PEDIATRICS AND ANESTHESIOLOGY COMBINED TRAINING REQUIREMENTS (LEADING TO DUAL CERTIFICATION)

PREAMBLE

This document is intended to provide educational guidance to program directors in pediatrics and anesthesiology as well as to individuals potentially interested in combined training in pediatrics and anesthesiology. All program requirements in both specialties, as described on the ACGME web site (https://www.acgme.org/), apply to combined residencies unless specifically modified in this document. However, this integrated program will require five, not six, years as would be necessary if these two residency programs were completed sequentially. Every program that wishes to offer this combined training must be approved by both the American Board of Pediatrics (ABP) and the American Board of Anesthesiology (ABA) before residents are recruited. In addition, both Boards (and Residency Review Committees, RRCs, when applicable) will review these training requirements periodically.

OBJECTIVES OF COMBINED TRAINING

Combined training in pediatrics and anesthesiology should allow the development of physicians who are fully qualified in both specialties. Physicians completing this training should be competent pediatricians and anesthesiologists capable of professional activity in either discipline. It is anticipated that many trainees will develop careers focused on caring for children with complex medical and surgical conditions who are hospitalized and/or require perioperative/periprocedural management. The strengths of the two residencies should complement each other to provide the optimal educational experience and to develop leaders in the field.

Both boards encourage residents to extend their training for an additional sixth year or more in subspecialty training in pediatrics or anesthesiology and/or investigative, administrative or academic pursuits in order to prepare graduates of this combined training program for careers in research, teaching, or departmental administration and to become leaders in their fields.

GENERAL REQUIREMENTS

Residency Candidates

Residents should enter a combined training residency at the first postgraduate year level (PGY-1). A resident may enter this combined residency at the PGY-2 level only if the first residency year was served in a categorical residency in pediatrics in the same academic medical center. Transitional year training will provide no credit toward the requirements of either Board. Residents may not enter combined residency training and receive credit beyond the PGY-1 level or transfer to another combined residency without the prospective approval of both Boards. A resident transferring from a combined residency to a categorical pediatric or anesthesiology program should seek specific eligibility information from the appropriate Board.

A resident in the pediatrics and anesthesiology combined program may be absent from training (vacation,
parental, sick, etc.) up to a total of five months during the 60 months of required training. Eight weeks (40 days) additional leave from training (above the five months) will be considered. All absences will be shared equally by both training residencies. Absences in excess of those described above will require lengthening of the total training time to compensate for the additional absences from training. The revised policy is in effect for trainees who graduate in 2022 or later.

**Characteristics of Eligible Combined Residencies**

The two participating core residency programs must be accredited by the ACGME and be within the same academic medical center. They must be located close enough to facilitate cohesion among the residents, attendance at conferences when scheduled, and faculty exchanges of curriculum, evaluation, administration and related matters. They should both be sponsored by the same ACGME Sponsoring Institution. The one exception is when the pediatric program is sponsored by an independent, free-standing, children’s hospital in which case the Designated Institutional Official (DIO) of the institution that sponsors the pediatric residency program will be the DIO with responsibility for institutional oversight of the combined program.

**Training**

The training requirements for eligibility for each board’s certification process will be satisfied by the satisfactory completion of 60 months of approved combined training. A reduction of 12 months over that required for the two separate residencies is possible due to the overlap of curriculum and experience inherent in the training of each discipline. The reduction of six months of the standard 36 months of pediatric training is met by 30 months of training in the pediatric component of the combined residency and six months of credit granted for training appropriate to pediatrics obtained during the 30 months of anesthesiology residency. The requirement of 48 months of training in anesthesiology is met by the 12 months of the first year of residency in pediatrics, 30 months of training in the anesthesiology component of the combined residency, and six months of credit for training appropriate to anesthesiology obtained during the remaining 18 months of residency in pediatrics. The working relationships developed among categorical and combined residency trainees will facilitate communication between the two specialties and increase the exposure of categorical residents to the other discipline. Training in each discipline must incorporate graded responsibility throughout the training period.

