



Status of guidelines and the scope of the specialty

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In 1990 the AAPD Education Committee formed a Subcommittee (subsequently an Ad Hoc Committee) on Advanced Education Guidelines. Members are: Steven M. Adair, Joel H. Berg, Charles R. Hall, Arthur J. Nowak, William A. Phillips, A. Charles Post, Henry W. Fields Jr. (ex-officio), John A. Bogert, (ex-officio) and Gerald A. Ferretti (Chair). The charge to the subcommittee was to review the existing Standards for Advanced Education Programs in Pediatric Dentistry as adopted by the ADA Commission on Dental Accreditation and the definition of pediatric dentistry as adopted by the ADA Council on Dental Education and to make recommendations for revisions to these documents in concert with the current scope of the specialty.

Over the past six years many hours of committee work, several solicitations for comments by program directors, hearings at the AAPD Annual Session, and circulation for comments from the communities of interest, including all of the recognized dental specialty organizations has occurred. This work resulted in several revised drafts of the documents.

The definition of pediatric dentistry was first submitted to the ADA Council on Dental Education in 1995 and, after being returned to the Council by the ADA House of Delegates for further circulation and comment, was finally approved by the 1996 ADA House of Delegates.

The advanced education guidelines were presented to the ADA Commission on Dental Accreditation in January, 1996, along with a rationale document. After minor modifications the guidelines were circulated to the communities of interest and appointed for a hearing in conjunction with the Annual Session of the American Association of Dental Schools in San Francisco on March 17, 1996.

While moving the guidelines forward for circulation, the Commission also requested that AAPD provide further justification for the must statements in Standard 5 and Standard 11. This additional rationale document was submitted to the Commission on April 15, 1996.

Comments from the communities of interest received by April 15, along with comments presented at the hearing on March 17 were considered by the Commission at their next meeting in July, 1996.

The Standards were adopted by the Commission. The implementation date for the revised standards will be July 1, 1997.

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Standards for advanced specialty education programs in pediatric dentistry

Pediatric dentistry is an age-defined specialty that provides both primary and comprehensive preventive and therapeutic oral health care for infants and children through adolescence, including those with special health care needs.

(Adopted October 1995)

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Implementation Date: July 1, 1997

Standard on Program Director (Standard 2)

Revised: July, 1994

Implementation date: January 1, 1997

Standard on Student Evaluation (Standard 8.a)

Revised: January, 1995

Implementation date: July 1, 1995

Standard on Due Process (Standard 9)

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Standard on Outcomes Assessment (Standard 12)

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The Standards for Advanced Specialty Education Programs in Pediatric Dentistry were approved by the Commission on Dental Accreditation in May 1984 for implementation in the accreditation of advanced pediatric dentistry programs effective January 1, 1985. The document was developed in cooperation with the American Academy of Pediatric Dentistry and the American Board of Pediatric Dentistry and is designed to serve three purposes:

1. To assist educational institutions and program directors in structuring new programs.
2. To promote improvement and enhancement of existing programs.

3. To serve as the standards by which the Commission evaluates advanced pediatric dentistry programs for accreditation purposes.

Preface

Maintaining and improving the quality of advanced education in the nationally recognized specialty areas of dentistry is a primary aim of the Commission on Dental Accreditation. The Commission is recognized by the public, the profession, the Commission on Postsecondary Accreditation and the United States Department of Education as the specialized accrediting agency in dentistry.

Accreditation of advanced specialty programs is a voluntary effort of all parties involved. The process of accreditation assures students, specialty boards and the public that accredited training programs are in essential compliance with published standards.

Accreditation is extended to institutions offering acceptable programs in the following recognized specialty areas of dental practice: dental public health, endodontics, oral pathology, oral and maxillofacial surgery, orthodontics and dentofacial orthopedics, pediatric dentistry, periodontics and prosthodontics. Major changes in the program administration or curriculum **must** be reported promptly to the Commission on Dental Accreditation. Program accreditation will be withdrawn when the training program no longer conforms to the requirements as specified in this document, when all first-year positions remain vacant for a period of two years or when a program fails to respond to requests for program information.

Exceptions for non-enrollment may be made by the Commission for programs with "approval" status upon receipt of a formal request from an institution stating reasons why the status of the program should not be withdrawn.

Advanced education in a recognized specialty area of dentistry may be offered on either a graduate or postgraduate basis.

A graduate program is a planned sequence of advanced courses leading to a master's or doctoral degree granted by a recognized and accredited educational institution.

