

STANDARDS FOR ACCREDITATION
OF NURSE ANESTHESIA
EDUCATIONAL PROGRAMS

COUNCIL ON ACCREDITATION OF NURSE ANESTHESIA
EDUCATIONAL PROGRAMS

Revised January 2022

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of Nurse Anesthesia Educational Programs
222 South Prospect Avenue
Park Ridge, Illinois 60068-4037

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Preamble

The Council on Accreditation of Nurse Anesthesia Educational Programs (COA) accredits nurse anesthesia programs within the United States and Puerto Rico that award post-master's certificates, master's, or doctoral degrees, including programs offering distance education. Students accepted into accredited entry-level programs on or after January 1, 2022 must graduate with doctoral degrees. The Council also offers accreditation for postgraduate CRNA fellowships (fellowship).

The accreditation standards for entry-level nurse anesthesia programs offering practice doctorate degrees and accreditation standards for postgraduate fellowships are written with input from a wide community of interest consisting of many individuals and groups, including Certified Registered Nurse Anesthetist (CRNA) practitioners and educators, nurse anesthesia students, administrators and faculty of colleges and universities, hospital administrators, state boards of nursing, the staff of the United States Department of Education (USDE), the Council for Higher Education Accreditation (CHEA) and other nationally recognized accreditation agencies, members of the National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA), and the Board of Directors of the American Association of Nurse Anesthesiology (AANA). Special recognition is given to members attending the Assembly of School Faculty meeting and to those on the AANA Education Committee for their continuing efforts to promote, support, and encourage the Council's objectives of quality assessment and enhancement in nurse anesthesia education through the accreditation process.

Future Revisions

Suggestions for future revisions should be forwarded to:

Council on Accreditation of Nurse Anesthesia Educational Programs
222 South Prospect Avenue
Park Ridge, Illinois 60068-4037

Mission, Values, Scope, Purposes, and Objectives of the Council on Accreditation of Nurse Anesthesia Educational Programs

The COA's Mission is:

To establish standards that promote quality education in nurse anesthesia programs through accreditation.

Values of the COA include:

- **Integrity** – Fair and objective decisions based on consistent application of COA Standards.
- **Accountability** – Responsive, efficient, and professional interaction with nurse anesthesia programs, free of conflicts of interest.
- **Commitment** – Dependable and respectful support to enhance and advance nurse anesthesia educational programs.
- **Diversity, equity, inclusion** – Mindful and open accreditation to ensure unrestricted opportunity in nurse anesthesia training.
- **Quality** – Evidence-based decisions and continuous improvement of operations, work, and assessment of programs.
- **Innovation** – Creative approaches to enhance and advance the profession, education programs, and the COA.

The Scope of the Council:

The Council is a nationally recognized accrediting agency for the accreditation of institutions and programs of nurse anesthesia at the post-master's certificate, master's, or doctoral degree levels in the United States and its territories, including programs offering distance education.

The goals of the Council are to:

1. Pursue its mission, goals, and objectives and conduct its operations with integrity.
2. Formulate and/or adopt standards, criteria, policies and procedures for the accreditation of nurse anesthesia educational programs and fellowships, subject to review and comment by all constituencies that are significantly affected by them.
3. Foster academic quality in educational programs and fellowships.
4. Utilize evaluation to measure a program's or fellowship's degree of success in meeting programmatic objectives and accreditation requirements within the context of its institutional mission and resources.

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5. Encourage innovations in program and fellowship design and/or experimental programs and fellowships that are based on sound educational principles.
 6. Ensure responsiveness to its communities of interest including but not limited to students, programs, fellowships and the public.
 7. Foster student achievement and continuous program improvement as a basis of promoting quality nurse anesthesia services to the public.
 8. Incorporate public involvement in its decision making related to quality and accountability.

The objectives of the Council are to:

1. Publish standards of accreditation and policies and procedures defining the accreditation process for nurse anesthesia graduate programs and fellowships with input from the communities of interest.
2. Periodically assess programs and fellowships for compliance with accreditation standards through annual reports, self studies, site visits, and progress reports.
3. Confer and publish accreditation decisions and the reasons for the decisions.
4. Require programs and fellowships to routinely provide reliable performance and information data to the public.
5. Offer consultation concerning nurse anesthesia education to enhance academic quality.
6. Conduct collaborative reviews with other accrediting agencies, as appropriate.
7. Maintain external recognition by recognized authorities.
8. Participate in a systematic self-assessment of the standards, policies, and procedures of accreditation to ensure accuracy and reliability.
9. Provide accurate information concerning accredited programs and fellowships.
10. Consider legitimate allegations from complainants concerning the accreditation process.
11. Employ appropriate and fair procedures in decision making.
12. Ensure the academic quality of distance and traditional educational offerings.

The Value of Accreditation

Accreditation is a voluntary activity that has been accepted for more than 100 years in the United States in contrast to other countries where governments supervise and control educational institutions. The goals of privately operated US accrediting agencies are to assure and improve the quality of education offered by the institutions and programs they accredit. In this system, accreditation by an accrediting agency that is recognized by the US Secretary of Education is necessary for institutions and programs to receive federal funds and for students to receive federal aid. Accrediting agencies recognized by federal and state governments are deemed reliable authorities of academic quality.

The large percentage of Americans who benefit from higher education, the reputation of US universities for both fundamental and applied research, and the widespread availability of professional services in the United States all attest to the high quality of postsecondary education and the success of the accreditation system that US institutions and professions have devised to promote quality.

Accreditation is a peer process whereby a private, nongovernmental agency grants public recognition to an institution or specialized program that meets or exceeds nationally established standards of acceptable educational quality. A guiding principle of accreditation is the recognition that institutions or specialized programs have a right to expect that they will be evaluated in the light of their own stated purposes, as long as those purposes are educationally appropriate, meet accreditation standards, and fall within the recognized scope of the accrediting body.

There are 2 fundamental reasons for accreditation: (1) to ensure quality assessment and (2) to assist in quality improvement. Accreditation, which applies to institutions or programs, must be distinguished from certification and licensure, which apply to individuals. Accreditation cannot guarantee the quality of individual graduates, but it can provide reasonable assurance of the context and quality of the education that is offered.

Accreditation provides services that are of value to several constituencies:

The public receives:

1. reasonable assurance of the external evaluation of a program and its conformity with general expectations in the professional field;
2. identification of programs that have voluntarily undertaken explicit activities directed at improving their quality and their successful execution;
3. improvement in the professional services available to the public, resulting from the modification of program requirements to reflect changes in knowledge and practice that are generally accepted in the field;

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4. less need for intervention by public agencies in the operations of educational programs, because of the availability of private accreditation for the maintenance and enhancement of educational quality.

Students benefit from:

1. reasonable assurance that the educational activities of an accredited program have been found to be satisfactory and meet the needs of students;
2. assistance in transferring credits among programs and institutions;
3. a uniform prerequisite for entering the profession.

Programs receive:

1. the stimulus needed for self-directed improvement;
2. peer review and counsel provided by the accrediting agency;
3. enhancement of their reputation, because of the public's regard for accreditation;
4. eligibility for selected governmental funding programs and private foundation grants.

The profession realizes:

1. a means for participation of practitioners in establishing the requirements for preparation to enter the profession;
2. a contribution to the unity of the profession by bringing together practitioners, educators, students, and the communities of interest in an activity directed toward improving professional preparation and practice.

References:

- *The Value of Accreditation*, Council for Higher Education Accreditation, June 2010.
- *The Importance of Specialized Accreditation: A Message to Our Publics*, Association of Specialized and Professional Accreditors, 2007.

The Accreditation Process

The Council is responsible for establishing the standards for accreditation of nurse anesthesia educational programs and postgraduate CRNA fellowships, subject to consideration of recommendations from the communities of interest. In an effort of ongoing improvement, the standards will undergo continual review and be subject to periodic major and minor revisions as indicated. Compliance with the standards forms the basis for the Council's accreditation decisions.

Ongoing oversight by the Council is provided between formal programmatic reviews. Programs are required to advise the Council and get approval for major changes. The Council also investigates situations brought to its attention that may affect a program's accreditation status.

In a broad sense, accreditation of nurse anesthesia educational programs and fellowships provides quality assurance concerning educational preparation through continuous self study and review. The ultimate goals of the accreditation program are to improve the quality of nurse anesthesia education, and provide competent nurse anesthetists for healthcare consumers and employers.

Practice Doctorate Standards

The practice doctorate standards address: (A) conducting institutions, (B) faculty, (C) students, (D) graduates, (E) curricula, (F) clinical sites, (G) policies, and (H) evaluations.

The accreditation process for established programs is based on the self-evaluation study document prepared by the program and an onsite review by a team of 2 or 3 reviewers. Certain Standards have been ascertained to have major significance regarding educational quality. Failure to fully comply with one or more of these Standards is considered to be of critical concern in decisions regarding nurse anesthesia program accreditation and is marked with an asterisk (*). The Council reserves the right to identify other areas or Standards.

