

2016 SUNRISE APPLICATION

ARIZONA ASSOCIATION OF NURSE ANESTHETISTS

September 1, 2016

President Andy Biggs
Arizona State Senate

Speaker David Gowan
Arizona House of Representatives

1700 W. Washington
Phoenix, AZ 85007

Dear President Biggs and Speaker Gowan,

Pursuant to section 32-3104 and 32-3106, Arizona Revised Statutes, the Arizona Association of Nurse Anesthetists hereby submits the attached report requesting an expansion to the scope of practice for Certified Registered Nurse Anesthetists (CRNA).

This proposal requests that language in section 32-1634.04, Arizona Revised Statutes, requiring the administration of anesthetics by a certified registered nurse anesthetist be done under the *direction of and in the presence* of a physician or surgeon (in place since 1923), be replaced with language recognizing the modern role of a CRNA as part of the healthcare team. It is outdated and inconsistent with modern practice. Healthcare, and the delivery of anesthesia, has made dramatic changes over this time table and it is imperative that statute reflect the needs of the practitioners as well as the public. We are not proposing to delete the current location requirements outlined therein nor the requirement that such anesthesia services be provided “...in connection with the preoperative, intraoperative or postoperative care of a patient or as part of a procedure performed by a physician or surgeon...”. In short, a physician or surgeon would continue to determine the need for anesthesia services, with the CRNA providing such service.

Additionally, while not a scope of practice expansion (see A.R.S. § 32-3102 (3)), but relevant to the proposal, the AzANA will also pursue legislation to reinstate a CRNA’s ability to obtain a Drug Enforcement Agency (DEA) license. When SB1362 was introduced in 2012 and passed into law, the language preserved CRNA scope of practice and also clarified the nature of CRNA medication ordering authority by allowing a CRNA to “order medication” in place of the term “prescriptive authority”, which was previously used in rule. The unforeseen fallout from this bill was that the DEA misinterpreted the new language and subsequently revoked the DEA licenses from CRNAs in Arizona. It is their belief that the new statute does not permit CRNAs to hold a DEA license, when the actual intention of SB1362 was only to move language from rule into statute, based on recommendations of the Auditor General. CRNA’s will pursue the statutory ability to not only continue giving and writing orders for medications to be administered pre-operatively, post-operatively, or as part of the procedure, but also to once again obtain DEA numbers. The AzANA recognizes current issues and concern from the public and the legislature regarding narcotic prescriptions, and therefore, new statutory language will not permit a CRNA to write any prescription, including an opioid (narcotic), for a patient to filled at an outside pharmacy.

We respectfully request a favorable review of this application.

Sincerely,



Ali Baghai, MS CRNA
President, Arizona Association of Nurse Anesthetists

Terms & Definitions

- APRN Advanced Practice Registered Nurse. A Registered Nurse who has undergone additional education and training, earning an advanced degree in a specific field of nursing. In Arizona this includes Nurse Practitioners, Clinical Nurse Specialists, Nurse Midwives, and Certified Registered Nurse Anesthetists.
- BSN Bachelor of Science in Nursing.
- BON Board of Nursing (specifically referring to Arizona). This is the regulatory body for all registered and advanced practice nurses in Arizona.
- COA Council on Accreditation of Nurse Anesthesia Educational Programs. The organization responsible for accrediting all nurse anesthesia programs throughout the United States, thus creating unity and equality between programs and graduates, regardless of which state a program may be located.
- CRNA Certified Registered Nurse Anesthetist. An advanced practice registered nurse that has undergone specialized training, usually at a masters or doctorate level, in the administration of anesthesia and pain management.
- NBCRNA National Board of Certification and Recertification for Nurse Anesthetists. This is a nationally-recognized certification body by which all CRNAs obtain and maintain national certification.
- NCSBN National Council of State Boards of Nursing. This is a national organization through which boards of nursing act and counsel together on matters of common interest and concern affecting public health, safety and welfare.
- NPA Nurse Practice Act. Statute governing scope of practice for all registered nurses and APRNs, Arizona Revised Statute, Title 32, chapter 15.
- RN Registered Nurse. This is the term used in this application to refer to an undergraduate-level nurse.

Introduction to Nurse Anesthesia

History of the profession:

Anesthesia was introduced into nursing in the mid-nineteenth century (as early as the American Civil War) as surgeons needed help caring for patients during surgical operations. Anesthesia went on to emerge as the first nursing specialty. In 1877 Sister Mary Bernard in Erie, PA became known as the first identifiable nurse anesthetist. Few physicians were administering anesthesia during this time period, and it was decades before physicians adopted the specialty of anesthesia (Bankert, 1989).

During these early years, nurses worked tirelessly to develop educational programs to educate and train nurses, and even physicians and dentists, to administer effective and safe anesthesia. It was during this time period that the Arizona Legislature passed HB146, signed by Governor George Hunt in 1923, allowing for anesthetics to be administered by specially trained nurses under the direction of and in the immediate presence of a physician or surgeon (see section 1 for the history of this statute). The National Association of Nurse Anesthetists was later founded in 1931 (renamed the American Association of Nurse Anesthetists in 1939), and the Arizona Association of Nurse Anesthetists (AzANA) was founded in 1956.

The early administration of anesthesia by nurses is an important point, and documents that anesthesia is a shared specialty between advanced practice nursing, dentistry, and medicine. It is not an exclusive practice-right, nor solely the purview of medicine, and never has been. More accurately, medical and nursing anesthesia professions developed separately and therefore the two professions share certain overlapping functions that can be performed by both (Blumenreich, 1990).

