

CRNAs: Providing Solutions to Dental Anesthesia Care

Introduction

As advanced practice registered nurses, Certified Registered Nurse Anesthetists (also recognized by the titles CRNA, nurse anesthetist, Certified Registered Nurse Anesthesiologist, and nurse anesthesiologist) are proud to be part of America's most trusted profession. Patients who require sedation or anesthesia for dental procedures know they can count on a CRNA to stay with them throughout their procedure, advocate on their behalf, and provide high-quality, patient-centered care. Likewise, healthcare facilities depend on CRNAs to serve the most patients for the least cost; deliver quality care to rural and other medically underserved areas; and positively impact the nation's growing healthcare cost crisis.

Dental anesthesia has a long history and continues to evolve in terms of techniques, drugs, monitoring, and safety. Dental anesthesia safety is paramount. As an increasing number of patients of all ages and complexity seek sedation and anesthesia for dental procedures in office-based settings, it is important to keep patient safety central to the delivery of these services. Challenges to the provision of safe sedation and anesthesia may increase with special populations, including but not limited to, pediatric patients, senior patients, obese patients with related airway issues, and patients with increasing health complexity. The complexity of care required emphasizes the importance of sedation and anesthesia provided by a qualified, licensed anesthesia professional, such a CRNA, who is focused only on patient safety, monitoring, and vigilance.

Dental Anesthesia Professionals

Several types of anesthesia professionals may be involved in the delivery of anesthetic care for dental patients: CRNAs, physician anesthesiologists, or dental anesthesiologists. CRNAs, physician anesthesiologists, and dental anesthesiologists provide anesthesia for the same types of surgical and other procedures, in the same types of facilities, for patients across the life span; one provider type is not required over the other in any given situation.

CRNAs possess the education, training, and skills to provide safe, high-quality, and cost-effective care as members of the patient-centered dental care team in all settings, including dental offices. CRNAs practice in accordance with their professional scope and standards of practice, federal, state, and local law, and facility policy to provide dental sedation and anesthesia services

For more information, see:

- [Scope of Nurse Anesthesia Practice](#)
- [Standards for Nurse Anesthesia Practice](#)
- [The Practice of Anesthesia, Position Statement](#)

CRNA Education

The comprehensive preparation of CRNAs for practice enables them to provide every type of anesthesia-related service and anesthetic drug, practice in every type of setting, including

dental offices, participate in every type of procedure where anesthesia is required, and handle emergency situations. Because of their extensive knowledge base and robust clinical experience prior to becoming a CRNA, these anesthesia experts are well-equipped to have an immediate impact as healthcare professionals upon graduation.

The nursing- and anesthesiology-focused education and training required to become a CRNA is extensive, and in many ways similar to, the education and training of a physician anesthesiologist. It takes 7-8 ½ years of coursework and clinical hours for a student registered nurse anesthetist (also known as SRNA, nurse anesthesia resident, nurse anesthesiology resident) to attain a masters or doctoral degree in nurse anesthesia. During that time the SRNA will, on average, amass nearly 9,400 hours of clinical experience.

For more information, see:

- [Certified Registered Nurse Anesthetists Fact Sheet](#)
- [Education of Nurse Anesthetists in the United States - At a Glance](#)
- [Council on Accreditation of Nurse Anesthesia Educational Programs \(COA\) Standards, Policies and Procedures, and Guidelines](#)

State Licensure, Permit Requirements, and Compliance

CRNAs can provide anesthesia care in dental offices in over 40 states. In about half of the states, however, restrictive state dental board requirements limit CRNAs to practicing with dentists who meet the requirements for a dental board anesthesia/sedation permit/certificate. Often, these permit requirements have the practical effect of limiting CRNAs to practicing with an oral surgeon (i.e., a dentist who has completed dental school, followed by a four to six year residency), as general dentists may not meet the permit criteria.

State dental board rules contain substantial, important requirements regarding monitoring, equipment and supplies necessary for providing safe dental office anesthesia and sedation. These clinical equipment and monitoring standards have demonstrated clinical effectiveness regarding patient safety. There is no credible evidence, however, that imposing additional restrictions specific to CRNAs in the dental office setting increases patient safety.

