media coverage of the report. Several states plan to use the paper during their 2013 legislative session to support increased funding for state programs such as Medicaid. Additionally, an op-ed highlighting key points in the paper and how dentists have worked to address barriers to care was provided to state societies. Currently an Op-Ed is being developed and the ADA will seek to get it placed in a leading health publication such as Medscape.

**Media Outreach**

The ADA’s commitment to the SPA program is reaping great benefits for many of the participating states. Ironically, the ADA’s own communications apparatus is stretched so thin that its ability to create and take advantage of media opportunities on public affairs issues is often too limited to reaction or wholesale outreach through press releases and statements. While staff can manage incoming inquiries, the capacity to provide active outreach is lacking. Therefore, the ADA cannot be as effective facing challenges at the national level as many of the individual SPA states can be at the local level.

Therefore, the Oversight Committee approved a request from the Division of Communications to retain CLS for an additional $60,000 over the last two quarters of 2012 to provide media outreach support to help us deliver nationally the stories states are promoting in their own jurisdiction. This effort will consist of packaging and actively pitching stories. Any reporter, who has covered these issues, whether locally or nationally, is potentially interested in follow-up and related stories.

In all of the work, ADA will maintain strict control over messaging. Only designated volunteers will speak to media for attribution, except in cases where ADA staff does so by prior authorization. Contracted agency employees will not speak for attribution. Their role is to promote the story, provide background information and coordinate with ADA staff to arrange for spokespeople or to follow up on other opportunities.

**Native American Project**

The purpose of the Native American Oral Health Care Project is to identify workable solutions to dental care issues facing tribes in Arizona, New Mexico, North Dakota and South Dakota. The local consultants and state executive directors continue to hold meetings throughout the states with tribal leaders in order to engage Native Americans on access to care issues.

In 2012, a new consultant was brought on board in North Dakota to aid the North Dakota Dental Association in its outreach to Native American communities. NDDA is pleased with its new firm, KAT Communications, as it has positive relationships with these communities and has increased NDDA’s credibility. NDDA has met with the tribal chairmen’s health directors and is continuing to develop relationships with the Indian Health Service and reservation personnel. NDDA has developed a survey instrument it plans to use to gauge interest from its members in delivering dental care on reservations. Further, as Pew explores the possibility of expanding their efforts into ND, having a full spectrum public affairs firm already working with NDDA will be invaluable.
Meanwhile, the South Dakota Dental Association, in partnership with Delta Dental of South Dakota and the South Dakota Oral Health Coalition’s Native American Work Group, organized a Tribal Oral Health Summit in April. Representatives from nearly all of the state’s tribes attended the meeting, which demonstrates a step forward in bringing together key stakeholders and proved the association had made progress in further developing relationships with the state’s tribes. Looking forward, SDDA will partner with the Delta Dental Foundation of South Dakota, which was recently awarded a CMS Healthcare Innovation Award to improve Native American oral health, a portion of which will go towards the training of CDHC type Community Health Workers.

In 2011, New Mexico became the first state to authorize a CDHC in statute. NMDA is in discussions with New Mexico Community College to develop a CDHC curriculum and hopes to have a program ready by Fall 2013 or Spring 2014. Additionally, NMDA continued its outreach to local tribes and has plans to meet with Dr. Chacon, Surgeon General of the Navajo nation, in June 2012.

In Arizona, AzDA has conducted regional roundtables with tribal representatives from 18 of the 22 Native American tribes in the state, IHS leadership, and leaders of the Navajo Nation, Hopi Tribe and Kaibab Paiute Nation. These meetings have focused on oral health literacy, preventive programs, CDHC, the educational pipeline, and coalition building. Additionally, AzDA has been awarded a DentaQuest Development grant to support the work of the Native Oral Health Alliance they have founded as an outgrowth of this work.

ADA’s research partnership with The Harvard Project was suspended in 2012 by the SPA Volunteer Oversight Committee. The lead researcher from Harvard recommended suspension due to concerns about diversity and sample size at Cheyenne River Sioux Tribe. Additionally, the Oversight Committee had requested the Health Policy Resource Center of ADA review the methodology and they had some significant questions. It became clear at the confluence of these two events that it was time to end this specific project.

Working with the states, SPA continues to steer the strategic direction of the project and ensure all state associations involved are sharing information. A bi-weekly Native American call is now conducted in order for all four states to have an opportunity to speak with each other. The group plans to discuss, among other things, goals and processes for reporting outcomes with regards to CDHC, the education pipeline and the translation of work on the ground in the states to the formation of national policy as well as develop specific workgroups for each specific topic.

**SPA Resources**

Working with the ADA SPA team, CLS has developed a series of documents to help state societies and associations. These resources prevent states from having to “reinvent the wheel” and further encourage states to share information. CLS periodically updates these resources to include recent initiatives. These resources include:

- **Bank of Legislative Solutions**: lists legislative initiatives various states have undertaken to address access challenges, which dental societies have developed and/or supported;

- **Case Studies**: provides in-depth analysis of different states’ legislative accomplishments;
• **Social Media Guide:** offers a step-by-step guide on how to use social media to more successfully engage important audiences;

• **Dentist Salary Talking Points:** lays out appropriate talking points when asked about the economics of the dental profession and dentist earnings in general, especially as the cost of care remains an unfortunate barrier to access during these lean economic times;

• **Dentists as Doctors Handbook:** outlines easily implementable initiatives to strengthen the perception of dentists as highly-skilled medical professionals; and

• **Coalition Guide:** explains how building coalitions can strengthen your position on oral health, and how to build and manage a successful coalition.

**Research**

SPA conducted focus group research with Public Opinion Strategies (POS) in Kansas surrounding workforce proposals and access to care issues. The results from the focus groups were primarily consistent with previous research. The results also highlighted that the groups displayed noticeable partisan division of opinion, with Democrats perceiving a much larger access problem. In particular, the research revealed that messaging dealing with “cutting” and “supervision” was most successful in tempering enthusiasm for therapist proposals. During the research, the dental school concept was tested as a head-to-head alternative to mid-level providers and, while the proposal siphoned some support away from therapists, it was not a “silver bullet.” Based on the results of this research, we developed a list of recommendations for the Kansas Dental Association, which were presented to KDA’s board in February.

Meanwhile, in a concurrent effort, SPA conducted a mini-national survey intended to test language about workforce proposals and access to care solutions. The learning from the Kansas focus groups was also incorporated into this effort to test, in a quantitative fashion, the qualitative findings that language about “cutting” weakened support for therapists. The findings of the quantitative national surveys were instructive and provided valuable insights into the most effective language to use as part of the workforce debate. As an example, the survey found that support for therapist proposals drops 20% when a description of a dental therapist’s scope of practice allows the individual to “cut through the hard tooth surface” and “inject Novocain...or other anesthesia.”

**State Activities-details**

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<td>California</td>
<td>N/A</td>
<td>• CDA has taken an active role in defining the California Health Benefits Exchange, a mandate from the national health care legislation.</td>
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<td>• CDA is focusing on educating the legislature, their staff and other policy makers on how dental is different, and must be treated as so as they craft the Exchanges.</td>
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<td></td>
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<td>• The issue is contingent upon the Supreme Court’s</td>
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| Connecticut | Global Strategy Group | - CSDA faced another attempt by workforce proponents to pass an ADHP bill. The language for an ADHP was included in legislation that also established an Expanded Function Dental Auxiliary (EFDA) and expanded the scope of practice for dental hygienists to perform Interim Therapeutic Restorations (IRT).  
- The bill died in the Public Health committee by a tie vote of 14-14, but CSDA believes workforce advocates are gaining momentum year after year and it is getting increasingly difficult to stall workforce proposals in the state.  
- The three scope of practice legislation was the result of a report issued by the state’s Public Health Department at the start of the legislative session, which highlighted the positives and negatives for each model.  
- CSDA supported the EFDA and IRT provisions, but found itself in the position to have to kill the full piece of legislation because of the ADHP portion.  
- Meanwhile, CSDA worked with its outside PR consultants, to bolster its PR efforts around access to care including arranging editorial board meetings, responding to positive and negative press, promoting the success of the state’s children’s dental Medicaid program and ensuring the Governor attended CSDA’s Dental Day at the Capitol. |
| Georgia | Market Decisions (Census Collection Group) | - Responding to repeated claims of a dental workforce and access shortage in the state, the GDA is conducting a dental census across the state.  
- It is intended to provide a true picture of Georgia’s dental workforce and the state’s needs, which can be utilized to address the oral health care needs of Georgia’s patients.  
- While GDA applied for SPA funding for the first half of 2012, it opted out of applying for additional funds during the second half of the year. GDA Board of Trustees have committed to funding the remainder of the Census project from its reserves. |
<p>| Idaho | Ritter Public Relations | - ISDA continues to face a number of challenges including: countering the claims of workforce proponents that the state lacks adequate dental capacity; preventing dental hygienists from expanding |</p>
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<th>Public Affairs Group</th>
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| Illinois      | Morrealle Public Affairs Group        | • ISDA made significant strides in all these areas in large part because of the SPA funding. In particular, ISDA has shown significant progress in demonstrating quantifying the state’s dental capacity with credible data.  
• Also, ISDA has started actively educating legislators on access and workforce issues.  
• ISDA successfully restored dental Medicaid to 12,000 developmentally challenged adults.  
• ISDA also quickly established itself as a leader among the 30 member coalition seeking an increase in Idaho’s tobacco tax by having the most consistent and focused representation among the membership. |
| Kansas        | Strategic Communications               | • KDA continues to face an aggressive campaign from the Kellogg Foundation, including advertising and support of DHAT-type legislation.  
• KDA’s Comprehensive Oral Health bill passed in April. The bill’s provisions include volunteer dental licenses for retired dentists to donate care to underserved populations and an expansion of locations where charitable dental care can be provided, as well as other access solutions including the development of a 3rd level of Expanded Function Hygienist. |
<p>| Maine         | JD’A Consulting                       | • Maine has had an extremely busy legislative session with increase pressure by workforce advocates.                                                                                                           |</p>
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| Michigan   | The Rossman Group             | • MDA successfully defeated dental therapist legislation and prevented the elimination of adult dental Medicaid from the state budget – a major victory in a year when the legislature filled an $83 million budget shortfall largely through other Medicaid cuts.  
• A study is currently underway in Maine to assess barriers to oral care, and its findings are expected to serve as the foundation for legislation in 2013, which Pew will likely attempt to narrowly focus on a workforce solution. The study is expected to be released in August/September 2012.  
• MDA continues to confront workforce issues from a professor at the University of Michigan School of Social Work. The professor is working with the dean of the University of Detroit Mercy School of Dentistry on a potential dental therapist pilot or unsupervised hygiene program. The school has applied for a HRSA grant to fund the program and is looking into other funding sources.  
• Separately, MDA is seeing attacks on water fluoridation in some Michigan communities, particularly as equipment needs to be replaced and budgets need to be balanced.  
• MDA has been successful at educating the legislators, media and third party stakeholders on what dentists are doing to address access while pushing solutions forward. The expansion of the widely recognized Healthy Kids Dental program was part of this success. |
| Missouri   | Fleishman-Hillard             | • MDA was successful in passing a dental Medicaid carve-out legislation, but its non-covered services bill didn’t pass. MDA plans to re-introduce the measure in 2013.  
• Separately, MDA continued to hold off workforce advocates from introducing legislation this session. With the state board of dental examiners endorsement of ADHP and dental therapists’ models, MDA anticipates greater pressure by the advocates in the next session.  
• MDA has an active agenda continuously advocating for legislation that advances solution to Missouri’s dental access issues, such as a dental carve out, improved reimbursement rates and expanding/protecting Medicaid dental coverage.  
• It also has a strong focus on prevention as an integral part of the solution. It started a new public education |
campaign called “Your Mouth is Talking,” which has been positively received by legislators, news media and other influencers.

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| Montana       | Strategies 360       | • Denturists and hygienists attempted to create a separate, non-dentist regulatory board or require autonomous committees within the Board of Dentistry to regulate denturists and hygienists. MDA was successful in halting these proposals in January 2012, but it expects similar bills will be introduced in the next session.  
  • Additionally, opponents of community water fluoridation are seeking to qualify a ballot initiative for November in the City of Bozeman to remove fluoride. As one of the largest cities in the state, MDA and the local dentists have built a broad coalition to oppose the measure, should it qualify for the ballot, with SPA support. |
| Native American Project | High Ground Poston and Associates KAT Communications Chas Jewett | See above |
| New Hampshire | Louis Karno & Company Communications | • Workforce continues to be a particularly hot issue in the state. NHDS was successful at amending a bill that included creating a dental therapy pilot project, by reaching an agreement with the dental hygiene association to create Public Health Hygienists and remove every other provision from the bill as introduced by Pew and other workforce advocates.  
  • NHDS has been successful at influencing policymakers and changing their perceptions of the organization. For instance, the Senator who introduced the dental therapist bill – and who strongly opposed NHDS’ efforts to defer the bill – ultimately ended up praising the dental society on the Senate floor for its willingness to work with him and others to craft an acceptable compromise.  
  • Separately, NHDS continues to face annual battles to maintain/implement water fluoridation. NHDS is working with Pew to pursue a fluoride feasibility study in Nashua, the largest non-fluoridated community in the state, for 2013. However, legislation was passed and signed requiring an annual notice on water bill advising that the water is fluoridated in those communities that... |
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<th>State</th>
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</table>
| New Mexico       | PR: Internal Communications Native American Project: Stephanie Poston | • During the 2012 legislative session, the new internal communications/advocacy position (supported by SPA funding) allowed NMDA to be more agile in its activities.  
• NMDA is in discussions with New Mexico Community College to develop a CDHC curriculum and hopes to have a program ready by Fall 2013 or Spring 2014.  
• NMDA participated in a successful Mission of Mercy event this March which garnered positive media coverage.  
• Corporate ownership could become an issue in the state. This spring, corporate owners hired attorneys to fight restrictions and brought them to a meeting of the dental board. |
| North Carolina   | NCDS                                    | • NCDS is seeking to pass Dental Management Arrangements (SB 655) legislation which would clarify the operating guidelines for dental management corporations (DMCs) doing business in North Carolina and restricting them, for example, from controlling parts of the dental practice that could have a negative impact on patient care.  
• The bill could also put an end to litigation between the state dental board and DMCs over who can own, manage, control or supervise a dental practice. The DMCs are aggressively fighting against this legislation in order to retain control over how the dental practices in their portfolios are run and managed. |
| Oregon           | Strategies 360                         | • The Board of Dentistry is revising the Administrative rule which dictates the populations to be served by EPDHs. ODA’s proposal included migrant farm workers, Native American tribes, and those that fall below 200% of the Federal Poverty Level. The board chose to strike all of the language except that pertaining to the Federal Poverty Level. The language is with the rules committee to relook at the health professional shortage areas (HPSAs).  
• ODA opposed allowing EPDHs to work in HPSAs because that would go beyond the scope of the legislative intent and allow for independent practice for dental hygienists.  
• They are seeking to fluoridate Portland and have conducted focus groups in the area. ODA is working closely with Upstream Public Health and Pew on these |
<table>
<thead>
<tr>
<th>State</th>
<th>Group</th>
<th>Efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennsylvania</td>
<td>The Bravo Group</td>
<td>• ODA has partnered with another organization to propose a pilot CDHC project to the Oregon Health Authority, which in 2011 legislation was given authority to undertake a wide array of dental workforce pilots. CDHC was the only model specified in the legislation and the only proposal submitted to date.</td>
</tr>
</tbody>
</table>
| Vermont  | Kimbell, Sherman, Ellis | • VSDS faced several challenges including a workforce measure pushed by a Kellogg-backed coalition. As such, VSDS was more aggressive and proactive in providing access solutions, successfully introducing a comprehensive oral health care package.  
  • The package included: expanding dental benefits to Medicaid-eligible pregnant women and mothers with young children; imposing an excise tax on sugar-sweetened beverages, a portion of which would go to a “Vermont oral health improvement fund”; expanding loan repayment and loan forgiveness programs for dentists; and authorizing a community dental health coordinator. The full package didn’t pass, but VSDS had success in passing a measure to expand dental benefits to pregnant woman and mothers.  
  • Additionally, VSDS built and established goodwill with policymakers by introducing this package. It plans to introduce a similar package in 2013.  
  • With US Senator Bernie Sanders having held hearings |
and introduced legislation on oral health, it simply adds to the volatility of the political environment in VT.

<table>
<thead>
<tr>
<th>State</th>
<th>Organization</th>
<th>Actions</th>
</tr>
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</table>
| Washington  | Washington2Advocates | - WSDA successfully defeated DHAT legislation in 2012, but given increased pressure from opponents, the association will present a resolution to its House of Delegates in September with draft legislation for an alternative to a mid-level provider bill. The bill would place a number of restrictions on the position, such as that one dentist could supervise no more than two midlevel providers. Ahead of the September meeting, WSDA will educate its delegates on the issue.  
- WSDA produced a report on strengthening the dental safety net which it will use to engage stakeholders and partners on reducing barriers to care. WSDA and its consultants are working to reframe the narrative on oral health in Washington through its latest report and through engagement with local media.  
- WSDA continues to build relationships with key stakeholders in the health policy arena, most recently with the Hospital Association. |
| Wisconsin   | Zeppos & Associates (Public Affairs)  
Forbes McIntosh (Lobbyist) | - WDA has been working to maximize opportunities for increased positive news coverage; address Marshfield Clinics attempt to roll dentistry into the medical school; and advance six policy initiatives addressing access to care, which includes: 1) increasing investment in Medicaid dental care services; 2) loan forgiveness and grant program to encourage new dentists to settle in underserved areas; 3) dental prevention educational component in Medicaid/BadgerCare program; 4) EFDA expansion; 5) public health hygiene model expansion; and 6) replacement of the dental Medicaid HMO program in SW Wisconsin with standard fee-for-service MA program.  
- Additionally, WDA is currently engaged in a contentious fluoride fight in Milwaukee that it anticipates dragging on for several months.  
- On workforce, WDA had anticipated the Wisconsin Oral Coalition to advocate for a midlevel provider. With the help of its SPA consultants, WDA has worked to improve the relationship with the coalition and now is an active member. WDA’s past president was recently elected to as the coalition’s Steering Committee Chair.  
- Milwaukee Alderman Jim Bohl is an opponent of the |
addition of fluoride to the community water supply and has made its removal his top legislative issue. On May 31, three national "anti-fluoridation experts" were flown in from other parts of the nation to make a coordinated (and very dramatic) three-hour presentation (the entire hearing lasted more than seven hours) on how the risks of fluoride far exceed the benefits of preventing tooth decay; they blamed fluoride for a very wide range of societal problems including: lower IQs, higher incarceration rates, higher rates of behavioral issues in school-aged children and higher rates of divorce. Alderman Bohl was given a great deal of leeway in "cross-examining" the presentations of dentists and other proponents of fluoride and, despite the very heavy-handed approach and favoritism shown to Alderman Bohl's side, the Alderman still did not have enough support to remove fluoride from the community water supply and they voted 5-2 to "hold" (i.e. table) the issue in an attempt to reach a compromise. The expected "compromise" will likely be voted on the week of July 23 and will likely propose that the city reduce the current level of fluoride to the level of .7 ppm which is the level that is expected to be formally released by the federal government later this year and for which organized dentistry has already indicated its support.
Medicaid Expansion
Under the Affordable Care Act
and Its Impact on Dental Delivery and Financing

August 20, 2012
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I. SUMMARY OF KEY FINDINGS

- We expect the expansion of the Medicaid program to provide medical coverage for 24 million people by 2018, consisting of 3.2 million children and 20.8 million adults. These projections assume that all states will participate in the expansion to 133% of the federal poverty level.

- Comprehensive dental benefits for children are a required component of state Medicaid benefits; as such, all of the 3.2 million expansion children will be eligible for dental coverage.

- Adult dental benefits are not a required Medicaid benefit, and many states offer limited or no dental benefits for adults. The impact of the Medicaid expansion on adults will be a function of whether and how each state’s Medicaid program covers adult dental services. Our analysis predicts that of the 20.8 million adults gaining Medicaid coverage, 37% will have no dental benefits. The remaining 63% will have some level of dental coverage, including 13% with emergency benefits only, 20% with limited dental coverage, and 30% with extensive dental benefits. This assumes that states will neither expand nor reduce adult Medicaid dental benefits from their current levels between now and 2018. Given the recent trend of reducing adult dental benefits, this is an optimistic assumption.

- Assuming that the expansion population utilizes Medicaid dental services in the same pattern as today’s Medicaid recipients, our analysis indicates that the Medicaid expansion population will generate 6.2 million users of services, accumulating 10.4 million dental visits and $2.4 billion in dental expenditures per year, assuming current Medicaid reimbursement levels, in 2018. This represents a 28% increase over current dental Medicaid spending and a 0.6% increase over current total Medicaid spending. Over time the utilization levels for this group will likely decline as the effect of pent up demand for services wears off.

- The cost associated with insuring the expansion population will be largely borne by the federal government; for the initial two expansion years the government will fully fund the cost, grading down to a 90% federal funding rate in 2020 and beyond.

- The increased number of potential dental patients in Medicaid will put further pressure on an already strained Medicaid dental care system. Access to dental services by Medicaid patients has been an issue in many states; issues such as low provider reimbursement levels, a shortage of local dental providers, administrative burdens, and patient compliance have contributed to the access problem. Unless continued progress is made toward reducing access barriers, some states may find increased unmet dental need as a result of Medicaid expansion.

- The Supreme Court ruled in June 2012 that states were not required to participate in the ACA’s Medicaid expansion and would not be penalized for opting out of the program. While most experts expect the vast majority of states to participate, several states could choose to keep their Medicaid programs in their current form. In addition, Medicaid adult dental benefits in many states have historically fluctuated with state budgets and may continue to do so. These factors lend an element of uncertainty to the ultimate impact of the Medicaid expansion on the dental industry. Again, all analyses in this paper assume 100% participation in the Medicaid expansion to 133% of the federal poverty level.
II. OBJECTIVES

One of the key tenets of the Affordable Care Act (ACA) is the expansion of the Medicaid program, aiming to reduce coverage gaps for poor Americans by creating a national income floor for Medicaid eligibility of 133% of the federal poverty line (FPL). The expansion covers all individuals under age 65 who meet the income qualification, including non-Medicare adults without dependent children who were previously ineligible in most state programs. In total, according to the Centers for Medicare and Medicaid Services (CMS), roughly 17 million new Medicaid enrollees are expected by 2019.¹ This total will be affected by the number of states that approve the expansion; with the Supreme Court’s ruling in late June, expanding Medicaid according to the parameters of the ACA became optional.

This paper explores the impact of the ACA’s expansion of Medicaid on dental care delivery. In particular, we analyze:

- the expected increase in the number of Medicaid enrollees
- how many of them will have access to, and how many are expected to utilize, Medicaid dental benefits
- the number of additional dental visits and procedures expected due to the expansion, and
- the cost implications of the expansion in the context of current Medicaid spending on dental and overall

Finally, we discuss issues related to the expansion, including factors that may impact access to dental care and the effect of the recent Supreme Court ruling on the constitutionality of the Medicaid expansion program.

All analyses presented in this paper assume that all states will expand Medicaid, but we provide commentary on the effects of states opting out of the expansion.

¹ http://www.cbo.gov/publication/43080
III. BACKGROUND

Medicaid and Medicaid Expansion Basics

Medicaid covers 60 million low income Americans, making it the largest national health insurance program in the U.S. for low income and high need individuals. Prior to the passage of the ACA, many low income adults with incomes higher than the Medicaid eligibility requirement remained uninsured due to lack of access or affordability of health coverage elsewhere. The ACA sought to close that coverage gap by increasing Medicaid eligibility to 133% of the FPL nationwide beginning in 2014 and including adults under age 65 without dependent children for the first time in many state Medicaid programs. The Children’s Health Insurance Program (CHIP), designed to cover uninsured, low income children ineligible for Medicaid, received two additional years of funding through the ACA, through 2015, as well as continued program authority through 2019. Children currently covered through CHIP who will be newly eligible for Medicaid in 2014 will transition to the Medicaid program.

The financing of Medicaid is shared by state and federal governments; on average across all states, the federal government pays about 57% of the total cost. For the expansion population, however, the federal government will fully fund the cost of the newly eligible Medicaid enrollees for the first few years of the expansion, from 2014 through 2016. It will then transition some funding responsibility to the states for the expansion population, funding 95% of the federal matching percentage (FMAP) starting in 2017, 94% in 2018, 93% in 2019, and 90% in 2020 and beyond. Thus, even in the long term, the federal government will fund much of the cost for this population, while continuing to pay 50-75% of the costs for the previously-eligible Medicaid population as well.

Some states had already expanded Medicaid eligibility to childless adults prior to the ACA; they will receive phased-in increases in their FMAP such that by 2019 they will receive the same funding as other states.

Medicaid recipients in the expansion population must receive a benefit package that provides all the “essential health benefits” as defined in the ACA. The essential benefits are:

- Ambulatory patient services;
- Emergency services;
- Hospitalization;
- Maternity and newborn care;
- Mental health and substance use disorder services, including behavioral health
- Prescription drugs;
- Rehabilitative and habilitative services and devices;
- Laboratory services;
- Preventive and wellness services and chronic disease management; and
- Pediatric services, including oral and vision care.

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iii Ibid.
iv Ibid.
Further, the Medicaid expansion benefit package must provide coverage equal to one of three “benchmarks”, which are:

- The Federal Employee Health Benefit Plan Blue Cross Blue Shield PPO
- The state employee benefit plan for the particular state
- The largest non-Medicaid commercial HMO in the state

The Secretary of the Department of Health and Human Services can also approve coverage for a state different from one of the three benchmarks, including the state’s current traditional full Medicaid program. States can provide benefits above and beyond the essential benefits as long as those benefits are contained in the benchmark plan or covered under traditional Medicaid.

The ACA Medicaid expansion also included a provision to increase Medicaid fee-for-service and managed care payment rates for primary care services to 100% of Medicare payment rates for 2013 and 2014, with 100% federal funding for that increase. As provider participation in Medicaid historically has been low, in part due to the low reimbursement levels, this increase is designed to incent primary care providers to participate in serving the Medicaid population. Similarly, the ACA provided for increased funding to safety net medical care provider organizations. It is notable that the mandated increase in Medicaid payment rates would not apply to dental providers; as such, dentist participation in Medicaid may still be constrained by low reimbursement levels in many states.

Dental Coverage under Medicaid

Dental coverage for adults is an optional service which states may choose to include or exclude in their Medicaid benefit package. Many states provide for emergency dental services only and only a few states provide comprehensive adult dental benefits. Adult dental is often one of the first benefits reduced or eliminated when states are faced with making Medicaid benefit cuts; in fact, the Kaiser Family Foundation reported that 12 states cut Medicaid adult dental benefits in 2010 or 2011. Medicaid adult dental benefits in a given state tend to be non-static over time, fluctuating as budget constraints ebb and flow. Many states went through multiple benefit changes over the past decade. A 2011 snapshot of the range of dental benefits provided to adults through Medicaid programs is shown below.

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vi Ibid.


Medicaid Adult Dental Benefits by State: 2011

Adult dental benefits

<table>
<thead>
<tr>
<th>None</th>
<th>No optional adult dental services covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency</td>
<td>Only emergency dental services covered</td>
</tr>
<tr>
<td>Limited</td>
<td>Covers more than just emergency dental services but not enough to be considered full coverage</td>
</tr>
<tr>
<td>Extensive</td>
<td>Covers extractions and at least preventive, diagnostic and restorative dental services</td>
</tr>
</tbody>
</table>

SOURCE: AMERICAN DENTAL ASSOCIATION

*Map copied from http://www.pbs.org/newshour/rundown/2011/11/how-have-medicaid-dental-benefits-changed-in-your-state-1.html\(^x\). “Full” label in original map was changed by Milliman to “Extensive”, as even states with the highest coverage levels still exclude/limit certain services. To develop state-level assumptions for Medicaid adult benefit levels for our projection model, we used this snapshot supplemented with Internet research conducted by both the ADA and Milliman on more recent changes in benefit levels, as well as a comprehensive report by the National Academy for State Health Policy.

\(^x\) Myers, Justin. How Have Medicaid Dental Benefits Changed in Your State? PBS Newshour. HEALTH -- November 17, 2011 at 11:41 AM EDT
For children under age 21, unlike adults, dental services are generally required as part of the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit, Medicaid’s child health program. EPSDT requires dental referrals for every child according to a state-set periodicity schedule, and requires that dental services be provided at intervals that meet dental practice standards as determined by the state. Services must include maintenance of dental health, restorations, and relief of pain and infections. For the EPSDT population, services may not be limited to emergency only. Further, if an oral screening reveals a condition that requires treatment, the state must provide the services to treat that condition whether or not the services are included in the state’s Medicaid program.¹

What is the impact of the Medicaid expansion on state budgets?

Various studies have been done to estimate the additional number of Medicaid enrollees as a result of the expansion. The Congressional Budget Office estimated the Medicaid expansion population at 17 million.¹¹ A study by the Urban Institute estimated 16 million additional adult Medicaid enrollees under a standard scenario, or potentially up to almost 23 million if a more aggressive outreach and enrollment campaign is pursued.¹² The Pew Center on the States study noted that the ACA will increase the number of children insured by approximately 5.3 million, mostly through Medicaid/CHIP expansion.¹³

According to the Kaiser Family Foundation, the Medicaid expansion will result in large declines in the number of uninsured people in all states, with the federal government paying a very large proportion of the cost. Increased state spending will be small relative to gains in the number of people covered, and relative to what states would have spent on this population without the ACA. State spending on the Medicaid expansion may be offset by savings from state payments for uncompensated care, as the number of uninsured would decline. In addition, states already covering individuals over 133% FPL under Medicaid may transition this population to Exchanges for insurance coverage, where subsidies and tax credits are fully funded by the federal government.¹⁴ This study analyzed the expansion, for newly-covered adults only, under two scenarios: one with assumptions like those of the Congressional Budget Office study, and another with higher enrollment assumptions to model the effect of a more aggressive outreach effort. Under the standard scenario, the total cost of the program was estimated at $464.7 billion, with $21.1B coming from the states and the remaining $443.5B coming from federal funding. The $21.1B represents a 1.4% increase in state Medicaid spending, while enrollment in the program is estimated to increase 27.4%. Meanwhile, federal spending on Medicaid is expected to increase 22.1% as a result of the expansion.¹⁵

¹ http://www.cms.gov/MedicaidDentalCoverage/
¹¹ http://www.cbo.gov/publication/43080
¹⁵ Holahan, John and Headen, Irene. Medicaid Coverage and Spending in Health Reform: National and State-by-State Results for Adults at or Below 133% FPL. Urban Institute, Kaiser Commission on Medicaid and the Uninsured. May 2010.
The Congressional Budget Office estimated a nationwide total of $20B in state spending for Medicaid and CHIP benefits for the expansion population; while this estimate is close to the Urban Institute’s, it includes children as well as adults unlike the Urban Institute’s study which considered adults only.\textsuperscript{xvi}

Neither of these studies included any offsetting cost savings. Various studies on the final net cost of the Medicaid expansion including savings generated by the program show national savings ranging from $33B to $107B.\textsuperscript{xvii}


\textsuperscript{xvii} Ibid.
IV. METHODOLOGY

We modeled the expected impact of the Medicaid expansion on the dental marketplace. In particular, we projected the expected increase in the number of Medicaid enrollees, how many of them will have access to Medicaid dental benefits, and the expected utilization and expenditures generated by the expansion. The modeling steps are summarized in the following flow chart.