Modern nurse anesthesia:

Today, a Certified Registered Nurse Anesthetist (CRNA) works as an Advanced Practice Registered Nurse (APRN), having graduate-level education and national board certification in anesthesia. CRNAs are frequently trained alongside physician anesthesiology residents in the same institutions, performing the same anesthetics, thus preparing CRNAs to administer the same quality anesthesia as their physician counterparts. At the University of Arizona, the nurse anesthesia students, as well as the residents, utilize Banner University Medical Center Tucson and the Tucson VA hospitals for their clinical training. At Midwestern University in Glendale, CRNAs students and medical students combine to take courses in human anatomy, physiology, embryology and biochemistry. (Midwestern University College of Health Science, 2014)(Appendix A)

CRNAs practice in all 50 states and the District of Columbia, administering approximately 34 million anesthetics each year. They practice in many different environments and models. Some work in conjunction with physician anesthesiologists, while others work independent of any other anesthesia provider presence. CRNAs care for every type of patient, from the neonate and the laboring mother to the critically ill and the elderly. CRNA practice includes all types of anesthesia, including general, regional and local, for every type of procedure: from podiatry and dentistry, to thoracic, cardiovascular and neurosurgery. Over 800 CRNAs are licensed in Arizona (Arizona Board of Nursing) and they practice in each of Arizona's counties, working in hospitals, surgery centers, dental offices and other healthcare environments. In the US Military, CRNAs serve our troops on the front lines and have been involved with wartime administration of anesthesia since the civil war. CRNAs were the only anesthesia providers deployed into front-line surgical hospitals during Operations Desert Storm and Iraqi Freedom.

CRNAs as primary providers of anesthesia:

In much of rural America, including Arizona, CRNAs serve as the *primary*, and often the *sole* anesthesia providers. Communities such as Cottonwood (Cobre Valley), Payson, Globe, Safford, Nogales, Parker, Page, Winslow, Tuba City and White River Indian Health Services are void of a physician anesthesiologist presence. CRNA services enable healthcare facilities in these medically underserved areas to offer obstetrical, surgical, and trauma stabilization services to patients near their homes and support the existence of these facilities in small communities across the state. Without CRNAs in these communities surgical and obstetrical services could not be offered and patients would be required to travel long distances to obtain the care they need. Even within Prescott, Yuma, Tucson and the metro Phoenix area there are facilities which offer CRNA-only anesthesia services.

1. A DEFINITION OF THE PROBLEM AND WHY A CHANGE IN SCOPE OF PRACTICE IS NECESSARY INCLUDING THE EXTENT TO WHICH CONSUMERS NEED AND WILL BENEFIT FROM PRACTITIONERS WITH THIS SCOPE OF PRACTICE.

Current statute permits a CRNA to “*administer anesthetics under the direction of and in the presence of a physician or surgeon in connection with the preoperative, intraoperative or postoperative care of a patient or as part of a procedure performed by a physician or surgeon*” in a healthcare institution, physician office, or an ambulance. (Appendix B) The terms “*direction*” and “*presence*” have been in statute since 1923 (a physician was required to be in the “*immediate*” presence until 1970 when the legislature deleted the term “*immediate*” and added a definition for “*presence*” to mean “*within the same room, an adjoining room or within the same surgical or obstetrical suite*”).

Presence

Only a limited number of states (approximately 5 others) have a physician “*presence*” requirement for CRNAs in their nurse practice acts, board of nursing rules/regulations, medical practice acts, or board of medicine rules/regulations. This can create access to care concerns because there are times when anesthesia services are requested, but the physician “*presence*” requirement prevents the delivery of anesthesia by a CRNA in that instance. An example is when a patient is scheduled to receive an MRI. This can be an extended procedure, and is performed with the patient resting perfectly still inside a long, narrow tube. For someone with anxiety, claustrophobia, or even a nervous disorder, it becomes almost impossible to complete a successful scan. CRNAs are frequently requested to provide the necessary sedation to make this procedure successful, but many times there is not a physician in the MRI suite, which prevents the patient from receiving the proper diagnostic testing in a timely manner.

Current statute requires a physician (surgeon) to be *present* while a CRNA is administering anesthesia. It is common practice for surgeons, upon completion of a procedure, to leave the operating suite, speak to the patient’s family, and begin paperwork for post-operative care. During this time the physician assistant may be sewing the wound closed while the anesthesia provider is waking the patient and accompanying them to the recovery room. There is no need for the surgeon to be present during this phase, and the requirement of his/her *presence* only adds to delays in the operating suite. Physicians are fully competent to determine, through their medical judgment, what their comfort level is with *any* provider of anesthesia. There should not be regulations preventing him/her from fulfilling other duties in a timely manner.

It will be shown throughout this application that CRNAs are trained and educated to provide safe anesthesia, regardless of the phase of the anesthetic. Whether at the beginning, middle, or the end of a procedure, a surgeon’s *presence* does not help or hinder the anesthetic process, and therefore is not a necessary statutory requirement.

Direction

The term “*under the direction of*” is not defined in statute and there is no Arizona case law to provide interpretation. Approximately 9 other states have a “*direction*” requirement for CRNAs in their nurse practice acts, board of nursing rules/regulations, medical practice acts, or board of medicine rules/regulations. Importantly, Arizona’s current scope of practice does allow CRNAs to identify, develop, implement and evaluate an anesthetic plan for a patient (A.R.S. § 32-1634.04 (B)(6)), thus recognizing the expertise and judgment of a CRNA in determining the type of anesthetic, the appropriate medications, and the proper doses to administer. Indeed, CRNAs are licensed professionals with a legal and professional obligation to exercise independent judgment regarding the care they provide to patients.

With that context, “*direction*” has historically been understood to mean that the physician requests anesthesia services from a CRNA for an operative procedure. In these situations, the physician fulfilling the statutory requirement is the operating surgeon, podiatrist or dentist. These physicians often do not have specific anesthesia training and are not board certified in anesthesia delivery. In fact, in most operating rooms a non-penetrable drape is placed between the operating surgeon and the anesthesia provider, thus guarding the patient and maintaining a sterile environment. Surgeons, being focused on the surgery itself, are not monitoring the slight changes and adjustments CRNAs make during the procedure to keep the patient safe and stable. There is, however, coordination and planning between a

surgeon and the CRNA before, during and after a procedure in order to provide the best outcome possible. In these instances, the CRNA is communicating information and utilizing their respective expertise as a member of the healthcare team to optimize the overall care delivered to the patient.

