

Research Agenda

The mission of the AANA Foundation is to advance the science of anesthesia through education and research. One of the goals of the AANA Foundation is to support new and seasoned investigators in nurse anesthesia through grants and the CRNA Scholars Program. Programs are designed to develop researchers in nurse anesthesia.

The AANA Foundation sets a broad research agenda that includes the following areas:

- Healthcare policy
- Science of anesthesia
- Education
- Practice/Clinical
- Leadership

Research Priorities

Valuable input from the AANA membership guides the AANA Foundation in establishing research priorities. Input from the members has led to the development of research topics for future research studies.

One of the top priorities is healthcare policy research. Additional targeted areas for funding include education, practice and clinical. Listed below are topics for consideration:

➤ Healthcare Policy

1. Determine the impact of nurse anesthesia care regarding (i.e., cost effectiveness, quality):
 - a) Hospital readmissions
 - b) Per-patient Medicare costs
 - c) Quality outcome as measured by (quality measure)
 - d) Geographical variation of [per patient Medicare costs/delivery of another (service)/per capita CRNA or anesthesiologist population] by [state/Medicare service area]
 - i. Example – Examine the impact of overall per-patient Medicare costs based on quality and geographical variation
 - ii. Example - Examine the variation in reimbursement [Medicaid/Medicare/commercial insurance plan] reimbursement for CRNA services vary within states and among states based on specific services
 - e) Identify how payment claims for CRNA services vary among state Medicare and Medicaid service areas in pain management
2. Examine the variability of the CRNA's scope of practice in each state
 - a) Examine the impact that limiting CRNA scope of practice would have on cost and access
3. Assess CRNA practice patterns (specialty anesthesia services) identified by locale
4. Explore how the implementation of health reform (i.e. ACSs/other share savings plans/payment innovations) may affect CRNA practice and reimbursement

➤ **Practice and Clinical**

1. Examine the comparative effectiveness of research on competency of healthcare providers performing specific procedures including central line insertions, ultrasound and arterial-line placements
2. Evaluate the impact of teamwork and hand offs related to patient safety
3. Assess the role of the CRNA regarding surgical site infections
4. Determine the top 10 activities anesthesia providers can do to reduce administrative costs while upholding optimal patient safety
5. Analyze the current literature detailing the competency and technical skills of CRNAs
6. Assess the impact that clinical relationships have between healthcare providers on improving patient care (Supervision – medical direction of CRNAs for cases involving intubation, etc.)
7. Identify which situations or scenarios enable CRNAs to be or become the best patient advocate: mass casualty, incident preparedness and the role of CRNAs
8. Describe role that RNs play in continuous epidural infusion
9. Determine if changes in surgical scheduling impact non-routine events (error prevention)
10. Analyze the comparative effectiveness of different types of innovative educational models for the preparation of nurse anesthetists on student satisfaction and performance and ultimately on performance measures reflecting safety, quality of care and health outcomes for patients served
11. Determine the comparative effectiveness of different types of organizational arrangements of practice (solo, group, faculty practice arrangements, salaried etc.) that influence compensation, retention in practice, age at retirement and professional satisfaction
12. Analyze the potential impact of changes in the organization and reimbursement of the nurse anesthesia care given different health reform options
13. Assess the impact of the differences in patient characteristics, practice settings, practice arrangements, case complexity and types of procedures on safety and quality
14. Create demonstration projects to evaluate innovative practice models that may improve care and the practice of nurse anesthesia in the future
15. Explore various models of practice arrangements and environments that may led to an ideal practice environment

Education

1. Determine the value of the doctorate (assess the measurable difference)
2. Examine the current design of the doctorate curriculum for “best practices” in doctoral education
3. Determine if critical thinking skills can be taught, measured and/or predicted
4. Assess the effectiveness of simulation on student education as well as on continuing education, maintenance and competency for CRNAs
5. Examine the effectiveness of current criteria for admission into a nurse anesthesia program, i.e. applicant’s behavior, attitude, etc. that could be used as a way to assist educators
 - a. Measure of maturity
 - b. Promising individuals for leadership positions