Step 1: Project Medicaid Expansion Population

Step 2: Project Medicaid Expansion Population with Access to Dental Benefits (All Children; Adults Depend on State Benefit Construct)

Step 3: Project Proportion of Medicaid Expansion Population Who Will Use Dental Services

Step 4: Project Additional Volume of Visits and Procedures (Adult Utilization Depends on State Benefit Levels)

Step 5: Project Additional Expenditure on Dental Services

An explanation of our methodology follows, and additional details on the methodology and specific factors used are contained in Appendix I.

Step 1: Estimate the number of expected post-expansion Medicaid beneficiaries.

Milliman’s Health Care Reform Financing Model (HCRFM) is a sophisticated modeling tool which enables analysis of how health care reform may change the number of people accessing the insurance marketplace, and the ways in which people will access insurance. A full description of the HCRFM population modeling process is contained in Appendix IV. We used the HCRFM population estimates of the number of people accessing medical coverage via Medicaid in 2018 as the starting point for our analysis. We use 2018 rather than an earlier year as it best reflects the steady state environment after all the health reforms have taken effect. The population is split according to their pre-reform source of medical insurance, enabling us to make assumptions regarding how many of them likely had dental coverage prior to the expansion versus how many were likely uninsured for dental.

The analysis in this paper assumes that all states will choose to expand Medicaid coverage per the terms of the ACA. In late June, the Supreme Court decided on the constitutionality of the ACA. While the ACA was largely upheld, the requirement for states to comply with the Medicaid expansion was modified. The court found that the Medicaid expansion itself is constitutional; however, it is not constitutional to financially penalize states that don’t comply with the expansion by withholding federal matching funds. xviii Now the decision to participate in the expansion falls to the states. Even though several states’ leaders have expressed concern over Medicaid expansion, many experts believe opting out of the expansion will be very uncommon. xix xx

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xix Ibid.

xx Ibid.
Step 2: Estimate how many of the expansion beneficiaries will have access to dental coverage through Medicaid.

We assumed that all children in all states will have access to Medicaid dental benefits, as pediatric dental care is a required Medicaid benefit. For adults, we developed state level assumptions according to whether each state covers adult dental as an optional Medicaid benefit. We assumed that states would retain their current adult dental benefit levels within Medicaid programs through 2018. This might be viewed as an optimistic assumption given recent trends in states cutting back adult dental benefits. However, there are anticipated system-wide saving within Medicaid programs, some of which might be reinvested into expanded dental benefits.

Step 3: For beneficiaries that have access to Medicaid dental coverage, estimate what proportion of them will utilize dental services in a given year.

We assumed that the dental utilization rate for the expansion population, i.e. the proportion of those eligible for Medicaid dental benefits that will actually utilize dental services in a given year, would mirror that of the existing Medicaid population, adjusted for any pent up demand for individuals previously uninsured for dental care. For children, we used the most recent (2010 for most states) Medicaid pediatric dental utilization rates from the CMS 416 report which details each state’s performance on EPSDT guidelines. As no consistent report of the Medicaid adult dental utilization rate is available, we used the pediatric utilization rate in the state adjusted for the national average differential in dental utilization between adults and children within Medicaid programs from the Medicaid Expenditure Panel Survey (MEPS).

When we modeled utilization, we considered whether enrollees would be covered for dental for the first time via the Medicaid expansion, or whether they had prior dental insurance coverage elsewhere. While the majority of Medicaid expansion enrollees are expected to have been previously uninsured for dental care, some are expected to have had employer sponsored coverage in either the group or individual market. For any adults or children in the projection assumed to have no prior dental coverage, we adjusted the utilization rate upward to account for pent up demand for dental services. For further details on the assumptions used, please see Appendix I.

Step 4: Project the number of additional dental visits and dental procedures generated by the Medicaid expansion.

For the proportion of people identified in Step 3 who are expected to utilize dental services, we used estimates of the number of visits and procedures per person, derived from external benchmarks as well as Milliman datasets, to calculate the expected additional dental utilization caused by the Medicaid expansion. A single national average estimate for both visits and procedures was used for children. For adults, separate visit and procedure values were used based on emergency, limited and extensive coverage of dental benefits. Due to the uncertainty and lack of data on which to base our assumptions on the expected dental utilization levels of adults, we also modeled an alternative scenario in which adult dental utilization is expected to mimic that of the commercial marketplace levels rather than Medicaid levels. This can be considered an upper bound on the utilization expected from the adult expansion population.

XX Pantely, Susan. Most of the ACA Upheld, but Medicaid Expansion Battleground will move to States to Decide. Milliman.
Step 5. Project the additional expenditure on Medicaid dental services generated by the Medicaid expansion.

To estimate the dental expenditures associated with the expansion, we relied on per member per month (PMPM) expenditures calculated from the 2009 CMS dataset on Medicaid dental expenditures and enrollees by state. This data is not split into adult and child PMPM costs, so we made assumptions regarding the child and adult costs in each state according to the state’s coverage of Medicaid adult dental benefits. In addition, the CMS data includes only fee-for-service expenditures, so we supplemented that information where possible with publicly available information on dental capitation rates in states that utilize risk-based payments for their Medicaid dental program.

A complete description of our methodology is contained in Appendix I.

The assumptions inherent in the modeling were derived largely based on data discovered during our literature review, combined with industry knowledge, anecdotal information, and judgment of both Milliman and the ADA.

In order to enable the analysis we also made a few overarching assumptions which influence the results. These are:

1. All states will choose to expand Medicaid coverage as promulgated by the ACA; no states will opt out of the Medicaid expansion program.

2. Each state’s current Medicaid program for adult dental coverage is assumed to stay constant through 2018.
V. MODELING RESULTS

Using the methodology and assumptions just described, we estimated the number of Medicaid expansion enrollees and the proportion eligible for dental benefits in their state. We calculated expected dental utilization and expenditures separately for adults and children. Below we describe the nationwide results of this study. State-by-state estimates may be found in Appendix II.

1. Number of Medicaid Enrollees

The HCRFM estimates that by 2018, the Medicaid program will serve 90.7 million people, a 59% increase over the number served today. This increase includes the adult expansion population of 20.8 million (an 84% increase in the number of adults served by Medicaid), and the child expansion population of 3.2 million (a 10% increase in the number of children covered by Medicaid). The child expansion population includes those born between 2010 and 2018 who would qualify for Medicaid under the expansion rules but not under pre-ACA Medicaid programs, as well as older children transferring from the group market or with no prior insurance. The remaining growth comes from 9.7 million children born between 2010 and 2018 who would qualify for Medicaid under pre-ACA rules. While these children represent part of the increase in Medicaid enrollment between now and 2018, they would have qualified for Medicaid prior to the expansion and are therefore not included in our expansion analysis. In the chart below, we show the HCRFM Medicaid expansion projection. This projection is consistent with other industry studies; The Urban Institute estimated a 16-23 million increase in adult Medicaid enrollees due to the expansion, and the Congressional Budget Office estimated an increase of 20 million enrollees.\textsuperscript{xxi}

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|}
\hline
 & Children & Adults & Total \\
\hline
\# of People in Medicaid 2010 & 32.3 & 24.7 & 57.0 \\
\hline
Growth in Medicaid due to Expansion & 3.2 & 20.8 & 24.1 \\
\hline
% Growth in Medicaid Due to Expansion & 10% & 84% & 42% \\
\hline
\end{tabular}
\caption{Medicaid Expansion: Increase in Medicaid Enrollment (in millions)}
\end{table}

2. Number of Medicaid Enrollees Eligible for Dental Benefits

Layering on the information regarding which states offer at least some level of adult dental benefit under Medicaid, we expect 13.1 million out of the total 20.8 million new adult Medicaid enrollees to have at least some form of dental benefits. All of the additional 3.2 million children expected to enroll in Medicaid will have full dental benefits as this part of the essential benefits package.

In the second chart below we break out the results according to the level of adult dental benefit received, where each state’s dental benefit was classified as Emergency, Limited, or Extensive for those that offer adult dental. While 13.1 million adults will be added to the Medicaid dental system, only 6.3 million of them live in states with extensive dental benefits; the remainder will have access to much more limited dental coverage.

\textsuperscript{xxi} Holahan, J. and Headen, I. Medicaid Coverage and Spending in Health Reform: National and State-by-State Results for Adults at or Below 133% FPL. Urban Institute. Kaiser Commission on Medicaid and the Uninsured. May 2010.
## Medicaid Expansion: Impact on Medicaid Dental Enrollment (in millions)

<table>
<thead>
<tr>
<th></th>
<th>Children</th>
<th>Adults</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td># of people covered for ANY level of dental under Medicaid 2010</td>
<td>32.3</td>
<td>16.5</td>
<td>48.8</td>
</tr>
<tr>
<td># of people covered for ANY level of dental under Medicaid 2018</td>
<td>35.5</td>
<td>29.6</td>
<td>65.1</td>
</tr>
<tr>
<td>Growth in Medicaid dental due to expansion</td>
<td>3.2</td>
<td>13.1</td>
<td>16.4</td>
</tr>
<tr>
<td>% growth in Medicaid dental due to expansion</td>
<td>10%</td>
<td>79%</td>
<td>34%</td>
</tr>
</tbody>
</table>

## Medicaid Expansion: Impact on Adult Medicaid Dental Enrollment by Benefit Level (in millions)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td># of adults covered for ANY level of Medicaid dental</td>
<td>16.5</td>
<td>29.6</td>
</tr>
<tr>
<td># of adults covered for EXTENSIVE Medicaid dental</td>
<td>8.3</td>
<td>14.6</td>
</tr>
<tr>
<td># of adults covered for LIMITED Medicaid dental</td>
<td>5.3</td>
<td>9.6</td>
</tr>
<tr>
<td># of adults covered for EMERGENCY Medicaid dental</td>
<td>2.8</td>
<td>5.5</td>
</tr>
</tbody>
</table>

It is also important to understand the composition of the Medicaid dental expansion population in terms of where, or whether, they accessed dental insurance prior to the expansion. While much of the expansion population was previously uninsured for dental, some people are expected to transfer to Medicaid from employer-sponsored dental insurance. A breakdown of the dental insurance status of the newly eligible Medicaid population is as follows.

## Medicaid Expansion: Dental Insurance Status of Medicaid Dental Enrollees (in millions)

<table>
<thead>
<tr>
<th></th>
<th>Children</th>
<th>Adults</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous Dental Insurance in Group Market</td>
<td>0.4</td>
<td>1.4</td>
<td>1.8</td>
</tr>
<tr>
<td>Previously Uninsured for Dental</td>
<td>2.1</td>
<td>11.7</td>
<td>13.9</td>
</tr>
<tr>
<td>Children Born into Medicaid Expansion Eligibility 2010-2018</td>
<td>0.7</td>
<td>-</td>
<td>0.7</td>
</tr>
<tr>
<td>Total</td>
<td>3.2</td>
<td>13.1</td>
<td>16.4</td>
</tr>
</tbody>
</table>
3. Utilization of Dental Services for Medicaid Dental Enrollees

| Medicaid Expansion: Number of Annual Dental Users, Procedures, and Visits for New Medicaid Dental Enrollees | (all numbers in Millions) |
|---|---|---|
| | Children | Adults | Total |
| **Annual Utilization**: Number of expansion enrollees expected to utilize dental services | 1.5 | 4.7 | 6.2 |
| **Annual Visits**: Number of expected annual dental visits for expansion enrollees | 2.9 | 7.5 | 10.4 |
| **Annual Procedures**: Number of expected annual dental procedures for expansion enrollees | 7.0 | 14.6 | 21.6 |

Assuming that expansion children utilize services similarly to the current pediatric Medicaid population, we expect 1.5 million additional children to access dental services, accumulating 2.9 million visits per year and 7 million annual dental procedures. These totals reflect higher utilization rates for children previously uninsured for dental; after the initial years of the expansion the utilization rates would be expected to trend downward toward a long-term average. 4.7 million additional adults are expected to utilize Medicaid dental services due to the expansion, generating 7.5 million dental visits and 14.6 million procedures. For adults, utilization rates are based on state level pediatric Medicaid utilization rates, adjusted for the national differential in adult versus child public program dental utilization. The number of visits and procedures reflect each state’s Medicaid dental benefit level as well as higher utilization rates for those previously uninsured for dental.

Due to the lack of available data on adult Medicaid dental utilization, we also modeled an alternative scenario which assumed that adults in the expansion population would incur utilization consistent with commercially-insured adults. This can be considered an upper bound on the expected adult dental utilization under Medicaid. The results of this scenario are shown in the following table.

| Medicaid Expansion: Number of Annual Dental Users, Procedures, and Visits for New Medicaid Dental Enrollees Using Upper Bound Assumptions for Adults | (all numbers in Millions) |
|---|---|---|
| | Children | Adults (Upper Bound) | Total |
| **Annual Utilization**: Number of expansion enrollees expected to utilize dental services | 1.5 | 7.9 | 9.4 |
| **Annual Visits**: Number of expected annual dental visits for expansion enrollees | 2.9 | 12.5 | 15.4 |
| **Annual Procedures**: Number of expected annual dental procedures for expansion enrollees | 7.0 | 24.5 | 31.5 |

When considering the impact of the Medicaid expansion on dental utilization and cost, it’s important to make the distinction between the effects on Medicaid versus the entire U.S. dental system. An estimated 1.8 million of the people coming into the Medicaid program were covered for dental insurance prior to the expansion and hence are not generating new dental lives or new system-wide dental costs. They are, however, shifting costs from the
private to the public sector, increasing Medicaid expenditures while reducing expenditures in the employer-sponsored marketplace. They also may be changing dental providers, as the network of dentists under an employer-sponsored plan may not be the same set of providers available to the Medicaid population.

For children and adults combined, approximately 1.0 million visits and 2.1 million dental procedures are estimated to be new to Medicaid but not to the overall dental system, as they will come from people who transferred to Medicaid from employer-sponsored dental coverage. An estimated 8.9 million visits and 18.2 million procedures will come from people previously uninsured for dental, the majority of whom are adults. Finally, as children are born into Medicaid expansion eligibility over the upcoming decade, they will generate additional utilization as well.

These estimates represent the forecasted utilization rates in the initial few years of dental coverage for the expansion population, as an influx of new enrollees with unmet dental needs seek care. Over time, as newly insured people remain continuously covered for dental services, their utilization rates should trend downward to the average level.

### 4. Dental Expenditures for New Medicaid Enrollees

Using estimates of each state’s Medicaid dental expenditures per enrollee derived from CMS data as well as other industry information, we determined the aggregate cost of the new Medicaid enrollees to the program. Nationwide, Medicaid spending on dental coverage will increase by about $2.4 billion dollars as a result of Medicaid expansion. The majority of that spending – about $2 billion – goes toward people without prior dental coverage. The remainder reflects spending on children born after 2010 as well as a transfer of approximately $263 million from the employer-sponsored dental market.

<table>
<thead>
<tr>
<th>Medicaid Expansion: Dental Expenditures for New Medicaid Dental Enrollees</th>
<th>Annual Dental Expenditures ($ Millions)</th>
<th>Children</th>
<th>Adults</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Expected Annual Expenditures</strong></td>
<td></td>
<td>$540.3</td>
<td>$1,875.3</td>
<td>$2,415.6</td>
</tr>
<tr>
<td>Annual Expenditures on People Transferring from Group Dental</td>
<td></td>
<td>$66.9</td>
<td>$196.5</td>
<td>$263.4</td>
</tr>
<tr>
<td>Annual Expenditures on People Previously Uninsured for Dental</td>
<td></td>
<td>$351.6</td>
<td>$1,678.8</td>
<td>$2,030.4</td>
</tr>
<tr>
<td>Annual Expenditures on Expansion Children Born 2010-2018</td>
<td></td>
<td>$121.8</td>
<td>-</td>
<td>$121.8</td>
</tr>
</tbody>
</table>
Dental expenditures will vary widely by state depending on the level of Medicaid dental benefit for adult offered.

<table>
<thead>
<tr>
<th>Medicaid Expansion: Dental Expenditures for New Medicaid Dental Enrollees</th>
<th>Children</th>
<th>Adults</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Dental Expenditures ($ Millions)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Expected Annual Expenditures</td>
<td>$540.3</td>
<td>$1,875.3</td>
<td>$2,415.6</td>
</tr>
<tr>
<td>Annual Expenditures in States with EXTENSIVE Adult Dental Coverage</td>
<td>$123.7</td>
<td>$999.5</td>
<td>$1,123.2</td>
</tr>
<tr>
<td>Annual Expenditures in States with LIMITED Adult Dental Coverage</td>
<td>$101.7</td>
<td>$710.3</td>
<td>$812.0</td>
</tr>
<tr>
<td>Annual Expenditures in States with EMERGENCY Adult Dental Coverage</td>
<td>$75.6</td>
<td>$165.6</td>
<td>$241.2</td>
</tr>
<tr>
<td>Annual Expenditures in States with NO Adult Dental Coverage</td>
<td>$239.3</td>
<td>$0.0</td>
<td>$239.3</td>
</tr>
</tbody>
</table>

The expenditure tables reflect the standard assumption for adult dental utilization described in part 3 of this section. If we model the alternative higher level of dental utilization for the adult expansion population, expenditures for the adult expansion population could reach $3,151 million resulting in total expected expenditures of $3.691 million.

The new expenditures on child Medicaid dental benefits will be borne largely by the federal government, in accordance with the FMAP process for Medicaid expansion. For optional adult Medicaid dental benefits, the law is not entirely clear. Recall that states are required to match their Medicaid benefits to a chosen benchmark plan. It is believed that, if a state’s Medicaid benefits are based on a benchmark plan which includes adult dental, then the federal government would bear much of the adult dental cost via the ACA FMAP process. If a state’s benchmark plan does not include adult dental but the state still chooses to offer the benefit above and beyond the benchmark, then they would continue to receive the regular, lower FMAP on those services.

According to the CMS Health Expenditure data, Medicaid and CHIP expenditures for 2010 totaled $413.1 billion, $8.5 billion of which was for dental coverage. In that context, the increase in dental expenditures due to the Medicaid expansion would represent a 0.6% increase in total Medicaid expenditures or a 28% increase in Medicaid dental expenditures over pre-expansion levels.
VI. DISCUSSION

The addition of 3.2 million children and 13.1 million adults who will be eligible for at least some level of dental benefits within Medicaid programs will put increased demands on the dental system. Now more than ever, it is important for states to ensure that access to dental services is sufficient to handle this influx of people. In many states, numerous barriers to care prevent timely access to oral health services. These include financial barriers, lack of oral health education, language or cultural barriers, fear of dental care and the belief that people who are not in pain do not need dental care, as well as a lack of access to Medicaid dental providers.

Over the past decade, several states have undertaken efforts to improve their Medicaid dental programs. According to the ADA, strategies that have proven the most successful in increasing the Medicaid utilization rate for children include:

- Improving Medicaid programs by streamlining administrative burdens, and raising Medicaid dental provider reimbursement levels to at least cover the cost of delivering services
- Working with families to educate them on how to use dental services and the importance of oral health
- Engaging commercial dental plans with adequate networks and devoted funding levels to allow for the purchase of dental services at market-competitive rates
- Repairing the oral care safety net, including community health center dental clinics, hospitals, public schools and dental schools, via funding increases and improvements in coordination, communication and collaboration

CMS has undertaken an initiative to improve access to pediatric oral care via a national oral health strategy that helps states target activities that will improve access even with strained Medicaid budgets. CMS completed detailed reviews of the Medicaid dental programs in eight states with higher than average pediatric dental utilization, as a means for gaining insight into successful strategies that might be transferable to other states. The reviews were completed in 2010 in Alabama, Arizona, Maryland, North Carolina, Nebraska, Rhode Island, Texas, and Virginia. While each state undertook a unique approach to improving dental care access for its Medicaid-eligible children, common themes reappeared throughout the eight reviews. These echoed the key success strategies listed by the ADA, and also discussed other innovations including:

- Having a dental champion in the state, such as a state Medicaid Dental Director to focus on oral health initiatives
- Streamlining administrative processes to simplify dentist participation in Medicaid
- Enabling loan assistance programs to provide additional incentive for dentists to participate in Medicaid; in exchange for assistance with repayment of education loans, they agree to provide care for Medicaid patients within the state for a defined time period
- establishing arrangements with state dental schools, enabling the dual goal of providing services to the Medicaid population and educating dental students on how to incorporate Medicaid patients into their practices
- Actively involving key stakeholders such as provider groups in the improvement of Medicaid dental services

Under the Medicaid expansion, these approaches will become critical elements of ensuring access for the additional people seeking dental services.

In addition, the analysis in this paper has shown that through ACA reform, roughly 15.9 million adults will become eligible for Medicaid in states that offer no adult dental benefits at all within their Medicaid programs. As dental utilization rates for low income adults continue to decline xxiv, lawmakers must take a serious look at ways to provide basic dental care to adults in Medicaid programs. With relatively small investment and using some of the innovations described above, this can be done. xxv

Another key issue is the level of uncertainty concerning future state actions regarding Medicaid dental benefits and, more broadly, participation in the Medicaid expansion program. With the Supreme Court’s June 2012 ruling that states cannot be forced to expand their Medicaid program, it is possible that some states will choose to refuse the additional federal funding for the expansion and instead keep their current Medicaid program. Or, they may expand to some extent but not to the level promulgated in the ACA. Additionally, even for states who do participate in the expansion program, the level of adult dental benefits offered by each state will likely continue to fluctuate over time. Historically, Medicaid adult dental benefits have been altered based on state budget pressures as well as political concerns. With the expansion’s requirement to tie benefits to a benchmark plan, states will have a renewed opportunity to assess their adult dental benefit and determine whether, and how much of, adult dental coverage is desirable and affordable.


xxv Ibid.
VII. CAVEATS AND LIMITATIONS

I, Joanne Fontana, am a Consulting Actuary for Milliman. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Milliman has prepared this report for the specific purpose of providing research results to ADA on the impact of the Affordable Care Act’s Medicaid expansion provision on dental delivery. This information may not be appropriate, and should not be used, for any other purpose. This report has been prepared solely for the internal business use of, and is only to be relied upon by, the management of ADA. No portion of this report may be provided to any other party without Milliman’s prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work even if we permit the distribution of our work product to such third party.

The results presented herein are estimates based on carefully constructed actuarial models. Differences between our estimates and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will not conform exactly to the assumptions used in this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

In performing this analysis, we relied on data and other information provided by ADA. We have not audited or verified this data and other information but reviewed it for general reasonableness. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

Milliman does not provide legal advice, and recommends that ADA consult with its legal advisors regarding legal matters.

The terms of Milliman’s Consulting Services Agreement with ADA signed on April 11, 2012 apply to this report and its use.
APPENDIX I – ADDITIONAL DETAIL ON MODELING METHODOLOGY AND
ASSUMPTIONS

We modeled the expected impact of the Medicaid expansion on the dental marketplace. In particular, we
projected:

- the expected increase in the number of Medicaid enrollees
- how many of them will have access to, and how many are expected to utilize, Medicaid dental benefits
- the number of additional dental visits and procedures expected due to the expansion, and
- the additional dental expenditures generated by the expansion

Step 1: Estimate the number of expected post-expansion Medicaid beneficiaries.

Milliman’s Health Care Reform Financing Model (HCRFM) is a sophisticated modeling tool which enables
analysis of how health care reform may change the number of people accessing the insurance marketplace, and
the ways in which people will access insurance. We used the HCRFM population estimates of the number of
people accessing medical coverage via Medicaid in 2018 as the starting point for our analysis. The population
is split according to their pre-reform source of medical insurance, enabling us to make assumptions regarding
how many of them likely had dental coverage prior to the expansion versus how many were likely uninsured for
dental.

For adults and for children, we started by making assumptions regarding how much of the expected Medicaid
expansion population was covered by dental insurance prior to health care reform. The proportion of the
Medicaid population estimated to have prior dental insurance was assumed to differ according to the person's
pre-reform source of medical insurance. As an example, the table below indicates that people in Medicaid who
obtained medical insurance pre-reform from the small group market had a 28% likelihood of also having dental
insurance pre-reform.

<table>
<thead>
<tr>
<th>Percent of Medicaid Expansion Enrollees Assumed to Have Prior Dental Insurance, by Pre-Reform Medical Insurance Source</th>
<th>Individual NonExchange*</th>
<th>Uninsured</th>
<th>Small Group**</th>
<th>Large Group***</th>
<th>Medicaid****</th>
<th>Medicare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual NonExchange*</td>
<td>0%</td>
<td>0%</td>
<td>28%</td>
<td>51%</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Individual dental market is very small; we assumed that people close to Medicaid poverty level would not have purchased dental in the individual market.

** From Exchanges and Dental Coverage: Building on an Employer Base. Nov 2011, National Maternal and Child Oral Health Policy Center. Small group dental offer rate 35%, small group employee uptake rate 79%, so Best Estimate assumption is 35% x 79% = 28%.

*** From Exchanges and Dental Coverage: Building on an Employer Base. Nov 2011, National Maternal and Child Oral Health Policy Center. Large group dental offer rate 64%, large group employee uptake rate 79%, so Best Estimate assumption is 64% x 79% = 51%.

**** For states that cover adult dental under Medicaid. Otherwise 0% was assumed.

Step 2: Estimate how many of the expansion beneficiaries will have access to dental coverage through Medicaid.

We assumed that all children in all states will have access to Medicaid dental benefits, as pediatric dental care
is a required Medicaid benefit. For adults, we developed state level assumptions according to whether each
state covers adult dental as an optional Medicaid benefit. For states with no adult dental coverage, we assumed
no Medicaid expansion adults would have access to dental services. For all other states, we assumed that
Medicaid expansion adults would have access to some level of dental services. We further classified these states as having Emergency, Limited, or Extensive Medicaid adult dental benefits for the purposes of projecting expected utilization of services in a later step. The state-level chart with assumed adult Medicaid dental benefit levels is shown as Table I at the end of this appendix.

Step 3: For beneficiaries that have access to Medicaid dental coverage, estimate what proportion of them will utilize dental services in a given year.

We assumed that the dental utilization rate for the expansion population, i.e. the proportion of those eligible for Medicaid dental benefits that will actually utilize dental services in a given year, would mirror that of the existing Medicaid population, adjusted for any pent up demand for individuals covered for dental for the first time via the expansion. For children, we used the most recent (2010 for most states) Medicaid pediatric dental utilization rates from the CMS 416 report which details each state’s performance on EPSDT guidelines. As no consistent report of the Medicaid adult dental utilization rate is available, we used the pediatric utilization rate adjusted for the an estimate of the overall expected differential in public program adult dental utilization rates versus public program child dental utilization rates from the Medicaid Expenditure Panel Survey (MEPS) Chartbook 17 as the basis for our adult dental utilization rate. We also modeled an alternative adult utilization scenario in which we assumed adult utilization would mirror that of the commercially insured population, again by adjusting the pediatric utilization rates up to a commercial adult level using overall expected differentials from the MEPS Chartbook 17. This would be viewed as an upper limit on the expected adult dental utilization rate.

<table>
<thead>
<tr>
<th>State</th>
<th>Assumed Medicaid Dental Utilization Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Child</td>
</tr>
<tr>
<td>Alabama</td>
<td>46.3%</td>
</tr>
<tr>
<td>Alaska</td>
<td>42.9%</td>
</tr>
<tr>
<td>Arizona</td>
<td>42.6%</td>
</tr>
<tr>
<td>Arkansas</td>
<td>23.3%</td>
</tr>
<tr>
<td>California</td>
<td>35.8%</td>
</tr>
<tr>
<td>Colorado</td>
<td>44.7%</td>
</tr>
<tr>
<td>Connecticut</td>
<td>38.8%</td>
</tr>
<tr>
<td>Delaware</td>
<td>39.3%</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>43.1%</td>
</tr>
<tr>
<td>Florida</td>
<td>21.6%</td>
</tr>
<tr>
<td>Georgia</td>
<td>42.0%</td>
</tr>
<tr>
<td>Hawaii</td>
<td>40.9%</td>
</tr>
<tr>
<td>Idaho</td>
<td>58.9%</td>
</tr>
<tr>
<td>Illinois</td>
<td>45.6%</td>
</tr>
<tr>
<td>Indiana</td>
<td>29.6%</td>
</tr>
<tr>
<td>Iowa</td>
<td>39.1%</td>
</tr>
<tr>
<td>Kansas</td>
<td>17.5%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>36.8%</td>
</tr>
<tr>
<td>Louisiana</td>
<td>42.9%</td>
</tr>
<tr>
<td>State</td>
<td>Child</td>
</tr>
<tr>
<td>------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Maine</td>
<td>37.1%</td>
</tr>
<tr>
<td>Maryland</td>
<td>47.5%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>45.0%</td>
</tr>
<tr>
<td>Michigan</td>
<td>32.4%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>38.8%</td>
</tr>
<tr>
<td>Mississippi</td>
<td>41.8%</td>
</tr>
<tr>
<td>Missouri</td>
<td>30.0%</td>
</tr>
<tr>
<td>Montana</td>
<td>34.4%</td>
</tr>
<tr>
<td>Nebraska</td>
<td>44.3%</td>
</tr>
<tr>
<td>Nevada</td>
<td>34.7%</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>52.3%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>40.3%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>48.8%</td>
</tr>
<tr>
<td>New York</td>
<td>36.0%</td>
</tr>
<tr>
<td>North Carolina</td>
<td>47.3%</td>
</tr>
<tr>
<td>North Dakota</td>
<td>32.2%</td>
</tr>
<tr>
<td>Ohio</td>
<td>39.1%</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>45.2%</td>
</tr>
<tr>
<td>Oregon</td>
<td>32.8%</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>37.1%</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>37.7%</td>
</tr>
<tr>
<td>South Carolina</td>
<td>46.8%</td>
</tr>
<tr>
<td>South Dakota</td>
<td>42.6%</td>
</tr>
<tr>
<td>Tennessee</td>
<td>42.5%</td>
</tr>
<tr>
<td>Texas</td>
<td>58.4%</td>
</tr>
<tr>
<td>Utah</td>
<td>39.0%</td>
</tr>
<tr>
<td>Vermont</td>
<td>54.2%</td>
</tr>
<tr>
<td>Virginia</td>
<td>44.0%</td>
</tr>
<tr>
<td>Washington</td>
<td>49.8%</td>
</tr>
<tr>
<td>West Virginia</td>
<td>43.4%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>15.4%</td>
</tr>
<tr>
<td>Wyoming</td>
<td>37.5%</td>
</tr>
</tbody>
</table>
When we modeled utilization, we considered whether enrollees would be covered for dental for the first time via the Medicaid expansion, or whether they were coming from prior dental insurance coverage elsewhere. While the majority of Medicaid expansion enrollees come without prior dental insurance, others come from employer sponsored coverage in either the group or individual market. For any adults or children in the projection assumed to have no prior dental coverage, we increased the utilization rate by a factor of 20% (adults) and 25% (children) to account for pent up demand for dental services. For those with prior dental coverage we used the aforementioned utilization rates with no adjustment. These assumptions represent short term utilization levels; as people are continuously covered for dental care over a number of years, their utilization of services would likely decline toward the baseline level.

