

Certified
Registered
Nurse
Anesthetist

CRNA FAST FACTS



1 There is no statistically significant difference in the risk of anesthesia complications based on the degree of restrictions placed on CRNAs by state SOP laws. (Negrusa et al, Medical Care Journal, 2016)

2 There is no difference in patient outcomes when anesthesia services are provided by CRNAs, physicians, or CRNAs supervised by physicians. (Dulisse, 2010 - Health Affairs)

3 Nurse anesthesia care is 25 percent more cost effective than the next least costly anesthesia delivery model. (Hogan, 2016-Nursing Economic\$)

4 Practicing in every setting, with and without anesthesiologists, CRNAs ensure patient access to healthcare and predominate in rural and other medically underserved areas.

5 Researchers studying anesthesia safety found no differences in care between CRNAs and anesthesiologists. (Lewis, 2014-Cochrane Database of Systematic Reviews)

- Nurse anesthetists have been providing anesthesia to patients in the United States for more than 150 years.
- CRNAs are advanced practice registered nurses who administer more than **45 million anesthetics** to patients each year. Nearly 53,000 U.S. nurse anesthetists and student nurse anesthetists are members of the American Association of Nurse Anesthesiology (AANA).
- In some states, CRNAs are the **sole anesthesia professionals in nearly 100% of rural hospitals**, ensuring patient access to obstetrical, surgical, trauma stabilization and pain management services.
- CRNAs have been **recognized Medicare Part B providers** since 1986.
- **CRNAs work in every setting in which anesthesia is delivered**, including hospitals, ambulatory surgical centers and physician offices.
- Nurse anesthesia **predominates in Veterans Hospitals and in the U.S. Armed Forces**.
- **CRNA services include** pre-anesthesia evaluation, administering the anesthetic, monitoring and interpreting the patient's vital signs and managing the patient throughout surgery.

Learn more about CRNAs nysana.com/info



American Association of Nurse Anesthesiology | Office of Federal Government Affairs
25 Massachusetts Avenue NW, Suite 320 | Washington, DC 20001 | 202.484.8400 | info@aanadc.com

CRNA's Make an Impact

Certified Registered Nurse Anesthetists (CRNA) are anesthesia professionals who safely administer more than 33 million anesthetics to patients each year in the United States and have been doing so since the Civil War. CRNAs ARE THE SOLUTION to high-quality, safe and affordable anesthesia care for New Yorkers.

Read these real stories from patients and a medical doctor who have seen and experienced the impact and expertise of CRNAs firsthand.



Dr. Abdul Chaudry, a gastroenterologist in Warsaw, NY, has been in practice for over 40 years and working alongside CRNAs for 15 of those years.

Jennifer Wallenhorst experienced this care firsthand when her CRNA responded with life-saving care and measures after an emergency c-section.



Becky Rautenstrauch is thankful for the unprecedented level of trust, care & compassion she felt from her CRNA.

READ MORE AT [NYSANA.COM/OURIMPACT](https://www.nysana.com/ourimpact) OR SCAN >



New York State Association of Nurse Anesthetists
(614) 228-4727 | NYSANA@AssnOffices.com



CRNA Education and Training

Certified Registered Nurse Anesthetists (CRNAs) are highly educated, advanced practice registered nurses who deliver anesthesia to patients in exactly the same ways, for the same types of procedures and just as safely as anesthesiologists.

CRNAs have a minimum of 7 to 8^{1/2} years of education and training specific to nursing and anesthesiology before they are licensed to practice anesthesia.



Baccalaureate prepared RN

Average
2.9 Years

Critical care nursing experience prior to entering nurse anesthesia program¹

24 – 42
Months

Classroom and clinical education and training



Master's or Doctoral Degree from a COA-accredited nurse anesthesia educational program²

By 2025, all anesthesia program graduates will earn doctoral degrees

Nurse anesthetists obtain an average of

9,369
Clinical
Hours



of training prior to becoming a CRNA.

Constant Learners



CRNAs must pass a **National Certification Examination** for entry into practice and be recertified every 4 years so they are current on anesthesia techniques and technologies.

They must also pass a Continued Professional Certification exam every 8 years. Anesthesiologists are recertified every 10 years.