A postgraduate program is a planned sequence of advanced courses that leads to a certificate of completion in a specialty recognized by the American Dental Association. The level of specialty area instruction in the graduate and postgraduate programs **must** be comparable.

This document constitutes the standards by which the Commission on Dental Accreditation and its consultants will evaluate advanced programs in each specialty for accreditation purposes. The Commission on Dental Accreditation establishes general requirements which are common to all dental specialties, institutions and programs regardless of specialty. Each specialty develops specific requirements for education programs in its specialty. The general and specific requirements,

subsequent to approval by the Commission on Dental Accreditation, set forth the requirements for the essential educational content, instructional activities, patient care responsibilities, supervision and facilities that should be provided by programs in the particular specialty.

General requirements are identified by the use of a single numerical listing (e.g., 1). Specific requirements are identified by the use of multiple numerical listings (e.g., 1.1, 1.1.2, 1.2).

Accreditation actions by the Commission on Dental Accreditation are based upon information gained through written submissions by program directors and evaluations made on site by assigned consultants. The Commission has established advisory committees in each of the recognized specialties to review site visit and progress reports and make recommendations to standing committees of the Commission. Advisory committees are composed of representatives selected by the specialties and their certifying boards. The Commission has the ultimate responsibility for determining a program's accreditation status. The Commission is also responsible for adjudication of appeals of adverse decisions and has established policies and procedures for appeal. A copy of policies and procedures may be obtained from the Director, Commission on Dental Accreditation, 211 East Chicago Avenue, Chicago, Illinois 60611.

Definition of terms

The verbs used in this document (i.e., shall, **must**, should, can and may) were selected carefully and indicate the relative weight that the Commission attaches to each statement. The definitions of these words as used in the *Standards* are as follows:

Must or 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 or Could: Indicates freedom or liberty to follow a suggested alternative.

Board Certified: Indicates that the individual is an educationally qualified pediatric dentist who has successfully completed a voluntary examination and who demonstrates unique knowledge and skill at a standard not usually possessed by other dentists.*

Board Eligible: An educationally qualified pediatric dentist who has paid a filing fee to the certifying board and whose application and credentials have been approved. Board eligibility expires exactly six years from the date on which the application was approved.*

Educationally Qualified: A dentist who has successfully completed an advanced education program in pediatric dentistry which is accredited by the Commission on Dental Accreditation.*

**** Student:** An individual enrolled in an advanced

education program, either graduate or post-graduate; can also be used to define Resident.

* As defined by the American Board of Pediatric Dentistry

** As defined by the Commission on Dental Accreditation

**Levels of Knowledge

1. **In-depth:** a thorough knowledge of concepts and theories for the purpose of critical analysis, synthesis and evaluation. (highest level of knowledge)
2. **Understanding:** adequate knowledge with the ability to apply.
3. **Familiarity:** basic knowledge for the purposes of orientation and recognition of general principles.

**Levels of Skill

1. **Proficient:** the level of skill attained when a particular activity is accomplished with repeated quality and efficient utilization of time. (highest level of skill)
2. **Competent:** adequate ability to perform a particular activity.
3. **Exposed:** the level of skill attained by observation of, or participation in, a particular activity.

** As defined by the Commission on Dental Accreditation

1. **INSTITUTIONAL COMMITMENT:** Advanced specialty dental education programs **must** be sponsored by institutions which are properly chartered and licensed to operate and offer instruction leading to degrees, diplomas or certificates with recognized educational validity. The principal institutions for advanced dental education are dental schools and hospitals. Hospitals that sponsor advanced education programs should be accredited by the Joint Commission on Accreditation of Health Care Organizations. The bylaws, rules and regulations of hospitals that sponsor or provide a substantial portion of advanced specialty education programs **must** assure that dentists are eligible for medical staff membership and privileges including the right to vote, hold office, serve on medical staff committees and admit, manage and discharge patients.

There shall be a commitment on the part of the institution that the educational program will provide training and health services of the highest quality. This responsibility includes, but is not limited to, assuring an administrative system which is dedicated to education and provides for the involvement of teaching faculty in selection of candidates, program planning, program review and evaluation on a regular basis.

The program should be a recognized entity within the institution's administrative structure. The position of the program in the administrative structure should be consistent with that of other

parallel programs and the administrator should have authority, responsibility and privileges equal to those of other program administrators.

The educational mission **must** not be compromised by a reliance on students to fulfill institutional service, teaching or research obligations. Resources and time **must** be provided for the proper achievement of educational obligations. Institutions sponsoring advanced dental specialty programs **must** provide financial support which will assure fulfillment of program objectives and accreditation requirements on a continuing basis. Appropriations should provide for innovations and changes to reflect current concepts of higher education and the practice of the specialty.

