

# EDUCATION NEWS



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*In 1989, the National Commission on Nurse Anesthesia Education was implemented to reverse a severe shortage of CRNAs. The Commission, charged with scrutinizing all aspects of nurse anesthesia educational programs, developed 8 goals with corresponding strategies that were used by the Commission Implementation Task Force to actualize its charge. These goals and strategies contributed to an increase of annual graduates from nurse anesthesia programs and the development of 10 new programs. These activities were documented in Part 1 of this article, which appeared in the October 2001 AANA Journal.*

*Following completion of the 3-year project, the Council on Accreditation of Nurse Anesthesia Educational Programs (COA) and the AANA Education Committee began carrying out the final recommendations made by the Commission. Part 2 addresses the accomplishments of the Education Committee and COA in implementing the recommendations of the Commission, discusses current status of educational programs and CRNA manpower, and identifies roles for both educators and practitioners in protecting the future of the profession.*

**Key words:** Certified Registered Nurse Anesthetist shortage, faculty, National Commission on Nurse Anesthesia Education, nurse anesthesia.

## THE NATIONAL COMMISSION ON NURSE ANESTHESIA EDUCATION 10 YEARS LATER — PART 2: YEARS FOLLOWING THE COMMISSION (1994 TO PRESENT)

The National Commission on Nurse Anesthesia Education (NCNAE) project was funded for 3 years and upon completion of the term, many of the recommendations had been met and the overall condition of the nurse anesthesia education system was better in that enrollments stabilized and program closures abated. By August 1995, there were 90 education programs with 2,504 students.<sup>1</sup> However, monitoring healthcare reform at both the state and federal level, took precedence, and AANA organizational priorities and funding were diverted to noneducational issues following completion of the project.

In 1996, the AANA Education Committee began working to fulfill the goals for education set forth in AANA's strategic plan. Many of these goals were complementary to the NCNAE's goals and strategies to reduce a shortage of nurse anesthetists. Efforts to meet the strategic goals were often coordinated between the Education Committee and Council on Accreditation of Nurse Anesthesia Educational Programs (COA), with each group assuming its appropriate responsibility. Close communication between the 2 groups was fostered by the fact that the Education Committee chair holds a position on the COA.

By 1998, the Education Commit-

tee was ready to assess its accomplishments in relation to the final recommendations made by the NCNAE. Revisiting the recommendations allowed the committee to measure its success in continuing the work of the Commission. Specifically, the Education Committee determined what recommendations had been acted upon and whether to take action on any recommendations that had yet to be implemented. Education Committee members realized that in some cases strategies would need to be developed to accomplish the Commission's recommendations. This evaluation process was initiated approximately 4 years after the Commission's project team had concluded its project. The following is a progress report on the actions taken to implement the Commission's 1994 recommendations.

### **Recommendation 1: Materials and brochures should be reviewed and updated periodically.**

Publications are reviewed and revised on a regular schedule by the AANA Education Department. The only exception is the brochure, "Certified Registered Nurse Anesthetists and the American Association of Nurse Anesthetists," which is reviewed and revised by the AANA Public Relations Department.

Another publication, "Degree Options for CRNAs," has been revised several times and will soon undergo review again. Information on distance education offerings has been added to this popular booklet since the time of the Commission to reflect new learning opportuni-

ties for CRNAs seeking baccalaureate, master's, or doctoral degrees.

Further, the Education Committee developed a new publication in July 1999 entitled "Education of Nurse Anesthetists in the United States." It provides a detailed description of nurse anesthesia education and its evolution from hospital-based certificate programs to graduate degree programs in universities. The publication is available for distribution to applicants, students, university officials, hospital administrators, legislators, and other interested parties. A list of current publications produced by the AANA Education Department can be found in Table 1.

