

Description of the Applicant Group and its Proposal

1. Provide the following information for the applicant group(s):

Name, Address, Telephone Number, E-mail Address and Website of the Applicant Group in Nebraska and any National Parent Organization

Applicant Group: Nebraska Academy of Anesthesiologist Assistants
Ryan Nathan, President
53439 822 1/2 Rd.
Newman Grove, NE 68758
Ryan.Nathan@usap.com
402.617.4757

National Parent Organization of NE-AAA

American Academy of Anesthesiologist Assistants
1818 Parmenter St, Ste 300, Middleton, WI 53562
Richard Evans
revans@anesthetist.org
512-422-3705

Applicant Group: Nebraska Society of Anesthesiologists
1045 Lincoln Mall, Suite 200
Lincoln, NE 68502
(402) 474-4472
carmencg@nebmed.org

National Parent Organization of NSA

American Society of Anesthesiologists
1061 American Lane
Schaumburg, IL 60173-4973
Jason Hansen
j.hansen@asahq.org

Composition of the Group and Approximate Number of Members in Nebraska; and Relationship of the Group to the Occupation Dealt with in the Application

The Nebraska Academy of Anesthesiologist Assistants is a nonprofit organization with membership categories including certified anesthesiologist assistants (CAAs), student anesthesiologist assistants (SAAs), and physician anesthesiologists. The academy was formed to advocate for CAA licensure in Nebraska and the board of directors is comprised of CAAs. Since CAAs are not licensed in Nebraska the members do not reside in the state.

2. Identify by title, address, telephone number, e-mail address, and website of

any other groups, associations, or organizations in Nebraska whose membership consists of any of the following:

Members of the Same Occupation or Profession as that of the Applicant Group

None

Members of the Occupation Dealt with in the Application

None

Employers of the Occupation Dealt with in the Application

(Hospitals and other types of health care facilities are potential employers of CAAs)

Nebraska Hospital Association
3255 Salt Creek Circle, Suite 110
Lincoln, NE 68504
(402) 742-8140
info@nebraskahospitals.org

Nebraska Association of Independent Ambulatory Centers
9850 Nicholas St
Omaha, NE 68114

Practitioners of the Occupations Similar to or Working Closely with Members of the Occupation dealt with in the Application

Nebraska Society of Anesthesiologists
1045 Lincoln Mall, Suite 200
Lincoln, NE 68502
(402) 474-4472
carmencg@nebmed.org

Nebraska Association of Nurse Anesthetists
3901 Normal Blvd, Suite 100
Lincoln, NE 68506
(402) 476-3852
neana@neana.org

Educators or Trainers of Prospective Members of the Occupation Dealt with in the Application

There are currently no AA educational programs located in Nebraska. There are 13 accredited AA programs in the US.

Citizens Familiar with or Utilizing the Services of the Occupation Dealt with in the Application (e.g., Advisory Groups, Patient Rights Groups, Volunteer Agencies for Particular Disease or Conditions etc.)

None

Any other Group that would have an interest in the Application

Nebraska Medical Association
1045 Lincoln Mall, Suite 200
Lincoln, Nebraska 68508-2966
402.474.4472

3. If the profession is currently credentialed in Nebraska, provide the current scope of practice of this occupation as set forth in the state statutes. If a change in this scope of practice is being requested, identify that change. This description of the desired scope of practice constitutes the proposal. The application comprises the documentation and other materials that are provided in support of the proposal.

N/A

4. If the profession is not currently credentialed in Nebraska, describe the proposed credential and the proposed scope of practice, and / or the proposed functions and procedures of the group to be reviewed. This description of the desired scope of practice and the proposed credential constitute the core of the proposal. Also, please describe how the proposal would be administered. The application comprises the documentation and other materials that are provided in support of the proposal.

Proposed Credential

This application proposes to create education, training, certification, supervision, and scope of practice requirements for individuals to be eligible for licensure in Nebraska to practice as a Certified Anesthesiologist Assistant (CAA).

Education and Training

Education and training are addressed in Question 11 in detail. This application proposes to require CAAs seeking credentialing/licensing in Nebraska to have graduated from an anesthesiologist assistant program accredited by the Commission on Accreditation of Allied Health Education Programs or its predecessor or successor organization and to have satisfactorily completed a certification examination administered by the National Commission for the Certification of Anesthesiologist Assistants or another national certifying agency that has been reviewed and approved by the board and that is currently certified.

