

**THE NATIONAL CAPITAL CONSORTIUM  
ANESTHESIOLOGY RESIDENCY**

**FACULTY MANUAL**

## TABLE OF CONTENTS

INTRODUCTION .....	3
ADMINISTRATIVE STAFF .....	4
CLINICAL DIRECTOR, DEPARTMENT OF ANESTHESIOLOGY .....	5
RESIDENCY PROGRAM DIRECTOR .....	6
FELLOWSHIP PROGRAM DIRECTORS.....	7
RESIDENCY PROGRAM COORDINATOR .....	8
CHAIR, CLINICAL COMPETENCY COMMITTEE.....	11
CHAIRMAN, EXECUTIVE EDUCATION COMMITTEE .....	12
RESEARCH COORDINATOR.....	13
SECTION HEADS .....	14
SUBSPECIALTY SECTION HEADS .....	15
GENERAL OBJECTIVES OF THE RESIDENCY .....	16
DIDACTIC PROGRAM.....	18
DEFINING COMPETENCE IN ANESTHESIOLOGY .....	21
RESIDENCY GOALS AND OBJECTIVES.....	Appendix

## INTRODUCTION

Contemporary graduate medical education in the field of anesthesiology is a time intensive and labor intensive endeavor. The days when any institution could establish a residency program solely based on a case load are long gone. Graduate medical education programs in all fields are being called upon to apply educational principles that have long been applied to other more structured graduate education programs. Thus, it is imperative that structure and focus is built into the program and that this is outlined right down to the last behavioral objective. The administrative and academic support involved in the maintenance of such a program requires a great deal of time, effort and dedication on the part of the faculty anesthesiologist.

Our program here at the National Capital Consortium (NCC) is unique to most other training programs both in and out of the armed services. There is a structured focus that is directed toward the development of the anesthesiology consultant based on the qualities that are required to function in such a capacity. Those qualities include the possession of an adequate knowledge data base, the manual dexterity necessary to perform manual tasks safely and efficiently, and (perhaps most importantly) sound medical judgment. Although outstanding clinicians possess other attributes, it is impossible to function as an anesthesiology consultant without these three basic qualities.

The data base is acquired through medical school training, internship experiences, clinical anesthesia teaching, lectures, conferences, personal reading, and other modalities such as simulation. The manual skills are acquired through clinical repetition and “hands on” supervised teaching. The development of judgment in the field of anesthesiology is an individual event that requires a foundation of basic science and clinical knowledge coupled with accumulating anesthesiology experiences that repeatedly places the trainee in the position of making clinical decisions. Even when these situations occur, the resident may not appreciate the full educational value of the experience. Thus, in addition to didactic sessions designed to broaden the residents’ knowledge database, our program exposes the trainee to a variety of conferences directed at decision making and judgment in anesthesiology. The various modes of delivery allow residents to learn through interaction with peers and consultant anesthesiologists while observing and enacting clinical decisions. Our curriculum provides continuous orally delivered simulations of clinical events and clinical decision making throughout the academic year which enhances the experiences obtained at the point of patient care.

The goal of this faculty manual is to outline our “educational method” and assist in the development of a talented faculty focused on resident education, patient safety, and clinical care

## ADMINISTRATIVE STAFF

Chair, Department of Anesthesiology Walter Reed National Military Medical Center	Necia Williams, MD
Clinical Chief, Department of Anesthesiology National Naval Medical Center	Patrick Sipe, MD
Clinical Chief, Department of Anesthesiology Walter Reed Army Medical Center	Scott Griffith, MD
Anesthesiology Residency Program Director National Capital Consortium	Dale Szpisjak, MD MPH
Associate Program Director Walter Reed Army Medical Center	Tracey Cacciatore, MD
Associate Program Director National Naval Medical Center	Jonathan Gibbons, MD
Pain Medicine Fellowship Program Director	Scott Griffith, MD
Critical Care Medicine Fellowship Program Director	Christian Popa, MD
Regional Anesthesia Fellowship Program Director	Chester Buckenmaier III, MD
Residency Program Coordinator	Barbara Pedevillano
Chairman of Clinical Competency Committee	Jonathan Gibbons, MD
Anesthesia Crisis Resource Management Course Coordinator	Cynthia Shields, MD
Research Coordinator	John Capacchione, MD
Director of Faculty Development	Meir Chernofsky, MD