The process is repeated at intervals of up to 10 years. A summary report of the review is presented to the Council for an accreditation decision. New programs that seek accreditation status must successfully complete an initial accreditation review, become accredited, admit students and undergo a subsequent review when it is possible to evaluate educational outcomes following the first graduation. Each program is required to complete and submit an annual report.

Graduation from an accredited program is a prerequisite for eligibility for national certification. It is also used as a criterion by licensing agencies, employers, and potential students in the decisions they make and in determining eligibility for government funding.

Postgraduate CRNA Fellowships

The Postgraduate CRNA Fellowship Standards address: (A) conducting organizations, (B) faculty/mentors, (C) fellows, (D) graduates, (E) curricula, (F) clinical sites, (G) policies, and (H) evaluations.

The accreditation process for fellowships is based on the postgraduate fellowship assessment document prepared by the fellowship and a virtual onsite review by the Fellowship Review Committee. Accreditation may be offered for onetime fellowships, or continuous/intermittent fellowships. Continuous/intermittent fellowships may be accredited for intervals of up to 5 years. New fellowships that seek accreditation status must successfully complete an initial *Postgraduate CRNA Fellowship Assessment*, become accredited, and admit fellows. Only fellows enrolled after accreditation is awarded will graduate from an accredited fellowship.

STANDARDS FOR ACCREDITATION OF NURSE ANESTHESIA EDUCATIONAL PROGRAMS

COUNCIL ON ACCREDITATION OF NURSE ANESTHESIA EDUCATIONAL PROGRAMS

To be considered for Council on Accreditation of Nurse Anesthesia Educational Programs (COA) accreditation, a nurse anesthesia program must demonstrate that it develops and implements the necessary mechanisms to comply with five educational standards.

Standard I: Governance

INSTITUTIONAL GOVERNANCE RESULTS IN THE EFFICIENT OPERATION OF THE NURSE ANESTHESIA PROGRAM, PROMOTES EDUCATIONAL EXCELLENCE AND SUPPORTS NEEDED CHANGE THROUGH THE IMPLEMENTATION OF ITS MISSION AND PHILOSOPHY. THE INFRASTRUCTURE FACILITATES ATTAINMENT OF PROGRAM GOALS AND OBJECTIVES AND INVOLVES ITS COMMUNITIES OF INTEREST.

CRITERIA

- A1. The mission and/or philosophy of the conducting institution's governing body promotes educational excellence and supports the nurse anesthesia program within a graduate framework.
- A2. The organizational relationships of the institution, academic unit, and program are clear, support the objectives of the program, and facilitate needed change.
- A3. The governance structures in which the program functions facilitate appropriate involvement and communication among and between faculty, students, administrators, the public, and its communities of interest.
- * A4. The governing body appoints a CRNA as program administrator with leadership responsibilities and authority for the administration of the program. The CRNA administrator must be qualified by experience and have an earned graduate degree from an institution of higher education accredited by a nationally recognized accrediting agency.

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- * A5. The governing body appoints a CRNA, qualified by graduate degree, education, and experiences to assist the CRNA program administrator and, if required, assume leadership responsibilities. This individual must have an earned graduate degree from an institution of higher education accredited by a nationally recognized accrediting agency.
 - A6. The program appoints a CRNA with a master's degree or physician anesthesiologist coordinator for each clinical site with defined responsibilities for students. **
 - A7. The conducting organization completes a legally binding written agreement that outlines the expectations and responsibilities of all parties when an academic or clinical affiliation is established or two or more entities with unshared governance enter into a joint arrangement to conduct a program.
 - A8. The academic institution identifies an appropriate liaison at the academic site when it enters into an affiliation with a nurse anesthesia program.
 - A9. A program of nurse anesthesia has current written policies and procedures that facilitate its efficient and effective operation.
 - A10. The institution's and/or program's committee structure is appropriate to meet program objectives, and includes public, student, and faculty participation.
 - * A11. An accredited program is required to act in accordance with the Council's policies and procedures for accreditation.
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- * Failure to fully comply with one or more of these criteria is considered to be of critical concern in decisions regarding nurse anesthesia program accreditation.
 - ** Master's degrees are required for CRNA clinical coordinators unless an exception for this requirement has been approved by the COA. An exception, if granted, will be effective for 5 years from the date of final Council approval.

Standard II: Resources

THE CONDUCTING INSTITUTION DEMONSTRATES THAT RESOURCES ARE SUFFICIENT TO PROVIDE ONGOING COMMITMENT AND SUPPORT OF THE NURSE ANESTHESIA PROGRAM.

CRITERIA

- * B1. Resources are adequate to promote effective teaching and student learning and to achieve the program's stated outcomes within the context of the institutional mission.
- B2. There is a budget that provides evidence of adequate funding for nurse anesthesia education.
- B3. The CRNA program administrator provides input into the budget process to ensure adequate resources are available for the program.
- * B4. The program's resources must be adequate to support the size and scope of the program to appropriately prepare students for practice and to promote the quality of graduates including:
 - a. Financial resources that are budgeted and used to meet accreditation standards.
 - b. Physical resources including facilities, equipment, and supplies.
 - c. Learning resources including clinical sites, library, technological access and support.
 - d. Faculty.
 - e. Support personnel.
 - f. Student services (see Glossary: Student services).
- B5. The conducting institution provides sufficient time and resources to permit faculty to fulfill their teaching, scholarly activities, service, administrative and clinical responsibilities.

- * Failure to fully comply with one or more of these criteria is considered to be of critical concern in decisions regarding nurse anesthesia program accreditation.

Standard III: Program of Study

THE PROGRAM CURRICULUM IS RELEVANT, CURRENT, COMPREHENSIVE, AND MEETS COMMONLY ACCEPTED NATIONAL STANDARDS FOR SIMILAR DEGREES. THE TEACHING-LEARNING ENVIRONMENT PROMOTES THE ACHIEVEMENT OF EDUCATIONAL OUTCOMES DRIVEN BY THE MISSION OF THE INSTITUTION AND FOSTERS STUDENT LEARNING, PROFESSIONAL SOCIALIZATION, AND FACULTY GROWTH. THE CURRICULUM PREPARES GRADUATES FOR THE FULL SCOPE OF NURSE ANESTHESIA PRACTICE.

CRITERIA

- C1. The program's curriculum builds upon prior nursing education and professional experiences, is congruent with the mission of the institution and is designed so that students benefit from the program.
- * C2. The faculty designs a curriculum that awards a master's or higher-level degree to graduate students who successfully complete graduation requirements.**
- C3. The program sets forth the curriculum in a logical manner with sequential presentation of classroom and clinical experiences.
- C4. The nurse anesthesia program must be a minimum of 24 months in length or its part-time equivalent.
- C5. The educational environment fosters student learning and promotes professional socialization.
- C6. The educational environment provides opportunities for faculty development.
- C7. The program designs a curriculum that enables graduates to attain certification in the specialty.
- C8. The program designs, when appropriate, an experimental/innovative curriculum that enables graduates to attain certification in the specialty.
- C9. The content of the curriculum is appropriate to the degree or certificate earned.
- C10. The curriculum meets commonly accepted national standards for similar degrees (see Glossary: Commonly accepted national standards).
- C11. Distance education programs and courses satisfy accreditation standards and achieve the same outcomes as traditional educational offerings.

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- C12. The educational environment promotes academic quality as evidenced through a variety of indicators (see Glossary: Academic quality).
- * C13. The program enrolls only baccalaureate prepared students who meet admission criteria. Admission requirements include:
- a. Registration as a professional nurse in the United States, its territories or protectorates.
 - b. At least one year of experience as a RN in a critical care setting (see Glossary: Critical care experience).
- * C14. The basic nurse anesthesia academic curriculum and prerequisite courses focus on coursework in anesthesia practice: pharmacology of anesthetic agents and adjuvant drugs including concepts in chemistry and biochemistry (105 hours); anatomy, physiology, and pathophysiology (135 hours); professional aspects of nurse anesthesia practice (45 hours); basic and advanced principles of anesthesia practice including physics, equipment, technology and pain management (105 hours); research (30 hours); and clinical correlation conferences (45 hours); radiology; and ultrasound.
- C15. The didactic curriculum includes three (3) separate comprehensive graduate level courses in advanced physiology/pathophysiology, advanced health assessment, and advanced pharmacology (see Glossary: Advanced health assessment).
- C16. The amount of advanced standing or transfer credits awarded by the degree granting institution is clearly stated and publicized.
- C17. The clinical curriculum provides students with opportunities for experiences in the perioperative process that are unrestricted, and promote their development as competent safe nurse anesthetists.
- * C18. The nurse anesthesia clinical curriculum prepares the student for the full scope of current practice in a variety of work settings and requires a minimum of 600 clinical cases and 2000 clinical hours including a variety of procedures, techniques, and specialty practice (see Appendix and Glossary – Clinical Hours).***
- * C19. The program provides opportunities for students to obtain clinical experiences outside the regular clinical schedule by a call experience or other mechanism (see Glossary: Call Experience).
- C20. The program demonstrates that it has achieved its stated outcomes.
- * C21. The program demonstrates that graduates have acquired knowledge, skills and competencies in patient safety, perianesthetic management, critical thinking, communication, and the competencies needed to fulfill their professional responsibility.

