

**Bryan College of Health Sciences  
School of Nurse Anesthesia**

**Plan for Assessment of Student Learning  
2019-20**

**Bryan College of Health Sciences Mission**

The Mission of Bryan College of Health Sciences is to provide education in the health professions emphasizing clinical and academic excellence through collaboration with Bryan Health System and the healthcare community.

**Bryan College of Health Sciences Goals**

The Goals of Bryan College of Health Sciences are to prepare graduates who:

- Are qualified to practice in entry level, mid-level, and advanced practice roles in diverse healthcare environments;
- Are critically aware of their individuality;
- Maintain a clear understanding of professional scope of practice;
- Value life-long learning as a means of personal and professional growth;
- Participate as responsible citizens within the community; and
- Are capable of meeting the healthcare needs of an ever-changing society.

**School of Nurse Anesthesia Philosophy Statement**

The philosophic foundations of the Doctor of Nurse Anesthesia Practice are commensurate with all graduate programs within the Bryan College of Health Sciences.

The practice doctorate in nurse anesthesia is unique in the realm of traditional graduate programming as the knowledge, skills and abilities are drawn from the integration of many disciplines that contribute to the core of professional education. The complexity of contemporary anesthesia practice justifiably requires this integration to enable the nurse anesthetist to practice the humanistic, scientific and technical skills of the profession competently and intelligently.

The educational program for the preparation of nurse anesthetists is conducted as a shared responsibility between student and faculty. Students must be intensely committed to achieving their goals through a consistent demonstration of purpose, motivation, responsibility to patients and colleagues, independence of thought, creativity and personal demeanor. Faculty, likewise, are committed to the responsibilities of competent resource, guidance and professionalism.

The program seeks to express its commitment to each student through individualized instruction and counsel. Our primary goal is to provide the graduate

student with an advanced scientific knowledge base, an understanding of healthcare policy, and the ability to advocate for the improvement of patient care through scholarship and leadership skill. We are committed to providing an opportunity to each student to develop a comprehensive array of clinical skills that hallmark the standards of care in anesthesia practice.

Our obligation to graduates will be to prepare them for full participation in the delivery of anesthesia care in concert with other healthcare providers. They will be competent in independent judgment as advanced-practice professional nurses.

Our responsibility to the community is expressed in the aim of providing an educational program that will ably prepare the nurse anesthetist to meet the healthcare needs of a culturally diverse population.

Our obligation to the profession is to prepare a nurse anesthetist who will serve as an invaluable resource in support of the goals of the American Association of Nurse Anesthetists and to the advancement of the profession of nurse anesthesia.

### **Educational Goals:**

The School of Nurse Anesthesia at Bryan College of Health Sciences has identified educational goals that the student will meet upon graduation from the program.

#### **Academic Goals**

- The student will obtain an advanced body of specialized knowledge that enables the student to integrate didactic information and clinical data and formulate a comprehensive individualized care plan.
- The student will demonstrate the skill to adjust the plan of care based on critical thinking and a problem-solving approach.

#### **Clinical Goals**

- The student will be able to plan and administer a safe and physiologic anesthetic across the lifespan; one based on a knowledge and synthesis of anesthetic principles and basic science study.
- The student will utilize evidenced based practice principles to promote problem identification, inform clinical decisions, analyze outcomes and improve quality of care.
- The student will demonstrate skill with a comprehensive range of clinical techniques found in contemporary nurse anesthesia practice.

#### **Scholarship Goals**

- The student will be able to translate research evidence to evaluate outcomes in a variety of populations, clinical settings, and systems.
- The student will disseminate an extensive body of knowledge within a specific area of nurse anesthesia practice, policy, leadership or education and apply this knowledge to solve an identified problem.

## **Leadership Goals**

- The student will demonstrate interprofessional and intraprofessional leadership.
- The student will integrate ethical, legal and cultural considerations with personal and professional value systems in the application of the art and science of nurse anesthesia.

## **Measures and Methods for Assessing Educational Goals:**

The School of Nurse Anesthesia uses the following methods to assess student learning. Benchmark data will be monitored annually for trends with the understanding that the small class size of 17-22 students per year can result in significant variation. Three year composite benchmarking data will be monitored as a statistically more powerful indication of outcomes.

### 1. Final Clinical Conference

A clinical conference is conducted with each student at the completion of Clinical Practicum, 871, the final clinical practicum of the program. A summary of the daily clinical evaluations is reviewed by the Program Administrator and a final evaluation is completed which assesses the student's ability to meet the Level Three Clinical Performance Criteria.