That said, the statutory requirement for physicians and surgeons to “direct” a CRNA has still created confusion as to what the role of a “director” should be when working with a CRNA. The term “*direction*” has been confused with, or in some cases argued to be the same as, “*supervision*.” CRNA’s in Arizona, along with 40 other states, do not have a statutory requirement to be “*supervised*” by a physician or anesthesiologist in their nurse practice acts, board of nursing rules/regulations, medical practice acts, or board of medicine rules/regulations. However, as recently as the June 2016 issue of the *MICA Risk Advisor*, the group providing liability insurance to physicians, it was argued that “*direction*” under Arizona law may in fact mean “*supervision*” which creates a “*liability risk for the physician providing the direction...*” and “*working with a CRNA can expose physicians to liability for both negligent supervision and vicarious liability for the negligence of a CRNA.*” (Giancola, P; 2016) The misperception in definitions between “*direction*” and “*supervision*” verifies the confusion and need to address this term. A review of reported cases in Arizona shows that physicians have no greater liability working with a CRNA than an anesthesiologist. In fact, we know of no reported cases in Arizona where a physician, podiatrist or dentist have been found liable for the actions of a CRNA, making independent judgements and critical decisions. CRNAs are not only separately licensed, but also hold their own malpractice/liability insurance.

The net result of this problem is not simply an unnecessary question of liability, but a documented problem of recruiting physicians and surgeons to hospitals (especially rural) where anesthesia care is only provided by CRNAs. In a previous Senate Health Committee Hearing, Victoria Clark, CEO of LaPaz Regional Hospital, testified of the recruiting difficulties she experiences due to the confusing “*direction and presence*” statute language. (Senate Health Committee, 2015)

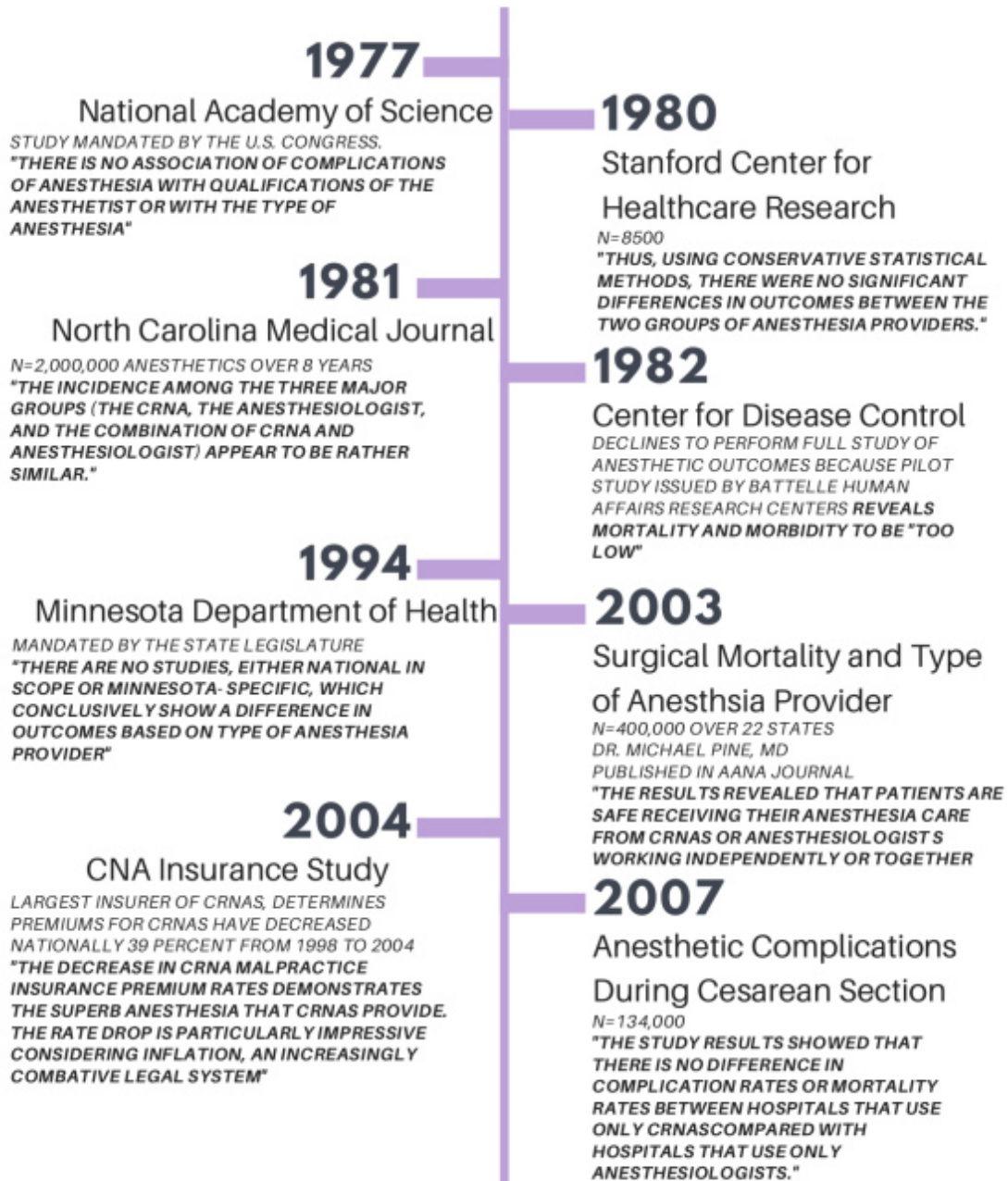
Outside of the hospital setting, this confusion has created an anti-competitive environment for CRNAs. In one recent example, a medical office had approached a CRNA practice, but after confusion regarding how to interpret “*direction*,” the offer was rescinded and instead offered to a physician-owned anesthesia practice (Rodriquez, 2016)

It has been stated that “it is legal for nurses to compete with physicians in providing services in which there is role overlap or when there is reasonable interchangeability between providers.” (Gunn, et. Al, 1987) Truly, both types of anesthesia providers (physicians and CRNAs) are essential to anesthesia delivery—first, because of manpower, as our need for healthcare providers continues to increase. Physician anesthesiologists not only provide excellent direct patient care, but also act in many leadership and research roles, which are necessary to our healthcare system. While the professions are interchangeable in many respects, both professions will remain vital to anesthesia delivery in Arizona after CRNA language is updated.