2. **PROGRAM DIRECTOR AND TEACHING STAFF:** The program **must** be administered by a director who is board certified or board eligible in the respective specialty(ies) of the program. Board eligibility is a status designated by the certifying board for a limited time period to identify individuals who have formally applied to the board and have been found to meet the stated eligibility requirements. (Program directors not board certified by January 1, 1984, will be exempt from this requirement. All program directors appointed after January 1, 1984, who have not previously served as program directors **must** be board certified or board eligible.) The director **must** have sufficient authority and time to fulfill administrative and teaching responsibilities in order to achieve the educational goals of the program. In addition, it is the director's responsibility to assure that students completing the program have achieved the standards of performance established for the program and for practice in the specialty.

The program faculty should have a strong interest in teaching and be willing to contribute the necessary time and effort to the educational program. A major portion of the specialty instruction and supervision **must** be conducted by individuals who are educationally qualified in the discipline. In addition, it is strongly recommended that individuals who provide instruction and supervision specific to a given specialty area be board certified in that specialty.

- 2.1 The program director should have at least a half-time appointment and have at least five years of experience after completion of a graduate or postgraduate pediatric dentistry program.
- 2.2 The program director **must** devote sufficient time to the program to meet the educational and administrative responsibilities including: (1) student selection; (2) curriculum development and implementation; (3) ongoing evaluation of pro-

gram goals, objectives and content and outcomes assessment; (4) periodic evaluation of faculty teaching; (5) evaluation of student performance; (6) program administration; (7) participation in planning for and operation of facilities used in the educational program; (8) evaluation of students' training and supervision in affiliated institutions; (9) maintenance of records related to the educational program, including written instructional objectives and course outlines; (10) responsibility for overall continuity and quality of patient care; and (11) and oversight responsibility for student research.

- 2.3 Instruction and supervision within the specialty of pediatric dentistry **must** be conducted by individuals who are certified by the American Board of Pediatric Dentistry, are board eligible, or are educationally qualified for certification. Foreign trained faculty **must** be comparably qualified. Individuals who provide instruction and supervision within the specialty of pediatric dentistry appointed prior to July 1, 1989 who are not board certified, board eligible, or educationally qualified will be exempt from this standard. All individuals appointed after July 1, 1989 who have not previously provided instruction and supervision within the specialty of pediatric dentistry **must** be board certified, board eligible, or educationally qualified for certification. Qualified teachers of biomedical sciences and other health disciplines should be available to teach in the advanced programs.
 - 2.3.1 The program clinical faculty and attending staff **must** have specific and regularly scheduled clinic assignments to ensure the continuity of the program.
 - 2.3.2 There **must** be immediate availability of clinical faculty for all clinical sessions including those scheduled in service clinics. The clinical faculty **must** be held accountable for assigned duties and responsibilities.
- 2.4 The pediatric dentistry faculty **must** develop cooperative arrangements with other medical and dental departments or specialties to provide comprehensive services to children.
- 2.5 The faculty should include members who conduct basic and/or applied research.
- 2.6 Annual evaluation of faculty performance by the program director or department chair **must** occur. These evaluations should be discussed with each faculty member.
3. **RADIOLOGY:** Attention **must** be directed to the judicious use of ionizing radiation for diagnosis and management of oral disease with a view to minimizing the use of ionizing radiation to patients and to users of such radiation. Policies and procedures **must** be developed in cooperation

with all other clinical departments or services on use of ionizing radiation (selection criteria). Implementation of the policies and procedures **must** be monitored on a continuing basis so that use of ionizing radiation is controlled.

Radiographic examination(s) **must** be secured only after a complete review of the medical, oral and dental histories and following a thorough clinical examination. Such examination(s) **must** be based on the needs of the patient for diagnostic purposes. Radiographic examination(s) **must** not be secured for administrative purposes.

The radiology facilities, including satellite radiology facilities located in extramural clinics, **must** be modern, adequately designed and shielded to afford the optimal degree of radiation protection for users of x-ray equipment and for individuals who may be in the immediate environment of such equipment while x-ray exposures are made. The institution **must** document its compliance with applicable regulations for radiation hygiene and protection.