Training in the PGY-1 must include 12 months of training in pediatrics. During the second year, the resident must have 12 months of training in anesthesiology. In each of the remaining three years, the resident shall have six months of training in pediatrics and six months of training in anesthesiology. Rotations of shorter duration, but not less than three months, are also acceptable. During these last three years, it is important that program directors make certain that in the PGY-3-5, each resident will have 18 months of training in each specialty.

**Faculty**

The combined residency must have one designated director who will be responsible for all administrative aspects of the program and who can devote substantial time and effort to the educational program. This individual can be the director of either the residency program in pediatrics or anesthesiology; the director of the other categorical residency program will be designated the associate director of this combined program. An exception to this requirement would be a single director who is certified in both specialties and has an academic appointment in each department. If the pediatric training largely occurs in an independent, free-standing children’s hospital, the program director of the combined program should be
the director of the pediatric residency program. The director and associate director must document meetings with each other at least quarterly to monitor the success of the residency and the progress of each resident.

Well-established communication must occur between these individuals, particularly in those areas where the basic concepts in both specialties overlap, to assure that the training of residents is well coordinated.

The program director is responsible for assuring all aspects of the program requirements are met. This individual, along with the associate program director, should submit the application for the program to both the ABP and ABA and notify both boards should any significant changes occur in either of the associated categorical residency programs. The program director and associate program director are responsible for completing evaluation forms for all trainees in the combined program as required by their respective Boards, and both must verify satisfactory completion of the training program on the resident’s final evaluation form.

As a general principle, the training of residents in pediatrics is the responsibility of the pediatric faculty and the training of residents in anesthesiology is the responsibility of the anesthesiology faculty. There should be an adequate number of faculty members who devote sufficient time to provide leadership to the residency and supervision of the residents. It is recommended that some faculty members have completed combined training in these two specialties. Since each component of the residency must be accredited by its respective discipline, the faculty must meet the requirements for their specialty.

Pediatric faculty must be certified by the American Board of Pediatrics or have acceptable educational qualifications in pediatrics as judged by the ACGME’s RC for Pediatrics. Anesthesiology faculty must be certified by the American Board of Anesthesiology or the American Board of Osteopathic Anesthesiology or have acceptable educational qualifications in anesthesiology, as judged by the ACGME’s RC for Anesthesiology.

**Curricular Requirements**

A clearly described written curriculum must be available for residents, faculty, and the RCs of both Pediatrics and Anesthesiology. The curricular components must conform to the program requirements for accreditation in pediatrics and anesthesiology. The curriculum must assure a cohesive, planned educational experience and not simply comprise a series of rotations between the two specialties. Duplication of clinical experiences between the two specialties should be avoided. Periodic review of the residency curriculum must be performed by the program director and associate program director in consultation with residents and faculty from both departments. Combined training must not interfere with or compromise the training of the categorical residents in either field.

Joint educational conferences involving residents from pediatrics and anesthesiology are desirable and should specifically include the participation of all residents in the combined training residency whenever possible.

**REQUIREMENTS FOR PEDIATRICS**

The training should be the same as described in the ACGME Program Requirements for Graduate Medical Education for Pediatrics as outlined in this document with the exceptions that follow.
The curriculum should be organized in educational units. An educational unit should be a block (four weeks or one month) or a longitudinal experience. An outpatient educational unit should be a minimum of 32 half-day sessions. An inpatient educational unit should be a minimum of 200 hours. The specific curriculum elements are detailed in the following chart.

**Program Requirements in General Pediatrics for Combined Training in Pediatrics-Anesthesiology**

<table>
<thead>
<tr>
<th>Component</th>
<th>Educational Unit*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medicine and Acute Illness</td>
<td>3 (with at least 2 in ED)</td>
</tr>
<tr>
<td>Developmental-Behavioral Pediatrics</td>
<td>1</td>
</tr>
<tr>
<td>Adolescent Medicine</td>
<td>1</td>
</tr>
<tr>
<td>Term Newborn</td>
<td>1</td>
</tr>
<tr>
<td>Inpatient Pediatrics (non-ICU)</td>
<td>5 (no maximum)</td>
</tr>
<tr>
<td>Ambulatory Experiences (to include community pediatrics and child advocacy)</td>
<td>2</td>
</tr>
<tr>
<td>NICU</td>
<td>2</td>
</tr>
<tr>
<td>PICU</td>
<td>2</td>
</tr>
<tr>
<td><strong>Additional Subspecialty</strong></td>
<td>7 (minimum)</td>
</tr>
</tbody>
</table>

