REPORT OF THE REVIEW COMMITTEE ON PEDIATRIC DENTISTRY EDUCATION TO THE COMMISSION ON DENTAL ACCREDITATION

Committee Chair: Dr. Joel Berg. Committee Members: Dr. James Boynton, Dr. Kevin Haubrick, Dr. Joseph Morales, and Dr. Anupama Tate. Commissioner Trainee: Ms. Lisa Mayer observed the meeting as a Commissioner Trainee. Guests (Open Session Only): Dr. Sheila Brear, chief learning officer, American Dental Education Association; Dr. Gregory Olson, president, American Board of Pediatric Dentistry; Ms. Leola Royston, education development and academic support manager, American Academy of Pediatric Dentistry; and Dr. Leila Younger, executive director, American Board of Pediatric Dentistry attended the policy portion of the meeting. Staff Members: Ms. Kirsten Nadler, manager, Advanced Dental Education and Ms. Jennifer Snow, manager, Advanced Dental Education, Commission on Dental Accreditation. Dr. Sherin Tooks, director, CODA and Ms. Cathryn Albrecht, senior associate general counsel, CODA attended a portion of the meeting. The meeting of the Review Committee on Pediatric Dentistry Education (PED RC) was held on July 12, 2022 via a virtual meeting.

CONSIDERATION OF MATTERS RELATED TO PEDIATRIC DENTISTRY EDUCATION

Informational Report on Frequency of Citings of Accreditation Standards for Advanced Dental Education Programs in Pediatric Dentistry (p. 1200): The Review Committee on Pediatric Dentistry Education (PED RC) considered the annual report on the frequency of citings of the Accreditation Standards for Advanced Dental Education Programs in Pediatric Dentistry implemented July 1, 2013. The PED RC noted that 114 site visits have been conducted from July 1, 2013 through October 31, 2021. Further, the PED RC noted that the most frequently cited pediatric dentistry-specific area of non-compliance, with 20 citings, is in Standard 4 related to advocacy (Standards 4-26, 4-27 and 4-28). Standard 4-26, related to didactic instruction in advocacy was cited a total of 9 times and Standard 4-27, related to clinical experiences in advocacy, was cited a total of 11 times. The most frequently cited pediatric dentistry-specific standard falls under Standard 4-6 related to clinical experiences in patient management using behavior guidance with a total of 20 citings. The Commission will continue to receive reports annually summarizing the updated data on the frequency of citings of individual Standards.

Recommendation: This report is informational in nature and no action is required.

Report on the Ad Hoc Committee on Pediatric Dentistry Anesthesia Standards (p. 1201): At its August 2021 meeting, the Commission on Dental Accreditation directed the establishment of a multidisciplinary Ad Hoc Committee composed of current and former Pediatric Dentistry Review Committee members as well as representation from the Dental Anesthesiology Review Committee and the Oral and Maxillofacial Surgery Review Committee to study the use of sedation in patient management, including the potential need for revision of the Accreditation Standards for Advanced Dental Education Programs in Pediatric Dentistry, as applicable, with a report to the Commission in Winter 2022.

The Ad Hoc Committee on Pediatric Dentistry Anesthesia Standards held two (2) meetings in November 2021 and determined that a definition of "Sole Primary Operator" should be added to the Definition of Terms within the Accreditation Standards for Advanced Dental Education Programs in Pediatric Dentistry. Additionally, the Ad Hoc Committee determined that an intent statement should be added to Pediatric Dentistry Standard 4-7 to clarify that "Each patient encounter shall have only one (1) sole primary operator." At its Winter 2022 meeting, the PED RC recommended adoption of these revisions with immediate implementation, and the Commission concurred (**Appendix 1, Policy Report p. 1201**).

The Ad Hoc Committee also believed that additional meetings were required to discuss outstanding issues related to its charge, with the inclusion of an additional member to provide further perspectives on the American Academy of Pediatric Dentistry anesthesia guidelines. As such, at its Winter 2022 meeting, the PED RC also recommended, and the Commission concurred, that the Commission invite the American Academy of Pediatric Dentistry's Chair of the Council on Clinical Affairs, Committee on Sedation and Anesthesia to join the Ad Hoc Committee as an additional member to provide a perspective on the potential revision to the Accreditation Standards for Advanced Dental Education Programs in Pediatric Dentistry related to anesthesia education for pediatric dentistry. The Commission further directed the Ad Hoc Committee on Pediatric Dentistry Anesthesia Standards to continue its review of pediatric dentistry Accreditation Standards which may warrant revision, with a report to the Commission in Summer 2022.

