Commission on Accreditation of Allied Health Education Programs

Standards and Guidelines for the Accreditation of Educational Programs in Anesthesia Technology

Standards initially adopted in 2011

Adopted by the: American Society of Anesthesia Technologists and Technicians, Committee on Accreditation for Anesthesia Technology Education, and CAAHEP

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredits programs upon the recommendation of the Committee on Accreditation for Anesthesia Technology Education (CoA-ATE).

These accreditation Standards and Guidelines are the minimum standards of quality used in accrediting programs that prepare individuals to enter the Anesthesia Technology profession. Standards are the minimum requirements to which a program is held accountable. Guidelines are descriptions, examples, or recommendations that elaborate on the Standards. Guidelines are not required, but can assist with interpretation of the Standards.

Standards are printed in regular typeface in outline form. Guidelines are printed in italic typeface in narrative form.

Preamble
The Commission on Accreditation of Allied Health Education Programs (CAAHEP), the American Society of Anesthesia Technologists and Technicians (ASATT), and the Committee on Accreditation for Anesthesia Technology Education (CoA-ATE) cooperate to establish, maintain and promote appropriate standards of quality for educational programs in Anesthesia Technology and to provide recognition for educational programs that meet or exceed the minimum standards, outlined in these Standards and Guidelines. Lists of accredited programs are published for the information of students, employers, educational institutions and agencies, and the public.

These Standards and Guidelines are to be used for the development, evaluation, and self analysis of Anesthesia Technology programs. On-site review teams assist in the evaluation of a program’s relative compliance with the Approval Standards.

Description of the Profession:
Anesthesia technology is an allied health profession specifically focused on fundamental and advanced clinical procedures which assist the anesthesia provider in the safe and efficient care of patient’s under anesthesia. The Anesthesia Technologist works under the direction of an anesthesia provider as a vital member of the anesthesia care team. The Anesthesia Technologist is proficient in the acquisition, preparation, and application of various types of equipment required for the delivery of anesthesia care. Cognitive abilities involve knowledge of anatomy/physiology, pathophysiology, pharmacology, and principles of anesthesia technology. Independent judgment is required for rapid response to the quickly changing circumstances in the patient care environment. The Anesthesia Technologist exhibits professionalism in patient and staff interactions.

Anesthesia technologists may work in a variety of clinical settings including: hospital operating rooms, interventional and diagnostic radiology, labor and delivery units, intensive care units, emergency rooms, outpatient procedure suites, and ambulatory surgery centers.
I. Sponsorship

A. Sponsoring Educational Institution

A sponsoring institution must be one of the following:

1. A post-secondary academic institution accredited by an institutional accrediting agency that is recognized by the U.S. Department of Education, and must be authorized under applicable law or other acceptable authority to provide a post-secondary program, which awards a minimum of an Associate Degree at the completion of the program.

2. A hospital or medical center accredited by a healthcare accrediting agency or equivalent that is recognized by the U.S. Department of Health and Human Services, and authorized under applicable law or other acceptable authority to provide healthcare, which awards a minimum of a certificate at the completion of the program.

The Sponsor must ensure that the graduates of the program have obtained or will obtain an Associate degree upon completion of the program.

B. Consortium Sponsor

1. A consortium sponsor is an entity consisting of two or more members that exists for the purpose of operating an educational program. In such instances, at least one of the members of the consortium must meet the requirements of a sponsoring educational institution as described in I.A.

2. The responsibilities of each member of the consortium must be clearly documented as a formal affiliation, agreement or memorandum of understanding, which includes governance and lines of authority.

C. Responsibilities of Sponsor

1. The Sponsor must ensure that the provisions of these Standards and Guidelines are met.

II. Program Goals

A. Program Goals and Outcomes

There must be a written statement of the program’s goals and learning domains consistent with and responsive to the demonstrated needs and expectations of the various communities of interest served by the educational program. The communities of interest that are served by the program must include, but are not limited to, students, graduates, faculty, sponsor administration, employers, physicians, and the public.

Program-specific statements of goals and learning domains provide the basis for program planning, implementation, and evaluation. Such goals and learning domains must be compatible with both the mission of the sponsoring institution(s), the expectations of the communities of interest, and nationally accepted standards of roles and functions. Goals and learning domains are based upon the substantiated needs of health care providers and employers, and the educational needs of the students served by the educational program.

B. Appropriateness of Goals and Learning Domains

The program must regularly assess its goals and learning domains. Program personnel must identify and respond to changes in the needs and/or expectations of its communities of interest.