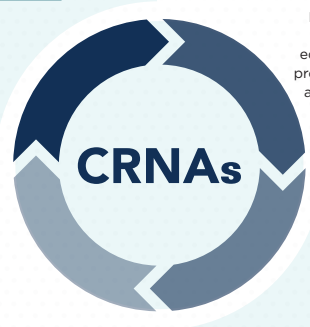
Minimum **60 hours** of approved continuing education and **40 hours** professional development activities every 4 years



Documentation of substantial anesthesia practice



Maintenance of current state licensure



CRNAs are qualified to administer **every type of anesthesia in any healthcare setting**, including pain management for acute or chronic pain.



Manage difficult cases



Use advanced monitoring equipment

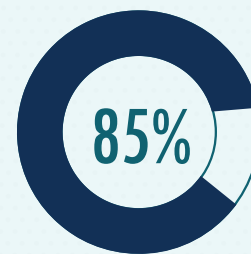


Interpret diagnostic information



Respond appropriately in any emergency situation

Research shows that CRNAs are



Less costly to educate and train than anesthesiologists.³

As the demand for healthcare continues to grow, increasing the number of CRNAs will be key to containing costs while maintaining quality care.

¹ CRNAs are the only anesthesia professionals with this level of critical care experience prior to entering an educational program.

² Council on Accreditation of Nurse Anesthesia Educational Programs

³ Update of Cost Effectiveness of Anesthesia Providers, Lewin Group Publications, May 2016

For more information, visit www.anesthesiafacts.com
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AANA.com

There is overwhelming evidence that CRNAs provide superb anesthesia care.

Research shows there is no difference in safety between CRNAs and anesthesiologists. The safety record of CRNAs is demonstrated by recent studies published in leading health policy journals and an independent review by Cochrane, a world-renowned organization that supports evidence-based decision-making in healthcare.

KEY STUDIES OF PATIENT SAFETY



Dulisse & Cromwell, 2010 (Health Affairs)

METHODS

Analysis of Medicare data for 1999–2005 in opt-out and non-opt-out states comparing CRNA solo, MDA solo, and Team anesthesia delivery models for over 481,000 hospitalizations.

KEY FINDINGS

No evidence that opting out of the Medicare supervision requirement resulted in increased inpatient deaths or complications.

POLICY IMPLICATIONS

"Despite the shift to more anesthetics performed by nurse anesthetists, **no increase in adverse outcomes was found in either opt-out or non-opt-out states ...** These results do not support the hypothesis that allowing states to opt out of the supervision requirement resulted in increased surgical risks to patients." (p. 1474)

Dulisse, B., & Cromwell, J. (2010). No harm found when nurse anesthetists work without supervision by physicians. Health Affairs (Project Hope), 29(8), 1469–1475.



Negrusa et al., 2016 (Medical Care)

METHODS

Analysis of 5.7 million commercial claims from 2011–2012 by state SOP and delivery models including CRNA alone, MDA alone, and various direction and supervision models.

KEY FINDINGS

The odds of a complication did not differ based on degree of state SOP restrictions or by delivery model.

POLICY IMPLICATIONS

"...there is no statistically significant difference in the risk of anesthesia complications based on the degree of restrictions placed on CRNAs by state SOP laws. Nor is there evidence that the risk of complications varies by delivery model. This evidence suggests that there is **no empirical evidence for SOP laws that restrict CRNAs** from practicing at levels that are below their education and training based on differences in anesthesia complication risk." (p. 7)

Negrusa, B., Hogan, P. F., Warner, J. T., Schroeder, C. H., & Pang, B. (2016). Scope of Practice Laws and Anesthesia Complications: No Measurable Impact of Certified Registered Nurse Anesthetist Expanded Scope of Practice on Anesthesia-related Complications. Medical Care, 54(10), 913–920.



Lewis et al., 2014 (Cochrane)

METHODS

Systematic review conducted by independent organization of 6 studies evaluating physician and non-physician anesthesia providers.

KEY FINDINGS

This evaluation of currently available scientific evidence was unable to draw conclusions about the superiority of any particular type of anesthesia provider. While the evaluation noted important limitations of the existing studies, the bottom line is that evidence to support the claim that physicians provide better anesthesia care compared to CRNAs is just not there.