Scope of Practice

Under the direction of a physician anesthesiologist, in agreement with the American Society of Anesthesiologists (ASA) Statement on the Anesthesia Care Team, (ACT) and in accordance with the AAAA Statement on the ACT, the scope of practice for a CAA includes:

- developing and implementing an anesthesia care plan for a patient;
- obtaining a comprehensive patient history and performing relevant elements of a physical exam;
- performing preoperative and post-operative anesthetic evaluations and maintaining patient progress notes;
- ordering and performing preoperative patient consultations;
- ordering preoperative medications, including controlled substances;
- changing or discontinuing a medical treatment plan after consulting with the supervising physician anesthesiologist;
- obtaining informed consent for anesthesia or related procedures;
- ordering the perioperative continuation of current medications;
- pretesting and calibrating anesthesia delivery systems and obtaining and interpreting information from the systems and from monitors;
- implementing medically accepted monitoring techniques;
- performing basic and advanced airway interventions, including, but not limited to, endotracheal intubation, laryngeal mask insertion and other advanced airways techniques;
- establishing peripheral intravenous lines, including subcutaneous lidocaine use;
- performing invasive procedures including but not limited to arterial lines, central lines, and Swan Ganz catheters;
- performing general anesthesia, including induction, maintenance, emergence and procedures associated with general anesthesia, such as gastric

intubation;

- administering anesthetic drugs, adjuvant drugs, and accessory drugs;
- administering vasoactive drugs and starting and titrating vasoactive infusions to treat patient responses to anesthesia;
- performing, maintaining, evaluating and managing epidural, spinal and regional anesthesia including catheters;
- performing monitored anesthesia care;
- obtaining venous and arterial blood samples;
- administering blood, blood products, and supportive fluids;
- performing, ordering and interpreting appropriate preoperative, point of care, intra-operative or postoperative diagnostic tests or procedures;
- obtaining and administering perioperative anesthesia and related pharmaceutical agents, including intravenous fluids and blood products;
- managing the patient while in the preoperative suite, recovery area, or labor suites;
- ordering postoperative sedation, anxiolysis or analgesia, postoperative respiratory therapy and medicines to treat patient responses to anesthesia and ordering postoperative oxygen therapy, including initial ventilator therapy;
- initiating and managing cardiopulmonary resuscitation in response to a life-threatening situation;
- participating in administrative, research and clinical teaching activities including supervising student anesthesiologist assistants and other students involved in anesthesia education; and
- performing such other tasks not prohibited by law that an anesthesiologist assistant has been trained and is proficient to perform.

Administered

This application proposes to grant the State Board of Medicine the power to oversee and regulate CAAs. Currently the Board of Medicine regulates physician assistants in addition to physicians and osteopathic physicians. Like CAAs, physician assistants do not have independent practice and must be supervised by a physician. States where CAAs currently practice typically follow the requirements promulgated by the Center for Medicare and Medicaid Services (CMS) that allow physician anesthesiologists to supervise up to four CAAs concurrently and this application proposes to require the board of medicine to adhere to CMS rules relating to CAA supervision. The State Board of Medicine would have the power to promulgate rules and regulations regarding the education and training requirements of CAAs and impose disciplinary measures against license holders on the typical grounds that such discipline can be imposed in the Uniform Credentialing Act.

Proposed exemptions from licensure are as follows:

N/A

5. Describe in detail the functions typically performed by practitioners of this occupation and identify what if any specific statutory limitations have been placed on these functions. If possible, explain why the Legislature created these restrictions.