*Educational Unit = Four weeks or one month block OR outpatient longitudinal experience of 32 half-day sessions OR inpatient longitudinal experience of 200 hours

**Additional Subspecialty** includes four units from four different subspecialties from the following list:

- child abuse
- medical genetics
- pediatric allergy and immunology
- pediatric cardiology
- pediatric dermatology
- pediatric endocrinology
- pediatric gastroenterology
- pediatric hematology-oncology
- pediatric infectious diseases
- pediatric nephrology
- pediatric neurology
- pediatric pulmonology
- pediatric rheumatology

An additional three units of single or combined subspecialties are required from the list above or below:

- child and adolescent psychiatry
- hospice and palliative medicine
- neurodevelopmental disabilities
- pediatric dentistry
- pediatric ophthalmology
- pediatric orthopaedic surgery
- pediatric otolaryngology
- pediatric rehabilitation medicine
- pediatric radiology
- pediatric surgery
- sleep medicine
- sports medicine

**Subspecialty Experience**

Educational experiences in the subspecialties must emphasize the competencies and skills needed to practice high-quality general pediatrics in the community. They should be a blend of inpatient and outpatient experiences and prepare residents to participate as team members in the care of patients with chronic and complex disorders. Pediatric anesthesiology should not be used to fulfill the subspecialty requirements during the 30 months of general pediatrics training.
Supervisory Responsibility

At least five months of supervisory responsibility must be provided for each resident during the 30 months of pediatrics training and must include experience leading an inpatient team.

Continuity Clinic

Continuity clinic in general pediatrics is required throughout the 30 months of pediatric training in accordance with the RC requirements. The number of weekly half-day sessions per year should be prorated on the basis of the number of pediatrics months assigned per year. It is expected that these experiences continue at least once a month during anesthesiology training; attendance at pediatric conferences is desirable on the day of pediatric continuity clinics. Program directors have discretion to determine whether the reciprocal time on the other specialty should be for a half day or a full day once a month as long as equal time is devoted to each specialty.

The medical home model of care must focus on wellness and prevention, coordination of care, longitudinal management of children with special healthcare needs, and provide a patient and family-centered approach to care.

Additional Experiences

To fulfill the additional six months of pediatrics training required in the combined program, the focus of the curriculum should be on providing experiences that will help residents be better prepared for the next step in their career after residency. The curriculum might include additional subspecialty experiences not already used to fulfill the core subspecialty requirement in pediatrics, additional supervisory experiences on an inpatient pediatric service, or other electives.

**REQUIREMENTS FOR ANESTHESIOLOGY**

1) The development of the resident’s skills in anesthesiology will be fostered by rotations in anesthesiology and its subspecialties caring for adult as well as pediatric patients.

2) The training should be the same as described in the program requirements of the RC for Anesthesiology with the exceptions that follow.

3) Thirty months of training must be in anesthesiology. The additional 6 months of credit is recognized through 6 months of pediatric training.

4) Training in anesthesiology must include the following experiences:
   - Two identifiable one-month rotations in obstetric anesthesiology, pediatric anesthesiology, neuroanesthesiology, and cardiothoracic anesthesiology. A rotation in pediatric anesthesiology, if taken during the first postgraduate year, is not considered part of this requirement for two months of pediatric anesthesiology experience.
   - A minimum of two months experience in an adult intensive care unit in addition to the requirements for training in neonatal and pediatric critical care medicine.
   - Three months of pain medicine; this may include one month in an acute perioperative pain management rotation, one month in the assessment and treatment of inpatients and outpatients with chronic pain problems, and one month of regional analgesia experience.
• Two weeks in a preoperative evaluation clinic.
• Two weeks of providing anesthesia for diagnostic or therapeutic procedures outside the surgical suites.

5) Advanced experiences can be in additional focused anesthesia subspecialties, related areas, or research.

6) No single subspecialty, excluding critical care medicine, shall exceed six months total.

