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An Update From the AANA Practice Committee: Application of the Evidence-Based Process

The American Association of Nurse Anesthetists Practice Committee applies a standardized evidence-based process to the development and revision of practice-related documents and member resources. This article highlights recent Practice Committee work related to the revision and development of new materials for the Professional Practice Manual for the Certified Registered Nurse Anesthetist. Specific areas discussed include infection control, Certified Registered Nurse Anesthetists and the interprofessional team, safe practices for needle and syringe use, securing propofol, safe surgery and anesthesia, patient safety and fatigue, and the use of mobile devices.

Keywords: Evidence-based process, nurse anesthesia practice, practice committee, standards of practice.

Since its formal adoption by the American Association of Nurse Anesthetists (AANA) Board of Directors (BOD) in 2008, the evidence-based process has been integral to the work of the AANA Practice Committee. The Practice Committee applies a standardized evidence-based process to the development and revision of practice-related documents, which provides added rigor, acts as a check on variations of quality of the evidence, and eliminates personal bias. This process begins with the development of pointed PICO(T) questions, which incorporate population, intervention, comparison, outcome, and timeframe components. The process continues with a detailed keyword search, identification of pertinent literature, ranking of the literature using a standardized ranking system, and an evaluation and synthesis of available evidence on a given topic. The details of AANA’s process have been previously discussed by McFadden and Thiemann.1,2 Application of the AANA’s evidence-based process continues to evolve. Recently, the literature ranking method has been updated to use the Grades of Recommendation, Assessment, Development, and Evaluation (GRADE) system approach to evaluate the evidence.3 Additionally, from a technology perspective, the AANA’s Professional Practice Division has developed an electronic literature repository, which provides a central location for all literature articles, associated reviews and rankings, and reporting capabilities across projects.

Each fiscal year, the BOD charges the Practice Committee with review, evaluation, and potential revision of various documents included in the Professional Practice Manual for the Certified Registered Nurse Anesthetist. The BOD may also charge the Practice Committee with the development of new documents or resources. This article highlights several revised and newly developed documents that have resulted from the Practice Committee’s work in the past year.

Infection Control Guide for Certified Registered Nurse Anesthetists

The Infection Control Task Force (ICT) was charged in 2009 with revising the Infection Control Guide for Certified Registered Nurse Anesthetists (ICG). This guide was last revised in 1997. Given the rapid advances in infection control since that time, the ICT began the immense undertaking of reviewing hundreds of literature articles pertinent to clinical infection control and prevention practices.

The ICT synthesized the evidence and revised the ICG to provide background data and recommendations on topics such as the following: hand hygiene, ventilator-associated pneumonia prevention, regional anesthesia, epidural catheters, safe injection practices, medication handling, central lines, arterial catheters, and surgical site infection prevention. The revised guide also includes recommendations about cleaning and disinfection of intravenous injection ports, rubber stoppers, and
vials; appropriate storage and packaging of reprocessed laryngoscope blades in accordance with The Joint Commission’s requirements; personal protective equipment; sharps; and home laundering of scrubs. The BOD approved the final document in November 2012.

Position Statement Number 1.12 Patient-Centered Care: CRNAs and the Interprofessional Team
This newly developed position statement resulted from review and evaluation of Position Statement Number 1.9 Nurse Anesthetists and Anesthesiologists Practicing Together and Position Statement Number 1.3 Opposition to Fixed Ratio of CRNAs to Anesthesiologists. After evaluating the literature and the importance of the healthcare interprofessional team, the Practice Committee decided to create a new position statement. This new document incorporates 3 main concepts with evidence to support patient-centered care, interprofessional collaboration in healthcare, and cost-effective quality care in anesthesia. In addition, the newly developed position statement acknowledges the importance of advanced practice registered nurses (APRNs) and their value in promoting high-quality, cost-effective healthcare as indicated by the 2011 Institute of Medicine report titled The Future of Nursing: Leading Change, Advancing Health.

The position statement expands the paradigm of the anesthesia team model consisting of nurse anesthetists and anesthesiologists working together to a broader concept of interprofessional team–based healthcare that emphasizes the need for patient-centered care. In recognizing the CRNA’s scope of practice, interprofessional teams, and the AANA’s opposition to a fixed ratio of CRNAs to anesthesiologists, the document emphasizes that patient care needs should dictate anesthesia personnel resources and not a predetermined arbitrary ratio. The AANA strongly encourages interprofessional collaboration and believes that patients are best served when healthcare professionals work in a collaborative fashion that promotes safe, high-quality, value-driven, patient-centered care.

Ultimately, the Practice Committee created Position Statement Number 1.12 Patient-Centered Care: CRNAs and the Interprofessional Team and recommended archiving Position Statement Number 1.9 Nurse Anesthetists and Anesthesiologists Practicing Together and Position Statement Number 1.3 Opposition to Fixed Ratio of CRNAs to Anesthesiologists. The BOD adopted Position Statement Number 1.12 and archived Position Statements Number 1.3 and Number 1.9 in June 2012.