### **Recommendation 2: The AANA should emphasize building relationships with other organizations.**

This activity has been continued by the AANA Board of Directors and by all departments within the

AANA. As examples, the Accreditation and Education Department has ongoing involvement with the National Student Nurses' Association, American Association of Colleges of Nursing, Alliance for Nursing Accreditation, Commission on Collegiate Nursing Education, National League for Nursing Accrediting Commission, Association of Specialized and Professional Accreditors, the Council for Higher Education Accreditation, and the US Department of Education. On the international level the COA interacts with the Center for Quality Assurance in International Education and the International Federation of Nurse Anesthetists.

### **Recommendation 3: Faculty development should be ongoing.**

One way this has been accomplished is including topics on fac-

ulty development at every annual Assembly of School Faculty. Additionally, a survey was conducted at the 1999 Assembly of School Faculty to identify faculty development activities at individual programs. The results of the survey were published in a newsletter to program directors.

The idea for one Assembly came from a study completed by the Education Committee on the turnover of CRNA program directors. The Assembly was extended and structured into a successful Educators' Institute aimed at developing a new program faculty. A mentoring program for new program directors also was implemented as a result of the study.

In addition, for almost 10 years, an orientation for new CRNA program directors has been held at the AANA office. This event brings together new directors, the AANA executive director, and AANA staff members including the COA and the Council on Certification of Nurse Anesthetists. The goal of the 2-day session is to assist new education leaders in assuming their new administrative positions.

### **Recommendation 4: Doctorally prepared CRNAs should be fostered by promoting the value of a doctoral education and the need for such preparation.**

Several suggestions were made by the Commission to foster doctoral education including: (1) identification of programs offering doctoral degrees, (2) promoting the value of doctoral education, and (3) the need for more doctorally prepared CRNAs.

Subsequently, a task force was appointed to study the feasibility of moving nurse anesthesia programs to the doctoral level. The task force concluded that most CRNAs did not support doctoral degrees for

**Table 1. Current publications produced by the AANA Education Department as of 2001**

1. Frels L. Routes to External Funding for New and Established Programs [booklet]. Park Ridge, Ill: American Association of Nurse Anesthetists; 1997.
2. Fagerlund K. The Cost of Starting a Nurse Anesthesia Educational Program [monograph]. Park Ridge, Ill: American Association of Nurse Anesthetists; 2000.
3. Degree Options for CRNAs [brochure]. Park Ridge, Ill: American Association of Nurse Anesthetists.
4. Education of Nurse Anesthetists in the United States [Education Department's White Paper]. Park Ridge, Ill: American Association of Nurse Anesthetists; 1999.
5. Focus on Your Future [brochure]. Park Ridge, Ill: American Association of Nurse Anesthetists.
6. Primer on Starting a Nurse Anesthesia Program [manual]. Park Ridge, Ill: American Association of Nurse Anesthetists.
7. A Career in Nurse Anesthesia [brochure]. Park Ridge, Ill: American Association of Nurse Anesthetists.
8. Wanted: Nurse Anesthetists for Clinical Preceptors [brochure]. Park Ridge, Ill: American Association of Nurse Anesthetists.
9. Teaching the Administration of Regional Anesthesia [manual]. Park Ridge, Ill: American Association of Nurse Anesthetists.

entry into practice, and more than one half of survey results from education programs indicated it was not feasible to offer doctoral degrees. After receiving the report from the task force, the AANA Board of Directors did make several recommendations to encourage the acquisition of doctoral degrees for program directors.<sup>2</sup>

Since that time, the AANA Research Foundation has organized a group of doctorally prepared CRNAs to mentor CRNA faculty pursuing doctoral degrees. The Education Department has also encouraged universities to publicize information about doctoral programs in the "Degree Options for CRNAs" brochure. Over time, interest in establishing doctoral programs has grown with some programs seeking accreditation at the doctoral level. This budding interest in doctoral degree nurse anesthesia programs will very likely result in an increased number of CRNA faculty members enrolled in doctoral programs.