**Step 4: Project the number of additional dental procedures and dental visits generated by the Medicaid expansion.**

For the proportion of people identified in Step 3 who are expected to utilize dental services, we used estimates of the number of visits and procedures per person, derived from external benchmarks as well as Milliman datasets, to calculate the expected additional dental utilization caused by the Medicaid expansion. Then for each of the subpopulations in the table above, we estimated their expected dental utilization and cost depending on (1) whether they were dentally insured prior to health reform, and (2) for adults, the Medicaid dental benefit levels in each state.

For states’ Medicaid adult dental benefits, we relied on several sources of information: (1) A map of 2011 coverage levels from PBS Newshour\textsuperscript{xxvi}, which described 2011 benefit levels, (2) 2008 comprehensive report on Medicaid adult dental benefits compiled by the National Academy for State Health Policy\textsuperscript{xxvii}, and (3) state-level research conducted by both the ADA and by Milliman to ascertain more recent changes in Medicaid adult dental benefits. In some cases, we found contradictory information and had to use additional research combined with judgment to estimate current coverage levels.

Each state’s Medicaid adult dental coverage was classified into one of four categories:

1. **NO:** State offers no optional adult dental coverage
2. **EMERGENCY:** State offers emergency services only
3. **LIMITED:** State offers more than emergency services but fewer services than what could be considered full coverage
4. **EXTENSIVE:** State offers at least extractions, preventive, diagnostic, and restorative dental services

The resulting classifications for each state used in our analysis are detailed in Table I at the end of this appendix.

We then modeled utilization by starting with baseline utilization levels from external benchmarks and then adjusting them using Milliman’s Health Cost Guidelines – Dental. According to the MEPS Chartbook 17, for adults with public dental coverage who had a dental visit, the average number of visits was 2.39. The same statistic for children was 1.94, according to a recent report by the Children’s Dental Health Project\textsuperscript{xxviii}. To

\textsuperscript{xxvi} Myers, Justin. How Have Medicaid Dental Benefits Changed in Your State? PBS Newshour. HEALTH – November 17, 2011 at 11:41 AM EDT


convert these visit estimates into procedures, we used the Guidelines adjusted for the population at hand (a pediatric population for child procedures, and an adult population for adult procedures).

<table>
<thead>
<tr>
<th>State’s Medicaid Dental Benefit Level</th>
<th>Adults</th>
<th></th>
<th>Children</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Procedures/Year</td>
<td>Visits/Year</td>
<td>Procedures/Year</td>
<td>Visits/Year</td>
</tr>
<tr>
<td>None</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Emergency Only</td>
<td>.012</td>
<td>.006</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Limited</td>
<td>3.11</td>
<td>1.59</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Extensive</td>
<td>4.67</td>
<td>2.39</td>
<td>4.61</td>
<td>1.94</td>
</tr>
</tbody>
</table>

Step 5. Project the additional expenditure on Medicaid dental services generated by the Medicaid expansion.

To estimate the dental expenditures associated with the expansion, we relied on per member per month (PMPM) expenditures calculated from the 2009 CMS dataset on Medicaid dental expenditures and enrollees by state. This data is not split into adult and child PMPM costs, so we made assumptions regarding the child and adult costs in each state according to the state’s coverage of Medicaid adult dental benefits. In addition, the CMS data includes only fee for service expenditures, so we supplemented that information where possible with publicly available information on dental capitation rates in states that utilize risk-based payments for their Medicaid dental program. Finally, Medicaid dental benefits for adults have changed over recent years in many states, and even recent historical data may not always reflect the most current benefit structure.

Table I at the end of this appendix includes a state-by-state listing of the Medicaid dental PMPM expenditure assumptions for adults and children, along with data source information for each state and an indicator of the reasonableness of the data available.

Other Methodology Notes

The assumptions inherent in the modeling were derived largely based on data discovered during our literature review, combined with industry knowledge, anecdotal information, and judgment of both Milliman and the ADA.

In order to enable the analysis we also made a few overarching assumptions which influence the results. These are:

1. All states will choose to expand Medicaid coverage as promulgated by the ACA; no states will opt out of the Medicaid expansion program.

2. Each state’s current Medicaid program for adult dental coverage is assumed to stay constant through 2018.
### TABLE I - STATE LEVEL ASSUMED MEDICAID ADULT DENTAL COVERAGE LEVELS AND MEDICAID DENTAL EXPENDITURES PER MEMBER PER MONTH

<table>
<thead>
<tr>
<th>State</th>
<th>Assumed Medicaid Adult Dental Coverage Level</th>
<th>Assumed Medicaid Child Dental PMPM Expenditure</th>
<th>Assumed Medicaid Adult Dental PMPM Expenditure</th>
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(1) Calculated PMPM expenditure based on CMS 2009 Medicaid dental expenditures and enrollees by state. State does not offer adult dental so PMPM was assumed to represent child cost.

(2) Calculated PMPM expenditure based on CMS 2009 Medicaid dental expenditures and enrollees by state; assumed PMPM identical for adults and children.

(3) State at least partially capitlates Medicaid dental. Capitation rate information was unavailable, so CMS 2009 data was used and assumed to be representative of Medicaid dental PMPMs in the state.

(4) State at least partially capitlates Medicaid dental. Capitation information was used and assumed to be representative of Medicaid dental PMPMs in the state.

(5) State at least partially capitlates Medicaid dental. Capitation information was unavailable. Adult and child dental PMPMs were derived using a combination of CMS information and Milliman Health Cost Guidelines – Dental.

(6) Adult and dental PMPMs were derived using a combination of CMS information and Milliman Health Cost Guidelines – Dental.

(7) State at least partially capitlates Medicaid dental. Capitation information was unavailable. Adult and child dental PMPMs were estimated based on market knowledge and/or industry standards.
(8) Do not believe state capitates Medicaid dental. Adult and child PMPMs derived from CMS data were deemed unreliable. Adult and child dental PMPMs were estimated based on market knowledge and/or industry standards.
## APPENDIX II – STATE LEVEL MEDICAID EXPANSION MODELING RESULTS

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American Dental Association
Medicaid Expansion Under the Affordable Care Act and Its Impact on Dental Delivery and Financing
August 20, 2012
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| Alaska             | 11%      | 96%    | 41%         | 20.05      | 93.38  | 46.21        | $21,302.39
| Arizona            | 11%      | 0%     | 11%         | 33.95      | 156.58 | 65.86        | $9,860.31
| Arkansas           | 11%      | 96%    | 44%         | 62.49      | 210.15 | 103.19       | $29,690.51
| California         | 11%      | 0%     | 11%         | 203.32     | 937.72 | 394.44       | $52,485.22
| Colorado           | 11%      | 0%     | 11%         | 21.07      | 97.20  | 40.89        | $9,238.05
| Connecticut        | 11%      | 83%    | 46%         | 100.86     | 470.04 | 234.63       | $55,739.08
| Delaware           | 11%      | 0%     | 11%         | 4.40       | 20.28  | 8.53         | $1,917.41
| District of Columbia | 11%    | 96%    | 59%         | 47.51      | 221.54 | 111.61       | $19,448.22
| Florida            | 11%      | 83%    | 43%         | 291.08     | 979.88 | 480.89       | $102,613.75
| Georgia            | 11%      | 96%    | 41%         | 293.86     | 266.60 | 112.40       | $30,048.35
| Hawaii             | 11%      | 96%    | 53%         | 57.44      | 31.49  | 13.30        | $83,213.99
| Idaho              | 11%      | 83%    | 35%         | 47.34      | 54.22  | 22.85        | $3,539.10
| Illinois           | 11%      | 96%    | 42%         | 526.94     | 461.65 | 194.66       | $48,459.64
| Indiana            | 11%      | 96%    | 43%         | 35.21      | 113.48 | 56.99        | $8,957.15
| Iowa               | 11%      | 83%    | 43%         | 78.76      | 264.30 | 129.92       | $32,883.11
| Kansas             | 11%      | 83%    | 59%         | 22.37      | 21.09  | 8.89         | $10,901.38
| Kentucky           | 11%      | 83%    | 55%         | 140.97     | 656.88 | 327.49       | $54,259.65
| Louisiana          | 11%      | 83%    | 38%         | 181.31     | 620.28 | 301.84       | $47,106.07
| Maine              | 11%      | 83%    | 33%         | 35.20      | 113.48 | 56.99        | $8,957.15
| Maryland           | 11%      | 96%    | 49%         | 208.98     | 973.93 | 486.25       | $63,753.31
| Massachusetts      | 11%      | 83%    | 34%         | 194.54     | 624.85 | 314.46       | $138,456.54
| Michigan           | 11%      | 83%    | 48%         | 307.56     | 1,433.52 | 717.10  | $176,285.49
| Minnesota          | 11%      | 83%    | 46%         | 129.32     | 602.65 | 300.59       | $35,982.22
| Mississippi        | 11%      | 83%    | 44%         | 142.85     | 106.46 | 49.41        | $17,449.80
| Missouri           | 11%      | 0%     | 11%         | 20.13      | 92.84  | 39.05        | $8,299.63
| Montana            | 11%      | 83%    | 36%         | 16.61      | 57.39  | 27.78        | $9,729.35
| Nebraska           | 11%      | 83%    | 37%         | 38.65      | 133.19 | 64.56        | $17,254.99
| Nevada             | 11%      | 83%    | 36%         | 37.81      | 40.74  | 17.17        | $7,489.54
| New Hampshire      | 11%      | 83%    | 38%         | 27.92      | 27.65  | 11.65        | $4,201.18
| New Jersey         | 11%      | 83%    | 34%         | 78.62      | 365.88 | 178.84       | $14,061.28
| New Mexico         | 11%      | 83%    | 33%         | 599.12     | 2,794.33 | 1,412.12 | $255,552.99
| New York           | 11%      | 83%    | 36%         | 322.17     | 1,500.88 | 745.30  | $167,136.65
| North Carolina     | 11%      | 96%    | 44%         | 322.17     | 1,500.88 | 745.30  | $167,136.65

Milliman Client Report
### Growth in Medicaid Dental Population due to Expansion

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<th>Children</th>
<th>Adults</th>
<th>Total</th>
<th>Users</th>
<th>Procedures</th>
<th>Visits</th>
<th>Expenditures</th>
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<tr>
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<td>48.89</td>
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<td>51%</td>
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<td>984.84</td>
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<td>96%</td>
<td>38%</td>
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<td>50.97</td>
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<td>648.31</td>
<td>$213,975.64</td>
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<tr>
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<td>83%</td>
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<td>34.96</td>
<td>114.92</td>
<td>57.12</td>
<td>$19,181.88</td>
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<tr>
<td>South Carolina</td>
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<td>11%</td>
<td>24.43</td>
<td>112.66</td>
<td>47.39</td>
<td>$9,711.57</td>
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<tr>
<td>South Dakota</td>
<td>11%</td>
<td>83%</td>
<td>37%</td>
<td>17.97</td>
<td>83.64</td>
<td>41.13</td>
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<td>11%</td>
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<td>70.68</td>
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<td>11%</td>
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<td>43.23</td>
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<td>Vermont</td>
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</tr>
<tr>
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<td>0%</td>
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<td>138.90</td>
<td>58.42</td>
<td>$8,897.62</td>
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<tr>
<td>Washington</td>
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<td>0%</td>
<td>11%</td>
<td>43.75</td>
<td>201.80</td>
<td>84.88</td>
<td>$15,653.79</td>
</tr>
<tr>
<td>West Virginia</td>
<td>11%</td>
<td>96%</td>
<td>50%</td>
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<td>48.65</td>
<td>20.54</td>
<td>$11,863.64</td>
</tr>
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<td>11%</td>
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<td>52%</td>
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<td>389.62</td>
<td>195.16</td>
<td>$82,681.24</td>
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<tr>
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<td>38%</td>
<td>10.45</td>
<td>35.94</td>
<td>17.44</td>
<td>$5,710.86</td>
</tr>
</tbody>
</table>
APPENDIX III – ABOUT THE HEALTH CARE REFORM FINANCING MODEL

Introduction

The Milliman Health Care Reform Financing Model (HCRFM) was developed by Milliman, Inc. (Milliman) to assist clients with an assessment of the potential impact of a particular health care reform requirement to be evaluated. The creation of HCRFM is the result of a collaborative effort among numerous Milliman consultants in various Milliman offices. The HCRFM models the potential costs and movements of individuals and the interaction between competing medical cost payers and providers within and between the various insurance markets that comprise the U.S. health care system for a given proposed health care financing scheme.

Modeling includes provision for:

- Seriatim projection of each census record, including differentiation by age, gender, income status, and health status. For these projections, we have used a random sample of 10% of a census file which represents all 300 million people in the United States.

- Eleven (11) different market segments, each with its own set of demographic, change factor, health care cost, and premium rate determination assumptions. The market segments being used are the following:

<table>
<thead>
<tr>
<th>Table 1 - Market Segment Modeled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Individual</td>
</tr>
<tr>
<td>2. State/Federal High Risk Programs</td>
</tr>
<tr>
<td>3. Uninsured</td>
</tr>
<tr>
<td>4. Small Group : 1 - 10 employees</td>
</tr>
<tr>
<td>5. Small Group : 11 - 25 employees</td>
</tr>
<tr>
<td>6. Small Group : 26 - 50 employees</td>
</tr>
<tr>
<td>7. Group : 51 - 100 employees</td>
</tr>
<tr>
<td>8. Group : 101 - 999 employees</td>
</tr>
<tr>
<td>9. Group: 1000+</td>
</tr>
<tr>
<td>10. Medicaid</td>
</tr>
<tr>
<td>11. Medicare</td>
</tr>
</tbody>
</table>
This model includes results from 2010 through 2017. We have shown results as of the end of that period, as that represents the point at which the exchange market will be most fully developed and tending toward a steady state.

Change algorithms applied to each individual and employer group in the census estimating the likelihood of changing from one market to another.

Switching (Change Factor) Process

The switching process develops the probability of an individual switching from his current market segment into each available competing market segment, including the likelihood of remaining in his current market segment. Movement to a new market is based upon selected characteristics of the individual or employer.

Movement from the uninsured market is based upon change factors that Milliman developed through research on certain programs such as health reform in Massachusetts and Maine’s Dirigo project, along with our judgment. Assumed movement varied by age, gender, income level, health status, and the market to which each uninsured person would change. It was assumed that a currently uninsured individual would stay uninsured, move to the Medicaid market, or obtain coverage in the individual market. However, in recognition of the relatively low initial penalties or incentive to change their uninsured status in year 2014 to purchase a health plan, we have assumed that our change factors to the Individual Medical Market from the Uninsured market are graded in overtime as penalties grow. By 2017, the phase-in is complete. The phase-in factors were not applied to movement to the Medicaid market since this decision would either not cost or be relatively low cost to newly eligible uninsured people to get their new coverage. We have assumed that 100% of those newly eligible for either program move to that program in 2014.

Expansion of the Small Group Market to 100 Employees

The values shown in this report reflect the recognition that the definition of a small group will by law be expanded to 100 or fewer employees starting in the year 2016. States have the prerogative to change the definition before this date, but our projection assumes that all states will wait until year 2016. This should be kept in mind when reviewing the results and movements for small group and large group from year 2015 to 2016.

Key Underlying Assumptions

1. Census: Used U.S. MEPS and U.S. Census data (March 2010) coupled with market research data for demographic and insurance splits of the baseline U.S. census data
   a. Member counts by age, gender, and family composition
   b. Family size
   c. Line of business
   d. Employer size
2. **Distribution of population by federal poverty level**

The following tables show the distribution of the population by federal poverty level (FPL). The distributions vary by geographic grouping. Note that we have assumed the same distribution by FPL for both Small Group and Large Group due to data limitations.

![Table 2: Distribution of Population by Federal Poverty Level](image)

3. **Births, Immigration, Medicare Eligibility, and Deaths**

   a. **Births**: New births each year are assumed to equal the number of newborns in our 2010 census data.

   b. **Immigration**: We have not included population growth due to immigration.

   c. **Medicare Eligibility**: We assume people move into the Medicare market in the year they attain age 65. We do not reflect any Medicare eligibility for those under age 65 who might qualify as disabled.

   d. **Deaths**: Deaths are projected to occur at the end of each projection year based upon a U.S. standard mortality table.

**Change Factor Assumptions**

Change factors are key assumptions regarding the projected impact of the ACA reforms. There is little empirical data supporting these assumptions. Milliman has conducted research on various programs that converted to a guaranteed acceptance basis and developed various change factors through observations of these other programs. Following are the various change factor assumptions used in this projection. They do not vary by scenario.
Medicaid Crowd-Out from the Individual or Group Markets

Medicaid crowd-out is the opportunity of employees and individuals who are in income levels (i.e. FPL ≤ 138%, or 133% plus 5% income disregard) that make them eligible for Medicaid expansion to move from their current coverage or uninsured status to the Medicaid program. The following crowd-out factors have been assumed. The higher the factor, the more likely the person will leave their current plan and enroll in Medicaid.

<table>
<thead>
<tr>
<th>Age/Gender</th>
<th>Health Status Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 0.75</td>
</tr>
<tr>
<td>All &lt; 18</td>
<td>86%</td>
</tr>
<tr>
<td>Females 18 – 44</td>
<td>81%</td>
</tr>
<tr>
<td>Females ≥ 45</td>
<td>77%</td>
</tr>
<tr>
<td>Males ≥ 17</td>
<td>77%</td>
</tr>
</tbody>
</table>

These factors do not vary by market or regulatory groupings.
Health Insurance Exchanges and the Individual Mandate under the Affordable Care Act: Impact on the Dental Market

July 23, 2012
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I. INTRODUCTION

The creation of health insurance exchanges, one of the most significant tenets of the Affordable Care Act (ACA), promises to change the way individuals and small groups purchase insurance in 2014 and beyond. State exchanges serving the individual and small group marketplaces, with longer term expansion to the large group market, will provide a more competitive, consumer-oriented way to shop for insurance coverage. Exchanges will enable consumers to compare and make purchase decisions on coverages from qualified health plans which must meet benefit design and consumer protection criteria. They will also increase access to insurance via one-stop eligibility determination for exchange subsidies and qualification for social programs such as Medicaid.\(^1\)

Benefit plans offered via the exchanges, as well as those offered in the individual and small group market outside the exchanges, must, at a minimum, cover a set of benefits deemed “essential” by ACA. The inclusion of “pediatric services, including oral and vision care” as one of these essential benefits will require that some form of child dental benefits is offered in these marketplaces. The combination of the essential benefits package requirement and ACA’s individual mandate provision, which requires most people to purchase insurance including at least the minimum essential benefits or pay a penalty (or additional income tax), means that the number of children with dental coverage could increase considerably under health reform.

The individual mandate applies to adults and children, but adult dental is not part of the mandated benefit package. Adults, who are required to purchase medical insurance, may decide whether to purchase optional dental coverage for themselves. On the one hand, an influx of first-time health insurance purchasers might choose to add optional adult dental coverage, if the available dental benefits and rates are attractive. This could increase the number of adults covered by dental insurance. Also, people purchasing on the exchange may pay less in premium than prior to health reform, due to federal subsidies and other rating reforms; this could free up cash with which people could potentially purchase dental coverage. On the other hand, adults with dependents have historically purchased dental insurance as a family policy. With pediatric oral care spiked out as the only mandated dental coverage, adults now have a new purchase option: they must purchase dental for their children but may do so without purchasing coverage for themselves, via a child-only dental policy. This dynamic could reduce the number of adults with dental coverage. The impact of the ACA on employer-sponsored insurance is a related wrinkle; if many large employers drop employer-sponsored plans and send their employees to the exchange, an even greater population will be subject to the forces of the exchange-based dental marketplace.

This paper explores the impact of health insurance exchanges and the individual mandate on the dental delivery system, including the types of dental benefit plans likely to be offered on and off exchanges, and the impact on the number of persons with dental insurance and on demand for dental care for both children and adults.

II. SUMMARY OF KEY FINDINGS

- We expect the requirement to purchase pediatric oral care coverage on the exchange will increase the number of children with dental insurance in the United States by approximately 3 million. With approximately 75 million children in the U.S., 77% of whom are estimated to have dental insurance, this equates to a 5% increase in the number of dentally insured children.

- Based on what we know today about states’ progress toward defining their essential benefit plan and the Department of Health and Human Services’ guidance on how to appropriately benchmark the pediatric oral care benefit, we believe that most states will end up with a comprehensive pediatric oral care essential benefit with an array of services similar to those seen in today’s commercial dental plans, even potentially including medically necessary orthodontia. Without the ability to utilize dollar annual or lifetime maximums on those services, states and health plans will need to consider other cost-reducing mechanisms such as higher deductibles, higher member coinsurance, or visit limitations to keep the benefit affordable.

- Adult dental benefits, though not part of the essential health benefit package, may be offered on the exchange. Due to the voluntary, individual-pay-all nature of this benefit, the offering will likely take on characteristics different from today’s commercial plans in order to avoid adverse selection. While pediatric dental benefits will be subject to cost-sharing restrictions in ACA such as the prohibition on the use of annual and lifetime dollar maximums, adult dental benefits are not subject to those rules. As such, dollar maximums and other cost-sharing approaches used in today’s dental plans are likely to be used in any adult plans offered on the exchange, and the plans may incorporate innovative approaches to manage cost and utilization while incenting participation.

- Based on what we know today, we expect that exchanges will slightly increase the net number of adults with dental insurance, by 0.8 million people. This accounts for the number of adults purchasing insurance on the exchange, offset by the exchange adults previously dentally insured in the group marketplace that drop adult dental coverage on the exchange.

- The overall rate of employer-sponsored dental insurance (ESI) is not expected to change significantly as a result of the new exchange marketplace. However, pockets of the ESI market, including smaller employers and those with a predominantly low-wage workforce, may discontinue offering benefits and send their employees to the individual exchange to purchase insurance coverage.

- We estimate that the impact to the dental care system of newly insured people on the exchange will be an addition of 17.4 million dental procedures or 7.6 million dental visits, totaling $1.1 billion in dental expenditures annually in the initial year in which these people are insured.

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8 Lewis C, Mouradian W, Stayton R, Williams A. Dental insurance and its impact on preventive dental care visits for U.S. children. Department of Pediatrics, Division of General Pediatrics and Child Health Institute, School of Medicine, University of Washington, Seattle, WA 98195, USA. cwlewis@u.washington.edu
III. BACKGROUND

Exchange Basics and Definitions

In order to understand the impact of exchanges and the individual mandate on the dental market, we must first acquaint ourselves with the key aspects of exchanges and with the array of new terminology used to describe exchanges. What follows are descriptions and definitions of terms used in the ACA that, taken together, outline how exchanges will operate. Information on how dental is incorporated into the various aspects of exchanges, if known, is included in the descriptions.

Individual and Small Group Exchange Structure: The Affordable Care Act (ACA) establishes rules by which states will have the opportunity to create health insurance exchanges as marketplaces in which individuals and small groups may purchase insurance. The American Health Benefits Exchange (AHB Exchange) will offer products to individuals, while the Small Business Health Options Program (SHOP) exchange will serve the small group market. The small group market includes groups with fewer than 100 employees, although until 2016 states can limit the definition to groups with 50 or fewer employees. In 2017 and beyond, SHOP exchanges can choose to expand beyond the small group marketplace to include larger employers as well. States can run their AHB and SHOP exchanges separately or opt to merge the two exchanges into a single entity. States also have the option of combining resources to establish a regional exchange, and, finally, if a state chooses not to establish an exchange, the federal government will establish a Federally Facilitated Exchange (FFE) on its behalf.

Per the Department of Health and Human Services, exchanges must allow stand-alone dental coverage to be sold via exchanges, either on their own or in conjunction with a qualified health plan. This would include child-only stand-alone dental policies satisfying the pediatric oral care benefit requirement, and could also include adult or family policies.

Federal Subsidies: In the AHB or individual exchange only, affordability is enhanced via federal subsidies, including refundable tax credits and cost-sharing subsidies, which are available to individuals or families with incomes between 133 percent and 400 percent of the federal poverty level (FPL). Many people will qualify for some level of subsidy; 400% FPL equates to an income of almost $90,000 for a family of four. In fact, the Congressional Budget Office estimated that roughly 81% of the AHB exchange population will qualify for subsidies, increasing the affordability of coverage for many Americans. Individuals may purchase insurance via the AHB exchange even if they are also eligible for coverage from their employer. In that situation, the purchase would be unsubsidized unless the employer-based coverage was deemed unaffordable, with employee-only premiums exceeding 9.5% of the employee’s income, or the coverage was less robust than a Bronze plan with 60% actuarial value.

Pediatric oral care coverage is an essential benefit, required to be included in all plans offered on exchanges and in individual and small group business sold outside exchanges; as such, subsidies are available for purchase of the pediatric oral care benefit on the exchange as part of the Essential Health Benefit Package. However, adult dental coverage and any child dental coverage outside of what is deemed essential is not a mandated purchase for individuals or small groups either on or off exchanges. As such, any subsidies available to individuals purchasing insurance on the exchange are not applicable to dental coverage above and beyond the pediatric oral care essential benefit.

Essential Health Benefit Package (EHBP): Per the ACA, all benefit packages offered on the exchanges, as well as all benefits sold outside the exchanges in the individual and small group markets must provide at least the ACA-defined “essential health benefits”. The essential benefits are:

- Ambulatory patient services;
- Emergency services;
- Hospitalization;
- Maternity and newborn care;
- Mental health and substance use disorder services, including behavioral health services;
- Prescription drugs;
- Rehabilitative and habilitative services and devices;
- Laboratory services;
- Preventive and wellness services and chronic disease management; and

**Pediatric services, including oral and vision care.**

Under the ACA, annual or lifetime dollar benefit limits are prohibited on the benefits comprising the EHBP. Plans are, however, able to utilize visit limits or other non-dollar limits on the EHBP to approximate the value of a dollar limit.

Per the Secretary of the Department of Health and Human Services, standalone dental coverage is an “excepted benefit” under HIPAA, which means that it is not subject to ACA’s market reforms, including the aforementioned cost-sharing limitations as well as other clauses. However, the pediatric oral care essential benefit is subject to the terms of the ACA.

In December 2011 the Department of Health and Human Services released guidance on how each state should define its EHBP via a benchmarking process. Each state must follow the benchmarking methodology to base its EHBP on one of four benchmark plans:

- The largest plan (as measured by enrollment) in any of the three largest small group insurance products in the state market.
- Any of the largest three state employee health benefit plans.
- Any of the largest three national Federal Employee Health Benefit (FEHB) plans.
- The largest insured commercial non-Medicaid HMO in the state.

If the state’s chosen benchmark does not include all ten essential benefits, then the benchmark must be supplemented with benefits from another benchmark in order to comprise the EHBP. If the state does not set its own benchmark, the default benchmark will be the largest small group insurance product in the state.

The guidance on the EHB benchmarking process acknowledged that oral care coverage is often provided via a standalone dental policy rather than as part of the medical benefit offering, and as such many of the potential benchmark medical plans are likely to exclude that benefit. In that situation, the guidance indicates that the benchmark plan would need to be supplemented with the pediatric oral care benefit from either the state’s CHIP program or from the Federal Employee Dental and Vision Program (FEDVIP). As both of these benefit programs cover comprehensive dental care for children, the pediatric oral care benefit in many states’
benchmarks is likely to be comprehensive as well, covering a full array of oral care procedures potentially including medically necessary orthodontia.

It is important to note that the benchmarking process defines only the scope of covered services in the state’s EHBP, not the specific cost-sharing provisions.

**Qualified Health Plans:** Only plans certified by the exchanges as qualified health plans, or QHPs, are able to offer products on the exchanges. QHPs must meet provider network adequacy standards. All plan offerings must include the essential health benefit package, and the plan must offer at least one Silver plan, one Gold plan, and a child-only plan at each metal level offered. In addition, the plan must meet cost-sharing limits set by the ACA.

The EHBP may be comprised of a combination of a medical plan and a standalone dental plan. As such, if standalone dental is offered on the exchange, QHPs do not have to offer the pediatric oral care essential benefit in order to qualify as a QHP.

Rules issued by the Department of Health and Human Services in March 2012 clarified that standalone dental plans offering the essential pediatric oral health benefit must comply with QHP certification standards such as network capacity and cost-sharing limitations; they need not comply for services other than the pediatric oral health benefit. The rule also stated that standalone dental plans are required to offer child-only policies on exchanges.\(^{iv}\)

**Actuarial Value:** The concept of Actuarial Value (AV) was created to help consumers compare the relative value of different plans offered on the exchange. AV is an estimate of how “rich” a benefit plan offering is; that is, how much of the plan’s total cost for the EHBP is borne by the insurance carrier versus the member’s out-of-pocket expense. AV is “generally calculated by computing the ratio of (i) the total expected payments by the plan for essential health benefits, computed in accordance with the plan’s cost sharing rules (i.e., deductibles, co-insurance, co-payments, out-of-pocket limits), for a standard population; over (ii) the total costs for the EHB the standard population is expected to incur.”\(^{v}\) The ACA assigns metal levels according to a plan’s AV; a Platinum plan has approximately 90% AV, a Gold plan 80%, Silver 70%, and Bronze 60%. A Gold plan, then, would cover on average 80% of a standard population’s expected expenses for the EHB.

It is important to note that the metal level applies to the EHB as a whole; it is not the case that each service category (such as inpatient services or pediatric oral care) has to meet a specified AV level on its own. Furthermore, while pediatric oral care services are part of the EHB and hence are theoretically part of the AV calculation, recent guidance suggests that the standard model being developed for AV calculation may include only those cost-sharing aspects with a significant impact on benefit plan richness (such as overall deductibles and coinsurance, inpatient copays, and the like).\(^{vi}\) A letter from the American Academy of Actuaries to the Center for Consumer Information and Insurance Oversight recommended the set of cost-sharing items to be included in the standard AV calculation, and pediatric oral care was not among the list of inputs.\(^{vi}\) So, while pediatric oral care services are a component of the EHB and are therefore part of the benefit plan’s overall AV, in practice the cost sharing levels associated with pediatric oral care may not be included in the standard AV calculation due to their limited impact on the overall plan value. This logic would apply whether the EHB is comprised of a single plan encompassing medical and dental benefits or a combination of a medical plan and a standalone dental plan.


