

## “Role of the CRNA in the Ambulatory Surgery Center (ASC) versus Hospital-Based Care”

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Certified Registered Nurse Anesthetists (CRNAs) play an integral role in the perioperative experiences of patients, interfacing at every setting in which anesthesia is administered. In addition to their value in traditional hospital-based operating rooms, CRNAs also work in obstetrical suites, chronic pain clinics, and dental offices. As a profession, nurse anesthesia has greatly evolved since its long-ago founding on the Civil War battlefields where it was used in surgeries for war wounds and injuries. As surgical techniques, technology and organizational capabilities are increasingly able to meet the expectations of patients today, the ambulatory surgical setting has become a more common environment for anesthesia delivery. However, each environment is unique in terms of acuity and types of surgery performed. For example, a specialty surgery center that only performs outpatient eye surgeries is far different than a large, academic trauma center where emergencies are quickly triaged before rushing off to the operating room.

CRNAs choosing to practice in either a free-standing ambulatory surgery center or a traditional hospital-based operating room have some work-life variables to consider first. Desire to change pace or care for a specific patient population may prompt the CRNA to consider the transition from one setting to the other. On a personal level, enjoyment and success depend heavily on finding the right niche—blending the correct skill sets and proper passions in the right atmosphere.

*When considering a role as a nurse anesthetist in an ambulatory surgery center versus hospital-based care setting, here are five key considerations that set the two apart:*

**Patient Acuity:** Healthy patients tend to require fewer resources, recover faster, and are more suitable for the ambulatory surgery center (ASC) environment. ASCs commonly possess standards for patient selection, set forth by organizational staff, which set limits on illness severity and/or comorbid conditions. Patients with extremes of age, severe systemic disease, or conditions such as obstructive sleep apnea and/or morbid obesity are considered more high-risk and commonly excluded from the ambulatory surgical setting. Patients with higher risk factors that need preoperative diagnostic testing and optimization are better handled at tertiary care centers or hospitals. Hospital settings also have a greater ability to escalate the level of care when necessary and can monitor patients for longer time periods after surgery. If complications arise during or after the surgery, or when patients have multiple medical care needs, hospitals have more resources and as such, the ability to transition care exists in a form that is not matched by an ASC.

**Types of Anesthesia Administered:** The ASC tends to be a throughput for high volumes of quicker cases. Thus, medication selection is carefully made in order to achieve satisfactory recovery from anesthesia without prolonging the patient’s stay. The nurse anesthetist in the ASC should be well equipped with acute pain management skills and regional anesthesia techniques. Skilled use of ultrasound, the ability to administer peripheral nerve blocks, perioperative block management and effective patient education

are all especially important skills to possess in the ambulatory setting as well. Regional anesthesia in this setting, as opposed to general anesthesia, also reduces the postoperative risk for nausea and vomiting, which would be reason enough to extend a patient's stay.

Surgical cases in a hospital-based environment, on the other hand, tend to present greater complexity, but at a lesser volume than ASCs. The CRNA in the hospital-based setting is especially skilled in definitive airway management, invasive monitoring techniques, and careful titration of vasoactive infusions. When compared to ambulatory cases, those occurring in the hospital environment may require additional considerations for venous/arterial access, intravenous fluid therapy, and transfusions of blood products. General anesthesia tends to be the mainstay in the hospital environment, as opposed to regional anesthetics in the ASC.

**Types of Surgical Cases:** The type of surgical cases encountered in the ambulatory center continues to grow at a rapid pace. Certain procedures that were once limited to the hospital-based operating rooms are now being done in ASCs. Examples of these procedures include arteriovenous fistula creation and orthopedic joint arthroplasty. More commonly performed ambulatory procedures include cataract extractions, endoscopies, joint arthroscopies, dental procedures, and simple gynecological procedures, among others. Despite the growth of the types of cases completed in the ASC, and the accompanying patient expectations to have a quick "day surgery," the greatest surgical case complexity will and should still take place in hospitals. Hospitals are also better prepared to take on cases involving pediatric patients or those with comorbid conditions because specialists are more readily available for consultation.

**Production Pressures:** The pressure to produce results at a rapid pace is also different in each environment. For example, ASCs tend to produce higher case volumes of shorter duration. This necessitates rapid operating room turnover time between cases, as well as the ability to process information for multiple patients in a shorter time frame. Thought processes should be aimed at minimizing anesthetic side effects and facilitating rapid offset. Contrastingly, hospital-based cases may not require the same volume or pace, but require more critical thinking for each patient in terms of pathophysiology, chronic disease processes, and long-term goals of care. Hospital-based providers are also more likely to encounter patients in vulnerable states, which could place a greater emotional burden on these providers when compared to ambulatory care.

**Scope of Practice:** Scope of practice for CRNAs varies by individual states, but is mostly influenced by institutional bylaws and policies. For example, although board-certified nurse anesthetists are duly able to administer peripheral and neuraxial blockade, not all facilities may credential them to do so. If certain skills are desired to practice, it is worth investigating credentialing standards for the individual facility prior to interviewing or applying to practice. Another influencer on provider scope is also intrinsic to the practice model itself. For example, many nerve blocks are administered in the preoperative setting and could require an additional anesthesia provider to be present for greatest efficiency so the ability to use this type of anesthesia depends upon CRNA/anesthesia provider numbers. Removing barriers to the scope of practice and permitting CRNAs to work to the fullest extent of their license improves patient access to care, efficiency, job satisfaction, and optimizes team-based outcomes.

The versatile role of CRNAs in both ambulatory and hospital environments can provide many new and exciting opportunities for CRNAs. CRNAs can also further specialize in populations such as pediatrics or adults, as well as a variety of other settings and specialties. The role of a CRNA requires a high level of critical thinking skills and a high degree of adherence to quality and safety. When considering where to practice as a CRNA, it is important to look at state and institutional regulations as the scope of practice restrictions can vary and will largely impact day to day duties.

Reference:

1. Deloitte Insights, "Growth in Outpatient Care: The role in quality and value incentives." [https://www2.deloitte.com/content/dam/insights/us/articles/4170\\_Outpatient-growth-patterns/DI\\_Patterns-of-outpatient-growth.pdf](https://www2.deloitte.com/content/dam/insights/us/articles/4170_Outpatient-growth-patterns/DI_Patterns-of-outpatient-growth.pdf). 2018