**Recommendation 5: A protocol needs to be established for regularly updating and maintaining key statistics essential to achieving AANA's goals.**

The Implementation Task Force recommended that key statistics be routinely available on CRNA manpower needs and the quality and cost-effectiveness of anesthesia services provided by CRNAs. Several sources have provided information about manpower and nurse anesthesia services over the years, including the annual AANA membership survey and studies sponsored by the AANA Research Foundation. Most recently, a study on the number of CRNAs nearing retirement age revealed there would be an impact on the supply of nurse anesthetists in the 21st

century due to attrition by age.<sup>3</sup>

For education, key statistical data are submitted via the Internet to the COA in annual reports from CRNA program directors. Data about conducting institutions, educational programs, faculty, and clinical experiences are directly entered into a computerized database. This annual report database has the capability of producing numerical tables on many topics.

**Recommendation 6: The number and quality of applicants to nurse anesthesia programs needs to be monitored and recruitment activities adjusted accordingly.**

Recruitment activities have been continually maintained while the market for nurse anesthesia services has driven the supply and demand for CRNAs.

By the mid-1990s the shortage of CRNAs caused by closures of nurse anesthesia programs in the 1980s had greatly diminished with the opening of new programs and expansion of established programs. In fact, some CRNAs felt that there were too many nurse anesthetists graduating for the number of available positions. The perceived oversupply was believed to be due to increased numbers of nurse anesthesia graduates plus a large increase in the numbers of anesthesiologists graduating from residencies. At the same time, managed care systems were changing the healthcare environment with cost-containment initiatives that affected the employers and employment of CRNAs. These market forces resulted in a decreased number of applicants to nurse anesthesia programs for a period of approximately 4 years in direct relation to manpower availability and forecasts.<sup>4</sup>

However, signs of another CRNA manpower shortage were appearing by the late 1990s even though there continued to be an average of more than 900 anesthesia graduates per year. Factors contributing to the emerging shortage were a decrease in the numbers of anesthesiology residents graduating and increased numbers of anesthetizing areas needing anesthesia providers. By early 2000, a CRNA shortage was quite evident and nurse anesthesia programs were being threatened by a managed care system that no longer wanted to fund education.

Once again, the market is beginning to respond to demand for CRNAs with a greater number of applicants applying to nurse anesthesia programs. The AANA Bookstore mails an average of 1,100 recruitment packets to prospective applicants each month. The Commission's "Questions and Answers About a Career in Nurse Anesthesia" has been recently redesigned as a booklet titled "A Career in Nurse Anesthesia" with contemporary photos of nurse anesthetists administering anesthesia. This booklet plus the COA's "List of Recognized Educational Programs" comprise the AANA's recruitment packet.

Another whole new avenue for recruitment has been opened with Internet access, which was not available at AANA during the time of the Commission. For example, nurse anesthesia education programs are now encouraged to have their own Web sites linked to the COA's list of Accredited Nurse Anesthesia Programs on the AANA Web site. Potential applicants can thereby obtain general information about all nurse anesthesia programs by clicking on "Accredited Programs" on the home page, in addition to learning

detailed information about an individual program by clicking on the name of a particular program.

For years, the AANA has routinely contributed scholarships, speakers, information booths, and recruitment literature at biannual meetings of the National Student Nurses' Association (NSNA). CRNAs and student nurse anesthetists who volunteer to staff booths and give speeches when NSNA meetings are held in their states support these important recruitment activities.

Placing advertisements in appropriate journals also has been part of the recruitment effort. A popular advertisement on nurse anesthesia as a career was first published in 1998 in *Imprint*, NSNA's journal. The ad has been published since that time in *Imprint's* annual issue on nursing careers. Posters have been made of the ad, and they are available to education programs and AANA members for recruitment.