POLICY IMPLICATIONS

"Overall, while some studies have shown small and inconsistent differences in some outcomes, the quality and nature of the **evidence are insufficient to draw firm conclusions about relative benefits and risks** of the different models of anaesthetic provision." (p. 14–15).

Lewis, S. R., Nicholson, A., Smith, A. F., & Alderson, P. (2014). Physician anaesthetists versus non-physician providers of anaesthesia for surgical patients. The Cochrane Database of Systematic Reviews, (7), CD010357.

AANA | GET THE FACTS

Quality of care.



The American Society of Anesthesiologists tries very hard to discredit the critical research on anesthesia safety funded by the AANA.

They would have you believe there is clear evidence of superior care when it's supervised by an anesthesiologist. **But there isn't.** These studies are all published in ASA or other medical anesthesiology-sponsored journals.

ASA-PREFERRED STUDIES OF PATIENT OUTCOMES



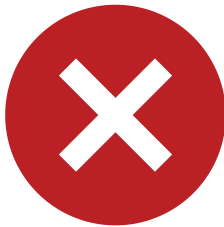
Silber et al, 2000 (Anesthesiology)

Inaccurately touted as the "gold standard", this study has significant methodological problems including:

- The data is 25+ years old
- The use of a 30-day mortality measure, which cannot assess anesthesia care where outcomes are measured within 48 hours
- No determination of provider type in the majority of undirected cases
- The large reported differences in mortality and failure-to-rescue are widely inconsistent with other reported rates of anesthesia-related mortality and complications, suggesting that these differences are not due to anesthesia care at all, but rather to unrelated perioperative care processes

HCFA determined this study to be irrelevant as evidence supporting physician supervision of CRNAs. According to HCFA/CMS published in the Federal Register, **"One cannot use this analysis (Silber) to make conclusions about CRNA performance with or without physician supervision."**

Silber, J. H., Kennedy, S. K., Even-Shoshan, O., Chen, W., Koziol, L. F., Showan, A. M., & Longnecker, D. E. (2000). Anesthesiologist direction and patient outcomes. *Anesthesiology*, 93(1), 152-163.



Memtsoudis et al, 2012 (Journal of Clinical Anesthesia)

This study tries to demonstrate that poorer outcomes and higher costs are associated with CRNA-provided anesthesia care based on selected years of data 10 years apart. However, an editorial in the same issue describes the problems with the methods and assumptions of this study:

- No adjustment for patient-level risk such as comorbidities
- No adjustment for geography despite known regional variation in discharge to residence based on research
- Outcome is not anesthesia specific and ignores many other factors that might affect discharge status like duration and end time of the procedure or complications unrelated to anesthesia
- Advancements in perioperative care and anesthesia techniques 1996-2006 indicate these should not be treated as comparable populations
- Only two types of procedures were analyzed, severely limiting generalizability

Memtsoudis, S. G., Ma, Y., Swamidoss, C. P., Edwards, A. M., Mazumdar, M., & Liguori, G. A. (2012). Factors influencing unexpected disposition after orthopedic ambulatory surgery. *Journal of Clinical Anesthesia*, 24(2), 89-95.



Miller et al, 2016 (A&A Practice)

The ASA uses this study to show that anesthesiologists are "affiliated" with hospitals exclusively billing with the QZ modifier (i.e. CRNA without medical direction), but the ASA inaccurately concludes that "potential" MDA involvement translates to "actual" involvement in CRNA cases. Other notable findings of the study include:

- The median number of MDAs at QZ only hospitals is 0.5 MDAs compared to 2.3 CRNAs, suggesting that MDAs often are not readily available and it actually is CRNAs providing the bulk of anesthesia care at those facilities, most likely without substantial involvement of MDAs

Miller, T. R., Abouleish, A., & Halzack, N. M. (2016). Anesthesiologists are affiliated with many hospitals only reporting anesthesia claims using modifier QZ for medicare claims in 2013. *A&A Practice*, 6(7), 217-219.

CRNAs: Ensuring Safe Anesthesia Care

WHY SURGEONS AND OTHER HEALTHCARE PROVIDERS RELY ON CRNAs

Certified Registered Nurse Anesthetists (CRNAs) are advanced practice registered nurses who collaborate with surgeons, obstetricians, dentists and other healthcare providers to deliver safe, high-quality and cost-effective anesthesia care to patients in virtually every healthcare setting.