CAAs work under the supervision of a physician anesthesiologist as a member of the anesthesia care team. CAAs perform direct, hands-on health care services to patients. CAAs may be responsible for:

- developing and implementing an anesthesia care plan for a patient;
- obtaining a comprehensive patient history and performing relevant elements of a physical exam;
- performing preoperative and post-operative anesthetic evaluations and maintaining patient progress notes;
- ordering and performing preoperative patient consultations;
- ordering preoperative medications, including controlled substances;
- changing or discontinuing a medical treatment plan after consulting with the supervising physician anesthesiologist;
- obtaining informed consent for anesthesia or related procedures;
- ordering the perioperative continuation of current medications;
- pretesting and calibrating anesthesia delivery systems and obtaining and interpreting information from the systems and from monitors;
- implementing medically accepted monitoring techniques;
- performing basic and advanced airway interventions, including, but not limited to, endotracheal intubation, laryngeal mask insertion and other advanced airways techniques;
- establishing peripheral intravenous lines, including subcutaneous lidocaine use;
- performing invasive procedures including but not limited to arterial lines, central lines, and Swan Ganz catheters;
- performing general anesthesia, including induction, maintenance, emergence and procedures associated with general anesthesia, such as gastric intubation;
- administering anesthetic drugs, adjuvant drugs, and accessory drugs;
- administering vasoactive drugs and starting and titrating vasoactive infusions to treat patient responses to anesthesia;

- performing, maintaining, evaluating and managing epidural, spinal and regional anesthesia including catheters;
- performing monitored anesthesia care;
- obtaining venous and arterial blood samples;
- administering blood, blood products, and supportive fluids;
- performing, ordering and interpreting appropriate preoperative, point of care, intra-operative or postoperative diagnostic tests or procedures;
- obtaining and administering perioperative anesthesia and related pharmaceutical agents, including intravenous fluids and blood products;
- managing the patient while in the preoperative suite, recovery area, or labor suites;
- ordering postoperative sedation, anxiolysis or analgesia, postoperative respiratory therapy and medicines to treat patient responses to anesthesia and ordering postoperative oxygen therapy, including initial ventilator therapy;
- initiating and managing cardiopulmonary resuscitation in response to a life-threatening situation;
- participating in administrative, research and clinical teaching activities including supervising student anesthesiologist assistants and other students involved in anesthesia education; and
- performing such other tasks not prohibited by law that an anesthesiologist assistant has been trained and is proficient to perform.

Restrictions

The only restrictions that are typically imposed by state regulations are to establish the number of CAAs that a physician anesthesiologist can supervise concurrently (which mirror CMS rules) allowing a physician anesthesiologist to supervise up to four CAAs. Many state laws also require a physician anesthesiologist to be “immediately available” to the anesthesiologist assistant who assists in the delivery of medical care such that the supervising physician anesthesiologist is able to intervene if needed.

6. Identify other occupations that perform some of the same functions or similar functions.

Physician Anesthesiologists and Certified Registered Nurse Anesthetists perform some of the same functions as Certified Anesthesiologist Assistants.

Physician anesthesiologists are medical doctors just like a primary care physician and surgeon. They specialize in anesthesia care, pain management, and critical care medicine, and have the necessary knowledge to understand and treat the entire human body. Physician anesthesiologists have 12 to 14 years of education, including medical school, and 12,000 to 16,000 hours of clinical training. Physician anesthesiologists evaluate,

monitor, and supervise patient care before, during, and after surgery, delivering anesthesia, leading the Anesthesia Care Team, and ensuring optimal patient safety.

CRNAs and CAAs are trained to perform the same tasks. In states where both CAAs and CRNAs practice, the scope of practice and hospital privileges for CAAs and CRNAs are typically identical and both work interchangeably in the operating room.

7. What functions are unique to this occupation? What distinguishes this occupation from those identified in question 6?

CAAs and CRNAs are trained and educated to perform the same functions. The main distinctions between CAAs and CRNAs relate to the educational pathways and supervision requirements. AA programs are affiliated with medical schools and prospective students must complete the same prerequisites required for entrance to medical school. CRNAs matriculate through nursing school and CRNA programs are affiliated with schools of nursing. In some states, CRNAs are allowed to practice without physician supervision. CAAs are trained and educated to work in the anesthesia care team model alongside physician anesthesiologists and will always work under the supervision of a physician anesthesiologist.

CAAs are not able to practice independently but can perform the same tasks as physician anesthesiologists and nurse anesthetists.

8. Identify other occupations whose members regularly supervise members of this occupation, as well as other occupations whose members are regularly supervised by this occupation. Describe the nature of the supervision that occurs in each of these practice situations.

