

## **Anesthesiologist Assistants vs. Nurse Anesthetists ... What Are the Differences?**

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The question for decades: Do differences in the education and practice of anesthesiologist assistants (AA) and nurse anesthetists (NAs) indicate the superiority of one profession over the other in either ability or capability? AAs and NAs are both longstanding members of the anesthesia care team (ACT). ASA and the Centers for Medicare & Medicaid Services (CMS) share the position that AAs and NAs have identical clinical capabilities and responsibilities. Nearly four decades of experience have proven the safety of the ACT with either an NA or AA as the nonphysician anesthetist. However, certain differences do exist between AAs and NAs. Since some of these differences are being mischaracterized in claims of superiority of one over the other, objective investigation and documentation was called for and was assigned to the Committee on the Anesthesia Care Team (CACT). This article summarizes the findings.

After thoroughly analyzing prerequisites for admission, curricula, graduation and certification requirements, and clinical practice and overall quality, the CACT drafted the recently approved "ASA Statement Comparing Anesthesiologist Assistant and Nurse Anesthetist Education and Practice" (the complete statement can be found in the "Members Only" section of the ASA Web site). The committee was greatly aided in its mission by the coincidental publication of an impartial study comparing the education and practice of AAs and NAs commissioned by the Kentucky Legislature. The Legislative Research Commission published its 59-page detailed report on February 2007 (see [www.asahq.org/Newsletters/2008/02-8/AA\\_Study\\_Report337.pdf](http://www.asahq.org/Newsletters/2008/02-8/AA_Study_Report337.pdf)). Of note, several other states (recently Florida and North Carolina) have reached the same conclusion.

### **Three differences between AAs and NAs can be summarized as follows:**

1. Prerequisites to training: NA schools require an RN degree and one year of critical care work experience. AA schools require an undergraduate degree emphasizing the requirements for medical school admission. ASA agrees with the impartial findings of the Kentucky Legislature that the requirement for clinical experience may constitute a temporary aid to those beginning their NA or AA education, but it makes no difference to the final outcome of that training.

2. Performance of regional anesthesia and invasive catheters: More NA education programs provide instruction in the technical aspects of regional anesthesia. A higher percentage of AA programs provide instruction in the placement of invasive monitors. There is no evidence to suggest that the innate abilities of either student type impact their suitability for these anesthesia practices. The decision by some AA programs to limit the teaching of regional techniques was influenced by the opinion of some anesthesiologists that neither AAs nor NAs should perform these invasive procedures. That limitation is voluntary, consistent with ASA policy and was implemented to enhance patient safety.

3. Supervision and independent practice: AAs must be supervised by an anesthesiologist, and NAs may be supervised by any physician. Political victories rather than changes in education have allowed NAs in some states to practice without the CMS requirement for physician supervision. Requiring that anesthesiologists supervise AAs in no way constitutes a mark of inferiority. To the contrary, and as concluded by the Kentucky study, AA work is directed only by anesthesiologists because AAs want it that way. They agree that the safest ACT is one led by an anesthesiologist, so it is their desire to practice in a manner that supports what they agree is the highest quality and safety available.

History has everything to do with the differences above. The AA profession was founded in the early 1970s by anesthesiologists striving to design an improved educational program for anesthesia physician extenders that would also include a direct path to medical school if desired. Focused on that goal, those pioneers in education recognized the value added by strong premedical backgrounds. By requiring prerequisites for admission to medical school in order to qualify for admission to AA schools, AAs may go from AA practice directly into medical school. Disadvantaged in this regard, NAs who wish to advance their ability and knowledge in anesthesia by becoming anesthesiologists have to first go back to the undergraduate level to complete a premedical curriculum. Thus by history, tradition, philosophy of education and desire, the AA is trained to work within the ACT. The quality and scope of their education has nothing to do with this decision.

In distinction, the NA discipline developed much earlier, in the late 1800s and early 1900s, in response to surgeons' requests for more anesthesia providers. As now, anesthesiologists alone could not accommodate all surgical demands. Necessity was truly the mother of invention for the evolution of NA practice — we needed more anesthesia providers. As early as 1916, NAs began fighting legal battles claiming their right to provide anesthesia supervised only by surgeons. NA

organizations have never formally supported or advocated for the idea that NA care is safer under the direction of an anesthesiologist or even supervision of a surgeon. Their legal right to practice without the supervision of an anesthesiologist is the result of their history, tradition, philosophy of education and tremendous political effort.

In summary, our analysis of prerequisites for admission, curricula, graduation and certification requirements, clinical practice, and overall quality and ability of both AAs and NAs supports the findings of the comprehensive, unbiased study of the Kentucky Legislature and CMS policies recognizing the two professions as being equivalent. After a year of practice, the relative quality and skill of individual AAs or NAs likely has more to do with personal talents and abilities than the educational route taken. This observation is supported by the testimonies of many anesthesiologists who have gained valuable insights working within the ACT for decades with both NAs and AAs who find no significant differences between the two groups of professionals in their daily clinical practices.

ASA's conclusion: Differences do exist between AAs and NAs in regard to the prerequisites, curriculum, instruction in regional anesthesia and invasive monitoring, and requirements for supervision in practice. However, these differences are not based on superiority of education or ability, but are rather a product of differences in historical development and the philosophies and motivations of those that practice within each profession.

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The Web site of the American Association of Anesthesiologist Assistants. [www.anesthetist.org](http://www.anesthetist.org).

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FAQs about AAs. ASA Website. [www.asahq.org/career/aa.htm](http://www.asahq.org/career/aa.htm).