Access to Care



CRNAs practice in **all 50 states** and in the military, safely providing more than 50 million anesthetics each year.

Patient Safety



National studies confirm that CRNAs are integral to high-value anesthesia care delivery where quality and safety are emphasized.*



Anesthesia care is **nearly 50x safer** than it was in the 1980s.**

This is due to **advancements in monitoring** technology, anesthetic drugs, provider education, and standards of care.

Risk Management



CRNAs are **educated, trained and experienced** in providing anesthesia care for complicated medical procedures and handling emergency situations.



As licensed professionals, CRNAs are responsible and accountable for decisions made and actions taken in their professional practice.



Case law shows that surgeons and other healthcare providers face no increase in liability when working with a CRNA versus a physician anesthesiologist.

For a surgeon (or other healthcare provider) to be liable for the acts of an anesthesia professional, the surgeon must control the actions of the CRNA or anesthesiologist and not merely supervise or direct them.



Courts apply the same standard to judge whether a surgeon is liable for the acts of a CRNA or an anesthesiologist.

On a nationwide basis, the average 2020 malpractice liability insurance premium for self-employed CRNAs was **36 percent less than it was in 1988**. When trended for inflation through 2020, **the reduction in premium is 71 percent**.



Cost Savings

Healthcare facilities that hire anesthesiologists to supervise CRNAs in an effort to manage risk may more than triple the costs of anesthesia delivery without improving patient outcomes, lowering risk or reducing liability coverage costs.



*RTI

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ENHANCED RECOVERY AFTER SURGERY

How CRNAs are reducing opioid use, improving outcomes, and lowering costs



The Issue

Persistent opioid use after surgery affects millions of Americans.

- More than **2 million people** may transition to persistent opioid use following elective, ambulatory surgery each year.¹
- Overprescribing of postsurgical opioids results in **billions of unused pills**.²
- In 2015, **2.1 million people** misused prescription opioids for the first time.³
- **Nearly half** of all U.S. opioid overdose deaths involve a prescription opioid.⁴

A Solution

Certified Registered Nurse

Anesthetists (CRNAs) are pain management experts who are uniquely qualified to help solve this problem. CRNAs offer patients holistic pain management services that reduce or eliminate the need for opioids post-surgery.

Enhanced Recovery After Surgery

Enhanced Recovery After Surgery (ERAS) is a patient-centered, evidence-based, pain management strategy employed by CRNAs to reduce the need for opioids, improve patient outcomes and reduce costs.

ERAS uses robust patient communication and opioid-sparing techniques such as regional anesthesia, peripheral nerve blocks, non-pharmacologic approaches and non-opioid medications.



Traditional Pain Management Pathway

- Patient assessment
- Opioid/non-opioid prescribing and discharge



ERAS Pain Management Pathway

- **Preadmission** – patient/family education; recovery and pain management planning
- **Preoperative** – minimize fasting to reduce anxiety and pain perception and improve diet recovery
- **Intraoperative** – administer analgesics and nerve blocks for pain and nausea/vomiting management
- **Postoperative** – patient assessment, plan modification, and multimodal medication prescribing
- **Post-Discharge** – education on anesthesia recovery, surgical procedure and pain management
- **Continued Quality Improvement** – analysis of compliance and outcomes to improve care

ERAS and the Opioid Crisis

ERAS supports collaborative pain care between the patient, the CRNA and the entire care team. It also encourages patients to play an active role by expressing their own needs and concerns to help establish realistic goals for improved well-being and quality of life without dependence on opioids.

This thorough assessment and treatment of pain not only reduces the need for opioids during and after surgery, but also decreases the risk of acute pain transitioning to chronic pain and the development of opioid dependency and abuse.



ERAS: Improved outcomes and reduced costs

- ERAS provides an **average savings** of **\$880 to \$5,560** per patient. ^{5,6}
- ERAS **reduces patient length** of stay **by 3-4 days** on average. ⁷⁻¹²
- ERAS **reduces 30-day** patient readmission rates and costs. ^{13,14}
- ERAS **helps patients return** to normal activities more quickly. ⁶

To learn more about CRNAs and their expertise in providing holistic, patient-centered, cost-effective pain management care, visit **anesthesiafacts.com**.

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