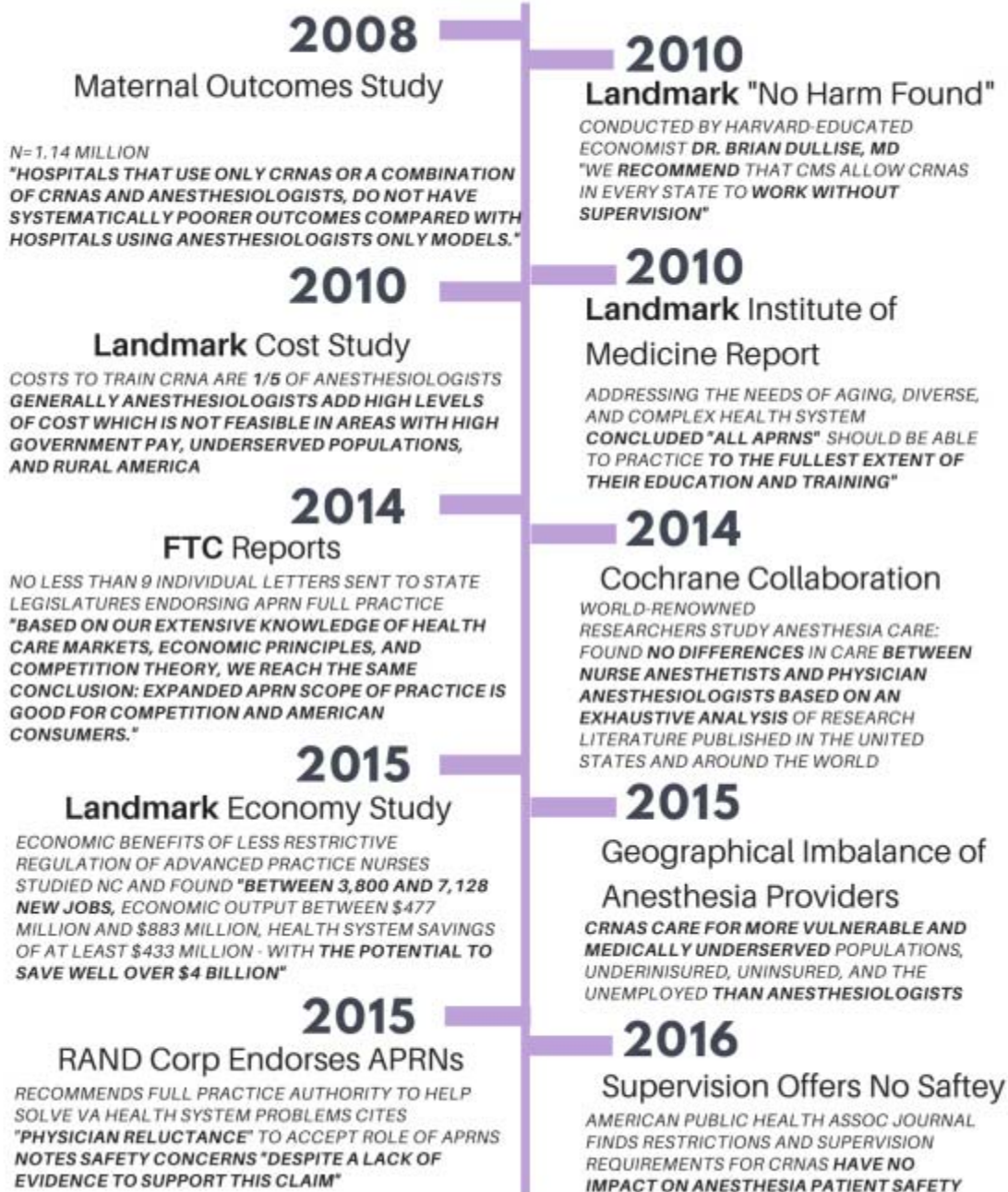
2. THE EXTENT TO WHICH THE PUBLIC CAN BE CONFIDENT THAT QUALIFIED PRACTITIONERS ARE COMPETENT:

Presented here are summaries of research conducted over the past forty (40) years that help emphasize the qualifications and safe practices of CRNAs.

A PREPONDERANCE



OF EVIDENCE



AZANA.ORG

A. EVIDENCE THAT THE ARIZONA STATE BOARD OF NURSING HAS FUNCTIONED ADEQUATELY IN PROTECTING THE PUBLIC.

The Arizona State Board of Nursing (BON) was established in 1921. It regulates the largest number of health care providers of any 90-10 Board: over 80,000 Registered Nurses, 10,000 Licensed Practical Nurses, 27,000 Nursing Assistants, and more than 6,000 Advanced Practice Nurses (including CRNAs). Its stated mission is to protect the public health, safety and welfare through the safe and competent practice of nursing and nursing assistants. (Arizona Board of Nursing).

Auditor General reports concerning the BON have consistently found the Board to be compliant in its licensing procedures. The history of appropriate administrative conduct is reflected in legislative continuation of at least ten years for each of the last three reviews (1992, 2002, and 2012).

B. WHAT EFFECTIVE QUALITY ASSURANCE STANDARDS EXIST IN THE CRNA PROFESSION SUCH AS LEGAL REQUIREMENTS ASSOCIATED WITH SPECIFIC PROGRAMS THAT DEFINE OR ENDORSE STANDARDS OR A CODE OF ETHICS?

The American Association of Nurse Anesthetists (AANA) is the national professional organization for CRNAs. It was founded in 1931 and currently represents nearly 48,000 CRNAs and student nurse anesthetists nationwide. The AANA promulgates education, practice standards and guidelines, ethics, and affords consultation to both private and governmental entities regarding nurse anesthetists.

The AANA established a Code of Ethics to guide its members in fulfilling their obligations as professionals (American Association of Nurse Anesthetists, 2013). Each member of the AANA has a personal responsibility to uphold and adhere to these ethical standards. The standards emphasize the following ideals:

1. Responsibility to Patients
2. Competence
3. Responsibilities as a Professional
4. Responsibility to Society
5. Endorsement of Products and Services
6. Research
7. Business Practices

The standard for certification has been a requirement of nurse anesthesia practice since 1945. The national board examination was chosen to safeguard the surgeon's interest, the interest of the hospitals and the interest of the public (Bankert, 1989). To become certified as a nurse anesthetist, the National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA) requires that candidates must first complete a bachelor's degree in a science-related field or a Bachelor of Science in Nursing. In addition, a candidate must be a licensed registered nurse (RN) with a minimum one-year full-time nursing experience in a critical care setting such as an intensive care unit. Following the critical care experience, applicants apply to a program of nurse anesthesia that is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA). These COA-accredited programs currently provide education at a masters or doctoral level. Program length varies from 24-36 months. Many programs require entrance prerequisites similar to medical schools (pre-med courses) and up to two years of critical care experience. The content of the educational curriculum for nurse anesthesia programs is governed by the COA standards and provides students the

scientific, clinical, and professional foundation upon which to build sound and safe clinical practice. Clinical rotations afford mentored experiences for students during which time they are able to learn anesthesia techniques, test theory, and apply knowledge to clinical situations. Students gain experience with patients of all ages who require surgical, obstetrical, dental and pediatric interventions.