To obtain the specific dental rules and other resources for a state, contact the AANA State Government Affairs Division at sga@aana.com. (Or enter “[state] dental board” into any search engine, then locate the dental board rules on the website. Requirements for permits, equipment and supplies are typically in the dental board rules, rather than the statutes/dental practice act.)

For more information, see:

- [Chart and map](#) of states with permit requirements under “State Law Considerations.”

Barriers to Practice

The anesthesia education and training required to become a CRNA are more extensive than the education and training required of permitted dentists, and CRNAs are responsible for the patient care they provide. Consequently, there is no reason to require an operating dentist to obtain a permit, and the additional anesthesia education and training that entails, when utilizing a CRNA. Restrictive permit requirements create an anticompetitive disincentive for dentists to use CRNAs, reduce access to dental care, and do not provide additional patient safety.

CRNAs Promote Dental Anesthesia Safety

Dental sedation and anesthesia safe outcomes are best achieved when provided by a healthcare professional, whose only responsibility is the anesthetic management and monitoring of the patient, and a proceduralist whose specific focus is on the procedure. Deep sedation and general anesthesia for dental procedures is safest when provided by a qualified, licensed anesthesia professional, who is not simultaneously engaged in the dental procedure. When sedation or anesthesia services are required, the use of anesthesia professionals, with delineated responsibilities, allows each team member to focus on his or her role for best outcomes and patient safety.

Through a holistic, patient-centered approach, CRNAs advocate for patient safety throughout every procedure, including dental sedation and anesthesia. CRNAs are experts in sedation and anesthesia delivery, pain management, advanced airway management, shared airway, hemodynamic and physiologic monitoring, and emergency management. CRNAs promote all aspects of office-based practice safety.

For more information, see:

- [Dental Office Sedation and Anesthesia Care, Position Statement](#)
- [AANA Dental Anesthesia Resource Webpage](#)
- [Office Based Anesthesia, Position Statement](#)
- [Malignant Hyperthermia Crisis Preparedness and Treatment, Position Statement](#)
- [Infection Prevention and Control Guidelines for Anesthesia Care](#)
- [Safe Injection Guidelines for Needle and Syringe Use](#)
- [AANA Outpatient Facility Considerations Webpage](#)
- [AANA Research Topics and Articles](#)
 - o See “Quality & Safety”

To further its commitment to dental patient safety, the American Association of Nurse Anesthetists (AANA) is a collaborating organization of the Dental Patient Safety Foundation (DPSF). The DPSF is an independent, multidisciplinary patient safety organization whose purpose is to improve safety and quality of dental care. Integral to this mission are the non-partisan data collection and analysis, with subsequent reporting, education, and advocacy to all dental professionals.

For more information, see:

- [AANA Partners with the Dental Patient Safety Foundation](#), *AANA NewsBulletin*, July 2020
- [Dental Patient Safety Foundation](#)

Billing

Many insurance policies do not pay for anesthesia services for dentistry. Typically, the responsibility for payment of anesthesia services is placed on the patient, prior to the procedure. Additionally, dental offices may not bill insurance companies directly for anesthesia services, but will supply the patient with a receipt, billing codes, and insurance information, so the patient can apply for reimbursement through their insurance carrier. Commercial dental insurance may

have a maximum allowed amount per year and the remainder of the cost will be the responsibility of the patient.

General anesthesia or IV sedation may be covered by medical insurance under specified circumstances of medical necessity, such as patients with concurrent medical or developmental health conditions. Medical necessity can be related to the procedure, such as an abscess that could cause systemic sepsis, trauma, or an underlying condition such as autism, debilitating anxiety, etc.

Dental insurance varies among states, therefore dental and anesthesia providers should be familiar with all pertinent insurance coverage, billing, and documentation requirements of third-party payers.

For more information, see:

- [Introduction to Dental Anesthesia Business*](#)

Malpractice Insurance

CRNAs work in any practice setting, including dental offices, and are able to obtain their own malpractice insurance coverage. CRNAs obtain the appropriate level of malpractice insurance for their practice setting and should consult with their malpractice insurance carrier to confirm coverage for specific dental anesthesia procedures. CRNAs who are insured under their facility's malpractice insurance should address coverage questions with the facility's risk management.