- 3.1 A record **must** be maintained of the number and type of all film exposures in the patient's records of clinical care.
- 3.2 The student **must** be proficient in obtaining, processing and interpreting radiographs according to accepted standards of care.
4. **FACILITIES AND RESOURCES:** Institutional facilities and resources **must** be adequate to provide the educational experiences and opportunities required to fulfill the needs of the educational program as specified in these Standards. These include, but are not limited to, facilities and personnel resources for students to carry out their patient care and personal educational responsibilities, administrative offices, and an adequate library providing access to standard reference texts and current journals and sufficient space for instruction.

Equipment and supplies for use in managing medical emergencies **must** be readily accessible and functional. In addition to ionizing radiation, attention **must** be directed to the judicious use and monitoring of nitrous oxide, mercury, drugs and other substances and techniques that might be hazardous to patients or personnel. Each institution **must** establish and enforce written preclinical/clinical laboratory protocols to ensure adequate asepsis, infection and hazard control and disposal of hazardous waste consistent with existing federal, state and local guidelines. These protocols **must** be provided to all students, faculty and appropriate support staff. Mechanisms **must** be established for continuously monitoring compliance with

these protocols within the institution and affiliated sites. The institution **must** document its compliance with applicable regulations. Students **must** be encouraged to be immunized against infectious diseases, for example mumps, measles, rubella and hepatitis B, prior to contact with patients and/or potentially infectious objects or materials, in an effort to minimize risk of infection to patients and dental personnel.

All students, faculty and support staff involved in the direct provision of patient care **must** be recognized (certified) in basic life support procedures including cardiopulmonary resuscitation. Recertification intervals **must** not exceed two years. There **must** be written institutional policies requiring the continuous recognition of all students, faculty and support staff involved in the direct provision of patient care. Recognition records **must** be maintained by the program. Documentation **must** be on file for anyone who is medically or physically unable to perform such services.

The Commission on Dental Accreditation only endorses the use of facilities in sponsoring and affiliated institutions. The use of private office facilities as a means of providing clinical experiences in advanced specialty education is not approved.

- 4.1 **Ambulatory Facilities:** Space **must** be designated specifically for the advanced program in pediatric dentistry. These facilities should be supplied with modern equipment and instruments. The facilities should provide flexibility to allow for changes in equipment location and for additions or deletions to improve operating efficiency, and promote efficient use of dental instrumentation and allied personnel.
 - 4.1.1 Adequate radiographic and laboratory facilities **must** be available and should be in close proximity to the patient treatment area.
 - 4.1.2 Clinic facilities **must** be accessible to patients with special health care needs.
 - 4.1.3 Recovery area facilities **must** be provided. A recovery area is defined as a designated space equipped properly for patients recovering from sedation.
 - 4.1.4 Reception and patient education areas **must** be available where children and parents can be introduced to the clinic and prepared for treatment.
 - 4.1.5 A hospital operating suite **must** be equipped for carrying out comprehensive oral health procedures.
 - 4.1.6 Inpatient facilities **must** be available to permit management of general and oral problems for patients with special health care needs.

- 4.1.7 Adequate administrative and clerical personnel **must** be provided.
- 4.1.8 There **must** be a sufficient number of operatories to accommodate the number of students enrolled.
- 4.1.9 Adequate allied dental personnel **must** be assigned to the program to ensure clinical and laboratory technical support.
- 4.2 **Research Facilities:** Facilities **must** be available for students to conduct basic and/or applied research.
- 4.3 **Information Resources:** Appropriate information resources **must** be available, including access to biomedical textbooks, dental journals and other sources pertinent to the area of pediatric dentistry practice and research.
- 4.4 **Patient Availability:** A sufficient pool of patients requiring a wide variety of oral health care **must** be available to provide ample opportunity for training. In addition to healthy individuals, patients with special health care needs **must** also be available.

5. **CURRICULUM AND PROGRAM DURATION:** The advanced dental specialty program **must** be designed to provide special knowledge and skills beyond the D.D.S. or D.M.D. training and **must** be oriented to the accepted standards of specialty practice as set forth in specific requirements contained in this document. The goals of the clinical and didactic components of the program **must** be clearly identified and documented. Documentation of all program activities **must** be maintained by the program director and available for review.

The duration of an advanced specialty program **must** include two or more calendar years of full-time formal training as specified by the Commission for each specialty area. The director of an accredited program may enroll students on a part-time basis providing that: (1) students are also enrolled on a full-time basis; (2) the educational experiences, including the clinical experiences and responsibilities, are the same as acquired by full-time students; and (3) there is an equivalent number of months spent in the program. Students enrolled on a part-time basis **must** be continuously enrolled and **must** complete the total curriculum in a period of time not to exceed twice the duration of the program for full-time students. Part-time students **must** start and complete the program within a single institution.