The Ad Hoc Committee held two (2) additional meetings in May and June 2022. As the discussion continued, the Ad Hoc Committee reviewed components of Pediatric Dentistry Standard 4-7a and b, suggesting the revisions found in **Appendix 2, Policy Report p. 1201**. The proposed revisions differentiate "minimal" and "moderate" sedation. The Committee also determined that the age of pediatric dentistry patients should be clarified to "patients 13 or under." Further, of the sedation cases not performed as the sole primary operator, beyond those 15 encounters that must involve direct patient care, the remaining may include simulation experiences. The Ad Hoc Committee thoroughly considered the use of simulation in health care education. The Committee noted educational "simulation" methods ranging from written case studies that only address knowledge through simulation methods using high-fidelity mannequins that simulate a real patient experience and assess knowledge and hands-on skill. It was noted that, if used appropriately, simulation that models that real patient experience may provide a valid educational tool. The Ad Hoc Committee believed that case-based written and/or discussion simulation activities are not appropriate methods through which knowledge and skill can be fully assessed.

The Ad Hoc Committee further noted that in September 2011, the Association of American Medical Colleges (AAMC) published the "Medical Simulation in Medical Education: Results of an AAMC Survey" in which the AAMC, for the purpose of the survey, defined "simulation." Following discussion, the Ad Hoc Committee believed that the AAMC's definition should be added to the Definition of Terms in reference to simulation activities that are permitted within the Accreditation Standards for pediatric dentistry programs **(Appendix 2, Policy Report p.**

1201).

The Ad Hoc Committee also concluded and recommended that, with future enhancements in technology and changes in educational models, the Commission further study simulation and its implications to dental and dental-related education programs as it relates to all disciplines within the Commission's purview, through formation of an Ad Hoc Committee representing all disciplines, with a future report to the Commission.

At this meeting, the PED RC carefully considered the proposed revisions to the Accreditation Standards for Advanced Dental Education Programs in Pediatric Dentistry submitted by the Ad Hoc Committee. Following discussion, the PED RC supported the proposed revisions to the standards submitted by the Ad Hoc Committee, as found in **Appendix 1**. The Review Committee also supported the Ad Hoc Committee's recommendation with regard to the Commission's further study of simulation and its implications to dental and dental-related education programs as it relates to all disciplines within the Commission's purview. Following review of comments on the proposed revisions to the Accreditation Standards regarding simulation in Summer 2023, the Commission may consider formation of an Ad Hoc Committee to engage in further study of simulation and its implications for all disciplines within CODA's purview.

In summary, the PED RC recommended that the proposed revisions to the Accreditation Standards for Advanced Dental Education Programs in Pediatric Dentistry (**Appendix 1**) be circulated to the communities of interest for review and comment, with Hearings held in conjunction with the October 2022 American Dental Association and March 2023 American Dental Education Association meetings, with comments reviewed at the Commission's Summer 2023 meetings. The PED RC further recommended that the Commission study simulation and its implications to dental and dental-related education programs as it relates to all disciplines within the Commission's purview, through formation of an Ad Hoc Committee representing all disciplines, with a future report to the Commission.

> **Recommendation:** It is recommended that the Commission on Dental Accreditation direct circulation of the proposed revisions to the Accreditation Standards for Advanced Dental Education Programs in Pediatric Dentistry **(Appendix 1)**, to the communities of interest for review and comment, with Hearings conducted in conjunction with the October 2022 American Dental Association and March 2023 American Dental Education Association meetings, with comments reviewed at the Commission's Summer 2023 meetings.
>
> It is further recommended that the Commission on Dental Accreditation, at its Summer 2023 meeting and following review of the proposed Pediatric Dentistry Standards Revisions, consider future study and definition of the potential uses of simulation, as an educationally valid teaching and evaluation tool, within dental education for all disciplines in the Commission's purview, with a future report to the Commission.

CONSIDERATION OF MATTERS RELATING TO MORE THAN ONE REVIEW COMMITTEE

Matters related to more than one review committee are included in a separate report.

CONSIDERATION OF MATTERS RELATED TO ACCREDITATION STATUS

Matters related to accreditation status of programs are included in a separate report.