7) Minimum clinical experiences as defined by the program requirements for anesthesiology must be met.

8) Rotations cannot be “counted” twice. Thus, rotations (such as pediatric critical care medicine, etc.) may be considered by the program to meet the requirements for training in pediatrics or anesthesiology, but not both simultaneously.

9) It is expected that anesthesiology experiences continue at least once a month during pediatric training; attendance at anesthesiology conferences is desirable on these days of anesthesiology practice. Program directors have discretion to determine whether the reciprocal time on the other specialty should be for a half day or a full day once a month as long as equal time is devoted to each specialty.

Evaluation

There must be adequate, ongoing evaluation of the knowledge, skills and performance of residents. Entry evaluation assessment, interim testing and periodic reassessment, utilizing appropriate evaluation modalities, including in-training exams as currently required by both pediatrics and anesthesiology, should be employed. There must be a method of documenting the procedures that are performed by the residents. Such documentation must be maintained by the program director and/or associate program director, be available for review by the RCs in Pediatrics and Anesthesiology, the ABP, the ABA, and site visitors, and may be used to provide documentation for application for hospital privileges by graduates of these training programs.

The faculty must provide a written evaluation of each resident after each rotation and these must be available for review by the site visitors of RCs. Written evaluation of each resident’s knowledge, skills, professional growth, and performance, using appropriate criteria and procedures, must be accomplished at least semi-annually and must be communicated to and discussed with the resident in a timely manner.

Residents should be advanced to positions of higher responsibility only on the basis of evidence of their satisfactory progressive scholarship and professional growth.

The program director and associate program director are responsible for the maintenance of a permanent record of each resident and its accessibility to the resident and other authorized personnel. The program director, associate program director, and faculty are responsible for provision of a written final evaluation for each resident who completes the program. This evaluation must include a review of the resident’s performance during the final period of training in each specialty and should verify that the resident has demonstrated sufficient professional ability to practice competently and without supervision and is
prepared to apply for the certification processes of both the ABP and ABA. This final evaluation should be part of the resident’s permanent record and should be maintained by the institution.

**Eligibility for Certification**

The residents in a combined training residency must satisfactorily complete the specific requirements of both the ABP and ABA to be eligible for the exam by each Board. Clinical competence must be verified by both the program director and associate program director in their respective specialties. Lacking this verification, the resident must satisfactorily complete 3 years of training in pediatrics or 3 years training in anesthesiology in addition to the PGY-1 to qualify for the exam in the respective specialty.

Residents who wish to be certified by ABA will be required to take the ABA BASIC Exam. The BASIC Exam, the first in a series of exams, will be offered to residents at the end of their CA-1 year. It focuses on the scientific basis of clinical anesthetic practice. It is offered twice per year. A resident who fails the BASIC Exam for the first time may take the exam again at the next opportunity. A resident who fails the BASIC Exam a second time will automatically receive an “unsatisfactory” for the Clinical Competence Committee reporting period, during which the exam was taken. After a third failed attempt at the BASIC Exam, a resident will be required to complete six months of additional training under the guidance of the anesthesiology training program. After a fourth failed attempt, a resident will be required to complete an additional 12 months of residency training also under the direction of the anesthesiology training program. Continuation of residency training is at the discretion of the individual training program. A resident cannot graduate from anesthesiology residency training without passing the BASIC Exam. The Board strongly encourages residents to register and take the BASIC Exam as soon as they meet the requirements.

Upon successful completion of all requirements of the combined residency, the candidate is qualified to take both the ABP and ABA certification exams. Residents may submit a registration for the general pediatrics certifying exam and the ABA’s ADVANCED Exam during their fifth year of training; however, registrants may not take either of these exams until all of the combined residency training requirements have been successfully completed. The ABA’s APPLIED Exam can occur at the earliest the following year. The APPLIED Exam includes two components: a Standardized Oral Exam (SOE) and an Objective Structured Clinical Exam (OSCE).

The candidate will be certified by each board upon successful completion of its certifying requirements. Certification in one specialty will not be contingent upon certification in the other. It is the candidate’s responsibility to complete the certification process in each specialty.

_Amended August 2017_

_The American Board of Pediatrics and The American Board of Anesthesiology, Inc._