## **CLINICAL DIRECTOR, DEPARTMENT OF ANESTHESIOLOGY**

1. This position is held by a staff credentialed anesthesiologist with well-recognized organizational and clinical abilities.
2. Responsibility.
  - a. Personal Management.
    - (1) Input into long term clinical faculty schedule.
    - (2) Input into daily staff anesthesiologist/resident/CRNA/SRNA assignments; assurance of comprehensive trainee exposure.
    - (3) Daily and long term manpower planning; efficient utilization of all available personnel.
    - (4) Coordinate management of all clinical aspects of the department.
  - b. Sub-Specialty Coverage.
    - (1) Ensure appropriate staff involvement with complex subspecialty cases.
    - (2) Participate in resident sub-specialty rotation development.
  - c. Daily Operations.
    - (1) Review of operative schedule on the day prior to surgery.
    - (2) Early AM review of the schedule on the day of surgery.
    - (3) Assess availability of intensive care resources.
    - (4) Coordinate changes to the schedule with regard to complexity of case, training opportunities, and fiscal restraints.
    - (5) Assure efficient flow and utilization of operating rooms.
    - (6) Act as primary liaison between anesthesiology and surgical department.
    - (7) Act as primary liaison to Intensive Care Unit.
    - (8) Chief arbiter of clinical and inter-staff problems.
  - d. Participative Role.
    - (1) Primary clinical consultant in the operating room.
    - (2) Clinical resource for difficult patients and procedures.
    - (3) Assist with anesthesia equipment and monitoring.
    - (4) Assist in the Quality Management process.
    - (5) Assist in disaster planning.
4. General Qualifications.
  - a. Seniority, appropriate academic rank.
  - b. Clinical proficiency/commitment being respected for clinical abilities is a significant attributes.

## **RESIDENCY PROGRAM DIRECTOR**

### General Description and scope of Responsibilities:

Ensure and document the efficient and complete execution of residency training as per the guidelines set by the American Board of Anesthesiology (ABA) and the Accreditation Council for Graduate Medical Education (ACGME).

### Specific Objectives

1. Serves as chairman of resident selection committee, facilitating the interview and evaluation of all applicants to the residency program.
2. Create the resident clinical schedule ensuring and documenting that each resident is meeting the ABA training requirements.
3. Establish a schedule of site visits to affiliated institutions and assign the appropriate “clinical section head” to visit and evaluate specific sites.
4. Serve as a point of contact for all residents and future residents to the program.
5. Facilitate the timely submission of resident TAD requests for out rotations and ensure that appropriate documentation is completed for liability coverage.
6. Facilitate the timely evaluation of residents doing out rotations.
7. Facilitate the organization and delivery of the CA-1 introductory seminar.
8. Facilitate the administration of all examinations throughout the academic year.
9. Ensure that the residents are informed of ABA deadlines for the board certification process.
10. Serves as a voting member of the NCC Graduate Medical Education Committee and abides by all guidelines delineated in the GME instruction.
11. Prepare the following documents on behalf of the residents:
  - a. Resident enrollment forms
  - b. Semiannual record of training reports.
  - c. Annual training summary reports.
  - d. In-training examination applications.
  - e. Documentation forms required by affiliated institutions.

## **FELLOWSHIP PROGRAM DIRECTORS**

General Description and scope of Responsibilities:

Ensure and document the efficient and complete execution of fellowship training as per the guidelines set by the ABA and the ACGME.

Specific Objectives

1. Serves as chairman of fellowship selection committee, facilitating the interview and evaluation of all applicants to the fellowship program.
2. Creates the fellow clinical schedule, ensuring and documenting that each fellow is meeting the ABA and the Accreditation ACGME.
3. Serves as the point of contact for all residents and future fellows to the program.
4. Ensures that the fellows are informed of ABA deadlines for the board certification process.
5. Serves as a voting member of the NCC Graduate Medical Education Committee and abides by all guidelines delineated in the GME instruction.
6. Prepare the following documents on behalf of the fellow:
  - a. Fellowship enrollment forms
  - b. Semiannual record of training reports.
  - c. Annual training summary reports.
  - d. In-training examination applications.
  - e. Documentation forms required by affiliated institutions.