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- a. Patient safety is demonstrated by the ability of the graduate to:
1. Be vigilant in the delivery of patient care.
 2. Refrain from engaging in extraneous activities that abandon or minimize vigilance while providing direct patient care (e.g., texting, reading, e-mailing, etc.)
 3. Protect patients from iatrogenic complications.
 4. Participate in the positioning of patients to prevent injury.
 5. Conduct a comprehensive and appropriate equipment check.
 6. Utilize standard precautions and appropriate infection control measures.
- b. Individualized perianesthetic management is demonstrated by the ability of the graduate to:
1. Provide care throughout the perianesthetic continuum.
 2. Use a variety of current anesthesia techniques, agents, adjunctive drugs, and equipment while providing anesthesia.
 3. Administer general anesthesia to patients of all ages and physical conditions for a variety of surgical and medically related procedures.
 4. Provide anesthesia services to all patients, including trauma and emergency cases.
 5. Administer and manage a variety of regional anesthetics.
 6. Function as a resource person for airway and ventilatory management of patients.
 7. Possess current advanced cardiac life support (ACLS) recognition.
 8. Possess current pediatric advanced life support (PALS) recognition.
 9. Deliver culturally competent perianesthetic care throughout the anesthesia experience (see Glossary: Culturally competent).
 10. Perform a comprehensive history and physical assessment (see Glossary: Comprehensive History and Physical Assessment).
- c. Critical thinking is demonstrated by the graduate's ability to:
1. Apply knowledge to practice in decision-making and problem solving.

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2. Provide nurse anesthesia care based on sound principles and research evidence.
 3. Perform a preanesthetic assessment and formulate an anesthesia care plan for patients to whom they are assigned to administer anesthesia.
 4. Identify and take appropriate action when confronted with anesthetic equipment-related malfunctions.
 5. Interpret and utilize data obtained from noninvasive and invasive monitoring modalities.
 6. Calculate, initiate, and manage fluid and blood component therapy.
 7. Recognize and appropriately respond to anesthetic complications that occur during the perianesthetic period.
 8. Pass the National Certification Examination (NCE) administered by the NBCRNA.
- d. Communication skills are demonstrated by the graduate's ability to:
1. Effectively communicate with individuals influencing patient care.
 2. Utilize appropriate verbal, nonverbal, and written communication in the delivery of perianesthetic care.
- e. Professional responsibility is demonstrated by the graduate's ability to:
1. Participate in activities that improve anesthesia care.
 2. Function within appropriate legal requirements as a registered professional nurse, accepting responsibility and accountability for his or her practice.
 3. Interact on a professional level with integrity.
 4. Teach others.
 5. Participate in continuing education activities to acquire new knowledge and improve his or her practice.
 6. Demonstrate knowledge of wellness and substance use disorder in the anesthesia profession through completion of content in wellness and substance use disorder (see Glossary: "Wellness and substance use disorder" for recommended content).

- * Failure to fully comply with one or more of these criteria is considered to be of critical concern in decisions regarding nurse anesthesia program accreditation.
- ** The COA will not consider any new master's degree programs for accreditation beyond 2015. All accredited programs must offer a doctoral degree for entry into practice by January 1, 2022. On January 1, 2022 and thereafter, all students matriculating into an accredited program must be enrolled in a doctoral program.
- *** For students matriculating into nurse anesthesia programs on or after January 1, 2015 and before January 1, 2022.

Standard IV: Program Effectiveness

PROGRAM EFFECTIVENESS IS EVIDENCED (1) IN THE QUALITY OF STUDENT, ALUMNI, AND FACULTY ACHIEVEMENT THAT FURTHERS THE INSTITUTION'S MISSION, PHILOSOPHY AND OBJECTIVES, (2) BY A COMMITMENT TO CONTINUOUS SELF-ASSESSMENT, AND (3) BY HOW IT ENHANCES THE EDUCATIONAL PROCESS.

CRITERIA

- D1. The institution and/or program utilizes systematic evaluation processes to assess achievement in the following areas:
- a. The quality of the didactic, clinical and research curriculum.
 - b. A teaching and learning environment that promotes student learning.
 - c. Faculty contributions to teaching, practice, service, and scholarly activities.
 - d. The competence of graduates entering anesthesia practice.
 - e. Alumni involvement in professional activities.
 - f. Institutional/program resources.
 - g. Student and faculty services.
- D2. The program has a written plan for continuous self-assessment that promotes program effectiveness, purposeful change and needed improvement.
- D3. The program relies upon periodic evaluations from its communities of interest to determine program effectiveness:
- a. Student evaluations of the program, courses, classroom instruction, clinical instruction, and clinical sites.
 - b. Faculty evaluations of the program.
 - c. Employer evaluations of recent graduates.
 - d. Alumni evaluations of the program.
 - e. Evaluations of the program by external agencies.

- * D4. The program utilizes evaluation data from all sources to monitor and improve program quality and effectiveness and student achievement:
 - a. Student evaluations, formative and summative, are conducted by the faculty to counsel students and document student achievement in the classroom and clinical areas.
 - b. Student achievement is documented through self-evaluation.
 - c. Outcome measures, including graduation rates, grade point averages, National Board of Certification and Recertification for Nurse Anesthetists' (NBCRNA) Certification Examination pass rates and mean scores, and employment rates and employer satisfaction are used to assess the quality of the program and level of student achievement (see Glossary: Graduate employment rate).
 - d. The program's evaluation plan is used to continuously assess compliance with accreditation requirements and to initiate corrective action should areas of noncompliance occur or recur.

- * Failure to fully comply with one or more of these criteria is considered to be of critical concern in decisions regarding nurse anesthesia program accreditation.

Standard V: Accountability

THE PROGRAM DEMONSTRATES ACCOUNTABILITY AND INTEGRITY TO ITS COMMUNITIES OF INTEREST INCLUDING THE PUBLIC, STUDENTS, FACULTY, THE CONDUCTING INSTITUTION(S), AND EXTERNAL AGENCIES.

CRITERIA

- * E1. The program evidences truth and accuracy in the following areas: advertising, student recruitment, admissions, academic calendars, program length, tuition and fees, travel requirements, catalogs, grading, representation of accreditation, and faculty accomplishments.
- E2. The program identifies, publishes, and distributes the rights and responsibilities of the following entities as they relate to the program: patients, applicants, students, faculty, conducting and affiliating institutions, and the accrediting agency.
- E3. The program annually publishes accurate information about its programmatic accreditation status, the specific academic program covered by the accreditation status, the name, address, and telephone number of the Council; and for the most recent graduating class the attrition, employment of graduates as nurse anesthetists within six months of graduation, and the certification examination pass rate for first time takers.
- * E4. Complaints, grievances and appeals are resolved in a timely and equitable manner affording adequate due process.
- * E5. The program defines and uses policies and procedures that are fair and equitable and do not discriminate on the basis of race, color, religion, age, gender, national origin, marital status, disability, sexual orientation, or any factor protected by law (see Glossary: Nondiscriminatory practice).
- * E6. The program defines and uses policies and procedures regarding academic integrity in all of its educational activities.
- * E7. The program maintains accurate cumulative records of educational activities.
- * E8. The program forbids the employment of nurse anesthesia students as nurse anesthetists by title or function.
- * E9. Student time commitment consists of a reasonable number of hours that does not exceed 64 hours per week (see Glossary: Reasonable time commitment).

- E10. The program restricts clinical supervision in nonanesthetizing areas to credentialed experts who are authorized to assume responsibility for the student (see Glossary: Credentialed expert).
- * E11. The program restricts clinical supervision of students in anesthetizing areas to CRNAs and/or physician anesthesiologists with institutional staff privileges who are immediately available in all clinical areas (see Glossary: Clinical supervision and Physician anesthesiologist).
- * E12. The program ensures that students and CRNA faculty including clinical instructors are currently licensed as registered professional nurses in one jurisdiction of the United States and CRNAs are certified/recertified by the National Board of Certification and Recertification for Nurse Anesthetists.
- * E13. The clinical supervision ratio of students to instructors must be coordinated to insure patient safety by taking into consideration: The student's knowledge and ability; the physical status of the patient; the complexity of the anesthetic and/or surgical procedure; and the experience of the instructor (see Glossary: Clinical Supervision).
- * Failure to fully comply with one or more of these criteria is considered to be of critical concern in decisions regarding nurse anesthesia program accreditation.

