Nurse anesthetists have a documented history of providing safe, high-quality anesthesia care. Today, nearly 150 years after the profession’s humble yet heroic beginnings on the battlefields of the Civil War, Certified Registered Nurse Anesthetists (CRNAs) are the hands-on providers of more than 32 million anesthetics given to patients each year in the United States, according to the American Association of Nurse Anesthetists (AANA) 2009 Practice Profile Survey.

A Commitment to Patient Safety
With its stated mission of “Advancing patient safety and excellence in anesthesia,” the AANA has been committed to improving the quality of anesthesia care provided by nurse anesthetists since it was established in 1931. To that end, the AANA is at the forefront of developing, maintaining, and updating evidence-based practice standards and guidelines for the nation’s 44,000 CRNAs and student nurse anesthetists. The first professional organization to endorse the Harvard Minimal Monitoring Standards in the late 1980s, the AANA subsequently issued even more explicit patient monitoring standards for anesthesia, demonstrating a desire to continually advance patient safety that endures to the present. The AANA has developed standards for pre-, peri- and postanesthesia care, as well as guidelines for obstetrical analgesia and anesthesia, waste gas management, and infection control that are acknowledged by nursing, medical, and allied health specialty groups.

The AANA fosters CRNA participation in and support for continuing education programs, patient safety research, patient satisfaction surveys, the advancement of anesthesia techniques and technology, and the development of practice standards and guidelines. The AANA also provides guidance to members who develop and/or participate in peer review and risk management activities within healthcare institutions. Among the many patient-centered organizations in which the AANA is involved are the Anesthesia Patient Safety Foundation, the Coalition for Patients’ Rights®, the Safe Injection Practices Coalition, the Council on Surgical and Perioperative Safety, and the Malignant Hyperthermia Association of the United States.

Anesthesia Studies
Numerous studies have shown that anesthesia care provided by CRNAs and physician anesthesiologists, whether working independently or together, has never been safer. According to the 1999 Institute of Medicine report To Err is Human: Building a Safer Health System, anesthesia is nearly 50 times safer than it was in the 1980s, as evidenced by a dramatic decrease in the anesthesia mortality rate from approximately 1 death in 5,000 anesthetics to approximately 1 in 250,000-300,000. Contributing factors include advances in anesthetic drugs, monitoring technology, practice standards and techniques, and the preparation and continuing education of CRNAs and anesthesiologists.

Following are additional noteworthy studies on anesthesia safety. For more information about these studies, go to www.aana.com/qualityofcare.aspx.

- In 1990, the Centers for Disease Control and Prevention (CDC) proposed to undertake research on morbidity and mortality in anesthesia. However, after reviewing preliminary data, the CDC concluded that the morbidity and mortality rates in anesthesia were too low to warrant a multi-million dollar study.
• In 1994, the Minnesota Department of Health (DOH) studied the provision of anesthesia services by CRNAs and anesthesiologists. Among the department’s conclusions was that “There are no studies, either national in scope or Minnesota-specific, which conclusively show a difference in patient outcomes based on type of anesthesia provider.”

• In 2003, Dr. Michael Pine, a board-certified cardiologist widely recognized for his expertise in analyzing clinical data to evaluate healthcare outcomes, and a team of researchers published the results of a groundbreaking study titled “Surgical Mortality and Type of Anesthesia Provider.” The study results revealed that patients are just as safe receiving their anesthesia care from CRNAs or anesthesiologists working individually, or from CRNAs and anesthesiologists working together.

• In 2007, a team of researchers led by Daniel Simonson, CRNA, MHPA, published the results of a retrospective analysis titled “Anesthesia Staffing and Anesthetic Complications During Cesarean Delivery.” The study results showed that there is no difference in complication rates or mortality rates between hospitals that use only CRNAs compared with hospitals that use only anesthesiologists.

• In 2008, researchers Jack Needleman, PhD, MS, and Ann Minnick, PhD, RN, FAAN, published results of a national study titled “Anesthesia Provider Model, Hospital Resources, and Maternal Outcomes.” The results of the study revealed that obstetrical anesthesia is equally safe in hospitals that use only CRNAs or a combination of CRNAs and anesthesiologists, compared with hospitals that use only anesthesiologists.

Malpractice Insurance Rates
Malpractice insurance rates for self-employed CRNAs have declined dramatically since the 1980s. In 2009, the average malpractice insurance premium was 33 percent lower than it was in 1988 (or 62 percent lower when adjusted for inflation). The decline in malpractice insurance premium rates demonstrates the superb anesthesia care that CRNAs provide. The rate drop is particularly impressive considering inflation, an increasingly combative legal system, and generally higher jury awards.

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