Respectfully submitted,

Dr. Joel Berg
Chair, Review Committee on Pediatric Dentistry Education

Commission on Dental Accreditation

Proposed Revisions to Standard 4-7 and Addition of Simulation Definition
Additions are Underlined
~~Strikethroughs~~ indicate Deletions

Accreditation Standards for Advanced Dental Education Programs in Pediatric Dentistry

Accreditation Standards for Advanced Dental Education Programs in Pediatric Dentistry

Commission on Dental Accreditation
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https://coda.ada.org/en

Definitions of Terms Used in Pediatric Dentistry Accreditation Standards

The terms 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 used in the Standards are as follows:

Must or Shall: Indicates an imperative need and/or duty; an essential or indispensable item; mandatory.

***Intent*:** Intent statements are presented to provide clarification to the advanced dental education programs in pediatric dentistry in the application of and in connection with compliance with the Accreditation Standards for Advanced Dental Education Programs in Pediatric Dentistry. The statements of intent set forth some of the reasons and purposes for the particular Standards. As such, these statements are not exclusive or exhaustive. Other purposes may apply.

Examples of evidence to demonstrate compliance include: Desirable condition, practice or documentation indicating the freedom or liberty to follow a suggested alternative.

Should: Indicates a method to achieve the standards.

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

Graduates of discipline-specific advanced dental education programs provide unique services to the public. While there is some commonality with services provided by specialists and general dentists, as well as commonalities among the specialties, the educational standards developed to prepare graduates of discipline-specific advanced dental education programs for independent practice should not be viewed as a continuum from general dentistry. Each discipline defines the educational experience best suited to prepare its graduates to provide that unique service.

Competencies: Statements in the advanced dental education standards describing the knowledge, skills and values expected of graduates of discipline-specific advanced dental education programs.

Competent: Having the knowledge, skills and values required of the graduates to begin independent, unsupervised discipline-specific practice.

In-depth: Characterized by thorough knowledge of concepts and theories for the purpose of critical analysis and synthesis.

Understanding: Knowledge and recognition of the principles and procedures involved in a particular concept or activity.

Other Terms:

Institution (or organizational unit of an institution): a dental, medical or public health school, patient care facility or other entity that engages in advanced dental education.

Sponsoring institution: primary responsibility for advanced dental education programs.

Affiliated institution: support responsibility for advanced dental education programs.

Advanced dental education student/resident: a student/resident enrolled in an accredited advanced dental education program.

A degree-granting 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 certificate program is a planned sequence of advanced courses that leads to a certificate of completion in an advanced dental education program.

Student/Resident: The individual enrolled in an accredited advanced dental education program.

International Dental School: A dental school located outside the United States and Canada.

Evidence-based dentistry: 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.

Formative Assessment*: guiding future learning, providing reassurance, promoting reflection, and shaping values; providing benchmarks to orient the learner who is approaching a relatively unstructured body of knowledge; and reinforcing students' intrinsic motivation to learn and inspire them to set higher standards for themselves.

Summative Assessment*: making an overall judgment about competence, fitness to practice, or qualification for advancement to higher levels of responsibility; and providing professional self-regulation and accountability.

Resident Clinical Log (RCL): A secure and valid account of procedures and experiences of a student/resident maintained by the program for use in evaluation, accreditation, quality assurance and other purposes.

Treatment: Refers to direct care provided by the student/resident for that condition or clinical problem.

Management: Refers to provision of appropriate care and/or referral for a condition consistent with contemporary practice and in the best interest of the patient.

REFERENCE MANUAL: The most current version of The American Academy of Pediatric Dentistry Oral Health Policies and Recommendations.

Sole Primary Operator: The student/resident providing the assessment, drug delivery, treatment, monitoring, discharge and emergency prevention/management in conjunction with other medical personnel as required by institutional policies. Each patient encounter shall have only one (1) sole primary operator.

Interprofessional Education**: When students/residents and/or professionals from two or more professions learn about, from and with each other to enable effective collaboration to improve health outcomes. *(Adapted from the WHO 2010)*

Social Determinants of Health***: The social determinants of health are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels. The social determinants of health are mostly responsible for health inequities - the unfair and avoidable differences in health status seen within and between countries. *(From the WHO)*

Simulation****: A method used in health care education to replace or amplify real patient experiences with scenarios designed to replicate real health encounters, using lifelike mannequins, physical models, standardized patients, or computers.

*Epstein, R. M. (2007). Assessment in Medical Education. The New England Journal of Medicine, 387-96.

** Definition adapted from the World Health Organization (WHO). (2010). Framework for action on interprofessional education & collaborative practice. Geneva: World Health Organization.