Additional criteria for the Standards regarding:

Research-Oriented Doctoral Degrees

1. Doctoral students are prepared to advance theory and knowledge of the discipline in which the degree is awarded (Standard III).
2. Doctoral students develop advanced scholarship skills and generate research relevant to the discipline (Standard III).
3. Doctoral students complete a dissertation or equivalent scholarly work that constitutes an original contribution to the knowledge within the discipline (Standard III).
4. Faculty members demonstrate competency for scholarly and professional work in the relevant discipline (Standard III).
5. Doctoral students have sufficient access to appropriately credentialed faculty (Standard II).
6. There is direct assessment of doctoral student achievement, including extensive comprehensive examinations conducted by recognized scholars in the discipline, to verify the knowledge and skills that constitute mastery in the discipline (Standard III).
7. There are established examination and assessment procedures to verify competence in pertinent research skills (Standard III).
8. Doctoral students defend the final dissertation or equivalent scholarly work before acknowledged scholars in the discipline (Standard III).
9. The curriculum is a minimum of 5 years in length post-baccalaureate or a minimum of 4 years in length post-master's of full-time study or longer if there are periods of part-time study (Standard III). **
10. Adequate resources such as teaching and research assistantships, internal and external funding or federal grants are available to support the research mission of the academic unit (Standard II).
11. There is support for research essential for degree purposes (Standard II).
12. The educational environment encourages scholarly research (Standard II).
13. Faculty are provided sufficient time and resources for scholarship and the conduct of research (Standard II).
14. The requirements for the research-oriented doctoral degree are significantly beyond those required for a master's degree and a practice-oriented doctoral degree (Standard III).

** Note: Shorter programs of study can be submitted for consideration when accompanied by supporting rationale that ensures compliance with accreditation standards.

Additional criteria for the Standards regarding:

Graduate Degree Programs for CRNAs * - Master's

1. Anesthesia must be referenced in the title of the master's degree offered. If not, a significant component of the curriculum must include anesthesia-related content (Standard III).
2. The curriculum for a master's degree program for CRNAs is similar to the requirements for an equivalent degree that prepares registered nurses for entry into nurse anesthesia practice (Standard III).
3. The length of the approved program of study must be appropriate for the CRNA graduate student to complete the degree requirements for the master's degree or research-oriented doctoral degree program (Standard III).

*see Glossary: Graduate Degrees for CRNAs

Additional criteria for the Standards regarding:

Graduate Degree Programs for CRNAs * - Practice Doctorate

1. Anesthesia must be referenced in the title of the practice doctoral degree offered. If not, a significant component of the curriculum must include anesthesia-related content (Standard III).
2. The program must demonstrate that the graduate degree program for CRNAs is in compliance with Conducting Institution Standards A8-A10 and A12. **
3. The program must demonstrate that the graduate degree program for CRNAs is in compliance with Faculty Standards B1, B9, B14 and B17. **
4. The program must demonstrate that the graduate degree program for CRNAs is in compliance with Graduate Standards D14, D23, D26, D31, D32, D33, D35 and D40-D51.**
5. The program must demonstrate that the graduate degree program for CRNAs is in compliance with Curriculum Standards E1, E3 and E5-E8. **
6. The program must demonstrate that the graduate degree program for CRNAs is in compliance with Policy Standard G2. **
7. The program must demonstrate that the graduate degree program for CRNAs is in compliance with all Standards listed under H. Evaluation, with the exception of H1.4.2, H1.6.2 and H1.6.3.**

*See Glossary: Graduate Degrees for CRNAs

**Programs must refer to the Standards for Accreditation of Nurse Anesthesia Programs-Practice Doctorate for the complete text of the standards referenced above.

Additional criteria for the Standards regarding:

Federally Mandated Requirements

The criteria listed in this section are those required of all accrediting agencies in order to be in compliance with the Higher Education Act (HEA) of 1965, as amended by the HEOA in 2008. Many requirements have also been included in the Council's policies and procedures.

1. The program and/or its conducting institution reviews the default rates in the student loan programs under Title IV of the Higher Education Act, based on the most recent data provided by the U.S. Secretary of Education.
2. The program's conducting entity demonstrates compliance with an institution's responsibilities under Title IV of the Higher Education Act, including: results of financial or compliance audits and program reviews and other information that the U.S. Secretary of Education may request.
3. The program provides evidence that students are made aware of their ethical responsibility regarding financial assistance they receive from public or private sources.

Appendix

Applies to students matriculating into anesthesia programs on or after January 1, 2015 and before January 1, 2022

The minimum number of clinical hours is 2000 (See Glossary: Clinical hours).

CLINICAL EXPERIENCES	Minimum Required Cases	Preferred Number of Cases
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PATIENT PHYSICAL STATUS

Class I		
Class II		
Classes III – VI (total of a, b, c, & d)	200	300
a. Class III	50	100
b. Class IV	10	100
c. Class V	0	5
d. Class VI		
Total Cases	600	700

SPECIAL CASES

Geriatric 65+ years	100	200
Pediatric		
Pediatric 2 to 12 years	30	75
Pediatric (less than 2 years)	10	25
Neonate (less than 4 weeks)		5
Trauma/Emergency (E)	30	50
Obstetrical management (total of a & b)	30	40
a. Cesarean delivery	10	15
b. Analgesia for labor	10	15
Pain management encounters (see Glossary: Pain management encounters)	15	50

CLINICAL EXPERIENCES	Minimum Required Cases	Preferred Number of Cases
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ANATOMICAL CATEGORIES¹

Intra-abdominal	75	
Intracranial (total of a & b)	5	20
a. Open	3	10
b. Closed		
Oropharyngeal	20	
Intrathoracic (total of a, b, & c)	15	40
a. Heart		
1. Open heart cases (total of a & b)	5	10
a) With cardiopulmonary bypass		
b) Without cardiopulmonary bypass		
2. Closed heart cases		10
b. Lung	5	
c. Other		
Neck	5	10
Neuroskeletal	20	
Vascular	10	30

¹ Count all that apply

CLINICAL EXPERIENCES	Minimum Required Cases	Preferred Number of Cases
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METHODS OF ANESTHESIA

General anesthesia	400	
Inhalation induction	25	40
Mask management ²	25	35
Supraglottic airway devices (total of a & b)	35	50
a. Laryngeal mask		
b. Other		
Tracheal intubation (total of a & b)	250	
a. Oral		
b. Nasal		5
Alternative tracheal intubation/endoscopic techniques ³ (total of a & b) (see Glossary: Alternative tracheal intubation techniques)	25	50
a. Endoscopic techniques ⁴ (total of 1 & 2)	5	15
1. Actual tracheal tube placement		
2. Simulated tracheal tube placement		
3. Airway assessment		
b. Other techniques	5	25
Emergence from anesthesia	300	

² A general anesthetic that is administered by mask, exclusive of induction.

³ Tracheal intubations accomplished via alternative techniques should be counted in both tracheal intubation and the alternative tracheal intubation categories.

⁴ Simple models and simulated experiences may be used to satisfy part of this requirement. No clinical experiences can be obtained by simulation alone.

CLINICAL EXPERIENCES	Minimum Required Cases	Preferred Number of Cases
Regional techniques		
Actual administration (total of a, b, c, & d)	35	
a. Spinal (total of 1 & 2)	10	50
1. Anesthesia		
2. Pain management		
b. Epidural (total of 1 & 2)	10	50
1. Anesthesia		
2. Pain management		
c. Peripheral ⁵ (total of 1 & 2)	10	50
1. Anesthesia		
Upper		
Lower		
2. Pain management		
Upper		
Lower		
d. Other ⁶ (total of 1 & 2)		
1. Anesthesia		
2. Pain Management		
Management (total of 1 & 2)	35	50
1. Anesthesia		
2. Pain management		
Moderate/deep sedation	25	50

⁵ Simple models and simulated experiences may be used to satisfy part of this requirement. No clinical experiences can be obtained by simulation alone.

⁶ Examples include truncal, cutaneous, head, and neck blocks (e.g., transversus abdominis plane, rectus sheath, ilioinguinal, iliohypogastric, oral, and maxillofacial blocks).

CLINICAL EXPERIENCES	Minimum Required Cases	Preferred Number of Cases
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ARTERIAL TECHNIQUE

Arterial puncture/catheter insertion	25	
Intra-arterial blood pressure monitoring	30	

CENTRAL VENOUS CATHETER

Placement ⁷ – Non PICC (total of a & b)	10	15
a. Actual		5
b. Simulated		
Placement – PICC (total of a & b)		
a. Actual		
b. Simulated		
Monitoring	15	

PULMONARY ARTERY CATHETER

Placement		5
Monitoring		10

OTHER

Ultrasound guided techniques (total of a & b)		10
a. Regional		
b. Vascular		
Intravenous catheter placement	100	
Advanced noninvasive hemodynamic monitoring		

⁷ Simple models and simulated experiences may be used to satisfy this requirement. For students enrolled on or after January 1, 2020, no clinical experiences can be obtained by simulation alone. Insertion of peripherally inserted central catheters (PICC) does not meet the requirements for central line placement.

Glossary

Academic faculty - Instructors who are responsible for providing didactic instruction in their individual areas of expertise.

Academic quality - Academic quality refers to results associated with teaching, learning, research, and service within the framework of the institutional mission. Academic quality requires an effective learning environment and sufficient resources for faculty and students to obtain the objectives of the program and meet accreditation standards.

Accreditation - A peer process whereby a private, nongovernmental agency grants public recognition to an institution or specialized program of study that meets or exceeds nationally established standards of acceptable educational quality.