An advisory committee, which is representative of at least each of the communities interest named in these Standards, must be designated and charged with the responsibility of meeting at least annually, to assist program and sponsor personnel in formulating and periodically revising appropriate goals and learning domains, monitoring needs and expectations, and ensuring program responsiveness to change.

The meeting of the advisory committee does not necessarily have to be a face to face meeting. Meetings held as a synchronous conference call or by electronic means are acceptable.

C. Minimum Expectations

The program must have the following goal(s) defining minimum expectations:

“To prepare competent entry-level Anesthesia Technologists in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.”

Programs adopting educational goals beyond entry-level competence must clearly delineate this intent and provide evidence that all students have achieved the basic competencies prior to entry into the field.
Nothing in this Standard restricts programs from formulating goals beyond entry-level competence.

III. Resources

A. Type and Amount

Program resources must be sufficient to ensure the achievement of the program’s goals and outcomes. Resources must include, but are not limited to: faculty; clerical and support staff; curriculum; finances; offices; classroom, laboratory, and ancillary student facilities; clinical affiliates; equipment; supplies; computer resources; instructional reference materials, and faculty/staff continuing education.

B. Personnel

The sponsor must appoint sufficient faculty and staff with the necessary qualifications to perform the functions identified in documented job descriptions and to achieve the program’s stated goals and outcomes

1. Program Director
   a. Responsibilities
      The Program Director must ensure achievement of the program’s goals and outcomes, and is responsible for all aspects of the program, including the organization, administration, continuous review, planning, development and general effectiveness of the program. The Program Director must provide supervision, administration and coordination of the instructional staff in the academic and clinical phases of the educational program.

   b. Qualifications
      The Program Director must:
      1. Possess a degree equal to the degree for which the students are being prepared.
      2. Possess a minimum of five years full time or equivalent experience as an Anesthesia Technologist.

      The Program Director should pursue ongoing formal training designed to maintain and upgrade their professional, instructional and administrative capabilities.

2. Medical Advisor
   a. Responsibilities
      The Medical Advisor of the program must provide the input necessary to ensure that the medical components of the curriculum, both didactic and supervised practice, meets current standards of medical practice.

   b. Qualifications
      The Medical Advisor must be a currently practicing, licensed physician, Board certified in anesthesiology.

3. Faculty and/or Instructional Staff
   a. Responsibilities
      In classrooms, laboratories, and all clinical facilities where a student is assigned, there must be (a) qualified individual(s) clearly designated as liaison(s) to the program to provide instruction, supervision, and timely assessments of the student’s progress in meeting program requirements. All faculty members, regardless of the extent of their participation, must be familiar with the goals of the program and must be able to demonstrate the ability to develop a plan of instruction and evaluation.

      Preceptors should be familiar with the expectations of the program, advance personal skills, and facilitate a training experience for the students.

   b. Qualifications
      Faculty and clinical preceptor liaisons must possess appropriate credentials and knowledge in subject matter by virtue of training and experience, in fulfilling their responsibilities.

      Important criteria of faculty should include: the ability to organize and present the subject. Faculty should include specialists trained in the Anesthesia discipline.
C. Curriculum

The curriculum must ensure the achievement of program goals and learning domains. Instruction must be an appropriate sequence of classroom, laboratory, and clinical activities. Instruction must be based on clearly written course syllabi that include course description, course objectives, methods of evaluation, topic outline, and competencies required for graduation.

The program must demonstrate that the content and competencies included in the program’s curriculum meet or exceed those stated in the latest edition of the National Standard Curriculum for College Associate Degree Programs in Anesthesia Technology (Appendix B).

To accomplish the requisite integration of knowledge, theory and application of the clinical and technical aspect of the discipline, a variety of instructional methods should be employed, including instructor lead presentations and demonstrations, interactive experiences, structured laboratory experiences and supervised clinical experiences.

D. Resource Assessment

The program must, at least annually, assess the appropriateness and effectiveness of the resources described in these Standards. The results of resource assessment must be the basis for ongoing planning and appropriate change. An action plan must be developed when deficiencies are identified in the program resources. Implementation of the action plan must be documented and results measured by ongoing resource assessment.

IV. Student and Graduate Evaluation/Assessment

A. Student Evaluation

1. Frequency and Purpose

Evaluation of students must be conducted on a recurring basis with sufficient frequency to provide both the students and program faculty with valid and timely indications of the students’ progress toward and achievement of the competencies and learning domains stated in the curriculum.