## **RESIDENCY PROGRAM COORDINATOR**

### **Introduction**

This position is to support the continued accreditation of the NCC Anesthesiology Residency program in accordance with the standards established by the NCC and the ACGME. The residency program coordinator reports to the Anesthesiology program director and will liaison with the GME office and other GME programs as needed.

Duties of the residency program coordinator include:

1. implementation of the training curriculum;
2. documentation of trainee performance;
3. resolution of administrative problems as they pertain to the residency training program;
4. assisting the program director in the development of faculty and administrative staffing plans.

### **Major Duties and Responsibilities**

The program coordinator's duties and responsibilities include (but are not limited to) the following:

1. Ensures that the residency training program is compliant with all NCC and ACGME requirements through analysis of program content and assisting in the development and implementation of both short and long-term plans.
2. Stays abreast of ACGME changes, including new and revised requirements.
3. Establishes and maintains accurate and complete records concerning resident education as required by the NCC and ACGME.
4. Composes correspondence and reports, prepares memoranda, agendas, schedules and course materials and maintains contact with as well as records for all residents.
5. Utilizes computer and database applications to update and maintain resident registration information, including data management aspects as it relates to websites, data logs, e-mail, PC's, and other interfaces as required.
6. Prepares comprehensive reports, including recommendations to improve coordination, planning, administration and management.
7. Interprets guidance from the clinical sites for incorporation into the curriculum planning guide.

8. Analyzes program content, develops plans and sets milestones to determine compliance with annual and long range objectives.
9. Determines short-term, intermediate, and long range GME Program resource requirements to include estimates for TAD/TDY, travel, contract costs, and necessary equipment and supplies.
10. Coordinates with the Budget Office to monitor obligations, commitments and expenditures for the residency program.
11. Prepares financial reports that include analyses and recommendations for cost savings.
12. Carries out the operational and administrative duties pertinent to the conduct of the residency programs to include the selection of course sites, logistics, and coordination of support requirements (i.e., personnel, equipment and facilities) for the operation of the program.
13. Coordinates training and residency rotations with both internal and external facilities that provide residency program training.
14. Represents the residency program director at meetings as required.
15. Negotiates any changes, modifications, or additions to the program with NCC representatives and other government and academic bodies as required, ensuring approval from the program director prior to final implementation.
16. Coordinates the administration of standardized examinations, to include scheduling, collecting, security, registration, collating, mailing and overall management of the system.
17. Assists the Program Director with completing any site review material required by the ACGME, NCC, or the department of defense.
18. Responsible updating and distributing the Residency Training Manual, whereas the program director provides for its specific.
19. Coordinates and tabulates periodic evaluations of residents and faculty anesthesiologists. Tracks evaluations, developing and implementing a database and reminder system. Extrapolates data from evaluations, summarizing all information and prepares it for cumulative review. Files completed evaluations in each resident's file.
20. Updates and maintains residents' files, entering information into databases, notes schedules for review, tabulates data, and prepares summary sheets as requested.

21. Updates/modifies required databases (includes, but not limited to ERAS (Electronic Residency Application Service) and GMETRACK (online tracking system for current and past interns/residents) and ADS (Academic Data System)).
22. Prepares letters of recommendation for GME, state licensure, membership in professional organizations and other such issues based on resident/intern files and Service standards, ensuring that content of letters is correct and the letters are distributed to the appropriate department and point of contact.
23. Schedules and documents periodic meetings for faculty with the program director, preparing the minutes and other information required.
24. Maintains schedules of conferences, lectures, grand rounds, resident academic days, executive educational committee meetings, and clinical competency committee meetings.

## **CHAIR, CLINICAL COMPETENCY COMMITTEE**

### General Description and scope of Responsibilities:

The Chairman of the Clinical Competency Committee, working closely with the Residency Program Director, ensures the evaluation and monitoring of resident performance with special emphasis on residents experiencing difficulties and makes recommendations to the Residency Program Director concerning resident competency and disposition.

### Specific Objectives

1. Provide continuous evaluation of academic performance and the clinical skills of each resident with quarterly staff evaluations and the assessment of written and oral examinations.
2. Identify residents with problems in the academic or clinical setting and provide recommendations concerning corrective measures.
3. Provide quarterly feedback to all residents and discuss the weaknesses and strengths relative to the level of training.
4. Maintain resident folders, track progress while allowing each resident full access to his or her folder.
5. Coordinate a resident mentor program (an informal relationship between faculty members and each resident for the purpose of providing a contact for counseling and feedback).