Advanced health assessment – A course in advanced health assessment includes assessment of all human systems, advanced assessment techniques, diagnosis, concepts, and approaches.

Advanced noninvasive hemodynamic monitoring - The use of advanced non-invasive technologies used to monitor hemodynamic variables such as central venous pressure, cardiac output, vascular resistance, and ventricular performance. This does not include routine monitors such as the automated blood pressure cuff.

Agreement - An exchange of a formal, written understanding between two or more entities that agree to provide appropriate academic and/or clinical learning experiences for students. Requirements should be outlined in sufficient detail to state clearly the expectations of the agreement and to protect the rights of the parties involved.

Alternative airway management techniques - Alternative airway management techniques include fiberoptic intubation, light wand, retrograde tracheal intubation, combitube, trans-tracheal jet ventilation, gum elastic bougie/tracheal tube changer, esophageal obturator airway, LMA guided intubation and cricothyroidotomy.

Alternative tracheal intubation techniques - Alternative tracheal intubation techniques include, but are not limited to, fiberoptic intubation, light wand, retrograde tracheal intubation, transtracheal jet ventilation, gum elastic bougie/tracheal tube changer, laryngeal mask airway (LMA) guided intubation, cricothyroidotomy, video assisted laryngoscopy, etc. The placement of supraglottic airway devices is not included in this definition because that clinical experience is counted separately. If the student inserts an LMA and then performs an LMA-guided endotracheal intubation, the student would count both experiences in the appropriate categories.

Ambulatory/Outpatient - Patients who are discharged from the facility within 23 hours or less following admission and surgery.

Anesthesia care plan - A written or verbal description of a proposed plan for the administration of an anesthetic, based on the known and anticipated needs of an individual patient during the perioperative period.

Appeal - In cases where sanctions may be imposed against a student or faculty member, the right to a fair hearing before an impartial body should be granted in accordance with published rules and procedures. Students should be allowed to appeal any decision that suspends or dismisses them from a program or that delays their graduation.

Call experience – Call is a planned clinical experience outside the normal operating hours of the clinical facility, for example, after 5 PM. and before 7 AM., Monday through Friday, and on weekends. Assigned duty on shifts falling within these hours is considered the equivalent of an anesthesia call, during which a student is afforded the opportunity to gain experience with emergency cases. Although a student may be assigned to a 24 hour call experience, at no time may a student provide direct patient care for a period longer than 16 continuous hours.

Certification - The process whereby a nongovernmental agency grants recognition to an individual who has voluntarily met predetermined qualifications specified by the agency.

Clinical experience - Supervised clinical activities in which the student gets to use the knowledge he or she has acquired in the clinical and/or academic phases of the program.

Clinical faculty - The CRNA or physician anesthesiologist who is responsible for teaching nurse anesthesia students during the perioperative period and for evaluating their clinical progress. When students are administering anesthesia, such instructors must be CRNAs or physician anesthesiologists with staff privileges in anesthesia. See also: Clinical supervision.

Clinical hours – Clinical hours include time spent in the actual administration of anesthesia (i.e., anesthesia time) and other time spent in the clinical area. Examples of other clinical time would include in-house call, preanesthesia assessment, postanesthetic assessment, patient preparation, operating room preparation, and time spent participating in clinical rounds. Total clinical hours are inclusive of total hours of anesthesia time; therefore, this number must be equal to or greater than the total number of hours of anesthesia time.

Clinical supervision - Clinical supervision of students must not exceed (1) 2 students to 1 CRNA, or (2) 2 students to 1 physician anesthesiologist, if no CRNA is involved. The CRNA and/or physician anesthesiologist are the only individual(s) with responsibility for anesthesia care of the patient, and have responsibilities including, but not limited to: providing direct guidance to the student; evaluating student performance; and approving a student's plan of care. There may be extenuating circumstances where supervision ratios may be exceeded for brief periods of time (e.g., life threatening situations); however, the program must demonstrate that this is a rare situation for which contingency plans are in place (e.g., additional CRNA or physician anesthesiologist called in, hospital diverts emergency cases to maximize patient safety). Clinical supervision must be consistent with the COA Standards (i.e., clinical oversight is the responsibility of a CRNA or physician anesthesiologist only). The program is responsible for ensuring its clinical supervision requirements are consistent with the COA Standards and that students are aware of these requirements and know who is supervising them in the clinical area.

Commonly accepted national standards - Standards that are generally recognized as determining quality of similar degrees by the larger community of higher education in the United States.

Comprehensive history and physical assessment - Comprehensive history and physical assessment includes the history, physical, and psychological assessment of signs and symptoms, pathophysiologic changes, and psychosocial variations of a patient. The assessment includes an evaluation of the body and its functions using inspection, palpation, percussion, auscultation and advanced assessment techniques, including diagnostic testing, as appropriate. A complete physical assessment should incorporate cultural and developmental variations and needs of a patient. The results of a comprehensive history and physical assessment are used to establish a differential diagnosis based on assessment data; and develop an effective and appropriate plan of care for a patient. Specific assessment related to anesthesia should be stressed in the practical experience of nurse anesthesia students.

Community of interest - A body of individuals who are directly affected by nurse anesthesia education and/or practice, including nurse anesthesia students, faculty, staff, patients, employers, institutions, the public, and higher education community.

Competency for entrance into practice - Verification by the program that a student has acquired knowledge and skills in patient safety, perianesthetic management, critical thinking, communication and professionalism.

Conducting institution - The legal entity (institution or organization) that assumes sole, primary, or shared responsibility for the conduct of a program, including budgetary support, and is responsible for ensuring that the program has complied with accreditation requirements.

Counting clinical experiences - Students can only take credit for a case where they personally provide anesthesia for critical portions of the case. A student may only count a procedure (e.g., central venous catheter placement, regional block, etc.) that he or she actually performs. Students cannot take credit for an anesthetic case if they are not personally involved with the management of the anesthetic, or only observe another anesthesia provider manage a patient's anesthetic care. Two learners should not be assigned to the same case, except when the case provides learning opportunities for 2 students and 2 anesthesia providers are necessary due to the acuity of the case. The program will need to justify any deviation from this requirement.

Course - A unit of study that exists in an academic discipline, such as anatomy and physiology of the respiratory system, pediatric anesthesia, etc.

Credentialed expert – An individual awarded a certificate, letter or other testimonial to practice a skill in an institution. The credential must attest to the bearer's right and authority to provide services in the area of specialization for which he or she has been trained. Examples are: a pulmonologist who is an expert in airway management; an emergency room physician authorized by an anesthesia department to assume responsibility for airway management; or a neonatologist who is an expert in airway management.

Critical care experience - Critical care experience must be obtained in a critical care area within the United States, its territories or a U.S. military hospital outside of the United States. During this experience, the registered professional nurse has developed critical decision making and psychomotor skills, competency in patient assessment, and the ability to use and interpret advanced monitoring techniques. A critical care area is defined as one where, on a routine basis, the registered professional nurse manages one or more of the following: invasive hemodynamic monitors (e.g., pulmonary artery, central venous pressure, and arterial catheters); cardiac assist devices; mechanical ventilation; and vasoactive infusions. Examples of critical care units may include but are not limited to: surgical intensive care, cardiothoracic intensive care, coronary intensive care, medical intensive care, pediatric intensive care, and neonatal intensive care. Those who have experiences in other areas may be considered provided they can demonstrate competence with managing unstable patients, invasive monitoring, ventilators, and critical care pharmacology.

CRNA assistant program administrator (CRNA Assistant Program Director) - A CRNA with an appropriate graduate degree who by position, responsibility, and authority actively assists the program administrator in the organization and administration of the entire program of nurse anesthesia. The graduate degree must be from an institution of higher education accredited by a nationally recognized accrediting agency. The assistant program administrator must be qualified to assume the responsibilities of the program administrator if required.

CRNA program administrator (CRNA Program Director) - A CRNA with an appropriate graduate degree who by position, responsibility, and authority is actively involved in the organization and administration of the entire program of nurse anesthesia. The graduate degree must be from an institution of higher education accredited by a nationally recognized accrediting agency.

Culturally competent - Cultural competency is demonstrated by effectively utilizing various approaches in assessing, planning, implementing, and administering anesthesia care for patients based on culturally relevant information.

Curriculum - All experiences, clinical or didactic, that are under the direction of the program. The planned educational input, process, outcomes, and evaluations designed to enable the student to acquire the experiences specified in the program's philosophy, goals, and objectives.

Due process - A legal and ethical principle whereby nurse anesthesia faculty and students are guaranteed treatment in accordance with reasonable, clearly defined rules and have the right to fair treatment, based on published standards, procedures, and the provisions of an appeals or grievance procedure.

Employment of nurse anesthesia graduate students - Anesthesia care provided by a graduate student outside the planned curriculum is considered employment as a nurse anesthetist, whether or not the care is reimbursed. Employment is permitted in a position other than anesthesia, as long as the student is not represented in any manner, such as by a name tag, uniform, and/or signature, to be a nurse anesthetist.

Evaluation – A systematic assessment that results in data that are used to monitor and improve program quality and effectiveness.