The eight categories of clinical performance evaluated include (1) Pre-anesthesia assessment: The student will be able to assess the patient's physical status and identify areas of concern related to anesthesia. (2) Anesthesia plan: The student will be able to formulate an appropriate anesthesia plan for the particular patient, considering the patient's requests, physical condition, and surgical procedure to be performed. (3) Preparation for the administration of anesthesia: The student will be able to prepare the equipment, drugs and the patient for anesthesia. (4) Induction: The student will be able to induce the patient according to the process identified in the anesthesia plan in a smooth, organized, and safe manner. (5) Intraoperative management: The student will be able to monitor the patient during administration of anesthesia and adjust the anesthesia to the patient response. (6) Emergence: The student will be able to manage the emergence from anesthesia according to the anesthesia plan and the instructor's preference. (7) Post-anesthesia management: The student will be able to provide appropriate care of the patient in the post anesthesia care unit, including providing information and direction to the nursing staff. (8) Interpersonal Relationships and Professional Attributes: The student will be able to demonstrate a progressive awareness of the responsibilities of the nurse anesthetist for effective communication and professional clinical leadership with the patient and family, physician, OR team, instructors, and peers. (9) Legal, Ethical and Regulatory Standards: The student will practice 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.

Specific behaviors for the nine categories of clinical performance are included in the School of Nurse Anesthesia Clinical Evaluation Handbook. Students are held to progressive standards as they progress through the three levels of clinical practicum experiences. The benchmark is that 100% of graduates will be rated Satisfactory in all categories at the Level Three standards.

## 2. Summary of Clinical Case Records

The number, and types, of clinical experiences are maintained by each student with a web based program. The clinical experiences are monitored by faculty throughout the program with a summary created at the end of the program. The benchmark is that 100% of graduates will meet the Council on Certification of Nurse Anesthetists requirements for eligibility for the Certification Exam. The benchmark for number of general anesthetics is 575. Regional anesthesia benchmarks include 50 subarachnoid blocks and 50 epidural blocks. The sedation benchmarks are 125 moderate/deep sedation experiences. The cardiac thoracic procedure benchmark is 20, and the less than 2 years of age pediatric patient benchmark is 20.

## 3. Self-Evaluation Exam (SEE)

The SEE is an in-training, norm referenced exam administered by the National Board on Certification and Recertification of Nurse Anesthetists (NBCRNA). Students enrolled in an accredited nurse anesthesia program are eligible to sit for the exam, and Bryan students are required to sit for the exam twice. The first exam is scheduled prior to, or at the beginning Semester 6 (Fall semester) and the second is scheduled prior to, or at the beginning of Semester 9 (Fall semester). A total score and four content area scores are reported as percentile ranks for each student. The four content areas are 1) Basic Science; 2) Equipment, Instrumentation & Technology; 3) General Principles of Anesthesia; and 4) Anesthesia for Surgical Procedures and Special Populations. Three years of data will be pooled for analysis. The benchmark is that 50% of students will score at, or above, the 50<sup>th</sup> percentile rank, and 80% will score at, or above, the 20<sup>th</sup> percentile rank for students in the corresponding year. This is for the total scores and for scores in each of the content areas.

## 4. National Certification Exam (NCE)

The NCE is a national exam administered by the NBCRNA. An individual must be a graduate of an accredited school of nurse anesthesia to be eligible to sit for the exam and must obtain a passing score to become designated a Certified Registered Nurse Anesthetist. Total scores and scores in four

content areas are reported. The four content areas are: 1) Basic Science; 2) Equipment, Instrumentation & Technology; 3) General Principles of Anesthesia; and 4) Anesthesia for Surgical Procedures and Special Populations. The most recent three years of data will be pooled for analysis. The benchmark is that the first attempt pass rate for each graduating class will be 80%. Additionally 50% of graduates will score at, or above, the national mean score. Certification scores will be correlated with individual grade point averages for the three most recent graduating classes.

5. Capstone

The research committee will evaluate each student's achievement in meeting the three Capstone objectives related to research and scholarship. The evaluation will be completed following the oral presentation of the Capstone. The student will be rated in the four domains in the grading rubric. The benchmark is 70% of students will score A or B on the rubric following the first attempt at oral defense.