*** Definition from the World Health Organization (WHO). (Retrieved from https://www.who.int/social_determinants/sdh_definition/en/, 2019)

****Definition from the Association of American Medical Colleges (AAMC) Medical Simulation in Medical Education: Results of an AAMC Survey. (Retrieved June 29, 2022 from https://www.aamc.org/system/files/c/2/259760-medicalsimulationinmedicaleducationanaamcsurvey.pdf)

STANDARD 4 – CURRICULUM AND PROGRAM DURATION

CLINICAL SCIENCES

BEHAVIOR GUIDANCE

4-6 Didactic Instruction: Didactic instruction in behavior guidance **must** be at the in-depth level and include:

a. Physical, psychological and social development. This includes the basic principles and theories of child development and the age-appropriate behavior responses in the dental setting;
b. Child behavior guidance in the dental setting and the objectives of various guidance methods;
c. Principles of communication, listening techniques, and communication with parents and caregivers;
d. Principles of informed consent relative to behavior guidance and treatment options;
e. Principles and objectives of sedation and general anesthesia as behavior guidance techniques, including indications and contraindications for their use in accordance with the REFERENCE MANUAL; and
f. Recognition, treatment and management of adverse events related to sedation and general anesthesia, including airway problems.

Intent: *The term "treatment" refers to direct care provided by the residents/student for that condition or clinical problem. The term "management" refers to provision of appropriate care and /or referral for a condition consistent with contemporary practice and in the best interest of the patient.*

4-7 Clinical Experiences: Clinical experiences in behavior guidance **must** enable students/residents to achieve competency in patient management using behavior guidance:

a. Experiences **must** include infants, children and adolescents including individuals with special health care needs, using:
    1. Non-pharmacological techniques;
    2. Minimal ~~S~~sedation; and
    3. Moderate sedation ~~Inhalation analgesia~~.

b. Students/Residents **must** perform adequate patient encounters to achieve competency:

1.~~Students/Residents **must** complete a minimum of 20 nitrous oxide analgesia patient encounters as primary operator; and~~

2. 1. Students/Residents **must** complete a minimum of 50 patient encounters in

which sedative agents other than nitrous oxide (but may include nitrous oxide in combination with other agents) are used to sedate pediatric patients (patients 13 or under), or patients with special health care needs. The agents may be administered by any route.

a. Of the 50 patient encounters, each student/resident **mus**t act as sole primary operator in a minimum of 25 sedation cases.

b. Of the remaining sedation cases (those not performed as the sole primary operator), each student/resident **must** gain clinical experience, which can be in a variety of activities or settings ~~including individual or functional group monitoring and human simulation~~. At least 15 encounters **must** involve direct patient care, the remaining of which may include simulation experiences.

2.In addition to the above, students/residents **must** complete a minimum of 20 nitrous oxide patient encounters as primary operator; and

3. ~~c.~~ All sedation cases **must** be completed in accordance with the recommendations of the REFERENCE MANUAL and/or applicable institutional policies and state regulations.

***Intent**: Programs will provide or make available adequate opportunities to meet the above requirements which are consistent with those experiences required by jurisdictions with policies regulating pediatric sedation in dental practice. The numbers of encounters cited in the Standard represents the minimal number of experiences required for a student/resident. In the sole primary operator role, the student/resident is expected to provide the assessment, drug delivery, treatment, monitoring, discharge and emergency prevention/management in conjunction with other medical personnel as required by institutional policies. Each patient encounter shall have only one (1) sole primary operator.*

~~*In the remaining sedation cases, where the student/resident is not the primary operator, the supplemental cases provide the student/resident with:*~~

~~(1)*direct clinical participation in patient care in an observational, data-gathering, monitoring, and/or recording capacity,*~~
~~(2)*simulation experiences with direct clinical application to elements of the REFERENCE MANUAL, or*~~
~~(3) *participation in ongoing activities related to specific patient care episodes such as quality improvement and safety initiatives, apparent cause analysis, Morbidity & Mortality conferences, and/or clinical rounds that review essential elements of an actual patient sedation visit.*~~

In the remaining sedation cases, where the student/resident is not the primary operator, ~~T~~these experiences require documentation and inclusion in the RCL. It is not an appropriate learning

experience for groups of students/residents to passively observe a single sedation being performed. The intent of this standard is not for multiple operators to provide limited treatment on the same sedated patient in order to fulfill the sedation requirement.