Experimental curriculum - A curriculum that is being tested to determine whether it will produce expected outcomes that may or may not become permanent.

Faculty - A body of individuals entrusted with instruction, including the teaching staff, both clinical and academic, and any individuals involved in teaching or supervising the educational experiences/activities of students on a part-time or full-time basis.

Formative evaluations - Student assessments that help identify problems and areas that require improvement, as well as measure progress and achievement of objectives.

Full scope of practice - Preparation of graduates who can administer anesthesia and anesthesia-related care in four general categories: (1) preanesthetic preparation and evaluation; (2) anesthesia induction, maintenance and emergence; (3) post-anesthesia care; and (4) perianesthetic and clinical support functions (Reference: “Scope and Practice for Nurse Anesthesia Practice,” available from AANA, Park Ridge, IL).

Graduate degrees for CRNAs - A degree awarded to a CRNA who has fulfilled the requirements for a master’s degree, practice-oriented doctoral degree, or research-oriented doctoral degree. The primary purpose of the graduate degree is to enable the CRNA to complete additional study and coursework beyond those required for graduation from a nurse anesthesia program and entry into practice as a nurse anesthetist. The curriculum for a graduate degree for CRNAs is similar to the requirements for an equivalent degree that prepares registered nurses for entry into nurse anesthesia practice. The length of study is generally shorter depending upon the amount of advanced standing or transfer credits awarded by the degree granting institution.

Graduate employment rate - Graduate employment is defined as occupational engagement in, or an offer of occupational engagement in, any setting that requires performance of duties within the scope of practice of the Certified Registered Nurse Anesthetist (CRNA) as a condition of employment.

Grievance - Any complaint that arises from the participation of a student or faculty member in a nurse anesthesia program.

Immediately available - A CRNA or physician anesthesiologist must be present in the anesthetizing location where a graduate student is performing/administering an anesthetic and available to be summoned by the graduate student.

Indicators of success - Documentation of student achievement and attainment of a program’s established outcome criteria. Examples of ways to measure success include 1. Identifying: (a) the number of students who complete the program, (b) the number of graduates that pass the National Certification Examination for Nurse Anesthetists in accordance with the COA’s Certification Examination policy, and (c) the number of graduates who secure employment as nurse anesthetists within 6 months post-graduation; 2. Conducting graduate (alumni) evaluations to assess the program’s

ability to prepare nurse anesthetists who are competent and capable of functioning in a variety of anesthesia settings; 3. Conducting employer evaluations to assess the program's ability to prepare nurse anesthetists who are competent and capable of functioning in a variety of anesthesia settings.

Innovative curriculum - A new or creative way to introduce a curriculum or program that may become permanent. Programs that are developed to prepare broad-based, competent nurse anesthetists but do not necessarily comply with Council's requirements pertaining to specific class hours or the details of the practical experiences.

Institution - A senior college or university, hospital, corporation, or other entity with an appropriate state license or a government-sponsored agency involved in the conduct of a nurse anesthesia educational program. An educational institution that is accredited in its entirety (as a whole), including nurse anesthesia certificate programs and single-purpose institutions.

Institutional accreditor - The institution where a degree is earned must be accredited by an agency that is recognized by the U.S. Secretary of Education as a reliable authority for the quality of training offered.

Legal requirements - Examples include (1) evidence that a program accepts its responsibilities under Title IV of the Higher Education Act, as demonstrated through its compliance with accreditation standards and by its attempts to lower default rates in federal student loan programs; (2) evidence that a nurse anesthesia program is legally authorized to operate; and (3) evidence that a professional complies with licensure and certification requirements prescribed by legislation or regulation.

Licensure - A process whereby a governmental agency grants permission to individuals to practice their occupation as a way of providing reasonable assurance that public health, safety, and welfare will be protected.

Mask management - A general anesthetic that is administered by mask, exclusive of induction.

Master's degree requirement - Programs must award a master's or higher degree to each graduate. A waiver of this requirement may be requested for valid reasons. Granting of the waiver is solely at the discretion of the Council.

Nationally recognized accrediting agency - An accrediting agency that is recognized by the U.S. Secretary of Education as a reliable authority as to the quality of training offered by educational institutions and/or programs. This includes regional institutional accrediting agencies, national institutional accrediting agencies, and specialized accrediting agencies.

Nondiscriminatory practice - Nondiscriminatory practice is the practice of treating all individuals, including applicants, without regard to race, color, national origin, gender, marital status, sexual orientation, religion, age or disability, consistent with law. Although an applicant should not be required to provide information regarding any protected characteristics, he or she can provide such

information on a voluntary basis. An applicant may be asked if he or she can perform the essential tasks or functions of a nurse anesthetist.

Nurse anesthesia graduate student - A registered professional nurse who is enrolled in an educational program that is accredited by the Council for the purpose of acquiring the qualifications necessary to become certified in the specialty of nurse anesthesia.

Objectives - Future-oriented purposes and goals that a nurse anesthesia educational endeavor seeks to fulfill.

Outcomes - Evidence that demonstrates the degree to which a program's purposes and objectives have been achieved, including the attainment of knowledge, skills, and competencies by students. Outcomes are operational definitions of objectives and must be assessed in relation to them.

Pain management encounters – Pain management encounters are individual one-on-one patient interactions for the express purpose of intervening in an acute pain episode or a chronic pain condition. Pain management encounters must include a patient assessment before initiating a therapeutic action. Pain management encounters include but are not limited to the following:

1. Initiation of epidural or intrathecal analgesia.
2. Facilitation or initiation of patient controlled analgesia.
3. Initiation of regional analgesia techniques for postoperative pain or other nonsurgical pain conditions including but not limited to plexus blocks, local anesthetic infiltration of incisions, intercostal blocks, etc.
4. Adjustment of drugs delivered, rates of infusion, concentration or dose parameters for an existing patient controlled analgesia or patient controlled epidural analgesia.
5. Pharmacologic management of an acute pain condition in postanesthesia care unit.
6. Trigger point injections.
7. Electrical nerve stimulation.

The administration of intravenous analgesics as an adjunct to a general or regional anesthesia technique does not constitute a pain management encounter for purposes of meeting minimal COA required clinical experiences. The administration of regional anesthesia as the primary anesthetic technique for a surgical procedure does not constitute an acute pain management encounter.

Perianesthetic management - Anesthesia care and management of patients, including preoperative, intraoperative, and postoperative care. Preoperative care includes the evaluation of patients through interview, physical assessment, and a review of records. Intraoperative care includes administration of anesthetics, decision-making, and recordkeeping. Postanesthesia care includes evaluation, monitoring of physiological functions, and appropriate intervention when a patient is emerging from anesthesia and surgery.

Personnel - Persons employed by a conducting institution to provide necessary services, such as teaching and secretarial support, for the operation of a nurse anesthesia program.

Physician anesthesiologist - A doctor of medicine (MD) or doctor of osteopathy (DO) who has successfully completed an approved anesthesiology residency program and has been granted active hospital staff membership and full hospital staff privileges in anesthesia.

Postanesthetic assessment - Review of all available patient data and validation of anesthesia outcomes.

Practice-oriented doctoral degree - The primary purpose of the practice-oriented doctoral degree is to prepare registered nurses for professional practice as nurse anesthetists who have additional knowledge in an area of academic focus. The curriculum for a practice-oriented doctoral degree is typically a minimum of 36 calendar months in length of full-time study or longer if there are periods of part-time study. The Doctor of Nurse Anesthesia Practice (DNAP) and Doctor of Nursing Practice (DNP) are examples.

Preanesthetic assessment - Review of all available patient data prior to initiating anesthesia.

Professional aspects – Courses and activities that are specific to the profession of nurse anesthesia including but not limited to (1) the business of anesthesia and practice management; (2) reimbursement methodologies and payment policies; (3) wellness and substance use disorder; (4) professional ethics; (5) quality improvement; (6) structure and function of the AANA; and (7) professional advocacy, practice standards and regulations (non-governmental, governmental).

Program - An educational curriculum that is designed to provide both didactic and clinical components to prepare a competent nurse anesthetist. The word program is commonly used for all types of nurse anesthesia schools including programs and institutions. In the case of a branch campus, program refers to an educational unit within a larger institution such as a university.

Program design - A graphic representation of the course of study, including all the components of the program, clinical, academic, research, call, affiliations, study time, and the total committed time by quarter or semester.

Public member - A public member is someone who ensures that consumer concerns, public and private, are formally represented and who curbs any tendency to put program priorities before public interest. Such members should be selected at large, and they cannot be current or former members of the healthcare profession or current or former employees of the institution that is conducting the program. This also excludes anyone who might be perceived to have divided loyalties or potential conflicts of interest, such as a relative of an employee or former employee.

Radiology – Didactic curricular content includes the fundamentals of radiologic principles and various techniques, topographic anatomy, contrast agents, radiation safety, basic evaluation of normal and abnormal radiographs of the chest, evaluation of proper positioning of various tubes (e.g., endotracheal

tubes, chest tubes) and lines (e.g., central venous catheters), and proper techniques of safe fluoroscopic equipment use.

