ORIGINAL: 2064 HARBISON COPIES: Sandusky Jewett Smith Wyatte RECEIVED 1999 NOV 22 AM IC: 22 INDEPENDENT REDULATORY REVIEW COMMISSION

## Statement of Michael Kost, CRNA, MS, MSN

## On Behalf of Pennsylvania Association of Nurse Anesthetists

## Before the

House Professional Licensure Committee

## On HB 50

## Wednesday, October 27, 1999

Harrisburg, PA

Good morning Mr. Chairman and members of the Committee. My name is Michael Kost and I am a certified registered nurse anesthetist and the Program Director of the Montgomery Hospital School of Anesthesia located in Norristown, Pennsylvania. I am a 1985 graduate of the Montgomery Hospital School of Anesthesia and have been involved in the education and training of nurse anesthetists since 1986. I was asked to present testimony to the committee regarding the educational process associated with nurse anesthetists.

### I. History

However, before I proceed with the requirements I would like to briefly review the history of nurse anesthesia in the United States. Nurses were the first professional group to provide anesthesia services in the United States. Established in the late 1800's, nurse anesthesia has since become recognized as the first clinical nursing specialty. The discipline of nurse anesthesia developed in response to requests of surgeons seeking a solution to the high morbidity and mortality attributed to anesthesia at that time. Serving as pioneers in anesthesia, nurse anesthetists became involved in the full range of specialty surgical procedures, as well as in the refinement of anesthesia techniques and equipment.

### II. American Association of Nurse Anesthetists

The American Association of Nurse Anesthetists (founded in 1931), is the professional association representing over 27,000 nurse anesthetists throughout the country. The AANA has produced educational and practice standards, implemented a certification process for nurse anesthetists in 1945, and developed an accreditation program for nurse anesthesia education that dates back to 1952. The AANA was a leader in forming multidisciplinary councils with public representation in order to fulfill the profession's autonomous credentialing functions. The AANA, as a professional association, or through its credentialing councils continues to update educational and practice standards, position statements, guidelines, and its accreditation, certification, and recertification processes.

## III. Educational Standards

Nurse anesthetists have a long history of establishing and implementing rigorous education requirements. As early as 1933, an education committee was charged with the development of educational standards, maintenance of a

central bureau and compiling lists of approved schools, and qualified instructors.

The formal accreditation program for nurse anesthesia education began in 1952, with the endorsement of the American Hospital Association (AHA). Since 1955, the AANA or its designated agency, the Council on Accreditation of Nurse Anesthesia Educational Programs (COA), has been listed by the US Commissioner of Education (now the Secretary of Education) as being a reliable authority concerning the quality of education or training offered by the anesthesia education programs it accredits. The Council on Accreditation of Nurse Anesthesia Educational Programs is currently recognized by the Council on Higher Education Accreditation (CHEA).

The Council on Accreditation of Nurse Anesthesia Educational Programs strict accreditation standards promote and maintain only the highest quality educational offerings for students in the nurse anesthesia curriculum. These accreditation standards (Appendix A) address:

Administrative policies and procedures Institutional support Curriculum and instruction Faculty Evaluation

## **IV.** Educational Requirements

The education of CRNAs is conducted in 83 accredited programs throughout the United States and Puerto Rico. Twelve of these programs are conducted in the Commonwealth of Pennsylvania. These Pennsylvania programs are identified in Appendix B. These programs offer master's or higher degrees in association with traditional institutions of higher education, most commonly in schools of nursing or health sciences. Minimum admission requirements to a nurse anesthesia educational program include:

- Bachelor of science in nursing (BSN) or other appropriate baccalaureate degree
- License as a registered nurse (RN)
- At least 1 year of critical care nursing experience (most applicants to nurse anesthesia educational programs significantly exceed this requirement)

The specialty curriculum requires that students expand their assessment skills, enhance their critical thinking capabilities, and become even more expert in making clinical judgements as a means of assuring that nurse anesthetists are fully capable of providing the full scope of anesthesia practice as defined by the profession (Scope of Practice, Appendix C). The curriculum in the anesthesia specialty is offered in an integrated program of academic and clinical study, ranging in length from 24 - 36 months. The academic curriculum consists of 48 - 55 credit hours of formalized graduate study including those courses listed below.

### PROGRAM CURRICULUM - DIDACTIC COURSE OVERVIEW

### Orientation to The Study of Anesthesia

This orientation is designed to acquaint the student with the physical plant, surgical suite, and critical care areas. School requirements as well as those of the Council on Accreditation of Nurse Anesthesia Educational Programs are thoroughly discussed. A Broad Field Orientation to clinical practice includes legal implications of anesthesia care, preoperative patient assessment, airway management and patient positioning.

Anatomy, Physiology and Pathophysiology Relative to Anesthesia

A general review of anatomy and physiology is presented with intense emphasis on the respiratory, cardiovascular, renal, neurologic and endocrine systems. Anatomical abnormalities and physiological conditions which may influence the conduct or choice of anesthesia are highlighted.

### Pharmacology Related to Anesthesia

A detailed course of the pharmacologic effects of anesthetics and the many accessory drugs used in anesthesia is presented. Pharmocologic considerations associated with the inhalation agents, intravenous anesthetic agents and muscle relaxants are emphasized.

### Chemistry and Physics of Anesthesia

This course provides a review of inorganic chemistry and a detailed study of organic chemistry relating to anesthetic compounds. The physical laws which apply to anesthetic practice are discussed. Electrical safety within the operating room environment is also presented.

### Principles of Anesthesia Practice

This course is designed to acquaint the student with commonly utilized anesthetic techniques. The indications and applications in various surgical situations are highlighted. Management of complications are discussed with treatment protocol provided.

### Advanced Principles of Anesthesia

An in-depth presentation of advanced principles of anesthesia practice. Special emphasis is placed on pediatric, geriatric, and obstetrical anesthesia. Anatomical categories of surgical procedures requiring special techniques and monitoring devices are discussed, i.e., anesthesia for neurosurgery, intrathoracic surgery, vascular surgery and emergency surgery for trauma and acute disease processes are presented.

### Clinical Correlative Conferences

Journal Clubs, Seminars, Morbidity/Mortality Conferences provide a review of current literature. This course provides an opportunity for the student to gain experience in writing research papers and presenting reports in a professional manner. Cases involving anesthesia complications are reviewed and discussed.

### Comprehensive Review Course

This course offers the student the opportunity to review and assess his/her knowledge of anesthesia theory and practice. During the last three months of the program the student is provided with ample time to prepare for the National Certification Examination.

#### 

This course explores the relationships among research, theory, and practice. Students examine the integration of theory in clinical, educational, and administrative areas of nursing. Critique of published research focuses students on the findings and methods of studies and the applicability of research findings to practical situations. Students develop a research question guided by a critical review of the literature. Various research designs are contrasted. **Prerequisite:** None

### Research and Theory II

This course is a continuation of Research and Theory I (NUR 604). The student develops a research proposal that originates in a question derived from clinical practice. The course examines treatment of variables, sampling, measurement theory, probability theory, qualitative and quantitative analysis, and the use of the computer in data analysis. The research consumer and participant roles are emphasized. Prerequisite: NUR 604

### Advanced Practice Nursing and Administration in Health Care Delivery Systems

This course examines the evolution of advanced nursing practice and administration in the context of changing health care delivery systems. Students investigate health care policy development and examine systems of delivering patient care in relation to financial, ethical, legal, social, legislative, political, and professional concerns. Program development, informatics, fiscal manage-ment of health care services, budgeting, and reimbursement issues are emphasized. Students explore interdisciplinary networking and coalition-building skills in leadership roles extending beyond the traditional health care environment. This course meets the standards of care and professional performance as published in the Scope and Standards of Advanced Practice Registered Nursing. **Prerequisite:** None

#### Population-Based Care and Advanced Practice Nursing

In this course students investigate the roles of advanced practice nurses in meeting the health care needs of diverse populations. Health promotion, disease prevention, resource utilization, and health education responsibilities are examined. Students utilize basic epidemiological concepts and needs assessment for vulnerable populations. They examine the diverse needs of different ethnic and racial groups in a community or clinical setting. Prerequisite: None

### Pathophysiology

This course integrates physiological principles and clinical practice and correlates physical manifestation with pathological interference. It focuses on recognizing changes in client status, interpreting physiological data, and utilizing this information in formulating nursing care plans. Nursing implications of current diagnostic studies and pharmacological treatments will also be addressed. **Prerequisite:** Core or Special Permission

### Pharmacology

The purpose of this course is to expand the study of the actions and effects of drugs on the human system. The student will analyze the scope of legal and professional nursing responsibilities related to pharmacology in an expanded nursing role. The student will study principles of drug therapy, mechanism of action, and selection of pharmacologic agents in clinical practice. Prerequisite: NUR 618, Core or Special Permission

#### Assessment of The Adult in Health and Illness

This course addresses the health assessment of clients using a framework of physiologic, psychosocial and physical examination data. Students explore history taking methods and principles of physical assessment to determine the client's potential and actual health problems. The purpose of the course is to enable the student to develop skills necessary to evaluate the holistic health status adults. It combines the principles and generalizations of nursing and other sciences with the nursing care of patients. Clinical problems are analyzed. Students advance in knowledge, clinical judgment, differential diagnosis and decision making skills. Prerequisite: NUR 617



In addition to these rigorous academic requirements, clinical nurse anesthesia residencies afford supervised experiences for students, during which time they are able to learn anesthesia techniques, test theory, and apply knowledge to clinical problems. Student nurse anesthetists function under strict supervision by clinical faculty while enrolled in the program. Each graduate is required to administer anesthesia to a minimum of 450 patients, which includes an average of 800 hours of hands on clinical anesthesia experience. Many programs exceed this minimum recommendation significantly. For example, our nurse anesthesia program graduates complete an average of 900 cases, including an average of 1,900 hours of hands on clinical anesthesia.

Graduates of accredited nurse anesthesia educational programs must meet all requirements prescribed by the Council on Certification of Nurse Anesthetists to write the national examination for certification as nurse anesthetists. Those who successfully pass this comprehensive examination are qualified to practice as CRNA's. Recertification, which includes a practice and continuing education requirement, must be met every 2 years to continue practicing as a nurse anesthetist. From the commencement of the professional education in nursing, a minimum of 7 - 9 years is involved in the preparation of a CRNA.

Nurse Anesthesia Student	Year of Preparation	
Enters BSN or other appropriate bachelor's degree program	1	
Same	2	
Same	3	
At completion, graduates with BSN or other appropriate baccalaureate degree	4	
Required 1 year experience as a licensed nurse in a critical care field (most have 2 or more years of critical care)	5	
1st year nurse anesthesia educational program	6	
2nd year nurse anesthesia educational program	7	
Most programs are 25 - 30 months Graduates	8	
Certification, first year of practice	9	

To put the anesthesia training program in perspective, last month I had the honor of participating in the graduation of our senior class. Handing out the diploma and master's degree to our graduates is a truly gratifying experience and rewarding for each individual student. As I welcomed our new incoming junior class the week prior to graduation, I debated if I should share with them the journey in which they would embark. The 25 month journey which begins in our program with:

Arising every morning at 0600 to attend academic lectures on anatomy, physiology, pathophysiology, and basic principles of anesthesia. Arriving home late in the evening only to study another 4 - 6 hours to acquire the information presented in class and to prepare for didactic examinations. Consistently completing these tasks for the first 6 - 8 months of the program in conjunction with the introduction of clinical concepts within the operating room environment.

A second year filled with intense clinical training. Clinical subspecialty rotations with call responsibilities in trauma, pediatrics, obstetrics, open heart surgery, neurosurgery, and the development of regional anesthesia administration skills.

The completion of their didactic and clinical education culminates in their preparation for the national certification examination. Our students prepare for this comprehensive examination 6 months prior to graduation with 30 hours weekly of supervised study time, in addition to their previously outlined academic and clinical responsibilities.

Unlike other nonphysician clinical specialties, CRNA education and training is a homogenous process, which is delegated through our educational programs and regulated through prestigious accrediting bodies. For example, physician assistant programs offer numerous educational variations and students have the option of graduating with an associate, baccalaureate or master's degree (Correspondence, National Commission on Certification of Physician Assistants, Atlanta, GA).

In closing, I hope that I have summarized the educational process entailed in the arduous task of studying to become a certified registered nurse anesthetist. In addition to our educational programs, certification and recertification lends credence to our role as advanced practice nurses. Our role in administering safe anesthesia deserves recognition as an advanced practice nursing specialty with appropriate representation on the Board of Nursing as outlined in House Bill 50.

APPENDIX LIST	CONTENTS
Appendix A	Council on Accreditation of Nurse Anesthesia Educational Programs STANDARDS AND GUIDELINES
Appendix B	Council on Accreditation of Nurse Anesthesia Educational Programs LISTS OF ACCREDITED PROGRAMS
Appendix C	American Association of Nurse Anesthetists STANDARDS FOR NURSE ANESTHESIA PRACTICE
Appendix D	American Association of Nurse Anesthetists QUALIFICATIONS OF THE CRNA
Appendix E	Montgomery Hospital & LaSalle University SAMPLE PROGRAM BROCHURE
Appendix F	American Association of Nurse Anesthetists QUALITY OF CARE IN ANESTHESIA
Appendix G	Council on Certification of Nurse Anesthetists HISTORICAL PERSPECTIVE

.

.

### APPENDIX A

•

### COUNCIL ON ACCREDITATION OF NURSE ANESTHESIA EDUCATIONAL PROGRAMS STANDARDS AND GUIDELINES

## STANDARDS FOR ACCREDITATION OF NURSE ANESTHESIA EDUCATIONAL PROGRAMS

## COUNCIL ON ACCREDITATION OF NURSE ANESTHESIA EDUCATIONAL PROGRAMS

To be considered for Council on Accreditation of Nurse Anesthesia Educational Programs (COA) accreditation, a nurse anesthesia program must demonstrate, through appropriate documentation, that it complies with six educational standards.

### **Standard I: Administrative Policies and Procedures**

A PROGRAM OF NURSE ANESTHESIA MUST HAVE CURRENT WRITTEN ORGANIZATIONAL PLANS THAT DELINEATE ITS FUNCTIONAL STRUCTURE, THE POLICIES AND PROCEDURES WITHIN WHICH IT OPERATES, AND THE MECHANISMS IT PROVIDES FOR COOPERATIVE PLANNING AND DECISION MAKING.

Specific criteria: Such a program is required to

- A1. Develop the following statements which must be appropriate and relevant to nurse anesthesia education and show evidence of plans to maintain the program:
  - a. A mission statement.
  - b. An educational philosophy.
  - c. Purposes congruent with the institution's philosophy.
- A2. Complete a written agreement that outlines the expectations and responsibilities of all parties when:
  - a. An academic or clinical affiliation is established.
  - b. Two or more entities with unshared governance enter into a joint arrangement to conduct a program.
- A3. Devise policies and procedures using continuous self-assessment strategies and identifiable outcome criteria that enhance the program's quality and integrity.

- A4. Describe current organizational relationships to reflect lines of communication among:
  - a. Conducting institutions.
  - b. Affiliates.
  - c. Faculty.
  - d. Students.
  - e. Other affected staff or organizational units.
- A5. Design its committee structure to:
  - a. Meet the program's needs.
  - b. Encompass representation from groups, including the public, that are directly affected by the committees' actions.
- A6. Maintain an administrative manual that:
  - a. Defines the program's policies and procedures.
  - b. Requires their publication and systematic review.
- A7. Develop policies regarding:
  - a. Recruitment.
  - b. Admissions.
  - c. Grading.
  - d. Advertising.
  - e. Catalogs.
  - f. Publications.
  - g. Program length.
  - h. Tuition and fees.

A8. Publish materials that are:

- a. Timely.
- b. Accurate.
- A9. Publish materials that clearly:
  - a. Specify the program's current accreditation status.
  - b. Indicate its academic institutions and clinical sites.

- A10. Adopt a curriculum plan and/or program design that is within the construct of graduate education.
- \* A11. Demonstrate that financial resources are sufficient for the program to meet accreditation standards.
  - A12. Publish student and faculty handbooks that contain pertinent information about the program.
  - A13. Formulate faculty policies and procedures that set forth qualifications for:
    - a. Employment.

×

- b. Teaching responsibilities.
- c. Administrative responsibilities.
- d. Continuing education.
- A14. Identify admission criteria and design the curriculum to enable baccalaureateprepared nurses to benefit from the program.
- A15. Enroll only students who have met applicable admission criteria.
  - A16. Enroll only students who have at least 1 year of experience as a registered professional nurse during which they have had an opportunity to:
    - a. Develop as independent decision makers.
    - b. Demonstrate psychomotor skills.
    - c. Display the ability to interpret and use advanced monitoring techniques, based on a knowledge of physiological and pharmacological principles.
- \* A17. Maintain accurate cumulative records of educational activities.
- \* Failure to fully comply with one or more of these criteria is considered to be of critical concern in decisions regarding nurse anesthesia program accreditation.

## **Standard II: Institutional Support**

.•

\*

## A CONDUCTING INSTITUTION(S) MUST PROVIDE ADMINISTRATIVE AND LOGISTICAL SUPPORT TO FACILITATE EFFICIENT AND EFFECTIVE OPERATION OF THE PROGRAM'S EDUCATIONAL ACTIVITIES.

Specific criteria: Such a conducting institution is required to

- B1. Provide adequate resources to support the efficient and effective operation of educational activities in the following areas:
  - a. Finance.
  - b. Personnel.
  - c. Administration.
  - B2. Provide enough of the following material resources to support a quality educational program:
    - a. Facilities.
    - b. Equipment.
    - c. Supplies.
    - d. Other material resources.
  - B3. Provide student services that extend from recruitment to graduation.
  - B4. Provide comfortable classroom space that will accommodate the nurse anesthesia student body.
  - B5. Provide access to library facilities that provide students with information relating to the specialty of nurse anesthesia and other related disciplines at:
    - a. Primary academic and clinical sites.
    - b. Remote academic and clinical sites.
  - B6. Provide clinical sites where students can successfully complete the clinical curriculum.

- B7. Provide students with the following:
  - a. Financial aid services.
  - b. Health and counseling support services.
- B8. Provide adequate space for the CRNA program director and faculty to:
  - a. Complete administrative tasks.
  - b. Prepare classroom presentations.
  - c. Privately counsel students and faculty.
  - d. Safely store program records.
- B9. Maintain a didactic and clinical educational environment while students are enrolled that:
  - a. Meets accreditation standards.
  - b. Fulfills the program's mission over the accreditation period.
- \* Failure to fully comply with one or more of these criteria is considered to be of critical concern in decisions regarding nurse anesthesia program accreditation.

1994 Standards for Accreditation of Nurse Anesthesia Educational Programs with 1999 revisions

5

### Standard III: Curriculum and Instruction

THE CLINICAL AND DIDACTIC CURRICULUM AND INSTRUCTION OF A PROGRAM OF NURSE ANESTHESIA MUST REFLECT ACHIEVEMENT OF ITS ESTABLISHED EDUCATIONAL OUTCOMES AND COMPLIANCE WITH THE STANDARDS OF THE COUNCIL ON ACCREDITATION OF NURSE ANESTHESIA EDUCATIONAL PROGRAMS.

Specific criteria: Such a program is required to

- C1. Implement an educational philosophy that supports the philosophy of graduate education.
- C2. Maintain clearly specified educational objectives and outcome criteria consistent with its mission and appropriate in light of the degree it awards.
- C3. Design a curriculum that will award a master's or higher level degree to students who successfully complete graduation requirements.
- C4. Meet the following criteria:

\*

- a. Be a minimum of 24 months in length.
- b. Demonstrate that the course of study is long enough for students and faculty to achieve the program's goals and objectives.
- C5. Develop an academic calendar that reflects a curriculum with a sequential presentation of the didactic and clinical experiences.
- C6. Offer a didactic curriculum that focuses primarily on the profession of nurse anesthesia and is supported by instruction in:
  - a. Professional aspects of nurse anesthesia (45 hours).
  - b. Anatomy, physiology, and pathophysiology (135 hours).
  - c. Chemistry and physics (45 hours).
  - d. Pharmacology (90 hours).
  - e. Clinical correlation conferences (45 hours).
  - f. Basic and advanced principles of anesthesia, including equipment and technology (90 hours).

- C7. Measure the length of the program in terms of clock hours or credit hours.
- C8. Provide didactic instruction in:
  - a. Administration and management of current anesthetic agents and techniques.
  - b. Monitoring modalities.
  - c. Pain control.
- C9. Set forth the curriculum in a logical manner to provide continuity of experiences.
- C10. Utilize effective methods of instruction to implement course objectives.
- C11. Incorporate current trends in nurse anesthesia education and practice to broaden and enhance the quality of the curriculum.
- C12. Provide a clinical curriculum in which students administer a minimum of 450 case requirements for a wide variety of procedures (See APPENDIX).
- \* C13. Demonstrate that students' clinical participation in total perioperative anesthesia management:
  - a. Is unrestricted.
  - b. Offers opportunity to develop as competent, safe nurse anesthetists.
  - c. Is adequate to enable them to function in all types of practice settings.
- \* C14. Provide an anesthesia call experience.
- \* C15. Demonstrate that the practicum provides students with the depth and breadth of experiences necessary to achieve entry-level clinical competencies, as defined by the profession and employer.
- \* C16. Implement a curriculum in which each graduate attains the following outcome criteria:
  - a. Maintains patient safety.
  - b. Protects patients from iatrogenic complications.
  - c. Positions or supervises the positioning of patients to prevent injury.

7

<sup>1994</sup> Standards for Accreditation of Nurse Anesthesia Educational Programs with 1999 revisions

- d. Performs a preanesthetic assessment and formulates an anesthesia care plan for patients to whom they are assigned to administer anesthesia.
- e. Uses a variety of current anesthesia techniques, agents, adjunctive drugs, and equipment while providing anesthesia.
- f. Conducts a comprehensive and appropriate equipment check.
- g. Identifies and takes appropriate action when confronted with anesthetic equipment-related malfunctions.
- h. Administers general anesthesia to patients of all ages and physical conditions for a variety of surgical and medically related procedures.
- i. Provides anesthesia services to patients, including trauma and emergency cases.
- j. Administers and manages a variety of regional anesthetics.
   (Administration of regional anesthetics is strongly encouraged and will be required by the year 2000.)
- k. Interprets and utilizes data obtained from noninvasive and invasive monitoring modalities.
- 1. Calculates, initiates, and manages fluid and blood component therapy.
- m. Recognizes and appropriately responds to anesthetic complications that occur during the perioperative period.
- n. Utilizes universal precautions and appropriate infection control measures.
- o. Functions as a resource person for airway and ventilatory management of patients.
- p. Serves as a leader or member of a cardiopulmonary resuscitation team and possesses advanced cardiac life support (ACLS) recognition.
- q. Participates in quality management activities.
- r. Functions within appropriate legal requirements as a registered professional nurse, accepting responsibility and accountability for his or her practice.
- s. Demonstrates personal and professional integrity and the ability to interact on a professional level.
- C17. Maintain a curriculum that achieves the program's outcome criteria (to include the previous criterion).
- C18. Design, when appropriate, experimental/innovative curricula that enable graduates to attain certification in the specialty.
- Failure to fully comply with one or more of these criteria is considered to be of critical concern in decisions regarding nurse anesthesia program accreditation.

1994 Standards for Accreditation of Nurse Anesthesia Educational Programs with 1999 revisions

\*

### **Standard IV: Faculty**

## THE FACULTY OF A PROGRAM OF NURSE ANESTHESIA MUST BE RESPONSIBLE FOR DESIGNING AND IMPLEMENTING ITS EDUCATIONAL OFFERINGS WITHIN THE CONTEXT OF THE INSTITUTION'S MISSION, GOALS, RESOURCES, AND THE PROGRAM'S IDENTIFIED OUTCOME CRITERIA.

Specific criteria: Such a program is required to

- **D1**. Foster an educational environment that encourages:
  - a. Critical thinking.
  - b. An active exchange of ideas.
  - c. Mutual respect.
- D2. Employ a CRNA who holds an earned graduate degree from an accredited institution of higher education to assume the role of program director. This individual, by position and function, will have authority over the organization and administration of the program.
  - D3. Appoint a CRNA who is qualified by graduate degree, education, and experience to assist the CRNA program director as needed and to assume the director's responsibilities if required.
    - D4. Appoint an appropriate CRNA or anesthesiologist coordinator for each clinical site.
    - D5. Identify an appropriate liaison with each academic site when an affiliation or cooperative arrangement exists.
    - D6. Provide an academic and clinical faculty to implement a comprehensive and relevant nurse anesthesia curriculum. Members of such a faculty must be qualified in terms of:
      - a. Professional education.
      - b. Knowledge and credentials.
    - D7. Involve appropriate faculty in curriculum planning, implementation, evaluation, and identification of indicators to measure the program's success.