The certification and recertification process of CRNAs is governed by the National Board of Certification and Recertification of Nurse Anesthetists (NBCRNA), which exists as an autonomous not-for-profit incorporated organization. This independent status provides assurance to the public that CRNA candidates have completed certification requirements that have met or exceeded benchmark qualifications and knowledge of anesthesia. It is required by the Arizona Board of Nursing for every CRNA licensed in Arizona to maintain current certification or recertification through the NBCRNA.

The initial certification after graduation is valid for two years. During that time, and during each subsequent two-year period, CRNAs are required to maintain competence and education by completing a minimum of 40 educational units that may then qualify him/her for recertification. The NBCRNA recognizes that healthcare is a changing entity and as such, CRNA requirements much change with it. Recent adjustments have been made to the recertification process and will go into effect in 2016 (National Board of Certification & Recertification for Nurse Anesthetists, 2015). These changes include an increase in the number of educational units (60) required as well as participation in a recertification examination.

The NBCRNA certification and recertification programs are accredited by the National Commission for Certifying Agencies (NCCA), a private not-for-profit organization. The NCCA is the accrediting branch of the National Organization for Competency Assurance (NOCA) which is the national standard-setting organization for credentialing groups including certification boards, licensing boards and associations.

C. WHAT EVIDENCE IS THERE THAT STATE APPROVED EDUCATIONAL PROGRAMS PROVIDE OR ARE WILLING TO PROVIDE CORE CURRICULUM ADEQUATE TO PREPARE PRACTITIONERS AT THE PROPOSED SCOPE OF PRACTICE?

CRNAs are highly-trained in the administration of anesthesia and treating adverse reactions and occurrences during the course of an anesthetic. As was shown in Appendix A, the upper-level educational curriculum gives CRNAs the necessary knowledge base and skills to manage any anesthetic, regardless of complexity. As students, CRNAs are exposed to many different types of anesthesia models, including working with our physician colleagues, as well as working in sole-CRNA environments. The largest CRNA education program in Arizona, Midwestern University, currently places students in all types of practice situations, and 41% of their student rotations are in CRNA-only practices. This unequivocally gives the student the necessary training to practice in this environment.

A CRNA's education begins long before an anesthesia program is selected. Before becoming an expert in anesthesia every CRNA went through an undergraduate degree program to become a registered nurse. Courses for a Bachelor of Science in Nursing (BSN) not only cover necessary nursing skills for hands-on experience but the science surrounding healthcare as well, including biology, microbiology, physics, chemistry, pharmacology, mathematics, anatomy, physiology and pathophysiology. A sample BSN degree path is included that provides insight into not only the science education an RN receives, but the valuable hands-on experiences as well which allow the student nurse to work at the bedside in caring for patients of every age and disease process (Arizona State University College of Nursing and Healthcare Innovation, 2015).

Following completion of a bachelor's program and successful RN examination a nurse must then complete a minimum one (1) year of clinical experience in a critical care environment, usually an intensive care unit. This allows the RN to gain valuable hands-on experience in working with vasoactive medications and working with patients with the most critical health concerns. Once an RN has completed the ICU experience he/she is then eligible to become a candidate for a program in nurse anesthesia.

Accreditation of nurse anesthesia educational programs began in 1952 by the COA, which has been recognized by the U.S. Department of Education since 1955.

Arizona hosts two programs that educate and train RNs to become CRNAs. Both programs are accredited through the COA and are preparing students to practice anesthesia within the national standards and scope of practice. Because the COA's accreditation is for institutions and programs of nurse anesthesia throughout the United States, both the United States Department of Education and the Council for Higher Education Accreditation have recognized the COA as an accrediting agency for nurse anesthesia.

The COA is responsible for establishing the standards and policies for nurse anesthesia educational programs subject to consideration by its communities of interest. The standards address administrative policies and procedures, institutional support, curriculum and instruction, faculty, evaluation, and ethics. The first set of standards was adopted in 1952, and the standards have been under review and subject to periodic major and minor revisions since that time. Compliance with the standards forms the basis for accreditation decisions made by the COA.

The COA standards for accreditation are consistent with the proposed changes to statute found in this application. These standards require that...

...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 (Council on Accreditation of Nurse Anesthesia Educational Programs; Practice doctorate, 2004).

The master's degree for 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) (Council on Accreditation of Nurse Anesthesia Educational Programs; Practice doctorate, 2004). Most programs exceed these minimum requirements. In addition, many require study in methods of scientific inquiry and statistics, as well as active participation in student-generated and faculty-sponsored research.

Doctoral nurse anesthesia programs must meet additional COA standards and include courses in advanced physiology/pathophysiology, advanced pharmacology, basic and advanced principles in nurse anesthesia, and advanced health assessment (Council on Accreditation of Nurse Anesthesia Educational Programs; Practice doctorate, 2004). These additional courses have an additional 450 hours and cover topics in human anatomy, chemistry, biochemistry, physics, genetics, acute and chronic pain management, radiology, ultrasound, anesthesia equipment, professional role development, chemical dependency and wellness, informatics, ethical and multicultural healthcare, leadership and

management, business of anesthesia/practice management, health policy, healthcare finance and integration/clinical correlation. This post-baccalaureate curriculum is a minimum of 3 years of full-time commitment.

A new program desiring accreditation must complete a capability study and undergo an on-site evaluation prior to being considered for accreditation. A similar review is required five years following the start of the program's first class. Across the nation there are currently 114 COA-accredited nurse anesthesia programs. In Arizona, Midwestern University (MWU) in Glendale and the University of Arizona (UA) in Tucson are currently the in-state nurse anesthesia programs.

