REFERENCES

(17) Hodgkinson R, Husain FJ, Bluhm C. Reduced effectiveness of bupivacaine 0.5% to relieve labor pain after prior injection of 2-chloroprocaine 2%. Anesthesiology. 1982;57:A201-202.

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Report of the National Commission on Nurse Anesthesia Education

Charleston Area Medical Center scholarship/loan program for nurse anesthesia students

NANCY L. TIERNEY, CRNA, MS

Publication of the monographs from the National Commission on Nurse Anesthesia Education began with the February 1991 issue of the AANA Journal. The main topics for these monographs include the History of Nurse Anesthesia Education, Accreditation, Certification, Current and Future Perspectives on the Educational Framework, Costs/Funding, the Nursing Shortage, CRNA Manpower Study, and Other Issues. The Executive Summary and Recommendations of the Report of the National Commission on Nurse Anesthesia Education were published in the October 1990 issue of the AANA Journal.

West Virginia’s Charleston Area Medical Center took an innovative approach to dealing with its nurse anesthetist shortage when it developed a scholarship/loan program that enables students to receive financial support while they are enrolled in the program in exchange for a commitment that they will work at the center for a period of time after graduation.
Charleston Area Medical Center (CAMC) is a regional referral and teaching center with exceptional tertiary care capabilities located in Charleston, the capital of West Virginia. It has nearly 1,000 beds on its three-campus complex. Its school of nurse anesthesia has been in existence since 1955.

Like most major tertiary referral centers across the country, CAMC has high-tech operating rooms that are busy around the clock with major trauma, cardiac surgery, kidney transplants and so on. Like so many other centers, it has suffered through severe anesthetist shortages that have brought about overworked staffs and a blitz of locum tenens.

The following approach to that crisis is one that appears to be working.

Development of the scholarship loan program

In late 1987, CAMC began to look at projections for CRNA full-time employees for August 1988. A new division of its medical center, Women and Children's, was scheduled to open across town on July 1, 1988. This division would have five operating rooms in the operating room suite, two ORs in the maternity suite and four ORs in the surgicare center. When vacancies at its other divisions were included, it was estimated at that time the center would need an additional 18 CRNAs to complement its existing staff of 45 CRNAs and 18 anesthesiologists.

The center's administration decided to offer all 10 seniors who graduated in 1988 a CRNA position. The offer was made, but there were no takers. The center had gone from 15 graduates who wanted positions in 1983, with five being hired, to 10 CRNA positions in 1988, none of which was accepted.

Reeling from the shock of learning that not one graduating student wanted a position at the center, it was decided to turn the problem over to the recruitment department and let it hire all the CRNAs and graduates of other programs that were needed. Over the next few months, another major problem was encountered: its full-fledged programs that were needed. Over the next few months, another major problem was encountered: its full-fledged programs that were needed.

In the interim, a survey had been developed and administered to the senior class to ascertain why graduates did not want to stay with CAMC.

The results of that survey were not surprising. Low salary, inadequate vacation time and poor working relationships with anesthesiologists were cited as reasons. Sound familiar?

While recruitment set about the task of attracting CRNAs and hiring locum tenens to keep operating rooms open, the school, along with administration, began to work seriously on the problems identified by graduating seniors.

A substantial salary increase and an additional week of vacation were given to all CRNAs, so that the entire salary/benefit package was competitive, and meetings were scheduled to talk about the CRNA/anesthesiologist working relationship.

A committee was formed to outline what the center wanted in a graduate CRNA and how best to recruit such an individual. After looking at the desired characteristics, e.g., competency, maturity and loyalty, CAMC decided the best source was its own anesthesia school.

Looking back over class composition during recent years, it was found that CAMC was employing few of its graduates. While it was doing a great job of recruiting registered nurses from other hospitals, other parts of the state and even other states, it was doing a lousy job of recruiting its own RNs.

In 1980, CAMC began to cut class size from 20 to 15 and, eventually, to 10.

As a first step in the turnaround, the committee voted to increase the class size to its original 20, beginning with the class entering in 1988. This, of course, depended upon its success in attracting a large, qualified applicant pool.