CAAs must always work under the supervision and direction of a physician anesthesiologist who retains responsibility for the immediate care of the patient.

The physician anesthesiologist and the CAA work together to provide high-quality care in the belief that the interests of patient safety are best served with a physician anesthesiologist's involvement in the delivery of every anesthetic. The responsibility for medical care for the patient lies with the physician anesthesiologist, who may then delegate aspects related to the implementation of an anesthetic plan to the CAA. Delegation of any aspect of patient care to a CAA is at the discretion of the physician anesthesiologist, in accordance with established state regulation and any applicable facility credentialing guidelines. Supervision includes ongoing communication between the physician anesthesiologist and the CAA regarding patient care and management.

CMS regulations regarding “medical direction” of a CAA (or CRNA) include a requirement that a physician anesthesiologist remain physically present and available

for immediate diagnosis and treatment of emergencies. ASA further defines this such that a medically directing physician anesthesiologist is immediately available “if s/he is in physical proximity that allows the physician anesthesiologist to return to re-establish direct contact with the patient to meet their medical needs and address any urgent or emergent clinical problems.”

The CAA does not supervise other providers.

9. What actions, judgments, and procedures of this occupation can typically be carried out without supervision or order? To what extent is this occupation, or portions of its practice, autonomous?

The functions performed by a CAA are always under the supervision of a physician anesthesiologist who is immediately available to assist the CAA. CAAs do not practice autonomously.

10. Approximately how many people are performing the functions of this occupation in Nebraska, or are presenting themselves as members of this occupation? To what extent are these people credentialed in Nebraska?

Approximately 3200 CAAs practice in the US, however, CAAs are not currently credentialed in Nebraska and thus none are performing the functions of this occupation in Nebraska or presenting themselves as members of this occupation.

In preparation for this application, NEAAA identified a number of individuals with Nebraska ties who are credentialed as a CAA in another state or are enrolled in an AA program in another state and who would like to practice in Nebraska.

11. Describe the general level of education and training possessed by practitioners of this occupation, including any supervised internship or fieldwork required for credentialing. Typically, how is this education and training acquired?

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Accreditation Review Committee for the Anesthesiologist Assistant (ARC-AA) are the organizations that accredit AA programs.

Candidates for AA programs must have completed a Baccalaureate degree from a regionally accredited college or university in the US or Canada and have completed the same prerequisites required for entrance to medical school. An accredited anesthesiologist assistant educational program must be supported by an anesthesiology department of a medical school that is accredited by the Liaison Committee on Medical Education or its equivalent. The Anesthesiology department

must have the educational resources internally or through educational affiliates that would qualify it to meet the criteria of the Accreditation Council for Graduate Medical Education (ACGME), or its equivalent, for sponsorship of an anesthesiology residency program.

The AA curriculum is based on an advanced graduate degree model. All current programs are 24 to 28 months and graduates from all AA educational programs earn a Master's Degree. The programs also include 2,000-2,500 clinical hours (600 total anesthesia cases) with rotations in all sub-specialty areas of anesthesia practice and across different types of practice locations. Sub-specialties include: general surgery, pediatrics, gynecology, otolaryngology, orthopedics, neurosurgery, ophthalmology, genitourinary surgery, vascular surgery, cardiac surgery, thoracic surgery, transplantation, and trauma.

CAAs are trained extensively in the delivery and maintenance of quality anesthesia care as well as advanced patient monitoring techniques. Under the Standards and Guidelines for the Accreditation of Educational Programs for the Anesthesiologist Assistant, graduate program instruction must include an appropriate sequence of classroom, laboratory, and clinical activities and must be based on clearly written course syllabi that include course description, course objectives, methods of evaluation, topic outline, and competencies required for graduation. General content areas must include:

1. Those basic medical sciences that are needed as a foundation for the clinical role of the Anesthesiologist Assistant. In particular, the basic science curriculum must include appropriate content in anatomy, biochemistry, physiology, and pharmacology, with particular emphasis on the cardiovascular, respiratory, renal, nervous, and neuromuscular systems.
2. Medical biophysics appropriate to anesthesia practice, including and emphasizing the principles underlying the function of the devices used in anesthesia delivery systems, in life support systems such as ventilators, and in basic and advanced patient monitors.
3. The principles of patient monitoring emphasizing the design, function, and recognition of artifacts and interpretation of data relevant to anesthesia care.
4. The function of lab instruments and interpretation of data obtained from clinical laboratories, cardiac and pulmonary laboratories.
5. The concepts of data analysis as related to the collection, processing, and presentation of basic science and clinical data in medical literature emphasizing methods that support an understanding of clinical decision-making.
6. Patient assessment, including techniques of interviewing to elicit a health history and performing a physical examination at the level appropriate for preoperative, intraoperative, and postoperative anesthetic evaluations.
7. Extensive instruction in the clinical practice of anesthesia and patient monitoring, principally in an operating room setting, but also in preoperative areas, postoperative recovery areas, intensive care units, pain clinics, affiliated clinical laboratories and other supporting services.

8. Clinical quality assurance conferences and literature reviews.
9. Competencies in emergency preparedness consistent with professional standards.

For first year students, the program must set and require a minimum number of clinical hours, and at least annually evaluate and document that the established program minimum is adequate to continue promotion to the second year of the program. Clinical hours vary depending on the program, but AA students graduate with about 2600 clinical hours involving over 600 cases.

For second and third year students, the program must set and require a minimum number of cases by patient population (including pediatrics, adults, geriatrics, acuity, and subspecialties cases - neuro, obstetrics, cardiac, trauma, out-patient) for each of the required patients and conditions listed in these standards, and at least annually evaluate and document that the established program minimums are adequate to achieve entry-level competency.

The image below provides a sample curriculum at UMKC in Missouri.

Sample CAA Curriculum

from the University of Missouri-Kansas City

Year 1 - Didactic Phase	Year 2 - Clinical Phase
Spring	Spring
Anatomy for Anesthesiologist Assistants	Anesthesia Clinical Correlation II
Professionalism for Anesthesiologist Assistants I	Anesthesia Clinical Experience III
Patient Monitoring and Instrumentation	Summer
Physiology for Anesthesiologist Assistants I	Anesthesia Clinical Correlation III
Introduction to Anesthesia	Anesthesia Clinical Experience IV
Orientation to Simulation & Clinical Application	Fall
Pharmacology for Anesthesiologist Assistants I	Anesthesia Clinical Correlation IV
Research Applications in Medicine	Anesthesia Clinical Experience V
Summer	
Professionalism for Anesthesiologist Assistants II	
Methods of Anesthesia I	
Physiology for Anesthesiologist Assistants II	
Anesthesia and Coexisting Disease I	
Anesthesia Clinical Experience I	
Physiological Model-based Simulation I	
Fall	
Anatomy for the Anesthesiologist Assistant II	
Professionalism for Anesthesiologist Assistants III	
Anesthesia and Coexisting Disease II	
Anesthesia Clinical Experience II	
Pharmacology for Anesthesiologist Assistants II	
Methods of Anesthesia II	
Physiological Model-based Simulation II	
	Year 3 - Clinical Phase
	Spring
	Senior Seminar
	Anesthesia Clinical Experience VI

<http://med.umkc.edu/msa/curriculum/#5518-5528-5538>

Nebraska does not currently have a CAA program within the state but there is strong interest in locating a program in Nebraska if licensure is approved. In the United States there are thirteen accredited educational programs for CAAs that graduate approximately 325 AAs annually:

- University of Missouri-Kansas City (UMKC) in Kansas City, Missouri
- University of Colorado in Denver, Colorado
- Case Western Reserve University, which offers its AA program at three locations: Cleveland, Ohio, Washington, D.C., Houston, Texas
- Emory University in Atlanta, Georgia
- Indiana University in Indianapolis, Indiana
- Northeast Ohio Medical University, Rootstown, Ohio
- Nova Southeastern University, which offers its AA program at three locations: Fort Lauderdale, Tampa, and Jacksonville, Florida
- South University which offers its AA program at two locations: Savannah, Georgia, and Palm Beach, Florida
- Medical College of Wisconsin in Milwaukee, Wisconsin

AAs must pass a national certification examination that is offered by the National Commission on the Certification of Anesthesiologist Assistants in collaboration with the National Board of Medical Examiners and must be recertified every ten years in order to continue to practice. CAAs must also complete 40 hours of continuing medical education every two years.