У

<sup>1994</sup> Standards for Accreditation of Nurse Anesthesia Educational Programs with 1999 revisions

- D8. Provide those faculty members who have a significant didactic or administrative commitment to the program with the resources needed to carry out assigned teaching and administrative responsibilities.
- D9. Restrict clinical supervision in nonanesthetic situations to credentialed experts:
  - a. In airway management and resuscitation.
  - b. Who assume responsibility for the student.
- D10. Restrict clinical supervision of students in anesthetic situations only to CRNAs and/or anesthesiologists with staff privileges who are immediately available in all clinical areas. (Instruction by graduate registered nurse anesthetists is never appropriate if they act as the sole agents responsible for the student.)
- D11. Coordinate the ratio of students to instructors in the clinical area based on:
  - a. The student's knowledge and ability.
  - b. The physical status of the patient.
  - c. The complexity of the anesthetic and/or surgical procedure.
  - d. The experience of the instructor.
- D12. At no time can the clinical supervision ratio exceed two students to one instructor.
- D13. Ensure that clinical CRNA faculty are:

\*

\*

\*

\*

- a. Currently licensed as registered professional nurses in one jurisdiction of the United States.
- b. Certified/recertified by the Council on Certification/Recertification of Nurse Anesthetists.
- D14. Maintain current curriculum vitae for the following individuals who have a significant involvement in the program:
  - a. Clinical faculty.
  - b. Didactic faculty.

D15. Provide evidence of faculty development activities.

\* Failure to fully comply with one or more of these criteria is considered to be of critical concern in decisions regarding nurse anesthesia program accreditation.

## **Standard V: Evaluation**

A PROGRAM OF NURSE ANESTHESIA, IN CONJUNCTION WITH ITS COMMUNITY OF INTEREST, MUST PERFORM AN ONGOING ASSESSMENT TO DETERMINE ITS INTEGRITY AND EDUCATIONAL EFFECTIVENESS. THIS PROCESS SHOULD ASSESS NOT ONLY THE PROGRAM'S PRESENT STATUS BUT DETERMINE ITS FUTURE GOALS FOR IMPROVEMENT AND ITS METHODS OF ACHIEVING THEM.

Specific criteria: Such a program is required to

- E1. Provide for periodic review by external agencies.
- E2. Evaluate the relevance to anesthesia practice of the program's:
  - a. Mission statement.
  - b. Educational purposes and outcomes.
  - c. Curriculum plan.
  - d. Faculty.
  - e. Methods of instruction.
- E3. Monitor and evaluate the following aspects of the program on a continuing basis and use such an evaluation to correct deficiencies:
  - a. The curriculum.
  - b. Its indicators of success.
- \* E4. Use a variety of indicators to evaluate the following as students progress through the program:
  - a. Clinical skills.
  - b. Cognitive skills.
  - E5. Evaluate administrative policies and procedures to ensure that:
    - a. They are current.
    - b. They are relevant.
    - c. They are used as a basis for making appropriate changes.

- E6. Require students to periodically complete written evaluations of:
  - a. The faculty.
  - b. The program.
- \* E7. Require faculty members to complete formative and summative evaluations of each student's performance in the following areas:
  - a. Clinical.
  - b. Didactic.
  - E8. Provide for periodic self-evaluations of the following:
    - a. Students.
    - b. Faculty.
  - E9. Provide for periodic faculty evaluations by superior(s).
  - E10. Conduct, on a regular basis, evaluations of the following sites:
    - a. Academic.
    - b. Clinical.
  - E11. Evaluate the following in relation to career opportunities and credentials earned:
    - a. Program length.
    - b. Tuition and fees.
  - E12. Use evaluative criteria to assess the adequacy of current resources to achieve the program's purposes and outcomes.
- \* E13. Resolve previously identified areas of partial compliance or noncompliance with the standards.
- \* E14. Identify previous areas of partial compliance or noncompliance with the standards:
  - a. Monitor identified standards.
  - b. Take corrective action if they recur.

1994 Standards for Accreditation of Nurse Anesthesia Educational Programs with 1999 revisions

13

- E15. Assess the following:
  - a. The program's responsibility, as prescribed by law.
  - b. Plans for corrective action, as necessary.
- E16. Review default rates in the student loan programs under Title IV of the Higher Education Act, based on the most recent data provided by the U.S. Secretary of Education.
- E17. Track the following indices to make curricular adjustments and to determine future enrollment:
  - a. Certification examination pass rates.
  - b. Course completion rates.
  - c. Job placement rates.
- E18. Monitor the program's compliance with the institution's responsibilities under Title IV, including:
  - a. Results of financial or compliance audits and program reviews.
  - b. Other information that the U. S. Secretary of Education may request.

Failure to fully comply with one or more of these criteria is considered to be of critical concern in decisions regarding nurse anesthesia program accreditation.

\*

### **Standard VI: Ethics**

# THE PROGRAM OF NURSE ANESTHESIA MUST BE GOVERNED BY ETHICAL AND MORAL STANDARDS.

Specific criteria: Such a program is required to

- F1. Take the following actions:
  - a. Develop and implement guidelines of ethical conduct.
  - b. Monitor compliance with ethical guidelines.
- F2. Identify, publish, and distribute the rights and responsibilities of the following entities as they relate to the program:
  - a. Patients.
  - b. Applicants.
  - c. Students.
  - d. Faculty.
  - e. Conducting and affiliating institutions.
  - f. The accrediting agency.
- **\*** F3. Limit students' commitment to the program to a reasonable number of hours so as to:
  - a. Ensure patient safety.
  - b. Promote effective student learning.
- \* F4. Forbid the employment of nurse anesthesia students as nurse anesthetists by title or function.
- \* F5. Develop and implement the following policies and procedures that:
  - a. Prohibit the program, its parent, or affiliating institutions from knowingly distorting its accreditation status.
  - b. Prevent the program, its parent, or affiliating institutions from misrepresenting its accreditation status.

- F6. Maintain appropriate fair and equitable standards, procedures, and rules to address grievances and hear appeals.
- F7. Provide evidence that students are made aware of their ethical responsibility regarding financial assistance they receive from public or private sources.
- F8. Define and use policies and procedures that do not discriminate on the basis of any of the following:
  - a. Race.

\*

- b. Age.
- c. Religion.
- d. Gender.
- e. National origin.
- f. Marital status.
- g. Disability.
- h. Any other factor protected by law.
- \* Failure to fully comply with one or more of these criteria is considered to be of critical concern in decisions regarding nurse anesthesia program accreditation.

### **APPENDIX B**

### COUNCIL ON ACCREDITATION OF NURSE ANESTHESIA EDUCATIONAL PROGRAMS

### LIST OF ACCREDITED PROGRAMS



Council on Accreditation of Nurse Anesthesia Educational Programs

List of Recognized Educational Programs/w/Revisions Current Status as of December 1998

> 222 South Prospect Avenue, Suite 304 Park Ridge, Illinois 60068-4010 (847) 692-7050

Cleveland-Cleveland Clinic Foundation/Frances Payne Bolton School of Nursing/Case Western Reserve University, School of Nurse Anesthesia, 9500 Euclid Ave. E-31, 44195-5154; Paul R. Blakeley, CRNA, MSN; Arthur Barnes, MD; (216) 444-6547; (800) 223-2273, Ext. 46547; Fax: (216) 444-9247; E-mail: blakelp@cesmtp.ccf.org L28; SD AUG DLR 04/1997 NRD 04/2003 MS in Nursing

Cleveland-The Mt. Sinai Medical Center/Frances Payne Bolton School of Nursing/Case Western Reserve University, One Mt. Sinai Drive, 44106-4198; Jack R. Kless, CRNA, MSN, MA; Irving A. Hirsch, MD; (216) 421-3914; Fax: (216) 421-5769; E-mail: mmbuky@msn.com L28; SD AUG DLR 10/1994 NRD 10/2000 MSN

**@Wright-Patterson Air Force Base**-United States Air Force Graduate Program of Nurse Anesthesia, 74th Medical Group/SGOSA, 4881 Sugar Maple Drive, 45433-5529; LTC Judy L. Ikirt, CRNA, MSN; (937) 257-0596; Fax: (937) 257-1235; E-mail: jikirt@usuhs.mil L27; SD AUG DLR 05/1995 Master of Health Science in Anesthesia Nursing Voluntary Closure 12/31/98

Youngstown-St. Elizabeth Health Center School for Nurse Anesthetists, Inc., 1044 Belmont Avenue, 44501-1790; Beverly A. Rodgers, CRNA, MEd; Ronald Mullis, MD; (330) 480-3444; Fax: (330) 480-3439; E-mail: brodgers@cboss.com SD AUG DLR 05/1997 NRD 05/2003 Master of Science in Health Science

### Pennsylvania

Danville-Geisinger Medical Center School of Nurse Anesthesia, 100 North Academy Avenue, 17822-2025; Arthur F. Richer, CRNA, MS; (717) 271-6587; (800) 441-6211, Ext. 6587; Fax: (717) 271-6762; E-mail: aricher@psghs.edu SD SEP DLR 04/1992 Revocation 9/30/98 Erie-Hamot Medical Center School of Anesthesia Gannon University, 201 State Street, 16550; K. Stephen Anderson, CRNA, MEd; Valerie Y. Hoover, BS; (814) 877-2938; (800) 937-9133, Ext. 2938; Fax: (814) 877-7049; E-mail: steve.anderson@hamot.org L28; SD JAN AUG DLR 04/1994 NRD 04/2000 Master of Science in Nursing

Greensburg-Westmoreland-Latrobe Hospitals School of Anesthesia/LaRoche College, 532 West Pittsburgh Street, 15601; Howard F. Armour, CRNA, MS; J.L. Chang, MD; (724) 832-4144; Fax: (724) 832-4164; E-mail: bighoward@aol.com L28; SD SEP DLR 10/1994 NRD 10/2000 Master of Science in Health Science

Natrona Heights-Allegheny Valley Hospital/La Roche College School of Nurse Anesthesia, 1301 Carlisle Street, 15065-1192; Deborah A. Davison, CRNA, MS; Joseph R. Janik, MD, PhD; (724) 226-7013; Fax: (724) 226-7199 SD AUG DLR 05/1998 NRD 05/2004 MS in Health Sciences

Norristown-Frank J. Tometta School of Anesthesia at Montgomery Hospital, 1301 Powell Street, 19404-0992; Michael Kost, CRNA, MS, MSN; (610) 270-2139; Fax: (610) 270-2298; E-mail: mbruno@mont.hosp.com L25; SD SEP DLR 05/1997 NRD 05/2003 MS in anesthesia

Philadelphia-MCP Hahnemann University Nurse Anesthesia Program, 230 North Broad Street, 19102; Michael J. Booth, CRNA, MA, MSN; Gloria Donnelly, PhD, RN, FAAN; (215) 762-4309; Fax: (215) 762-1259; E-mail: booth@auhs.edu L27; SD JAN DLR 10/1993 NRD 10/1999 Masters in Nursing (Nurse Anesthesia Tract)

CODE: L — length of course in months. All schools are 24 months unless otherwise indicated, for example, L27. SD — starting dates — months are indicated. If no month is given, write to school. DLR — date of last review by the Council. NRD — next review date by the Council. All programs required to offer graduate degrees as of January 1, 1998. @ — indicates applicants accepted only from Commissioned Nurse Corps Officers of their respective branch of the Federal Uniformed Services. 12/98

Philadelphia-Nazareth Hospital School of Nurse Anesthesiology, 2601 Holme Avenue, 19152-2096; William J. Discavage, CRNA, MS; (215) 335-6217; Fax: (215) 335-6668 L27; SD SEP DLR 09/1997 NRD 09/2003 MS in Nurse Anesthesia

Philadelphia-Pennsylvania Hospital School of Nurse Anesthesia, 800 Spruce Street, 19107-6192; Kathleen Kinslow, CRNA, EdD; (215) 829-3320; Fax: (215) 829-8757; E-mail: rokumo@pahosp.com L27; SD SEP DLR 05/1998 NRD 05/2004 MSN in nursing

Pittsburgh-St. Francis Medical Center School of Anesthesia/LaRoche College, 400 45th Street, 15201-1198; Arlene S. Loeffler, CRNA, PhD; Anand Tewari, MD; (412) 622-4369; Fax: (412) 688-3883; E-mail: aloeffler@compuserve.com SD AUG DLR 05/1995 NRD 05/2001 Master in Health Science

Pittsburgh-University of Pittsburgh School of Nursing, Nurse Anesthesia Program, 315 Victoria Building, 3500 Victoria Street, 15261-2404; John M. O'-Donnell, CRNA, MSN; (412) 624-4860; Fax: (412) 624-2401; E-mail: eir+@pitt.edu L28; SD AUG

DLR 10/1993 NRD 10/1999

Masters of Science in Nursing, Anesthesia Concentration

Washington-The Washington Hospital School of Anesthesia for Nurses, 155 Wilson Ave., 15301-3398; Susan J. Coyne, CRNA, MEd; James Massucci, MD; (724) 223-3134; Fax: (724) 229-2031 L29; SD JAN DLR 04/1994 NRD 04/2000 MS in Biology

Wilkes-Barre-Wyoming Valley Health Care System/Wilkes University School of Nurse Anesthesia, 575 North River Street, 18764-0001; Eileen Y. Evanina, CRNA, MS; Joseph J. Filler, MD; (717) 552-1867; Fax: (717) 552-1856; E-mail: wvans@epix.net L26; SD JUL DLR 10/1995 NRD 10/2001

Master of Science with a Major in Nursing

Wynnewood-Lankenau Hospital School of Anesthesia, 100 Lancaster Ave., 19096-3404; Bette Wildgust, CRNA, MS, MSN; (610) 645-2145; Fax: (610) 645-3411; E-mail: wildgustb@mlhs.org L27; SD AUG DLR 10/1994 NRD 10/2000 MSN

### **Puerto Rico**

Arecibo-InterAmerican University of Puerto Rico Master of Science in Anesthesia, P.O. Box 4050, 00614-4050; Sister Mary Arthur Schramm, CRNA, PhD; (787) 878-5475, Ext. 2503; Fax: (787) 880-1624; E-mail: marthur@arecibo.inter.edu SD AUG DLR 10/1995 NRD 10/2000 Masters of Science in Anesthesia

San Juan-University of Puerto Rico, School of Nursing, Medical Sciences Campus, P.O. Box 365067, 00936-5067; Crucita Mattei, CRNA, MSN; (787) 758-2525, Ext. 3104; Fax: (787) 281-0721; E-mail: fr-guzman@rcma.upr.cui.edu L25; SD AUG DLR 05/1995 NRD 05/2001 MSN-with Specialty in Anesthesia

### **Rhode Island**

North Providence-St. Joseph Hospital School of Anesthesia for Nurses, 200 High Service Ave., 02904-5113; Lucille S. Buono, CRNA, MEd; Julius C. Miglior, MD; (401) 456-3639; Fax: (401) 752-8140; E-mail: saintjoes@aol.com L28; SD JUL DLR 04/1992 NRD 04/1998 MS in Nurse Anesthesia

Pawtucket-Memorial Hospital of Rhode Island School of Nurse Anesthesia, 111 Brewster Street, 02860; Mark A. Foster, CRNA, MA; Fred T. Perry, MD; (401) 729-2000; Fax: (401) 729-3476 L29; SD MAY DLR 05/1995 NRD 05/2001 MS Biology/Anesthesia

CODE: L — length of course in months. All schools are 24 months unless otherwise indicated, for example, L27. SD — starting dates — months are indicated. If no month is given, write to school. DLR — date of last review by the Council. NRD — next review date by the Council. All programs required to offer graduate degrees as of January 1, 1998. @ — indicates applicants accepted only from Commissioned Nurse Corps Officers of their respective branch of the Federal Uniformed Services. 12/98

### **APPENDIX C**

### AMERICAN ASSOCIATION OF NURSE ANESTHETISTS

SCOPE AND STANDARDS FOR NURSE ANESTHESIA PRACTICE



## Scope and Standards for Nurse Anesthesia Practice

American Association of Nurse Anesthetists 222 South Prospect Avenue Park Ridge, Illinois 60068

Copyright@1996 American Association of Nurse Anesthetists

## **Scope and Standards for Nurse Anesthesia Practice**

The AANA Scope and Standards for Nurse Anesthesia Practice offer guidance for Certified Registered Nurse Anesthetists (CRNAs) and health care institutions regarding the scope of nurse anesthesia practice. The scope of practice of the Certified Registered Nurse Anesthetist addresses the responsibilities associated with anesthesia practice and is performed in collaboration with other qualified health care providers. Collaboration is a process which involves two or more parties working together, each contributing his or her respective area of expertise. CRNAs are responsible for the quality of services they render.

### **Scope of Practice**

The practice of anesthesia is a recognized specialty in both nursing and medicine. Anesthesiology is the art and science of rendering a patient insensible to pain by the administration of anesthetic agents and related drugs and procedures. Anesthesia and anesthesia-related care represents those services which anesthesia professionals provide upon request, assignment, and referral by the patient's physician or other health care provider authorized by law, most often to facilitate diagnostic, therapeutic and surgical procedures. In other instances, the referral or request for consultation or assistance may be for management of pain associated with obstetrical labor and delivery, management of acute and chronic ventilatory problems, or the management of acute and chronic pain through the performance of selected diagnostic and therapeutic blocks or other forms of pain management. CRNA s practice according to their expertise, state statutes and regulations, and institutional policy.

CRNA scope of practice includes, but is not limited to the following:

- Performing and documenting a preanesthetic assessment and evaluation of the patient, including requesting consultations and diagnostic studies; selecting, obtaining, ordering, and administering preanesthetic medications and fluids; and obtaining informed consent for anesthesia.
- 2. Developing and implementing an anesthetic plan.
- 3. Initiating the anesthetic technique which may include: general, regional, local, and sedation.
- Selecting, applying, and inserting appropriate non-invasive and invasive monitoring modalities for continuous evaluation of the patient's physical status.
- 5. Selecting, obtaining, and administering the anesthetics, adjuvant and accessory drugs, and fluids necessary to manage the anesthetic.
- Managing a patient's airway and pulmonary status using current practice modalities.

- 7. Facilitating emergence and recovery from anesthesia by selecting, obtaining, ordering and administering medications, fluids, and ventilatory support.
- 8. Discharging the patient from a postanesthesia care area and providing postanesthesia follow-up evaluation and care.
- 9. Implementing acute and chronic pain management modalities.
- Responding to emergency situations by providing airway management, administration of emergency fluids and drugs, and using basic or advanced cardiac life support techniques.

Additional nurse anesthesia responsibilities which are within the expertise of the individual CRNA include:

- Administration/management: scheduling, material and supply management, supervision of staff, students or ancillary personnel, development of policies and procedures, fiscal management, performance evaluations, preventative maintenance, billing and data management.
- Quality assessment: data collection, reporting mechanism, trending, compliance, committee meetings, departmental review, problem focused studies, problem solving, interventions, documents and process oversight.
- Educational: clinical and didactic teaching, BCLS/ ACLS instruction, inservice commitment, EMT training, supervision of residents, and facility continuing education.
- Research: conducting and participating in departmental, hospital-wide, and university-sponsored research projects.
- Committee appointments: assignment to committees, committee responsibilities, and co-ordination of committee activities.
- 6. Interdepartmental liaison: interface with other depart-

ments such as nursing, surgery, obstetrics, postanesthesia care units (PACU), outpatient surgery, admissions, administration, laboratory, pharmacy, etc.

 Clinical/administrative oversight of other departments: respiratory therapy, PACU, operating room, surgical intensive care unit (SICU), pain clinics, etc.

The functions listed above are a summary of CRNA clinical practice and are not intended to be all-inclusive. A more specific list of CRNA functions and practice parameters is detailed in the AANA Guidelines for Clinical Privileges.

CRNA's strive for professional excellence by demonstrating competence and commitment to the clinical, educational, consultative, research, and administrative practice in the specialty of anesthesia. CRNAs should actively participate in the development of departmental policies and guidelines, performance appraisals, peer reviews, clinical and administrative conferences, and serve on health care facility committees. In addition to these activities, CRNAs should assume a leadership role in the evaluation of the quality of anesthesia care provided throughout the facility and the community.

The scope of practice of the CRNA is also the scope of practice of nurse anesthetists who have graduated within the past 24 months from a nurse anesthesia educational program, accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs, but have not yet passed their initial certification examination. Students enrolled in nurse anesthesia educational programs accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs practice pursuant to the Council's Standards and Guidelines.

### **Standards for Nurse Anesthesia Practice**

### Introduction

These standards are intended to:

- Assist the profession in evaluating the quality of care provided by its practitioners.
- Provide a common base for practitioners to use in their development of a quality practice.
- 3. Assist the public in understanding what to expect from the practitioner.
- 4. Support and preserve the basic rights of the patient.

These standards apply to all anesthetizing locations. While the standards are intended to encourage high quality patient care, they cannot assure specific outcomes.

### Standard I.

### Perform a thorough and complete preanesthesia assessment.

### Interpretation:

The responsibility for the care of the patient begins with the preanesthetic assessment. Except in emergency situations, the CRNA has an obligation to complete a thorough evaluation and determine that relevant tests have been obtained and reviewed.

### Standard II.

### Obtain informed consent for the planned anesthetic intervention from the patient or legal guardian.

### Interpretation:

The CRNA shall obtain or verify that an informed consent has been obtained by a qualified provider. Discuss anesthetic options and risks with the patient and/or legal guardian in language the patient and/or legal guardian can understand. Document in the patient's medical record that informed consent was obtained.

### Standard III.

### Formulate a patient-specific plan for anesthesia care.

### Interpretation:

The plan of care developed by the CRNA is based upon comprehensive patient assessment, problem analysis, anticipated surgical or therapeutic procedure, patient and surgeon preferences, and current anesthesia principles.

### Standard IV.

Implement and adjust the anesthesia care plan based

#### \*Adopted 1989 to become effective January 1, 1990 Revised 1992, 1996

### on the patient's physiological response.

### Interpretation:

The CRNA shall induce and maintain anesthesia at required levels. The CRNA shall continuously assess the patient's response to the anesthetic and/or surgical intervention and intervene as required to maintain the patient in a satisfactory physiologic condition.

### Standard V.\*

Monitor the patient's physiologic condition as appropriate for the type of anesthesia and specific patient needs.

- A. Monitor ventilation continuously. Verify intubation of the trachea by auscultation, chest excursion, and confirmation of carbon dioxide in the expired gas. Continuously monitor end-tidal carbon dioxide during controlled or assisted ventilation. Use spirometry and ventilatory pressure monitors.
- B. Monitor oxygenation continuously by clinical observation, pulse oximetry, and if indicated, arterial blood gas analysis.
- C. Monitor cardiovascular status continuously via electrocardiogram and heart sounds. Record blood pressure and heart rate at least every five minutes.
- D. Monitor body temperature continuously on all pediatric patients receiving general anesthesia and when indicated, on all other patients.
- E. Monitor neuromuscular function and status when neuromuscular blocking agents are administered.
- F. Monitor and assess the patient's positioning and protective measures. (Effective April 6, 1998).

### Interpretation:

Continuous clinical observation and vigilance are the basis of safe anesthesia care. The standard applies to all patients receiving anesthesia care and may be exceeded at any time at the discretion of the CRNA. Unless otherwise stipulated in the standards a means to monitor and evaluate the patient's status shall be immediately available for all patients. As new patient safety technologies evolve, integration into the current anesthesia practice shall be considered. The omission of any monitoring standards shall be documented and the reason stated on the patient's anesthesia record. The CRNA shall be in constant attendance of the patient until the responsibility for care has been accepted by another qualified health care provider.

### Standard VI.

There shall be complete, accurate, and timely documentation of pertinent information on the patient's medical record.

### Interpretation:

Document all anesthetic interventions and patient responses. Accurate documentation facilitates comprehensive patient care, provides information for retrospective review and research data, and establishes a medical-legal record.

### Standard VII.

Transfer the responsibility for care of the patient to other qualified providers in a manner which assures continuity of care and patient safety.