Midwestern University's 27-month master's degree program has proven itself a pinnacle of Nurse Anesthesia education. Not only does MWU meet all COA requirements, it *exceeds* all of them. For example, the minimum number of anesthesia cases required for graduation is 550, and Midwestern students earn over 1,100 cases on average. These students gain significantly more clinical, didactic and simulation time than required by the COA (Burns, personal communication May 19, 2015). Midwestern has a focus on full scope practice and allows their students to travel to many urban and rural areas of Arizona and around the country to work with and learn from CRNAs who are providing services in every practice model. Midwestern students consistently fill some of the needs of this state upon graduation and hence strengthen the CRNA workforce in Arizona.

The University of Arizona College of Nursing, Doctor in Nursing Practice (DNP)-Nurse Anesthesia program is the fifth advanced practice nursing educational specialty within the nationally recognized Commission on Collegiate Nursing Education (CCNE) accredited doctor of nursing practice program. This nurse anesthesia program received its initial accreditation from the COA in January 2015 and is preparing CRNA students at a doctoral level via a 36-month program and aims to not only meet the standards set by the COA, but exceed them in every aspect. The University of Arizona is well-known for its quality education in the healthcare industry. This CRNA program hosts an innovative skills lab that includes the use of life-like manikins that unite the cognitive and psychomotor skills of the students. It also provides clinical sites throughout Arizona for hand-on anesthesia experience.

3. TO WHAT EXTENT MAY AN INCREASED SCOPE OF PRACTICE HARM THE PUBLIC?

CRNAs are didactically and clinically prepared to provide high quality, safe anesthesia through rigorous training in nationally accredited masters and doctoral programs. The expertise of CRNAs is insured through a strict certification and recertification process and practice is closely regulated by the Board of Nursing. There is no evidence to suggest CRNAs practicing to the full extent of their education and training will induce any public harm. In fact, the opposite is true, and multiple studies verify that facts that CRNAs are equally safe providers as they physician counterparts.

An exploration of the Medicare database for CRNAs providing care without anesthesiologist supervision from 1999 to 2005 demonstrated no difference in the morbidity or mortality rates as compared to other anesthesia care models (such as working under the supervision of an anesthesiologist) (Dulisse & Cromwell, 2010). This study, which examined nearly 500,000 individual cases in 14 states that removed the federal physician supervision requirement for CRNAs between 2001 and 2005, revealed that outcomes did not differ between the states that do, and those that do not require physician supervision. Further, the study confirmed that there are no differences in patient outcomes when anesthesia services are provided by CRNAs, physician anesthesiologists, or CRNAs supervised/directed by physicians.

Additional research and exploration, in studies conducted from 1977 to 2015 (pages 8-9), show that nurse anesthesia has proven to be as effective and as safe as physician-led practice. In a study by Dulisse and Cromwell it was shown that "...complication rates for the solo nurse anesthetist group were essentially identical to those of the solo anesthesiologist group." This same study also discovered that, "Despite the shift to more anesthetics performed by nurse anesthetists,

no increase in adverse outcomes was found...” (Dulisse & Cromwell, 2010).

Most recently, a landmark study was completed, being the first to focus on state scope of practice laws and how they relate to anesthesia practice and patient outcomes. The study examined over 5.7 million anesthetics and found that scope of practice restrictions and physician supervision requirements have no impact on anesthesia patient safety. (Newhouse, R. P., et al, 2011)

Landmark findings from the Institute of Medicine (IOM), now named the National Academy of Medicine, assert that expanding the role of nurses in the U.S. healthcare system will help meet the growing demand for medical services (Institute of Medicine, 2010b). This IOM report urges policymakers to remove barriers that hinder advanced practice registered nurses such as CRNAs from practicing to the full extent of their education and training. Many recent studies have been published on a national level that weigh in on using CRNAs to their fullest extent. Adoption of the proposed changes will bring Arizona into compliance with suggestions made by the Institute of Medicine and the Federal Trade Commission regarding advanced practice nurses (Gilman, 2014; Institute of Medicine, 2010a). These two reports, as well as a study published in Health Affairs, suggest ways to minimize healthcare dollars while maximizing efficacy, including the utilization of CRNAs as outlined in this Sunrise Application (Dulisse & Cromwell, 2010).

A. TO WHAT EXTENT, IF ANY, DOES AN INCREASE IN SCOPE OF PRACTICE RESTRICT ENTRY INTO PRACTICE?

As mentioned above, CRNAs are adequately trained and prepared to provide high quality, safe anesthesia by virtue of their education in nationally-accredited programs and through strict certification and recertification requirements. As these requirements are all pre-existing standards set by national boards and councils this proposed statutory amendment will neither restrict entry into the profession nor have a negative effect on CRNAs migrating from other states.

Educational and licensing requirements are not the only provisions which can restrict entry into practice. Without the requested change in scope of practice, CRNAs will continue working in an anti-competitive environment, unnecessarily restrained from applying their profession in an open market. A review of federal and state laws and judicial decisions demonstrate that this is inconsistent with policies of preventing anti-competitive practices.

The Sherman Antitrust Act of 1890 is a federal anti-monopoly and anti-trust statute which prohibits activities that restrict interstate commerce and competition in the marketplace. States, acting in their sovereign capacity have immunity from the Act’s application if the state’s anti-competitive policy is clearly articulated and affirmatively expressed and the policy actively supervised by the state. But a recent decision of the U.S. Supreme Court in *North Carolina State Board of Dental Examiners v. FTC* (No. 15-534 U.S. ____2015) made clear the Court would carefully review state actions to determine if regulators, acting under the cloak of state authority and engaging in anti-competitive conduct, were promoting individual interests rather than state policy.

Of course the exercise of a state’s sovereign authority is subject to limitation especially if there is an inappropriate attempt to apply a “police power.” In three particular cases the Arizona Supreme Court has reviewed statutes providing anti-competitive restraints through professional regulation: *State v. Childs* 32 Ariz. 222 (1927) (limitations on the sales of proprietary drugs by non-pharmacists); *State v. Borah* 51 Ariz. 318 (1938) (prohibition of utilization by a dentist of a registered nurse entitled by education to administer anesthesia) and *Edwards v. State Board of Barber Examiners* 72 Ariz. 108 (1951) (Barber Board establishment of minimum prices for barber services). In all of these cases the Court construed the statutes to avoid non-competitive restraints or found them to be unconstitutional. The language utilized in these opinions is enlightening.