Reasonable time commitment – A reasonable number of hours to ensure patient safety and promote effective student learning should not exceed 64 hours per week. This time commitment includes the sum of the hours spent in in class and all clinical hours (see Glossary: Clinical hours) averaged over 4 weeks. Students must have a 10 hour rest period between scheduled clinical duty periods (i.e., assigned continuous clinical hours). At no time may a student provide direct patient care for a period longer than 16 continuous hours.

Recertification - A process whereby the National Board of Certification and Recertification for Nurse Anesthetists grants recognition to CRNAs who have met the predetermined criteria specified by the Council. It is intended to advance the quality of anesthesia care provided to patients and to ensure that nurse anesthetists maintain their skills and remain up to date on scientific and technological developments.

Research-oriented doctoral degree - The primary purposes of the research-oriented doctoral degree are to prepare registered nurses for professional practice as nurse anesthetists and as researchers capable of generating new knowledge and demonstrating scholarly skills. The curriculum for a research-oriented doctoral degree is typically a minimum of 5-7 years in length past the baccalaureate degree or 4-5 years in length past the master's degree of full-time study, or longer if there are periods of part-time study. The Doctor of Philosophy (PhD) and Doctor of Nursing Science (DNSc) are examples.

Scholarly activities - A series of accomplishments and/or achievements that require and contribute to overall critical thinking, analysis, decision-making, and innovative skills and competencies by faculty/students. Scholarly activities contribute to the achievement of the missions/goals of the academic unit and parent institutions. Examples of scholarly activities may include but are not limited to: new or innovative teaching/learning strategies; peer reviewed presentations at local, state, national and/or international levels; publish peer review articles and/or book chapters/books; investigator in research studies; participant in fellowships, internships; adviser/committee member on research committees; data analysis, collection, and utilization for program maintenance, modification or revision; leadership roles in professional organizations; attends research focus groups and research conferences; development of non-print media.

Self-assessment - A process that starts with the institutional or programmatic self-study, a comprehensive effort to measure progress based on previously accepted objectives and outcome measures. The self-study considers the interests of the communities of interest, including students, faculty, administration, and graduates.

Shared governance - A formal arrangement in which two or more organizations or institutions are controlled by a single administrative authority. Written affiliation agreements are not necessary between entities that participate in shared governance arrangements.

Sitting position - Any position in which the torso is elevated from the supine position 45 to 90 degrees and the torso is higher than the legs.

Standard precautions - An approach to infection control based on the concept that human blood and certain human body fluids are treated as if they are known to be infectious for HIV, HBV, or other bloodborne pathogens.

Strategic plan - A written guide that is used to direct the effective operation of a nurse anesthesia program and to promote academic quality.

Student services - Assistance offered to students, such as financial aid, health services, insurance, placement services, and counseling.

Summative evaluations - Summative evaluations describe a student's achievement at the completion of a period or unit of learning activity and include both expected and unexpected outcomes.

Supervision – (see Clinical Supervision).

Title IV Higher Education Opportunity Act (HEOA) program requirements - Federal requirements for programs that participate in student loan programs authorized under Title IV of the Higher Education Opportunity Act, known as Federal Family Education Loan (FFEL) programs. Examples: Federal Stafford Loan; Federal PLUS; Federal Supplemental Loans for Students; and Federal Consolidation Loans.

Unshared governance - A formal arrangement in which 2 or more organizations or institutions are controlled by separate administrative authorities. Written affiliation agreements are necessary between entities that participate in unshared governance arrangement.

Wellness and substance use disorder – Wellness is defined as a positive state of the mind, body, and spirit reflecting a balance of effective adaptation, resilience, and coping mechanisms in personal and professional environments that enhance quality of life. Substance use disorder (SUD), previously known as chemical dependency and often referred to as addiction, is a chronic and progressive disease which threatens physical and mental health and is individually characterized by a multiplicity of behaviors from misuse through dependency/addiction to alcohol and/or drugs (legal and illegal). The wellness/SUD curriculum must be an evidence-based program of study that may include but is not limited to the following five key conceptual components and learning objectives:

1. Importance of wellness to healthcare professionals: Describe the integration of healthy lifestyles, adaptive coping behaviors and tools to prioritize self-care and lessen career stressors. Build awareness of risk factors for substance use and mental health disorder and suicidal ideation. For workplace wellness, introduce conversational strategies for effective communications and the role CRNAs can take in promoting a health work environment.
2. Healthy lifestyles: Describe attitudes, behaviors, and strategies (i.e., healthy nutrition and hydration, exercise, sleep patterns, risk reduction) to support personal and professional well-being, encourage work/life balance, and mitigate physical or mental illness. Describe the effect of self-care as it relates to optimized patient safety.

3. **Mental well-being:** Describe adaptive behaviors to lessen the intensity of experienced stress and traumas to reduce the potential of unresolved feelings adversely affecting mental health. Discuss positive techniques, such as meditation, deep breathing, and counseling. Describe behaviors, feelings, and symptoms (observed or felt), indicating decline in ability to function to be able to recognize when professional mental health help is needed. Apply understanding to reduce stigma surrounding mental health challenges and treatment and know it is okay to ask for help when needed.
4. **Identifying and addressing SUD:** Describe basic pathophysiology and the disease model of addiction. Identify associated symptoms for early recognition. Describe the need and process for reporting a colleague to management to safely address. Identify and describe how to use safe appropriate strategies for successful intervention, evaluation for treatment, optimal treatment following recommendations specific to anesthesia professionals, aftercare, and monitoring for sustained recovery.
5. **Reentry into the workplace after treatment for SUD:** Broadly describes components of successful return to nurse anesthesia practice. These components include the frameworks for returning to administrative, academic and/or clinical anesthesia practice; strategies to increase the likelihood of sustained recovery upon re-entering; and elements of lifestyle adaptation that lead to a healthy work/life balance for physical, emotional, and spiritual health.

History of Nurse Anesthesia Accreditation

On June 11, 1930, Agatha Hodgins, a nurse anesthetist, set forth her ideas regarding the essentials of a national organization for nurse anesthetists. They included (1) organization of a special group, (2) establishment of educational standards, (3) development of a state registration mechanism, (4) lobbying to practice without unwarranted criticism, and (5) improving the quality of work through study and research. She became the force behind establishing an organization dedicated to meeting the needs of the first nursing specialists. One of the initial objectives of the National Association of Nurse Anesthetists (NANA), whose name was later changed to the American Association of Nurse Anesthetists (AANA), was to develop the mechanisms for establishing a program to evaluate schools of nurse anesthesia.

Development of an Accreditation Process

An Education Committee was established in 1933 and with the assistance of other NANA committees, was charged with the development of educational standards, maintenance of a central bureau, and compilation of lists of approved schools and qualified instructors. To that end, preparations included identifying hospitals that operated schools of anesthesia, visiting those schools, and analyzing the content of their curriculums. These efforts resulted in written guidelines that established minimums of a 4 months' course of study, 250 anesthesia cases, and 75 hours of classroom instruction. The work of national committees over the following decades resulted in refinement of early education guidelines and identification of essential elements for nurse anesthesia education.

At the 1950 AANA Annual Meeting in Atlantic City, New Jersey a resolution was unanimously adopted to create a plan for accreditation of nurse anesthesia schools. The formal accreditation program began 2 years later when the 1952 AANA Board of Trustees accepted criteria for accreditation of schools and delegated responsibility for its implementation to the Approval of Schools Committee. In addition to support shown by the vote of AANA members, the new process to accredit nurse anesthesia schools was endorsed by the American Hospital Association (AHA).

From 1937 to 1975, the educational guidelines, voluntary approval process, and eventually the accreditation process focused only on hospital-based schools of anesthesia. In 1970, the accreditation standards recommended that schools pursue the goal of offering college credit for coursework. The first mention by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA) accrediting degree granting schools was recorded in the 1976 standards indicating that the same standards applied to certificate and degree granting schools. Increasingly higher expectations for graduates to earn higher education degrees continued over the years with accreditation standards for master's degree programs in 1998, optional research-oriented and practice-oriented doctoral degree programs in 2004, and draft standards for practice doctoral degree programs in 2014. All accredited nurse anesthesia programs offered masters level education as of October 1, 1998, and all programs must offer doctoral degrees by 2022.

Organizational Structure

In 1955, AANA was listed by the US. Commissioner of Education as the recognized agency for accreditation of nurse anesthesia schools. The accreditation function was transferred to the AANA's Council on Accreditation of Nurse Anesthesia Educational Programs/Schools in 1975, in response to a major revision of the US Office of Education criteria. The revised criteria reflected many of the sociopolitical concerns of the time: (1) public accountability, (2) conflicts of interest, (3) consumer protection, (4) nondiscriminatory practices, (5) due process, and (6) community of interest involvement. These criteria mandated a structural change in the AANA that resulted in the formation of 3 semiautonomous councils: accreditation, certification, and practice. These councils were granted full functional and operational autonomy over the next 3 years, after proving their effectiveness in performing their respective responsibilities. A fourth council, recertification, was established in 1978 to serve as the monitoring body for the continuing education of nurse anesthetists.

