The Development of a Common Clinical Assessment Tool for Clinical Evaluation in Nurse Anesthesia Education in the United States

Sass Elisha, EdD, CRNA; Laura Bonanno, DNP, CRNA; Demetrius Porsche, DNS, PhD, FACHE, FAANP, FAAN; Amanda Brown, DNAP, CRNA; Brett Clay, DNAP, CRNA; Deana Starr, DNP, CRNA; Frank Gerbasi, PhD, CRNA

In early 2015, the Council on Accreditation of Nurse Anesthesia Educational Programs (COA) began discussion regarding the development of a Common Clinical Assessment Tool (CCAT) for voluntary use by nurse anesthesia educational programs as there is no common clinical assessment tool used in nurse anesthesia educational programs at this time. Interest in developing such a tool has anecdotally increased as a result of the American Association of Colleges of Nursing (AACN) taskforce's recommendation for a common clinical assessment tool across the Advanced Practice Registered Nurse (APRN) roles. It was the consensus of the nurse anesthesia community that many current evaluation tools are statistically unreliable and that a common clinical assessment tool could provide reliability, consistency, and could assure alignment with the COA's accreditation Standards. All programs are required to conduct formative and summative clinical evaluations of nurse anesthesia students. The CCAT would be created for both formative and summative evaluations.

In 2016, the COA appointed a Special Interest Group (SIG) to develop a standardized assessment instrument that is competency based and reflective of the Practice Doctorate Standards. The SIG created a Common Clinical Assessment Tool (CCAT) to validate its use in nurse anesthesia programs and improve the ability to accurately assess student's clinical competencies. The tool will help provide reliability, consistency, and could assure alignment with the COA's accreditation Standards. The evaluation tool will be created for both formative and summative clinical evaluations of nurse anesthesia students. An important component in developing the tool is to establish validity.

A literature search was conducted on articles published in English between 2000 and 2016. The search included research articles, standards for nurse anesthesia educational program, standards of practice by CRNAs, and information regarding the Delphi Study methodology. Major sources of information that were used during the construction of the CCAT included but were not limited to: COA's doctoral standards; AACN's Common Advanced Practice Registered Nurse Doctoral-Level Competencies; NBCRNA's NCE content outline; AANA's member survey profile; graduate QSEN competencies and IPEC core competencies.

To measure the validity of the developed clinical tool, the COA used a Delphi Study technique to obtain feedback from a Panel of Judges with nurse anesthesia knowledge representing the community of interest. The Delphi Study technique is a method of generating ideas and facilitating consensus among individuals who have special knowledge and interest to share regarding nurse anesthesia who can analyze the clinical tool. An institutional review board approval was obtained at Louisiana State University. The Panel of Judges was identified as program administrators, program faculty, CRNA clinical educators, or nurse anesthesia students. Selection criteria for the Panel of Judges include the following:

Program Administrator and Nurse Anesthesia Program Faculty

- Doctoral degree required
- At least 3 years of experience in role as Clinical Educators
- Doctoral degree preferred, Masters required
- At least 3 years of experience in role

Nurse Anesthesia Students

- One year of nurse anesthesia clinical experience
- Good academic standing
- Letter of recommendation from nurse anesthesia program

The Delphi Study was conducted using an online survey tool. The first survey contained demographic type questions about the Judges in order to establish their eligibility for participation on the Delphi Study panel on the basis of the relevance of their expertise.

The subsequent surveys (three rounds) were used to collect data regarding the validity of the domains, competencies, and progression indicators of the common clinical assessment tool developed by the COA SIG.

The Panel of Judges rated the relevance for each of the domains, competencies, and progression indicators for relevancy with a 5 point Likert scale (1=not relevant, 2=somewhat relevant, 3=neutral, 4=quite relevant, or 5 = highly relevant). After each item, the Panel of Judges had an opportunity to provide a comment to ensure the item was clear and valid. At least ninety percent of the Judges had to rate a domain, competency or progression indicator as 5 = highly relevant for the item to not be altered for the next Delphi Round.

The CCAT included four domains with domain descriptors (refer Table 1)

Table 1.Domains and Domain Descriptors-Common Clinical Assessment Tool

Domain 1-Patient Safety and Peri-anesthesia Care
Domain Descriptor: Administers and manages comprehensive, safe, and patient-centered anesthesia care across the lifespan for a variety of procedures and physical conditions.

Domain 2-Knowledge and Critical Thinking
Domain Descriptor: Comprehends, synthesizes, applies, and evaluates new and existing knowledge and experience that guides clinical anesthesia decision-making.

Domain 3-Professional Communication and Collaboration
Domain Descriptor: Engages in effective communication with patients, their families/significant others, and other healthcare professionals to deliver safe, patient-centered anesthesia care.

Domain 4-Professional Role
Domain Descriptor: Practices in a responsible and accountable manner that complies with professional, legal, ethical, and regulatory standards with an awareness and responsiveness to the larger healthcare system.

Twenty-five individual competencies have been determined

- Domain 1-nine competencies
- Domain 2-six competencies
- Domain 3-four competencies
- Domain 4-six competencies

Domain competency evaluation categories include: are not applicable; safety concern; novice; beginner; advanced beginner and proficient (entry into practice).

The data collected from the Delphi Study technique was evaluated after each round; the evaluation will assess the feedback on the domains, competencies, and progression indicators and identify any changes suggested by the Panel of Judges. Statistical analysis was conducted on the data collected and was reviewed by the SIG prior to making any changes to the CCAT for each round of Delphi Study.

The finalization of a common clinical assessment tool will provide benefits to all the stakeholders involved in nurse anesthesia education. The programs, students, and clinical educators would have the opportunity to have an assessment tool with the same terminology and understanding of the progression indicators similar to a Likert scale on a national basis. The COA would have the opportunity to collect data on a national level where it has never been done prior. If an adequate sample size of the programs utilize the common clinical assessment tool, then the COA could analyze the data collected and make future improvements to its Standards positively impacting the nurse anesthesia educational programs and the nurse anesthesia profession.

In conclusion, the Common Clinical Assessment Tool can provide consistently accurate evaluation of a leaner's clinical performance during anesthesia education is vital to:

- Allow the learner to identify their strengths and areas for improvement.
- Effectively integrate academic knowledge into clinical practice.
- Improve competence upon graduation and patient outcomes.
- Determine if terminal educational objectives are being achieved.
- Serve as documentation for remediation or dismissal.

After approval from the COA Board of Directors, the CCAT will be distributed to all US program administrators during a "call for comment" period. All revisions will be completed by Fall 2018 and its use will be optional.

The COA's CCAT will be the first nationally validated clinical assessment instrument in nurse anesthesia within the US. Future analysis will be needed to determine if the CCAT accurately and consistently evaluates clinical performance in nurse anesthesia learners.