For the first time, the center decided to concentrate its recruitment efforts on its own pool of RNs. Information about the program was posted on all hospital bulletin boards, fliers were inserted in all paychecks and a list of all RNs with baccalaureate degrees within the medical center was requested and received so that they could receive individual correspondence.

An open house was conducted at all three divisions for every shift so that RNs could be recruited for anesthesia school. In open discussion with these potential candidates, a large number of qualified RNs indicated that they were very interested but most could not afford to give up their jobs to pursue a career goal. All this information was supplied to the committee, which formally petitioned the CAMC administration to offer a scholarship/loan program to enable its own RNs to attend anesthesia school.

Education has always been strongly emphasized and encouraged at CAMC, and the administration did not disappoint our committee. It responded with a more than generous scholarship/loan program. The program described below is the current model, which has been developed over the past two years from experience and input from the students themselves.

Charleston Area Medical Center nurse anesthesia scholarship/loan program

1. The scholarship/loan program is available to eligible RNs who have been accepted into the nurse anesthesia program.
2. Students are eligible to receive a monthly stipend of $1,245, for a total of $29,880 for the 2-year program.
3. To receive a 2-year loan award, four years of employment at CAMC following graduation are required.
4. The loan will be forgiven at a prorated amount for each month of continuous full-time employment the recipient spends as a CRNA with CAMC.
5. Students must maintain an academic average of 80% or above for continuing eligibility.
Report of the National Commission on Nurse Anesthesia Education

6. CAMC seniority will be earned/maintained while in the program.
7. CAMC benefits, at the group rate, continue while the student is in the program.
8. The student will be interviewed for employment with CAMC.
9. Students will be placed in the division and shift for which they have a preference, if at all possible.
10. If the student does not complete the nurse anesthesia program or terminates/resigns from CAMC prior to forgiveness of the full amount of the loan, the remainder of the loan will be payable at that time.
11. The amount forgiven through service to CAMC is subject to federal income tax, which is deferred until the time of employment.

Thus far, CAMC has had 27 students accept its scholarship/loan program. Of these, two left the state after graduation but paid off their loans, four remain on staff, 11 have accepted employment with CAMC after graduation in August 1990 and 10 are currently enrolled as first-year students in the program. CAMC has also awarded 11 scholarship/loans to RNs it accepted for the incoming class of August 1990.

Another area at which the committee looked closely was providers other than the center that benefited most from graduates of CAMC's anesthesia program. It did not have to look far to find that the anesthesia departments of the other two local hospitals were almost completely staffed by CAMC graduates.

With this in mind, CAMC's vice president for human resources and education approached the administration at these hospitals with a proposal for a joint effort that would be mutually beneficial to all parties by offering each hospital three student positions in the anesthesia class of 1989 (anticipated graduation in 1991). In return, their hospital would participate financially with CAMC in supporting the anesthesia program.

The applicants for these three positions would be recruited from each hospital's RN staff, very much like CAMC was doing, and the hospital could develop and offer its own scholarship/loan package. The applicants would go through the admission process along with the other applicants and be expected to meet the same requirements. The three candidates would be chosen by the anesthesia school's regular admissions committee. If a hospital could not generate three qualified RN applicants, then CAMC agreed to refer to the hospital applicants that had been accepted into its program but were not on scholarship/loan commitment to CAMC.

CAMC also agreed to hold an open house at these hospitals to talk with their RNs about anesthesia as a career and about its program, activities similar to those that took place at the open houses at CAMC.

J. Herbert Thomas Memorial Hospital accepted this proposal, and three well-qualified RNs from the hospital's staff were accepted into CAMC's program in August 1989, all under a Thomas Memorial Hospital scholarship/loan program similar to CAMC's. The other local hospital declined the offer because of financial problems and other unrelated political issues.

For the class entering in 1990, (anticipated graduation in 1992), Thomas Memorial Hospital has again accepted CAMC's offer for two positions, as has a small rural hospital for one position.

Conclusion

CAMC learned retrospectively that offering students money at or near graduation meant very little and was a weak recruitment tool. But offering it as a support system while they were in school meant everything in terms of success for the individual and for CAMC.

Students who have taken advantage of the scholarship/loan program were and are truly appreciative of the opportunity CAMC has given them to advance their career goal. The loyalty factor the committee was looking for has been fostered during its two years of partnership.