### Interpretation:

The CRNA shall assess the patient's status and determine when it is safe to transfer the responsibility of care to other qualified providers. The CRNA shall accurately report the patient's condition and all essential information to the provider assuming responsibility for the patient.

### Standard VIII.

Adhere to appropriate safety precautions, as established within the institution, to minimize the risks of fire, explosion, electrical shock and equipment malfunction. Document on the patient's medical record that the anesthesia machine and equipment were checked.

### Interpretation:

Prior to use, the CRNA shall inspect the anesthesia machine and monitors according to established guidelines. The CRNA shall check the readiness, availability, cleanliness, and working condition of all equipment to be utilized in the administration of the anesthesia care. When the patient is ventilated by an automatic mechanical ventilator, monitor the integrity of the breathing system with a device capable of detecting a disconnection by emitting an audible alarm. Monitor oxygen concentration continuously with an oxygen supply failure alarm system,

### Standard IX.

Precautions shall be taken to minimize the risk of infection to the patient, the CRNA, and other health care providers.

#### Interpretation:

Written policies and procedures in infection control shall be developed for personnel and equipment.

### Standard X.

### Anesthesia care shall be assessed to assure its quality and contribution to positive patient outcomes.

#### Interpretation:

The CRNA shall participate in the ongoing review and evaluation of the quality and appropriateness of anesthesia care. Evaluation shall be performed based upon appropriate outcome criteria and reviewed on an ongoing basis. The CRNA shall participate in a continual process of self evaluation and strive to incorporate new techniques and knowledge into practice.

### Standard XI.

## The CRNA shall respect and maintain the basic rights of patients.

#### Interpretation:

The CRNA shall support and preserve the rights of patients to personal dignity and ethical norms of practice.

### **APPENDIX D**

### AMERICAN ASSOCIATION OF NURSE ANESTHETISTS

### QUALIFICATIONS AND CAPABILITIES OF THE CERTIFIED REGISTERED NURSE ANESTHETIST



## Qualifications and Capabilities of the Certified Registered Nurse Anesthetist

#### Introduction

This document has been prepared by the American Association of Nurse Anesthetists (AANA) to provide information about the qualifications and capabilities of Certified Registered Nurse Anesthetists (CRNAs). The practice of anesthesia is a recognized specialty within the profession of nursing. As one of the first nursing specialty groups, CRNAs have a longstanding commitment to high standards in a demanding field. As independently licensed health professionals, CRNAs are responsible and accountable for their practice.

In order to be a Certified Registered Nurse Anesthetist one must:

- 1. Graduate from an approved school of nursing and hold current state licensure as a registered nurse.
- 2. Graduate from a nurse anesthesia educational program accredited by the AANA Council on Accreditation of Nurse Anesthesia Educational Programs or its predecessor.
- 3. Successfully complete the certification examination administered by the AANA Council on Certification of Nurse Anesthetists or its predecessor.
- 4. Comply with criteria for biennial recertification, as defined by the AANA Council on Recertification of Nurse Anesthetists. These criteria include evidence of (a) current licensure as a registered nurse, (b) active practice as a CRNA, (c) appropriate continuing education and (d) verification of the absence of mental, physical or other problems which could interfere with the practice of anesthesia.

Since its organization in 1931, the AANA has placed its responsibilities to the public above or equal to its responsibilities to its membership. The association has produced educational and practice standards, implemented a certification process for nurse anesthetists (1945) and developed an accreditation program for nurse anesthesia education (1952). It was a leader in forming multidisciplinary councils with public representation to fulfill the profession's autonomous credentialing functions.

Over 24,000 CRNAs provide quality anesthesia care to more than 65% of all patients undergoing surgical or other medical interventions which necessitate the services of an anesthetist. In addition, CRNAs administer anesthesia for all types of surgical cases, from the simplest to the most complex. CRNAs are the sole anesthesia providers in 85% of rural hospitals in the United States. CRNAs work in every setting in which anesthesia is delivered: traditional hospital surgical suites and obstetrical delivery rooms, ambulatory surgical centers and the offices of dentists, podiatrists, and plastic surgeons.

#### **Education of Nurse Anesthetists**

Nurse anesthesia educational programs are a minimum of 24 months in length, and exist either in a certificate or master's degree framework. Currently, more than half of the programs are at the master's level. These programs provide an educationally sound curriculum that combines theory and clinical practice. Students are given the opportunity to integrate classroom content with direct application of state-of-the-art techniques in the provision of anesthesia care to all patient populations in all risk categories. The education of nurse anesthetists also includes experiences in the management of respiratory care and emergency resuscitation of patients in intensive care units, postanesthesia care units and other acute care areas.

#### Academic Curriculum Requirements

Minimum academic curriculum requirements for nurse anesthesia programs are as follows:

Professional Aspects of Nurse Anesthesia Practice	45 hours
Advanced Anatomy, Physiology and Pathophysiology	135 hours
Chemistry and Physics Related to Anesthesia	45 hours
Advanced Pharmacology	90 hours
Principles of Anesthesia Practice	90 hours
Clinical and Literature Review Conferences	45 hours

Most programs exceed these minimum requirements. In addition, many require study in methods of scientific inquiry and statistics, as well as active participation in student-generated and faculty-sponsored research.

#### **Clinical Curriculum Requirements**

The clinical component of the nurse anesthesia educational program mandates that each student administer a minimum of 450 anesthetics to patients, representing at least 800 hours of anesthesia time. To meet this requirement, students provide these services under the supervision of qualified clinical instructors, which include CRNAs or anesthesiologists.

These requirements further specify that each student's anesthesia experiences will include (1) the major anesthetic techniques and monitoring modalities in current use, (2) patients of all ages from birth through senescence and (3) patients whose concomitant medical interventions are representative of the broad spectrum of medical specialty procedures utilized today. Most accredited nurse anesthesia educational programs far exceed these minimum requirements.

#### **Admission Prerequisites**

Admission to nurse anesthesia educational programs requires graduation from an approved school of nursing, a baccalaureate in nursing or other appropriate pachelor's degree, current licensure as a registered nurse and a minimum of 1 year of professional nursing experience in an acute care setting.

Most applicants have acquired extensive clinical backgrounds as professional nurses in such settings as coronary, respiratory, postanesthesia and surgical intensive care units, emergency rooms or as members of a trauma or cardiac surgical team. As a result, applicants to nurse anesthesia programs have demonstrated a high level of clinical competence as licensed professional nurses by incorporating theory into clinical decisionmaking and clinical skills into the provision of direct patient care.

#### **Total Educational Sequence**

The current educational sequence for CRNAs is as ollows: A bachelor's degree in nursing or other appropriate degree, licensure as a registered nurse, a ninimum of 1 year of professional nursing experience in an acute care setting and a minimum of 24 months in an accredited nurse anesthesia educational program. Thus he minimum time sequence required to qualify as a CRNA is 7 years. The extension of some programs berond 24 months in length relates principally to the graduate academic requirements for research and completion of a project or thesis.

#### Faculty

Faculty for nurse anesthesia educational programs are multidisciplinary in character and are composed of CRNAs, anesthesiologists, graduate nursing faculty, specialty physicians and other graduate faculty in basc, medical and social sciences. Each faculty member nust be qualified by education and experience to meet specific educational objectives. CRNA program directors must possess a minimum of a master's degree.

A large number of CRNA faculty members have earned doctoral degrees in nursing, basic sciences, education or administration. The faculty regularly participate in institutional governing mechanisms, research and inter- and intradisciplinary academic affairs. In addition to their responsibilities for nurse anesthesia students, CRNA faculty members take part in the academic and clinical instruction of students from a variety of disciplines, including physician and dental trainees.

#### Educational Standards and Program Development

The AANA Education Committee reviews and recommends standards for education of nurse anesthetists to the AANA Council on Accreditation of Nurse Anesthesia Educational Programs. The committee facilitates the growth of existing and the start of new nurse anesthesia educational programs through; (1) the provision of educational consulting services, (2) the program agenda of the AANA Assembly of School Faculty and (3) sponsorship of faculty development workshop.

On a national level, the AANA Assembly of School Faculty convenes twice a year to discuss educational issues. This collegial body, composed of the community of interest—CRNAs, anesthesiologists, educators, administrators and representatives from the AANA and AANA councils on accreditation, certification, recertification and public interest—assures participation and input by all individuals concerned with nurse anesthesia education.

#### **Accreditation of Educational Programs**

The AANA Council on Accreditation of Nurse Anesthesia Educational Programs is recognized by the United States Department of Education and the Council on Post-Secondary Education Accreditation (COPA) as the accrediting agency for nurse anesthesia programs. This council provides for systematic self-study and on-site evaluation of all nurse anesthesia educational programs. The Council on Accreditation publishes a list of accredited nurse anesthesia educational programs twice a year.

#### **Certification of Nurse Anesthetists**

The AANA Council on Certification of Nurse Anesthetists is the certifying body that conducts the national certification examination. Each graduate of a nurse anesthesia program must successfully pass the national certification examination before he or she can be certified as a CRNA.

#### **Recertification of Nurse Anesthetists**

For recertification, mandatory continuing education (CE) is required of CRNAs on a biennial basis. The recertification program is administered by the AANA Council on Recertification of Nurse Anesthetists. This council reviews CRNA qualifications with reference to (1) current licensure as a registered nurse, (2) active practice as a CRNA, (3) continuing education (40 contact hours of approved CE) and (4) verification of the absence of mental, physical or other problems which could interfere with the practice of anesthesia.

#### **Clinical Practice**

CRNAs practice according to their expertise, state statutes or regulations, and institutional policy. CRNAs administer anesthesia and anesthesia-related care in four general categories: (1) preanesthetic preparation and evaluation; (2) anesthesia induction, maintenance and emergence; (3) postanesthesia care; and (4) perianesthetic and clinical support functions. The CRNA scope of practice includes, but is not limited to, the following:

(a) Performing and documenting a preanesthetic assessment and evaluation of the patient, including requesting consultations and diagnostic studies; selecting, obtaining, ordering, or administering preanesthetic medications and fluids; and obtaining informed consent for anesthesia.

the second

(b) Developing and implementing an anesthetic plan.

(c) Selecting and initiating the planned anesthetic technique which may include: general, regional, and local anesthesia and intravenous sedation.

(d) Selecting, obtaining, or administering the anesthetics, adjuvant drugs, accessory drugs, and fluids necessary to manage the anesthetic, to maintain the patient's physiologic homeostasis, and to correct abnormal responses to the anesthesia or surgery.

(e) Selecting, applying, or inserting appropriate noninvasive and invasive monitoring modalities for collecting and interpreting patient physiological data.

(f) Managing a patient's airway and pulmonary status using endotracheal intubation, mechanical ventilation, pharmacological support, respiratory therapy, or extubation.

(g) Managing emergence and recovery from anesthesia by selecting, obtaining, ordering, or administering medications, fluids, or ventilatory support in order to maintain homeostasis, to provide relief from pain and anesthesia side effects, or to prevent or manage complications.

(h) Releasing or discharging patients from a postanesthesia care area, and providing postanesthesia follow-up evaluation and care related to anesthesia side effects or complications.

(i) Ordering, initiating or modifying pain relief therapy, through the utilization of drugs, regional anesthetic techniques, or other accepted pain relief modalities, including labor epidural analgesia.

(j) Responding to emergency situations by providing airway management, administration of emergency fluids or drugs, or using basic or advanced cardiac life support techniques.

(k) Additional nurse anesthesia responsibilities which are within the expertise of the individual CRNA.

The functions listed above are a summary of CRNA practice and are not intended to be all-inclusive. A more specific list of CRNA functions and practice parameters is detailed in the AANA Guidelines and Standards for Nurse Anesthesia Practice.

#### Clinical Support Services Provided Outside of Operating Room

CRNAs also provide clinical support services outside of the operating room upon request or referral. These services include providing consultation and implementation of respiratory and ventilatory care, identiying and managing emergency situations, including initiating or participating in cardiopulmonary resuscitation that involves airway maintenance, ventilation, tracheal intubation, pharamaologic, cardiopulmonary support, and management of blood, fluid, electrolyte and acid-base balance.

#### **Administrative and other Professional Roles**

Current data indicate that more than 6,000 CRNAs perform administrative functions for departments of anesthesia. The services provided by these department directors and managers are extremely important to the overall functioning of an anesthesia department and impact directly the efficiency and quality of service provided. These functions include personnel and resource management, financial management, quality assurance, risk management and continuing education.

CRNAs serve on a variety of institutional committees and participate as instructors in staff development and continuing education programs for both professional and non-professional staff members.

CRNAs hold staff and committee appointments with state and federal governmental agencies such as state boards of nursing and the U.S. Food and Drug Administration. CRNAs are also actively involved in professional and standard setting organizations such as the National Fire Protection Association and the American Society for Testing and Materials.

#### Research

Nurse anesthetists have been involved as investigators, collaborators, consultants, assistants, interpreters and users of research findings since the turn of the century. Early studies usually were confined to descriptive methodologies, with the findings published in medical or nursing journals. In more recent years, many CRNAs have utilized experimental designs and expanded their research activities into the area of basic science. The movement of nurse anesthesia educational programs into graduate educational frameworks has allowed students to graduate with basic skills for undertaking research. In addition, there is a growing number of CRNA faculty, credentialed at the graduate level, who regularly sponsor and consult in research endeavors and act as project directors or prinicpal investigator for funded research in university settings.

At the AANA Annual Meeting, educational sessions are conducted in research methodology and grantsmanship. The AANA also sponsors a "Research in Action" session at its annual meeting for presentation of research papers. In addition, CRNAs have reported on their research at a variety of national and international meetings, including those sponsored by nurses, physicians, physiologists and pharmacologists. Research by CRNAs has been funded by private and governmental grants, as well as from the AANA Education and Research Foundation.

#### **Publications**

CRNAs have authored numerous book chapters, monographs and articles on clinical, educational and research subjects in a variety of refereed professional publications such as the AANA Journal, CRNA: The Clinical Forum for Nurse Anesthetists, Nurse Anesthesia, Anesthesiology, Anesthesia and Analgesia, Journal of the American Society of Regional Anesthesia, Journal of the American Medical Association, Nursing Research and Hospitals. The first noted articles by nurse anesthetists appeared in the Northwestern Lancet in 1899, the St. Paul Medical Journal in 1900 and in Surgery, Gynecology and Obstetrics in 1906.

#### Subspecialization

Some CRNAs have chosen to specialize in pediatrics, obstetrics, cardiovascular, plastic, dental or neurosurgical anesthesia. Others also hold credentials in fields such as critical care nursing and respiratory care. In addition to their membership in the AANA, many CRNAs also belong to in a variety of anesthesia and subspecialty organizations, including the following:

- International Anesthesia Research Society
- American Society of Regional Anesthesia
- American Association of Critical Care Nurses
- American Society of Post-Anesthesia Nurses
- Association of Operating Room Nurses
- American Association of Respiratory Care

#### **APPENDIX E**

#### SAMPLE PROGRAM BROCHURE

#### MONTGOMERY HOSPITAL SCHOOL OF ANESTHESIA & LASLLE UNIVERSITY GRADUTE NURSING



### Frank J. Tornetta School of Anesthesia



610-270-2139

## La Salle University Graduate Nursing



215-951-1413

# AN INFORMATIONAL GUIDE FOR NURSES ENTERING THE VITAL FIELD OF ANESTHESIA

This booklet is provided as an introduction and guide for candidates interested in pursuing nurse anesthesia education at the Frank J. Tornetta School of Anesthesia/ LaSalle University College of Nursing (Graduate Division). It is intended to answer many of your questions regarding prerequisites, candidate selection and curriculum requirements. Once you have had a chance to review the information please feel free to contact our office (610) 270-2139 with additional questions. Our office hours are Monday through Friday, 7:00 a.m. to 3:00 p.m.

#### **ACCREDITATION STATUS**

The Frank J. Tornetta School of Anesthesia is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs, a specialized accrediting body recognized by the Council on Postsecondary Education and the U.S. Department of Education.

LaSalle University is accredited by the National League for Nursing Accreditation Commission (NLNAC), Commission on Collegiate Nursing Education of the American Association of Colleges of Nursing (AACN) and fully approved by the Pennsylvania State Board of Nursing.

#### **TABLE OF CONTENTS**

	Page
History of the Frank J. Tornetta School of Anesthesia	1
Facilities	1
School Philosophy	1
Program Objectives	2
Admission Requirements	3
Admission Procedure	4
Selection Process	4
Length of Course	5
Expenses	5
Financial Aid	e
Student Employment	6
Liability Insurance	6

	Page
Vacations, Holidays, Sick Leave	6
Calendar for New Classes	7
Requirements for Graduation	7
Transfer	8
Student Rights and Responsibilities .	8
Program Curriculum - Clinical Practicum	8
Program Curriculum - Didactic Course Overview	10
Program Enrichment	12
Clinical Affiliations	13
Directions to Montgomery Hosptial	13
Application for Admission - Detach Adder	

#### HISTORY OF THE FRANK J. TORNETTA SCHOOL OF ANESTHESIA

The Frank J. Tornetta School of Anesthesia was founded under the direction of Frank J. Tornetta, M.D., Ph.D., in 1951 and has graduated a class of students each year since. Its graduates are highly respected in the academic and clinical areas of anesthesia and many hold top-level positions in educational, teaching and administrative fields. With over 300 graduates, the School has developed not only a wide and favorable reputation, but also a sense of tradition. The School has been fully accredited since its founding.

#### THE MODERN FACILITIES AT MONTGOMERY HOSPITAL

Founded in 1889, Montgomery Hospital is a non-profit, non-sectarian general hospital with approximately 300 beds serving Central Montgomery County. It is situated some 15 miles from Center City Philadelphia. Today, the hospital is at the hub of a thriving community of caring. Recent renovations and expansion include the Lea and Arthur Powell Maternal & Child Care Center, the Red McCarthy Cancer Treatment & Education Center, a parking garage, business and medical office complex.

McShea Hall, formerly the home for student nurses, now houses the School of Anesthesia offices, library and classroom, Dialysis Center, Clinical Services, Human Resources Department, Billing departments, and offices for community physicians and dentists.

As Central Montgomery County's complete medical center, Montgomery Hospital provides the finest medical and surgical services along with the latest laboratory, radiology, physical medicine, psychiatry and ancillary services.

Montgomery Hospital Medical Center has nine operating rooms, three delivery rooms, and a 16-bed post-anesthesia care unit. It also has an award-winning mobile paramedical unit, modern Emergency Room, and fully-equipped Intensive Care, Critical Care, Skilled Nursing Unit, Short Stay Unit, and Cardiac Cath Lab. There is a 17-bed Short Stay Psychiatric Unit, and a Maternal and Child Health Unit with a state-of-the-art nursery and six LDRP suites.

In total, approximately 8,000 anesthetics are administered annually at Montgomery Hospital, involving a wide variety of agents and techniques. These include the newest inhalation anesthetics, intravenous agents and many types of regional anesthetics.

The first of its kind in 1889, Montgomery Hospital is proud to be among the finest medical centers in the country today.

#### SCHOOL PHILOSOPHY

The School of Anesthesia is operated primarily for the education of the student. A professional nurse anesthetist is a specialist who performs an indispensable service for the patient. The nature of the work is critical and the standards to be met are of the very highest. In order to practice anesthesia independently, safely and wisely, a solid preparation in the basic sciences is absolutely necessary. The application of this knowledge with sound judgment in the clinical setting results in a well-conducted and safely managed anesthetic.

The practice of anesthesiology involves a life-long learning process. It is the School's goal to establish a firm foundation for that process by providing the student with the basic didactic and supervised clinical instruction necessary for independent practice.

Students must recognize their responsibility to the School and their profession by pursuing further knowledge and challenging clinical experiences.

In this way, they will continue to enrich and enhance their profession, and be of valuable service to the community throughout their careers.

#### **PROGRAM OBJECTIVES**

Students in the Frank J. Tornetta School of Anesthesia receive a thorough and comprehensive education from faculty members working in the field, and professional educators. At the conclusion of the program, students are expected to:



Perform a preanesthetic interview and physical assessment.



Discuss the anesthesia plan with the patient, establish rapport and prepare the patient psychologically for the anticipated surgery.



Evaluate patient's history, physical and diagnostic test results.

Formulate a comprehensive anesthesia care plan suitable for the specific needs of the patient.



Conduct a safe general anesthetic for patients of all ages using a wide variety of anesthesia techniques and agents.



Administer and manage regional anesthesia cases.

Utilize a variety of monitoring modalities including electrocardiogram monitors (EKG), arterial pressure, central venous pressure (CVP), end tidal carbon dioxide levels and pulse oximetry.



Manage fluid therapy within the medical plan of care.



Institute appropriate treatment of complications occurring during anesthetic management.



Evaluate quality of anesthesia care and institute appropriate actions to improve this care.



Position patients safely to assure optimal physiological function.

Use mechanical ventilators effectively.



Provide consultation pertaining to respiratory care in acute care settings.

Function as a team leader/member in cardiopulmonary resuscitation.

Interpret blood gas results.



Utilize appropriate principles of basic and behavioral sciences in protecting patients from iatrogenic complications.



Function within appropriate legal boundaries as a licensed professional accepting responsibility for practice.



Conduct a clinical study, write a research paper, and present a report in a professional manner.

#### ADMISSION REQUIREMENTS

The Frank J. Tornetta School of Anesthesia only considers students who have demonstrated above average ability academically, clinically and professionally. Consideration for admission includes the following minimum requirements:



Evidence of successful academic achievement in completing a baccalaureate degree in Nursing from an NLN accredited program.



Current R.N. licensure in Pennsylvania.

Acceptable scores in the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT) taken within the past five years. Arrangements to take the MAT may be made with the Counseling Center of LaSalle University. Information on GRE scheduling is also available from the Counseling Center.



Minimum of one year of nursing experience in an acute care setting, i.e., Intensive Care Unit, Coronary Care Unit, Surgical Intensive Care Unit, Emergency Room, etc. It is the prerogative of the program to determine what constitutes an acute care setting.



General scholarship as evidenced by an average of at least 80% in the following areas:

- Anatomy and physiology
- Chemistry
- Pharmacology

• Letters of recommendation from:

- Direct supervisor
- Physician
- Peer



A personal interview with members of the Admission Committee.

The Application for Admission, accompanied by the stipulated application fee payable to the Frank J. Tornetta School of Anesthesia.

#### ADMISSION PROCEDURE

Before students can be admitted to the program, they must complete or submit the following information:



- Official transcripts (bearing the school seal)
  - Nursing School
  - College
  - Any other institution attended

Letters of recommendation from:

- Direct supervisor
- A physician familiar with their clinical ability
- A peer who is familiar with their professional demeanor and clinical care.

A copy of their current professional nursing license.

A chronological summary of places of employment and experiences since high school graduation.



A brief statement explaining their interest in the study of anesthesia. Include both long and short term goals.



A personal interview with the Admissions Committee of the School of Anesthesia is required before admission.

#### THE SELECTION PROCESS

To be considered for a position in the classs, the applicant must have all the necessary documentation on file in the program office. It is the responsibility of the applicant to ensure that the application is complete and that all required information has been forwarded to the program office.

Following a review of all materials by the Admissions Committee, interviews will be scheduled. Although no student is accepted without an interview, the Committee reserves the right to take final unfavorable action and deny the request for an interview based on the credentials submitted.

Among the qualified applicants, selection will be made on the basis of overall grade-point average, science grades, recommendations, work experience, and the personal interview.

At any of its meetings, the Admissions Committee may elect to accept, reject, or defer for reconsideration any applicant.

Applicants not selected may request to have their shortcomings addressed, and suggestions made on how to improve any deficient areas.

Applicants are considered without regard to age, race, color, marital status, national origin, sex, religious creed, physical or mental handicap, disability or any other legally protected factor.

The Frank J. Tornetta School of Anesthesia operates much like any private institution of graduate learning. Students are expected to abide by, and benefit from, the School's regulations and requirements.

#### LENGTH OF COURSE

Because the study of anesthesia requires superior knowledge and proficient technical skills, the course of study is 25 months. At the end of 25 months, upon satisfactory completion of the course program and meeting the objectives of the program, the student will be awarded a diploma from the School of Anesthesia and a Master of Science Degree in Nursing from LaSalle University College of Nursing. Upon recommendation of the Program Director, the student will be permitted to take the National Certification Examination to gain CRNA Certification.