\(^{vi}\) Ibid.

**Functions of Exchanges:** Key functions of state exchanges include member eligibility determination and enrollment, certification of qualified health plans, creation and operation of a consumer website portal for benefit plan comparisons, operation of a consumer hotline, and consumer outreach and education. In addition, in the SHOP exchange, the exchange is responsible for providing a premium list bill to each employer group; the SHOP would collect premiums from the employer and pay the QHPs.

**Timeline for Exchange Implementation:** Exchanges are expected to be fully operational by January 1, 2014; as such, they must be approved for operation by January 1, 2013 and ready for the first open enrollment period beginning October 1, 2013. For exchanges not approved for operation by January 2013, a Federally Facilitated Exchange (FFE) will be put in place, such that coverage via exchanges will begin for all states on January 1, 2014.iii

**Individual Mandate:** The ACA’s individual mandate requires most individuals to have insurance coverage of at least the minimum essential benefit package. Included in the mandate are Medicare recipients, Medicaid and CHIP, other government sponsored plans, individual market plans, and employer sponsored coverage. If an individual is not enrolled in coverage via one of these programs, he or she is subject to a tax. If a person’s household income is less than the filing threshold for federal income taxes, or if the required contribution for individual EHBP coverage would be greater than 8% of household income in 2014, then that person is exempt from the mandate. The mandate is important because without it, a portion of the population may forego insurance until a health need presents itself, leading to adverse selection. Giving the uninsured population a financial incentive to purchase insurance should reduce this adverse selection.ix

As pediatric oral care is a component of the EHBP, the individual mandate will have an impact on the number of children insured for this benefit.

**Constitutionality of the Individual Mandate:** In late June, the Supreme Court decided to largely uphold the constitutionality of the ACA. The individual mandate to purchase insurance was declared to be constitutional, in the context of Congress’ right to set taxes. As such, states must continue moving forward with developing insurance exchanges and their essential benefit packages. However, the possibility for political challenges to the ACA still looms, especially in light of the upcoming presidential election in November 2012.

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IV. IMPACT OF EXCHANGES AND INDIVIDUAL MANDATE ON NUMBER OF INSURED PEOPLE

We reviewed publicly-available literature and research studies on exchanges to better understand the number, demographic characteristics, and utilization profile of expected AHB exchange enrollees as well as how exchanges are likely to impact the employer-sponsored insurance market. To gain knowledge on how states are moving forward in building their exchanges, we conducted literature research and interviewed nine Milliman consultants directly involved in state exchange planning projects.

Characteristics of Exchange Enrollees

The Congressional Budget Office estimated that by 2019, approximately 24 million people would be served by the AHB exchange. The Kaiser Family Foundation conducted an analysis to project the characteristics of these 24 million people: their demographic composition, health status, and pre-ACA source of insurance. They found that the majority of the exchange enrollees would be people who were uninsured prior to the ACA; 16 million people would become newly insured via the exchange. The remainder of the exchange enrollees consisted of 3.5 million people whose employers dropped health coverage, 1.5 million people whose employer-sponsored coverage was unaffordable, 1 million people from the individual insurance marketplace, and 2 million who would transition from Medicaid.

![Breakdown of Exchange Population (Millions)](image)


The study also found that the probable exchange population would be “relatively older, less educated, lower income, and more racially diverse than current privately-insured populations.” Adults represented 84% of the exchange population, as compared to 75% of current employer-sponsored insurance enrollees. Exchange enrollees had a median income of 235% of the federal poverty level (FPL), wealthier than the current uninsured at 175% FPL, but significantly poorer than the population currently insured via their employer (423% FPL).

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xiv Ibid.
xv Ibid.
With the majority of exchange participants having no prior insurance, pent up demand for health care will likely be an issue. The Kaiser study found that 29% of expected exchange enrollees had no interaction with the health care delivery system over the past year, and 39% did not have a usual source of care. The study notes that medical expenditures for previously uninsured individuals tend to increase dramatically once they become insured, by 25-60%, and this is expected to occur with the exchange enrollees as well. It remains to be seen whether the supply of medical providers will be sufficient to handle this influx of newly-insured participants or whether those individuals will continue to experience barriers to access.

With respect to dental utilization, the Kaiser study reported that 43% of child (age 0-18) exchange enrollees had a dental visit in the past year, compared with 31% of today’s uninsured children and 56% of today’s children covered under employer-sponsored insurance. For adult exchange enrollees, 29% had a dental visit in the prior year as compared to 21% of today’s uninsured adults and 51% of today’s employer-sponsored insurance enrollees.

**Future of the Employer Sponsored Market**

Today, employer-sponsored group insurance (ESI) is the primary form of medical coverage for Americans, covering roughly 150 million people. For dental insurance, ESI is even more dominant; only 1% of dental policies are sold on the individual market. If, with the advent of exchanges, employers step away from the traditional employer-sponsored model, sending their employees to purchase coverage on the AHB exchange instead, the number of dental insureds may change, especially in the adult dental market where coverage is not mandated.

Employers are subject to “pay or play” penalties under the ACA; that is, if they do not offer ESI to their employees, they must pay financial penalties. However, such penalties do not apply to small employers with 50 employees or fewer. To form an employee benefits strategy under health care reform, employers are modeling the financial pros and cons of continuing to offer benefits versus paying the penalties. Decisions will differ based on the employer’s current benefit construct, worker composition, philosophy regarding employee benefits, and the cost of providing benefits versus the penalties that would need to be paid. For example, for firms with predominantly low-wage workers who would qualify for Medicaid expansion coverage or for federal subsidies on the exchange, it may make sense to allow those workers the opportunity to benefit from those programs. Similarly, firms facing high early retiree costs could benefit by sending those people to the exchanges for coverage. Small businesses will have a new marketplace in which to shop for ESI via the SHOP exchange; as such, the rate of ESI in that segment may increase. Deloitte reaffirmed this notion, indicating that the 50-and-under employee market is highly price sensitive and may opt to drop ESI or purchase it through the SHOP exchange if it’s less expensive. In the 51-100 employee market, employers will be weighing the cost of penalties against the tax deductibility of ESI, and the benefit decision will depend on the specifics of the industry, workforce, wage mix, and current benefits. Also, the individual mandate may spur some companies to start offering or continue to offer ESI. Companies that feel strongly that employee benefits are a value added recruiting and retention tool or a productivity enhancer will be more likely to continue to offer health benefits, while employers that have historically offered benefits simply because there wasn’t a viable alternative

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xii Ibid.

xiv Ibid.


may be less likely to continue doing so.\textsuperscript{xix} Another factor at work is that early movers may influence the direction of other employers; for example, if a large, high profile employer decides to discontinue offering ESI, others may follow.

Several studies have attempted to estimate the potential migration of ESI enrollees to the individual exchanges. Most expect the rate of ESI to remain relatively stable, at least in the short term; however, if exchanges prove to be a successful marketplace, longer term erosion of the ESI market is possible.\textsuperscript{xx}

The chart below summarizes the expected change in ESI due to health care reform according to various studies. The range of estimates varies widely, but according to Avalere Health, a healthcare research and strategy firm, most benefit consultants agree with the models that predict little change in ESI overall.

<table>
<thead>
<tr>
<th>Study</th>
<th>Percentage Change in ESI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rand</td>
<td>+8.7%</td>
</tr>
<tr>
<td>Urban Institute</td>
<td>Little Net Change</td>
</tr>
<tr>
<td>Lewin Group</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Congressional Budget Office</td>
<td>-1.9%</td>
</tr>
<tr>
<td>Booz &amp; Co.</td>
<td>-4.5%</td>
</tr>
<tr>
<td>Holtz-Eakin</td>
<td>-22.3%</td>
</tr>
<tr>
<td>McKinsey &amp; Co.</td>
<td>-30.0%</td>
</tr>
</tbody>
</table>


Currently, in the dental ESI market, large groups are more likely to offer a dental benefit than small groups; 87% of employers with more than 100 employees offer dental, while 45% of smaller firms offer the benefit. Across both size segments, the employee uptake rate for dental benefits is similar, at 79% for large companies and 76% for small.\textsuperscript{xxi}

According to a brief by the National Maternal and Child Oral Health Policy Center, it is expected that large employer dental ESI offerings will not be drastically affected by the ACA, echoing Avalere Health’s statement that most analysts feel the overall impact will be minimal. In the small group market, pockets of decline in dental ESI may occur, but the offer rate of dental ESI is already fairly low in that market. For children, overall coverage should increase as a result of the ACA, as any decline in ESI should be more than offset by expanded Medicaid eligibility and the presence of the AHB exchange.\textsuperscript{xxii} The more difficult question is whether adults who no longer receive dental ESI will choose to purchase family dental coverage or just the required child dental coverage in the individual market.

The 2011 NADP Purchaser Survey also analyzed the future of dental ESI once exchanges are operational; survey results indicated that over 80% of companies plan to continue with ESI rather than send their employees to the exchange. Approximately 40% of companies with fewer than 100 employees plan to purchase coverage via the SHOP exchange, while another 40% are neutral between on versus off exchange purchase. Dental benefits are expected to be maintained outside of the exchange by 70% of companies. Additionally, over half of

\textsuperscript{xix} Ibid.
\textsuperscript{xx} Ibid.
\textsuperscript{xxii} Ibid.
companies that currently offer dental benefits will consider continuing to offer adult dental benefits even though they are not a mandated essential benefit.\textsuperscript{xiii}

\textsuperscript{xiii} NADP Purchaser Survey. May 2011.
V. WHAT WILL STATES’ DENTAL BENEFIT PLANS LOOK LIKE ON EXCHANGES?

State Progress on Exchanges

States have taken a range of approaches to exchange development and are in various stages of the exchange building process. As of May 10, 2012, according to the National Conference of State Legislatures, ten states plus the District of Columbia have enacted legislation to establish a state exchange. Massachusetts and Utah are the only two states who had legislation in effect prior to the passage of the ACA. In New Jersey and New Mexico, establishment legislation passed but was then vetoed by the governor. The map below summarizes each state’s progress in exchange establishment as of May 2012.

According to Milliman consultants interviewed, states have varied philosophies on exchange creation. Overall, it is believed that the number of states that have moved beyond the planning stage is still quite small. Based on consultant information, it appears that the state approaches can be classified into several categories:

- Early movers who are pushing forward aggressively with exchange creation.
- Cautious movers were waiting for the Supreme Court ruling on key tenets of the ACA before expending too much effort on exchanges; these states have been doing preliminary work at most. This bucket represents the majority of states as of mid-2012. Now that the ruling has been made, some of these states may begin to move forward more quickly, while others may continue to hedge until the next presidential election has been decided.
- States that have either decided not to establish their own exchange or are leaning in that direction for financial or political reasons, and will leave it up to the federal government to implement an exchange for them.
- States that have taken a unique approach to the exchange; for example, Vermont’s exchange will serve as a platform for the single payer system it intends to create.xxv

Consultants also noted that states’ characteristics may have an impact on their exchange philosophies:

- States with heavily rural populations are less likely to be moving forward rapidly. Several of those states believe that the slice of the state’s population served by the exchange will be quite small, and they feel that the work entailed in building an exchange may not be cost-effective given the small subgroup of the state’s people that will use it. These states may be more likely to allow the federal government to build their exchange.
- States can decide whether their exchange will be an “active purchaser”, determining which carriers can offer on the exchange, versus a clearinghouse model in which any QHP can offer. The active purchaser model may provide the state more opportunity to drive down the cost of health care, and may make the payoff from building the exchange greater.

State EHBP Development and Likely Structure of Pediatric Oral Care EHB

The early movers, as well as some of the cautious movers, have begun work on detailing their EHBP by following the benchmarking process defined earlier in this paper. While the Federal Employee Health Benefit Plan (FEHBP) is one of the benchmark options, no consultant interviewed indicated that a state was likely to choose this benchmark. Most consultants said that the states with which they worked were leaning toward a benchmark based on either the small group plans in the state or HMOs in the state. The key reasons for choosing these benchmarks are: (1) they already contain any state mandated benefits, which may not be included in the FEHBP; (2) they most closely represent a typical employer-sponsored plan in the state; and (3) small group plans are the default benchmark. Consultants added that numerous states will not have enough time to do extensive analysis to determine their benchmark and as such will end up using the default benchmark of the state’s largest small group plan.

Assuming that a small group medical plan or an HMO plan is used as the benchmark in most states for the EHBP, we can make some predictions concerning what the pediatric oral care essential benefit might look like. Generally, small group HMOs and other small group medical plans do not include dental services as an

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xxv [http://dvha.vermont.gov/administration/health-benefits-exchange](http://dvha.vermont.gov/administration/health-benefits-exchange)
embedded coverage; those employers offer dental benefits via a separate insurance policy. Per the benchmarking guidance from the Department of Health and Human Services, if a state’s chosen benchmark plan excludes pediatric oral care coverage, then the benchmark must be supplemented with the pediatric oral care benefit from either (1) the Federal Employee Dental and Vision Program (FEDVIP), or (2) the state’s CHIP plan. The FEDVIP program, as well as most states’ CHIP programs, includes a full array of dental procedures – preventive, diagnostic, restorative, and oral surgery, for example -- as well as medically necessary orthodontia. As such, we may surmise that many states’ pediatric oral care essential benefit will be comprehensive in terms of the procedures covered.

Adult Dental Coverage on Exchanges

Per the Department of Health and Human Services, states must allow standalone dental coverage to be sold via exchanges, either on its own or in conjunction with a qualified health plan. Whether states choose to allow adult-only or family dental policies to be offered in addition to the child-only dental policies required to meet the EHBP remains to be seen. Most Milliman consultants indicated that states had not yet considered whether adult dental policies or other supplemental coverages would be made available via the exchanges. A few states have discussed the issue in broad terms but have not yet come to a final conclusion on whether adult/family dental would be offered.

The adult dental market has the potential to increase or decrease with the advent of exchanges, depending on the availability of the benefit and the attractiveness of the benefit offered. There are several factors which will influence what type of adult dental benefit plans are offered on exchanges:

- While adult or family dental policies could be offered on the exchange, it remains to be seen how many states will actively pursue including these policies as part of the exchange benefit portfolio.

- The exchange represents a voluntary, unsubsidized marketplace for adult dental; individuals would purchase the benefit with out-of-pocket dollars, unsubsidized by the government, at their own discretion.

- In a voluntary market, adverse selection must be anticipated; people are more likely to purchase the benefit if they intend to utilize it frequently. If states require that voluntary dental benefits on the exchange be offered on a guaranteed issue basis, adverse selection will be even greater.

- Adding to the potential for adverse selection, the exchange market decouples adult dental coverage from child dental coverage, as compared to today’s marketplace in which people generally purchase a family policy for themselves and their dependents. People who purchased family dental coverage pre-reform now have the choice of discontinuing coverage for themselves. If people purchase the pediatric oral care essential benefit and then have the option of purchasing additional adult coverage, their decision will depend on their likelihood of using the benefit as well as the attractiveness of the benefit from both a service and cost standpoint.

- The uptake rate on adult dental insurance will also depend on the ease of the purchase process; if the state exchange web portal highlights the benefit and makes it easy to understand, people may be more likely to consider it.

By exploring how the exchange marketplace for dental compares with today’s employer-sponsored dental plans, we can make some predictions about the structure of benefits in the post-reform market.
Comparison with Today’s Dental Plans

Today, Americans access dental coverage largely via standalone dental plans offered via their employers; individual private coverage and private dental coverage integrated with medical insurance are rare. A breakdown of the dental industry today is contained in the following chart.

<table>
<thead>
<tr>
<th>Coverage Type</th>
<th>Percentage of People with Coverage Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Standalone Dental Plans</td>
<td>81.12%</td>
</tr>
<tr>
<td>Public Coverage</td>
<td>15.03%</td>
</tr>
<tr>
<td>Dental Integrated with Medical</td>
<td>1.91%</td>
</tr>
<tr>
<td>Individual Dental Plans</td>
<td>1.45%</td>
</tr>
<tr>
<td>Other</td>
<td>0.48%</td>
</tr>
</tbody>
</table>

Source: National Association of Dental Plans/Delta Dental

As required under the ACA, the Department of Labor compiled a report in April 2011 detailing current employer-sponsored benefit plans, for the purposes of aiding states in the creation of the EHBP. Dental plans were reported to almost always cover preventive, basic and major services, while orthodontia was often covered via a separate rider. Typically, cost-sharing for dental services included an annual deductible (with a median value of $50 for an individual) and coinsurance (with a median benefit percentage of 100% for preventive services, 80% for basic services, and 50% for major services and orthodontia). Annual maximum benefit limits are also standard in today’s marketplace, with a median value of $1500, along with a separate maximum for orthodontia, with a median of $1500.

Exchange-based coverage for children will bear similarities, as well as some significant differences, to today’s common employer-sponsored dental benefit.

- With the pediatric oral care benchmark in most states likely to be reflective of the FEDVIP or state CHIP program, the covered services in the pediatric oral care benefit offered via exchanges will likely cover a comprehensive array of procedures, similar to today’s dental policies.

- Dollar annual benefit maximums are not permitted to be applied to components of the EHBP under the ACA; today, dental benefit plans rely on maximums as the primary means of cost control. The price of the pediatric dental benefit could become an issue unless other benefit changes are enacted to counteract the removal of the dollar benefit limits.

- Without the use of dollar maximums, the pediatric oral care plans may rely on higher deductibles or member coinsurance levels to help control cost. Conversely the plans may apply visit limitations or other limits on the number of procedures to keep costs in line with current plans.

- For some higher cost procedures and for orthodontia, more stringent medical necessity criteria may be applied in order to qualify for the procedure than are required in today’s commercial market. In the current ESI dental market, little to no medical necessity requirement is utilized, as the annual benefit maximum, often along with a separate lifetime maximum for orthodontia, effectively control plan cost. Without such a benefit maximum, medical necessity can be used to manage which children are eligible to undergo a dental procedure. CHIP plans today commonly use medical necessity, and the pediatric oral care benefit could follow suit as another means to control the price of the benefit.

xxvi Offering Dental Benefits on Health Exchanges. National Association of Dental Plans and Delta Dental. September 2011

Some carriers are exploring evidence-based benefit offerings on the exchange. Delta Dental has recommended an approach to defining the pediatric oral care essential benefit which would assess each child’s dental needs according to risk factors and determine an individualized treatment plan, enabling savings on unnecessary procedures while targeting optimal oral health outcomes. While evidenced-based medicine is common in health plans today, it is not part of the mainstream dental insurance market.

For adults, the cost-sharing structure of dental benefit plans offered via exchanges may continue to exist as in today’s commercial market, but carriers may develop new and different forms of coverage to control adverse selection in this marketplace.

- As adult dental coverage is not considered an essential health benefit, the form of the coverage may still utilize annual or lifetime dollar maximums; Milliman consultants expect those maximums to continue to function as the primary form of cost mitigation.

- To attract people to purchase adult dental coverage while mitigating the risk of adverse selection, dental insurance carriers may create innovative, cost-effective products aimed at healthy individuals. Adult dental coverage is not required to mirror any particular benchmark or have any particular relationship to today’s dental plans, so carriers may develop creative approaches to pull in low-risk individuals. Deloitte notes that with prior health marketplace innovations like the creation of Medicare Part D, the carriers who obtained early market share continue to have an advantage, and that the same phenomenon may apply with exchanges. Dental carriers who can develop new approaches to profitably insuring adults on the exchange may be able to dominate that market.

- Market innovations may take the form of limited benefit plans covering only specified procedures, evidence-based dentistry initiatives, dental health incentive programs, or other new ideas.

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VI. IMPACT OF EXCHANGES ON DENTAL COVERAGE

Background and Methodology

Milliman’s Health Care Reform Financing Model (HCRFM) is a sophisticated modeling tool which enables analysis of how health care reform will change the number of people accessing the insurance marketplace, and the ways in which people will access insurance. A full description of the HCRFM population modeling process is contained in Appendix II. We used the HCRFM population estimates of the number of people purchasing medical coverage on the individual exchange as the starting point for our analysis. We then developed projections of how many people would purchase dental insurance via the individual exchange by 2018 as well as their expected dental service utilization levels and dental expenditure. Estimates were developed separately for adults and children, as different factors influence the dental purchase decision for these two cohorts.

As it is difficult to predict with a high degree of accuracy how the exchange marketplace for dental will develop over the next several years, we employed a scenario-based approach to the analysis. We developed three projection scenarios designed to encompass the array of potential outcomes in this marketplace. The scenarios are:

1. **Best Estimate** – Based on information gathered in our literature review and consultant interviews, as well as overall industry knowledge and judgment, these estimates represent our best guess of how the exchange-based dental marketplace will evolve.

2. **Aggressive** – The Aggressive scenario generates more dental insureds and more dental procedures than the Best Estimate scenario. If, for example, dental carriers develop innovative products which incent adults to purchase optional coverage, dental participation rates might approach this level. This level also reflects higher utilization levels than the Best Estimate scenario.

3. **Conservative** – The Conservative scenario generates fewer dental insureds and dental procedures than the Best Estimate scenario, if fewer than expected adults choose to purchase coverage via the exchange and if utilization levels are lower than our best estimate.

As very little empirical data is available on the expected behavior of potential dental insurance purchasers on the exchange, the assumptions contained in each scenario were derived largely based on industry knowledge, anecdotal information, and judgment of both Milliman and the ADA.

In order to enable the analysis, we also made several overarching assumptions which influence the results. These are:

1. All states will offer adult dental coverage as an optional purchase on exchanges.

2. The pediatric oral care essential benefit will be comprehensive in all states, including not only preventive and diagnostic procedures but also higher level care.

3. Cost assumptions, derived separately for adults and children, are 2014 costs for a comprehensive oral care plan excluding orthodontia.

4. The adult dental benefit will mirror today’s commercial benefit structure.

For adults and for children, we started by making assumptions regarding how much of the expected exchange population was covered by dental insurance prior to health care reform, according to the following table. The proportion of the exchange population estimated to have prior dental insurance was assumed to differ according
to the person’s pre-reform source of medical insurance. As an example, the table below indicates that people on the exchange who obtained medical insurance pre-reform from the individual market had a 10% likelihood of also having dental insurance pre-reform.

<table>
<thead>
<tr>
<th></th>
<th>Individual NonExchange*</th>
<th>Uninsured</th>
<th>Small Group**</th>
<th>Large Group***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Exchange Enrollees Assumed to Have Prior Dental Insurance, by Pre-Reform Medical Insurance Source</td>
<td>10%</td>
<td>0%</td>
<td>28%</td>
<td>51%</td>
</tr>
</tbody>
</table>

*Individual dental market is very small; assume that 10% of people purchasing individual medical policies pre-reform also purchased individual dental policies.

** From Exchanges and Dental Coverage: Building on an Employer Base. Nov 2011, National Maternal and Child Oral Health Policy Center. Small group dental offer rate 35%, small group employee uptake rate 79%, so Best Estimate assumption is $0.35 \times 0.79 = 0.28 \times 100 = 28\%$.

*** From Exchanges and Dental Coverage: Building on an Employer Base. Nov 2011, National Maternal and Child Oral Health Policy Center. Large group dental offer rate 64%, large group employee uptake rate 79%, so Best Estimate assumption is $0.64 \times 0.79 = 0.51 \times 100 = 51\%$.

Then for each of these subpopulations we analyzed the factors inherent in their decision to purchase dental and the resulting implication on dental utilization.

**Adults with dental insurance prior to health care reform:** For those assumed to be previously insured, we projected some drop-off in their dental insurance uptake rate due to two factors:

1. The separation of adult dental coverage from child dental coverage – People previously purchasing a family dental policy mainly for the benefit of their children may opt to purchase only the mandated pediatric benefit and forego dental insurance on themselves.

2. The voluntary nature of the dental benefit offered via the exchange – Adults have no obligation to purchase dental insurance on the exchange and will purchase the benefit with their own out-of-pocket dollars, as compared to a group insurance situation in which the employer may subsidize part of the cost.

We also assumed that, due to the adverse selection associated with a voluntary dental benefit, utilization for the remaining adults choosing to purchase dental insurance would be higher than for the pre-reform insured population.

**Adults with no dental insurance prior to health care reform:** For adults without dental insurance prior to the advent of the exchange, we started by estimating an overall likelihood of such a person purchasing dental on the exchange. We expect that the dental insurance uptake rate for this population will be modest and that those people that do choose to purchase dental for the first time will do so because (1) they need dental services, (2) they’ve recently been educated about the benefit by a salesperson or via the exchange’s web portal, (3) the availability of subsidies and rating limitations for the purchase of the medical plan frees up money to make a dental plan more affordable, and/or (4) the dental benefits offered on the exchange represent something new, different, or lower cost than dental plans they’ve considered before.

The overall likelihood of an adult with no prior dental insurance purchasing it on the exchange is estimated as follows.
The overall likelihood of purchase is then adjusted by the estimated price sensitivity of each subgroup. Price sensitivity was set according to each subpopulation’s assumed overall income level: people entering the exchange market from prior uninsured status were assumed to be 50% less likely to purchase dental insurance than those from the individual, small group, or large group markets with presumably higher average income levels.

Previously uninsured adults who purchase dental coverage on the exchange are likely to have higher utilization than comparable commercial members due to the adverse selection associated with the voluntary dental offering as well as pent-up demand for dental services. The Kaiser Family Foundation’s study of the expected exchange population estimated that utilization would be 25 to 60% higher than those with prior insurance.xxxi

We modeled utilization by starting with a baseline utilization level of 1.79 visits per adult per year and 3.42 procedures per adult per year, derived from Milliman’s Health Cost Guidelines – Dental, adjusted to reflect an adult-only population. We then made assumptions, by scenario, of how much higher than the baseline a first-time dental insurance purchaser’s utilization would be.

<table>
<thead>
<tr>
<th>Adults with No Prior Dental Insurance who Purchase Dental on Exchange: Percentage Increase in Utilization over Baseline Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive</td>
</tr>
<tr>
<td>Best Estimate</td>
</tr>
<tr>
<td>Conservative</td>
</tr>
</tbody>
</table>

A schematic summary of the projection methodology for the adult population is shown below.

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**Overall Likelihood of Adult With No Dental Insurance Prior to Exchange Purchasing Dental Insurance on Exchange**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive</td>
<td>15%</td>
</tr>
<tr>
<td>Best Estimate</td>
<td>10%</td>
</tr>
<tr>
<td>Conservative</td>
<td>5%</td>
</tr>
</tbody>
</table>

**Note:** A Profile of Health Insurance Exchange Enrollees. Focus on Health Reform. Kaiser Family Foundation. March 2011.
As children are subject to the mandated pediatric oral care component of the essential health benefit plan, we assumed in all scenarios that all children on the exchange would have dental coverage. However, children who would be insured for the first time via the exchange would be expected to have different utilization patterns than those who had prior dental insurance. As such, we also split the child population into groups based on whether they were assumed to have dental coverage prior to health reform, and similar to the analysis for adults, we estimated the utilization of each cohort.

We again started with a baseline utilization level from the Milliman Health Cost Guidelines – Dental. For the child population, we assumed a baseline of 1.59 visits per child per year and 3.78 procedures per child per year.

**Children with dental insurance prior to health care reform:** For those assumed to be previously insured, we assumed that they would remain insured for dental in the exchange, and projected no change in utilization for that group since those children would be continuously insured.

**Children with no dental insurance prior to health care reform:** For children accessing dental insurance for the first time, we expect that utilization would be higher than for a standard commercial population, due to unmet dental needs of that population. This population consists of children of families who did not purchase dental insurance prior to health reform as well as children who didn’t qualify for or did not enroll in Medicaid or CHIP and had no private dental coverage.

<table>
<thead>
<tr>
<th>Children with No Prior Dental Insurance Percentage Increase in Utilization over Baseline Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive</td>
</tr>
<tr>
<td>Best Estimate</td>
</tr>
<tr>
<td>Conservative</td>
</tr>
</tbody>
</table>

A schematic summary of the projection methodology for the child population is shown below.

**Modeling Results**

The HCRFM projects that approximately 25 million people will access the individual exchange by 2018, including 5 million children. Roughly 15 million of the exchange participants are projected to be people who did not have medical insurance prior to health reform, while the remainder is comprised of 5 million coming from the individual medical insurance market, 3 million from the small group marketplace, and 0.5 million from the large group marketplace. The child population includes over 1.5 million children born between 2010 and 2018 that will be served by the exchange.
Using the 2018 expected exchange population as the starting point, and the scenarios outlined previously, we projected how much dental insurance would be purchased on the exchange as well as the resulting change in dental utilization and expenditure.

Under the Best Estimate scenario, we expect that 3.4 million of the exchange enrollees will be people who had dental insurance prior to the exchange, while the remaining 21.8 million come with no prior dental coverage. Using Best Estimate assumptions, 7.1 million people will access dental via the exchange, comprised of the 5 million children covered under the essential pediatric oral health benefit as well as 2.1 million adults. The group accessing dental insurance includes 3.8 million first-time insureds who would add 17.8 million dental procedures per year. This addition is slightly offset by the projected decline in dental enrollment for the adult population insured prior to health care reform; we project that 0.1 million previously insured adults will drop dental coverage on the exchange. As a result, the net addition to the dental system consists of 3.7 million people, generating 17.4 million dental procedures and 7.6 million visits totaling roughly $1.1 billion in dental expenditures.

Of the 5 million children covered via the exchange, we expect that almost 3 million will be without previous coverage for dental benefits. With mandated coverage of pediatric oral care benefits, all of these 3 million children will become newly insured. With coverage levels expected to be similar to today’s commercial benefits, and accounting for the higher utilization levels expected for children with unmet dental needs, we project that these additional children will generate approximately 5.9 million visits and 14 million additional procedures per year, which equates to 2 visits and 4.7 procedures per newly-insured child per year, in the year they obtain insurance. The utilization level for the newly-insured children will likely decline from its initial high as the children’s dental needs are met on a consistent basis.

In the National Association of Dental Plan’s September 2011 white paper “Offering Dental Benefits in Health Exchanges”, the per-child per-month premium for a pediatric oral care benefit consistent with a typical employer plan excluding orthodontia was estimated at $21.25.xxiii This premium was developed using an 80% loss ratio, putting the actual cost of pediatric dental services at $17.00. Using this estimate as our cost basis, the newly insured children would generate additional dental expenditure of $604 million per year. Accounting for the additional procedures that these children are likely to seek in the first few years of exchange operation due to pent-up demand, the cost could near $750 million in the initial years. As the dental needs of this population are served, the relative cost of previously uninsured children would trend downward to approach that of their previously insured counterparts.