A new recruitment effort, started in 1999 by the Education and Public Relations Departments, is an advertisement promoting nurse anesthesia in *Critical Care Nurse*, published by the American Association of Critical Care Nurses, and *Imprint*, published by NSNA. The ad is intended to pique the interest of registered nurses who are likely to possess the prerequisite experience for becoming anesthetists.

**Recommendation 7: Contributions to the Education Fund should be encouraged as an option for donors, and other methods should be sought for maintaining the financial stability of programs.**

It was recommended that the Capital Campaign for Education be continued after the Commission ended. In 1998, the Education

Committee queried the AANA Research Foundation about the status of the money and learned that none of the \$53,000 had been awarded. However, bear in mind that programs are not encouraged to apply for funds because of the limited amount of money to be given to programs in trouble. Furthermore, no effort had been made to obtain more donations for the fund since the Commission had disbanded. In response to a request from the Education Committee, the AANA Foundation agreed to use the funds to sponsor Financial Issues workshops in 2001 and 2002 for program directors.

**Recommendation 8: The AANA should closely monitor the trends in nurse anesthesia education and CRNA supply and demand. To accomplish this and also to identify and oversee activities to address any situations that arise requiring action, the Association should consider appointing another group made up of members collected from existing appropriate committees/groups or councils.**

A Focus Team on Education consisting of AANA staff members was appointed in April 2000 in response to an increase in the number of programs facing financial difficulty. The task force is continuing to work on 3 major initiatives: (1) developing new education programs and clinical sites, (2) identifying and assisting programs with financial pressures, and (3) determining how to obtain reimbursement for CRNA instructors. Consultation has been sought from 2 CRNAs who served with the Commission in addition to a researcher, lobbyists, and others.

**Recommendation 9: The Financial Analysis Model should contain a section for use by new nurse anesthesia education programs in the developmental stages.**

During its last revision, the *Manual for Developing a Nurse Anesthesia Education Program*, now known as a primer, was reorganized and expanded by adding a section on the costs of opening a program.<sup>1</sup> This new section was created after the developer of the Commission's Financial Analysis Model confirmed that the original model was out of date. In the future, material from a 2000 Financial Issues Workshop will be available to replace the Commission's model.

**Recommendation 10: There should be periodic publications that identify sources of grant support.**

A monograph, "Routes to External Funding for New and Established Programs," was published in 1997.<sup>5</sup> It is available through the AANA Bookstore for a nominal fee. Additionally, the AANA Education Department's staff screens commercial grant newsletters and the *Federal Register* for grants that might be of interest to nurse anesthesia educators. Notices and deadlines are then sent to program directors for their consideration.

A federal grants workshop has been cosponsored by the AANA and the US Department of Health and Human Services, Division of Nursing, for the past 3 years. This event has been scheduled to coincide with the Division of Nursing's annual publication of application forms for nurse anesthesia student traineeships, grants for new and established nurse anesthesia programs, and grants for faculty development.

At this time, a new methodology

is being developed to allocate grant funds to advanced nursing education as a result of 1998 legislation for Title VIII of the Health Professions Education Partnerships Act. It is likely that any new method to allocate funds will increase the need for programs to compete against a larger pool of applicants for grants. In the future, the Division of Nursing will conduct workshops for all nurses who are eligible to apply for federal funds in addition to nurse anesthetists.

### Summary

The Education Committee and Education Department of AANA in collaboration with the COA have actively participated in implementing the final recommendations made by the NCNAE in 1994. As a result, action taken on the recommendations has strengthened existing processes within the Education Department and the COA, or

recommendations have been adopted as part of its ongoing work. The profession continues to closely watch the number of nurse anesthesia programs since the implementation of the NCNAE in 1989. The current number of programs has been maintained, and the number of graduates has remained relatively constant since 1994 through the significant efforts of nurse anesthesia educators, hospital administrators, and university leadership.