2. Documentation

Records of student evaluations must be maintained in sufficient detail to document learning progress and achievements.

B. Outcomes

1. Outcomes Assessment

The program must periodically assess its effectiveness in achieving its stated goals and learning domains. The results of this evaluation must be reflected in the review and timely revision of the program.

Outcomes assessments include, but are not limited to: national credentialing technologist examination performance, programmatic retention/attrition, graduate satisfaction, employer satisfaction, job (positive) placement, and programmatic summative measures. The program must meet the outcomes assessment thresholds.

“Positive placement” means that the graduate is employed full or part-time in a related field; and/or continuing his/her education; and/or serving in the military.

2. Outcomes Reporting

The program must periodically submit to the CoA-ATE its goal(s), learning domains, evaluation systems (including type, cut score, appropriateness), outcomes, its analysis of the outcomes and an appropriate action plan based on the analysis.

Programs not meeting the established thresholds must begin a dialogue with the Committee on Accreditation for Anesthesia Technology Education (CoA-ATE) to develop an appropriate plan of action to respond to the identified shortcomings.
V. Fair Practices

A. Publications and Disclosure
1. Announcements, catalogs, publications, and advertising must accurately reflect the program offered.
2. The following must be made known to all applicants and students: The sponsor's institutional and programmatic accreditation status, as well as the name, mailing address, web site address, and phone number of the accrediting agencies; admissions policies and practices, including technical standards (when used), policies on advanced placement, transfer of credits, and credits for experiential learning; number of credits required for completion of the program; tuition/fees and other costs required to complete the program; policies and processes for withdrawal and for refunds of tuition/fees.
3. At least the following must be made known to all students: academic calendar; student grievance procedure; criteria for successful completion of each segment of the curriculum and graduation; and policies and processes by which students may perform clinical work while enrolled in the program.
4. The sponsor must maintain, and make available to the public, current and consistent summary information about student/graduate achievement that includes the results of one or more of the outcomes assessments required in these Standards.

The sponsor should develop a suitable means of communicating to the communities of interest the achievement of students/graduates (e.g. through a website or electronic or printed documents).

B. Lawful and Non-discriminatory Practices
All activities associated with the program, including student and faculty recruitment, student admission, and faculty employment practices, must be non-discriminatory and in accord with federal and state statutes, rules, and regulations. There must be a faculty grievance procedure made known to all paid faculty.

C. Safeguards
The health and safety of patients, students, and faculty associated with the educational activities of the students must be adequately safeguarded.

All activities required in the program must be educational and students must not be substituted for staff.

D. Student Records
Satisfactory records must be maintained for student admission, advisement, counseling, and evaluation. Grades and credits for courses must be recorded on the student transcript and permanently maintained by the sponsor in a safe and accessible location.

E. Substantive Change
The sponsor must report substantive change(s) as described in Appendix A to CAAHEP/CoA-ATE in a timely manner. Additional substantive changes to be reported to CoA-ATE within the time limits prescribed include:
1. Changes to the institution's mission or objectives, if these will affect the program.
2. The addition or deletion of courses that represent a change in content or in method of delivery.
3. The award level other than that of an associate degree.
4. Substantial increase or decrease in credit hours for successful completion of a program.

F. Agreements
There must be a formal affiliation agreement or memorandum of understanding between the sponsor and all other entities that participate in the education of the students describing the relationship, role, and responsibilities between the sponsor and that entity.
Appendix B
National Standard Curriculum
For Accredited Programs

Section A  General Content Areas

The curriculum of the program must include:
A.1.1  Anatomy and Physiology
A.1.2  Chemistry

In addition Medical Terminology and Physical Education are recommended.

Each educational institution should determine whether the General Education component should be included into the professional curriculum or required prior to entry into the program.