#### EXPENSES



**Tuition:** Because of changing administrative costs and instruction fees, the cost of tuition is determined yearly. See enclosed insert.



**Book Fee:** An invoice is issued to the student's home from our supplier for the required textbooks. Upon remittance, the books are sent directly to the student, approximately three months prior to the start of the academic year.



**A.A.N.A. Membership Fees:** Dues for Associate Membership in the American Association of Nurse Anesthetists is \$20.00.

• Lab Coats: Students are required to purchase two long white lab coats. Operating room attire is provided and laundered by the Hospital at no cost to the student.



**Equipment:** Students are required to purchase pre-cordial monitoring equipment including a personal molded earpiece.



**Certification Examination Fee:** Each student is responsible for payment of the fee which must accompany the application to take the National Certification Examination upon graduation.



Loans, Grants or Scholarships: Loans, grants or scholarships are not available from the Hospital.

**A.A.N.A. Loans:** Loans are available upon demonstrated need after completion of the first three months in an anesthesia program. The American Association of Nurse Anesthetists provides low interest loans with deferred payment through their Student Loan Program. Students must apply directly to the A.A.N.A.

**Guaranteed Student Loan Program:** The Guaranteed Student Loan Program is provided through the Financial Aid Office at LaSalle University. All student loans are distributed and monitored through the LaSalle University F.A.O. (For additional information please contact the Financial Aid Officer at LaSalle at 215-951-1070.)

#### STUDENT EMPLOYMENT

Students may work after school hours in related areas such as the Intensive Care Unit, Coronary Care Unit, Emergency Room or general nursing. Such outside employment **must have approval from the Program Director of the School of Anesthesia.** Under no circumstances may any student administer (or assist) anesthesia either with or without remuneration in any other medical or dental facility outside the School of Anesthesia.

#### LIABILITY INSURANCE

Professional liability insurance is provided for each student by the Hospital.

#### VACATIONS, HOLIDAYS, SICK LEAVE



Vacation: 35 days throughout the length of the Program.

Hospital Holidays: Number of days will be determined by the Director, but shall not exceed five days per year.



**Leave of Absence:** Only by special arrangement and approval from the Director.



Students who exceed the allowable time off must make up all excess missed time at the end of the 25 month program of study.

#### CALENDAR FOR NEW CLASSESS



A new class of students commences annually (September).

Students are expected to report on duty no later than 6:30 A.M. each morning and are generally dismissed by 3:30 - 4:00 P.M. Adequate time for lunch and breaks is provided.



Total committed time does not exceed 64 hours per week.

Students participate in a rotating call schedule in order to gain clinical experience in management of emergency cases.

#### **REQUIREMENTS FOR GRADUATION**

#### A. Council on Certification Requirements

The Council on Certification of Nurse Anesthetists requires each student to complete an accredited course of study for certification examination eligibility. Minimum requirements include:



Total number of cases ...... 450 cases

2

Clinical anesthesia time ...... 800 hours

Special case requirements ..... as per Standards and Guidelines for Accreditation of Nurse Anesthesia Education Programs



Length of Program...... 25 months

#### **B.** Requirements For Graduation

Achievement of all terminal, behavioral and course objectives.

Completion of all academic courses with a minimum average of 80%.



Completion of the clinical curriculum in anesthesia with a passing grade.



Maintenance of a passing grade in all clinical evaluations.

 Satisfactory completion of all academic and clinical assignments and required experiences including journal club, case reports and care plans.

Completion of a Final Clinical Performance Evaluation demonstrating an unquestionable ability to perform as a competent Anesthesia Nurse Practitioner as determined by the faculty.

Completion of all records required by this School and the Council on Accreditation.



Attendance within the framework of the 25 month course excluding the allotted vacation and sick time.



Demonstration of good character traits of honesty, stability, good judgment and good professional and social conduct exemplifying those high standards of a professional person.



Recommendation by the Program Director.

#### TRANSFER

Students are strongly advised against transferring to another school unless an urgent reason arises. Credit for work done shall be determined by the new school accepting the student. The Council on Certification will be notified of any such transfer.

#### STUDENT RIGHTS AND RESPONSIBILITIES



The student has the right to withdraw from the program at any time.

Student responsibilities include: attendance, interest and completion of satisfactory didactic and clinical work, and indication of a willingness to take study and learning seriously. To benefit to the greatest degree possible, a student must assume his/her share of responsibility to the patient, the anesthesia staff, and the entire surgical team to ensure proper order and safety. Any student who does not maintain didactic or clinical standards as prescribed by the program may be dismissed. Grievance and Due Process Procedures are available for every student.

#### **PROGRAM CURRICULUM - CLINICAL PRACTICUM**

Students enrolled in the program begin their didactic education by participating in the "shared curriculum." "Shared curriculum" utilizes a variety of clinical, didactic and administrative faculty from anesthesia programs throughout the Philadelphia region. Didactic instruction in anatomy, physiology, pharmacology and anesthesia techniques is incorporated into the initial 6-8 month period of enrollment within the school. Students complete the remainder of the didactic program at Montgomery Hospital participating in classroom instruction one to two days per week.

Clinical instruction is provided under the direct supervision of a certified nurse anesthetist and staff anesthesiologist. Students gain experience increasing in complexity, and employing all of the commonly utilized anesthetic agents and techniques. Upon completion of the course, the student will have acquired clinical experience with various anesthetic agents, techniques, surgical procedures and the clinical experience required to sit for the National Certification Examination. Call duty is required to provide the student an opportunity to participate in emergent surgical procedures and airway management. Additional clinical experience is provided through a variety of clinical rotations which include:

- Saint Christopher's Hospital for Children: Pediatric Anesthesia Philadelphia, PA
- Crozer Chester Hospital: Upland, PA
- Fitzgerald Mercy Hospital: Upland, PA
- Children's Hospital of Philadelphia: Philadelphia, PA

Open Heart/Neuro and General Surgery

Regional Anesthesia Techniques General Surgery

Fellowship Available in Advanced Pediatric Anesthesia\*\*

\*\*Limited number of fellowships available for each class.

During the clinical curriculum the student will gain clinical experience with the following:



- Agents Used:
- a. Nitrous Oxide
- b. Halothane
- c. Isoflurane
- d. Desflurane
- e. Sevoflurane
- f. Diazepam, Midazolam
- g. Neuroleptic drugs
- h. Major tranquilizers
- i. Intravenous narcotics/analgesics
- j. Muscle relaxants
- k. Drug antagonists

Methods and Techniques Employed:

- a. Inhalation Methods
  - 1) Endotracheal
  - 2) Mask cases
  - 3) LMA
- b. Intravenous
- c. Regional
  - 1) Management of all types of regional anesthesia and administration of spinal and epielids
  - 2) Topical administration
  - 3) Perfusion block administration (Bier Block)
- d. Intravenous and intramuscular anesthesia
- e. Special techniques
  - 1) Arterial blood gas sampling
  - 2) Hypothermia
  - 3) Hypotensive anesthesia
  - 4) Electronic Monitoring



#### **Types of Surgical Procedures**

Extensive experience is gained in all types of surgical procedures. In addition to meeting requirements for all types of surgical procedures, the clinical experience extends into the specialty areas of pediatrics, obstetrics, geriatrics, emergency surgery and psychiatry. Overall, the student performs in excess of 450 anesthetic cases involving over 800 clinical hours.

Assistance and consultation are always available to the student from a CRNA and/or anesthesiologist.

#### PROGRAM CURRICULUM - DIDACTIC COURSE OVERVIEW

#### Orientation to The Study of Anesthesia

This orientation is designed to acquaint the student with the physical plant, surgical suite, and critical care areas. School requirements as well as those of the Council on Accreditation of Nurse Anesthesia Educational Programs are thoroughly discussed. A Broad Field Orientation to clinical practice includes legal implications of anesthesia care, preoperative patient assessment, airway management and patient positioning.

#### Anatomy, Physiology and Pathophysiology Relative to Anesthesia

A general review of anatomy and physiology is presented with intense emphasis on the respiratory, cardiovascular, renal, neurologic and endocrine systems. Anatomical abnormalities and physiological conditions which may influence the conduct or choice of anesthesia are highlighted.

#### Pharmacology Related to Anesthesia

A detailed course of the pharmacologic effects of anesthetics and the many accessory drugs used in anesthesia is presented. Pharmocologic considerations associated with the inhalation agents, intravenous anesthetic agents and muscle relaxants are emphasized.

#### **Chemistry and Physics of Anesthesia**

This course provides a review of inorganic chemistry and a detailed study of organic chemistry relating to anesthetic compounds. The physical laws which apply to anesthetic practice are discussed. Electrical safety within the operating room environment is also presented.

#### Principles of Anesthesia Practice

This course is designed to acquaint the student with commonly utilized anesthetic techniques. The indications and applications in various surgical situations are highlighted. Management of complications are discussed with treatment protocol provided.



#### **Advanced Principles of Anesthesia**

An in-depth presentation of advanced principles of anesthesia practice. Special

emphasis is placed on pediatric, geriatric, and obstetrical anesthesia. Anatomical categories of surgical procedures requiring special techniques and monitoring devices are discussed, i.e., anesthesia for neurosurgery, intrathoracic surgery, vascular surgery and emergency surgery for trauma and acute disease processes are presented.

#### **Clinical Correlative Conferences**

Journal Clubs, Seminars, Morbidity/Mortality Conferences provide a review of current literature. This course provides an opportunity for the student to gain experience in writing research papers and presenting reports in a professional manner. Cases involving anesthesia complications are reviewed and discussed.

-8.

#### **Comprehensive Review Course**

This course offers the student the opportunity to review and assess his/her knowledge of anesthesia theory and practice. During the last three months of the program the student is provided with ample time to prepare for the National Certification Examination.

#### •

#### **Research and Theory I**

This course explores the relationships among research, theory, and practice. Students examine the integration of theory in clinical, educational, and administrative areas of nursing. Critique of published research focuses students on the findings and methods of studies and the applicability of research findings to practical situations. Students develop a research question guided by a critical review of the literature. Various research designs are contrasted. **Prerequisite:** None

#### Ð

#### **Research and Theory II**

This course is a continuation of Research and Theory I (NUR 604). The student develops a research proposal that originates in a question derived from clinical practice. The course examines treatment of variables, sampling, measurement theory, probability theory, qualitative and quantitative analysis, and the use of the computer in data analysis. The research consumer and participant roles are emphasized. **Prerequisite:** NUR 604

#### P

#### Advanced Practice Nursing and Administration in Health Care Delivery Systems

This course examines the evolution of advanced nursing practice and administration in the context of changing health care delivery systems. Students investigate health care policy development and examine systems of delivering patient care in relation to financial, ethical, legal, social, legislative, political, and professional concerns. Program development, informatics, fiscal manage-ment of health care services, budgeting, and reimbursement issues are emphasized. Students explore interdisciplinary networking and coalition-building skills in leadership roles extending beyond the traditional health care environment. This course meets the standards of care and professional performance as published in the Scope and Standards of Advanced Practice Registered Nursing. **Prerequisite:** None



#### **Population-Based Care and Advanced Practice Nursing**

In this course students investigate the roles of advanced practice nurses in meeting the health care needs of diverse populations. Health promotion, disease prevention, resource utilization, and health education responsibilities are examined. Students utilize basic epidemiological concepts and needs assessment for vulnerable populations. They examine the diverse needs of different ethnic and racial groups in a community or clinical setting. **Prerequisite:** None

#### Pathophysiology

This course integrates physiological principles and clinical practice and correlates physical manifestation with pathological interference. It focuses on recognizing changes in client status, interpreting physiological data, and utilizing this information in formulating nursing care plans. Nursing implications of current diagnostic studies and pharmacological treatments will also be addressed. **Prerequisite:** Core or Special Permission

#### Pharmacology

The purpose of this course is to expand the study of the actions and effects of drugs on the human system. The student will analyze the scope of legal and professional nursing responsibilities related to pharmacology in an expanded nursing role. The student will study principles of drug therapy, mechanism of action, and selection of pharmacologic agents in clinical practice. **Prerequisite:** NUR 618, Core or Special Permission

#### Assessment of The Adult in Health and Illness

This course addresses the health assessment of clients using a framework of physiologic, psychosocial and physical examination data. Students explore history taking methods and principles of physical assessment to determine the client's potential and actual health problems. The purpose of the course is to enable the student to develop skills necessary to evaluate the holistic health status adults. It combines the principles and generalizations of nursing and other sciences with the nursing care of patients. Clinical problems are analyzed. Students advance in knowledge, clinical judgment, differential diagnosis and decision making skills. **Prerequisite:** NUR 617

#### PROGRAM ENRICHMENT

An ongoing assessment of the program in Nurse Anesthesia may result in modifications and/or revisions from time to time in the light of changing needs, scientific advancements and new standards of accreditation.

#### CLINICAL AFFILIATIONS

#### Crozer Chester Hospital, Upland, Pennsylvania

This clinical rotation provides the student with in-depth knowledge and clinical experience in neurosurgical anesthesia, open heart surgery and general surgical procedures.

#### Fitzgerald Mercy Hospital, Darby, Pennsylvania

This clinical rotation provides the student with in-depth knowledge and clinical experience in the techniques of regional anesthesia administration and management of obstetric anesthesia services.

#### Saint Christopher's Hospital for Children, Philadelphia, Pennsylvania This pediatric clinical affiliation affords the student the opportunity to refine his/ her clinical skills with specific emphasis on pediatric clinical anesthesia practice.

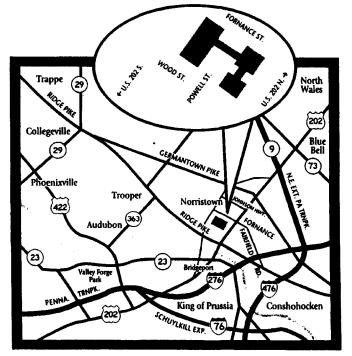
#### Children's Hospital of Philadelphia, Pennsylvania

This pediatric affiliation provides fellowship opportunity for students who are interested in pediatric anesthesia practice.

#### LaSalle University: College of Nursing (Graduate Division)

This affiliation provides a Master of Science Degree in Nursing upon successful completion of all academic and clinical requirements.

#### DIRECTIONS TO MONTGOMERY HOSPITAL



#### **FROM LANSDALE & NORTH**

Follow 202 south to Johnson Highway (at Johnson Highway, 202 South turns into a one-way street facing you). Bear right onto Johnson Highway and go one block to Powell Street. Turn left onto Powell Street and go 5 blocks to Fornance Street. Hospital is located on right, parking on left.

#### FROM PAOLI & SOUTH

Follow 202 north through King of Prussia. Route 202 north bears to the right at Bridgeport. Cross over the Bridgeport Bridge to Main Street in Norristown. Follow for several lights to Fornance Street. Turn left at light. Continue one block to Powell. Turn left. Hospital is located on right, parking on left.

#### FROM THE PENNSYLVANIA TURNPIKE -EAST & WEST

Take Turnpike to Exit 25 (Norristown/Plymouth Meeting). Follow Germantown Pike west to Route 202 south (left turn). Route 202 south deadends at third light (Johnson Highway). Bear right onto Johnson Highway for one block to Powell Street. Turn left onto Powell and follow for five blocks. Hospital is located on right, parking on left.

#### FROM PHILADELPHIA

Follow 76 west (Schuykill Expressway) to Route 476 north (Blue Route). Exit at Norristown. Turn right onto Chemical Road. Follow for 1.8 miles and turn right onto Ridge Pike. Follow for two miles to Fairfield Street. Turn right onto Fairfield which becomes Fornance Street after first light. Follow to Powell Street and turn left. Hospital is located on right, parking on left.

(610) 270-2000

#### MONTGOMERY HOSPITAL AND MEDICAL CENTER SCHOOL OF ANESTHESIA

## **APPLICATION FOR ADMISSION**

To comply with the Standards and Guidelines of the Council on Accreditation of Nurse Anesthesia Educational Programs/Schools, Admission Requirements shall include, but not be restricted to the following:

• Current licensure as a Registered Professional Nurse.

• Minimum of one year of nursing experience in an acute care setting.

**Baccalaureate Degree in Nursing.** 

Acceptable score in the GRE or MAT examination.

You are urged to give careful consideration to each question on this form. Fill out this application completely and return promptly to the Director of Admissions along with a \$35.00 Application Fee. Your application will not be processed without the fee.

Full Name:	First		Initial	Maiden
Address:	City		State	Zip
Sueet     Felephone No.:	•	No.:		•
School of Nursing:		,,,		
Date of Entrance:	Graduat	ion Date:	. <u> </u>	
State Registration:	Licensu	re No.:		
College:		City		State
Date of Entrance:		•	: <u> </u>	
College:		City		State
Date of Entrance:		-	•	
Have you ever been a student in If yes, please explain:			Yes	
Have you ever been rejected by	a School of Anesthesia?	🗖 No	🗇 Yes	
, , , , , , , , , , , , , , , , , , ,		_	_	
Have you ever administered an If yes, please explain:		🗖 No	🗖 Yes	

I am interested in admission beginning September, \_

The School of Anesthesia operates on a rolling admission policy. All completed applications submitted will be reviewed as they are received.

List the names and addresses of three health care providers, and ask each of them to submit a letter of recommendation.

1. Name	Phone
Address	
2. Name	Phone
Address	
3. Name	Phone
Address	

Include the following information with this application:

A chronological summary of places of employment and experience since graduation from High School.



A Statement of Interest in the study of Nurse Anesthesia.

A photocopy of your current RN license.

In order to expedite processing of your application, be sure to request official transcripts, bearing a School Seal, from your College and Nursing School and have them forwarded to us as soon as possible.

Please have your GRE or MAT scores sent to the School of Anesthesia.

A personal interview with the *Representatives of the Admissions Committee* is required before admission can be considered. You will be contacted for an interview appointment after your application is complete.

It is the policy of the Admissions Committee to evaluate all applicants according to their didactic and clinical backgrounds. Applicants are considered without regard to age, race, color, marital status, national origin, sex or religious creed.

I have taken/will take the GRE/MAT examination on or about \_\_\_\_

Date

I certify that all my answers are true and correct. I understand that falsification of this form in any way, may be cause for immediate dismissal.

Signature: \_

Date: \_\_\_\_\_



1301 Powell Street • Norristown, Pennsylvania 19401 (610) 270-2000

School of Anesthesia

#### APPENDIX F

.

#### QUALITY OF CARE IN ANESTHESIA

.

.





Synopsis of Published Information Comparing Certified Registered Nurse Anesthetist and Anesthesiologist Patient Outcomes



American Association of Nurse Anesthetists

Nurse anesthetists have been providing quality anesthesia care in the United States for more than 100 years. In administering more than 65 percent of the anesthetics given annually, CRNAs have compiled an enviable safety record. No studies to date that have addressed anesthesia care outcomes have found that there is a significant difference in patient outcomes based on whether the anesthesia provider is a CRNA or an anesthesiologist.

The practice of anesthesia has become safer in recent years due to improvements in pharmacological agents and the introduction of so-phisticated technology. Recent studies have shown a dramatic reduction in anesthesia mortality rate to approximately one per 250,000 anesthetics.

That there is no significant difference regarding the quality of care rendered by anesthesiologists and CRNAs "may be surprising to the less knowledgeable, an understanding of the nature of anesthesia would lead one to expect this. The vast majority of anesthesia-related accidents have nothing to do with the level of education of the provider." [Blumenreich GA, Wolf BL. "Restrictions on CRNAs imposed by physician-controlled insurance companies." *AANA Journal.* 1986;54:6:538-539, at page 539.]

The most common anesthesia accidents are lack of oxygen supplied to the patient (hypoxia), intubation into the esophagus rather than the trachea, and disconnection of oxygen supply to the patient. All of these accidents result from lack of attention to monitoring the patient, not lack of education. In fact, the Harvard Medical School standards in anesthesia are directed toward monitoring, which reiterates the basic point — most anesthesia incidents relate to lack of attention to monitoring the patient, not lack of education.

As Blumenreich has stated:

Anesthesia seems to be an area where, beyond a certain level, outcome is only minimally affected by medical knowledge but is greatly affected by factors such as attention, concentration, organization and the ability to function as part of a team; factors towards which all professions strive but which no profession may claim a monopoly. *See id.* at page 539.

#### **Section One**

#### Summary of Pertinent Quality of Care Studies and Data

#### 1. Bechtoldt Study

[Bechtoldt, Jr, AA. "Committee On Anesthesia Study. Anesthetic-Related Deaths: 1969-1976." *North Carolina Medical Journal*. 1981;42:253-259.]

#### A. Background

A 10-member Anesthesia Study Committee (ASC) of the North Carolina Medical Society reviewed approximately 900 perioperative deaths in that state over the eight-year period from 1969 to 1976. The ASC determined that 90 perioperative deaths were, to a certain extent, related to the administration of an anesthetic. The ASC did not study types of anesthesia-related outcomes other than death. Based on an ASC survey of hospitals, the ASC estimated that more than two million anesthetics were administered in North Carolina from 1969 to 1976.

The ASC defined "anesthetic-related" deaths as those in which the ASC determined that anesthesia was found to be a) the sole cause of death or b) the major contributing factor.

In categorizing cases, the ASC used information from death certificates and questionnaires completed by anesthesia providers of record. Based on that data, the ASC estimated that there had been one anesthetic-related death per 24,000 anesthetics administered.

The ASC used six different criteria to review the cases, including the following:

- type of anesthetic involved
- · location where anesthesia was administered within the facility
- type of practitioner(s) involved in anesthesia administration
- surgical procedure or operation
- · patient risk classification

#### B. Comparison of Outcome According to Provider Type

The ASC classified those who had administered anesthesia as follows:

- certified registered nurse anesthetist (CRNA) working alone
- anesthesiologist working alone
- CRNA and anesthesiologist working together
- surgeon or dentist
- unknown (in some of the cases, the type of practitioner administering the anesthetic was not identifiable based upon the information available to the ASC)

#### Bechtoldt reported that the ASC:

...found that the incidence among the three major groups (the CRNA, the anesthesiologist, and the combination of CRNA and anesthesiologist) to be rather similar. Although the CRNA working alone accounted for about half of the anesthetic-related deaths, the CRNA working alone also accounted for about half of the anesthetics administered. [page 257] [emphasis added]

Bechtoldt stated that the ASC's study included patients representing all risk categories. The study did not, however, address whether particular types of anesthesia providers (i.e., anesthesiologists or CRNAs) tended to encounter patients having particular risk factors. Because CRNAs working alone provided approximately half of the nearly two million anesthetics administered in the state during the period of the study, it is reasonable to believe CRNAs provided care to patients covering the full spectrum of physical status and anesthetic risk.

#### 2. Forrest Study

[Forrest, WH. "Outcome - The Effect of the Provider." In: Hirsh, R, Forrest, WH, et al., eds. *Health Care Delivery in Anesthesia*. Philadelphia: George F. Stickley Company. Chapter 15. 1980:137-142.]

Forrest reviewed data that had been collected as part of an intensive hospital study of institutional differences that the Stanford Center for Health Care Research conducted. Forrest analyzed mortality and severe morbidity outcome data from 16 randomly selected hospitals, controlling for case-mix variations. The data concerned 8,593 patients undergoing 15 surgical procedures over a 10-month period (May 1973 through February 1974). Using that data, Forrest compared outcomes based upon type of anesthesia provider.

For study purposes, the hospitals were classified as having either:

- 1. primarily physician (anesthesiologist) providers (9 hospitals), or
- 2. primarily nurse anesthetist providers (7 hospitals).