In Borah, the Court held that a law which prevented dentists from utilizing the services of a professional now titled a CRNA would (citing the opinion in Childs) be merely giving a certain class of men a monopoly of the trade. "This is not within the police power of the state."

*"Courts will never assume to determine whether the law is a wise one, or whether the Legislature have adopted the best means. **Yet there is a limit to this power.** A law enacted in the exercise of the police power must, in fact, be a police law. If it be a law for the protection of public health, it must be a health law having some relation to public health. In this day, when so many selfish and private schemes in the way of securing monopolies and excluding competition in trade are attempted under the mask of sanitary legislation, it may be an important question whether the judiciary are concluded by the mask, or whether they may tear it aside in order to ascertain who is in it. But with this we are not now concerned. It is, at least, settled that, **if it is apparent on the face of the act that its provisions, from their very nature, cannot and will not conduce to any legitimate police purpose, it is the right as well as the duty of the court to pronounce it invalid, as in excess of legislative power and an arbitrary and unwarranted interference with the right of the citizen to pursue any lawful occupation.**" (Emphasis added)*

Our legal framework sets a high standard for the interference with rights of citizens to pursue their lawful occupations. A police regulation must not be "unduly oppressive upon individuals, must have a real and substantial relation to their purpose, and must not interfere with private rights beyond the necessities of the situation" *Edwards v. State Board of Barber Examiners*. The Legislature has a responsibility to place restrictions on healthcare professionals for the preservation of public health and safety. But this application provides evidence that CRNAs have adequate training and education to provide anesthesia care safely and effectively without the current statutory requirements of physician "presence" and "direction". In fact, many states do not have such restrictive practice requirements. The proposed statutory changes maintain public health and safety and avoid the anti-competitive restraints described in this application.

B. DOES THE PROPOSED LEGISLATION REQUIRE CRNAs IN OTHER STATES WHO MIGRATE TO THIS STATE TO QUALIFY IN THE SAME MANNER AS STATE APPLICANTS FOR LICENSURE?

References have been cited and studies presented that demonstrate the quality of nurse anesthesia and the safety it has proven for decades. CRNAs are adequately prepared to provide safe anesthesia services by virtue of the education in nationally-accredited programs and strict certification and recertification requirements. This quality preparation and education occurs in all 114 institutions across the United States, thus preparing all students to meet the same requirements, regardless of the state in which they will practice. As these standards are all set by national boards and councils, the proposed statutory amendment will neither restrict entry into the profession nor have a negative effect on CRNAs migrating from other states.

Although CRNA education is congruent throughout the United States not all state-sponsored scopes of practice are identical. With this legislation, CRNAs wishing to obtain prescriptive authority in Arizona will provide specific documentation relating to their education and practice, thus obtaining the proper authorization from the Board of Nursing to prescribe the necessary medications within the realm of their education.

C. DO OTHER STATES HAVE SUBSTANTIALLY EQUIVALENT REQUIRMENTS FOR LICENSURE AS THOSE IN THIS STATE?

Currently the State of Arizona requires CRNA applicants to obtain a *license* as a registered nurse and a *certification* to practice anesthesia, defined in ARS §32-1634.03 (Arizona State Legislature)(Appendix B). This process is similar to other states (California Board of Registered Nursing; District of Columbia Municipal Regulations; State of New Mexico Board of

Nursing, 2012). However, many states require a CRNA to be licensed in anesthesia, as well as obtaining a license as a registered nurse.

4. WHAT IS THE COST TO THE STATE AND TO THE GENERAL PUBLIC OF IMPLEMENTING THE PROPOSED INCREASE IN SCOPE OF PRACTICE?

It is anticipated there will be no expense to the state when implementing these proposed changes.

There are several types of anesthesia delivery models, in addition to healthcare facility credentialing and bylaws, with varying degrees of CRNA autonomy:

- Physician anesthesiologist practicing alone. No CRNAs are involved in this model.
- Physician anesthesiologist oversight of CRNA
 - Supervision model: this model allows one anesthesiologist to supervise multiple (sometimes up to ten) CRNAs. It satisfies the requirements of some facilities to maintain an anesthesiologist on staff.
 - Medical direction model: this is a model that is required when submitting certain billing procedures for Medicare, and requires no greater than a 1:4 anesthesiologist:CRNA ratio. There are no quality assurance issues tied to this model, it is strictly for billing purposes on a limited number of cases.
- CRNA practicing without physician anesthesiologist oversight (supervision or direction). In this model, compliance with Arizona statute is maintained by the surgeon, dentist, or podiatrist.

In contrast to added costs, multiple empirical studies have confirmed that allowing all APRNs, including CRNAs, to practice to the full extent of their education and training is safe and decreases health care costs (Epstein & Dexter, 2012; P. F. Hogan, Seifert, Moore, & Simonson, 2010; Newhouse et al., 2011). The state of Texas estimates that utilizing APRNs more effectively will increase their economic benefits to more than \$46.9 billion by the year 2040 (The Perryman Group, 2012). The Federal Trade Commission has found that unnecessary supervision requirements of CRNAs decrease market competitiveness and increase costs to consumers and the entire health care industry (Gilman, 2014). The National Institute of Medicine has also found that overregulation of APRNs leads to decreased innovation in healthcare which will cause an increased overall cost to the health care industry (Institute of Medicine, 2010a).

A recent study has shown that a medical direction model for anesthesia delivery is not cost effective and may not be sustainable without large subsidies (A. Hogan, Furst Seifert, R., Moore, C., & Simonson, B.E., 2010). This same study shows that CRNAs working to their full practice authority, without unnecessary direction and/or supervision, is the most cost-effective model. CRNAs acting as the sole anesthesia provider cost 25 percent less than the second lowest cost model. Alternatively, the model in which one anesthesiologist supervises one CRNA is the costliest model. Not surprisingly, the more barriers that are removed from CRNA practice, the more cost-effective anesthesia delivery becomes.