Each program must present a curriculum that prepares its students to provide and/or support the provision of oral health care services to patients with blood borne infectious diseases.

Appropriate content related to bloodborne infectious diseases must be integrated throughout the didactic and preclinical/clinical/laboratory components of the curriculum. Applicable basic and applied concepts must be incorporated into all aspects of the educational program. Each student must understand the ethical, legal and regulatory considerations related to bloodborne infectious diseases. Each student must be able to apply those concepts in providing and/or supporting the provision of oral health care services to patients. Discussion formats should be used to ensure that students achieve a sufficient level of understanding of these considerations.

- 5.1 **Goals of Advanced Education in Pediatric Dentistry:** The goal of an advanced education program in pediatric dentistry is to prepare a specialist who is proficient in providing both primary and comprehensive preventive and therapeutic oral health care for infants and children through adolescence, including those with special health care needs.

This individual is trained to provide services in institutional, private, or public health settings. The program encourages the development of a critical and inquiring attitude that is necessary for the advancement of practice, research, and teaching in pediatric dentistry. The program educates future pediatric dentists to work in coordination with members of other healthcare and social disciplines.

- 5.2 **Curriculum:** The program provides the opportunity to extend the student's diagnostic ability, basic and advanced clinical knowledge and skills, and critical judgment. Also, it offers experience in closely related areas to ensure that students become proficient in comprehensive care. The core portion of the curriculum includes all subject matter necessary for the development of a pediatric dentist. A supporting portion of the curriculum extends the student's educational experience and enhances his/her ability to think critically and independently and to communicate information clearly, effectively and accurately.

- 5.2.1 Allocation of time should approximate the following guidelines:

Clinical 55%
Didactic 20%
Research 15%
Teaching 5%
Elective 5%

- 5.2.2 **Biomedical Sciences:** Biomedical sciences **must** be included to support the clinical, didactic and research portions of the curriculum. The biomedical sciences may be integrated into existing

courses arranged especially for the pediatric dentistry program.

Instruction in the following biomedical sciences **must** be included at the understanding level:

- A. **BIOSTATISTICS and CLINICAL EPIDEMIOLOGY:** Including probability theory, descriptive statistics, hypothesis testing, inferential statistics, principles of clinical epidemiology and research design.
 - B. **PHARMACOLOGY:** Including pharmacokinetics, interaction and oral manifestations of chemotherapeutic regimens, pain and anxiety control, and drug dependency.
 - C. **MICROBIOLOGY:** Including virology, immunology, and cariology.
 - D. **EMBRYOLOGY:** Including principles of embryology with a focus on the developing head and neck, and craniofacial anomalies.
 - E. **GENETICS:** Including human chromosomes, Mendelian and polygenic patterns of inheritance, expressivity, basis for genetic disease, pedigree construction, physical examination and laboratory evaluation methods, genetic factors in craniofacial disease and formation and management of genetic diseases.
 - F. **ANATOMY:** Including a review of general anatomy and head and neck anatomy with an emphasis on the growing child.
 - G. **ORAL PATHOLOGY:** Including a review of the epidemiology, pathogenesis, clinical characteristics, diagnostic methods, formulation of differential diagnoses and management of oral and perioral lesions and anomalies with emphasis on the infant, child, and adolescent.
- 5.2.3 **Clinical Science Core:**
- A. **Instruction must be provided at the in-depth level in:**
 1. Physical, psychological and social development. This should include the basic principles and theories of child development and the age-appropriate behavior responses in the dental setting.
 2. Behavior Management
 - a. Child behavior management in the dental setting and the objectives of various management methods.
 - b. Principles of communication techniques, including the descriptions of and recommendations for the use of specific techniques.
 3. The principles of informed consent relative to behavior management and treatment options.
 4. The principles and objectives of conscious sedation, deep sedation and general anesthesia as behavior management techniques, including indications and contraindications for their use.