Each of the 8,593 patients were "weighted" to reflect the progression or stage of disease at the time of surgery, and "the probability of developing postoperative morbidity and mortality, given the stage of the patient's disease." Forrest initially compared actual patient outcome to the outcome that would have been predicted based upon the patient's preoperative health status and the surgery performed. Compared with outcomes predicted, the actual results showed no significant difference in outcome between facilities having primarily nurse anesthetists or those having primarily physician anesthesiologists. Forrest then looked at the data using three scales that differed based on definitions of "morbidity" applied to each scale. Slight differences between the two groups (i.e., primarily nurse anesthetist, or primarily anesthesiologist) were found, but the favored group varied according to the analysis criteria employed. That is, depending on criteria, sometimes the anesthesiologist-dominated group showed better outcomes, and sometimes the nurse anesthetist-dominated group fared better. After applying statistical tests to the results, Forrest stated:

Thus, using conservative statistical methods, we concluded that there were no significant differences in outcomes between the two groups of hospitals defined by type of anesthesia provider. Different methods of defining outcome changed the direction of differences for two weighted morbidity measures. [page 141] [emphasis added]

The Forrest study was presented at a 1977 symposium sponsored by the Association of University Anesthetists; the symposium dealt with the broader subject of "Epidemiology and Demography of Anesthesia." Official comments concluding this anesthesiologist-dominated proceeding (Chapter 25 of *Health Care Delivery in Anesthesia*, cited above) showed that the findings of Dr. Forrest, as well as others researching provider aspects of outcomes, caught some of the symposium participants off guard. As one commenter stated:

It was surprising that the stage of training of the anesthesiologist or administration of an anesthetic by a nurse anesthetist or anesthesiologist seemed to affect risk very little....[page 220]

Still another physician commenter, who was chair of a university-based anesthesia department, articulated a reaction possibly shared by many of his colleagues in academia:

Dr. Forrest's very carefully done study showed no difference in outcome whether the provider was a nurse anesthetist or an anesthesiologist.... If we had to accept the data that there are no differences in outcome between anesthetics administered by anesthesiologists compared to nurse anesthetists, the consequences would be truly extraordinary. It would mean that we would have to question our very careers; we would have to question the value of anesthesia residency training programs; we would have to question organization in hospitals; we would have to question and reexamine projections for manpower needs in the future; we would have to question medical economics as they are projected right now. With some of the data presented to us [during the full symposium] we were very comfortable because they matched expectations... Now in the study

Quality of Care in Anesthesia

comparing nurse anesthetists and anesthesiologists, we do not have this comfort. [pages 223-224]

#### 3. Minnesota Department of Health Study

In 1994, the Minnesota Department of Health (DOH), as mandated by the state Legislature, studied the provision of anesthesia services by CRNAs and anesthesiologists. The department reached four conclusions, including the following:

There are no studies, either national in scope or Minnesotaspecific, which conclusively show a difference in patient outcomes based on type of anesthesia provider. [page 23, DOH study.] [emphasis added]

#### 4. Centers for Disease Control

In 1990, the federal Centers for Disease Control (CDC) considered undertaking a multimillion-dollar study regarding anesthesia outcomes. Following a review of anesthesia data from a pilot study issued by the CDC and the Battelle Human Affairs Research Centers, however, the CDC concluded that morbidity and mortality in anesthesia was too low to warrant a broader study. The pilot study, published on December 1, 1988, was entitled, "Investigation Of Mortality and Severe Morbidity Associated With Anesthesia: Pilot Study." The pilot study stated that:

To obtain regional estimates of rates of mortality and severe morbidity totally associated with anesthesia with a precision of about 35% a nationwide study consisting of 290 hospitals should be selected. This size study would cost approximately 15 million dollars spread over a 5-year period.

#### 5. National Academy of Sciences Study

This study was mandated by the U.S. Congress and performed by the National Academy of Sciences, National Research Council. The report to Congress stated: "There was no association of complications of anesthesia with the qualifications of the anesthetist or with the type of anesthesia." [House Committee Print No. 36, Health Care for American Veterans, page 156, dated June 7, 1977.]

#### 6. St. Paul Data

The St. Paul Fire and Marine Insurance Company malpractice insurance premium rate for claims-made coverage for self-employed CRNAs decreased nationally a total of 52 percent from 1988 through 1998. The premium drop is detailed in the Appendix entitled, "Nurse Anesthetist Professional Liability Premiums." St. Paul is the country's largest provider of liability insurance for health care professionals, and insures both CRNAs and anesthesiologists. From 1988 to 1996, St. Paul returned nearly \$26,000,000 in premiums to its insured CRNAs because the loss experience was substantially better than St. Paul originally predicted.

The decline in CRNA malpractice insurance premium rates demonstrates the superb anesthesia care that CRNAs provide. The rate drop is particularly impressive considering inflation, an increasingly combative legal system, and generally higher jury awards.

In a 1988 book, Mark Wood of St. Paul Fire and Marine Insurance Company summarized a St. Paul study of its anesthesia-related claims. St. Paul studied the leading medical liability allegations that St. Paul-insured anesthesiologists and CRNAs reported between 1981 and 1985. The data consisted of all claims, including pending and closed claims. St. Paul concluded that "[n]urse anesthetist loss experience is very similar to that of anesthesiologists ..." [Wood, MD, "Monitoring Equipment and Loss Reduction: An Insurer's View," in Gravenstein JS, Holzer JF (eds): *Safety and Cost Contained in Anesthesia*. 1988. Stoneham, Mass.:Butterworth Publishers.]

Clearly, CRNAs have enjoyed a tremendous decline in professional liability premiums over the past decade. The Appendix details premium information from St. Paul for CRNAs, both on a state-by-state basis, and nationally.



Quality of Care in Anesthesia

#### Section Two

#### Anesthesiologist Distortions Concerning Quality of Care

The following section discusses the articles (by Abenstein and Warner; Silber, et al.; and Wiklund and Rosenbaum) that anesthesiologists have primarily cited to support their view that CRNAs should be anesthesiologist supervised, and that utilization of anesthesiologists improves anesthesia outcomes. As the following will demonstrate, however, none of the articles cites any credible scientific evidence that validates the anesthesiologists' position. In fact, two of the three articles do not even discuss the role of CRNAs in anesthesia care.

1. Abenstein and Warner Article in Anesthesia & Analgesia [Abenstein, JP, Warner, MA. "Anesthesia providers, patient outcomes and costs." Anesthesia & Analgesia. 1996;82:1273-1283.]

A. Abenstein and Warner Distortions Concerning Minnesota Department of Health Study

The Minnesota Department of Health (DOH) study discussed earlier led to development of the Abenstein and Warner article. In its 1994 study of the provision of anesthesia services by CRNAs and anesthesiologists, the DOH reached four "key findings,"<sup>1</sup> including the following:

There are no studies, either national in scope or Minnesota-specific, which conclusively show a difference in patient

"National and state health care reform are effecting [sic] the entire health care market in Minnesota. Although this study is the result of concerns over the changing market for anesthesia services, the primary forces driving these changes are effecting [sic] all of health care. For more than a decade, rising health care costs have been a major concern for state and federal programs. As both Medicare, and later Medicaid, began to review their payment methodologies to reduce costs, payers and providers were prompted to seek new ways to control costs and, at the same time, maintain or improve the quality of services. Reduced payments by payers have brought about greater competition in many areas, including anesthesia services, and a growth in managed care concepts (i.e., negotiated fees, the formation of provider networks). This has been particularly true in Minnesota."

"As a result of the reduced reimbursement to anesthesia providers and the increased focus on cost containment, Minnesota hospitals have had to examine their budgets and attempt to cut costs. Hospitals began to look for new service delivery models that would encourage the cooperation of providers in their delivery of services, maintain high quality, and be cost effective. Consequently, several hospitals made the decision to terminate their CRNAs from their hospital staff and to contract for services. The providers are thus responsible for the billing and overhead costs, not the hospital, and for providing quality service to the patient. This decision, based on economics and the changing market, provide cost savings to these hospitals. The impact of health care market dynamics will continue as the market demands shift and develop both locally and nationally."

"In summary, anesthesia services continue to be provided primarily in a 'care team' approach using both anesthesiologists and CRINAs, with current risk levels remaining very low. The market and demand for both CRINAs and anesthesiologists is changing and we can expect continued flux in this market for several years." [pages 23-24 of the Minnesota DOH study]

n

#### American Association of Nurse Anesthetists

Ovality of Caro in Amarthacia

<sup>&</sup>lt;sup>1</sup> "Limitations on the study made it impossible to fully evaluate the cost of service provided under each type of employment arrangement. However, there are some findings worth noting. Anesthesia providers are paid equivalent amounts per case under Medicare, and will likely under Medicaid, as well, when new guidelines are implemented. Reimbursement is declining to all anesthesia providers for federally funded programs and other third party payers are also beginning to negotiate lower reimbursement rates."

<sup>&</sup>quot;There are no studies, either national in scope or Minnesota-specific, which conclusively show a difference in patient outcomes based on type of anesthesia provider."

# *outcomes based on type of anesthesia provider.* [page 23, DOH study] [emphasis added]

The Minnesota Society of Anesthesiologists (MSA) had urged the DOH to reach different conclusions, and the department refused to do so. Disappointed that their views about quality weren't reflected in the department's report, anesthesiologists decided to seek a different forum to air their opinions. Two Minnesota anesthesiologists — doctors Abenstein and Warner — essentially repackaged the MSA's report that the MSA had submitted to the DOH, and published it as an article in June 1996 in *Anesthesia and Analgesia*. Abenstein and Warner acknowledge in their article that it "is an abridged version of a document submitted by the Minnesota Society of Anesthesiologists to the Minnesota Commissioner of Health." [page 1273]

The Abenstein and Warner article purported to analyze quality of care in anesthesia, quoted the Minnesota Department of Health report at length at the end of the article, but failed to mention the key conclusion about quality quoted above. It is clear that Abenstein and Warner failed to mention the conclusion because it did not fit their thesis that CRNAs should be anesthesiologist supervised.

As Christine Zambricki states in the enclosed article from the October 1996 AANA Journal:

We are curious as to how the authors' [Abenstein and Warner] omission of three of the [Minnesota DOH's] four concluding findings could be overlooked in *Anesthesia and Analgesia's* extensive peer and editorial review. This is especially surprising because the finding that directly contradicts Abenstein and Warner's principal thesis was considered crucial enough to the report to be restated in the report's executive summary. If, as the Minnesota Department of Health's report contends, there are no studies that 'conclusively show a difference in patient outcomes based on type of anesthesia provider,' it becomes difficult, if not impossible, to support the authors' thesis that an increase in the number of practicing anesthesiologists is the primary reason for the decrease in anesthesia-related mortality.

[Zambricki, CS. "Anesthesia providers, patient outcomes, and costs': the AANA responds to the Abenstein and Warner article in the June 1996 *Anesthesia and Analgesia.*" AANA Journal. 1996;64:413-416, at page 415.]

The Abenstein and Warner article is a partisan advocacy piece – it is not a credible scientific evaluation. Remarkably, despite his subsequent decision to publish the Abenstein and Warner article, the editor of *Anesthesia and Analgesia* (Dr. Ronald Miller), stated that: There were many reasons not to publish this paper. First, as recognized by Abenstein and Warner, '[it] lacks the scientific credibility of a review or original article and is related to policy making more than science'...Abenstein and Warner often are not only subjective, but clearly biased toward one method of anesthesia care delivery.... [Miller, Ronald D., "Perspective from the Editor-in-Chief: Anesthesia Providers, Patient Outcomes, and Costs." *Anesthesia and Analgesia*. June 1996, 82:1117-18.]

#### B. Abenstein and Warner Distortions Relating to Increased Number of Anesthesiologists and Anesthesia Safety

Abenstein and Warner conclude that improved patient outcomes associated with the administration of anesthetic agents have resulted almost exclusively from the growth of the number of practicing anesthesiologists. In contrast, as noted above, the Minnesota Department of Health concluded that studies to date do not show a difference in patient outcome based on whether the anesthesia provider is an anesthesiologist or CRNA, rejecting the position argued by Abenstein and Warner.

Gross variations between observed reductions in anesthesia-related mortality compiled by Abenstein and Warner and the growth in membership reported by the American Society of Anesthesiologists suggests that there is little, if any, correlation between the reduction in mortality and an increase in anesthesiologists. Increases in the numbers of practicing nurse anesthetists show the same long-term growth as anesthesiologists, and variations in the rate of growth of CRNAs seem to coincide with the variations in the decline of mortality compiled by Abenstein and Warner.

The exponential decline in anesthesia-related mortality has resulted from the almost complete elimination of administrators lacking anesthesia education; improvements in technology and anesthetic agents; a marked increase in the proportion of patients who received anesthesia care from highly educated anesthesia specialists, including anesthesiologists *and* CRNAs; and an increased understanding of the causes of adverse events associated with anesthesia.

In two different letters to the editor of *Anesthesia & Analgesia*, physicians elaborated on the flaws in Abenstein and Warner's analysis:

 "It is interesting that there exist no data within the last 20 years concerning patient outcome as a function of anesthesia provider. Much has changed in anesthetic practice in 20 years, not only from the standpoint of medical and technical factors, but also in terms of the distribution of providers, the types of patients and surgeries encountered by these providers, and the organizational nature of these practices.... In summary, although the data, information, and analyses provided by the authors are interesting and provocative, I strongly disagree with their nearly unqualified statement that "the anesthesia care team and hybrid practices appear to be the safest methods of delivering anesthesia care. This safety may be due, in part, to the rapid availability of physicians, especially during medical crises.' The question of how best to organize anesthesia care (or any other type of medical care) for achieving maximum patient safety has not yet been thoroughly examined. It is inappropriate to make claims such as those made by the authors based on such a paucity of data and analysis." [David M. Gaba, MD, Department of Anesthesia, Stanford University School of Medicine, Veterans Affairs Palo Alto Health Care System, Palo Alto, California; *Anesthesia & Analgesia*. December 1996, 82:1347-1348, Letters to the Editor.]

- 2. "...I question the validity of the conclusion reached by the authors [Abenstein and Warner] regarding the anesthesia care team in which they state, 'When the data are critically examined, the evidence is very supportive that the anesthesiologist-led anesthesia care team is the safest and most cost effective method of delivering anesthesia care. At this time, public policy decisions should encourage the development of anesthesia care teams where none exist, particularly in the rural areas, and assure the continued utilization of this patient care model'....Unchallenged acceptance of the conclusion that evidence supports a specific method of anesthesia care delivery to be the 'safest and most cost effective' is misleading to patients, colleagues, and those responsible for shaping health care delivery policy.... the participation of certified registered nurse anesthetists (CRNAs) in delivery of anesthesia care would have ceased many years ago if there was evidence that this participation resulted in a less favorable outcome compared with anesthesia personally administered by an anesthesiologist." [Robert K. Stoelting, MD, Department of Anesthesia, Indiana University School of Medicine, Indianapolis; Anesthesia & Analgesia. December 1996, 82:1347, Letters to the Editor.]
- C. Abenstein and Warner Distortions Relating to the Bechtoldt and Forrest Studies

The report submitted to the Minnesota Department of Health by the Minnesota Society of Anesthesiologists, and the Abenstein and Warner article, rewrote the findings of the Bechtoldt and Forrest studies that we summarized previously. Abenstein and Warner claim that the studies show that there were differences in the outcomes of care based on type of provider, **netwithstanding that the actual researchers came** to the opposite conclusion.

The Minnesota Department of Health report, in addressing the Bechtoldt study, stated:

Observed differences [in the incidence of anesthetic-related deaths] suggest that anesthesiologists and the CRNA-anesthesiologist care team were somewhat associated with lower rates of anesthesia-related deaths than CRNA's [sic] working alone. However, given the absence of controls, the findings cannot be used to determine (1) whether the differences are greater than would be expected by chance, or (2) the extent that the type of anesthesia provider is responsible for the differences versus other factors. The author concluded that the incidence of patient death among these groups is 'rather similar.' [page 12, Minnesota DOH study]

Concerning the Forrest study, the Minnesota Department of Health stated:

Outcomes considered were deaths, complications, and intermediate outcomes. Ratios of the actual number of adverse outcomes (or deaths, morbidity, or weighted outcome scales) to the number predicted from selected patient and hospital characteristics (i.e., indirectly standardized outcomes ratios) for the two groups were compared and tested. The study concluded that, although there were some unadjusted outcome differences between the two groups, after controlling for patient and hospitals characteristics, there were no statistically significant differences in outcomes between the two groups of hospitals defined on the basis of primary type of anesthesia provider. [page 11, Minnesota DOH study]

The enclosed December 1996 AANA Journal article by Denise Martin-Sheridan and Paul Wing, as well as the Zambricki article cited earlier, details the Abenstein and Warner article's numerous distortions and errors. Martin-Sheridan and Wing conclude that:

In general, the authors [Abenstein and Warner] reconfigure statistics and findings in the literature concerning outcomes of anesthesia care based on provider. If the best available research studies did not support their position, we feel it was inappropriate and misleading to reconfigure data upon which recommendations for policy decisions were made.

[Martin-Sheridan, D, Wing, P. "Anesthesia providers, patient outcomes, and costs: a critique." *AANA Journal.* 1996; 64(6):528-534, at page 533.]

Auditu of Caro in Anartharia

#### 2. Silber Study in Medical Care

[Silber, JH, Williams, SV, Krakauer, H, Schwartz, JS. "Hospital and Patient Characteristics Associated With Death After Surgery. A Study of Adverse Occurrence and Failure to Rescue." *Medical Care*. 1992;30:615.]

The Silber study examined the death rate, adverse occurrence rate, and failure rate of 5,972 Medicare patients undergoing two fairly low-risk procedures —elective cholecystectomy and transurethral prostatectomy. The study did not discuss any anesthesia provider except physician anesthesiologists; the study did not even mention CRNAs. The study, therefore, had nothing to do with CRNAs and did not compare the outcomes of care of nurse anesthetists to those of anesthesiologists. The study did not address any aspect of CRNA practice; it certainly did not explore the issue of whether CRNAs should be physician supervised.

The Silber study was a pilot study, i.e., a study to demonstrate the feasibility of performing a more definitive study concerning patients developing medical complications following surgery. It would be in-appropriate to formulate public policy based on the Silber study; the study does not address CRNAs, and cannot be considered conclusive even about the issues that it does address. The Silber study states, at page 625:

This pilot project examined ideas that, to our knowledge, have not been examined previously, and more work is needed before the full significance of the results can be determined. It is especially appropriate, therefore, that the limitations of the project be recognized.

At most, the study's conclusions support the proposition that certain facilities would benefit from having a board-certified anesthesiologist in the Intensive Care Unit. This might result in the "rescue" of some patients who have undergone elective cholecystectomies and transurethral prostatectomies and developed life-threatening postoperative complications. The Silber study's conclusions have nothing to do with nurse anesthetists or the nature of who may supervise, direct, or collaborate with nurse anesthetists. At most, the study concluded that anesthesiologists may play a clinically valuable role in caring for postoperative complications. The study, however, did not involve examination of the outcomes of anesthesia in the operating room.

In his analysis of the Silber study, Dr. Michael Pine (physician and expert in quality and health care) stated that:

Thus, the presence of board-certified anesthesiologists does

American Association of Nurse Anesthetists

not appear to lower the rate of complications, either alone or in combination with other factors such as high technology. It is not anesthesia care but the failure to rescue patients once complications occur which contributes to the death rate. On the other hand, unmeasured factors such as a higher percentage of other board-certified physicians in the hospital, also may account for the better outcomes. The conclusion to be drawn from this study is that, although the presence of board-certified anesthesiologists may not make a difference in the operating room, it may make a difference in the failure to rescue patients from death or adverse occurrences after postoperative complications have arisen. This conclusion is in keeping with the expanded role that anesthesiologists have identified for themselves in post-operative care....

Dr. Pine went on to conclude, in pertinent part, regarding the Silber study that:

- "1. This study encompassed the entire period of operative and postoperative care and was not specific to anesthesia staffing.
- 2. The rate of deaths possibly attributable to anesthesia care is a negligible fraction of the death rate found in this study.
- 3. The factors that significantly affect mortality and are most amenable to clinical interventions arise during postoperative management, not during the administration of anesthesia.
- 4. The type of anesthesia provider does not appear to be a significant factor in the occurrence of potentially lethal complications. If anything, this study suggests that surgical skill is more important.
- 5. The presence of board-certified specialists does appear to make an important difference in post-surgical care."

Pennsylvania anesthesiologists have unsuccessfully attempted to use the Silber study as a justification for a restrictive regulation they have urged the state's board of medicine to adopt. While the board proposed the regulation, it has not adopted it. Reportedly, the board decided at a March 1998 meeting to withdraw the proposal. The proposed regulation would have required physicians who delegate duties to CRNAs to have qualifications that only anesthesiologists typically possess. The practical effect would have been to require CRNAs to be anesthesiologist supervised in every practice setting.

Significantly, the Independent Regulatory Review Commission (IRRC), a Pennsylvania oversight commission that reviews health care pro-

Ľ

Quality of Care in Anesthesia

posals, carefully evaluated the Silber study, and issued a report rejecting the study as any basis for requiring anesthesiologist supervision of CRNAs. The IRRC stated that:

Based on our review of the 1992 *Medical Care* article, we have concluded, as its authors clearly state, it is a preliminary study and that caution should be taken in making any definitive conclusions. More importantly, the authors did not consider the scenario of an operating physician delegating the administration of anesthesia to a CRNA, or what expertise the operating physician should have in order to safely delegate anesthesia to a CRNA. Therefore, we do not believe this study should be used as justification for the significant change in practice for the administration of anesthesia.

#### The IRRC further stated that:

There have been two studies, both completed over 20 years ago, that compared the outcomes of anesthesia services provided by a nurse anesthetist and an anesthesiologist. Neither of these studies concluded that there was any statistically significant difference in outcomes between the two providers. This conclusion was also reached by the Minnesota Department of Health, which recently completed a study on the provision of anesthesia services. In fact, most studies on anesthesia care have shown that adverse outcomes and deaths resulting from anesthesia has decreased significantly in the last several decades as [a] result of improved drugs and monitoring technology.

3. New England Journal of Medicine Articles (by Wiklund and Rosenbaum)

[Wiklund, RA, Rosenbaum, SH. "Medical Progress: Anesthesiology" (part one). *New England Journal of Medicine*. 1997;337(16):1132-1141. Wiklund, RA, Rosenbaum, SH. "Medical Progress: Anesthesiology" (part two). *New England Journal of Medicine*. 1997;337(17): 1215-1219.]

These articles attempt to summarize key developments in the broad field of anesthesiology during the past 30 years. The articles focus on "preparation of patients for surgery, recent developments in anesthetic agents and techniques, multimodal pain management, and postoperative complications related to anesthesia."

The articles, however, do not attempt to compare patient outcomes by type of anesthesia provider. In fact, the articles do not discuss the involvement or contributions of CRNAs. The articles, therefore, have no relevance to the issue of CRNA versus anesthesiologist quality, and certainly have no bearing on the question of whether CRNAs should be physician supervised.

The articles have some merit as an overview of anesthesiology developments during the past 30 years. For example, the authors discuss advances in applied research that have led to new technology, products, and techniques. In certain areas, however, the authors leave the path of an unbiased review of the specialty to make unsubstantiated or misleading comments about the unilateral contributions of anesthesiologists to the advancements achieved.

For example, part one of the article states in its opening paragraph that anesthesia-related deaths have decreased dramatically since the late 1960s, coinciding with a decision by the National Institutes of Health to "support training in clinical anesthesiology." While it makes logical sense that proper training should enhance outcomes in all disciplines, the reader is left to assume that it was this seminal event – physician training in anesthesiology – which has led directly to the decreased mortality rates mentioned.

In fact, many factors, some of which are discussed in the articles, have influenced the trend to improved anesthesia-related outcomes. The articles make little attempt to provide statistical support regarding the causes of outcome trends and do not compare outcomes based upon type of anesthesia provider, type of case, surgical setting, or patient physical status.

The authors make the blanket statement that:

Increasingly, anesthesiologists direct the preoperative assessment and preparation of patients for surgery with the aim of ensuring safe and efficient care while controlling costs by reducing unnecessary testing and preventable cancellations on the day of surgery. [page 1132]

While the value of preoperative patient assessment is indisputable, the authors reference only one article to substantiate their claim that anesthesiologist management of this process is particularly beneficial. In that case study [Fischer, SP. "Development and Effectiveness of an Anesthesia Preoperative Evaluation Clinic in a Teaching Hospital." *Anesthesiology.* 1996;85(1):196-206], cost-savings are reported through the use of an organized preoperative assessment clinic staffed by anesthesiologists and nurse practitioners, a service not previously available at this large, university-based medical center. Consequently, both nurses and physicians contributed to the clinic's cost effectiveness. Any inferences to be drawn from the Fischer article are limited, because the article is based on a case study of a single anesthesia preoperative evaluation clinic. Moreover, the Fischer study did not compare CRNA preoperative evaluation effectiveness with that of anesthesiologists.

The Fischer article points out the benefits of developing protocols for reasonable preoperative testing and evaluation, but breaks no new ground in this area. If anything, the findings indicate that cost effective care in the preoperative period results from multidisciplinary guideline development and acceptance, as opposed to guidelines developed and managed solely by anesthesiologists.