According to the American Society of Anesthesiologists, “once fully trained, **the anesthesiologist assistant fills the same clinical role as a nurse anesthetist.**”

12. Identify the work settings typical of this occupation (e.g., hospitals, private physicians’ offices, clinics, etc.) and identify the predominant practice situations of practitioners, including typical employers for practitioners not self-employed (e.g., private physician, dentist, optometrist, etc.).

CAAs work under the supervision of the physician anesthesiologist as part of a care team. As such they may work in any setting that a physician anesthesiologist might provide services, including in a hospital or ambulatory surgical center. CAAs are not self-employed and instead are employed by a physician anesthesiologist, a physician practice group, a hospital, or ambulatory surgical center.

13. Do practitioners routinely serve members of the general population? Are services frequently restricted to certain segments of the population (e.g., senior citizens, pregnant women, etc.)? If so, please specify the type of population served.

CAAs serve the general population as a member of a care team providing anesthesia services under the supervision of a physician anesthesiologist. A patient might need anesthesia care during a major operation, during childbirth, or

during a minimally invasive procedure, like a colonoscopy. Additionally, local anesthetics might be used for procedures like removing a mole, stitching a deep cut, or setting a broken bone.

14. Identify the typical reasons a person would have for using the services of a practitioner. Are there specific illnesses, conditions or situations that would be likely to require the services of a practitioner? If so, please specify

See the response to question 13.

15. Identify typical referral patterns to and from members of this occupational group. What are the most common reasons for referral?

Patients are not referred to CAAs, nor do CAAs refer patients to other providers.

16. Is a prescription or order from a practitioner of another health occupation necessary in order for services to be provided?

No, CAAs do not practice independently and instead assist the physician anesthesiologist as part of a care team.

17. How is continuing competence of credentialed practitioners evaluated?

CAAs work under the supervision of the physician anesthesiologist as part of a care team. As such the performance and general competence of the CAA would be evaluated on an ongoing basis by the supervising physician anesthesiologist. Additionally, if the CAA is employed by a facility, the facility might have guidelines and processes for evaluation of the CAA. In all cases the CAA is subject to the continuing education requirement and recredentialing examination discussed in the response to question 18.

18. What requirements must the practitioner meet before his or her credentials may be renewed?

The National Commission for Certification of Anesthesiologist Assistants (NCCAA) provides the certification process for anesthesiologist assistants in the United States. The NCCAA charter includes assuring the public that certified anesthesiologist assistants (CAA) meet basic standards related to fund of knowledge and application of that knowledge to the duties of practicing as a certified anesthesiologist assistant. The NCCAA requires ongoing medical education to maintain certification. CAAs must complete 40 hours of CME every two years and pass a recertification exam every 10 years.

19. Identify other jurisdictions (states, territories, possessions, or the District of Columbia) wherein this occupation is currently regulated by the government, and the scopes of practice typical for this occupation in these jurisdictions.

CAAs can practice via licensure or delegatory authority in 21 jurisdictions including:

Alabama
Colorado
District of Columbia
Florida
Georgia
Indiana
Kansas
Kentucky
Michigan
Missouri
New Mexico
North Carolina
Ohio
Oklahoma
Pennsylvania
South Carolina
Texas
Utah
Vermont
Wisconsin
US Territory of Guam

CAAs are also authorized to practice in any Veterans' Administration hospital in the country. The scope of practice for CAAs in these jurisdictions are similar to the scope of practice proposed in this application.

Additional Questions

Additional Question an Applicant Group Must Answer about their Proposal

1a) What is the problem created by not regulating the health professional group under review, or by not changing the scope of practice of the professional group under review?

Medical providers trained to practice as a certified anesthesiologist assistant are not currently eligible for licensure in Nebraska. By joining the 21 other jurisdictions where CAAs can practice, Nebraska could take a step in addressing the shortage of anesthesia providers that exists in the state. CAAs can help fill the workforce gap because they are highly trained and can support the anesthesia care team, allowing the other team members to maximize their time to meet patient needs.

Anesthesiologist assistant education programs take much less time to complete than anesthesiologist training. This allows more people to work in this profession and protects patient safety by ensuring they work under the direction and supervision of a physician anesthesiologist.