5. The epidemiology of oral diseases encountered in pediatric patients, including those pediatric patients with special health care needs.
 6. The oral diseases encountered in pediatric patients, including those pediatric patients with special health care needs.
 7. The ability to diagnose oral and perioral lesions and anomalies in infants, children, and adolescents; treat common oral diseases; perform uncomplicated biopsies and adjunctive diagnostic tests; order necessary laboratory tests; and refer persistent lesions and/or extensive surgical management cases to appropriate specialists. Adjunctive diagnostic tests would include exfoliative cytology, microbial cultures, and other commercially available tests, such as the herpes simplex antigen test.
 8. Pediatric oral and maxillofacial radiology and appropriate procedures of radiation hygiene.
 9. The scientific basis for the prevention and treatment of dental caries, periodontal and pulpal diseases, traumatic injuries, and developmental anomalies, especially in the following areas:
 - a. Infant oral health care.
 - b. The effects of proper nutrition, fluoride therapy and sealants in the prevention of oral diseases.
 - c. Restorative and prosthetic techniques and materials for the primary, mixed and permanent dentitions.
 - d. The prevalence and severity of gingival, periodontal and other mucosal disorders in children and adolescents.
 - e. Pulp histology and pathology of primary and young permanent teeth, including indications and rationale for various types of indirect and direct pulp therapy.
 10. The prevention and management of medical emergencies in the dental setting.
 11. Medical conditions and the alternatives in the delivery of dental care that those conditions might require.
 12. Craniofacial growth and development to enable the student to diagnose, consult with and/or refer to other specialists, problems affecting orofacial esthetics, form or function. This should include, but is not limited to:
 - a. Theories of growth mechanisms.
 - b. Principles of comprehensive diagnosis and treatment planning to identify normal and abnormal dentofacial growth and development.
 - c. The indications and contraindications for extraction and non-extraction therapy, growth modification, dental compensation for skeletal problems, growth prediction and treatment modalities.
 13. Recognition, referral and treatment of child abuse and neglect.
 14. Formulation of treatment plans for patients with special health care needs.
- B. Instruction must be provided at the understanding level in:**
1. Fundamentals of pediatric medicine including those related to pediatric patients with special health care needs such as:
 - a. Developmental disabilities.
 - b. Genetic/metabolic disorders.
 - c. Infectious disease.
 - d. Sensory impairments.
 - e. Chronic disease.
 2. Normal language development and the recognition of language delays/disorders; the anatomy and physiology of articulation and normal articulation development; causes of defective articulation with emphasis on oral anomalies, craniofacial anomalies, dental or occlusal abnormalities, velopharyngeal insufficiency (VPI), history of cleft lip/palate and normal velopharyngeal function and the effect of VPI on resonance.
 3. The design, implementation and management of a contemporary practice of pediatric dentistry, emphasizing business skills for proper and efficient practice.
 4. Jurisprudence and risk management.
 5. Use of computers in didactic, clinical and research endeavors, as well as in practice management.
 6. Biomedical ethics.
- 5.2.4 Clinical Core:** The clinical experiences **must** be of sufficient quantity and variety to provide a broad range of learning experiences. The student **must** have the opportunity to work cooperatively with consultants and clinicians in other dental specialties and health fields.
- A. The program must provide clinical experiences that enable students to achieve proficiency in:**
 1. Basic life support (Pediatric Advanced Cardiac Life Support preferred).
 2. Pediatric patient management using non-pharmacological and pharmacological approaches consistent with approved guidelines for care.
 3. Application of preventive practices including:
 - a. Scientific principles, techniques and treatment planning for the prevention of oral diseases.
 - b. Dental health education programs, materials and personnel to assist in the delivery of preventive care.
 4. Management of comprehensive restorative and prosthetic care for pediatric patients.
 5. Management of orofacial injuries as follows. The

student **must** diagnose and treat traumatic injuries of the oral and perioral structures including:

- a. Evaluation and treatment of trauma to the primary, mixed and permanent dentitions, such as repositioning, replantation and stabilization of intruded, extruded, luxated, and avulsed teeth.
 - b. Evaluation, diagnosis, and management of the pulpal, periodontal and associated soft tissues following traumatic injury.
 - c. Recognition of injuries including fractures of the maxilla and mandible and referral for treatment by the appropriate specialist.
 - d. Recognition and reporting child abuse and neglect and non-accidental trauma.
6. Ability to diagnose the various periodontal diseases of childhood and adolescence, treat and/or refer cases of periodontal diseases to the appropriate specialist.
7. Management of pulpal and periradicular tissues in the primary and developing permanent dentition.
8. Management of the oral health of pediatric patients and/or those with special health care needs, such as those who are:
- a. Medically compromised.
 - b. Physically compromised or disabled.
 - c. Diagnosed to have developmental disabilities, psychiatric disorders or psychological disorders.
- B. **The program must provide clinical experiences that ensure competency in diagnosis of abnormalities in the developing dentition and treatment of those conditions which can be corrected or significantly improved by the early utilization of limited procedures.**
- 5.2.5 **Hospital Experience:** Students **must** acquire knowledge and skills to function as health care providers within the hospital setting.
- A. **The program must provide the following clinical experiences:**
1. Dental care in the Hospital-Based Operating Room Setting: Each student **must** participate in the treatment of pediatric patients under general anesthesia in the operating room. Each student **must** participate in a minimum of twenty (20) operating room cases, ten (10) of which the student **must** provide the pre-operative workup and assessment, conducting medical risk assessment, admitting procedures, informed consent, and intra-operative management including completion of the dental procedures, post-operative care, discharge and follow up and completion of the medical records.
 2. Inpatient Care: Students **must** participate in the evaluation and medical management of pediatric patients admitted to the hospital. The