Wiklund and Rosenbaum fail to support their premise that anesthesiologists, as a group, are "increasingly" staffing preoperative clinics and developing their own standardized protocols for assessing patients. In fact, their analysis of the Fischer article suggests there is a trend toward protocols developed by various specialties that can be utilized by all providers caring for the patient in the preoperative period.

Examples referenced in the article include guidelines jointly developed by the American College of Cardiology and the American Heart Association regarding the preoperative cardiovascular evaluation of patients undergoing noncardiac surgery. According to the authors, these guidelines have actually replaced those previously developed and standardized by anesthesiologists.

Further misleading editorial comments appear in part two of the article. Addressing the subject of new techniques of patient monitoring, the authors state:

Prompted by the Harvard Medical School report on standards of monitoring during anesthesia, the American Society of Anesthesiologists has become a leader in the adoption of standards of care and guidelines for practice. As a result, pulse oximetry and capnography (the analysis of carbon dioxide in exhaled air) are now used routinely to monitor general anesthesia in virtually all surgical patients in the United States. [page 1217]

Once again, the authors blend legitimate technological advancement with credit to a single professional group. In fact, the Harvard monitoring standards referenced here were first adopted and promoted by the American Association of Nurse Anesthetists. While it is true that the American Society of Anesthesiologists has since endorsed the standards as well, it is absurd to claim that oximetry and capnography have become anesthesia standards of care solely "as a result" of the ASA's endorsement.

#### Summary

This publication has demonstrated that CRNAs provide superb anesthesia care, and has refuted anesthesiologist contentions to the contrary. Anesthesia-related accidents are infrequent; those that do occur tend to result from lack of vigilance rather than the level of education of the provider. The federal Centers for Disease Control has considered conducting a large-scale study on anesthesia care, but decided such a study would not be worth the high cost such a study would entail. The reason is that the evidence is overwhelming that anesthesia care is very safe, regardless of whether the care is given by a CRNA or anesthesiologist. It is clear that studies to date demonstrate that there is no statistically significant difference between the anesthesia care provided by CRNAs working alone, CRNAs working with anesthesiologists, or anesthesiologists providing care alone. In addition, malpractice insurance premiums (as shown by St. Paul Fire and Marine Insurance Company statistics) for CRNAs have decreased significantly over the past 10 years, further demonstrating that CRNAs provide safe anesthesia care.

#### **APPENDIX**

# Nurse Anesthetist Professional Liability Premiums Premium Changes from 1988 to 1998 (St. Paul Documentation)

State	1988 Premium	1998 Premium	Overail Change (%)
Alabama	2,537	1,716	-821 (-32)
Alaska	2,603	1,097	-1,506 (-58)
Arizona	5,414	3,149	-2,265 (-42)
Arkansas	1,196	1,300	104 (9)
California	7,148	2,715	-4,433 (-62)
Colorado	2,461	1,853	-608 (-25)
Connecticut	4,704	1,312	-3,392 (-72)
Delaware	2,689	2,029	-660 (-25)
District of Columbia	3,032	2,027	-1,005 (-33)
Florida	3,588	1.898	-1.690 (-47)
Georgia	2,219	1,135	-1,084 (-49)
Hawaii <sup>(1)</sup>	2,600	1,816	-784 (-30)
Idaho	4,221	1,640	-2,581 (-61)
Illinois	6,989	2,406	-4,583 (-66)
Indiana	5,809	1,152	-4,657 (-80)
Iowa	3,317	1,608	-1,709 (-52)
Kansas	3,272	1,337	-1,935 (-59)
Kentucky	2,972	1,659	-1,313 (-44)
Louisiana	3,358	1,884	-1,474 (-44)
Maine	2,598	1,286	-1,312 (-51)
Maryland	2,921	1,593	-1,328 (-45)
Massachusetts	2,678	1,164	-1,514 (-57)
Michigan	4,980	1,509	-3,471 (-70)
-		· · · · · · · · · · · · · · · · · · ·	·
Minnesota	2,369	699	-1,670 (-70)
Mississippi	2,198	1,213	-985 (-45)
Missouri	7,806	2,738	-5,068 (-65)
Montana	3,872	1,324	-2,548 (-66)
Nebraska	2,228	873	-1,355 (-61)
Nevada	8,231	2,933	-5,298 (-64)
New Hampshire	2,530	1,817	-713 (-28)
New Jersey	5,013	3,013	-2,000 (-40)
New Mexico	2,249	2,522	273 (12)
New York	6,061	3,902	-2,159 (-36)
North Carolina	1,476	952	-524 (-36)
North Dakota	2,461	832	-1,629 (-66)
Ohio	5,392	2.638	-2,754 (-51)

New Hampshire	2,530	1,817	-713 (-28)
New Jersey	5,013	3,013	-2,000 (-40)
New Mexico	2,249	2,522	273 (12)
New York	6,061	3,902	-2,159 (-36)
North Carolina	1,476	952	-524 (-36)
North Dakota	2,461	832	-1,629 (-66)
Ohio	5,392	2,638	-2,754 (-51)
Oklahoma	2,309	1,751	-558 (-24)
Oregon	5,737	1,782	-3,955 (-69)
Pennsylvania	1,771	787	-984 (-56)
Rhode Island	3,412	1,357	-2,055 (-60)
South Carolina	1,935	671	-1,264 (-65)
South Dakota	2,736	1,007	-1,729 (-63)
Tennessee	2,352	1,180	-1,172 (-50)
Texas	2,865	2,763	-102 (-4)
Utah	3,876	1,315	-2,561 (-66)
Vermont	2,330	1,042	-1,288 (-55)
Virginia	1,431	1,095	- 336 (-23)
Washington	2,687	1,596	-1,091 (-41)
West Virginia	2,592	1,207	-1,385 (-53)
Wisconsin	2,744	889	-1,855 (-68)
Wyoming	3,947	1,933	-2,014 (-51)
TOTAL	177,916	85,116	-92,800 (-52%)

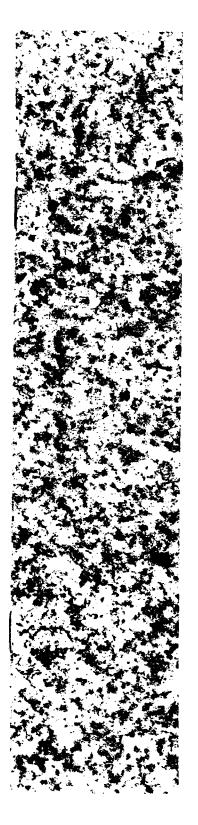
<sup>(1)</sup>St. Paul did not provide coverage in Hawaii until 1990

#### **APPENDIX G**

.

.

#### HISTORICAL PERSPECTIVE NURSE ANESTHESIA CERTIFICATON EXAMINATION





A Developmental Historical Perspective of the Qualifying Examination First Administered in 1945

Susan Smith Caulk, CRNA, MA



American Association of Nurse Anesthetists 222 South Prospect Avenue Park Ridge, Illinois 60068-4001



# signs of Progress

ي. جي ي

 $\mathbf{T}$ 

A group of nurse anesthetists founded the National Association of Nurse Anesthetists in 1931. Fifty-three nurse anesthetists signed the founding statement.



In 1940 the corporate seal was adopted. The seal's theme is the Watchful Care of the Sleeper by the Light of the Lamp of Learning. i

ì

John F. Garde, CRNA, MS

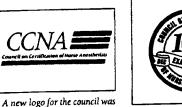
AANA Executive Director

Karen L. Zaglaniczny, CRNA, PhD

CCNA Chairman



In 1975, with the formation of the Council on Certification, the AANA transferred responsibility for the Certification Examination to the council.



On December 10, 1994, the Certification Examination will be given for the 100th time since it was introduced in June 1945.

© 1994 American Association of Nurse Anesthetists



#### Dear Friends,

Nineteen hundred ninety-four marks the year when the 100th Certification Examination for nurse anesthetists wil be given nationwide. We are proud to kick off this special event with this timeline of highlights that led up to the firs examination, which was then known as the Qualifying Examination. Over the next few years, a more in-depth chronology of historical information will be compiled that will document the vision of our former leaders and underscore the role our present leaders are playing in moving our profession into the 21st century.

We nurse anesthetists are extremely proud to have been the first specialty group in nursing to conduct a national examination after a candidate completes his or her nurse anesthesia educational program. This publication is intended to provide you with some background on the people who were instrumental in the development of that firs examination and the events leading up to its initial administration in 1945.

The Certification Program has come a long way over the past 60 years, and the Council on Certification of Nurse Anesthetists (CCNA) is currently working on the implementation of a computer adaptive testing system that will meet the requirements of ever-changing times and technology.

For AANA, as for any specialty organization, remembrand of the past helps guide future decisions.

1



In 1975, the AANA logo as we now know it today was introduced.

introduced in 1990 to denote

action and forward thinking.

#### 'I Remember..."

sie Hood, Charity Hospital, Irleans "We had been well sared by our instructors at urity Hospital, so I did not the questions overly diffi-. I did not take anesthesia atly, I worked and studied rd...the examination was a definite step forward."

Elizabeth Coolidge, Grace tal, Detroit "I thought the examination was a good ...Nurse anesthesia was a ard job. I started at \$250 a and was on call every day very other weekend ... The amination was hard, too, ring the 9-month course I had taken in anesthesia. ok me all day to write it."

nne Merkel, Germantown spital, Philadelphia "The lation covered every area inesthesia and contained several essay questions."

fary Lou Dailydas, Mercy al, Chicago "That examiution was so difficult that nember thinking if 1 ever other one it would be for al degree ... Nevertheless, it was a good idea."

Bertha Miller, Grace il. Detroit "I can't recall a : question. Although the academic training I had ed was not helpful in the mination, my hands-on perience served me well, only on the examination but throughout the 35 years I practiced."

wrg M. Midtlien, Charity New Orleans "I had just ed my anesthesia course a before, so many of the rs to the questions were 1 my mind...l was afraid didn't pass I would lose my job."

2

#### A history of the first Qualifying **Examination of the American** Association of Nurse Anesthetists (1933 - 1945)

introduced in June 1945.

This marks a credentialing

record among nursing spe-

which the American Associ-

ation of Nurse Anesthetists

When it was first adminis-

tered almost 50 years ago,

the examination was known

as the Oualifying Examina-

tion. Passage of the examina-

cialty organizations, of

(AANA) is the oldest.

On December 10, 1994. In no way was it a state the Certification Examinaboard examination or cretion of the Council on Certidentialing examination such fication of Nurse Anestheas that which is known tists will be given for the today. 100th time since it was

To indicate that an individual was a member of the association, he or she was permitted to use the designation MAANA, which stood for member of the American Association of Nurse Anesthetists.

The initials RNA were considered incorrect for use by members because they designated a registered nurse anesthetist, and there was no

It was not until 1956. when the members of the association voted to change the bylaws, that the initials CRNA, for certified registered nurse anesthetist. came into use. The initials CRNA indicated that the member had met the minimum requirements for admission to membership in the association.

In 1975, responsibility for the examination's development and administration was transferred from the AANA to the Council on Certification of Nurse Anesthetists.

More than 60 years have passed since an examination was first proposed. Time has An historical periodic de camination exists. But the words of some of those who took it speak to the examination importance in their aspirations to succeed in this "new" profession. Toward excellence in murse onessinettst. eradicated most of the de-

#### World War II. a turning point

The second world war accelerated the coming of age of the nurse anesthesia profession. Suddenly, the war in Europe and the Pacific had siphoned off a great many anesthesia providers, and hospitals all over the country were scrambling to fill the void.

Different hospitals coped with the shortage in different ways. Some looked to AANA's standards as criteria for training their students, in the hope of meeting their own needs and those of the community.

Far from being flattered by this attention, AANA was

Gail Gerway, Grace Hospital Detmit "I did not prepare ahea of time. Each school taught wi it wanted, because there were not any regulations at that tim I felt the first examination was feeler to learn how the schools measured up."

Anne Karam, Mt. Carmel Hospital, Detroit "My reaction the introduction of the examin tion was favorable. I felt it wou insure better job opportunities At the time of the examination I do remember that I felt adequately prepared. I attribute th to the director of my school of anesthesia."

Jesse Compton, Dallas, member of the first Committee ( Examinations. "I was called to Chicago with two other members of the Committee on Examinations, Marie Brown a Lois Childress, and told to bri 50 questions and answers as samples for the first examination. My questions were to be on arthrology.

"The examinations were to be conducted in different area with a monitor assigned to ear My area was Southern Method

ecommendations of the Education mittee Regarding the Examination Program ---**3 Annual Meeting** 

latings of each school rould be based on the stage of its graduates at pass examinations n by a national board of examiners.

tandards of education training should be set , as well as a working in that requires applints for certification to demonstrate their tining and knowledge.

. A mechanism should provided to verify an applicant's mastery of NANA's recommended urriculum. This could then be presented to a zical or hospital group basis for certification.

(continued on page 5)

4

the country. What knowledge it had was pieced together from questionnaires submitted by program directors, information on applications for membership and a fledgling school visit program that had been curtailed by the war. There was great concern about the graduates who were applying for membership, because of the quality of the instruction of the newly organized courses as well as that of the older

for approval of anesthesia

of examinations that had

been under discussion since

courses and schools.

in the history of the nurse anesthesia profession is best told by the events that unfolded at a succession of courses that nurses took annual meetings between and the lack of standards 1933 and 1944.

#### 1933 Suddenly, world events Milwaukee added urgency to fulfillment **1st Annual Meeting** of plans for a national board

"The fact that a patient chooses a surgeon...and

would benefit the associa-

tion and be the fairest way to

handle membership qualifi-

cations from the standpoint

of the association as well as

from the standpoint of the

individuals who were apply-

The significance of the

Certification Examination

ing for membership.

demand the same vigilance in the choice and protection of the person who, under his direction, is going to carry his patient from the conscious state into the unconscious state."

With those words, Gertrude Fife, president of the National Association of Nurse Anesthetists (NANA) called for the establishment of a national board of examination for nurse anesthetists.

In her presentation, "The Future of the Nurse Anesthetist," Ms. Fife told annual meeting attendees that such an examination would document that the nurse anesthetists' knowledge in their field met the approval of an examining board whose members were chosen to safeguard the surgeon's interest, the interest of hospitals and the interest of the public.

The association was originally known as the National Association of Nurse Anesthetists (NANA). The name was changed to the srown steadily. area excellence in nurse anesthesia

American Association of Nurse Anesthetists (AANA) in 1939.

#### 1934 Philadelphia 2nd Annual Meeting

At NANA's second annual meeting, an Education Committee was appointed to study the feasibility of a national examination for nurse anesthetists and the standardization of schools of nurse anesthesia.

To further underscore the importance of such an examination, Ms. Fife observed: "We must build our organization to function for the good of all. The national association can be likened to the hub of a wheel, with the states as spokes, each strong and sturdy, helping keep the wheel of progress in motion."

She reminded her audience that great strides had been made in anesthesia over the past 20 years and that the demand for nurse

#### (continued from page 4)

4. The Education Committee should begin development of a master set of ex amination questions for use by a national board of examiners.

5. The scope of the questions should be comprehensive while covering a broad area of training, both theoretical and prac tical, and meet the standard curriculum that has already been adopted.

6. Plans for a national examination and certifica tion of nurse anesthetists should be compatible wit the professional trends that have brought about the newly created American Board of Surgery and Council on Dental Education.

#### Steps in Preparing for the **First Qualifying** Examination

• Revision of the application forms for AANA membership

reation of a transcript for each student

• Refinement of the gistics of the program and examination

> • Preparation of bylaw revisions

• Development of test questions and a study outline

б

"We must," she said, "find a way whereby the hospitals and surgeons who employ nurse anesthetists can be assured that they have received the proper training and are

qualified to do the work." Whereas this could be assured by having state board registration, Ms. Fife went on to say that such registration was not practical or

"Our national association should choose an examining board, and every applicant who applies for NANA membership should be required to pass an examination," she said.

possible at the time.

#### 1935 St. Louis **3rd Annual Meeting**

Although there was no mention in reports from the 3rd NANA Annual Meeting of plans for the examination program, outgoing president Gertrude Fife told the audience that "through the efforts of the organization in the past two years, we have seen a trend toward better organized schools of anesthesia. The hospitals are becoming more conscious of the value of carefully trained anesthetists. It is the nurse anesthetist who must guide and influence the future education of the nurse entering this field."

- Sciences

#### 1936 Cleveland 4th Annual Meeting

Three years after a national examination for nurse anesthetists had first been proposed, NANA President Hilda Salomon told annual meeting attendees that the gap between the supply of nurse anesthetists and the demand was still widening.

Every effort, she said, should be made to contact executives of various medical organizations regarding the work of the NANA Education Committee, with a goal of establishing a national board of examiners for nurse anesthetists.

# 1937

ing the development of standards for inspecting schools of anesthesia and for the examination and certification of graduates of the proposed schools to be accredited as well as the examination and/or certification of those who were currently working in the profession.

The committee's discussions with individual members of the American Board of Surgery and the American Hospital Association regarding the proposed examination for nurse anesthetists and the inspection of schools were considered to have been productive.

#### 1939 Toronto **7th Annual Meeting**

#### List of Examination **Takers for First Qualifyin** Examination by School - 1945

Albany Hospital, Albany, NY Armstrong, Frances Thomson, Thelms L. Young, Harriett Slocun Allegheny Valley General Hospiu Pittsburgh, Pa. Kimling, Dorothy Augustana Hospital, Chicago, Ill. Bilhildis, Sister M. Barnes Hospital, St. Louis, Mo. Evans, Margaret Stallings Marsh, LaVerne Ross, Iredelle Yang, Jane H.S. Charity Hospital, New Orleans, La. Brouillard, Alice Kay Coons, Jessie V. Dixson, Ruth M. Hofrichter, Margaret Horton, Mary F. McCarty, Sara Middlien, Alborg Pierce, Bernice Cook County Hospital, Chicago, Íll.\* Robertson, Elva French Hospital, San Francisco, Calif. Mitchell, Elizabeth An historical period between the president Salomon again emphasized the need for nurse anesthetists. That it had been that i Germantown Hospital, Philadelphia, Pa.

ued from page 7) Hospital, Philadelphia, Pa. dy Hattie Hopkins Hospital, imore, Md. er, Ruth A cks, Mary S. shall, Eunice M. Immaculate Hospital, aica, NY and Sister M. schuseus General Hospital ton. Mass. tham, Sybil ton, Gertrude y Hospital, Chicago, Ill. nson, Marjorie rce, Joan Mary midt, Mary W reis, Monica y Hospital, Pittsburgh, Pa. sarvk, Emily Carmel Hospital, Detroit, Mich. derson, Rosa V. nacci, Charina ne, Anna M. ram, Anne J. :Nelly, Ena P. les, Blanche M wegian American Hospital, ticago, Ill. rdan, Evelyn Anderson inswood Hospital, Chicago, Ill. ros, Anne ard, Margaret P. red Heart Hospital, lentown, Pa. algocy, Sister M. Helen irella, Sister M. red Heart Hospital, Yankton, SD iarcaria, Sister M. red Heart Hospital ookane, Wash. hilders, Fern L. ovington, Jean G ormier, Sister M. Wonne lolt, Florence Francis Hospital, Peoria, Ill. lenrichs, Eunice Francis Hospital, usburgh, Pa. amp, Annella eller, Inda West Jenderson, Jean R. Aorgan, Josephine

ntinued on page 9)

Interest in nurse anesthesia as a career had received a major boost when an article. "Anesthesia - A Career," appeared in the August issue of RN Magazine and drew 400 inquiries in a 3-week period.

Another landmark was reached that year when a resolution was adopted to change the name of the association to the American Association of Nurse Anesthetists.

#### 1940 Boston 8th Annual Meeting

President Shupp recommended that until such time An historical person that all active members in An historical person the structure of the s as the AANA could be as-

cants could be used to measure their eligibility.

"We have," she said, "arrived at that period in our development when this project can and should be put into effect to assure the members of AANA and those who employ nurse anesthetists that only properly qualified people are being admitted to membership."

Requirement of such an examination would serve a dual purpose. First, it would motivate schools of anesthesia to improve their instructional programs, and, second, it would monitor the quality of such schools based on the rate of success or failure of their graduates on the

good standing be permitted to become registered simply by paying the examination fee by a specified time. Those who failed to do so would be required to take and pass the national examination.

Ms. Shupp recommended that a special committee be appointed to prepare a detailed plan of the national examination for membership. This plan was to be announced and put to a vote at the 1941 annual meeting.

#### 1941 **Atlantic City 9th Annual Meeting**

President Helen Lamb expressed the hope that a national examination program could be developed and put into operation by early 1943.

The Education Committee had laid the groundwork for the examination by sending a memorandum to schools of anesthesia requesting sets of questions for use in

plan was put into effect. Selection of the actual questions for the examination was to be the responsibility of the yet to be named examining board.

Upon the recommendation of President Shupp in 1940, the AANA Board of Trustees appointed a Certification Program Committee to study plans for the examination for membership in the association.

It was felt at the time that determining their eligibility for membership in the AANA was of special importance to the anesthetists who had extensive experience in administering anesthetics but were not graduates of an approved school of anesthesia.

#### 1942 St. Louis **10th Annual Meeting**

The Certification Program Committee, which had been appointed the previous year, put its report in the form of a resolution, calling for a pro-

Bartholomew, Sister M. Offvia, Sister M. St. Vincent's Hospital, Worcester, Mass. Compangone, Josephine Station Hospital, Ft. McPherson, Ga. University Hospital Cleveland, Ohio DuBois, Marion E. Miller, Florence V. Northern, Edith University of Michigan, Ann Arbor, Mich. Curran, Agnes K. Denton, Mary Joa Stefanowski, Anna V. J University of Minnesota, Minneapolis, Minn. Brecht, Doris M. Erickson, Genrude Hughes, Vera C. Olsen, Elsie Marie Pieiler, Bernadine Poole, Genrude M. Schulze, Paula A. Vander Wal, Emmi Vanderbili University, Nashville, Tenn. Weinstein, Lucy M

> Burmeister, Grace Graham, Hilda M. Swanson, Agnes M. West End Hospital, Chicago, Il Henderson, Willie No School Indicated Celine, Sister M.

> > 9

(continued from page 8)

St. Francis Hospital, LaCrosse, \ Andrews, Dorothy Schumach St. John's Hospital, Springfield, Emelia, Sister M. St. Joseph's Hospital, Joliet, Ill. Neighbor, Virginia St. Mary's Hospital, Duluth, Mi Thompson, Mary Marguerite Wesley Hospital, Chicago, Ill. when such a gram that would require all AANA members to be certi-ard excellence in nurse anesthesit

#### mary of the lopment of the Qualifying ination

The first call was nade for a national voard of examination or nurse anesthetists.

**An Education Com**nittee was appointed o study the feasibiliy of a national xamination for urse anesthetists ind standardization f schools of nurse nesthesia.

he Certification 'rogram Committee egan work on a plan or a national xamination. Rose G. Donovan Gertrude Fife Helen Lamb Miriam G. Shupp, Chairman

resolution prepared y the Certification rogram Committee at called for certifiition of all present tive members by aiver and certificam of all properly alified applicants examination as unanimously lopted.

in page 11)

0

fied by examination, with the exception of currently active members, for whom the examination requirement would be waived.

In the introduction to the resolution, the importance of a certification/examination program was explained:

> "The increased need for anesthetists in the armed forces created an acute shortage of nurse anesthetists, and • "It is the earnest desire of the Board of Trustees of the American Associa-

tion of Nurse Anesthetists not only to maintain the standards already attained, but to

ing this period, and "There are now various" hospitals that are opening schools of anesthesia,

raise the standards dur-

which offer courses of Mich out, Today, Today, Town

at least six months' duration whose quality of training is difficult for AANA to determine but whose graduates are from time to time making application for

membership in the association."

The resolution was presented and unanimously adopted.

Each individual who applied for membership to become certified would have to have the qualifications reguired by the AANA and take an examination conducted by the AANA.

A certification fee of \$10, over and above the annual dues, was established, with the proceeds to go toward meeting program expenses and the program's further

#### 1943 Buffalo **11th Annual Meeting**

With an embargo on unnecessary travel because of the war, the length of the annual meeting was reduced to only one day. That the AANA was one of the few favored organizations allowed to travel at all to convene during the second year of the war attested to the importance of the activities in which the association was engaged.