Section B  Professional Curriculum Components

B.1.1  Introduction to Anesthesia Technology.
B.1.1.1  Role of the Anesthesia Care Team
B.1.1.2  Scope of practice and specific duties of the Anesthesia Technologist.
B.1.1.3  Policies and Standards of patient care practice.
B.1.2  Basic and Advanced Principles for Anesthesia Technology.
B.1.2.1  Set-up and function of basic equipment for anesthesia care.
B.1.2.2  Anesthesia machine checkout.
B.1.2.3  Hemodynamic monitoring.
B.1.2.4  Types of Anesthesia.
B.1.2.5  Functioning as a member of the Anesthesia Care Team.
B.1.2.6  Advanced equipment for anesthesia care.
B.1.3  Anesthesia Pharmacology.
B.1.3.1  Intravenous therapy.
B.1.3.2  Emergency medications.
B.1.4  Anesthesia Instrumentation (Lab).
B.1.4.1  Hemodynamic monitoring equipment; function, application and troubleshooting.
B.1.4.1.1  Invasive and non-invasive.
B.1.4.1.2  Emergent and non-emergent.
B.1.4.2  Advanced knowledge of Anesthesia machine.
B.1.4.3  Intubation equipment.
B.1.4.3.1  Emergency intubation techniques and equipment.
B.1.4.4  Set-up and use of complex Anesthesia equipment.
B.1.4.5  Diagnosis and minor repair of Anesthesia equipment for proper function and maintenance.
B.1.4.6  Cleaning and documentation.
B.1.4.7  Safety
B.1.4.8  Asepsis
B.1.4.9  Policies and Standards.
B.1.4.10  Quality assurance and process improvement.
B.1.4.10.1  Regulatory Associations and credentialing.
B.1.4.10.2  Researching future technologies.
B.1.5  Clinical Experience,
344 B.1.5.1 Demonstrate clinical application of basic skills acquired from previous didactic coursework in the patient care setting.
345 B.1.5.2 Student will progress to independently set-up, and/or assess efficacy of equipment, medications, and technique.
346 B.1.5.3 Student will evaluate the circumstance of the patient, consult with the Anesthesia provider and assist in the care of the patient.
348 B.1.5.4 In the patient care setting, the student will progressively demonstrate their ability to function as a member of the Anesthesia Care Team.
350 B.1.5.5 Including:
352 B.1.5.5.1 Interaction with vendors.
354 B.1.5.5.2 Interaction with other departments.
355
356 B.1.6 Capstone Project.
357 B.1.6.1 Student will discuss clinical scenarios and form patient care plans.
359 B.1.6.2 Possess critical thinking skills in caring for the anesthesia patient.
360 B.1.6.3 Possess ability to effectively collaborate with the anesthesia care team.
362 B.1.6.4 Review Anesthesia Technologist career opportunities.
363 B.1.6.5 Prepare for the national technologist credential exam.
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366 B.2.0 Anesthesia Technologist Terminal Student Learning Objectives
367 B.2.1 Maintains vigilance and patient safety throughout the peri anesthetic continuum, by actively protecting patients from iatrogenic complications, and utilizes appropriate precautions in infection control.
369 B.2.2 Collaborates with the anesthesia multi-disciplinary care team in the development of an anesthesia plan of care for patients in areas to which they are assigned, and subsequently assists the anesthesia provider in a variety of current anesthesia techniques and use of equipment for providing anesthesia. Provides support for anesthesia services to all patients and types of anesthesia, including trauma and emergency cases.
374 B.2.3 Conducts a comprehensive and appropriate equipment check. Identifies and takes appropriate action when confronted with anesthetic equipment-related malfunctions and maintains service records.
378 B.2.4 Uses critical thinking skills in assisting the anesthesia provider with patients of all types, ages and physical conditions for a variety of surgical and medically related procedures.
382 B.2.5 Sets up and calibrates equipment, and understands data obtained from noninvasive and invasive monitoring modalities.
386 B.2.6 In collaboration with the anesthesia provider recognizes and appropriately responds to anesthetic complications that occur during the perioperative period. Describes the relationship of fluid management and the equipment required.
390 B.2.7 Functions as a resource person for the acquisition, preparation and application of warming, airway and ventilatory equipment.
394 B.2.8 Serves as a member of cardiopulmonary resuscitation team, possesses BLS, and ACLS (obtained during program).
398 B.2.9 Participates in quality management activities, and operates within budget limits and cost effectiveness.
B.2.10 Functions as a student anesthesia technologist within appropriate professional standards, ethical, and legal requirements, accepts responsibility and accountability while assisting with the delivery of patient care.

B.2.11 Demonstrates personal and professional integrity and has the ability to communicate, on a professional level verbally and non-verbally, regarding the delivery of perianesthetic care. Shows respect for human dignity to patients, peers, and organizations.

B.2.12 Positively influences health care policy decisions and participates in activities, which enhance anesthesia technologist roles in improved patient care and is an advocate for patients, families and communities. Understands the various needs of diverse multi-cultural and complex client populations in the delivery of culturally competent care.