It is more difficult to predict the dental utilization and cost impact of adults who become newly insured via the exchange, as the form of adult dental benefits offered on the exchange may differ considerably from commercial policies that are commonplace today. Assuming that the composition and cost of dental coverage remains similar to today, we can make some estimation of how adult dental insureds will impact the system.

We expect that, under Best Estimate assumptions, almost 18.9 million of the 20 million adults on the exchange will be first-time potential dental insurance purchasers. In this voluntary dental marketplace where the purchase decision will be influenced by cost and health status, we believe that roughly 2.1 million adults will purchase dental insurance: 0.9 million first-time purchasers along with 1.2 million people who had pre-reform dental coverage. Utilization for this group of dental insureds will likely be higher than for a comparable commercial dental group, even for those who had insurance prior to health reform, as the voluntary nature of the benefit will induce adverse selection. In addition, unmet dental needs for previously uninsured adults will increase utilization further. We estimate that the population accessing adult dental benefits via the exchange will consume 8.2 million dental procedures per year, or approximately 4 procedures per insured per year. This

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The first-time insureds comprise 3.8 million of the dental procedures utilized. As newly insured people become continuously insured for multiple years via the exchange, their utilization of dental services will likely decline toward that of those with prior dental insurance. However, due to the element of adverse selection for exchange-offered adult dental benefits, utilization may remain higher than that of a commercial population.

The impact to the dental system of the newly-insured adults is offset slightly by adults who had dental insurance prior to the ACA but chose to drop coverage once in the exchange environment. Netting out those people and their expected utilization levels, the overall impact of changes in adult enrollment to the dental system is estimated to be 0.8 million adults with 1.7 million visits and 3.4 million procedures per year in the short term.

Using a 2014 claim cost estimate per adult per month of $37.00, generated using Milliman’s Health Cost Guidelines – Dental and adjusted upward to reflect anticipated adverse selection, the 0.8 million net additional insured adults on the exchange could generate costs of $357 million per year in the initial years of insurance. Again, there could be wide variation in cost impact depending on creative benefit strategies employed by carriers offering adult dental on the exchanges; methods to counter anti-selection and incentivize healthy individuals to purchase coverage could mitigate the costs considerably. Also, as the oral health of this population improves, utilization and cost per patient would be expected to trend downward toward that of the non-exchange insured population.

A summary of the modeling output for the Best Estimate scenario is contained in the following table. Results from all scenarios modeled can be found in Section IX.

### Dental Insurance on Exchange as of 2018: Best Estimate Scenario

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange Population 2018</td>
<td>25.2</td>
<td>20.1</td>
<td>5.1</td>
</tr>
<tr>
<td># of Prior Dental Insureds</td>
<td>3.4</td>
<td>1.3</td>
<td>2.1</td>
</tr>
<tr>
<td># of Prior Dental Uninsureds</td>
<td>21.8</td>
<td>18.9</td>
<td>3.0</td>
</tr>
<tr>
<td># of People Purchasing Dental on Exchange</td>
<td>7.1</td>
<td>2.1</td>
<td>5.1</td>
</tr>
<tr>
<td># Purchasing Dental on Exchange - Prior Insureds</td>
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<td>2.1</td>
</tr>
<tr>
<td># Purchasing Dental on Exchange - Prior Uninsureds</td>
<td>3.8</td>
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<td>3.0</td>
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<tr>
<td>Decline in Dental Enrollment for Prior Insureds</td>
<td>(0.1)</td>
<td>(0.1)</td>
<td>-</td>
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<tr>
<td><strong>Net Dental Enrollment Impact</strong></td>
<td><strong>3.7</strong></td>
<td><strong>0.8</strong></td>
<td><strong>3.0</strong></td>
</tr>
<tr>
<td>Expected Annual Dental Procedures of Net New Dental Enrollees</td>
<td>17.4</td>
<td>3.4</td>
<td>14.0</td>
</tr>
<tr>
<td>Expected Annual Dental Visits of Net New Dental Enrollees</td>
<td>7.6</td>
<td>1.7</td>
<td>5.9</td>
</tr>
<tr>
<td>Expected Annual Dental Expenditure of Net New Dental Enrollees</td>
<td>$1,103.5</td>
<td>$356.9</td>
<td>$746.5</td>
</tr>
</tbody>
</table>

According to the Centers for Medicare and Medicaid Services, in 2010, United States expenditures on dental care from all payers combined was $104.8 billion, including $51 billion from the private insurance market, $43.3 billion consumer out-of-pocket spending, $7.4 billion Medicaid spending, $1.1 billion from CHIP programs, and
the remainder from other miscellaneous programs. The additional $1.1 billion spending by new dental enrollees who previously had no dental insurance would represent a 2% increase spending in the private insurance sector.

The likely range of outcomes, encompassing the three main scenarios modeled, is shown below. All modeled scenarios, including the three aforementioned scenarios as well as an Aggressive scenario with a 20% adult dental uptake rate and a Conservative scenario with a 0% adult dental uptake rate, are shown in Appendix I.

**Dental Insurance on Exchange as of 2018: Range of Outcomes**

<table>
<thead>
<tr>
<th>all numbers expressed in millions</th>
<th>Total</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange Population 2018</td>
<td>25.2</td>
<td>20.1</td>
<td>5.1</td>
</tr>
<tr>
<td># of Prior Dental Insureds</td>
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<td>1.3</td>
<td>2.1</td>
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<tr>
<td># of Prior Dental Uninsureds</td>
<td>21.8</td>
<td>18.9</td>
<td>3.0</td>
</tr>
<tr>
<td># of People Purchasing Dental on Exchange</td>
<td>6.6 – 7.7</td>
<td>1.5 – 2.6</td>
<td>5.1</td>
</tr>
<tr>
<td># Purchasing Dental on Exchange - Prior Insureds</td>
<td>3.2 – 3.4</td>
<td>1.1 – 1.3</td>
<td>2.1</td>
</tr>
<tr>
<td># Purchasing Dental on Exchange - Prior Uninsureds</td>
<td>3.4 – 4.3</td>
<td>0.4 – 1.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Decline in Dental Enrollment for Prior Insureds</td>
<td>(0.2) – 0</td>
<td>(0.2) - 0</td>
<td>-</td>
</tr>
<tr>
<td>Net Dental Enrollment Impact</td>
<td>3.2 - 4.3</td>
<td>0.3 - 1.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Expected Annual Dental Procedures of Net New Dental Enrollees</td>
<td>12.1 - 23.6</td>
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<td>11.2 - 16.8</td>
</tr>
<tr>
<td>Expected Annual Dental Visits of Net New Dental Enrollees</td>
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<td>0.4 - 3.5</td>
<td>4.7 - 7.1</td>
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<tr>
<td>Expected Annual Dental Expenditure of Net New Dental Enrollees</td>
<td>$687.0 – 1,336.2</td>
<td>$82.7 – 589.7</td>
<td>$604.3 - 746.5</td>
</tr>
</tbody>
</table>

---

VII. CONCLUSION

The inclusion of pediatric oral care as a required component of the EHBP, which must be included in all plans offered on the individual exchange and more broadly in the individual and small group marketplace, will increase the number of children with dental coverage. We estimate an additional 3 million children will gain dental coverage, utilizing 14 million dental procedures and generating $746 million in dental expenditures in the initial coverage year. The individual mandate for medical insurance also presents an opportunity to increase the number of adults with dental coverage, as much of the adult exchange population will be comprised of people with no prior dental insurance who will now have the opportunity to purchase dental on the exchange along with medical coverage. However, adults on the exchange have no obligation to purchase dental coverage for themselves, nor will they receive any government subsidies to do so. Further, many of them had the opportunity to purchase dental insurance prior to health reform via employer-sponsored plans or the individual market, but chose not to do so. As such, we believe that only slight gains in adult coverage are likely via the exchange. Adults purchasing dental coverage for the first time via the exchange are likely to do so for one of two reasons: (1) they need dental care and expect to heavily utilize the benefit, or (2) a new, more attractive type of dental benefit plan is available. We do not know the details yet regarding what types of adult dental benefit plans will be offered; product innovations which provide attractive, cost-effective dental coverage to adults could incentivize people to purchase dental and improve the dental coverage rate further. Our analysis estimates that between 0.4 million and 1.3 million adults will gain dental coverage from this “spillover” effect of ACA, resulting in between 0.4 and 3.5 million dental visits generating $83 to $590 million in dental expenditures.
VIII. CAVEATS AND LIMITATIONS

I, Joanne Fontana, am a Consulting Actuary for Milliman. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The analyses and results presented in this report represent my opinion and judgment based upon the assumptions described in the report and my reliance on the work of others within and outside of Milliman. It is possible that other knowledgeable professionals might use other assumptions and methodologies deriving different results.

I have prepared this report for the specific purpose of providing research results to ADA on the impact of the Affordable Care Act's creation of health insurance exchanges and mandated purchase of the pediatric oral care benefit on dental delivery. This information may not be appropriate, and should not be used, for any other purpose. This report has been prepared solely for the internal business use of, and is only to be relied upon by, the management of ADA. No portion of this report may be provided to any other party without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work even if we permit the distribution of our work product to such third party.

The results presented herein are estimates based on carefully constructed actuarial models. Differences between our estimates and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will not conform exactly to the assumptions used in this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

In performing this analysis, I have relied on data and other information provided by ADA, as well as that from other sources, both internal and external of Milliman. We have not audited or verified this data and other information but reviewed it for general reasonableness. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

Milliman does not provide legal advice, and recommends that ADA consult with its legal advisors regarding legal matters.

The terms of Milliman’s Consulting Services Agreement with ADA signed on April 11, 2012 apply to this report and its use.
APPENDIX I -- DETAILED METHODOLOGY: PROJECTION OF NUMBER OF PEOPLE WITH DENTAL INSURANCE ON EXCHANGES AND THEIR UTILIZATION

We used the HCRFM population estimates of the number of people served by the individual exchange, described in the previous section, as the starting point for our analysis. We then developed projections of how many people would purchase dental insurance via the individual exchange by 2018 as well as their expected dental service utilization levels. Estimates were developed separately for adults and children, as different factors influence the dental purchase decision for these two cohorts.

As it is difficult to predict with a high degree of accuracy how the exchange marketplace for dental will develop over the next several years, we employed a scenario-based approach to the analysis. We developed three projection scenarios designed to encompass the array of potential outcomes in this marketplace. The scenarios are:

1. **Best Estimate** – Based on information gathered in our literature review and consultant interviews, as well as overall industry knowledge and judgment, these estimates represent our best guess of how the exchange-based dental marketplace will evolve.

2. **Aggressive** – The Aggressive scenario generates more dental insureds and more dental procedures than the Best Estimate scenario. If, for example, dental carriers develop innovative products which incent adults to purchase optional coverage, dental participation rates might approach this level. This level also reflects higher utilization levels than the Best Estimate scenario.

3. **Conservative** – The Conservative scenario generates fewer dental insureds and dental procedures than the Best Estimate scenario, if fewer than expected adults choose to purchase coverage via the exchange and if utilization levels are lower than our best estimate.

As very little empirical data is available on the expected behavior of potential dental insurance purchasers on the exchange, the assumptions contained in each scenario were derived largely based on industry knowledge, anecdotal information, and judgment of both Milliman and the ADA.

We also made several important overarching assumptions which influence the results. These are:

1. All states will offer adult dental coverage as an optional purchase on exchanges.

2. The pediatric oral care essential benefit will be comprehensive in all states, including not only preventive and diagnostic procedures but also higher level care.

3. The adult dental benefit will mirror today’s commercial benefit structure.

For adults and for children, we started by making assumptions regarding how much of the expected exchange population was covered by dental insurance prior to health care reform, according to the following table. The proportion of the exchange population estimated to have prior dental insurance was assumed to differ according to the person’s pre-reform source of medical insurance. As an example, the table below indicates that people on the exchange who obtained medical insurance pre-reform from the individual market had a 10% likelihood of also having dental insurance pre-reform.
Percent of Exchange Enrollees Assumed to Have Prior Dental Insurance, by Pre-Reform Medical Insurance Source

<table>
<thead>
<tr>
<th></th>
<th>Individual NonExchange*</th>
<th>Uninsured</th>
<th>Small Group**</th>
<th>Large Group***</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>0%</td>
<td>28%</td>
<td>51%</td>
<td></td>
</tr>
</tbody>
</table>

*Individual dental market is very small; assume that 10% of people purchasing individual medical policies pre-reform also purchased individual dental policies.

** From Exchanges and Dental Coverage: Building on an Employer Base. Nov 2011, National Maternal and Child Oral Health Policy Center. Small group dental offer rate 35%, small group employee uptake rate 79%, so Best Estimate assumption is 35% x 79% = 28%.

*** From Exchanges and Dental Coverage: Building on an Employer Base. Nov 2011, National Maternal and Child Oral Health Policy Center. Large group dental offer rate 64%, large group employee uptake rate 79%, so Best Estimate assumption is 64% x 79% = 51%.

Then for each of these subpopulations we analyzed the factors inherent in their decision to purchase dental and the resulting implication on dental utilization.

**Adults with dental insurance prior to health care reform:** For those assumed to be previously insured, we projected some drop-off in their dental insurance uptake rate due to two factors:

1. The separation of adult dental coverage from child dental coverage – People previously purchasing a family dental policy mainly for the benefit of their children may opt to purchase only the mandated pediatric benefit and forego dental insurance on themselves.

2. The voluntary nature of the dental benefit offered via the exchange – Adults have no obligation to purchase dental insurance on the exchange and will purchase the benefit with their own out-of-pocket dollars, as compared to a group insurance situation in which the employer may subsidize part of the cost.

We also assumed that, due to the anti-selection associated with a voluntary dental benefit, utilization for the remaining adults choosing to purchase dental insurance would be higher than for the pre-reform insured population.

Specific assumptions for previously insured adults, which may differ based on pre-reform source of medical insurance, are shown in the charts below.

<table>
<thead>
<tr>
<th>Change in Enrollment of Previously Insured Adults due to Separation of Adult from Child Dental Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>**</td>
</tr>
<tr>
<td>Aggressive</td>
</tr>
<tr>
<td>Best Estimate</td>
</tr>
<tr>
<td>Conservative</td>
</tr>
</tbody>
</table>
Adults with no dental insurance prior to health care reform: For adults without dental insurance prior to the advent of the exchange, we started by estimating an overall likelihood of such a person purchasing dental on the exchange. We expect that the dental insurance uptake rate for this population will be modest and that those people that do choose to purchase dental for the first time will do so because (1) they need dental services, (2) they've recently been educated about the benefit by a salesperson or via the exchange’s web portal, and/or (3) the dental benefits offered on the exchange represent something new, different, or more affordable than dental plans they’ve considered before.

The overall likelihood of an adult with no prior dental insurance purchasing it on the exchange is estimated as follows.

<table>
<thead>
<tr>
<th>Overall Likelihood of Adult With No Dental Insurance Prior to Exchange Purchasing Dental Insurance on Exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive</td>
</tr>
<tr>
<td>Best Estimate</td>
</tr>
<tr>
<td>Conservative</td>
</tr>
</tbody>
</table>

Because this is such a critical assumption, we ran two extra scenarios to determine the sensitivity of the final results to the previously uninsured adult dental purchase rate. Those scenarios were as follows: the Aggressive scenario but with a 20% overall likelihood of purchase, and the Conservative scenario but with a 0% overall likelihood of purchase. The results of these additional scenarios are shown later in this section.

The overall likelihood of purchase is then adjusted by the estimated price sensitivity of each subgroup. Price sensitivity was set according to each subpopulation’s assumed overall income level: people entering the exchange market from prior uninsured status or from a state’s high risk pool were assumed to be 50% less likely to purchase dental insurance than those from the individual, small group, or large group markets with presumably higher average income levels.

Previously uninsured adults who purchase dental coverage on the exchange are likely to have higher utilization than comparable commercial members due to the anti-selection associated with the voluntary dental offering as well as pent-up demand for dental services.
As children are subject to the mandated pediatric oral care component of the essential health benefit plan, we assumed in all scenarios that all children on the exchange would have dental coverage. However, children who would be insured for the first time via the exchange would be expected to have different utilization patterns than those who had prior dental insurance. As such, we also split the child population into groups based on whether they were assumed to have dental coverage prior to health reform, and similar to the analysis for adults, we estimated the utilization of each group.

**Children with dental insurance prior to health care reform:** For those assumed to be previously insured, we assumed that they would remain insured for dental in the exchange, and projected no change in utilization for that group since those children would be continuously insured.

**Children with no dental insurance prior to health care reform:** For children accessing dental insurance for the first time, we expect that utilization would be higher than for a standard commercial population, due to unmet dental needs of that population.
Results
Modeling results for all scenarios are shown in the tables below.

### Dental Insurance on Exchange as of 2018: Best Estimate Scenario

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange Population 2018</td>
<td>25.2</td>
<td>20.1</td>
<td>5.1</td>
</tr>
<tr>
<td># of Prior Dental Insureds</td>
<td>3.4</td>
<td>1.3</td>
<td>2.1</td>
</tr>
<tr>
<td># of Prior Dental Uninsureds</td>
<td>21.8</td>
<td>18.9</td>
<td>3.0</td>
</tr>
<tr>
<td># of People Purchasing Dental on Exchange</td>
<td>7.1</td>
<td>2.1</td>
<td>5.1</td>
</tr>
<tr>
<td># Purchasing Dental on Exchange - Prior Insureds</td>
<td>3.3</td>
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<td>2.1</td>
</tr>
<tr>
<td># Purchasing Dental on Exchange - Prior Uninsureds</td>
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<td>0.9</td>
<td>3.0</td>
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<tr>
<td>Decline in Dental Enrollment for Prior Insureds</td>
<td>(0.1)</td>
<td>(0.1)</td>
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<tr>
<td>Net Dental Enrollment Impact</td>
<td>3.7</td>
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<td>3.0</td>
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<tr>
<td>Expected Annual Dental Procedures of Net New Dental Enrollees</td>
<td>17.4</td>
<td>3.4</td>
<td>14.0</td>
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<tr>
<td>Expected Annual Dental Visits of Net New Dental Enrollees</td>
<td>7.6</td>
<td>1.7</td>
<td>5.9</td>
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<tr>
<td>Expected Annual Dental Expenditure of Net New Dental Enrollees</td>
<td>$1,103.5</td>
<td>$356.9</td>
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### Dental Insurance on Exchange as of 2018: Aggressive Scenario

<table>
<thead>
<tr>
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<tr>
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<tr>
<td># of Prior Dental Uninsureds</td>
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<td>18.9</td>
<td>3.0</td>
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<tr>
<td># of People Purchasing Dental on Exchange</td>
<td>7.7</td>
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<td>5.1</td>
</tr>
<tr>
<td># Purchasing Dental on Exchange - Prior Insureds</td>
<td>3.4</td>
<td>1.3</td>
<td>2.1</td>
</tr>
<tr>
<td># Purchasing Dental on Exchange - Prior Uninsureds</td>
<td>4.3</td>
<td>1.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Decline in Dental Enrollment for Prior Insureds</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>Net Dental Enrollment Impact</td>
<td>4.3</td>
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<tr>
<td>Expected Annual Dental Procedures of Net New Dental Enrollees</td>
<td>23.6</td>
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<td>16.8</td>
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<td>10.6</td>
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<tr>
<td>Expected Annual Dental Expenditure of Net New Dental Enrollees</td>
<td>$1,336.2</td>
<td>$589.7</td>
<td>$746.5</td>
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### Dental Insurance on Exchange as of 2018: Conservative Scenario

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<td><strong>Exchange Population 2018</strong></td>
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<tr>
<td># of Prior Dental Uninsureds</td>
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<td>18.9</td>
<td>3.0</td>
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<tr>
<td># of People Purchasing Dental on Exchange</td>
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<td>1.5</td>
<td>5.1</td>
</tr>
<tr>
<td># Purchasing Dental on Exchange - Prior Insureds</td>
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<td>2.1</td>
</tr>
<tr>
<td># Purchasing Dental on Exchange - Prior Uninsureds</td>
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<td>Decline in Dental Enrollment for Prior Insureds</td>
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<td>(0.2)</td>
<td>-</td>
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</table>

#### Net Dental Enrollment Impact

<table>
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</thead>
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<td>Expected Annual Dental Expenditure of Net New Dental Enrollees</td>
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<td>$82.7</td>
<td>$604.3</td>
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### Dental Insurance on Exchange as of 2018: Aggressive Scenario But With 20% Purchase Rate for Adults on Exchange with No Prior Dental Coverage

<table>
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<th>Total</th>
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<td># Purchasing Dental on Exchange - Prior Insureds</td>
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</tr>
<tr>
<td># Purchasing Dental on Exchange - Prior Uninsureds</td>
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<tr>
<td>Decline in Dental Enrollment for Prior Insureds</td>
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<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Net Dental Enrollment Impact

<table>
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<th></th>
<th>Total</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected Annual Dental Procedures of Net New Dental Enrollees</td>
<td>25.9</td>
<td>9.1</td>
<td>16.8</td>
</tr>
<tr>
<td>Expected Annual Dental Visits of Net New Dental Enrollees</td>
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<td>4.6</td>
<td>7.1</td>
</tr>
<tr>
<td>Expected Annual Dental Expenditure of Net New Dental Enrollees</td>
<td>$1,532.8</td>
<td>$786.3</td>
<td>$746.5</td>
</tr>
</tbody>
</table>
Dental Insurance on Exchange as of 2018: Conservative Scenario but With 0% Purchase Rate for Adults on Exchange with No Prior Dental Coverage

<table>
<thead>
<tr>
<th>all numbers expressed in millions</th>
<th>Total</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange Population 2018</td>
<td>25.2</td>
<td>20.1</td>
<td>5.1</td>
</tr>
<tr>
<td># of Prior Dental Insureds</td>
<td>3.4</td>
<td>1.3</td>
<td>2.1</td>
</tr>
<tr>
<td># of Prior Dental Uninsureds</td>
<td>21.8</td>
<td>18.9</td>
<td>3.0</td>
</tr>
<tr>
<td># of People Purchasing Dental on Exchange</td>
<td>6.1</td>
<td>1.1</td>
<td>5.1</td>
</tr>
<tr>
<td># Purchasing Dental on Exchange - Prior Insureds</td>
<td>3.2</td>
<td>1.1</td>
<td>2.1</td>
</tr>
<tr>
<td># Purchasing Dental on Exchange - Prior Uninsureds</td>
<td>3.0</td>
<td>0</td>
<td>3.0</td>
</tr>
<tr>
<td>Decline in Dental Enrollment for Prior Insureds</td>
<td>(0.2)</td>
<td>(0.2)</td>
<td>-</td>
</tr>
<tr>
<td>Net Dental Enrollment Impact</td>
<td>2.8</td>
<td>(0.2)</td>
<td>3.0</td>
</tr>
<tr>
<td>Expected Annual Dental Procedures of Net New Dental Enrollees</td>
<td>10.5</td>
<td>(0.7)</td>
<td>11.2</td>
</tr>
<tr>
<td>Expected Annual Dental Visits of Net New Dental Enrollees</td>
<td>4.4</td>
<td>(0.3)</td>
<td>4.7</td>
</tr>
<tr>
<td>Expected Annual Dental Expenditure of Net New Dental Enrollees</td>
<td>$541.3</td>
<td>($63.0)</td>
<td>$604.3</td>
</tr>
</tbody>
</table>
APPENDIX II -- ABOUT THE HCRFM

Introduction

The Milliman Health Care Reform Financing Model (HCRFM) was developed by Milliman, Inc. (Milliman) to assist clients with an assessment of the potential impact of a particular health care reform requirement to be evaluated. The creation of HCRFM is the result of a collaborative effort among numerous Milliman consultants in various Milliman offices. The HCRFM models the potential costs and movements of individuals and the interaction between competing medical cost payers and providers within and between the various insurance markets that comprise the U.S. health care system for a given proposed health care financing scheme. Modeling includes provision for:

- Seriatim projection of each census record, including differentiation by age, gender, income status, and health status. For these projections, we have used a random sample of 10% of a census file which represents all 300 million people in the United States.

- Eleven (11) different market segments, each with its own set of demographic, change factor, health care cost, and premium rate determination assumptions. The market segments being used are the following:

<table>
<thead>
<tr>
<th>Table 1 - Market Segment Modeled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Individual</td>
</tr>
<tr>
<td>2. State/Federal High Risk Programs</td>
</tr>
<tr>
<td>3. Uninsured</td>
</tr>
<tr>
<td>4. Small Group : 1 - 10 employees</td>
</tr>
<tr>
<td>5. Small Group : 11 - 25 employees</td>
</tr>
<tr>
<td>6. Small Group : 26 - 50 employees</td>
</tr>
<tr>
<td>7. Group : 51 - 100 employees</td>
</tr>
<tr>
<td>8. Group : 101 - 999 employees</td>
</tr>
<tr>
<td>9. Group: 1000+</td>
</tr>
<tr>
<td>10. Medicaid</td>
</tr>
<tr>
<td>11. Medicare</td>
</tr>
</tbody>
</table>

- This model includes results from 2010 through 2017. We have shown results as of the end of that period, as that represents the point at which the exchange market will be most fully developed and tending toward a steady state.
Switching (Change Factor) Process

The switching process develops the probability of an individual switching from his current market segment into each available competing market segment, including the likelihood of remaining in his current market segment. Movement to a new market is based upon selected characteristics of the individual or employer.

Movement from the uninsured market is based upon change factors that Milliman developed through research on certain programs such as health reform in Massachusetts and Maine’s Dirigo project, along with our judgment. Assumed movement varied by age, gender, income level, health status, and the market to which each uninsured person would change. It was assumed that a currently uninsured individual would stay uninsured, move to the Medicaid market, or obtain coverage in the individual market. However, in recognition of the relatively low initial penalties or incentive to change their uninsured status in year 2014 to purchase a health plan, we have assumed that our change factors to the Individual Medical Market from the Uninsured market are graded in overtime as penalties grow. By 2017, the phase-in is complete. The phase-in factors were not applied to movement to the Medicaid market since this decision would either not cost or be relatively low cost to newly eligible uninsured people to get their new coverage. We have assumed that 100% of those newly eligible for the Medicaid expansion program move to that program in 2014.

Expansion of the Small Group Market to 100 Employees

The values shown in this report reflect the recognition that the definition of a small group will by law be expanded to 100 or fewer employees starting in the year 2016. States have the prerogative to change the definition before this date, but our projection assumes that all states will wait until year 2016. This should be kept in mind when reviewing the results and movements for small group and large group from year 2015 to 2016.

Key Underlying Assumptions

1. **Initial Census:** Used U.S. MEPS and U.S. Census data (March 2010) coupled with market research data for demographic and insurance splits of the baseline U.S. census data
   - a. Member counts by age, gender, and family composition
   - b. Family size
   - c. Line of business
   - d. Employer size
2. **Distribution of population by geographic grouping and market**

<table>
<thead>
<tr>
<th>Market</th>
<th>Most Restrictive</th>
<th>Average Restrictive</th>
<th>Least Restrictive</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>1,489</td>
<td>5,018</td>
<td>8,134</td>
<td>14,641</td>
</tr>
<tr>
<td>High Risk</td>
<td>3</td>
<td>101</td>
<td>153</td>
<td>257</td>
</tr>
<tr>
<td>Uninsured</td>
<td>4,620</td>
<td>15,673</td>
<td>29,206</td>
<td>49,499</td>
</tr>
<tr>
<td>SG : 1 - 10 EEs</td>
<td>1,264</td>
<td>2,753</td>
<td>4,254</td>
<td>8,271</td>
</tr>
<tr>
<td>SG : 11 - 25 EEs</td>
<td>1,088</td>
<td>3,159</td>
<td>4,875</td>
<td>9,122</td>
</tr>
<tr>
<td>SG : 26 - 50 EEs</td>
<td>1,021</td>
<td>3,181</td>
<td>5,405</td>
<td>9,607</td>
</tr>
<tr>
<td>Group : 51 – 100</td>
<td>1,132</td>
<td>2,912</td>
<td>4,612</td>
<td>8,666</td>
</tr>
<tr>
<td>Group : 101 - 999</td>
<td>3,964</td>
<td>9,035</td>
<td>16,102</td>
<td>29,101</td>
</tr>
<tr>
<td>Group: 1000+</td>
<td>10,117</td>
<td>29,038</td>
<td>44,792</td>
<td>83,947</td>
</tr>
<tr>
<td>Medicaid</td>
<td>7,869</td>
<td>17,328</td>
<td>29,934</td>
<td>55,132</td>
</tr>
<tr>
<td>Total Non-Medicare</td>
<td>32,569</td>
<td>88,197</td>
<td>147,467</td>
<td>268,233</td>
</tr>
<tr>
<td>Medicare</td>
<td>5,338</td>
<td>15,792</td>
<td>21,868</td>
<td>42,998</td>
</tr>
<tr>
<td>Total</td>
<td>37,907</td>
<td>103,989</td>
<td>169,336</td>
<td>311,232</td>
</tr>
</tbody>
</table>

Table 3 shows the percentage distribution of the population shown above within each geographic area.

<table>
<thead>
<tr>
<th>Market</th>
<th>Most Restrictive</th>
<th>Average Restrictive</th>
<th>Least Restrictive</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>4.6%</td>
<td>5.7%</td>
<td>5.5%</td>
<td>5.5%</td>
</tr>
<tr>
<td>High Risk</td>
<td>0.0%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Uninsured</td>
<td>14.2%</td>
<td>17.8%</td>
<td>19.8%</td>
<td>18.5%</td>
</tr>
<tr>
<td>SG : 1 - 10 EEs</td>
<td>3.9%</td>
<td>3.1%</td>
<td>2.9%</td>
<td>3.1%</td>
</tr>
<tr>
<td>SG : 11 - 25 EEs</td>
<td>3.3%</td>
<td>3.6%</td>
<td>3.3%</td>
<td>3.4%</td>
</tr>
<tr>
<td>SG : 26 - 50 EEs</td>
<td>3.1%</td>
<td>3.6%</td>
<td>3.7%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Group : 51 – 100</td>
<td>3.5%</td>
<td>3.3%</td>
<td>3.1%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Group : 101 - 999</td>
<td>12.2%</td>
<td>10.2%</td>
<td>10.9%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Group: 1000+</td>
<td>31.1%</td>
<td>32.9%</td>
<td>30.4%</td>
<td>31.3%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>24.2%</td>
<td>19.6%</td>
<td>20.3%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Total Non-Medicare</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The states included in each of the regulatory groupings are shown in the Table 4. They were categorized based upon our view of the business environment for the individual comprehensive medical
market. We recognize that some states might be categorized differently by others and the groupings would differ for the group markets.