The plan for the Certification Program that had been approved at the 1942 meeting had been submitted to the Council on Professional Practice of the American Hospital Association (AHA). The AHA's liaison with AANA was Dr. J.R. Clemmons, who looked favorably on nurse

advance...... of An historical performance quality of nurse anesthesia delivery while depriving those who were practicing

but did not have the qualifications necessary to take the examination for AANA membership.

It was also concerned that by waiving the certification requirement for all currently active members, the AANA was conferring the highest rating on them and possibly weakening the program by including some who might be among the least qualified to practice.

Because the examination itself would only test the theoretical, the AHA remained skeptical of the examination's ability to comprehensively test the clinical skills and fitness of the candidates.

Meanwhile, within the AANA membership itself, there were objections to paying a fee for an examination that gave the successful testtakers no advantages over those remaining uncertified.

To address the criticisms, the Certification Program Committee proposed that the action taken by the those who were membership at the previous practicing annual meeting be rescinded and the 1942 report excellence in nurse anesthesio

(continued from page 10)

1943 Because of the American Hospital Association's reserv. tions about the proposed examination program and AANA member objections, the Certification Program Committe proposed that the resolution passed in 1942 be rescinded and referred back to the committee for further study.

1944 Bylaws were amena ed to make passing the qualifying exan nation a requireme. for eligibility to be a active member of AANA. The Committee on

Examinations was formed to prepare test questions and grade papers. The Committee on Credentials was formed to determin and/or reject the qualifications of ea applicant for the examination.

1945 The first qualifying examination was administered on June 4.

#### **Facts About the First Qualifying** Examination

92 nurse anesthetists ook the examination\*

hospitals were represented from 16 states

89 test-takers passed with grade of 70% or better

A \$10 fee was levied examination was 38 pages long

contained true-false, fill-in, essay and multiple-choice questions

consisted of five parts: inatomy and physiology; anesthetic agents ind medications; clini-1 aspects; gas therapy and miscellaneous, which included history, ethics, terminology, organization and management of anesthesia; nd gas therapy departments and explosion azards and safeguards

: One applicant was disqualified use she had not been accepted by e Committee on Credentials and was not authorized to take the examination

(continued on page 13)

12

be referred back to the committee for further study.

that these applications

or rejected.

1944

Cleveland

should be expeditiously

reexamined and approved

**12th Annual Meeting** 

In the May NewsBulletin,

Executive Secretary Ann

Campbell expressed the

hope that "admission by ex-

amination will make it possi-

ble to judge the caliber of the

Campbell expressed confidence that "the results of the While the groundwork for examination should provide the examination was being a basis for judging the thorlaid, a backlog of applicaoughness of the schools." tions for membership built up. The committee decided

When the annual meeting convened in 1943, lack of a quorum had prevented action from being taken on recommendations made by the Examination Program Committee (formerly, the Certification Program Committee). However, the examination program was approved at the 1944 meeting, and the bylaws were amended to make

because of the war, Ms.

successful passage of the Qualifying Examination a requirement for eligibility as an active member.

Trustees. The committee was charged with the responsibility for preparing the master set of questions for each examination as well as instructions for test-takers and grading the papers of those who took the test.

An important change had occurred in the way the program was originally presented and the way it had been revised: Certification had been abolished. The program, as it was now presented to the members for approval, provided for the examination of applicants for membership without certifying them on the basis of successful completion of the examination or by waiver.

art-on to the watchful eye of a local to the watchful eye of a local

The questions for both the oral and written portions of the examination were to be developed by the members of the Committee on Examinations and submitted to AANA's executive secretary under the seal of the local examiner, who would indicate the results of the test and send it to the executive secretary, who would then send it to the Committee on Examinations.

Once the committee received a completed written examination, each member would review it and grade it according to predetermined values. The marks would then be sent back to the executive secretary, whose responsibility it was to average the marks and assign a grade.

Answers to the practical and written parts carried equal weight, and 70% was set as the passing grade.

Those who failed the examination could take it again within the calendar year in the catendar year without having to pay an ad-ditional fee. However, if they are excellence in nurse anesthesia

#### (continued from page 12)

- There was no oral or practical component
- The clinical aspects wa the easiest section
- · Gas therapy and misce laneous were the most difficult
- · Each section carried equal weight in scoring
- Passing was based on the average score of the five sections
- · Each section was grade by the committee member who developed questions for it
- · Grades were not revealed to test-takers or schools

#### 1944 Committee on Examinations

Marie Brown Lois Childress Jessie Compton Sister Ruldolpha Esther Myers Stephenson Miriam G. Shupp, Chairman

#### Applicant Qualifications

lave graduated from an credited high school or its equivalent.

ave graduated from an accredited school of nursing.

Be currently registered a nurse in her state of residence.

· Be of good moral and ethical standing in the nursing profession.

lave graduated from a hool of anesthesiology t offered an organized purse of no less than 6 mths' duration, which et the standards of the association.

14

failed again, further attempts to pass the examination could be made only if they paid another \$15 fee.

> Successful test-takers were to be notified by the executive secretary within 90 days. Upon payment of prorated annual dues, they were issued membership cards.

Also established under the revised bylaws was the Committee on Credentials, which replaced the membership committee.

The responsibility of the Committee on Credentials was to review the qualifications of each applicant as a basis for accepting or rejecting the applicant's request to

in the examination. Twentyfour schools submitted examination questions, of which all but two sent in essay-type questions. Questions that were included in the examination were drawn

from these submissions.

With the time for the first examination nearing, the Certification Program Committee was working jointly with the Committee on Examinations to prepare the test in conformance with new bylaws and rules voted on at the annual meeting.

#### **June 4, 1945** The First Qualifying Examination

bility set it apart from a state board examination or a certification examination.

Overseen by examination proctors who were chosen by the chairman of the Committee on Examinations and AANA's executive secretary. the examinees tackled the five parts of the 38-page examination, which included true-false, fill-in, essay and multiple-choice questions but no oral or practical component.

The examination questions covered anatomy and physiology; anesthetic agents and medications' clinical aspects; gas therapy and miscellaneous, which included questions on histonization and management of

Led, Lang grade being prerequisite to AANA mem-bership. This aspect of eligi-An historical heaving to motivor. An historical heaving the 

cult. Obstacles presented by these two areas were ascribed to the possibility that they were not as thoroughly covered in the schools as the areas in which the examinees performed better.

From a practical standpoint, the five separate content areas carried equal weight, because passing or failing the test was based on the average of the scores of the five divisions of the examination.

Each section of the examination was graded by the committee member who developed the questions for it. Because of its chairman's heavy work load, five committee members had worked on the gas therapy section, which was later graded by the chairman with the assistance of one of the committee members.

The grades of the first group of test-takers were not revealed to them or their schools. However, by the time of the second examina-

#### Conditions **Required** to Take the Examination

- If an individual had graduated from a school of anesthesiology that of. fered an organized cours of 4 to 6 months' duration before 1939, that training was accepted in lieu of a 6-month course that was taken after 1939.
- · If an applicant had not taken a formal course in anesthesiology but had been continuously administering anesthetics since 1933 in a hospital that was approved by the American College of Surgeons and was employed at the time she applied to take the examination, that experience was accepted in lieu of having taken a course of 6 months' duration after 1939.

#### Evaluation )uestionnaire llowing First Examination

'ere there any quesions that you found confusing?

you find any one of : examination parts o be too long for the time allotted?

Was there anything ed on this examination that was not ught in your school of anesthesiology?

Was there anything sitted on this examination that you feel should have been incorporated?

#### Resources Following administration

of the first Qualifying Exam-

candidates, who were asked

As might be expected,

answers to each of these, but

in general there were no seri-

At last, 12 years after it

was first proposed, the nurse

anesthesia profession had a

vardstick that enabled the

association to "raise the

standards of membership

and the educational stan-

sia, as well as increase the

excellence of the services

provided to patients, sur-

individual nurse anesthetists

dards of schools of anesthe-

there were yes and no

ination, AANA prepared a

questionnaire for the

four questions.

ous complaints.

1. Bulletin. National Association of Nurse Anesthetists. February 1933 to August 1939.

2. Bulletin. American Association of Nurse Anestherists. November 1939 to November 1946.

3. Journal of the American Association of Nurse Anesthetists. February 1945 to November 1947.

4. Notes on the History and Organization of the American Association of Nurse Anesthetists. AANA 1963 Planning Committee. 1967.

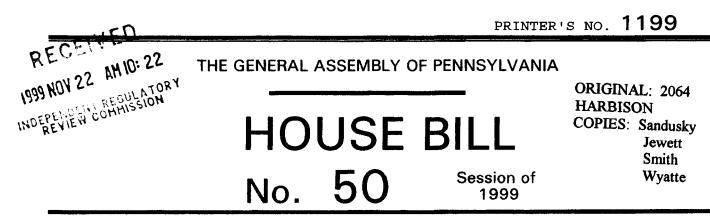
A STATE OF STATE

#### Looking to the 21st Century



Over the past decade, computers have become an integral part of our An historical person technology into its testing. By 1996, the Council's goal is to implement computer adaptive testing (CAT). society and our practice. The

### **Designs** o **Progres**:



INTRODUCED BY VANCE, MANDERINO, DAILEY, STERN, E. Z. TAYLOR, BUXTON, ARMSTRONG, BAKER, BARD, BARRAR, BATTISTO, BEBKO-
JONES, BELARDI, BELFANTI, BENNINGHOFF, BISHOP, BOYES, BUNT,
CAPPABIANCA, CASORIO, CHADWICK, CLYMER, L. I. COHEN,
M. COHEN, CORNELL, COSTA, COY, CURRY, DALEY, DALLY, DELUCA,
DEMPSEY, DERMODY, DeWEESE, EVANS, FICHTER, FLEAGLE, FLICK,
FORCIER, FRANKEL, FREEMAN, GEORGE, GODSHALL, GRUITZA, HABAY,
HARHAI, HASAY, HENNESSEY, HERMAN, HERSHEY, HORSEY,
HUTCHINSON, JAMES, JOSEPHS, KAISER, KENNEY, KREBS, LAGROTTA,
LAUGHLIN, LAWLESS, LUCYK, LYNCH, MAHER, MAJOR, MARSICO,
MASLAND, MCCALL, MCGILL, MCILHATTAN, MCILHINNEY, MELIO,
METCALFE, MICHLOVIC, MICOZZIE, S. MILLER, MUNDY, MYERS,
NICKOL, OLIVER, ORIE, PESCI, PETRARCA, PETRONE, PIPPY,
PRESTON, RAMOS, RAYMOND, READSHAW, ROEBUCK, ROONEY, ROSS,
RUBLEY, SAINATO, SANTONI, SAYLOR, SCRIMENTI, SEMMEL, SEYFERT,
SHANER, B. SMITH, SNYDER, SOLOBAY, STABACK, STEELMAN, STEIL,
STETLER, STEVENSON, STURLA, SURRA, THOMAS, TRAVAGLIO, TRELLO,
TRICH, TULLI, VAN HORNE, VEON, WALKO, WILLIAMS, WILT, WOGAN,
WOJNAROSKI, YEWCIC, YOUNGBLOOD AND ZIMMERMAN, MARCH 24, 1999

REFERRED TO COMMITTEE ON PROFESSIONAL LICENSURE, MARCH 24, 1999

#### AN ACT

1 2	Amending the act of May 22, 1951 (P.L.317, No.69), entitled, as amended, "An act relating to the practice of professional
3	nursing; providing for the licensing of nurses and for the
4	revocation and suspension of such licenses, subject to
5	appeal, and for their reinstatement; providing for the
6	renewal of such licenses; regulating nursing in general;
7	prescribing penalties and repealing certain laws," further
8	providing for State Board of Nursing; providing for advanced
9	practice registered nurse, for certified registered nurse
10	practitioner, for certified registered nurse anesthetist and
11	for certified clinical nurse specialist; further providing
12	for unauthorized practices and for refusal, suspension or
13	revocation of licenses; and making a repeal.

The General Assembly of the Commonwealth of Pennsylvania 14

hereby enacts as follows: 15

Section 1. Sections 2 and 2.1 of the act of May 22, 1951
 (P.L.317, No.69), known as The Professional Nursing Law, amended
 December 20, 1985 (P.L.409, No.109), are amended to read:

Section 2. Definitions.--When used in this act, the
following words and phrases shall have the following meanings
unless the context provides otherwise:

7 [(1)]The "Practice of Professional Nursing" means diagnosing 8 and treating human responses to actual or potential health 9 problems through such services as casefinding, health teaching, 10 health counseling, and provision of care supportive to or restorative of life and well-being, and executing medical 11 12 regimens as prescribed by a licensed physician or dentist. The 13 foregoing shall not be deemed to include acts of medical 14 diagnosis or prescription of medical therapeutic or corrective 15 measures, except as may be authorized by rules and regulations 16 jointly promulgated by the State Board of Medicine and the 17 Board, which rules and regulations shall be implemented by the 18 Board.

19 (2) "Board" means the State Board of Nursing.]

20 "Advanced practice registered nurse" means an individual who 21 has met the requirements to practice as an advanced practice 22 registered nurse as set forth in regulations promulgated by the Board of Nursing and practices in one or more of the categories 23 of certified registered nurse practitioner (CRNP), certified 24 25 registered nurse anesthetist (CRNA) or certified clinical nurse specialist (CCNS) in accordance with the scope of practice and 26 27 standards of care that are defined by national organizations of each specialty area of practice. 28 29

29 [(3)] "Approved" means approved by the State Board of 30 Nursing.

19990H0050B1199

- 2 -

1 "APRN" means an advanced practice registered nurse.

2 <u>"Board" means the State Board of Nursing.</u>

3 "CCNS" means a certified clinical nurse specialist.

4 "CRNA" means a certified registered nurse anesthetist.

5 "CRNP" means a certified registered nurse practitioner.

[(4)] "Diagnosing" means that identification of and
discrimination between physical and psychosocial signs and
symptoms essential to effective execution and management of the
nursing regimen.

10 [(5) "Treating" means selection and performance of those 11 therapeutic measures essential to the effective execution and 12 management of the nursing regimen, and execution of the 13 prescribed medical regimen.

14 (6)] "Human responses" means those signs, symptoms and
15 processes which denote the individual's interaction with an
16 actual or potential health problem.

"Practice of professional nursing" means diagnosing and 17 18 treating human responses to actual or potential health problems 19 across the life span. This practice involves the performance of acts requiring substantial knowledge, judgment and skill based 20 21 upon the principles of the biological, physical, behavioral and 22 social sciences. The professional nurse develops and initiates a 23 plan of care to accomplish defined goals and evaluates responses to care and treatment. The practice of professional nursing 24 includes, but is not limited to, initiation and maintenance of 25 therapeutic health care regimens and comfort measures, promoting 26 and supporting human functions and responses, establishing and 27 managing an environment conducive to well being, providing 28 health counseling and teaching, case finding and case management 29 and executing therapeutic patient care orders of a licensed 30 19990H0050B1199 - 3 -

professional health care provider, including, but not limited
 to, advanced practice registered nurses, certified nurse

#### 3 midwives, physicians and dentists.

4 <u>"Treating" means selection and performance of those</u>

5 therapeutic measures essential to the effective execution and

6 management of the nursing regimen and execution of a prescribed

7 therapeutic regimen.

19990H0050B1199

8 Section 2.1. State Board of Nursing .-- (a) The State Board 9 of Nursing shall consist of the Commissioner of Professional and 10 Occupational Affairs, three members appointed by the Governor, 11 with the advice and consent of a majority of the members elected 12 to the Senate, who shall be persons representing the public at 13 large, and [seven] nine members appointed by the Governor, with the advice and consent of a majority of the members elected to 14 15 the Senate, five of whom shall be registered nurses, graduated from schools of nursing where practical and theoretical 16 17 instruction is given, at least three of whom shall possess 18 Masters' degrees in nursing, at least one of whom shall be a 19 certified registered nurse practitioner, at least one of whom shall be a certified registered nurse anesthetist, and at least 20 one of whom shall be a certified clinical nurse specialist, and 21 two of whom shall be licensed practical nurses, and all of whom 22 23 shall have been engaged in nursing in this Commonwealth for the five-year period immediately preceding appointment. In making 24 appointments to the Board, the Governor shall give due 25 consideration to providing representation from diversified 26 fields of nursing, including, but not limited to, specialized 27 nurses of all types. 28

29 (a.1) (1) The Board shall appoint an advisory council that 30 will:

- 4 -

1	(i) Draft and recommend for the Board's approval rules and
2	regulations for the practice of the specialties of CRNP, CRNA
3	and CCNS.
4	(ii) Act as expert consultants in matters pertaining to
5	advanced practice registered nurse and education and scope of
6	practice.
7	(iii) Function as a resource in matters pertaining to
8	grievances and arbitration of APRNs.
9	(iv) Review quality and effectiveness of services being
10	delivered by APRNs so as to assure the protection of the health,
11	safety and welfare of the public.
12	(2) The composition of the council shall include the four
13	APRN members of the Board. Additionally the Board shall appoint
14	at least one other member from each specialty group (CRNPs,
15	CRNAs and CCNSs). These individuals shall be chosen from lists
16	furnished by organized APRN groups in this Commonwealth. The
17	APRN representatives shall be those APRNs who are actively
18	involved in the delivery of health care and shall represent some
19	geographical distribution throughout this Commonwealth. Two
20	consumers, one of whom shall be a consumer of APRN services,
21	shall also be appointed.
22	(b) The terms of the members of the Board shall be six years
23	or until his or her successor has been appointed and qualified
24	but not longer than six months beyond the six-year period. In
25	the event that any of said members shall die or resign or
26	otherwise become disqualified during his or her term, his or her
27	successor shall be appointed in the same way and with the same
28	qualifications and shall hold office for the unexpired term. No
29	member shall be eligible for appointment to serve more than two
30	consecutive terms.
1999	90H0050B1199 - 5 -

(c) A majority of the members of the Board serving in
 accordance with law shall constitute a quorum. Except for
 temporary and automatic suspensions under section 15.1 of this
 act or section 17.1 of the act of March 2, 1956 (1955 P.L.1211,
 No.376), known as the "Practical Nurse Law," a member may not be
 counted as part of a quorum or vote on any issue, unless he or
 she is physically in attendance at the meeting.

8 (d) The Board shall select annually a chairman from among 9 its members. The Board shall select an executive secretary who, 10 with the approval of the Commissioner of Professional and 11 Occupational Affairs, need not be a member of the Board.

(e) Each member of the Board, except the Commissioner of
Professional and Occupational Affairs, shall receive sixty
dollars (\$60) per diem when actually attending to the work of
the Board. Members shall also receive the amount of reasonable
traveling, hotel and other necessary expenses incurred in the
performance of their duties in accordance with Commonwealth
regulations.

(f) The Board is subject to evaluation, review and termination within the time and in the manner provided in the act of December 22, 1981 (P.L.508, No.142), known as the "Sunset Act."

(g) A member of the Board who fails to attend three consecutive meetings shall forfeit his or her seat unless the Commissioner of Professional and Occupational Affairs, upon written request from the member, finds that the member should be excused from a meeting because of illness or the death of a family member.

(h) A public member who fails to attend two consecutive
 statutorily mandated training seminars in accordance with
 19990H0050B1199 - 6 -

section 813(e) of the act of April 9, 1929 (P.L.177, No.175), known as "The Administrative Code of 1929," shall forfeit his or her seat unless the Commissioner of Professional and Occupational Affairs, upon written request from the public member, finds that the public member should be excused from a meeting because of illness or the death of a family member.

7 (i) The Board, with the approval of the Commissioner of 8 Professional and Occupational Affairs, shall also appoint and 9 fix the compensation of one or more State educational advisors 10 of schools of nursing and one or more State practice advisors, 11 who shall have the same qualifications as the nurse members of 12 the Board who hold Masters' degrees in nursing.

(j) The Board shall meet at least once every two months and
at such additional times as may be necessary to conduct the
business of the Board.

16 (k) The Board shall have the right and duty to establish 17 rules and regulations for the practice of professional nursing 18 and the administration of this act. Copies of such rules and 19 regulations shall be available for distribution to the public. 20 Section 2. The act is amended by adding a section to read: 21 Section 3.1. Advanced Practice Registered Nurses.--(a) An APRN is authorized to diagnose and treat illnesses, perform 22 23 therapeutic and invasive procedures, prescribe, dispense and 24 administer drugs and devices and order and administer anesthetics, pursuant to the rules and regulations established 25 26 by the Board consistent with the advanced practice registered nurse scope of practice. APRNs may prescribe and administer 27 controlled substances in categories II through V pursuant to 28 29 Federal Drug Enforcement Agency's (DEA) rules and regulations in 30 a manner consistent with their scope of practice. - 7 -19990H0050B1199

1 (b) A person who is authorized by the Board to practice as a 2 CRNP shall have the right to use the title certified registered 3 nurse practitioner and the abbreviation CRNP to indicate that 4 the person is a certified registered nurse practitioner. A 5 person who is authorized by the Board to practice as a CRNA 6 shall have the right to use the title certified registered nurse 7 anesthetist and the abbreviation CRNA to indicate that the 8 person is a certified registered nurse anesthetist. A person who 9 is authorized by the Board to practice as a CCNS shall have the 10 right to use the title certified clinical nurse specialist and 11 the abbreviation CCNS to indicate that the person is a certified 12 clinical nurse specialist. No other person shall engage in the 13 practice of or use the titles certified registered nurse 14 practitioner, certified registered nurse anesthetist or 15 certified clinical nurse specialist or the abbreviation CRNP, 16 CRNA or CCNS to indicate that the person is a certified registered nurse practitioner, a certified registered nurse 17 18 anesthetist or a certified clinical nurse specialist. 19 Section 3. Sections 4 and 14 of the act, amended December 20, 1985 (P.L.409, No.109), are amended to read: 20 Section 4. Unauthorized Practices; Acts not Prohibited .--21 22 This act [confers no authority to practice dentistry, podiatry, optometry, chiropractic, medicine or surgery,] does not limit 23 24 the right of an individual to practice a health occupation that he or she is otherwise authorized to practice under this act, 25 26 nor does it limit the right of an individual to practice any other profession that he or she is authorized to practice under 27 the laws of this Commonwealth, nor does it prohibit --28 29 Home care of the sick by friends, domestic servants, (1) nursemaids, companions, or household aides of any type, so long 30 19990H0050B1199 - 8 -

as such persons do not represent or hold themselves out to be 1 2 licensed nurses, licensed registered nurses, or registered 3 nurses; or use in connection with their names, any designation tending to imply that they are licensed to practice under the 4 provisions of this act nor services rendered by any physicians, 5 osteopaths, dentists or chiropractors, podiatrists, 6 optometrists, or any person licensed pursuant to the act of 7 March 2, 1956 (P.L.1211, No.376), known as the "Practical Nurse 8 Law." 9

10 (2) Care of the sick, with or without compensation or 11 personal profit, when done solely in connection with the 12 practice of the religious tenets of any church by adherents 13 thereof.

14 (3) The practice of professional nursing by a person 15 temporarily in this Commonwealth licensed by another state, territory or possession of the United States or a foreign 16 17 country, in compliance with an engagement made outside of this 18 Commonwealth, which engagement requires that such person 19 accompany and care for a patient while temporarily in this 20 Commonwealth: Provided, however, That said engagement shall not be of more than six (6) months' duration. 21

(4) The practice of professional nursing, pursuant to a 22 23 temporary practice permit, by a graduate of an approved program of professional nursing in Pennsylvania or any other state, 24 25 working under qualified supervision, during the period not to exceed one (1) year between completion of his or her program and 26 notification of the results of a licensing examination taken by 27 such person, and during such additional period as the Board may 28 in each case especially permit. 29

30 (5) The practice of professional nursing, pursuant to a 19990H0050B1199 - 9 -

temporary practice permit, by a person who holds a current 1 2 license or other evidence of the right to practice professional nursing, as that term is defined in this act, issued by any 3 other state, territory or possession of the United States or the 4 Dominion of Canada, during the period that an application filed 5 6 by such person for licensure in Pennsylvania is pending before 7 the Board, but not for a period of more than one (1) year and 8 during such additional period as the Board may in each case 9 especially permit.

(6) The practice of professional nursing, within the
11 definition of this act, by any person when such person is
12 engaged in the practice of nursing as an employee of the United
13 States.

14 Section 14. Refusal, Suspension or Revocation of Licenses.--15 (a) The Board may refuse, suspend or revoke any license in any 16 case where the Board shall find that--

17 (1) The licensee is on repeated occasions negligent or18 incompetent in the practice of professional nursing.