## **CHAIRMAN, EXECUTIVE EDUCATION COMMITTEE**

### General Description and scope of Responsibilities:

The program director serves as the chair of the executive education committee (EEC). The goal of EEC is to ensure that that educational structure is focused on nurturing the growth and development of the “Anesthesiology Consultant” in accordance with the academic philosophy of the department.

### Specific Objectives:

1. Write the annual core curriculum lecture schedule and assign lecturers implementing the recommendations of the respective education subcommittee.
2. Oversee the annual updating of the resident manual as per subcommittee recommendations.
3. Coordinate the annual review and update of subspecialty assignments.
4. Evaluate on a monthly basis resident case load and case variety, ensuring that schedules are adjusted to ensure that resident’s experience at least meets the minimum ACGME case log requirements.
5. Organize and preside over faculty development.
6. Assign “subspecialty” case conferences to the respective academic section heads.
7. Produce and update annually the department faculty manual.

## **RESEARCH COORDINATOR**

General Description and scope of Responsibilities:

Responsible for the development, facilitation, and completion of research within the NCC Anesthesiology Residency.

Specific Objectives:

1. Act as the point of contact both intra- and extra-departmentally for all interested in participating in research involving the NCC faculty and residents.
2. Chairs monthly Anesthesiology Department Research Meeting. This is to track progress of ongoing research projects, and allow feedback by other researchers on new projects.
3. Facilitate and implement the research efforts of other departmental members by:
  - a. assisting in project's design
  - b. gaining support within the department for assistance in clinical studies
  - c. gaining administrative time for researchers to complete projects
  - d. assisting in writing abstracts and papers
  - e. assisting in project submissions for presentation and publication
4. Maintain active research efforts within the Anesthesia Subspecialties.
5. Provide a positive image by conducting active research projects, either laboratory or clinical.

## SECTION HEADS

Ambulatory Procedures Unit Preanesthesia Assessment	Kevin Maguire, MD
Cardiothoracic Anesthesia	John Hodgson, MD
Critical Care Medicine	Christian Popa, MD
Neuroanesthesia	John Dunford, MD
Obstetric Anesthesia	Tiffany Angelo, DO
Pain Medicine	Scott Griffith, MD
Pediatric Anesthesia	James Solomon, MD
Post-Anesthesia Care	Gregory Applegate, DO
Regional Anesthesia	Chester Buckenmaier III, MD

## **SUBSPECIALTY SECTION HEADS**

General Description and scope of Responsibilities:

The section head should have a depth of knowledge and clinical experience, gained through a focused course of study, which exceeds that of the strict “generalist” and should be prepared to devote the time and effort required to serve as a section head.

Specific Objectives:

1. Outline the required base of knowledge.
2. Establish the goals and objectives of the respective subspecialty rotation.
3. Establish, annually update, and maintain a bibliography of articles that represent the “state of the art” conceptual framework of the subspecialty.
4. Assign and/or give the subspecialty case conferences defined in the core curriculum.
5. Execute site visits to the respective subspecialty out rotations as per the schedule developed by the chair of the EEC.
6. Serve as resident advisor in the respective subspecialty.

## **GENERAL OBJECTIVES OF THE RESIDENCY**

The objective of the NCC graduate training program in anesthesiology is to provide the Fleet/Marine Force and US Army with consultant anesthesiologists with a breadth of experience in using all contemporary anesthetic techniques who are prepared to:

1. Coordinate the preoperative evaluation of patients with surgeons and appropriate medical specialists.
2. Select and administer an anesthetic most suitable for the patient and disease state.
3. Assist in the prevention, diagnosis, and treatment of postoperative anesthetic complications.
4. Provide consultation in airway management, critical care, and pain management.
5. Practice the skills of anesthesiology in a military environment.

Training in Clinical Anesthesia consists of three years (CA-1,2,3). The Clinical Anesthesia Phase must be preceded by one year of Clinical Base training (CBY). Upon completion of three years of clinical anesthesiology, the resident will demonstrate adequate knowledge, skill, and judgment to be eligible to enter the ABA board certification process. Residents completing training will have mastered the core competencies (Medical Knowledge, Patient Care, Practiced-based learning, Systems-based Practice, Interpersonal and Communication Skills, and Professionalism) to the level expected of a newly trained anesthesiologist. All graduating residents are expected to function as consultant anesthesiologists and gain board certification at the earliest opportunity.