### Table 4

<table>
<thead>
<tr>
<th>Regulatory Environment*</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>MR - Most Restrictive</td>
<td>MA, ME, NJ, NY, VT</td>
</tr>
<tr>
<td>AR - Average Restrictive</td>
<td>AL, CT, DE, FL, IA, ID, KS, KY, LA, MI, MN, MS, MT, NE, NH, NM, NV, OR, PA, RI, SC, SD, UT, WA</td>
</tr>
<tr>
<td>LR - Least Restrictive</td>
<td>AK, AR, AZ, CA, CO, DC, GA, HI, IL, IN, MD, MO, NC, ND, OH, OK, TN, TX, VA, WI, WV, WY</td>
</tr>
</tbody>
</table>

* based on the regulatory environment of the individual market

3. **Distribution of population by federal poverty level**

The following tables show the distribution of the population by federal poverty level (FPL). The distributions vary by geographic grouping. Note that we have assumed the same distribution by FPL for both Small Group and Large Group due to data limitations.

### Table 5A

<table>
<thead>
<tr>
<th>FPL</th>
<th>Individual</th>
<th>High Risk</th>
<th>Small Group</th>
<th>Large Group</th>
<th>Uninsured</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;139%</td>
<td>23.9%</td>
<td>17.9%</td>
<td>4.9%</td>
<td>4.9%</td>
<td>40.1%</td>
<td>14.6%</td>
</tr>
<tr>
<td>139% - 149%</td>
<td>2.2%</td>
<td>1.6%</td>
<td>0.9%</td>
<td>0.9%</td>
<td>3.7%</td>
<td>1.7%</td>
</tr>
<tr>
<td>150% - 199%</td>
<td>10.2%</td>
<td>9.7%</td>
<td>5.8%</td>
<td>5.8%</td>
<td>13.7%</td>
<td>8.0%</td>
</tr>
<tr>
<td>200% - 299%</td>
<td>18.2%</td>
<td>15.5%</td>
<td>17.2%</td>
<td>17.2%</td>
<td>18.1%</td>
<td>17.5%</td>
</tr>
<tr>
<td>300% - 399%</td>
<td>12.9%</td>
<td>13.1%</td>
<td>16.5%</td>
<td>16.6%</td>
<td>9.9%</td>
<td>14.7%</td>
</tr>
<tr>
<td>400%+</td>
<td>32.5%</td>
<td>42.2%</td>
<td>54.7%</td>
<td>54.6%</td>
<td>14.5%</td>
<td>43.6%</td>
</tr>
<tr>
<td>All</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Based upon U.S. Census data. Percentage may not add to 100.0% due to rounding.
### Table 5B
**Distribution of Population by Federal Poverty Level**

<table>
<thead>
<tr>
<th>FPL</th>
<th>Individual</th>
<th>High Risk</th>
<th>Small Group</th>
<th>Large Group</th>
<th>Uninsured</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;139%</td>
<td>27.0%</td>
<td>20.9%</td>
<td>4.2%</td>
<td>4.2%</td>
<td>32.0%</td>
<td>10.8%</td>
</tr>
<tr>
<td>139% - 149%</td>
<td>2.1%</td>
<td>1.9%</td>
<td>0.6%</td>
<td>0.6%</td>
<td>3.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td>150% - 199%</td>
<td>8.1%</td>
<td>4.8%</td>
<td>4.3%</td>
<td>4.3%</td>
<td>12.6%</td>
<td>6.0%</td>
</tr>
<tr>
<td>200% - 299%</td>
<td>18.0%</td>
<td>16.4%</td>
<td>13.7%</td>
<td>13.7%</td>
<td>18.0%</td>
<td>14.8%</td>
</tr>
<tr>
<td>300% - 399%</td>
<td>11.0%</td>
<td>10.6%</td>
<td>13.7%</td>
<td>13.7%</td>
<td>12.2%</td>
<td>13.2%</td>
</tr>
<tr>
<td>400%+</td>
<td>33.8%</td>
<td>45.3%</td>
<td>63.5%</td>
<td>63.5%</td>
<td>22.1%</td>
<td>54.0%</td>
</tr>
<tr>
<td>All</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Based upon U.S. Census data. Percentage may not add to 100.0% due to rounding.

### Table 5C
**Distribution of Population by Federal Poverty Level**

<table>
<thead>
<tr>
<th>FPL</th>
<th>Individual</th>
<th>High Risk</th>
<th>Small Group</th>
<th>Large Group</th>
<th>Uninsured</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;139%</td>
<td>24.0%</td>
<td>19.9%</td>
<td>5.0%</td>
<td>5.0%</td>
<td>40.0%</td>
<td>14.2%</td>
</tr>
<tr>
<td>139% - 149%</td>
<td>2.8%</td>
<td>2.2%</td>
<td>1.0%</td>
<td>1.0%</td>
<td>3.7%</td>
<td>1.7%</td>
</tr>
<tr>
<td>150% - 199%</td>
<td>11.2%</td>
<td>9.6%</td>
<td>6.2%</td>
<td>6.2%</td>
<td>13.5%</td>
<td>8.2%</td>
</tr>
<tr>
<td>200% - 299%</td>
<td>18.2%</td>
<td>14.6%</td>
<td>18.1%</td>
<td>18.1%</td>
<td>18.5%</td>
<td>18.2%</td>
</tr>
<tr>
<td>300% - 399%</td>
<td>13.0%</td>
<td>13.3%</td>
<td>17.3%</td>
<td>17.3%</td>
<td>9.6%</td>
<td>15.3%</td>
</tr>
<tr>
<td>400%+</td>
<td>30.8%</td>
<td>40.3%</td>
<td>52.3%</td>
<td>52.3%</td>
<td>14.7%</td>
<td>42.4%</td>
</tr>
<tr>
<td>All</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Based upon U.S. Census data. Percentage may not add to 100.0% due to rounding.
Table 5D

<table>
<thead>
<tr>
<th>FPL</th>
<th>Individual</th>
<th>High Risk</th>
<th>Small Group</th>
<th>Large Group</th>
<th>Uninsured</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;139%</td>
<td>23.3%</td>
<td>16.5%</td>
<td>5.0%</td>
<td>5.0%</td>
<td>41.5%</td>
<td>15.6%</td>
</tr>
<tr>
<td>139% - 149%</td>
<td>1.8%</td>
<td>1.3%</td>
<td>0.9%</td>
<td>0.9%</td>
<td>3.8%</td>
<td>1.7%</td>
</tr>
<tr>
<td>150% - 199%</td>
<td>10.1%</td>
<td>9.9%</td>
<td>5.8%</td>
<td>5.8%</td>
<td>14.0%</td>
<td>8.2%</td>
</tr>
<tr>
<td>200% - 299%</td>
<td>18.3%</td>
<td>16.0%</td>
<td>17.5%</td>
<td>17.5%</td>
<td>17.8%</td>
<td>17.6%</td>
</tr>
<tr>
<td>300% - 399%</td>
<td>13.2%</td>
<td>12.9%</td>
<td>16.8%</td>
<td>16.8%</td>
<td>9.8%</td>
<td>14.7%</td>
</tr>
<tr>
<td>400%+</td>
<td>33.3%</td>
<td>43.3%</td>
<td>54.0%</td>
<td>54.0%</td>
<td>13.1%</td>
<td>42.1%</td>
</tr>
</tbody>
</table>

All 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%

* Based upon U.S. Census data. Percentage may not add to 100.0% due to rounding.

4. Births, Immigration, Medicare Eligibility, and Deaths

   a. Births: New births each year are assumed to equal the number of newborns in our 2010 census data.
   
   b. Immigration: We have not included population growth due to immigration.
   
   c. Medicare Eligibility: We assume people move into the Medicare market in the year they attain age 65. We do not reflect any Medicare eligibility for those under age 65 who might qualify as disabled.
   
   d. Deaths: Deaths are projected to occur at the end of each projection year based upon a U.S. standard mortality table.

Change Factor Assumptions

Change factors are key assumptions regarding the projected impact of the ACA reforms. There is little empirical data supporting these assumptions. Milliman has conducted research on various programs that converted to a guaranteed acceptance basis and developed various change factors through observations of these other programs. Following are the various change factor assumptions used in this projection. They do not vary by scenario.

A. Group Employers Plan Termination Factors

Some employers may be motivated to terminate their health plans and send their employees to the individual market. This is particularly true for groups of 50 or fewer employees since they are not subject to any penalties for not sponsoring a plan. Table 6 presents the assumed termination rates. It is assumed that these terminations occur only in years 2014 and 2015. This results in sending their employees to the individual market to choose a plan, either through the Exchange or outside of the Exchange. No correlation...
is assumed between the health plan carrier they had under their group plan and the one that they choose in the individual market. All employees will choose a plan in the year the employer terminates the group plan.

<table>
<thead>
<tr>
<th>Group Size</th>
<th>Most Restrictive</th>
<th>Average Restrictive</th>
<th>Least Restrictive</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG : 1 - 10 EEs</td>
<td>10% / 10%</td>
<td>15% / 15%</td>
<td>20% / 15%</td>
</tr>
<tr>
<td>SG : 11 - 25 EEs</td>
<td>10% / 5%</td>
<td>10% / 10%</td>
<td>15% / 10%</td>
</tr>
<tr>
<td>SG : 26 - 50 EEs</td>
<td>5% / 2%</td>
<td>5% / 5%</td>
<td>10% / 5%</td>
</tr>
<tr>
<td>Group : 51 – 100</td>
<td>2% / 1%</td>
<td>3% / 3%</td>
<td>5% / 3%</td>
</tr>
<tr>
<td>Group : 101 - 999</td>
<td>1% / 0%</td>
<td>1% / 0%</td>
<td>1% / 1%</td>
</tr>
<tr>
<td>Group: 1000+</td>
<td>0% / 0%</td>
<td>0% / 0%</td>
<td>0% / 0%</td>
</tr>
</tbody>
</table>

B. Medicaid Crowd-Out from the Individual or Group Markets

Medicaid crowd-out is the opportunity of employees and individuals who are in income levels (i.e. FPL ≤ 138%) that make them eligible for Medicaid expansion to move from their current coverage or uninsured status to the Medicaid program. The following crowd-out factors have been assumed. The higher the factor, the more likely the person will leave their current plan and enroll in Medicaid.

<table>
<thead>
<tr>
<th>Age/Gender</th>
<th>Health Status Factor</th>
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These factors do not vary by market or regulatory groupings.
American Dental Association

ACOs and Their Impact on Dental Care Delivery

July 18, 2012

Prepared for:
American Dental Association

Prepared by:
Milliman, Inc.

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Consulting Actuary
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APPENDIX II – SSP ACO LIST  
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I. INTRODUCTION

Historically, the U.S. health care delivery system has been fragmented, characterized by a wide array of primary care clinicians, specialists, hospitals, and other institutions and health professionals who operate without any consistent connection to one another. Patients often must navigate their own way through this complex system and are the main conveyors of information and health history from one provider to another. Provider reimbursement systems that focused on payment for services rendered give providers little incentive to invest time in care coordination, incenting them instead to increase the volume of services provided.

New models of health care delivery, including Accountable Care Organizations (ACOs) and Patient-Centered Medical Homes (PCMHs), aim to refocus the industry toward care coordination, care quality, improved patient experience and health outcomes, and efficiency. Cost savings are also a goal; improved care coordination should result in a reduction in unnecessary duplication of services, medical errors, and other inefficiencies. The Affordable Care Act put increased focus on these new models and on ACOs in particular, by enabling ACOs to share in the potential savings from providing coordinated care to the Medicare population. In this report, commissioned by the American Dental Association, we (i) define ACOs, (ii) review how dental providers are currently included in ACO models already in operation, and (iii) discuss the factors influencing how dental providers might be integrated into these delivery models in the future.
II. SUMMARY OF KEY FINDINGS

Our review of publicly available literature, as well as interviews with Milliman consultants working in the ACO arena, revealed the following significant findings:

- Dental providers and services are not generally included as a core component of today’s ACOs and ACO-like organizations. Entities most likely to have even considered dental care are non-profit community health centers, organizations serving a population for which dental is a part of the benefit offering such as Medicaid, and organizations in states that encourage or require the inclusion of dental care in their programs.

- Experts offered several reasons for the lack of focus on dental in today’s ACOs.
  - Many of the more established ACOs have oriented themselves toward (or are participating in) the Medicare Pioneer or Shared Savings risk-sharing programs; Medicare does not have significant coverage for dental services, and those ACOs are focused on high-cost, high-risk procedures that, if managed, will reduce cost trend.
  - Many less mature ACOs could expand to include dental in the future, but are currently focused on integrating their core medical services.
  - A perception persists that dental providers are outside the mainstream of medicine, and that they have no need for health plan or ACO arrangements to stay financially stable.
  - Dental providers and dental benefit plans today do not mesh with an ACO’s evidence-based care approach, as most providers and plans are accustomed to providing care according to frequency limits defined by dental insurance policies rather than a patient’s dental risk profile.

- As ACOs mature, there are several potential opportunities for dental providers to link into them.
  - Medicare ACOs may begin to focus their energies on dually-eligible Medicare/Medicaid patients; as Medicaid covers dental services for children in all states and for adults in some states, dental providers might become a component of the ACO structure.
  - Similarly, Medicaid ACOs being developed in some states will need to closely integrate with dental providers.
  - ACOs created or promoted by insurance carriers who sell medical and dental insurance could begin to pull dental services into the ACO framework as a value-added service to its members.
In the longer term, as ACO entities become successful, they may pull away from insurance carriers and instead sell insurance directly to individuals via “private label” products. If such products are to be sold to individuals or small groups, the ACO will need to incorporate pediatric oral care into its offering, as required by ACA’s essential benefit package rule. That will necessitate some connection with dental providers.

- Large self-insured employer groups may push for inclusion of dental as well as medical metrics and outcomes.

Dental providers may become part of an ACO framework in various ways, ranging from simple co-location of services or facilitation of medical-to-dental referrals, which would allow dental clinicians to continue practicing largely as they do today, to full integration in which dental clinicians are a core component of the ACO’s coordination team and risk-based reimbursement structure.

The remainder of this paper explores these findings in further detail.
III. DEFINITIONS

Several new care models with similar goals have evolved in recent years. It is important to understand how each model was developed, for what purpose, and for what target population in order to understand the ramifications on the dental industry. It is also important to understand the key ways in which dental services might be incorporated into these care models; we will refer to these various means of integrating dental into these models throughout this paper.

**Accountable Care Organizations, or ACOs,** are designed to align provider incentives with provision of quality, coordinated care rather than volume of services, and to improve the infrastructure underlying care delivery. In the Affordable Care Act (ACA), ACOs are highlighted as a key means to improve the quality of care, while reducing cost, for the Medicare Fee-for-Service population. The Department of Health and Human Services (HHS) reported that more than ½ of Medicare beneficiaries have 5 or more chronic conditions, requiring them to see many physicians for care. Additionally, 1 in 7 Medicare patients in the hospital were victim to a medical error, and 1 in 5 Medicare patients were readmitted to the hospital within 30 days after discharge\(^1\). Better managing these complex patients’ care can reduce duplication of services and medical errors. HHS estimates that such ACOs could save Medicare between $170-960 million over three years\(^2\).

The ACA defines ACOs in the context of the Medicare innovation programs launched by the legislation. Under that definition, an ACO may consist of ACO professionals such as physicians, hospital clinicians, and other providers in group practice arrangements, networks of individual practices of ACO professionals, partnerships or joint ventures between hospitals and ACO professionals, hospitals employing ACO professionals, or other arrangements as allowed by the Secretary of the Department of Health and Human Services\(^3\). Each ACO is assumed to consist of at least primary care clinicians, specialists, and one or more hospitals\(^4\). The two essential features of ACOs are (1) designated accountable provider entities which share responsibility for treating a group of patients, and (2) performance measurement and new reimbursement mechanisms. New payment approaches could include supplementing each provider’s fee-for-service reimbursement based on the performance of the ACO as a whole, or moving toward global budgets or capitation\(^5\).

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\(^1\) HHS Fact Sheet — Accountable Care Organizations: Improving Care Coordination for People with Medicare. Department of Health and Human Services. March 31, 2011.


\(^5\) Ibid.
The Centers for Medicare and Medicaid Services (CMS) created new rules under the Affordable Care Act as a means to help health care providers, including doctors, hospitals, and others, to better coordinate care for Medicare patients, with the goal of creating incentives for providers to work across care settings to best treat each individual. In particular, Section 3022 of the ACA added Section 1899 to the Social Security Act, requiring the Secretary of the Department of Health and Human Services to establish a Shared Savings Program for Medicare ACOs by January 1, 2012. The Shared Savings Program enables creation of ACOs that will be held accountable for improving the health of, and health care experience of, Medicare beneficiaries while reducing growth in Medicare spending.

Along with the Shared Savings Program, CMS is also exploring alternative provider reimbursement structures via its Innovation Center. One such alternative, the Pioneer ACO model, allows experienced ACOs to move toward population-based reimbursement over the short term; another, the Advance Payment ACO model, aids physician-owned and rural organizations participating in the Shared Savings Program in their ACO development by providing start-up resources.

**Shared Savings Program (SSP):** The Medicare SSP is a statutory requirement of ACA, designed to improve care coordination and quality while reducing cost for the Medicare fee-for-service population. Organizations must apply to become part of this program, demonstrating the capability to operate as an ACO and agreeing to accept responsibility for 5000 or more Medicare beneficiaries for a minimum of 3 years. To be accepted into the program, an ACO must show that it will utilize evidence-based medicine, collect and report on quality measures and performance, invest in its workforce as needed to ensure coordinated care, and actively engage its beneficiary population in the care process. As of April 2012, 27 organizations had been selected to participate in the SSP. These health systems span 18 states, serving roughly 375,000 Medicare beneficiaries. The majority of these ACOs are physician led organizations, and many are working with private insurers to expand their scope to serve patients other than Medicare beneficiaries. An additional 150 organizations applied to become part of the SSP in July 2012, and CMS just announced on July 9th that 89 have been selected. Those additional ACOs service approximately 1.2 million people in 40 states and Washington, DC.

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7. Ibid.


Clinicians in Medicare SSP ACOs will still be paid on a fee-for-service basis for the Medicare patients that they serve; however, each ACO will be eligible to retrospectively receive a portion of the savings generated by the ACO relative to a benchmark cost level for their population, as calculated by CMS. There are two SSP models from which an organization can choose. The first allows the ACO to share only in savings, but not in risk, for the first two years; in the third year the ACO would share in any savings or losses versus the benchmark cost level. The second model requires the ACO to share savings as well as losses from the first year onward, in exchange for a higher share of any savings generated.

**Advance Payment Model:** the Advance Payment Model is a CMS Innovation Center initiative available to ACOs participating in the SSP. Intended to provide support to physician-owned and rural providers, it provides start-up resources (“advance payment”) to build ACO infrastructure, including information technology, electronic health records, and additional staff.

**Pioneer ACO Program:** The CMS Innovation Center created the Pioneer ACO program as a more aggressive risk-sharing alternative to the SSP for mature ACOs with existing care coordination infrastructure. 32 organizations are participating in this program. Qualifying ACOs must serve a minimum of 15,000 Medicare FFS beneficiaries (5,000 for rural areas). For the first two years of the program, these experienced ACOs participate in a shared savings and risk program similar to the SSP but with higher levels of risk and reward. In the third year, those with savings during the initial period will convert to a population based model, in which providers are paid a per beneficiary per month amount to replace some or all of the ACO’s FFS payments. Further, Pioneer ACOs must move toward similar risk-based contracting arrangements with other payers such that by the end of the second performance year, over 50% of their revenues come from risk-based contracts. It is also required that by the end of 2012, more than 50% of the ACO’s primary care providers be utilizing electronic medical records. By participating in the Pioneer program, these ACOs are showing a true commitment to the accountable coordinated care model and to risk-based contracting. ¹⁰

The **Patient Centered Medical Home (PCMH)** is a practice model guided by a primary care clinician in which a team of health care providers delivers coordinated care to patients, with a focus on evidence-based medicine, enhanced patient involvement and communication, quality, and information technology. This model evolved in the pediatric arena, where it was found that complex cases had better outcomes when care was coordinated by the primary

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care doctor. The National Committee for Quality Assurance (NCQA) designed accreditation standards for practices to be certified as a PCMH; to be recognized by NCQA, medical homes must meet specific criteria in 6 categories: enhancing access and continuity, using data to identify and manage patient populations, planning and managing care using evidence based guidelines, tracking and coordinating care, and measuring and improving performance. As of 2011, NCQA had certified over 1500 PCMHs.¹¹

Unlike ACOs, PCMHs need not move toward bearing financial risk for their patient population. However, PCMHs can become part of ACOs or develop into ACOs; over time we may see that PCMHs provide coordination within an ACO framework with ACO incentives.¹²

There are several means by which dental providers might be enfolded into an ACO/PCMH framework. A report by the Rhode Island Oral Health Commission Safety Net Workgroup reviews five different models of medical-dental integration originally constructed by the National Maternal and Child Oral Health Policy Center.

1. **Facilitated referral**: Enabling referrals, referral tracking, and follow-ups between medical and dental providers will help to ensure optimal care by both providers.

2. **Co-location**: By simply working out of the same location, medical and dental providers may find it easier to refer patients, to communicate with other providers, and to obtain multiple services during one visit.

3. **Virtual integration**: Using electronic medical record technology to allow medical and dental providers to access and edit a single set of records for a given patient will help to avoid duplication of services while giving each provider a full understanding of a patient’s history. For example, the Rhode Island report indicates that the Veteran’s Administration program utilizes integrated medical/dental records so that any provider can access the full health profile of a patient in that program.

4. **Shared financing**: In this arrangement, medical and dental providers would share in the financial risk and opportunity associated with providing coordinated care. This would include reimbursing primary care providers for applying fluoride varnish to children’s teeth, as part of a process of engaging patients in better dental care and

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referring patients for regular dentistry. It could also include more direct arrangements such as pulling dental services into a global capitation arrangement.

5. **Full integration:** This model allows for dental providers to be core members of an ACO, working with an interdisciplinary team of medical specialists in a single location to provide the complete set of medical and dental services to its patients, and adhering to the same standards, reporting requirements, and financial arrangements as the ACO in total.\(^\text{13}\)

IV. INCLUSION OF DENTAL SERVICES IN ACOs AND PCMHs TODAY

We conducted a comprehensive literature and website review for all the Pioneer ACOs and SSP ACOs established as of July 2012, as well as publicly available literature on other ACOs and PCMHs. In addition, we held interviews with five Milliman consultants, each of whom has worked with several ACOs, ACO payer groups, ACO collaboratives, and/or PCMHs. We also elicited commentary from one Milliman client involved with multiple ACOs.

In our review of publicly available literature on ACOs and ACO-like organizations, we found that including dental services is not generally a consideration at this point in time. We found only rare instances in which ACOs and PCMHs referenced dental providers or services. In particular, we noted the following themes:

- Organizations serving the Medicaid population are more likely to incorporate dental providers. Pediatric dental services are a required Medicaid benefit and adult dental benefits are also offered in some states, making it important for Medicaid-focused groups to provide dental care.
- Non-profit organizations focused on underserved communities who have espoused the coordinated care concept are also more likely to include dental, likely due to a Medicaid-heavy patient population as well as an overall mission to improve community medical and oral health access and outcomes.
- Organizations in states promoting or requiring medical-dental coordination, are the most likely to have made progress in integrating dental providers into the ACO or PCMH fold.
- Other coordinated care demonstrations sponsored by dental-focused organizations have tested the incorporation of dental providers into medical-dental homes or have applied ACO-like principles to dental-only provider groups.
- Outside the aforementioned examples, no significant market forces appear to be pushing providers toward medical-dental integration at this point in time. Without a mandate from a higher authority such as a state, or an overarching mission to fully serve a needy community, today's dentists and physicians in private practice may not choose to devote resources toward coordinating care with each other.\textsuperscript{14}

In the remainder of this section we discuss our literature review findings in more detail.

**Pioneer ACOs:** Out of the 32 organizations named as Pioneer ACOs, only two mention dental services or plans on their website. The Atrius Health Pioneer ACO, a group practice

\textsuperscript{14} Ibid.
organization with 1000 physicians and over 1425 other health care professionals, serves almost 1 million patients in Eastern and Central Massachusetts. The organization is comprised of five medical groups. One of the groups, Dedham Medical Associates, includes dental providers. A full range of pediatric and adult dental care services is offered, including general dentistry as well as orthodontics, periodontics, and endodontics.\textsuperscript{15}

<table>
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<th># of Pioneer ACOs</th>
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<td>30</td>
<td>No Dental Care Included</td>
</tr>
<tr>
<td>1 (North Texas ACO)</td>
<td>Participate with dental insurers, but does not appear that dental services are part of ACO</td>
</tr>
<tr>
<td>1 (Atrius Health)</td>
<td>Full Integration</td>
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Atrius Health is unique in several ways when compared to most of the other Pioneer ACOs. Atrius Health is quite experienced in using global payments, having done so since 1969; over 75% of their revenue comes from global payments across the commercial, Medicare, and Medicaid spectrum.\textsuperscript{16} Atrius Health and its medical groups are not-for-profit organizations. All providers use electronic health records, and 33 practices are NCQA patient-centered medical homes. The global payment structure is a per member per month payment made for any member who has selected an Atrius primary care provider. The gross capitation payment is designed to cover all “covered” services, including “ancillary” services, which presumably include dental. The only listed excluded services are behavior health, some vision services, and out-of-area services; if Atrius provides those services, they are paid on a fee-for-service basis.\textsuperscript{17}

The North Texas ACO is a partnership between Northern Texas Specialty Physicians (NTSP) and the Texas Health Resources health system serving several counties in Northern Texas. NTSP is an independent practice association comprised of nearly 600 physicians, while Texas Health Resources includes 24 hospitals owned, operated, affiliated, or joint-ventured with Texas Health Resources. Listed on their website is information identifying the insurance companies with which they participate; dental companies including Aetna Dental, CIGNA Dental, United Concordia, and others are included. However, there is no listing for dental providers and it does not appear that dental services are provided as part of the ACO arrangement.

Attached as Appendix I is a full listing of the Pioneer ACOs.

\textsuperscript{15} http://www.dedhammedical.com/services/dentalServices.cfm
\textsuperscript{17} Ibid.
SSP ACOs: A website search for the 27 initial SSP ACOs as of April 2012 revealed no mention of dental services on any of the organizations’ sites. We also researched the 89 additional SSP ACOs announced in July 2012. Many of these did not have websites. Of those that did, we found a just a few that mentioned inclusion of dental in some form. For example, Mount Sinai Care in New York has a dental department whose providers service the full range of dental procedures for children and adults. Mount Sinai is unique in that it has had a department of dentistry within its general hospital setting since 1910; it was one of the first institutions in the country to integrate dental providers in that manner.18 Another newly-announced ACO, University Hospitals Coordinated Care in Ohio, has a pediatric dental center in its children’s hospital. Finally, the website for Georgia’s WellStar Health Network lists dental providers who appear to be affiliated with the ACO.

Attached as Appendix II is a full listing of the SSP ACOs.

Other ACOs and PCMHs: In addition to the ACOs specifically designated by CMS as Pioneers or SSP participants, there are a wide range of provider groups across the country that function as ACOs, ACO-like entities, and PCMHs. While the CMS programs apply to ACOs serving the Medicare fee-for-service population, these other groups may focus on commercial members, Medicaid, or some other subset of the population such as cancer patients. PCMH and ACO pilots are also being sponsored by health plans, large employers, and private foundations such as the Robert Wood Johnson Foundation and the Commonwealth Fund19.

Our research revealed several themes in the types of organizations most likely to pursue an ACO or PCMH framework that includes dental as well as medical services:

Organizations serving a population for which dental services are part of the benefit package, such as Medicaid, are more likely to include dental. As the Pioneer and SSP ACOs are focused on the Medicare population, and dental benefits are not a core Medicare benefit, it is not surprising that most of these organizations have not put a focus on dental. For those organizations to benefit from CMS’s risk sharing program, they must focus on reducing per-member per-month costs, eliminating duplication, reducing hospital readmission rates, and better managing complex patients – none of which would directly involve dental services.

As Medicaid offers dental coverage for children nationwide, and for adults in some states, ACOs serving that population may be more likely to consider dental providers as part of their

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structure. In Oregon, for example, the legislature created Coordinated Care Organizations (CCOs) in 2011 as a means to improve population health and ensure quality, affordable care for everyone in the state, focusing first on the Medicaid population. Created in part due to a large state budget deficit, CCOs represent an opportunity to improve care while sharply reducing Medicaid costs.\(^\text{20}\) Like ACOs, CCOs are designed to promote integration and coordination of benefits and services, local accountability for health and resource allocation, and standards for safe and effective care. CCOs will have a global Medicaid budget with capitated and non-capitated components, capped at a set amount each year and tied to a sustainable rate of growth; the CCO is responsible for allocating the budget as it sees fit. CCOs must coordinate physical, mental, behavioral, and dental health care for people eligible for Medicaid or dually eligible for Medicare and Medicaid. They will be responsible for the health outcomes of that population and will be required to publicly report on quality metrics, including dental metrics. Health Management Associates estimated that Oregon could save $1 billion in Medicaid spending over the next three years via institution of this program. The bill specifically requires that each CCO have a formal contractual relationship with any dental care organization that serves members of the CCO in the area where they reside, sharing financial accountability such that incentives are aligned and cost-shifting is discouraged. Oral health services are capitated under the current Medicaid managed care program and would be part of a CCO’s global budget; these budgeted services could include basic dental services, urgent dental care, and other services\(^\text{21}\).