19 (2)The licensee is unable to practice professional nursing with reasonable skill and safety to patients by reason of mental 20 21 or physical illness or condition or physiological or psychological dependence upon alcohol, hallucinogenic or 22 23 narcotic drugs or other drugs which tend to impair judgment or coordination, so long as such dependence shall continue. In 24 enforcing this clause (2), the Board shall, upon probable cause, 25 have authority to compel a licensee to submit to a mental or 26 physical examination as designated by it. After notice, hearing, 27 adjudication and appeal as provided for in section 15, failure 28 of a licensee to submit to such examination when directed shall 29 constitute an admission of the allegations against him or her 30 19990H0050B1199 - 10 -

unless failure is due to circumstances beyond his or her control, consequent upon which a default and final order may be entered without the taking of testimony or presentation of evidence. A licensee affected under this paragraph shall at reasonable intervals be afforded an opportunity to demonstrate that he or she can resume a competent practice of professional nursing with reasonable skill and safety to patients.

8 (3) The licensee has wilfully or repeatedly violated any of 9 the provisions of this act or of the regulations of the Board. 10 (4) The licensee has committed fraud or deceit in the 11 practice of nursing, or in securing his or her admission to such 12 practice or nursing school.

13 The licensee has been convicted, or has pleaded guilty, (5) 14 or entered a plea of nolo contendere, or has been found guilty by a judge or jury, of a felony or a crime of moral turpitude, 15 16 or has received probation without verdict, disposition in lieu 17 of trial or an Accelerated Rehabilitative Disposition in the disposition of felony charges, in the courts of this 18 19 Commonwealth, the United States or any other state, territory, 20 possession or country.

(6) The licensee has his or her license suspended or revoked
or has received other disciplinary action by the proper
licensing authority in another state, territory, possession or
country.

(7) The licensee has acted in such a manner as to present an26 immediate and clear danger to the public health or safety.

(8) The licensee possessed, used, acquired or distributed a
controlled substance or caution legend drug for other than an
acceptable medical purpose.

30 (9) The licensee has been guilty of immoral or 19990H0050B1199 - 11 - unprofessional conduct. Unprofessional conduct shall include departure from or failing to conform to an ethical or quality standard of the profession. The ethical and quality standards of the profession are those embraced by the professional community in this Commonwealth. In proceedings based on this clause, actual injury to a patient need not be established. ((9) added May 27, 1994, P.L.248, No.35)

8 (b) When the Board finds that the license of any nurse may 9 be refused, revoked or suspended under the terms of subsection 10 (a), the Board may:

11 (1) Deny the application for a license.

12 (2) Administer a public reprimand.

13 (3) Revoke, suspend, limit or otherwise restrict a license14 as determined by the Board.

(4) Require a licensee to submit to the care, counseling or
treatment of [a physician or a psychologist] <u>an APRN or other</u>
<u>appropriate mental health care professional</u> designated by the
Board.

19 (5) Suspend enforcement of its finding thereof and place a
20 licensee on probation with the right to vacate the probationary
21 order for noncompliance.

(6) Restore or reissue, in its discretion, a suspended
license to practice professional or practical nursing and impose
any disciplinary or corrective measure which it might originally
have imposed.

Section 4. Section 15 of the act of December 20, 1985 (P.L.457, No.112), known as the Medical Practice Act of 1985, is repealed.

29 Section 5. This act shall not prohibit the continued 30 practice of nurses authorized to practice in this Commonwealth 19990H0050B1199 - 12 -

- 1 prior to the effective date of this act.
- 2 Section 6. This act shall take effect in 60 days.

B22L63JS/19990H0050B1199 - 13 -

.

·

## People's Medical Society.

462 Walnut Street Allentown, PA 18102 (610) 770-1670 • Telephone (610) 770-0607 • FAX RECEIVED 1999 NOV 22 AM 10: 21 INDEPENDENT REGULATORY REVIEW COMMISSION

ORIGINAL: 2064 HARBISON COPIES: Sandusky Jewett Smith Wyatte

### Testimony of Michael A. Donio Director of Projects, People's Medical Society Professional Licensure Committee The Honorable Mario J. Civera, Jr., Chairman Thursday, October 28, 1999

Mr. Chairman and members of the committee. I want to thank you for providing me with this opportunity to present testimony in favor of House Bill 50. My name is Michael A. Donio and I am the director of projects for the People's Medical Society, a national health care consumers organization headquartered in Allentown.

I appear here today to speak in favor of HB 50 for one fundamental reason. It is in the best interest of the medical consumer.

In addition, it addresses one of the major goals of the People's Medical Society which is a free, open, competitive marketplace where the consumer has choices and makes decisions. The People's Medical Society does not believe that the medical field should be the exclusive purview of any one group of practitioners. Rather, we envision a medical marketplace where various, well-qualified practitioners are free to offer their services and we, as consumers, decide when and where to access those services.

I do not intend to get into a technical discussion of the finer points of HB-50----I believe the nursing profession can better address that aspect of the bill. Rather, I am providing you with the consumers point of view of how access to advance practice nurses gives us more choices. We are surprised, however, that the Pennsylvania Medical Society opposes HB-50 since on most issues they are in favor of a free enterprise model of health care. We question why they suddenly no longer believe in a capitalistic, free enterprise, open market approach. Could it be they are more concerned about their income and control of the nursing profession than in the best interests of consumers? Is this perhaps more a turf battle than "true" concern about the quality of health care (see attached article from People's Medical Society newsletter).

Since the founding of People's Medical Society, we have been very strong supporters of nursing, especially advance practice nurses such as nurse practitioner--adult and pediatric, nurse-midwives and certified registered nurse anesthetists to name a few. We have always advised consumers to seek out the opinions of nurses on various medical

conditions. We recognize nurses as an excellent source of health care information and leaders in consumer health care education. We have often said if you want to find a good doctor, "ask a nurse." Or, if you have questions concerning medical procedures and their outcomes. In fact, we are currently completing a consumer health education publication entitled, *Ask A Nurse: From Home Remedies to Hospital Care.* 

With the passages of HB-50 consumers will no longer need to consult with a physician every time they require a new prescription or a refill. They will be able to work with their nurse practitioner and have all their needs met. Not only does this provide consumers with an easier access to care, but also at a reduced cost.

Several studies have examined the potential economic savings as a result of using advance practice nurses to deliver care and concluded that up to \$1 billion could be saved in primary care costs. For the self-insured and even insurance companies, this translates into real money and actual savings.

The nursing profession has made tremendous strides within the past quarter-century by developing baccalaureate and graduate programs that have elevated it from merely being the "hand maiden" of physicians to where

nurses are professional, competent, and independent health care practitioners. I am citing this time frame, because it represents the time that I have actively been involved in the health care system.

They fill a very important role in being the first contact for many consumers entering the health care system and their impact can be tremendous. Physicians have been known to complain that they don't have time to discuss every issue with consumers because their time is so valuable. Physicians also tend to consider certain aspects of primary care, taking a medical history, doing the initial vital signs work-up, reviewing the medical record and listening to the complaint as beneath their station.

Nurse practitioners are well-skilled at these practices and, if truth be told, are probably more adept at collecting this information than physicians. And studies tend to support this supposition. 75-80 percent of adult primary care cases and upwards of 90 percent of pediatric primary care services can be performed by nurse practitioners.

You don't need to look any further than the certified nurse-midwife program to see the contributions of advance practice nurses. Nursemidwives give women a second option when choosing obstetrics care and usually an alternative birthing setting as well. Working independently, except

for certain collaborative or back-up arrangement with physicians, certified nurse mid-wives clearly demonstrate the competency, skill and value of advance practice nursing.

Advance practice nurses are also found to make valuable contributions to primary care, where they generally devote more time to each consumer than would be allocated by a physician. Several successful demonstration projects, including one sponsored by Columbia University School of Nursing, illustrate this point. So successful are these nurse practitioners, that they are now being courted by managed care plans to be part of the primary care team. Once again demonstrating that advance practice nurses make an invaluable contribution to consumer health by offering expanded, convenient and cost-effective care.

On one last point, we would ask that you consolidate the licensing of nurses exclusively to the state Board of Nursing. It makes no sense to split the responsibility as currently exists. Those regulations were written at a time when the nurse practitioner movement was just beginning and nurses were striving to raise the credentials of their profession. But we're now 25 years past this time, advance practice nursing is a reality, accredited training

programs are a fact and advance practice nurses have found a role in the health care delivery system. It seems logical that we would now take action to update and modernize the system that grants these professionals the right to perform their duties.

Remember, it's the consumer who benefits and it is ultimately the consumer who should have the right to make a choice in a free, open, competitive medical marketplace. Thank you for listening to my presentation and I will gladly answer any of your questions.

*Book Extra* Sexual Health

Sex is a major part of health-but many of us are afraid to ask the questions that will provide the vital information we need to know. Our latest book. Sexual Health: Questions You Have ... Answers You Need, does just that. In this frank and clear guide, Michael V. Reitano, M.D., founder of Health Advice Company and a clinical expert on sexual health, and Charles Ebel, a veteran health writer and managing editor of Sexual Health magazine, answer your questions about intimacy, sexually transmitted diseases, birth control, fertility problems, sexual orientation, sexual pleasure and how to stay sexually healthy-and active ---for a lifetime. Here is an excerpt from this groundbreaking book.

#### Q: What is sexual health?

A: There isn't a broadly accepted definition of sexual health because the opinion leaders who have tried to frame this *Continued on page 6* 

### Turf Wars: Are Consumers Caught in the Middle?

here's a war going on in the medical community. And if you're not careful, you may get caught in the middle. The war is over the "turf," or responsibilities, of nonphysician clinicians, namely nurse practitioners (N.P.'s) and physician assistants (P.A.'s).

People's Medical Societ

NEWSLETTER

The history of N.P.'s and P.A.'s reads much like a Greek tragedy. The gods heard the cry of the over worked physician and gave him a gift: N.P.'s and P.A.'s. But this gift, like Pandora's box, has proven troublesome to its recipient. With the growth of managed care, the responsibilities of nonphysician clinicians have broadened. In fact, some insurers now allow consumers to choose a nurse practitioner, rather than a doctor, as their primary care provider. As a result, that overworked physician now sees his gift as more of a threat than a benefit to his profession. But N.P.'s and P.A.'s are not willing to go back into the box. So the battle lines are drawn.

#### **A Brief History**

The lines were actually sketched several years ago during the health care reform debate. Health reformers were looking for an efficient, costeffective way to deliver basic primary care and a solution to the shortage of primary care doctors. They suggested that advanced practice nurses might be the solution. But when President Clinton included a provision in his 1993 health care reform bill that would allow advanced practice nurses to practice independently, the American Medical Association (AMA) voiced its opposition, arguing that "quality medical care requires that a physician be responsible for the overall care of each and every patient."

The health care reform bill never passed, but reform has occurred. As managed care has become the dominant type of insurance in the nation, the role of advanced practice nurses has expanded. A growing number of managed care companies have allowed independent nurse practitioners to serve as primary care providers with little fanfare. But in 1997, when Oxford Health Plan announced a pilot plan in which nurse practitioners not only serve as primary care providers but also are paid competitively with doctors, the AMA again got into the act, agreeing to lobby for legislation to prevent managed care organizations from designating nonphysicians as primary care providers.

#### The Issues

The doctors maintain that the war they're fighting is not over turf, but over quality of care. They say that N.P.'s and P.A.'s are trying to assume the roles of physicians without the same amount of training.

"Individuals should be reimbursed and allowed to practice according to their training and qualifications," says Ted Lewers, M.D., a member of the AMA's board of trustees. "Our opinion is that nurse practitioners and physician assistants are not trained to [be primary care providers].... We have nurses saying that they can do 80 percent of what physicians do, and we don't quite see it that way. It's not what you can do, it's what you don't do or it's what you don't know you're missing."

It's true that N.P.'s and PA.'s do not receive the same medical training that doctors do. Doctors must attend four years of medical school and pass a licensing exam to earn their medical *Continued on page 8* 

#### INSIDE THIS ISSUE

#### Turf Wars Continued from page 1

degrees, and many invest two or more additional years in study to learn a specialty. Nurse practitioners, after earning their basic nursing degrees, generally attend a two-year master's degree program in primary care that builds on their nursing education. (All nurse practitioners are registered nurses.) They are certified by various nursing organizations. Physician assistants, too, attend a two-year program, accredited by the AMA, generally on top of at least two years of college credits and previous health care experience. They must also pass a certifying exam. The question is whether this training is adequate for providing primary care.

Many insurance companies and consumers think so. Columbia-Presbyterian Medical Center in New York City, for example, has found that pediatric asthma patients treated by N.P.'s were less likely to be hospitalized than those cared for by primary care physicians. And studies show that P.A.'s and N.P.'s earn greater patient satisfaction scores with no measurable difference in outcomes. Indeed, many doctors themselves count on N.P.'s and P.A.'s to provide basic care in their practices, which frees them to handle more complex

Charles B. Inlander President Karle Morales Vice President of Communication Karen Kommerer Vice President of Operations

n J. Greene Director of Sales and Publishe Michael Donie Director of Projects Linda Swank Operations Manager

Jennifer Hay Exitor Annatte Doran, Gail Snyder, Bernadette Sukley, Kimberly Tueci Editoni Coninbutors Donna Nielsen-Knewle Art Director

PEOPLE'S MEDICAL SOCIETY NEWSLETTER VOLUME 18 NUMBER 1 (ISSN 0736-4873) is published b by the People's Medical Society, Inc., a nonprofit organiz Walnut Street, Allentown, PA 18102: 510-770-1570. Me dues: \$20 annually. Copies of this publication; \$1.50 for me

BOARD OF DIRECTORS CHAIR—Pamole Maraido, Ph.D., R.N. Columos Universit VICE CHAIR—Gall E. Rose Uchtmen, Trater, Singer & Ross SECRETARY—Alma Rose South Flonde People's Medical ersity TREASURER (EX OFFICIO)—Karen Kem ople's Medical Society was Comby French, J.D. Claude W. Pettit College of Law

Ohio Northern University Tom Belford Foceboont, Inc. Lowell Levin Yale University School of Medicine Alan Trench FITNE

#People's Medical Society.

Visit us on-line: http://www.peoplesmed.org cases. In fact, nearly 60 percent of group practice doctors employ N.P.'s, P.A.'s or nurse-midwives.

When N.P.'s and P.A.'s are in a practice with doctors, "they understand that their role is to be under the supervision of a doctor," says Pamela Maraldo, R.N., Ph.D., of the Columbia University School of Nursing and chairwoman of the People's Medical Society Board of Directors, "So it's not as though they're out to usurp any power or stand between the doctor and the patient."

#### **A Compromise**

It's true that responsibilities overlap. But that doesn't mean that both primary care physicians and nonphysician clinicians can't coexist-either independently or as an effective team.

Maraldo offers this example: "Say you go to a prestigious but busy Manhattan practice. You like your doctor and he likes you. But you've just been put on new blood pressure medication. You're starting to notice what you think is a side effect. You know you need to have your doctor see you, but his earliest appointment is next week. The physician assistant can talk to you now and see you tomorrow.

"The public will view N.P.'s and P.A.'s favorably as long as they are introduced to them as part of their health care team." savs Maraldo, who adds that public acceptance of these assistants will be influenced by their doctor. But, she says, "consumers will not choose their doctor on the presence or absence of N.P.'s or P.A.'s."

And what about costs?

Although Lewers says that there is no good evidence that N.P.'s and P.A.'s lower costs, the fact that cost-conscious managed care companies are turning to them indicates that they may be less expensive than doctors. In general, N.P.'s and P.A.'s are paid less than half of what most doctors earn.

"Let's face it," says Maraldo. "We are in a health [care] situation that is cost-driven. and N.P.'s and P.A.'s make a lot of sense. With [their] more generalistic approach and [doctors'] trend toward specialties, N.P.'s and P.A.'s can treat illness in a more cost-effective and cost-efficient way."

#### **Book Extra** Continued from page 6

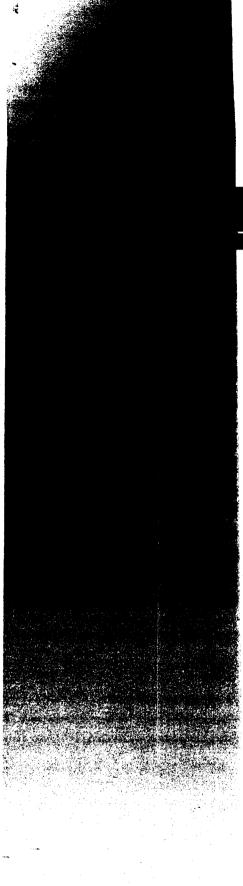
to mention sexual health problems, so there is some reluctance on the part of the doctor and the patient to open a dialogue about sexual health. In addition, most M.D.'s have received miserably few hours of education about sexually transmitted diseases and even less about issues of sexual function. Without this training, health care professionals bring just as many prejudices and value judgments to a patient consultation as anvone else.

#### Q: How can the health care system do a better job on sexual health issues?

A: The first thing is to ask that very question. Unfortunately, up until now, sexual health per se really hasn't been on the list of priorities for either the private or public sector. Until we acknowledge that it has more importance, we won't do more about it. Second, we need to begin to see sexual health as a more integral part of our physical and mental wellness. More than simply the absence of disease, it should be a source of joy and fulfillment. Third, we need to make men accountable for their share of the work in improving the collective reproductive and sexual health.

#### **A Hot Number**

Looking for information about food labels? Got a question about a newly approved drug? Want to report a medical error? Then we've got your number. The Food and Drug Administration has established a new toll-free information number: 888-INFO FDA (888-463-6332). By dialing this number between 10 a.m. and 4 p.m. Eastern Standard Time, you can access prerecorded information, request brochures and other printed materials and speak with a consumer affairs specialist.



RECEIVED 1999 NOV 22 AM 10: 21 INDEPENDENT REGULATORY REVIEW COMMISSION



THE HOSPITAL & HEALTHSYSTEM ASSOCIATION OF PENNSYLVANIA ORIGINAL: 2064 HARBISON COPIES: Sandusky Jewett Smith Wyatte

Testimony

### **Public Hearing on House Bill 50**

Presented by Paula A. Bussard Senior Vice President, Policy & Regulatory Services

Harrisburg, PA October 28, 1999

4750 Lindle Road P.O. Box 8600 Harrisburg, PA 17105-8600 717.564.9200 Phone 717.561.5334 Fax http://www.hap2000.org

#### Statement of The Hospital & Healthsystem Association of Pennsylvania Before the House Professional Licensure Committee Public Hearing on House Bill 50

#### Presented by

Paula A. Bussard Senior Vice President, Policy and Regulatory Services The Hospital & Healthsystem Association of Pennsylvania (HAP)

> Harrisburg, Pennsylvania October 28, 1999

Chairman Civera and members of the committee, I am Paula A. Bussard, Senior Vice President, Policy and Regulatory Services, of the Hospital & Healthsystem Association of Pennsylvania. I appreciate this opportunity to again provide testimony on House Bill 50. The Hospital & Healthsystem Association of Pennsylvania represents and advocates for the more than 225 acute and specialty care hospitals and health systems in the commonwealth, and the patients and communities they serve.

Advanced practice nurses serve vital roles in the state's health care delivery system. They do so in collaboration with and/or under the direction or supervision of a physician. How this occurs has been defined by the legislature in the professional nursing law. Further specification for certified registered nurse anesthetists, certified registered nurse practitioners, and clinical nurse specialists, occurred subsequently through the promulgation of regulations. Hospitals and health systems believe that these requirements for

- 1 -

collaboration and/or direction or supervision by physicians are essential to ensuring quality health care for citizens of Pennsylvania.

Therefore, it is important for this committee to understand that The Hospital & Healthsystem Association of Pennsylvania is not advocating for changes in the scope of practice of advanced practice nurses. The current laws and regulations that establish requirements for collaboration, direction, or supervision by physicians are appropriate.

That said, however, there have been barriers to the most effective and efficient use of advanced practice nurses and this has impacted the delivery of care in the commonwealth. The nursing scope of practice that defines what certified registered nurse practitioners can do was passed in 1974 and reenacted in 1985. The act calls for regulations to be promulgated jointly by the state Board of Medicine and the state Board of Nursing to enable certified registered nurse practitioners to have prescriptive privileges. While we are pleased that both boards have released proposed regulations to implement the prescriptive authority for certified registered nurse practitioners, we remain concerned about the advancement of these regulations to become final.

Because the use of advanced practice nurses has improved access to health care services and improved delivery of care for the citizens of Pennsylvania, we have supported House Bill 50. We believe that unifying the oversight of advanced practice nurses under the state Board of Nursing will enable the scopes of practices, as exist in law now, to be implemented and regulated in a more cohesive and timely fashion. We believe that there still will be

- 2 -

sufficient safeguards in place within Pennsylvania's regulatory review process to allow for necessary and appropriate input from various stakeholder groups on any regulations affecting advanced practice nurses, including input from physicians, hospitals, and other health care providers. Nothing in House Bill 50 will or should change the requirements for advanced practice nurses acting in their expanded role to do so in collaboration with and/or under the direction or supervision of a physician.

HAP's previous testimony cited how certified registered nurse anesthetists, certified registered nurse practitioners, and clinical nurse specialists fulfill their roles in hospitals and health systems. I have included briefly those examples again today to clearly demonstrate that we believe that advanced practice nurses can offer improved care delivery while at the same time continuing to function collaboratively or under the direction or supervision of physicians.

Certified registered nurse anesthetists are employed by the vast majority of hospitals and health systems across the state in both inpatient and outpatient surgery settings to administer anesthesia to patients. Certified registered nurse anesthetists perform their functions in cooperation with a surgeon or dentist and their performance is under the overall direction of the chief or director of anesthesia services in a hospital setting.

Certified registered nurse practitioners practice in primary care settings, including pediatrics and obstetrics-gynecology, as well in hospital outpatient speciality clinics. Many of the nurse practitioners working in primary care provide vital access in medically

- 3 -

underserved areas. These settings can range from Pennsylvania's rural communities to the inner cities of Philadelphia and Pittsburgh. In specialty care settings, certified registered nurse practitioners often work side-by-side with physicians working to care for chronically ill children or adults and establishing close caring relationships with the patient and their family, arranging scheduling for tests and treatments, following through on patient education to improve compliance, assessing the need for family support services, and providing a vital communication link between the patient, family and the physician.

Certified registered nurse practitioners may be practicing in community settings, such as providing primary and preventive care in school-based clinics, conducting home primary care visits for the elderly, working in employee health and occupational health services in industry, and conducting home care visits to evaluate progress of medically complex children. In each case, these nurses are working under a collaborative agreement with a physician, and it is important for everyone to understand that House Bill 50 would not change this requirement.

Certified clinical nurse specialists can be found in every department within a hospital or health system, including pediatrics, obstetrics, oncology, psychiatry, rehabilitation, and gerontology. Clinical nurse specialists enhance care delivery through improving nursing care, participating in research, educating patients and families, and providing nursing consultation.

- 4 -

Pennsylvania's regulatory responsibility for advanced practice nurses has been varied. Certified registered nurse anesthetists and certified clinical nurse specialists are already solely regulated by the state Board of Nursing. Certified nurse midwives are regulated solely by the state Board of Medicine. Certified registered nurse practitioners, however, are regulated under both the state Board of Nursing and the state Board of Medicine. All House Bill 50 would do is place certified registered nurse practitioners under the authority of the state Board of Nursing. It does not and should not change their scope of practice.

House Bill 50 would enable the state Board of Nursing to regulate prescriptive privileges for certified registered nurse practitioners. In nearly every other state, certified registered nurse practitioners have an ability to prescribe certain medications. As I earlier stated, although state current law establishes prescriptive privileges for nurse practitioners, regulations to implement that provision of law have never been adopted in Pennsylvania. Pennsylvania remains one of the last states where certified registered nurse practitioners are not afforded prescriptive privileges. This issue has gone unresolved for too long. We are hopeful that the recent promulgation of proposed regulations by the state Board of Medicine and state Board of Nursing will resolve and move this issue forward.

HAP pledges its support to work with the Professional Licensure Committee, nursing leaders, and physicians in assuring that nursing law and regulation provide sufficient public accountability while at the same time enabling flexible and innovative use of health care professionals in providing access to quality health care.

- 5 -

Again, I appreciate the opportunity to be here today to present the views of hospitals and health systems from across the state. I would be happy to respond to any questions that you may have. Thank you.

###