As of August 1990, only two years after the inception of the scholarship/loan program, CAMC will have employed 15 of the 18 full-time equivalent CRNAs.

The cooperative effort between two hospitals that normally are in competition for anesthesia personnel is exceptionally rewarding. It demonstrates how hospitals can work together for a common goal in the public interest at a time when everyone is feeling the crunch of the shortage of CRNAs.

There is a real potential for small rural hospitals to offer similar scholarship/loan programs to their own RN staff and then enter into a financial support agreement with a school of nurse anesthesia for a reserved position in the class. As long as the individual hospital's candidates meet the same entrance requirements as the other candidates accepted, quality assurance is maintained.

Hospital administrators are willing to pay thousands of dollars to placement agencies and locum tenens for individuals they do not know who probably will not stay at their institutions for any length of time. Why not invest those dollars in their own people, who have family and ties to their community and institution?

Every hospital seeking a reserved position in a school of nurse anesthesia should work out its own individual arrangement for financial reimbursement or support of the program with that school.

However, if program directors have become financially responsible, as they certainly should be by now, then they can determine through cost analysis how many actual
dollars it takes to educate one anesthesia student. This cost could then be passed on to the hospital that wants a reserved position in the program.

Hospitals and nurse anesthesia programs at both the collegiate and certificate level must be innovative and willing to do things in an unconventional manner if they are to overcome the critical CRNA shortage that looms in the future.

The need for alternative educational pathways in nurse anesthesia education
LYNN L. LEBECK, RNC, BSN, RNAS

A graduate of an associate degree nursing program takes a look at the pros and cons of pursuing an advanced degree in nurse anesthesia on a part-time basis.

One would have to be deaf and blind not to be aware of the current shortage of nurses in general and CRNAs in particular. Jordan summed up the situation when she observed that "A major concern is the decrease in the number of graduates, with a significant increase in the need for CRNAs."

Granted, some program closures were the result of changes in accreditation requirements and others closed because of political problems, but the high costs associated with the education of the CRNA may have contributed to the demise of some programs as well. In an editorial, Zambricki and Ouellette have suggested that "fewer, but larger nurse anesthesia educational programs can reduce the overall costs of nurse anesthesia education."2

In the future, a level of 800-1,000 graduates per year will be needed to maintain an adequate number of CRNAs. This translates to an average of 8-10 graduates per program, with approximately 100 programs. (Editor's note: Since this was written, the Nurse Anesthetist Manpower Study, commissioned by the United States Congress and performed by Health Economics Research, Inc., has reported such need to be 1,500 graduates per year to make up for current deficits and meet the additional need for CRNAs by the year 2010.)

First, the pool of possible applicants should be considered. With the move toward the master's degree and the requirement that applicants must have a BSN or equivalent degree for entering a nurse anesthesia educational program, the number of nurses eligible to apply has been reduced. The decline of the number of 18-year-olds and the increase in the number of career options open to women have resulted in fewer people entering nursing following high school graduation.

On the plus side, more people are making career changes after 25 years of age, and many of them are choosing nursing. In the author's associate degree class in 1981, the typical nursing student was over 25 years of age, married and had, on average, 1.5 children. Given such changes in the eligible pool of applicants, some creative solutions are needed to attract top-notch people who might otherwise not consider entering a program of nurse anesthesia.

Because of the type of education provided for students, the feasibility of a student working part-time and attending a nurse anesthesia program is very questionable.

This is a major stumbling block for many nurses considering a mid-career change. A number of nurses support, often solely, children or other family members and maintain home ownership. In such a situation, working is not an option; it is absolutely mandatory to keeping a roof overhead and food on the table. For such nurses, stipends and loans fall woefully short of filling the gaps in even the most basic living requirements.

One solution to the dilemma is a part-time program, such as that offered at Mercy College in Detroit, Michigan. For many unable to afford to quit all outside employment, the option exists to complete up to 20 of the 61 credit hours required to graduate from the program on a part-time basis. For many, this option may make the difference in whether a nurse becomes a CRNA or not.

By being able to complete up to one-third of the degree work prior to starting the clinical component of the

*At the time this article was written, the author was a nurse anesthesia student.