Oregon is the only state we have identified that has created such a direct link between dental and medical services in ACOs serving the Medicaid population; it remains to be seen whether others follow their lead. However, even with Oregon’s CCO initiative, dental care organizations are concerned that they may not have as much of an opportunity to influence medical-dental integration as they would like. Dental care organizations are not required to become a part of the CCOs until 2014 and can just contract with a CCO to provide dental services in the meantime. Some dental provider groups fear that becoming part of the CCO later in the process will reduce their ability to impact the planning process to ensure that dental is a core part of the value proposition. In addition, newly-forming coordinated care organization governance boards are not required to include dental providers, and dental groups who have attempted to join these boards have had mixed results.\(^\text{22}\)

ACOs and PCMHs created by **non-profit community health centers**, like the Atrius Health Pioneer ACO, seem more likely to include dental services. This is likely due to the Medicaid-heavy population served by these health centers, as well as the mission of these organizations to improve overall access and outcomes for underserved community members.


regardless of ability to pay. Co-locating dental and medical providers can help these patients obtain care more easily. For example, The Community Health and Dental Care PCMH in Pennsylvania includes both medical and dental providers in a co-located setting, providing a full range of dental services to both children and adults. This clinic was founded with the mission of ensuring access for all, regardless of ability to pay, and its formation was funded by a local foundation and local businesses. The clinic works with most insurance companies and charges uninsured patients on a sliding scale.23

At International Community Health Services, a certified PCMH in Seattle, WA, patients can receive care from medical as well as dental providers including dentists and dental assistants. This non-profit community health center was founded to better serve needy Asian, Native Hawaiian, and Pacific Islander communities in a culturally and linguistically appropriate manner, as well as other underserved communities in the Seattle area. A broad health team including pharmacy staff, interpreters, referral coordinators, and others coordinate to address all of a patient’s health care needs. The center’s two sites each house co-located medical and dental professionals.24

In another example, the Thundermist Health Center PCMH, a multi-site non-profit community health center in Rhode Island, provides care including dental services at all three sites by directly employed, fully dedicated clinical staff. All Thundermist sites utilize electronic medical records, and their strategic plan indicates a potential move toward non-fee-for-service payment approaches.25

ACO-like organizations in states proactively advocating medical and dental coordination are also more likely to consider dental services as part of their framework, due to rules set forth by those states that recommend or require dental services as part of an overall medical home. As previously discussed, Oregon’s CCO program that specifically requires inclusion of dental providers is unique and will spur the integration of medical and dental care in that state, at least for the Medicaid population. Rhode Island has also been at the forefront of PCMH development. The Rhode Island Chronic Care Sustainability Initiative, convened in 2006 by the state health insurance commissioner, has been sponsoring a multi-payer demonstration of the PCMH since 2008. One of the first medical home demonstrations in the country with virtually 100% payer participation including commercial carriers as well as Medicaid and Medicare, the program is continuing to expand to enfold new sites and hospitals26. However, very little was done in this pilot project to include dental.27 Work has

23 http://www.ch-dc.org
24 http://www.ichs.com
begun to facilitate the integration of dental and medical services into medical-dental homes; Rhode Island’s Oral Health Commission Safety Net Workgroup was charged with expanding the medical-dental home concept among dental practices in the state. They surveyed medical-dental centers across the state as well as medical and dental payers to assess how far along Rhode Island providers were in integrating medical and dental care. While promising levels of integration have occurred in some medical-dental centers serving the Medicaid population such as the aforementioned Thundermist Health Center, dental and medical providers responded that further integration in the private marketplace was challenged by the lack of a stronger mandate from a higher authority, such as the state. Without such a mandate, dentists and physicians in private practice may not choose to devote resources toward care coordination.28

Tests of innovative delivery systems sponsored by foundations, dental benefit carriers, or other organizations have also explored the application of ACO principles to dental. For example, the Colorado Delta Dental Foundation, in partnership with the University of Colorado School of Medicine and The Children’s Hospital, sponsored a pilot to co-locate dental hygienists in primary care offices to enable a true total health home for children. The premise of the study was to show that co-location – providing dental services in the same place where children frequently receive medical care -- would lead to provider collaboration and integration of medical and dental care, for the benefit of the patient. Colorado was a perfect place to experiment with this approach, as the state allows registered dental hygienists to practice independently. The medical offices selected to participate in this study served mostly low-income children. Hygienists targeted care toward patients of 6 to 36 months of age, performing services such as oral exams, rubber tip prophylaxis, caries assessments, application of fluoride varnish, and oral health instruction. All children seen by the hygienists were referred to a dentist. Hygienists in the medical offices would practice independently and do their own scheduling and billing. The results of the study indicated that co-location was feasible. Hygienists cared for target children as well as non-target patients, many of whom had never been seen by dentists and were already showing deteriorating oral health. Barriers to co-location included lack of space for hygienists, encouraging doctors to refer patients to the hygienist, and scheduling challenges. However, these barriers were not particularly common, nor were they felt to be insurmountable.29

Willamette Dental, the largest multispecialty group dental practice in the Northwest, has been an innovator in creating an accountable care-style model for dental. With 170 dentists and 1000 employees, the group delivers care to 350,000 people in Oregon, Washington, and Idaho. Willamette Dental espouses evidence based prevention and treatment methods,

28 Ibid.
patient education, collaboration, and holds itself accountable for all aspects of dental care delivery, including access, cost, and quality. Technology has been utilized to make business processes more efficient, and by 2013 it is expected that all Willamette offices will have electronic dental records.\(^{30}\) Established in 1970, the company has taken the track of many medical ACOs. It started as a single office committed to the coordinated care concept, then partnered with an insurance carrier -- Blue Cross Blue Shield of Oregon -- to provide a coordinated care product, and ultimately began to offer its own prepaid dental benefit plan in 1983.\(^{31}\) It is believed that Willamette providers are generally salaried employees of the company or are paid on a capitated basis.

We also conducted interviews with key Milliman consultants having a breadth of experience with ACOs and ACO-like entities. These consultants confirm that dental providers and services are generally not on the radar screen of most of today’s ACOs and similar organizations. One consultant remarked that while Milliman’s ACO financial modeling product, the Milliman ACO Care Management Model, does not include any line items related to dental, none of the almost two dozen ACO clients using the model have noted this as a shortcoming. This indicates that, at least for our ACO client base, dental providers and services are not currently part of the ACO structure.

**Why Dental Isn’t a Focus of Today’s ACOs and PCMHs**

Milliman consultants pointed to several reasons why dental providers and services are not considered critical components of ACOs or PCMHs at this point.

- **It’s too soon.** Even many of the Pioneer ACOs, which are often more established than the other entities, are still working on the basics, including setting up information technology infrastructure and recruiting needed staff. SSP ACOs and many others are even less developed. Until their core processes and services are fully operational, they are unlikely to expand into the dental realm. While the ACO concept seems likely to live on, the early years of implementation will include success stories and failures; our consultants felt that successes needed to take place before ACOs would expand their scope.

- **Medicare doesn't cover dental services.** Many of the larger, more established ACOs are focusing on the Medicare population in order to reap the benefits of CMS’s Pioneer and SSP risk sharing programs. As dental procedures are not a reimbursable component of Medicare, those ACOs are not likely to focus much attention on the population’s dental needs.

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\(^{31}\) [https://www.willamettedental.com/our-history.htm](https://www.willamettedental.com/our-history.htm)
The current focus is on high cost procedures and high risk patients. One Milliman consultant commented that hospital-driven ACOs aren’t likely thinking about dental at all, since “hospitals don’t make money on teeth”. If the goal of an ACO is to drive down inefficiencies while improving quality, dental services don’t make the list of high-cost, high-risk procedures. A client company involved with multiple ACOs echoed this concept, stating that ACOs are focused on lowering overall per-member per-month costs and reducing hospital readmission rates, neither of which would suggest that dental should be a focus. Also, early evidence on the efficacy of ACOs and PCMHs suggest that the models are most effective at reducing costs for high risk patients and may not reduce costs at all for others.32

Dentists don’t need or want to be part of ACOs. Several Milliman consultants, as well as one client involved with multiple ACOs, noted that there is a perception that dentists and dental care are outside the realm of mainstream medical care, and that dentists do well financially in the current fee-for-service environment. Many dentists don’t participate with Medicaid, or even with dental insurance plans, due to lower reimbursement levels, instead pulling in much of their revenue from local customers paying the full cost of care. If dentists have been financially successful in that environment, why would they even desire to enter into arrangements in which they bear the financial risk for the volume of care provided?

Dental care isn’t risk based. To embrace an ACO concept, dental providers would need to become more comfortable with aligning care with patient risk profiles and with the medical necessity of procedures being performed. Furthermore, dental benefit plans would need to be restructured to reimburse dentists for risk-based care. While evidence-based dentistry is becoming prominent in dental school curricula and is supported by the ADA, it has not yet gained widespread acceptance among practicing dental providers.33 For example, most dentists are used to performing, and most dental insurance plans cover, two cleanings per year. Clinical studies provide evidence that some people need fewer cleanings, while others need more, in order to prevent disease; the same goes for fluoride treatments and other key dental procedures. Until more providers embrace the risk-based dentistry concept and until more payers incent dentists to provide the appropriate number of services based on a patient’s profile rather than a set number of procedures per year, the inclusion of dental services in an ACO environment might not be an obvious fit.


33 Yamamoto, John DDS, MPH. Considering Impact of Evidence-based Dentistry, Risk Based Disease Management on Dental Benefits. The Institute for Health Care Consumerism.
V. THE FUTURE OF DENTAL CARE IN ACOs AND PCMHs

Milliman consultants interviewed feel strongly that the ACO concept is here to stay. Even if CMS drops the Medicare ACO risk-sharing programs (which seems unlikely), progress in forming new and different provider constructs in which providers bear financial risk for care is likely to continue. The ACO care model was evolving before the CMS programs took effect, and will most likely continue to evolve even if the fate of the ACA is reconsidered after the presidential election\(^\text{34}\).

ACOs are proliferating in the Medicare market, as evidenced by the additional 150 SSP applications pending approval by CMS. As these organizations succeed and mature, our consultants believe there may be increased focus on the dual eligible population – those patients eligible for both Medicare and Medicaid. This subpopulation is subjected to health system inefficiencies and discontinuity of care as a result of being eligible for both programs, and as such might be a natural fit for ACOs that could provide seamless care for that group of people, generating cost savings. Medicaid covers dental care for children nationally and provides varying levels of dental coverage for adults in some states. As such, should Medicare ACOs turn their focus toward dual eligibles, dental care will become an important component of providing for a patient’s total health care needs.

In the Medicaid marketplace, we have already discussed a few examples of how ACO-like organizations are being developed, including Oregon’s CCO program and Rhode Island’s work to begin coordinating medical and dental care for its Medicaid population. According to the National Academy for State Health Policy, 39 states are pursuing medical home efforts for CHIP and/or Medicaid\(^\text{35}\), indicating that this model may become prevalent for that population. Milliman consultants believe that the Medicaid arena is a natural fit for ACOs, given the unique challenges in providing care to that population, including cultural, language, transportation, and other issues. Also, non-profit community health centers often serve Medicaid patients and many of them are already starting to move toward a coordinated care model. Dental care for children, and for adults in some states, is a covered Medicaid benefit, necessitating some consideration of dental services and providers as these arrangements take form. The structure of medical/dental integration in these Medicaid ACOs could take several forms including facilitated referrals, co-location, or full medical/dental integration, presenting varying opportunities to dental providers. Also, it remains to be seen whether more ACOs might pursue a hygienist-oriented model, like the Colorado dental hygienist co-location project mentioned previously; including relatively more hygienists and fewer dentists.


into the ACO framework could be a potential mechanism for lowering per-patient dental costs.

ACOs are becoming more prominent in the commercial marketplace as well. Consultants specifically mentioned Cigna, Aetna, and Wellpoint initiatives to partner with provider groups to utilize collaborative care approaches which reward medical groups for achieving specific targets related to quality and cost. CIGNA, for example, is engaged in 28 patient-centered initiatives in 17 states. A web scan revealed that other large medical insurers including Humana, United, and BlueCross BlueShield are also pursuing ACOs in some form. Some carriers are even contracting with existing ACO groups in other states as a means to expand the geographic reach of their license. For carriers that offer medical insurance as well as dental insurance, beginning to align dental services with medical services might be a next step. The coordination of a patient’s total health needs, including dental as well as medical, could be marketed as a value-added component of the carrier’s products.

Multiple consultants discussed how the next generation of ACOs might take the form of “private label” products sold directly by the ACOs to individuals. Early ACOs reap benefits by partnering with insurance carriers, which may help them with reporting and compliance and by directing patient volume to their organizations. Once these ACOs are mature, they might consider removing the insurance carrier as “middle man”, instead taking on insurance functions themselves. With the advent of state insurance exchanges, ACOs could easily market their private label products directly to consumers. If this shift occurs, ACOs will need to offer all the components of the essential benefit package as defined in ACA, which requires that consumers purchasing insurance via the individual or small group marketplace on or off the exchanges must have coverage of at least those benefits. Pediatric oral care is one of the required benefits, and as such ACOs will need to devise a way to offer such a benefit via some relationship with dental providers. Even for adults, ACOs might consider including some dental services, potentially limiting the types of covered procedures, in their benefit offering as a value-added component of their private label product. Willamette Dental, discussed in detail earlier in this paper, is a good example of an innovative dental provider group marketing a private label product; the group sells pre-paid dental benefit plans.

As the ACO/PCMH model continues to show success, large, influential employer groups may push the inclusion of dental services as well. The State of Connecticut employee benefit plan is moving toward a PCMH structure as the core of its network, and its Health Enhancement Program initiative requires its insurance carriers to report on health outcomes and compliance with health initiatives such as preventive screenings. The employer’s benefit design includes an annual dental exam, and metrics related to this benefit are reported, although the PCMH does not incorporate dental. Instead, the medical and dental carriers

36 http://newsroom.cigna.com/knowledgecenter/aco
must coordinate to do the necessary employer and enrollee reporting. The State’s benefit program incorporates elements of value-based insurance design, which aligns patient cost with the value of treatments, effectively reducing barriers to high-value treatments and discouraging low-value treatments. This concept aims to increase patient compliance with recommended treatments and to enable cost savings. The inclusion of dental exams as a metric for the State’s benefit plan stems from the connection between oral health and overall health. So, in this situation, the employer group rather than the PCMH has set forth the idea of connecting oral and medical health, beginning with shared reporting.

Milliman consultants echoed the concepts introduced earlier in this paper regarding the methods by which dental services might be integrated into ACOs or PCMHs. Consultants indicated that in the short term, safety net organizations such as non-profit health centers might be more likely to embrace more aggressive integration of medical and dental homes by using co-location, shared financing, and even full integration. As many of the patients in these centers may be on Medicaid, have previously unmet medical or dental needs, and have other special concerns such as transportation or language barriers, the coordination of care may yield the biggest benefit for this group.

Dentists not in such practices could join ACOs as aligned providers, without taking financial risk, potentially using facilitated referral or virtual integration models. ACOs could still pay dentists on a fee-for-service basis, and dental providers could continue operating largely as they do today. For ACOs sponsored by a commercial payer, the payer may align medical and dental providers in much the same manner.

Consultants felt that in order for dental providers to embrace capitation or other risk-based payment forms and participate in an ACO arrangement more fully, the providers would need good incentives to provide evidence-based care. This would likely require not only pay-for-performance rewards, but also a change in the structure of dental benefit plans such that dentists would be reimbursed for providing the appropriate level of care based on a person’s risk rather than care based on a set frequency schedule for all patients. Larger dental practices might be more apt to go this route, potentially contracting with insurers to retain some or all of the risk for patients' care or even creating their own ACO-like organizations. Willamette Dental, highlighted earlier in this paper, is one good example of dental innovators applying evidence-based care concepts and a care coordination model to dental. If pressure for dental providers to practice more efficiently and reduce costs begins to mount, more provider groups may explore ACO-style arrangements as a means to achieve those goals.

Private label ACOs might present a more enticing opportunity for smaller dental provider groups to enter the ACO framework. These ACOs would already have a well-understood population, a developed infrastructure, and a strong provider network. They may proactively seek to contract with dental providers in order to offer products containing all the essential
benefits directly to the individual or small group market. Dentists, even those with small or solo private practices, could contract with these organizations as just one component of their overall patient population, potentially gaining new patients from the individual marketplace.

All consultants we spoke with emphasized that the dental industry should continue to support studies on the connection between oral health and overall physical health. If evidence mounts that oral health is a key element of total health, or that oral health problems may provide insight into a patient’s medical conditions, it will become more apparent that oral and general health should not be treated as separate paths. The 2000 Surgeon General report “Oral Health in America” called attention to the importance of a linkage between oral and medical health, and studies continue to explore the various connections. A higher level of awareness of those connections could make insurance carriers, large employer groups like the State of Connecticut, or ACOs marketing private label products more apt to pursue dental as a core piece of their benefit construct and ACO structure.
VI. CAVEATS AND LIMITATIONS

I, Joanne Fontana, am a Consulting Actuary for Milliman. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Milliman has prepared this report for the specific purpose of providing research results to ADA on the impact of the Affordable Care Act’s ACO programs on dental delivery. This information may not be appropriate, and should not be used, for any other purpose. This report has been prepared solely for the internal business use of, and is only to be relied upon by, the management of ADA. No portion of this report may be provided to any other party without Milliman’s prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work even if we permit the distribution of our work product to such third party.

Milliman does not provide legal advice, and recommends that ADA consult with its legal advisors regarding legal matters.

The terms of Milliman’s Consulting Services Agreement with ADA signed on April 11, 2012 apply to this report and its use.
## APPENDIX I – PIONEER ACO LIST

<table>
<thead>
<tr>
<th>Organization</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Allina Hospitals &amp; Clinics</td>
<td>Minnesota and Western Wisconsin</td>
</tr>
<tr>
<td>2. Atrius Health</td>
<td>Eastern and Central Massachusetts</td>
</tr>
<tr>
<td>3. Banner Health Network</td>
<td>Phoenix, Arizona Metropolitan Area (Maricopa and Pinal Counties)</td>
</tr>
<tr>
<td>4. Bellin-Thedacare Healthcare Partners</td>
<td>Northeast Wisconsin</td>
</tr>
<tr>
<td>5. Beth Israel Deaconess Physician Organization</td>
<td>Eastern Massachusetts</td>
</tr>
<tr>
<td>6. Bronx Accountable Healthcare Network (BAHN)</td>
<td>New York City (the Bronx) and lower Westchester County, NY</td>
</tr>
<tr>
<td>7. Brown &amp; Toland Physicians</td>
<td>San Francisco Bay Area, CA</td>
</tr>
<tr>
<td>8. Dartmouth-Hitchcock ACO</td>
<td>New Hampshire and Eastern Vermont</td>
</tr>
<tr>
<td>10. Fairview Health Systems</td>
<td>Minneapolis, MN Metropolitan Area</td>
</tr>
<tr>
<td>11. Franciscan Alliance</td>
<td>Indianapolis and Central Indiana</td>
</tr>
<tr>
<td>12. Genesys PHO</td>
<td>Southeastern Michigan</td>
</tr>
<tr>
<td>13. Healthcare Partners Medical Group</td>
<td>Los Angeles and Orange Counties, CA</td>
</tr>
<tr>
<td>14. Healthcare Partners of Nevada</td>
<td>Clark and Nye Counties, NV</td>
</tr>
<tr>
<td>15. Heritage California ACO</td>
<td>Southern, Central, and Costal California</td>
</tr>
<tr>
<td>16. JSA Medical Group, a division of HealthCare Partners</td>
<td>Orlando, Tampa Bay, and surrounding South Florida</td>
</tr>
<tr>
<td>ACO Name</td>
<td>Location</td>
</tr>
<tr>
<td>--------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>17. Michigan Pioneer ACO</td>
<td>Southeastern Michigan</td>
</tr>
<tr>
<td>18. Monarch Healthcare</td>
<td>Orange County, CA</td>
</tr>
<tr>
<td>19. Mount Auburn Cambridge Independent Practice Association (MACIPA)</td>
<td>Eastern Massachusetts</td>
</tr>
<tr>
<td>20. North Texas ACO</td>
<td>Tarrant, Johnson and Parker counties in North Texas</td>
</tr>
<tr>
<td>21. OSF Healthcare System</td>
<td>Central Illinois</td>
</tr>
<tr>
<td>22. Park Nicollet Health Services</td>
<td>Minneapolis, MN Metropolitan Area</td>
</tr>
<tr>
<td>23. Partners Healthcare</td>
<td>Eastern Massachusetts</td>
</tr>
<tr>
<td>24. Physician Health Partners</td>
<td>Denver, CO Metropolitan Area</td>
</tr>
<tr>
<td>25. Presbyterian Healthcare Services – Central New Mexico Pioneer Accountable Care Organization</td>
<td>Central New Mexico</td>
</tr>
<tr>
<td>26. Primecare Medical Network</td>
<td>Southern California (San Bernardino and Riverside Counties)</td>
</tr>
<tr>
<td>27. Renaissance Medical Management Company</td>
<td>Southeastern Pennsylvania</td>
</tr>
<tr>
<td>28. Seton Health Alliance</td>
<td>Central Texas (11 county area including Austin)</td>
</tr>
<tr>
<td>29. Sharp Healthcare System</td>
<td>San Diego County</td>
</tr>
<tr>
<td>30. Steward Health Care System</td>
<td>Eastern Massachusetts</td>
</tr>
<tr>
<td>31. TriHealth, Inc.</td>
<td>Northwest Central Iowa</td>
</tr>
<tr>
<td>32. University of Michigan</td>
<td>Southeastern Michigan</td>
</tr>
</tbody>
</table>

Source: Centers for Medicare and Medicaid Services.
## APPENDIX II – MEDICARE SHARED SAVINGS PROGRAM ACO LIST

### SSP ACOs Announced in April 2012

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Est. Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountable Care Coalition of Caldwell County, LLC</td>
<td>Lenoir, NC</td>
<td>5,000</td>
</tr>
<tr>
<td>Accountable Care Coalition of Coastal Georgia</td>
<td>Ormond, FL (Serving beneficiaries in GA and SC)</td>
<td>8,000</td>
</tr>
<tr>
<td>Accountable Care Coalition of Eastern North Carolina, LLC</td>
<td>New Bern, NC</td>
<td>10,000</td>
</tr>
<tr>
<td>Accountable Care Coalition of Greater Athens Georgia</td>
<td>Athens, GA</td>
<td>8,500</td>
</tr>
<tr>
<td>Accountable Care Coalition of Mount Kisco, LLC</td>
<td>Mount Kisco, NY</td>
<td>N/A</td>
</tr>
<tr>
<td>Accountable Care Coalition of the Mississippi Gulf Coast, LLC</td>
<td>Clearwater, FL (Serving beneficiaries in the Mississippi Gulf Coast area)</td>
<td>7,000</td>
</tr>
<tr>
<td>Accountable Care Coalition of the North Country, LLC</td>
<td>Canton, NY</td>
<td>5,300</td>
</tr>
<tr>
<td>Accountable Care Coalition of Southeast Wisconsin, LLC</td>
<td>Milwaukee, WI</td>
<td>10,000</td>
</tr>
<tr>
<td>Accountable Care Coalition of Texas, Inc.</td>
<td>Houston, TX</td>
<td>70,000</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>------------</td>
<td>--------</td>
</tr>
<tr>
<td>AHS ACO, LLC</td>
<td>Morristown, NJ (Serving beneficiaries in NJ and PA)</td>
<td>50,000</td>
</tr>
<tr>
<td>AppleCare Medical ACO, LLC</td>
<td>Buena Park, CA</td>
<td>8,000</td>
</tr>
<tr>
<td>Arizona Connected Care, LLC</td>
<td>Tucson, AZ</td>
<td>7,500</td>
</tr>
<tr>
<td>Chinese Community Accountable Care Organization</td>
<td>New York, NY</td>
<td>12,000</td>
</tr>
<tr>
<td>CIPA Western New York IPA, doing business as Catholic Medical Partners</td>
<td>Buffalo, NY</td>
<td>31,000</td>
</tr>
<tr>
<td>Coastal Carolina Quality Care, Inc.</td>
<td>New Bern, NC</td>
<td>11,000</td>
</tr>
<tr>
<td>Crystal Run Healthcare ACO, LLC</td>
<td>Middletown, NY (Serving beneficiaries in NY and PA)</td>
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<tr>
<td>Florida Physicians Trust, LLC</td>
<td>Winter Park, FL</td>
<td>16,500</td>
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<tr>
<td>Hackensack Physician-Hospital Alliance ACO, LLC</td>
<td>Hackensack, NJ (Serving beneficiaries in NJ and NY)</td>
<td>11,000</td>
</tr>
<tr>
<td>Jackson Purchase Medical Associates, PSC</td>
<td>Paducah, KY</td>
<td>6,000</td>
</tr>
<tr>
<td>Jordan Community ACO</td>
<td>Plymouth, MA</td>
<td>6,000</td>
</tr>
<tr>
<td>North Country ACO</td>
<td>Littleton, NH (Serving</td>
<td>6,000</td>
</tr>
</tbody>
</table>
### SSP ACOs Announced in July 2012*

<table>
<thead>
<tr>
<th>ACO Name</th>
<th>Location</th>
<th>Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimus Healthcare Partners, LLC</td>
<td>Summit, NJ</td>
<td>29,000</td>
</tr>
<tr>
<td>Physicians of Cape Cod ACO</td>
<td>Hyannis, MA</td>
<td>5,000</td>
</tr>
<tr>
<td>Premier ACO Physician Network</td>
<td>Lakewood, CA</td>
<td>12,500</td>
</tr>
<tr>
<td>Primary Partners, LLC</td>
<td>Clermont, FL</td>
<td>7,500</td>
</tr>
<tr>
<td>RGV ACO Health Providers, LLC</td>
<td>Donna, TX</td>
<td>6,000</td>
</tr>
<tr>
<td>West Florida ACO, LLC</td>
<td>Trinity, FL</td>
<td>10,000</td>
</tr>
</tbody>
</table>

Source: Centers for Medicare and Medicaid Services.

**AzPCP ACO, located in Chandler, Arizona, is comprised of networks of individual ACO practices, with 73 physicians. It will serve Medicare beneficiaries in Arizona.**

**John C. Lincoln Accountable Care Organization, LLC, located in Phoenix, Arizona, is comprised of partnerships between hospitals and ACO professionals, and hospitals employing ACO professionals. It will serve Medicare beneficiaries in Arizona.**

**Fort Smith Physicians Alliance ACO, LLC, located in Fort Smith, Arkansas is comprised of networks of individual ACO practices, with 78 physicians. It will serve Medicare beneficiaries in Arkansas and Oklahoma.**
ApolloMed Accountable Care Organization Inc., located in Glendale, California, is comprised of networks of individual ACO practices, with 130 physicians. It will serve Medicare beneficiaries in California.

Golden Life Healthcare LLC, located in Sacramento, California, is comprised of networks of individual ACO practices and partnerships between hospitals and ACO professionals, with 57 physicians. It will serve Medicare beneficiaries in California.

John Muir Physician Network, located in Walnut Creek, California, is comprised of ACO group practices and networks of individual ACO practices, with 197 physicians. It will serve Medicare beneficiaries in California.

Meridian Holdings, Inc., located in Hawthorne, California, is comprised of ACO group practices and networks of individual ACO practices, with 60 physicians. It will serve Medicare beneficiaries in California, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, and Texas.

North Coast Medical ACO, Inc., located in Oceanside, California, is comprised of ACO group practices, hospitals employing ACO professionals, and a federally qualified health center, with 281 physicians. It will serve Medicare beneficiaries in California.

Torrance Memorial Integrated Physicians, LLC, located in Torrance, California, is comprised of partnerships between a hospital and ACO professionals, with 398 physicians. It will serve Medicare beneficiaries in California.

MPS ACO Physicians, LLC, located in Middletown, Connecticut, is comprised of networks of individual ACO practices, with 38 physicians. It will serve Medicare beneficiaries in Connecticut.

PriMed, LLC, located in Shelton, Connecticut, is comprised of ACO group practices, with 116 physicians. It will serve Medicare beneficiaries in Connecticut.

Accountable Care Coalition of Northwest Florida, LLC, located in Pensacola, Florida, is comprised of networks of individual ACO practices, with 60 physicians. It will serve Medicare beneficiaries in Alabama and Florida.
| Accountable Care Partners, LLC, located in Jacksonville, Florida, is comprised of ACO group practices and networks of individual ACO practices, with 65 physicians. It will serve Medicare beneficiaries in Florida and Georgia. |
| Allcare Options, LLC, located in Parrish, Florida, is comprised of ACO group practices and networks of individual ACO practices, with 198 physicians. It will serve Medicare beneficiaries in Florida. |
| Florida Medical Clinic ACO, LLC, located in Zephyrhills, Florida, is comprised of networks of individual ACO practices, with 153 physicians. It will serve Medicare beneficiaries in Florida. |
| FPG Healthcare, LLC, located in Orlando, Florida, is comprised of ACO group practices, with 142 physicians. It will serve Medicare beneficiaries in Florida. |
| HealthNet LLC, located in Boynton Beach, Florida, is comprised of networks of individual ACO practices, with 55 physicians. It will serve Medicare beneficiaries in Florida. |
| Integrated Care Alliance, LLC, located in Gainesville, Florida, is comprised of networks of individual ACO practices, with 115 physicians. It will serve Medicare beneficiaries in Florida. |
| Medical Practitioners for Affordable Care, LLC, located in Melbourne, Florida, is comprised of networks of individual ACO practices, with 126 physicians. It will serve Medicare beneficiaries in Florida. |
| Palm Beach Accountable Care Organization, LLC, located in West Palm Beach, Florida, is comprised of networks of individual ACO practices, with 337 physicians. It will serve Medicare beneficiaries in Florida. |
| Reliance Healthcare Management Solutions, LLC, located in Tampa, Florida, is comprised of networks of individual ACO practices, with 36 physicians. It will serve Medicare beneficiaries in Florida. |
| WellStar Health Network, LLC, located in Marietta, Georgia, is comprised of partnerships between hospitals and ACO professionals, with 1,203 physicians. It will serve Medicare beneficiaries in Georgia. |
Advocate Health Partners, located in Rolling Meadows, Illinois, is comprised of partnerships between hospitals and ACO professionals, with 2,237 physicians. It will serve Medicare beneficiaries in Illinois.

Chicago Health System ACO, LLC, located in Westmont, Illinois, is comprised of ACO group practices, networks of individual ACO practices, partnerships between hospitals and ACO professionals, hospitals employing ACO professionals, and federally qualified health centers, with 523 physicians. It will serve Medicare beneficiaries in Illinois.

Deaconess Care Integration, LLC, located in Evansville, Indiana, is comprised of ACO group practices, networks of individual ACO practices, partnerships between hospitals and ACO professionals and a hospital employing ACO professionals, and a rural health clinic, with 323 physicians. It will serve Medicare beneficiaries in Illinois, Indiana, and Kentucky.

Franciscan AHN ACO, LLC, located in Mishawaka, Indiana, is comprised of partnerships between hospitals and ACO professionals, with 245 physicians. It will serve Medicare beneficiaries in Indiana.

Indiana University Health ACO, Inc., located in Indianapolis, Indiana, is comprised of ACO group practices, networks of individual ACO practices, partnerships between hospitals and ACO professionals and hospitals employing ACO professionals, and a federally qualified health center, with 1,837 physicians. It will serve Medicare beneficiaries in Indiana.

Genesis Accountable Care Organization, LLC, located in Davenport, Iowa, is comprised of hospitals employing ACO professionals, with 312 physicians. It will serve Medicare beneficiaries in Illinois and Iowa.

Iowa Health Accountable Care, L.C., located in Des Moines, Iowa, is comprised of ACO group practices, networks of individual ACO practices, a combination of hospitals employing ACO professionals, a federally qualified health center and a rural health clinic, with 1,551 physicians. It will serve Medicare beneficiaries in Illinois, Iowa, and Missouri.