student's role **must** include participating in admitting procedures, completing of consultation requests, obtaining and evaluating patient/family history, orofacial examination and diagnosis, ordering radiological and laboratory tests, writing patient management orders, pediatric patient monitoring, discharging and chart completion.

3. Emergency Care: Students **must** be scheduled regularly for pediatric dental emergency services that offer sufficient clinical experiences to enable the student to achieve competency in the assessment and management of oro-facial trauma, dental pain and infections.
4. Anesthesiology Rotation: Students **must** complete a rotation through the anesthesiology department of a hospital. This rotation **must** be at least four consecutive weeks and be the principal activity of the student during this scheduled time. The anesthesiology rotation **must** be structured to provide the student with knowledge and experience in the management of children and adolescents undergoing general anesthesia. The rotation should provide experiences such as pre-operative evaluation, risk assessment, assessing the effects of pharmacologic agents, venipuncture techniques, airway management, general anesthetic induction and intubation, administration of anesthetic agents, patient monitoring, prevention and management of anesthetic emergencies, recovery room management, postoperative appraisal and followup.
5. Pediatric Medicine Rotation: Students **must** participate in a pediatric medicine rotation of at least two (2) weeks duration which is the student's principal activity during this scheduled period. The rotation **must** include exposure to obtaining and evaluating complete medical histories, parental interviews, system-oriented physical examinations, clinical assessments of healthy and ill patients, selection of laboratory tests and evaluation of data, evaluation of physical, motor and sensory development, genetic implications of childhood diseases, the use of drug therapy in the management of diseases, and parental management through discussions and explanations.
6. Pediatric Patients with Special Health Care Needs: Experiences **must** be included to broaden the students' overall knowledge and skills in the evaluation and management of pediatric patients with special health care needs such as:
 - a. Rotations: These rotations may be of varying length and include regular attendance at conferences, seminars, clinic participation, and, if applicable, clinical inpatient rounds.
 - b. Multidisciplinary Team Service: Student involvement in multidisciplinary team service

includes participation in the oral assessment, discussion of the management and delivery of necessary dental procedures for pediatric patients with special health care needs.

B. The program should provide the following experiences:

1. **Emergency Room Rotation:** Each student should participate in an emergency room rotation. This rotation should total at least two (2) weeks duration and be an experience beyond regular dental emergency duties.

2. **Hospital Lectures, Seminars and Staff Meetings:** Students should regularly attend lectures, seminars and conferences presented by the hospital dental or medical staff. Students should attend medical and/or dental staff meetings and any other hospital functions deemed appropriate. These meetings should familiarize students with hospital policies and procedures, medical/dental staff organization, and staff member responsibilities.

5.2.6 **Teaching Experience:** Instruction should be provided at the understanding level in principles of education. When students are teaching, faculty **must** be available immediately for supervision and instruction.

5.2.7 **Elective Experience:** Students should participate in elective experiences that are designed to broaden their knowledge and provide them with an opportunity to gain knowledge in areas of specific interest.

5.2.8 **Extramural Experience:** As part of preparing students for a role in the community, they should have experience in providing services at the community level.

5.3 **Program Duration:** The duration of an advanced education program in pediatric dentistry **must** be a minimum of 24 months.

6. **ELIGIBILITY AND SELECTION:** Dentists with the following qualifications are eligible to enter advanced dental specialty programs accredited by the Commission on Dental Accreditation:

- a. Graduates from institutions in the U.S. accredited by the Commission on Dental Accreditation.
- b. Graduates from institutions in Canada accredited by the Commission on Dental Accreditation of Canada.
- c. Graduates of foreign dental schools who possess equivalent educational background and standing.

There should be an admission policy which is designed to identify those students with standards of integrity, motivation, industry, resourcefulness and basic knowledge required for completing the specialty curriculum. Nondiscriminatory policies **must** be followed in selecting students.

Advanced placement or credit by examination should be granted in accordance with institution and Commission policies and shall be based on the same standards of achievement that are required for other students who earn credit in the usual way.