Economic Prudence

Peer reviewed evidence continues to support the safety and economic cost-effectiveness of CRNAs. CRNAs, as independently licensed professionals, are responsible and accountable for judgments made and actions taken in his or her professional practice.¹ As advanced practice registered nurses, CRNAs practice with a high degree of autonomy and professional respect. CRNAs can provide the full range of anesthetic services required within a dental practice while facilitating a safe and patient-centered environment. These services include, but are not limited to, patient and caregiver education, preanesthesia assessment and evaluation, establishing an anesthetic plan, patient monitoring throughout the procedure, postanesthesia care, and emergency management. CRNAs can also assist a dental practice in aspects such as staff education, policy and procedure development, and quality improvement initiatives. The cost-efficiency of CRNAs helps control escalating healthcare costs.

Cost effectiveness directly relates to access to care for patients. CRNAs are the predominant anesthesia providers in rural and medically underserved communities in the US, therefore, they deliver essential healthcare to patients who may otherwise not be able to undergo their surgery or procedure, including dental care. A recent study published in the 2015 *Nursing Economic\$* found that CRNAs provide the majority of anesthesia care in U.S. counties with lower-income populations and populations that are more likely to be uninsured or unemployed.² CRNAs are also more likely found in states with less-restrictive practice regulations where more rural counties exist.

Numerous peer reviewed studies have shown that CRNAs are safe, high quality and cost-effective anesthesia professionals who should practice to the full extent of their education and

abilities. According a 2010 study published in the *Journal of Nursing Economic*, CRNAs acting as the sole anesthesia provider are the most cost-effective model for anesthesia delivery, and there is no measurable difference in the quality of care between CRNAs and other anesthesia providers or by anesthesia delivery model.³ An August 2010 study published in *Health Affairs* showed no differences in patient outcomes when anesthesia services are provided by CRNAs, physicians, or CRNAs supervised by physicians.⁴ The findings of this study were reaffirmed by further research in 2018.⁵ Researchers studying anesthesia safety found no differences in care between nurse anesthetists and physician anesthesiologists based on an exhaustive analysis of research literature published in the United States and around the world, according to a scientific literature review prepared by the Cochrane Collaboration, the internationally recognized authority on evidence-based practice in healthcare.⁶ Recently, a study published in June 2016 in *Medical Care* found no measurable impact in anesthesia complications from nurse anesthetist scope of practice or practice restrictions.⁷

For more information, see:

- [AANA Research Topics and Articles](#)

References

1. American Association of Nurse Anesthetists. Code of Ethics for the Certified Registered Nurse Anesthetist. 2018.
2. Liao CJ, Quraishi JA, Jordan LM. Geographical imbalance of anesthesia providers and its impact on the uninsured and vulnerable populations. *Nurs Econ*. 2015;33(5):263-270.
3. Hogan PF, Seifert RF, Moore CS, Simonson BE. Cost effectiveness analysis of anesthesia providers. *Nurs Econ*. 2010;28(3):159-169.
4. Dulisse B, Cromwell J. No harm found when nurse anesthetists work without supervision by physicians. *Health Aff (Millwood)*. 2010;29(8):1469-1475.
5. Cintina I, Hogan PF, Schroeder C, Simonson BE, Quraishi JA. Cost effectiveness of anesthesia providers and implications of scope of practice in a medicare population. *Nurs Econ*. 2018;36(2):67-73.
6. Lewis SR, Nicholson A, Smith AF, Alderson P. Physician anaesthetists versus non-physician providers of anaesthesia for surgical patients. *Cochrane Database Syst Rev*. 2014(7):CD010357.
7. Negrusa B, Hogan PF, Warner JT, Schroeder CH, Pang B. Scope of practice laws and anesthesia complications: No measurable impact of Certified Registered Nurse Anesthetist expanded scope of practice on anesthesia-related complications. *Med Care*. 2016;54(10):913-920.

*AANA member login required

Adopted by the AANA Board of Directors September 2020.

© Copyright 2020