The COA continued to exist from 1978 to 2009 as an autonomous, multidisciplinary body under the corporate structure of the AANA. In 2009, due to concerns by the AANA regarding compliance with Illinois State law and difficulty in the indemnification of COA directors and onsite reviewers, the COA separately incorporated. It is now recognized as a 501 (c) (3) accrediting organization by the Internal Revenue Service.

External Recognition of COA

The COA has been continuously recognized by the US Secretary of Education (formerly the US Commissioner of Education), US Department of Education (USDE) since 1975, as well as by the Council on Postsecondary Accreditation (COPA) or its successor, the Commission on Recognition of Postsecondary Accreditation (CORPA), since 1985. The Council for Higher Education Accreditation (CHEA) assumed CORPA's recognition functions in 1997. COA maintains USDE recognition under the legislative mandate that calls for the US Secretary of Education to identify reliable authorities for the quality of training that is offered by programs. COA maintains CHEA recognition to demonstrate its effectiveness in assessing and encouraging improvement and quality in programmatic accreditation. COA also subscribes to the Code of Good Practice for accrediting organizations through membership in the Association of Specialized and Professional Accreditors (ASPA).

COA's scope of accreditation was clarified by the USDE in 1993 and by CORPA in 1994 to delete reference to generic programs and specify nurse anesthesia programs that prepared graduates at the certificate, baccalaureate, master's, and doctoral degree levels. In 1997, the scope was revised to delete baccalaureate programs that no longer existed. Currently, the COA is identified by the USDE and CHEA as a nationally recognized accrediting agency for the accreditation of institutions and programs of nurse anesthesia at the post-master's certificate, master's, and doctoral degree levels, including programs offering distance education in the US and Puerto Rico.

Changes to the Higher Education Act, later named the Higher Education Opportunity Act - (HEOA) have resulted in COA revising its standards with each reauthorization as needed to comply with federal regulations for accrediting agencies. Regulations have been adopted requiring accreditors to review an institution's and/or program's compliance with tuition in relation to the subject matter taught, default rates in student loan programs, records of student complaints, and attrition, graduation, certification, and employment rates among others.

A significant change in federal regulations occurred during the 1990s. Congress set stringent requirements for the federal government, state governments, and accrediting agencies, including COA, to increase oversight of institutions that participate in federal programs such as student financial aid. The original impetus for this action was an unacceptably high national rate of college graduates who failed to repay their federal student loans. As a result, only accrediting agencies linked to federal programs were eligible for new or continued recognition by the US Secretary of Education. Several accrediting agencies were "derecognized" during this time.

The COA continues to be officially recognized as the only accreditor for nurse anesthesia educational programs in the US. Graduation from a COA accredited program is required: (1) as the basis for ascertaining eligibility for federal programs under selected legislation, (2) to sit for the National Certification Examination, (3) for licensing in state rules and regulations, and (4) as a condition of employment.

COA Membership and Staff

Changes in COA membership occurred in May 2002 to comply with USDE requirements. The AANA Education Committee chair member was replaced with a CRNA educator member and a second public member was added. At the COA's October 2017 meeting, an additional educator director was added. The resulting COA membership includes 6 CRNA educators; 2 CRNA practitioners; 1 healthcare administrator; 1 academic administrator; 2 public members; and 1 nurse anesthesia student. COA's membership represents the various publics within the nurse anesthesia community of interest in which the profession resides. All representatives are members of the COA Board of Directors and have been vested with full decision-making and voting powers with the exception of the nurse anesthesia student who serves as a nonvoting member.

COA staff consists of the Chief Executive Officer, accreditation specialists, and administrative support personnel. The Chief Executive Officer oversees operational activities and works closely with COA directors. Accreditation specialists work directly with program administrators, onsite reviewers, and consultants on accreditation and education related activities. Office operations specialists support the development, implementation and ongoing support of technology and communication. In 2008, a major change in COA operations was the deployment of an electronic accreditation business process management system (i.e., COAccess).

Movement to Doctoral Education

Educational requirements have continued to increase since the establishment of a national organization for nurse anesthetists in the early 20th century. Schools of anesthesia have moved from apprenticeships at hospitals to programs affiliated with institutions of higher education offering graduate degrees. Official positions taken by the COA and AANA have facilitated this movement including support for nurse anesthesia program applicants to possess baccalaureate degrees, support for the education of nurse anesthetists at the postbaccalaureate level, transition of programs to the master's degree level, and more recently to the doctoral degree level.

The first COA requirement for degree programs was published in the 1990 standards for all nurse anesthesia programs to transition from awarding certificates to awarding master's degrees. By October 1, 1998, all accredited nurse anesthesia programs were offering master's level education.

Exploring doctoral level education for nurse anesthetists has been a methodical, deliberate process. In 1996, the AANA appointed a Doctoral Task Force to study the feasibility of doctoral degrees for nurse anesthetists. This task force found little support for the idea at that time. However, the COA published standards for optional practice-oriented and research-oriented doctoral degrees in 2004 because of the continued interest in and movement toward doctoral education for nurse anesthetists.

The transition of many healthcare roles to the practice doctorate for nurses and other nonphysicians in the US has been driven by national healthcare policy as attempts are made to reduce medical errors, mediate healthcare costs, and improve quality and outcomes for patients. Practice doctorates have been established for many health professions in this environment (e.g. optometry, audiology, pharmacy, and physical therapists). As part of this societal movement for health professions to hold practice doctorates, the American Association of Colleges of Nursing (AACN) published a position statement in October 2004 for its member colleges to transition all advanced practice nursing education to the doctor of nursing practice degree. The AANA convened a summit in June 2005 to reexplore doctoral preparation of nurse anesthetists. Pursuant to its summit, the AANA appointed the Task Force on Doctoral Preparation for Nurse Anesthetists (DTF). The DTF held meetings between December 2005 and February 2007 for the purpose of developing options for the doctoral preparation of nurse anesthetists. The DTF provided its report to the AANA Board of Directors in April 2007. In June 2007, the AANA Board unanimously adopted a position statement to support doctoral education for entry into nurse anesthesia practice by 2025. The COA subsequently explored the accreditation ramifications of the AANA position statement regarding doctoral education. In January 2009, the COA voted to require nurse anesthesia educational programs to transition to a doctoral framework no later than January 1, 2022. All entry-into-practice graduates from nurse anesthesia educational programs will be required to possess a doctoral degree as of January 1, 2025.

The COA has taken key steps in transitioning to doctoral level education for nurse anesthetists. These included notification to accredited programs that: (1) the COA will not consider any new master's degree programs for accreditation beyond 2015; (2) students accepted into an accredited program on January 1, 2022 and thereafter must graduate with doctoral degrees; and (3) doctoral degrees will be required for the CRNA program administrators (program administrators and assistant administrators) in all doctoral programs by January 1, 2018. All degrees must be awarded by a college or university that is accredited by a nationally recognized institutional accreditor.

Recognizing the need to develop comprehensive standards for entry-into-practice doctoral programs, the COA subsequently appointed a Standards Revision Task Force (SRTF) in 2010. The SRTF performed extensive research and analysis of data both from within and external to nurse anesthesia education. The SRTF considered input from various communities of interest as it set about its work. These communities of interest included nurse anesthetists from varied practice settings, the AANA Board of Directors, the AANA Education Committee, the National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA), student nurse anesthetists, other nursing groups, university officials, educational accreditors, healthcare administrators, physicians, related healthcare professions, regulatory authorities, payors of healthcare services, patients, and the public. The need to develop an understanding of competencies expected for entry into nurse anesthesia practice was integral to the SRTF's work. Following extensive multivariate efforts by the SRTF, the COA approved the following understanding of the concept of nurse anesthesia entry-into-practice competencies at the doctoral level:

Entry-into-practice competencies for the nurse anesthesia professional prepared at the doctoral level are those required at the time of graduation to provide safe, competent, and ethical anesthesia and anesthesia-related care to patients for diagnostic, therapeutic, and surgical procedures.

Entry-into-practice competencies should be viewed as the structure upon which the nurse anesthetist continues to acquire knowledge, skills, and abilities along the practice continuum that starts at graduation (proficient), and continues throughout their entire professional career (expert).

The SRTF presented its first draft of the Standards for Accreditation of Nurse Anesthesia Programs: Practice Doctorate to the COA in January 2012. By 2013, input was solicited from the AANA Education Committee in the development of the standards with the first draft of revised standards sent to the committee members in preparation for their conducting selected hearings. Further, the AANA Education Committee has provided input throughout the developmental process according to written procedure. This procedure has practical considerations since the Council is the entity with knowledge of laws, regulations, and other requirements and constraints imposed by external authorities governing accrediting agencies in the US. Several drafts of the standards were developed based on comments received by the COA, SRTF, and AANA from all stakeholders from 2012 to 2014. Following careful

consideration of all inputs, the COA approved the final draft at its January 2014 meeting. The trial standards were implemented after adoption in January 2014 and became required standards in January 2015.