

## STATEMENT COMPARING ANESTHESIOLOGIST ASSISTANT AND NURSE ANESTHETIST EDUCATION AND PRACTICE

Committee of Origin: Anesthesia Care Team

(Approved by the ASA House of Delegates on October 17, 2007)

Anesthesiologist Assistants (AA) and nurse anesthetists (NA) are both members of the Anesthesia Care Team. Their role in patient care is described in the American Society of Anesthesiologists' (ASA) [Statement on the Anesthesia Care Team](#). The ASA document entitled *The Scope of Practice of Nurse Anesthetists* further details the safe limits of clinical practice. These documents state ASA's view that both AA and NA have identical capabilities and responsibilities in the clinical care of patients – a view in harmony with their treatment under the Medicare Program. The proven safety of the ASA care team approach to anesthesia with either NA or AA as the non-physician anesthetist confirms the wisdom of this view. Nevertheless, certain differences do exist between AAs and NAs in regard to the educational program prerequisites, instruction in regional anesthesia and invasive monitoring, and requirements for supervision in practice. Since some of these differences are being mischaracterized and misrepresented for the benefit of one category of provider over the other, it has become necessary to address the question of whether these differences in education and practice indicate the superiority of one profession compared to the other in either innate ability or clinical capability.

In order to answer this question, the Committee on Anesthesia Care Team studied and compared the prerequisites for program admission and curriculum of both AA and NA educational programs and the clinical practice in regards to scope of practice and overall quality. Reference was made to published program prerequisites, curricula and graduation requirements for both AA and NA education programs; the laws and regulations governing clinical practice; and available studies on the safety of NA and AA practice. In addition, the Committee had access to an impartial study comparing AA and NA education and practice commissioned by the Kentucky legislature and published in February 2007, as well as a white paper from the American Association of Anesthesiologists' Assistants (AAAA) entitled "Comparison of AA and NA Education and Practice". The Committee came to the following conclusion:

*Differences do exist between Anesthesiologist Assistants and Nurse Anesthetists in regard to the educational program prerequisites, instruction in regional anesthesia and invasive monitoring, and requirements for supervision in practice. However, these differences are not based on superiority of education but are rather a product of the different manner in which the two professions developed and the desire of Anesthesiologist Assistants to work only with anesthesiologists.*

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

### **1. Prerequisites to Anesthesia Training –**

NA schools require a nursing degree and one year of critical care experience, and AA programs require a bachelor's degree emphasizing pre-medical coursework. Many AA students enter

programs with a broad range of clinical experience, but this is not required. The Committee agrees with the impartial findings of the study commissioned by the Kentucky legislature that the requirement for clinical experience, while it may constitute a temporary aid to those beginning their NA or AA education, makes no difference to the final outcome of that training. This conclusion is born out by the clinical experiences of anesthesiologists who work simultaneously with AA and NA and find no significant difference in clinical practice ability between the two professions.

## **2. Performance of Regional Anesthesia and Insertion of Invasive Catheters –**

Data compiled by the AAAA in their “Comparison of AA and NA Education and Practice” show that more NA education programs provide instruction in the technical aspects of regional anesthesia, but that a higher percentage of AA programs provide instruction in the placement of invasive monitoring lines. There is no evidence to suggest that the innate abilities or clinical capabilities of the students have any bearing on their suitability for this aspect of practice. Rather, the decision by some AA programs to limit the teaching of these techniques is based on the reservations expressed by some anesthesiologists about the safety of this practice by either AA or NA. That limitation is voluntary, consistent with ASA policy and done with a view to enhancing patient safety. The ASA [Statement on Regional Anesthesia](#) recognizes that the supervising anesthesiologist may, when appropriate, delegate to a non-physician anesthetist certain technical aspects of these procedures. Nevertheless, as neither NA nor AA receives the medical education necessary to safely evaluate patients for the appropriateness of these procedures or manage complications when they occur, regional anesthesia is “best performed by an anesthesiologist who possesses the competence and skills necessary for safe and effective performance”.

## **3. Supervision and Independent Practice –**

AA must be supervised by an anesthesiologist and NA may be supervised by any physician. Due to political battles and action, and not because of education or improvements in patient safety or quality care, states can opt out of the Medicare requirement for physician supervision of the NA. The fact that anesthesiologists must supervise AAs does not constitute a mark of inferiority. On the contrary, and as noted in the Kentucky study, AAs work under the direction of anesthesiologists only because that is the history of their profession and their desire.

The AA profession was established in the late 1960s by anesthesiologists addressing the shortage of anesthesiologists in the country. After studying the educational pathway for anesthesiologists and nurse anesthetists, they created a new educational paradigm for a mid-level anesthesia practitioner that included a pre-med background in college. This person would perform the same job as the NA but would be readily able to go on to medical school if appropriate. This new professional, the anesthesiologist assistant, or AA, thus had the potential to alleviate the shortage of anesthesiologists. Trained specifically to share a common practice philosophy with anesthesiologists and to work only with anesthesiologist, their education was designed to incorporate the basic principles supportive of the Anesthesia Care Team (ACT). The founders recognized early on the advantage of a strong pre-medical background in comparison to the nursing educational backgrounds of the NA profession. The wisdom of this view has

been confirmed by the increased focus on pre-medical course work as a prerequisite for admission to NA programs that occurred in response to the success of the AA profession. 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 in the late 1800's and early 1900's out of surgeons' requests for more anesthesia providers. Prior to 1900 it was uncommon for physicians to specialize in anesthesia, so unlike the AA profession and due to this historical circumstance, the nurse anesthesia profession developed without the benefit of leadership from medical doctors trained in anesthesia. As early as 1916 and 1917, NAs fought their first legal battles to create and maintain the right to provide anesthesia under the direction of surgeons. Their nursing specialty was born within a climate allowing their practice without supervision of a physician trained in anesthesia, and since those early years they have continued fighting politically for the right to practice without any physician supervision. Anesthesia nurses' legal right to practice without the supervision of an anesthesiologist is due to their history, tradition, philosophy of education and political efforts, rather than the quality and scope of their education.

In summary, review of the prerequisites, curriculum and clinical abilities of both AAs and NAs supports ASA policy of recognizing the two professions as being equivalent based strictly upon their educational preparation. Any differences that do exist are the result of the historical development of the two professions and their philosophies of practice.