Position Statement Number 2.13 Safe Practices for Needle and Syringe Use
The AANA continues to take a strong stance concerning infection control and prevention behaviors, such as its recent endorsement of the Centers for Disease Control and Prevention’s restatement on protecting patients against preventable harm from improper use of single-dose/single-use vials. In addition, the Practice Committee has confirmed its stance regarding safe injection practices with the reaffirmation of Position Statement Number 2.13, originally adopted in January 2009. This position statement provides meaningful safe injection practice recommendations for CRNAs, which include:

• Never administer medications from the same syringe to multiple patients, even if the needle is changed.
• Never reuse a needle, even on the same patient.
• Never refill a syringe once it has been used, even for the same patient; never use infusion or intravenous administration sets on more than one patient.
• Never reuse a syringe or needle to withdraw medication from a multidose medication vial.
• Never reenter a single-use medication vial, ampoule, or solution. Following the evidence-based process, Position Statement Number 2.13 was updated to reflect current literature related to safe injection practices and was reaffirmed by the BOD in November 2012.

Position Statement Number 2.14 Securing Propofol
This position statement was last revised in September 2009. Upon review of the current state of the evidence, the Practice Committee made several revisions to this document. The purpose of this position statement is to promote securing propofol in facilities as an effort to reduce propofol diversion and misuse. The position statement acknowledges that fospropofol, the prodrug to propofol, is classified under Schedule IV of the Controlled Substances Act and that propofol also warrants Schedule IV classification because of its potential for chemical dependency and misuse. In addition, Position Statement Number 2.14 recommends that facilities actively develop methods for reducing the potential of propofol diversion and misuse, such as by placing propofol in a secure environment. The position statement, however, acknowledges that simply securing propofol may not be enough to prevent substance diversion and misuse and that further investigation into effective methods of prevention is needed. The BOD approved this revised position statement in November 2012.

Position Statement Number 2.15 Safe Surgery and Anesthesia
This position statement was last revised in August 2009. Upon review of the state of the evidence, this document has been updated to reflect current literature, expand
The involvement of a CRNA; CRNAs should be active participants during the entire presurgical verification process and structured transfers of care. Additionally, CRNAs should encourage a culture of open communication among all healthcare team members to foster safe surgical and anesthesia care for patients. The BOD approved the revised position statement in August 2012.

**Position Statement Number 2.17 Patient Safety: Fatigue, Sleep, and Work Schedule Effects**

In 2009, the Perioperative Safety Task Force (PST) was charged with the review and revision of Advisory Opinion 5.1: Patient Safety: Fatigue, Stress, and Work Schedule Effects. Given the sensitivity and importance of this topic, the PST also conducted 3 membership surveys during several phases of document development. The first survey provided an opportunity for AANA members to leave comments, opinions, and suggestions regarding fatigue and work schedule issues. The purpose of the second, more detailed work schedule survey was to evaluate the impact of recommending possible workplace-hour parameters for CRNAs. The final survey provided the draft Position Statement Number 2.17 for member input. Specifically, members were asked to identify gaps in evidence and comment on the clarity of the document. Ultimately, based on the strength of the literature, the PST recommended archiving Advisory Opinion 5.1 and proposing the new Position Statement Number 2.17 Patient Safety: Fatigue, Sleep, and Work Schedule Effects to the BOD.

The PST reviewed the literature pertaining to fatigue, sleep science, and work schedule effects and their impact on patient safety and provider performance. The document was then constructed to promote professional preservation and patient safety and to provide the strongest sources of evidence.
These recommendations apply to all institutions, regardless of practice setting, facility type, caseload, or patient acuity. The BOD approved this new document in June 2012.

Position Statement Number 2.18 Mobile Device Use
Recognizing the clinical implications of mobile device use on patient safety, the Practice Committee developed Position Statement Number 2.18. The purpose of this position statement is to describe the benefits and risks that use of mobile devices has on patient safety. The position statement acknowledges that mobile device use is becoming more integrated into the delivery of patient care and has the potential to positively affect patient care by increasing productivity, increasing communication, reducing medical errors, and readily providing clinical resources. However, with advancements in technology comes an additional opportunity for non-essential distractions and interruptions. Given that anesthetized patients require a CRNA’s constant situational awareness, CRNAs have an ethical responsibility to provide safe patient care by avoiding nonessential distractions and interruptions. Other considerations for mobile device use in the operating room discussed in this position statement include using sound clinical judgment when applying information provided by mobile applications, the potential for bacterial contamination, the potential for interference by mobile devices with medical equipment, the impact of the availability of camera phones and video capabilities, and the role of social media. Importantly, the position statement also discusses consequences of violations of the privacy rule in the Health Insurance Portability and Accountability Act (HIPAA).

The AANA supports the use of mobile technology pertaining to direct patient care so long as it does not negatively affect provider performance and compromise patient care. The BOD adopted this position statement in June 2012.

Conclusion
The Practice Committee strives to provide AANA members with the most up-to-date evidence-based resources and recommendations on timely topics affecting nurse anesthesia practice. These documents should be used in conjunction with a CRNA’s clinical expertise and judgment in providing high-quality anesthesia services to patients. The committee will continue its work to review, revise, and develop resources through an objective, evidence-based process. We will continue to announce committee activities through various communication channels, such as the AANA website, Anesthesia E-sential, the AANA Journal, and social media, including Facebook and Twitter. In addition to CRNAs, student registered nurse anesthetists and other interested healthcare professionals are encouraged to check these sources often and remain informed about recent advances in nurse anesthesia practice.

REFERENCES


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