7. **AFFILIATIONS:** When the resources of two or more institutions are utilized for the conduct of a single program, each participating institution or organizational unit **must** demonstrate a commitment to the advanced educational program. Documentary evidence of agreements, approved by the institutions, **must** be available for inspection by assigned site visit consultants. The following items should be covered in such interinstitutional agreements:

- a. Designation of a single program director. The scope of the director's authority to direct and coordinate the program's activities in all participating institutions should be clearly set forth in written statements.
- b. The teaching staff responsible for providing the educational program and supervising students in each institution **must** be designated.
- c. The expected contribution of the educational objectives of the program to be provided by each institution to the program should be delineated.
- d. The period of assignment of students to the segment of the program provided by each institution, and any priority of assignment should be set forth.
- e. Each institution's financial commitment to the direct support of the program should be specifically identified.

The primary sponsor of the educational program **must** accept full responsibility for the quality of education provided in all affiliated institutions.

8. **STUDENT EVALUATION:** There **must** be documentation of ongoing evaluation and advancement of students. The system **must** assure that, through the director and faculty, each program:

- a. Periodically, but at least semi-annually, evaluates the knowledge, skills and professional growth of its students, using appropriate **written** criteria and procedures.
- b. Formally provides to students an assessment of their performance, at least semi-annually. More frequent evaluations and documentation of such evaluation should be made if it is determined a student may not be properly motivated or eligible for advancement or retention in the program.
- c. Advances students to positions of higher responsibility only on the basis of an evaluation of their readiness for advancement.

- d. Maintains a personal record of evaluation for each student.
- 8.1 Evaluation of students should include daily supervision of clinical procedures, particularly in the first year, to ensure high quality care and continuous improvement of clinical skills. A variety of evaluation methods should be used.
9. **DUE PROCESS:** There **must** be specific written procedures for adjudication of academic and disciplinary complaints. These procedures should parallel those established by the parent institution when possible and **must** ensure due process to protect the recognized rights and responsibilities of students/ residents. The procedures **must** include institutional policy which provides for due process for all individuals who may be potentially involved when actions are contemplated or initiated which could result in dismissal of a student/ resident. When there are grievances against a program or an institution, it is imperative that review of these grievances be initiated at the local level prior to the involvement of outside organizations or agencies.
10. **STUDENT RIGHTS AND RESPONSIBILITIES:** Candidates for acceptance should be apprised, in general, of the educational experience to be provided, including the nature of assignments to other departments or institutions and teaching commitments. Additionally, all students should be provided with written information which affirms their obligations and responsibilities to the institution, the program and program faculty. The statement should include, but not necessarily be limited to, information about: 1) tuition, stipend or other compensation; 2) vacation and sick leave; 3) practice privileges and other activities outside the educational program; 4) professional liability coverage; 5) due process policy; and 6) the current accreditation status of the program.
11. **RESEARCH:** The application of research methods and the evaluation of investigative data develop intellect, a creative attitude, a better interpretation of scientific literature and a desire for continued study. Students should be encouraged to engage in an investigative project. Such research may take the form of:
- a. Investigation in laboratories or clinics.
 - b. Comprehensive summaries of scientific literature or the preparation of statistical analyses based on clinical case records or existing data sets.
- 11.1 **Research Experience:** Students **must** initiate and complete a research paper including data collection and analysis, using the elements of scientific method, including research design, accurate reporting, critical thinking and the formulation of conclusions based upon data rather than opinion. Affiliation with hospitals, medical institutions and other health-oriented organizations should be encouraged to foster collaborative research.
12. **OUTCOMES ASSESSMENT:** Each program **must** regularly evaluate the degree to which its goals are being met through a formal assessment of outcomes. The Commission on Dental Accreditation expects each program to define its own goals and objectives for preparing pediatric dentists. The Commission expects that one of the goals of the program is to prepare qualified pediatric dentists.
- Accredited programs **must** design and implement their own outcomes measures to determine the degree to which their stated goals and objectives are being met. Outcomes measures **must** include, as appropriate, consideration of course completion, state licensing examination, and job placement rates. One measure of the quality of an education program may be the success of graduates on the certification examination of the relevant discipline. Such measurements **must** be ongoing and systematically documented. Results of the assessment process **must** be used to evaluate the program's effectiveness in meeting its goals and to foster enhanced student achievement.
- 12.1 A Commission-accredited advanced education program in pediatric dentistry **must** use, among other outcomes measures, the successful completion by its graduates of the American Board of Pediatric Dentistry certification process.
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