One Care LLC, located in Des Moines, Iowa, is comprised of partnerships between hospitals and ACO professionals, with 402 physicians. It will serve Medicare beneficiaries in Iowa.
<table>
<thead>
<tr>
<th>University of Iowa Affiliated Health Providers, LC, located in Iowa City, Iowa, is comprised of partnerships between hospitals and ACO professionals, with 1,791 physicians. It will serve Medicare beneficiaries in Iowa.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owensboro ACO, located in Owensboro, Kentucky, is comprised of networks of individual ACO practices, with 26 physicians. It will serve Medicare beneficiaries in Indiana and Kentucky.</td>
</tr>
<tr>
<td>Quality Independent Physicians, located in Louisville, Kentucky, is comprised of ACO group practices, with 74 physicians. It will serve Medicare beneficiaries in Indiana and Kentucky.</td>
</tr>
<tr>
<td>Southern Kentucky Health Care Alliance, located in Smiths Grove, Kentucky, is comprised of networks of individual ACO practices, with 35 physicians. It will serve Medicare beneficiaries in Kentucky.</td>
</tr>
<tr>
<td>TP-ACO LLC located in Baton Rouge, Louisiana, is comprised of networks of individual ACO practices, with 50 physicians. It will serve Medicare beneficiaries in Florida, Louisiana and Tennessee.</td>
</tr>
<tr>
<td>Central Maine ACO, located in Lewiston, Maine, is comprised of ACO group practices, networks of individual ACO practices and partnerships between hospitals and ACO professionals, including a combination of hospitals employing ACO professionals. It includes 566 physicians. It will serve Medicare beneficiaries in Maine.</td>
</tr>
<tr>
<td>Maine Community Accountable Care Organization, LLC, located in Augusta, Maine, is a federally qualified health center with 125 physicians. It will serve Medicare beneficiaries in Maine.</td>
</tr>
<tr>
<td>MaineHealth Accountable Care Organization, located in Portland, Maine, is comprised of networks of individual ACO practices, partnerships between hospitals and ACO professionals and hospitals employing ACO professionals, with 1,595 physicians. It will serve Medicare beneficiaries in Maine.</td>
</tr>
<tr>
<td>Accountable Care Coalition of Maryland, LLC, located in Hollywood, Maryland, is comprised of ACO group practices, with 109 physicians. It will serve Medicare beneficiaries in Maryland.</td>
</tr>
</tbody>
</table>
Greater Baltimore Health Alliance Physicians, LLC, located in Baltimore, Maryland, is comprised of partnerships between a hospital and ACO professionals and a hospital employing ACO professionals, with 399 physicians. It will serve Medicare beneficiaries in Maryland and Pennsylvania.

Maryland Accountable Care Organization of Eastern Shore LLC, located in National Harbor, Maryland, is comprised of ACO group practices, networks of individual ACO practices, with 61 physicians. It will serve Medicare beneficiaries in Maryland.

Maryland Accountable Care Organization of Western MD LLC, located in National Harbor, Maryland, is comprised of ACO group practices and networks of individual ACO practices, with 23 physicians. It will serve Medicare beneficiaries in Maryland, Pennsylvania, and West Virginia.

Circle Health Alliance, LLC, located in Lowell, Massachusetts, is comprised of partnerships between hospitals and ACO professionals, with 353 physicians. It will serve Medicare beneficiaries in Massachusetts and New Hampshire.

Harbor Medical Associates, PC, located in South Weymouth, Massachusetts, is comprised of ACO group practices, with 116 physicians. It will serve Medicare beneficiaries in Massachusetts.

Accountable Healthcare Alliance, PC, located in East Lansing, Michigan, is comprised of networks of individual ACO practices, with 29 physicians. It will serve Medicare beneficiaries in Michigan.

Oakwood Accountable Care Organization, LLC, located in Dearborn, Michigan, is comprised of partnerships between hospitals and ACO professionals, with 1,546 physicians. It will serve Medicare beneficiaries in Michigan.

Southeast Michigan Accountable Care, Inc., located in Dearborn, Michigan, is comprised of ACO group practices and networks of individual ACO practices, with 333 physicians. It will serve Medicare beneficiaries in Michigan.
Essential Health, located in Duluth, Minnesota, is comprised of a combination of ACO group practices, critical access hospitals, and a rural health clinic, with 1,404 physicians. It will serve Medicare beneficiaries in Minnesota, North Dakota, and Wisconsin.

Medical Mall Services of Mississippi, located in Jackson, Mississippi, is comprised of networks of individual ACO practices and a federally qualified health center, with 487 physicians. It will serve Medicare beneficiaries in Mississippi.

BJC HealthCare ACO, LLC, located in St. Louis, Missouri, is comprised of a combination of hospitals employing ACO professionals, and rural health clinics, with 556 physicians. It will serve Medicare beneficiaries in Illinois and Missouri.

Heartland Regional Medical Center, located in St. Joseph, Missouri, is comprised of a hospital employing ACO professionals, with 199 physicians. It will serve Medicare beneficiaries in Kansas and Missouri.

Nevada Primary Care Network ACO, LLC, located in Las Vegas, Nevada, is comprised of ACO group practices and networks of individual ACO practices, with 89 physicians. It will serve Medicare beneficiaries in Nevada.

Concord Elliot ACO LLC, located in Manchester, New Hampshire, is comprised of partnerships between hospitals and ACO professionals, with 234 physicians. It will serve Medicare beneficiaries in New Hampshire.

Barnabas Health ACO-North, LLC, located in West Orange, New Jersey, is comprised of partnerships between hospitals and ACO professionals, hospitals employing ACO professionals, with 435 physicians. It will serve Medicare beneficiaries in New Jersey.

Accountable Care Coalition of Syracuse, LLC, located in Syracuse, New York, is comprised of ACO group practices, with 105 physicians. It will serve Medicare beneficiaries in New York.

Asian American Accountable Care Organization, located in New York City, is comprised of networks of individual ACO practices, with 239 physicians. It will serve Medicare beneficiaries in New York.
<table>
<thead>
<tr>
<th>Accountable Care Network</th>
<th>Location</th>
<th>Description</th>
<th>Physicians</th>
<th>Medicare Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance Accountable Care Network</td>
<td>New York City</td>
<td>Comprised of hospitals and networks of individual ACO practices</td>
<td>1,069</td>
<td>New York</td>
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<tr>
<td>Beacon Health Partners, LLP</td>
<td>Manhasset, New York</td>
<td>Comprised of networks of individual ACO practices</td>
<td>261</td>
<td>New York</td>
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<tr>
<td>Chautauqua Region Associated Medical Partners, LLC</td>
<td>Jamestown, New York</td>
<td>Comprised of partnerships between hospitals and ACO professionals</td>
<td>35</td>
<td>New York and Pennsylvania</td>
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<tr>
<td>Healthcare Provider ACO, Inc.</td>
<td>Garden City, New York</td>
<td>Comprised of networks of individual ACO practices</td>
<td>395</td>
<td>New York</td>
</tr>
<tr>
<td>Mount Sinai Care, LLC</td>
<td>New York City</td>
<td>Comprised of networks of individual ACO practices and a hospital(s) employing ACO professionals</td>
<td>2,249</td>
<td>New York</td>
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<tr>
<td>ProHEALTH Accountable Care Medical Group, PLLC</td>
<td>Lake Success, New York</td>
<td>Comprised of ACO group practices</td>
<td>281</td>
<td>New York</td>
</tr>
<tr>
<td>WESTMED Medical Group, PC</td>
<td>Purchase, New York</td>
<td>Comprised of ACO group practices</td>
<td>250</td>
<td>Connecticut and New York</td>
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<tr>
<td>Cornerstone Health Care, PA</td>
<td>High Point, North Carolina</td>
<td>Comprised of ACO group practices</td>
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<td>North Carolina</td>
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<tr>
<td>Triad Healthcare Network, LLC</td>
<td>Greensboro, North Carolina</td>
<td>Comprised of networks of individual ACO practices and a hospital employing ACO professionals</td>
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<td>North Carolina</td>
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<tr>
<td>Accountable Care Organization</td>
<td>Location</td>
<td>Members</td>
<td>Services</td>
<td>Notes</td>
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<tr>
<td>-------------------------------</td>
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<tr>
<td>Mercy Health Select, LLC</td>
<td>Cincinnati, Ohio</td>
<td>365 physicians</td>
<td>Medicare beneficiaries in Indiana and Ohio</td>
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<td>ProMedica Physician Group, Inc.</td>
<td>Toledo, Ohio</td>
<td>250 physicians</td>
<td>Medicare beneficiaries in Michigan and Ohio</td>
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<tr>
<td>Summa Accountable Care Organization</td>
<td>Akron, Ohio</td>
<td>612 physicians</td>
<td>Medicare beneficiaries in Ohio</td>
<td></td>
</tr>
<tr>
<td>University Hospitals Coordinated Care</td>
<td>Shaker Heights, Ohio</td>
<td>1,770 physicians</td>
<td>Medicare beneficiaries in Ohio</td>
<td></td>
</tr>
<tr>
<td>North Bend Medical Center, Inc.</td>
<td>Coos Bay, Oregon</td>
<td>112 physicians</td>
<td>Medicare beneficiaries in Oregon</td>
<td></td>
</tr>
<tr>
<td>Coastal Medical, Inc.</td>
<td>Providence, Rhode Island</td>
<td>100 physicians</td>
<td>Medicare beneficiaries in Massachusetts and Rhode Island</td>
<td></td>
</tr>
<tr>
<td>Accountable Care Coalition of The Tri-Counties, LLC</td>
<td>Charleston, South Carolina</td>
<td>108 physicians</td>
<td>Medicare beneficiaries in South Carolina</td>
<td></td>
</tr>
<tr>
<td>AnewCare LLC</td>
<td>Johnson City, Tennessee</td>
<td>673 physicians</td>
<td>Medicare beneficiaries in Tennessee and Virginia</td>
<td></td>
</tr>
<tr>
<td>Cumberland Center for Healthcare Innovation, LLC</td>
<td>Nashville, Tennessee</td>
<td>33 physicians</td>
<td>Medicare beneficiaries in Tennessee</td>
<td></td>
</tr>
<tr>
<td>Accountable Care Organization</td>
<td>Location</td>
<td>Description</td>
<td>Physicians</td>
<td>Coverage Area</td>
</tr>
<tr>
<td>------------------------------</td>
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</tr>
<tr>
<td>MissionPoint Health Partners</td>
<td>Nashville, Tennessee</td>
<td>Hospitals employing ACO professionals</td>
<td>544</td>
<td>Tennessee</td>
</tr>
<tr>
<td>St. Thomas Medical Group PLLC</td>
<td>Nashville, Tennessee</td>
<td>ACO group practices</td>
<td>41</td>
<td>Tennessee</td>
</tr>
<tr>
<td>Summit Health Solutions</td>
<td>Knoxville, Tennessee</td>
<td>Hospitals and ACO group practices</td>
<td>220</td>
<td>Tennessee</td>
</tr>
<tr>
<td>BHS Accountable Care, LLC</td>
<td>San Antonio, Texas</td>
<td>ACO group practices, networks, partnerships, hospital employing ACO professionals</td>
<td>348</td>
<td>Texas</td>
</tr>
<tr>
<td>Memorial Hermann Accountable Care Organization</td>
<td>Houston, Texas</td>
<td>Networks of individual ACO practices, partnerships</td>
<td>332</td>
<td>Texas</td>
</tr>
<tr>
<td>Methodist Patient Centered ACO</td>
<td>Dallas, Texas</td>
<td>ACO group practices, networks, partnerships</td>
<td>269</td>
<td>Texas</td>
</tr>
<tr>
<td>Essential Care Partners, LLC</td>
<td>Austin, Texas</td>
<td>Federally qualified health center</td>
<td>275</td>
<td>Texas</td>
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<tr>
<td>Physicians ACO, LLC</td>
<td>Houston, Texas</td>
<td>Networks of individual ACO practices</td>
<td>75</td>
<td>Texas</td>
</tr>
<tr>
<td>Texoma ACO, LLC</td>
<td>Wichita Falls, Texas</td>
<td>ACO group practices, networks of individual ACO practices</td>
<td>52</td>
<td>Texas</td>
</tr>
<tr>
<td>Central Utah Clinic, P.C.</td>
<td>Provo, Utah</td>
<td>ACO group practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountable Care Coalition of Green Mountains, LLC, located in South Burlington, Vermont, is comprised of ACO group practices and networks of individual ACO practices, with 42 physicians. It will serve Medicare beneficiaries in Vermont.</td>
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</tr>
<tr>
<td>Polyclinic Management Services Company, located in Seattle, Washington, is comprised of ACO group practices, with 296 physicians. It will serve Medicare beneficiaries in Washington.</td>
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<tr>
<td>Aurora Accountable Care Organization LLC, located in Milwaukee, Wisconsin, is comprised of ACO group practices, with 275 physicians. It will serve Medicare beneficiaries in Wisconsin.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Dean Clinic and St. Mary’s Hospital Accountable Care Organization, LLC, located in Madison, Wisconsin, is comprised of ACO group practices and a partnership between a hospital and ACO professionals, with 701 physicians. It will serve Medicare beneficiaries in Wisconsin.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>ProHealth Solutions, LLC, located in Waukesha, Wisconsin, is comprised of partnerships between hospitals and ACO professionals, with 697 physicians. It will serve Medicare beneficiaries in Wisconsin.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*Copied directly from CMS Office of Public Affairs Fact Sheet “CMS NAMES 89 NEW MEDICARE SHARED SAVINGS ACCOUNTABLE CARE ORGANIZATIONS” released July 9, 2012*
### APPENDIX III – LIST OF MILLIMAN CONSULTANTS INTERVIEWED

<table>
<thead>
<tr>
<th>Consultant</th>
<th>Milliman Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Mirkin</td>
<td>New York</td>
</tr>
<tr>
<td>Bruce Pyenson</td>
<td>New York</td>
</tr>
<tr>
<td>Jill Herbold</td>
<td>Indianapolis</td>
</tr>
<tr>
<td>Bill Thompson</td>
<td>Hartford</td>
</tr>
<tr>
<td>David Williams</td>
<td>Hartford</td>
</tr>
</tbody>
</table>
This report is in response to the 2011 American Dental Association (ADA) House of Delegates’ resolution 87H, which asks the ADA to study the payment methodologies of federally qualified health centers (FQHCs).

**Federally Qualified Health Centers**

FQHCs are community-based and patient-directed organizations that serve populations with limited access to health care. These include low income populations, the uninsured, those with limited English proficiency, migrant and seasonal farm workers, individuals and families experiencing homelessness, and those living in public housing. FQHCs include all organizations receiving grants under section 330 of the Public Health Service Act. Section 330 grants are administered by the Health Resources and Services Administration (HRSA) of the Department of Health and Human Services.

To receive federal section 330 funding, a facility must:

- be located in a federally designated medically underserved area or serve a federally designated medically underserved population;
- be a public or private non-profit facility;
- provide comprehensive primary health services, referrals, and other services needed to facilitate access to care, such as case management, translation, and transportation;
- have a governing board, the majority of whose members are patients of the health center;
- provide services to all in the service area regardless of ability to pay; and
- offer a sliding fee schedule that adjusts according to individual family income.

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1. Study of FQHC Payment Methodologies (Res. 87H)

   **Resolved**, in consultation with the Medicaid/CHIP State Dental Association (MSDA) and other stakeholders, the ADA shall determine the feasibility of a study of the payment methodologies of FQHCs, and be it further **Resolved**, that the appropriate agency will provide an interim report, if feasible, to the Board of Trustees as soon as possible and report to the 2012 House of Delegates.

2. For purposes of this document, the term Federally Qualified Health Center will be used to designate only federally funded facilities participating in the Consolidated Health Centers program run by the Federal government’s Bureau of Primary Health Care (BPHC), within the Health Resources and Services Administration (HRSA) of the Department of Health and Human Services (DHHS). Other facilities that do not receive section 330 funds – such as FQHC Lookalikes and centers that receive only local and state funds – are not included under this definition. FQHCs are commonly known and recognized in federal legislation as Health Centers.

Section 5602 of the Patient Protection and Affordable Care Act (ACA) (P.L. 111-148; 111-152) directs the Department of Health and Human Services to establish a negotiated rule making process to reexamine the methodology for designating medically underserved areas and medically underserved populations (MUA/P) that are experiencing a health service shortage. The ACA also calls for the agency to look at the separate designation of a health professional shortage area (HPSA). The MUA/P designation is used, for example, in helping to determine eligibility for FQHC certification (and the granting of section 330 funding). The HPSA designation is used to determine eligibility for National Health Service Corps (NHSC) placements. The NHSC program provides recruitment incentives such as loan repayments to bring practitioners into underserved areas.

On October 31, 2011, a negotiated rule making committee submitted a recommendation to HRSA. The agency will issue a proposed rule, soliciting comments. In the committee’s report, the components considered for MUA/P designations are population-to-provider ratio, health status, barriers to care, and ability to pay. The most heavily weighted component for an MUA designation is “ability to pay” (those at or below 200 percent of the federal poverty level) at 45 percent. The most heavily weighted component for an MUP designation is “barriers to care” (e.g. limited English proficiency, racial minority, travel time) at 40 percent. The committee stated in its report to HRSA that it did not address the criteria for designating dental HPSAs.

The latest information available (2010) indicates there were 1,124 health centers (about 75 percent of which provide on site dental services) and 8,100 service sites, providing 3,750,481 patients with dental care during 9,231,348 visits. These services were delivered by 2,882 dentists and 1,144 dental hygienists. 93 percent of the patients served are below 200 percent of the federal poverty level (FPL), 72 percent are below 100 percent of the FPL, and 38 percent are uninsured.

Regarding the breath of dental services provided by FQHCs, the federal statute governing health centers requires these facilities to provide only dental screenings to determine the need for dental care and the delivery of preventive dental services. However, the HRSA guidance governing the section 330 grant processes uses the statutory authority given the DHHS Secretary to expand the definition of “primary oral health” care to include not only prevention, education, and emergency care, but also basic restorative and basic rehabilitative services that replace missing teeth. This is commonly referred to as providing comprehensive primary oral health services.

Payment Methodologies

FQHCs receive payments from Medicare, Medicaid, other public insurance (such as the Children’s Health Insurance Program), private insurance, as well as from the patients themselves as out-of-pocket payments. They also rely on grants and other revenue.

According to the 2008 Uniform Data System data reported by HRSA, sources of total FQHC revenue breaks down as follows.

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Medicare | 6 percent  
Medicaid | 37.1 percent  
other public insurance | 2.8 percent  
private insurance | 7.5 percent  
self pay | 6.2 percent  
federal grants (including section 330 grants) | 20.4 percent  
nonfederal grants | 13.9 percent  
other revenue | 6.1 percent

Private Insurance and Self Pay

Like private dental offices, FQHCs take payment from private insurance if the patients have coverage and patients could be required to pay out-of-pocket depending on their financial status. Pursuant to federal law, in addition to seeing all patients living at or below the federal poverty level regardless of ability to pay, the center’s fee schedule is required to be consistent with the private sector rates in the geographic area in which the health center resides, and the FQHC must offer a sliding fee scale for individuals living at or below 200 percent of the FPL. Individuals with income above 200 percent of the FPL must pay the full charges.\(^7\)

Payment Alternatives for Medicaid

Under Medicaid, FQHCs have a choice. They can either be paid the Prospective Payment System (PPS) compensation rate or they can opt for an alternative method of payment that is negotiated with the state for services provided to Medicaid-eligible individuals, generally called an alternative payment methodology (APM).

Prospective Payment System

The Medicare, Medicaid and SCHIP Benefits Improvement and Protection Act of 2000 (P. L. 106-554) established the prospective payment methodology, effective on January 1, 2001, to guarantee FQHCs (and rural health clinics) a minimum per visit payment for services provided to Medicaid beneficiaries. Prior to that, FQHCs had a cost-based reimbursement system that was retrospective in nature allowing for end of the year reconciliation.

The PPS rate is intended to reflect the average cost of providing services to Medicaid beneficiaries and is different from the Medicaid payment system established for private practitioners. FQHCs are reimbursed based on the previous year’s payments, increased by that year’s Medicare Economic Index (measure of physicians’ practice cost inflation) for primary care and adjusted for changes in an FQHC’s scope of services. If the FQHC is a newly established facility, the PPS rates are based on the PPS rates charged by other FQHCs located in the same or adjacent area with a similar caseload. In the absence of such a center or clinic, a newly established facility

\(^7\) 42 CFR 51c. 303(f) and Section 330(k) (3) (G) (i) of the Public Health Service Act.
established FQHC will be reimbursed in accordance with the prospective payment methodology as specified by the Secretary of the Department of Health and Human Services.

FQHCs working within managed care arrangements receive supplemental payments (called wrap around payments)\(^8\) from the State for the difference between the amount they would have received under the PPS and the amount received under contract with the managed care organization. Supplemental payments must be made pursuant to a payment schedule agreed to by the State and the FQHC.

**Alternative Payment Methodology**

A State may use an alternative payment methodology to reimburse FQHCs for services rendered to Medicaid beneficiaries as long as such an alternative methodology reimburses FQHCs at a rate that is no less than the amount that they would be reimbursed using the PPS but only if the health center agrees to the alternative methodology.\(^9\)

**Current Status**

Since 2003, the National Association of Community Health Centers (NACHC) has annually surveyed the state Primary Care Associations to determine the status of PPS implementation.

The 2011 NACHC study’s findings included the following:

**PPS Snapshot**

- 21 states use PPS, 12 use the APM and 12 use both.
- 5 states (MN, NJ, NY, RI, and TN) use an APM other than reasonable cost.
- Majority of states use the MEI for an inflation factor.

**Payment – Rates, Services, Visits**

- 20 states reported that the same PPS/APM rate is paid for all services, while 24 states have more than one rate. 22 states have a separate dental rate.
- 82 percent of states allow for more than one visit per day, although many have conditions on additional visits such as one medical, one dental and one mental health. 5 states don’t place limits on the numbers of visits, while 7 states have a one visit limit.
- 12 states have placed some sort of limits on the number of Medicaid visits per year, not just on FQHCs but other providers as well. For example, some limit the number of a certain type of service like behavioral health or family planning, while 3 states (AR, LA, MS) have a total annual visit limit of 12.

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\(^8\) This supplemental payment provision was added as an incentive for FQHCs to encourage participation in managed care plans. It guarantees a PPS rate as a minimum. See: [http://www.hhs.gov/asi/testify/t050525a.html](http://www.hhs.gov/asi/testify/t050525a.html)

\(^9\) NACHC Issue Brief Medicare/Medicaid Technical Assistance #69, "Understanding the Medicaid Prospective Payment System for Federally Qualified Health Centers (FQHCs)". January 2001.
• 16 states reported that co-pays are deducted from FQHC payments.

• 35 states include dentists as the type of provider who can generate a PPS encounter. 18 states recognize dental hygienists for such purposes.

**Scope of Service**

• 16 states reported that there is no definition of scope of service. Of those states with a definition, the majority said they would like to see it changed.

• 12 states do not have a rate adjustment process. Similarly to the definition, of those that do, the majority said they would like to see it changed.

• In 8 states rate changes are effective the day the new service is added, 6 states also use the date the request is approved and 3 use the date Medicaid receives the request.

• In terms of the time from request to payment, a few states reported as little as 30 or 60 days, but many others reported significant delays from 2 to 5 years.

**Wrap-Around Payments**

• 22 states provide wrap-around payments to FQHCs treating Medicaid managed care enrollees. 14 states indicated that there are no managed care enrollees.

• 9 states provide wrap-around payments on a quarterly basis, 4 provide monthly payments and 4 pay as claims are submitted while 5 more pay every 4-12 months. 15 states reconcile at the end of the year, while 12 do not.

• The PCAs in the majority of states feel that the wrap-around process is problematic, reporting significant delays, even years in a few cases.

• 5 states (CO, CT, MA, MS, DE) actually pay the managed care organizations the wrap-around who in turn pay the health centers. Texas just made this change, which is effective September 1st. NJ, NC, and TN are considering this change.

**Recent Changes**

• 11 states reported policy changes to PPS in the last year. For example, Texas health centers saw their inflation factor reduced, Hawaii required managed care organizations to pay health centers the full amount, and Washington reverted to MEI and significantly reduced the APM for health centers.

• 18 states reported that changes to PPS are currently being considered. Changes being explored include: adding medical education costs (MA), developing APM to implement
primary care homes (OR), claims based reimbursement with managed care organizations paying the wrap-around (TN).\textsuperscript{10}

**Medicare Payments to FQHCs**

The ACA requires the Secretary of the Department of Health and Human Services to establish a PPS (predetermined, fixed amount) for Medicare payments to FQHCs, effective on or after October 1, 2014. This will be a distinct and separate program from the PPS Medicaid program. The new PPS program will eliminate the current all-inclusive payment rate with upper limits and productivity guidelines, which was established in 1992. Currently, Medicare pays FQHCs 80 percent of the all-inclusive rate for each visit and the beneficiary’s coinsurance is 20 percent. No deductibles apply, however. A Government Accountability Office (GAO) study found that about 72 percent of FQHCs had costs per visit that exceeded the upper payment limits.\textsuperscript{11}

**CHIP Payments to FQHCs**

The Children’s Health Insurance Program Reauthorization Act (CHIPRA) signed into law in February 2009 required all separate CHIP plans (those not structured as Medicaid expansions) to pay FQHCs using a PPS/APM methodology modeled after reimbursement laws currently used by Medicaid with an implementation date of October 1, 2009.

Guidance issued by the Centers for Medicare and Medicaid services (CMS) on February 4, 2010, gave states three options with regard to payments to FQHCs for services covered by CHIP: adopt the Medicaid PPS rates, construct separate CHIP PPS rates, or use an alternative payment methodology, with an October 1, 2009, implementation date. To accommodate the implementation date, many states had to make retroactive PPS-based payments.

A June 2010 assessment by the Association of State and Territorial Health Officials shows that:

- 20 states with separate or combination CHIP plans reported that they already paid the PPS rate for CHIP services at FQHCs prior to the CHIPRA law enactment. Of those 20 programs, six are separate CHIP programs and the rest are all combination.

- 11 states with separate or combination CHIP have implemented an FQHC PPS since CHIPRA was enacted. Eight chose Medicaid PPS rate and three chose APM.

- Since the enactment of CHIPRA, 11 additional states implemented CHIP PPS for FQHCs, five of which are separate CHIP programs. Eight of these 11 states use the Medicaid PPS rate with only three states opting for an APM. (As with Medicaid, a CHIP FQHC APM would require a payment to each FQHC that is no less than what the FQHC would receive under CHIP PPS and must be agreed to by the FQHC.)

- Two of the states using the APM reported that it would be higher than the Medicaid PPS rate. All states reported that they are paying health centers based on the PPS/APM retroactively to October 1, 2009.


Out of these 11 states that have implemented a CHIP FQHC PPS program since the enactment of CHIPRA, five reported the system working “very well”, five reported it was working “good” and one reported that it “needs improvements”. Kansas reported that their wrap-around payment method and settlement process is working very well. Florida reported an issue with providers not identifying themselves as FQHCs to the managed care organization until they seek payment after the fact.\textsuperscript{12}

List of Acronyms

ACA: Patient Protection and Affordable Care Act  
APM: Alternative Payment Methodology  
CHIP: Children’s Health Insurance Program  
CHIPRA: Children’s Health Insurance Program Reauthorization Act  
CMS: Centers for Medicare and Medicaid Services  
FPL: Federal Poverty Level  
FQHCs: Federally Qualified Health Centers  
GAO: Government Accountability Office  
HPSA: Health Professional Shortage Area  
HRSA: Health Resources and Services Administration  
MEI: Medicare Economic Index  
MUA: Medically Underserved Area  
MUP: Medically Underserved Population  
MUA/P: Medically Underserved Area and Population  
NACHC: National Association of Community Health Centers  
NHSC: National Health Service Corps  
PPS: Prospective Payment System

\textsuperscript{12} Association of State and Territorial Health Officials, “\textit{Status of CHIP Prospective Payer System Implementation: An Assessment of State CHIP Directors}”, 
Background: The following resolution was submitted by the Thirteenth Trustee District and transmitted on October 16, 2012, by Debra S. Finney, MS, DDS, 13th District, Legal, Legislative and Public Affairs Matters Reference Committee Workgroup Chair.

The 2011 ADA House of Delegates approved a review of the ADA’s governance structure (Resolution 38H-2011), which was completed this year with several recommendations coming forward for the ADA House to consider. While the governance review was extensive, it did not include a comprehensive review of the ADA Bylaws. A bylaws review is the logical next step to undertake as the ADA seeks to acquire greater operational flexibility in order to provide value sufficient to attract and retain members.

The Association recently adopted the American Institute of Parliamentarians Standard Code of Parliamentary Procedure, which states that bylaws should be concise and not include administrative details. The ADA Bylaws contain many policies and procedures that would be better managed within the context of a policy or operating manual. For example, Chapters XII and XIII of the ADA Bylaws give detailed information regarding all aspects of disciplinary actions that can be taken against members for ethics and member conduct violations. These chapters comprise 13 pages which affect very few members and contain much information that is administrative or procedural in nature. As there is a greater set of requirements for amending Bylaws than operating or policy manuals, having such provisions within them is restrictive and reduces the ADA’s ability to be responsive to its members and changing conditions.

Additionally, a review will provide the Association with the opportunity to ensure consistency within its governing documents and eliminate any potential conflicts between the Bylaws and ADA policy.

It is recommended that the entity charged with reviewing the Bylaws work with an outside consultant who can provide information on association best practices for bylaws development and structure. It is estimated that the cost of hiring an external consultant for this project could be up to $25,000.

Resolution

172. **Resolved**, that the ADA direct the appropriate entity to conduct a comprehensive review of the ADA Bylaws, and be it further

**Resolved**, that recommendations for changes to the Bylaws be brought forward to the 2013 ADA House of Delegates for consideration.

BOARD RECOMMENDATION: Received after this section had been reproduced for House distribution.
Resolution No. 175

Report: NA

Date Submitted: October 2012

Submitted By: Seventeenth Trustee District

Reference Committee: Legal, Legislative and Public Affairs Matters

Total Net Financial Implication: None

Net Dues Impact: None

Amount One-time FTE 0

Amount On-going FTE 0

ADA Strategic Plan Goal: Financial

Resolution 175. Resolved, that the ADA Constitution be amended by addition to Article IV Government, Section 20, in line 52 after the word “Board” the following: “with the exception that the Board and the House of Delegates shall have joint responsibility for development and adoption of the annual budget” so that Section 20 reads:

Section 20. ADMINISTRATIVE BODY: The administrative body of the Association shall be a Board of Trustees, which may be referred to as ‘the Board” or “this Board,” with the exception that the Board and the House of Delegates shall have joint responsibility for development and adoption of the annual budget.

BOARD RECOMMENDATION: Received after this section had been reproduced for House distribution.