The means by which these goals are achieved include: exposure to adequate case load and case variety, the didactic lecture series, case conferences, morbidity and mortality reviews, clinical teaching, simulation education, and involvement in basic and clinical research. The most important means, however, is serious, individual, goal-directed study.

The Department prides itself on its faculty with their varied training backgrounds and subspecialty expertise. The faculty are resources for the resident's training and professional development. Training residents is a privilege, not a right, in the NCC anesthesiology residency program.

The CA-1 year (first year of residency) is spent in clinical anesthesia at the core hospitals of the residency, NNMC and WRAMC. During the first six months, the resident is closely supervised and is introduced to departmental routine, preoperative anesthetic evaluation and premedication, airway management, and basic techniques of general and regional anesthesia. The resident is expected to become intimately acquainted with the functioning of anesthetic equipment and monitors. The resident is encouraged to formulate anesthetic plans and become familiar with basic management decisions. During the second six months, the resident is expected to gain

proficiency in anesthetic planning for routine cases and make preoperative and intraoperative management decisions under supervision. Two months of training in Obstetrical Anesthesia will occur during months 6 to 18 of residency training. A SICU rotation will also occur during the CA-1 year.

The CA-2 year is spent in clinical anesthesia at the core hospitals and affiliated hospitals. The majority of subspecialty rotations will occur during the CA-2 year. Anesthetics will be performed with a degree of independence but always with a staff anesthesiologist (who is ultimately responsible) present for advice and consultation. CA-2 residents serve as the senior resident on call and assist with teaching the junior residents. This year is primarily devoted to the sub-specialty areas of cardiac, obstetric, pediatric, thoracic and vascular, neuroanesthesia, and pain management. There is also a rotation in the SICU. Out-rotations are done at Children's National Medical Center (Pediatrics), Washington Hospital Center (Cardiothoracic), University of Miami (Trauma), Fairfax Hospital (Cardiothoracic and Trauma), and Landstuhl Army Medical Center (Regional).

The CA-3 year is an individually designed year, arranged by the resident with the advice and approval of the Residency Coordinator and the Program Director, within the framework established by the American Board of Anesthesiology.

## DIDACTIC PROGRAM

The lecture and conference schedule is provided as a framework for the resident's personal reading and study and is specifically directed at their development as an anesthesiology consultant. The conferences have been specifically chosen and developed to expose aspects of the practice of anesthesiology that may not be found in traditional published reading material. The program provides educational experiences that focus attention on the development of the prerequisites of knowledge, manual skills, and judgment required for practice as an anesthesiology consultant.

The core curriculum lectures, case conferences, visiting professor lectures, CA-1 lectures, research, and journal club provide the foundation of the didactic program. The "key words" are phrases representing select topics in the specialty chosen by the ABA examination committee for their relevance to current clinical anesthesia practice. They are the database from which the written board examination in anesthesiology is generated. While attempting to keep their lectures current and stimulating, you should make every effort to cover these key word topics as they relate to the lecture material being presented. The residents should explore keywords not covered directly by independent reading or discussion with faculty members. The core curriculum lecture series repeats in a one year cycle which offers ample opportunity to hear material missed.

The time spent in the operating room with you, the anesthesiology staff, is the most significant portion of the resident's training during residency. Discussions during this period of time should cover topics that apply physiology and pharmacology to the clinical setting and distinguish the anesthesiologist as a true consultant. Ideally the topics to be discussed should be chosen the evening prior to clinical activity during the preoperative planning discussion between the resident and the assigned staff member. These topics should also follow the lecture curriculum to further cement these important areas, but, naturally will also be guided by the cases at hand.

The remainder of the didactic program includes a series of conferences and activities that help the resident hone the clinical judgment that they are acquiring on a daily basis. These include the preoperative consultation clinic teaching, PBLDs, multidisciplinary conferences, case conferences, and morbidity and mortality conference. The development of sound clinical judgment occurs on an individual basis. However, the resident's exposure to the application of clinical decision making as it is evaluated and debated in a variety of different modes of presentation will extend their clinical experience and nurture their development from an anesthesiology resident to an anesthesiology consultant.