6. Exit Evaluation, Alumni Self-Evaluation, and Employer Evaluation

Students complete an exit evaluation upon graduation, and alumni evaluations are emailed to graduates at 1 and 2 years following graduation. A request for employer email addresses is included in the alumni evaluation. Employer evaluations are emailed at 1 and 2 years following graduation. The benchmark for the exit, alumni and employer evaluation is  $\geq 70\%$  of those who return the evaluation will respond "Yes, definitely" to the statements,  $\leq 30\%$  will respond "Yes, somewhat", and  $\leq 5\%$  will respond "No".

7. Employment Rate

The Program Director collects employment information on new graduates at six months following graduation. The benchmark is 90% will have obtained employment within six months of graduation.

8. Graduation Rate

The graduation rate is calculated each year as the number of graduates completing the program within 48 months (36 months + 12 months) or 54 months (36 months X 150%) divided by the number who matriculated into the cohort the first semester of the curriculum. The benchmark is 90% will graduate within 48 months of matriculation.

9. Intercultural Development Inventory (IDI)

The Intercultural Development Inventory is a 50-item, theory-based paper and pencil instrument that measures intercultural sensitivity as conceptualized in Bennett's Developmental Model of Intercultural Sensitivity. The IDI measures an individual's (or group's) fundamental worldview orientation to cultural difference, and thus the individual's or group's capacity for intercultural competence. As a theory-based test, the IDI meets the standard scientific criteria for a valid and reliable psychometric instrument. Each class will complete the IDI first during the 2<sup>nd</sup> semester of the curriculum and again during the final semester prior to graduation. The results will be compared to assess individual and group growth. The benchmark is that 75% will score at the Minimization or Acceptance/Adaptation dimension.

### **Analysis of Objectives:**

Data obtained through the measures and methods for assessing the terminal objectives will be gathered and presented to the Nurse Anesthesia Assessment Subcommittee and Graduate Studies Committee annually. The Nurse Anesthesia Assessment Subcommittee will analyze the data and compose an annual assessment report identifying the objectives fully met, and gaps in objectives partially met or not met. An objective is fully met if all benchmarks are reached, partially met if some, but not all benchmarks are reached, and not met if no benchmarks are reached. The gaps in achieving objectives will be identified in the report. Data will also be grouped three-year summaries due to the class size. Measures will be reported as both one-year and three-year, summary data in the annual report.

### **Determination of Contributing Factors for Identified Gaps:**

The Nurse Anesthesia Assessment Subcommittee review individual gaps uncovered in the annual report and investigate possible sources of gaps and the related solutions during faculty meetings. As discussed previously, data will be reviewed annually with the awareness that significant variation can result due to the small class size in the program. Individual instructors will be consulted when warranted and the literature will be reviewed as appropriate.

### **Planned Modifications to Identified Gaps:**

The Nurse Anesthesia Assessment Subcommittee in consultation with the Dean will make recommendations for programmatic and/or operational adjustments after consideration of the data. The Dean and faculty may determine additional monitoring may be appropriate if a gap is only present in one-year data. A gap present in the two-year or three-year data will be considered a more compelling case necessitating change in the program. A proposal for recommended adjustments

will be presented to the Graduate Studies Committee including the gap(s) identified, and the solution(s) proposed.

**Planning and Budgeting Processes:**

Recommended programmatic and/or operational adjustments will be integrated into the annual planning and budgetary process. The Nurse Anesthesia faculty and Dean will prioritize programmatic changes and resultant budgetary requests based upon the assessment data. The requests will be integrated into the annual strategic planning and operational/capital budgetary cycles. Program requests will be submitted to appropriate Faculty Senate committees as needed with operational requests submitted to Leadership Council. The Nurse Anesthesia faculty and Dean will address budget requests occurring throughout the year during faculty meetings.

**Adjustment and Outcome Correlations:**

The Nurse Anesthesia Assessment Subcommittee will evaluate the outcomes of program adjustments on identified gaps annually. Data gathered prior to, and following, adjustments for specific gaps will be compared and analyzed for trends. A report detailing the adjustments and achievements will be created and reviewed. Any continuing gap(s) will be addressed during the annual review of all data related to the assessment of the terminal objectives.

**Refining the Assessment Plan and Processes:**

The assessment instruments and processes will be reviewed annually by the Nurse Anesthesia Assessment Subcommittee. The Graduate Studies Committee will be consulted in the development and evaluation of revisions to the assessment plan.