According to the job posting website gaswork.com, on June 8 there were 95 job postings (some with multiple positions) for a CRNAs in Nebraska. In 2007, there was already a nationwide shortage of 3800 physician anesthesiologists and 1200 nurse anesthetists.¹ Even with some effort to increase the number of providers, the shortage was expected to continue into 2020 and beyond. The COVID-19 pandemic worsened this problem with increased surgical demand and a smaller workforce. A 2021 study by the American Association of Medical Colleges projected a shortage of between 10,300 and 35,600 providers in the physician specialty category that includes physician anesthesiologists by 2034 (link below).

(<https://www.aamc.org/media/54681/download?attachment>)

2a) If the proposal is for the regulation of a health professional group not previously regulated, all feasible methods of regulation, including those methods listed below, and the impact of such methods on the public, must be considered. For each of the following evaluate the feasibility of applying it to the profession and the extent to which the regulatory method would protect the public.

- Inspection requirements. Inspection would not provide adequate regulation of the profession.
- Injunctive relief. Injunctive relief could be an element of regulation of the profession but not in lieu of licensure/credentialing by the medical board.
- Regulating the business enterprise rather than individual providers. The business enterprise (hospitals, ASCs, physicians' groups) are already regulated and licensed by the state. States that license CAAs do so by licensing individuals or indirectly through the licensure of the supervising physician in states where CAAs practice via delegatory authority.
- Regulating or modifying the regulation of those who supervise the providers under review. The state could choose to allow CAAs to practice under the delegatory authority of a physician anesthesiologist similar to how CAAs can practice in Texas, Michigan, Kansas and Pennsylvania. However, licensure allows a more direct regulation of the profession and provides a more clearly defined scope of practice that benefits employers of CAAs and patients who receive care from CAAs.
- Registering the providers under review. Registration is an option the state could consider provided that it did not limit the scope of practice or reduce the educational standards required to practice as a CAA.
- Certifying the providers under review by the State of Nebraska. CAAs are already

¹ Daugherty, Lindsay, Raquel Fonseca Benito, Krishna B. Kumar, and Pierre-Carl Michaud, Is There a Shortage of Anesthesia Providers in the United States?. Santa Monica, CA: RAND Corporation, 2010. https://www.rand.org/pubs/research_briefs/RB9541.html.

certified by a national organization based on completion of an AA program and passage of the certifying exam. The state would be duplicating a process that is already being administered by a national organization.

- Licensing the providers under review. Licensure would provide the state with direct oversight of the profession for the purposes of establishing education requirements, scope of practice, supervision requirements, and disciplinary actions. It is the most effective manner to regulate the profession and achieve optimum employment opportunities.

3a) What is the benefit to the public of regulating the health professional group under review or changing the scope of practice of the regulated health profession under review?

The public would benefit from the increased health care provider workforce that would result from allowing CAAs to practice in Nebraska. Hospitals are delaying or canceling surgeries due to a shortage of anesthetists and CAAs can quickly increase the number of anesthetists available for hospitals, ASCs and physician groups to hire. The public would also benefit from having clear regulations that establish the education requirements, scope of practice, title usage, and supervision requirements for CAAs.

4a) What is the extent to which the proposed regulation or the proposed change in scope of practice might harm the public?

No harm would result from the proposed regulation. CAAs are recognized by CMS as nonphysician anesthetists, just like CRNAs, and practice in the Medicare system. CAAs are highly educated and trained to perform a variety of health care services directly for patients. A 2018 study by Stanford University School of Medicine that compared CAAs and CRNAs working in the anesthesia care team model found no significant difference in mortality, length of hospital stay, or spending between CAAs and CRNAs. CAAs work in some of the highest ranked university and private hospitals in the country. Medical malpractice insurance premiums for CAAs are comparable to CRNAs and complaints with state boards are rare or nonexistent.

5a) What standards exist or are proposed to ensure that a practitioner of the health professional group under review would maintain competency?