### **Conferences and Frequency**

Core Curriculum Lectures	One per week
Case Conferences	One per month
Morbidity and Mortality	One per week
Problem Based Learning Discussions	One per week
Journal Club	One per month
Guest Lecture Series	One per month
CA1 Lecture Series	August/ September

## COMPETENCE

Defining competence in anesthesiology is a demanding task. The ACGME has established six core competencies that define the framework of all resident education. They are Medical Knowledge, Patient Care, Practice-based learning and improvement, Interpersonal and communication skills, Professionalism, and Systems-based practice.

Expectations of residents with regards to the core competencies follow:

### **Patient Care:**

Provides complete preoperative evaluation and optimization of patient status when appropriate, including use of consultants; develops appropriate anesthetic plan including selection of monitors, anesthetic agents and plan for postoperative analgesia; follows intraoperative course and adjusts care appropriately; responds appropriately to critical events; evaluates patient postoperatively; adequately documents all aspects of care provided.

A subset of patient care is technical skill: demonstrates physical dexterity with respect to invasive procedures, including intubation, line placement and regional anesthetic techniques; demonstrates organizational skills such as efficient case turnover and case starts.

### **Medical Knowledge:**

Understands human physiology as it applies to anesthesia; understands the basics of evaluation and treatment of common medical and surgical disease, including interpretation of laboratory and diagnostic tests; is capable of appropriately modifying anesthetic care based on the status of the patients medical conditions; properly utilizes and interprets monitoring and other medical equipment.

### **Practice-based Learning and Improvement:**

Reads about unfamiliar patient care situations; formulates questions when unclear how to integrate knowledge into clinical practice; learns from clinical experiences and direct teaching; understands the techniques of scientific investigation, including basic statistical analysis; uses information technology for patient care and for own education; can impart information to colleagues and students.

### **Interpersonal and Communication Skills:**

Interviews patients in a manner conducive to patient participation; has good listening skills; appropriately explains anesthetic options and procedures, including risks; effectively imparts information verbally and in writing; can defend anesthetic management; works effectively with other health care professionals.

**Professionalism:**

Places the best interests of the patient over self-interest; exhibits compassion; respects the opinions, beliefs and values of patients and colleagues; involves the patient in their medical care and honors the patient's wishes; ethically manages informed consent, patient confidentiality and business practices; is committed to excellence and professional development; promotes trust; in general, acts in an honest, moral and ethical fashion.

**Systems Based Practice:**

Provides anesthetic care that respects and integrates the care provided by other physicians involved with the patient; understand the anesthesiologist's role in the broad context of the delivery of health care, including patient advocacy, quality improvement programs and control of health care costs without compromising care.

More detailed descriptions, specific to the different rotations, are found in the Goals and Objectives for each clinical rotation.

## **THE AMERICAN BOARD OF ANESTHESIOLOGY DEFINING COMPETENCE IN ANESTHESIOLOGY**

To varying degrees, characteristics of competence in anesthesiology are measurable. The written and oral examinations of the American Board of Anesthesiology together with recommendations of Program Directors and Committees on Clinical Competence provide measures of competence. Based on the results of these evaluations, physicians are certified as consultants in anesthesiology.

As stated in the American Board of Anesthesiology Information booklet:

“A consultant in anesthesiology is a physician who possesses knowledge, judgment, adaptability, clinical skills, technical skills, and personal characteristics sufficient to carry out the entire scope of anesthesiology practice. A consultant in anesthesiology is able to communicate effectively with peers, patients, their families, and others involved in the medical community. The consultant can serve as an expert in matters related to anesthesiology, deliberate with others and provide advice and defend opinions in all aspects of the specialty of anesthesiology. A Board certified anesthesiologist is able to function as the leader of the anesthesiology care team.

Because of the nature of the role of the consultant anesthesiologist, the consultant must be able to deal with emergent life-threatening situations in an independent and timely fashion. The ability to acquire and process information in an independent and timely manner is central to assure individual responsibility for all aspects of anesthesiology care. Adequate physical and sensory faculties, such as eyesight, hearing, speech, and coordinated function of the extremities, are essential to the independent performance of the functions of a consultant anesthesiologist. Freedom from the influence of or dependency on chemical substances that impair cognitive, physical, sensory or motor functions also is an essential characteristic of the consultant anesthesiologist.”