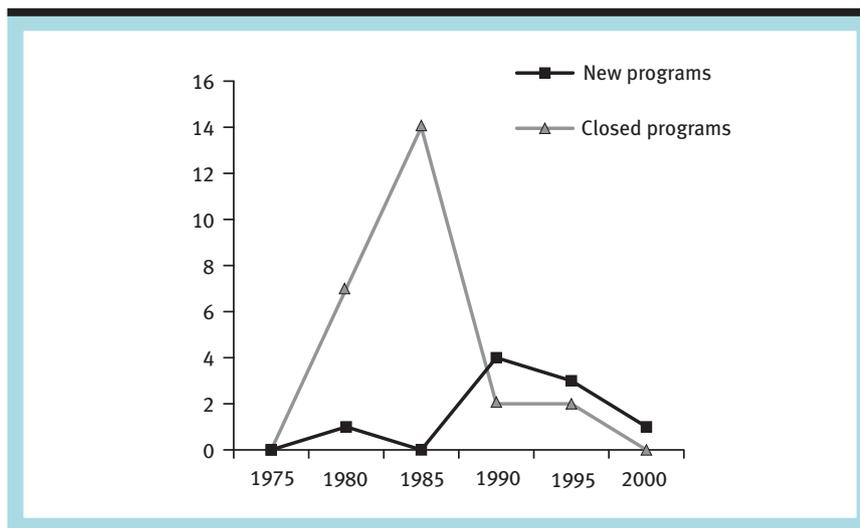
Consultation continues to be provided on the development of new programs with 9 new programs being started from January 1995 through May 2001. However, recruitment efforts have become increasingly important because more programs have closed than opened during this 5-year period, primarily due to the impact of managed care on hospital-funded education (Figure). Existing programs have responded to this challenge by

increasing student enrollment and adding more clinical sites for a total of more than 700 sites by the end of 2000. Although our current graduates far exceed the low rate of the late 1980s, as evidenced by the shortage of nurse anesthetists the profession is experiencing today, the number is not adequate to keep up with an increased demand.

Forecasts by the COA for 2000 indicate that more new programs will be needed than are currently being developed to replace those that are at risk for closure. Also, workforce projections within anesthesia indicate that the nurse anesthesia educational system needs to be reevaluated. In response to this concern, AANA Executive Director John F. Garde, CRNA, MS, FAAN, appointed a Focus Team on Education from among the AANA staff (Table 2). The goal is to concentrate on ensuring an adequate supply of CRNAs to meet the needs of society. Strategies and tactics related to this goal are also being included in the new AANA Strategic Plan. This plan should become a working document for all CRNAs since all have a role to play in the future of the profession.

Given these longstanding predictions of the need for more nurse anesthesia providers, the goal for our profession is clear. In order to maintain an adequate supply of nurse anesthetists, it is necessary once again to increase the size of our programs and foster new program development.

**Figure. Numbers of new and closed anesthesia programs before and after the National Commission on Nurse Anesthesia Education**



**Table 2. AANA Focus Team on Education**

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Theresa Ruiz-Law, BA	Director of Managed Care and Reimbursement
Marguerite M. Brunner, MA	Education Coordinator

### REFERENCES

1. Fagerlund K. The Cost of Starting a Nurse Anesthesia Educational Program [monograph]. In: *Primer on Starting a Nurse Anesthesia Program*. Park Ridge, Ill: American Association of Nurse Anesthetists; 2000.
2. Jordan L, Shott S. Feasibility of a doctoral degree for nurse anesthetists. *AANA J*. 1998;66:287-298.
3. Revak G, Jaffe J. A study of CRNA retirement and practice termination patterns and projections into the 21st century. *AANA Membership and Information Sys-*

tems, Park Ridge, Ill: American Association of Nurse Anesthetists; 1998.

4. Ouellette S, Courts N, Lincoln P. Nurse anesthesia education: A different challenge. *AANA J*. 1999;67:21-31.
5. Frels L. Routes to External Funding for New and Established Educational Programs. Park Ridge, Ill: American Association of Nurse Anesthetists; 1997.

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