CAAs work under the supervision of the physician anesthesiologist as part of a care team. As such the performance and general competence of the CAA would be evaluated on an ongoing basis by the supervising physician anesthesiologist. Additionally, if the CAA is employed by a facility, the facility might have guidelines and processes for evaluation of the CAA. In all cases the CAA is subject to the continuing education requirement imposed by this application, which is 40 hours every two years. The State Department of Health and Human Services and Board of Medicine and Surgery would have the same responsibility in this case for enforcing such a requirement as it does for other professions, including physicians

and physician assistants. CAAs must pass a recertification exam every 10 years in order to be able to continue practicing.

6a) What is the current and proposed role and availability of third-party reimbursement for the services provided by the health professional group under review?

Certified anesthesiologist assistants are recognized by the federal Centers for Medicare & Medicaid Services (CMS) as nonphysician anesthesia providers and are eligible for Medicaid and Medicare reimbursement under the care team model. CAAs are also authorized to practice in any Veterans' Affairs hospital in the country, participate in the TRICARE system, and are generally covered by private insurers. CAAs are also generally covered under Medicaid systems in states where CAAs practice.

7a) What is the experience of other jurisdictions in regulating the practitioners affected by the proposal? Identify appropriate statistics on complaints, describing actions taken, etc., by jurisdictions where the profession is regulated.

CAAs are regulated by state boards of medicine with the exception of Georgia, where CAAs are regulated as physician's assistants. While there is no central repository of disciplinary actions relating to CAAs there appears to be little or no record of disciplinary actions taken by states against CAAs.

8a) What are the expected costs of regulating the health professional group under review, including the impact of registration, certification, or licensure on the costs of services to the public? What are the expected costs to the state and to the general public of implementing the proposed legislation?

The cost of the state to implement the proposed legislation should be constrained largely to the cost born by the Nebraska Department of Health and Human Services and Board of Medicine and Surgery to issue the licenses. Those costs should largely, if not entirely, be recouped by a licensing fee.

9a) Is there any additional information that would be useful to the technical committee members in their review of the proposal?

CAAs provide a critical addition to the health care provider field with their high level of training and the core foundation of the position functioning as part of an Anesthesia Care Team under the direction of a licensed physician anesthesiologist. The care team model expands the medical treatment provided by the physician anesthesiologist and equips the medical facility to serve patients more effectively and efficiently. In states that have licensure for CAAs, they often work in tandem and interchangeably on teams alongside Certified Registered Nurse Anesthetists (CRNAs).

By adding CAAs as a regulated health professional in Nebraska, the state would be expanding the workforce for a field that cannot currently fill positions to meet demand. One of the key barriers to having a sufficient physician anesthesiologist workforce is the length of time required for their education programs. It typically takes 12-14 years to become a licensed physician anesthesiologist. In contrast, the CAA education program requires a Bachelor's degree followed by 24-28 months in a Master's level program accredited by the Commission on Accreditation of Allied Health Education Programs. Having an education program that takes less time to complete allows more people to access the profession, but the safety and integrity of the position is ensured by having CAAs always work under the direction and supervision of a physician anesthesiologist. The potential harm to the public of not establishing licensure in Nebraska so CAAs are legally able to practice is that health facilities will continue to struggle to fill positions, and when there aren't adequate providers, patient care and medically necessary procedures get delayed.

There is no peer-reviewed or other credible evidence that the care provided by a CAA is less safe than that of a nurse anesthetist. In October of 2018, there was a study (attached) published in the reputable Journal, *Anesthesiology*, that concluded "The specific composition of the anesthesia care team (whether made up of a physician anesthesiologist and an AA or a physician anesthesiologist and a CRNA) was not associated with any significant differences in mortality, length of stay, or inpatient spending."

CAAs work in major private and university hospitals throughout the US including those listed below. The decision by these and many more major hospital systems to employ CAAs is clear evidence that CAAs provide safe and cost-effective care for patients.

- Emory University Hospital
- University of Colorado
- Indiana University Health
- University of New Mexico
- University of Wisconsin
- The Ohio State Medical Center
- The George Washington University Hospital
- University of Vermont Medical Center
- University of Florida
- The Cleveland Clinic
- Children's Hospital Colorado
- Children's Mercy Hospital/Missouri
- Children's Medical Center of Dallas
- Children's Hospital of Wisconsin
- Johns Hopkins Medicine-Sibley Memorial Hospital
- MedStar Georgetown University Hospital