It is generally believed that a high degree of competence will result in the best possible patient care with minimal morbidity and mortality. The American Board of Anesthesiology defines a competent physician as possessing the character skills and adequate knowledge, judgment, and clinical skills for assuming independent responsibility for patient care. These elements are further defined below as guides to Clinical Competence Committees.

### **ESSENTIAL CHARACTER ATTRIBUTES:**

The resident should possess those character traits and skills that are essential to the safe practice of anesthesiology, critical care and pain management. These include all of the following:

1. Demonstrates high standards of ethical and moral behavior.

2. Demonstrates honesty, integrity, reliability, and responsibility.
3. Learns from experience; knows limits.
4. Reacts to stressful situations in an appropriate manner.
5. Has no documented abuse of alcohol or illegal use of drugs.
6. Has no cognitive, physical, sensory or motor impairment that precludes acquiring and processing information in an independent and timely manner.
7. Demonstrates respect for the dignity of patients and colleagues, and sensitivity to a diverse patient population.

### **ACQUIRED CHARACTER SKILLS:**

The resident should demonstrate the following acquired character skills that are important to the practice of anesthesiology and which develop and evolve during the anesthesiology continuum.

1. Communicates effectively with patients and members of the health care team.
2. Has a commitment to continuing education.
3. Is adaptable and flexible.
4. Is careful and thorough.
5. Is complete and accurate in record keeping.
6. Has breadth of thinking.
7. Is appropriately self-confident.

### **KNOWLEDGE:**

The committee on clinical competence judges a resident's knowledge. The written examinations of the American Board of Anesthesiology are one element utilized to determine if a resident is functioning at the level of the consultant anesthesiologist.

## **JUDGEMENT:**

The resident must possess the ability to integrate clinical scenarios to facilitate timely and accurate diagnoses and the appropriate prescription of therapy consistent with safe anesthetic management. The resident must:

1. Demonstrates use of a sound background in general medicine in the management problems relevant to the specialty of anesthesiology.
2. Recognizes the adequacy of preoperative preparation of patients for anesthesia and surgery and recommends appropriate steps when preparation is inadequate.
3. Selects anesthetic and adjuvant drugs and techniques for rational and safe anesthetic management.
4. Recognizes and responds appropriately to significant changes in anesthetic course.
5. Prescribes and advises appropriate post anesthetic care.
6. Provides appropriate consultative support for patients who are critically ill.
7. Evaluates, diagnoses, and selects appropriate therapy for acute a chronic pain disorders.

## **CLINICAL SKILLS:**

The resident must demonstrate the facility to organize and expedite safe anesthetic procedures. The following contains examples that aid the evaluation of psychomotor performance:

1. General preparation:
  - a. Adequacy and speed of preparation.
  - b. Indicated vascular cannulation including venous, arterial, central venous and pulmonary arterial catheter insertions.
  - c. Appropriate application and use of current technology for efficient and safe anesthesia care and life support of patients. Examples include direct and indirect blood pressure measurement ventilation and respiratory gas monitoring, assessment of neuromuscular function electrocardiographic, electroencephalographic, and evoked-potential monitoring, and evaluation of laboratory results (chemistry radiographs, etc.).
  - d. Instrument and anesthesia machine testing and calibration.
  - e. Operating room safety procedures for oxygen delivery, electrical safety, and waste gas evacuation.
  - f. Proper patient positioning during anesthesia.
2. General Anesthesia:

- a. Airway management: head position, ventilation by mask, appropriate use of oral and nasal airways.
  - b. Tracheal intubation: oral and nasal intubation by various techniques, appropriate and adequate tracheal and airway local anesthesia, and fiberoptic techniques.
  - c. Maintenance of respiration and gas exchange including management of various types of mechanical ventilation.
  - d. Support of the circulation during the perioperative period, including the management of all types of shock.
  - e. Support of renal function perioperatively.
  - f. Management of the patient with increased intracranial pressure.
  - g. Appropriate administration of fluids and maintenance of fluid, electrolyte and acid-base balance.
  - h. Judicious use of blood products.
3. Regional anesthesia and pain (including postoperative) management:
- a. Spinal and epidural anesthesia and analgesia.
  - b. IV regional anesthesia.
  - c. Nerve blocks for diagnostic, therapeutic and surgical procedures.
4. Special Procedures:
- a. Management of cardiopulmonary resuscitation.
  - b. Anesthetic management of cardiopulmonary bypass.
  - c. Deliberate hypotension.