Multiple empirical studies have confirmed that allowing all APRNs, including CRNAs, to practice to the full extent of their education and training is safe and decreases health care costs (Epstein & Dexter, 2012; P. F. Hogan, Seifert, Moore, & Simonson, 2010; Newhouse et al., 2011). The state of Texas estimates that utilizing APRNs more effectively will increase their economic benefits to more than \$46.9 billion by the year 2040 (The Perryman Group, 2012). The Federal Trade Commission has found that unnecessary supervision requirements of CRNAs decrease market competitiveness and increase costs to consumers and the entire health care industry (Gilman, 2014). The National Institute of Medicine has also found that overregulation of APRNs leads to decreased innovation in healthcare which will cause an increased overall cost to the health care industry (Institute of Medicine, 2010a).

APPENDIX A

Midwestern University Nurse Anesthesia Curriculum

First Year		69 quarter credits
Summer Quarter/2014		12.5 quarter credits
ANAT 1551	Human Anatomy & Embryology	7.0
BIOC 550	Biochemistry	3.0
NAAP 570	Professional Aspects of Nurse Anesthesia I	2.0
NAAP 580	Evidence-Based Journal Club	0.5
Fall Quarter/2014		21.0 quarter credits
CORE 1560	Interdisciplinary Health Care	0.5
NAAP 540	Principles & Pathophysiology of Anesthesia I	6.0
NAAP 540L	Principles & Pathophysiology of Anesthesia I Simulation Lab	2.0
NAAP 551	Anesthesia Pharmacology I	4.0
NAAP 569	Advanced Physical Assessment Across the Lifespan	4.0
NAAP 581	Evidence-Based Journal Club	0.5
PHYS 1571	Human Physiology I	4.0
Winter Quarter/2014		17.0 quarter credits
CORE 1570	Interdisciplinary Health Care	0.5
NAAP 541	Principles & Pathophysiology of Anesthesia II	6.0
NAAP 541L	Principles & Pathophysiology of Anesthesia II Simulation Lab	2.0
NAAP 552	Anesthesia Pharmacology II	4.0
NAAP 582	Evidence-Based Journal Club	0.5
PHYS 1582	Human Physiology II	4.0
Spring Quarter/2015		18.5 quarter credits
CORE 1580	Interdisciplinary Health Care	0.5
NAAP 542	Principles & Pathophysiology of Anesthesia III	6.0
NAAP 542L	Principles & Pathophysiology of Anesthesia III Simulation Lab	2.0
NAAP 560	Research Methods	3.0
NAAP 553	Anesthesia Pharmacology III	4.0
NAAP 571	Professional Aspects of Nurse Anesthesia II	2.5
NAAP 583	Evidence-Based Journal Club	0.5

Updated 10/16/2013

Highlighted courses indicated shared courses with medical students

APPENDIX B

Historic Statutory Revisions & Current Arizona Revised Statute: CRNA Scope of Practice

HB 146, approved March 10, 1923:

That all regularly graduated and registered nurses within the State of Arizona, shall be empowered to administer anesthetics under the direction of and in the immediate presence of a licensed physician or surgeon, provided such nurses has taken a prescribed course of anesthesia in good standing, or is a graduate in the science of anesthesia from some recognized school or college.

In 1928 and in 1939 the code was revised and changed to A.R.S. 32-1661 but no changes to the statutory language.

On October 18th, 1968 Arizona Attorney General Gary K Nelson released a legal opinion NO. 68-28-L (R-116)

Gary K Nelson Arizona Attorney General released a legal opinion that the definition of immediate presence was, "For the reason that the term "immediate presence" is not defined in the statute, and does not appear to be a technical or ambiguous term, the words would have to be given the ordinary or general meaning. It is the opinion of this office the word "presence" preceded and qualified by the word immediate in A.R.S. 32-1661 would have to be interpreted as meaning in the same room or similar close contact as opposed to within the surgical or obstetrical suite."

House Bill 68, approved on April 10, 1970 amended 32-1661 to change the definition of immediate presence to include within the same surgical or obstetrical suite.:

A licensed registered nurse may administer anesthetics under the direction of and in the presence of a licensed physician or surgeon if the nurse has completed a nationally accredited program in the science of anesthesia. As used in this section, "presence" means within the same room, an adjoining room or within the same surgical or obstetrical suite.

In 1985, Senate Bill 1058 amended 32-1661 to read:

A. A licensed registered nurse may administer anesthetics under the direction of and in the presence of a licensed physician or surgeon if the nurse has completed a nationally accredited program in the science of anesthesia.

B. As used in SUBSECTION A, "presence" means within with in the same room, OR an adjoining room or within the same surgical or obstetrical suite.

In May 2011, the Auditor General in its standard sunset audit of the Arizona State Board of Nursing found that, "*one rule appears to exceed the Boards statutory authority. Specifically, Arizona Administrative Code R4-19-515 provides that the Board can authorize a Certified Registered Nurse Anesthetist (CRNA) to prescribe medication. However A.R.S. 32-1661 authorizes CRNAs to only administer anesthetics, not to prescribe medications.*" In response to the Auditor General's point, SB1362 was introduced in 2012 and passed into law.

Title 32, chapter 15

32-1634.04. Certified registered nurse anesthetist; scope of practice

A. A certified registered nurse anesthetist may administer anesthetics under the direction of and in the presence of a physician or surgeon in connection with the preoperative, intraoperative or postoperative care of a patient or as part of a procedure performed by a physician or surgeon in the following settings:

1. A health care institution.
2. An office of a health care professional who is licensed pursuant to chapter 7, 11, 13 or 17 of this title.
3. An ambulance.

B. In connection with the preoperative, intraoperative or postoperative care of a patient or as part of the procedure in the settings prescribed in subsection A of this section, a certified registered nurse anesthetist as part of the care or procedure may:

1. Issue a medication order for drugs or medications to be administered by a licensed, certified or registered health care provider.
2. Assess the health status of an individual as that status relates to the relative risks associated with anesthetic management of an individual.
3. Obtain informed consent.
4. Order and evaluate laboratory and diagnostic test results and perform point of care testing that the certified registered nurse anesthetist is qualified to perform.
5. Order and evaluate radiographic imaging studies that the certified registered nurse anesthetist is qualified to order and interpret.
6. Identify, develop, implement and evaluate an anesthetic plan of care for a patient to promote, maintain and restore health.
7. Take action necessary in response to an emergency situation.
8. Perform therapeutic procedures that the certified registered nurse anesthetist is qualified to perform.

C. A certified registered nurse anesthetist's authority to administer anesthetics or to issue a medication order as prescribed by this section does not constitute prescribing authority.

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