

REPORT OF RECOMMENDATIONS AND FINDINGS

**By the Certified Registered Nurse Anesthetists' (CRNAs)
Technical Review Committee**

**To the Nebraska State Board of Health, the
Director of the Department of Health and Human Services, Division of
Public Health, and the Members of the Health and Human
Services Committee of the Legislature**

October 29, 2007

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INTRODUCTION

The Credentialing Review Program is a review process advisory to the Legislature which is designed to assess the need for state regulation of health professionals. The credentialing review statute requires that review bodies assess the need for credentialing proposals by examining whether such proposals are in the public interest.

The law directs those health occupations and professions seeking credentialing or a change in scope of practice to submit an application for review to the Department of Health and Human Services, Division of Public Health. The Director of this Division will then appoint an appropriate technical review committee to review the application and make recommendations regarding whether or not the application in question should be approved. These recommendations are made in accordance with four statutory criteria contained in Section 71-6221 of the Nebraska Revised Statutes. These criteria focus the attention of committee members on the public health, safety, and welfare.

The recommendations of technical review committees take the form of written reports that are submitted to the State Board of Health and the Director of the Division along with any other materials requested by these review bodies. These two review bodies formulate their own independent reports on credentialing proposals. All reports that are generated by the program are submitted to the Legislature to assist state senators in their review of proposed legislation pertinent to the credentialing of health care professions.

**MEMBERS OF THE
CERTIFIED REGISTERED NURSE ANESTHETISTS (CRNAs)
TECHNICAL REVIEW COMMITTEE**

June 2007

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Representing the State Board of Health
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J. Bradley Barr, PT, DPT, OCS (Omaha)
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Kevin Horne (Lincoln)
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Steve Wooden, CRNA, MS (Albion)
Nominated by the Nebraska Association of Nurse Anesthetists
Self-Employed CRNA

EXECUTIVE SUMMARY OF COMMITTEE ACTIONS

Directive Item One: Is there a need to expand CRNA scope of practice to include fluoroscopic procedures?

Recommendation One:

The Committee members agreed that there is a public health-related need to allow CRNAs to use fluoroscopy in Nebraska.

Directive Item Two: “Is there significant potential for new harm that might be associated with the proposed changes in CRNA scope of practice?”

Recommendation 2A:

There are concerns about the potential for new harm inherent in the idea of expanding the number of practitioners who perform fluoroscopic procedures independently, regardless of what group or groups these practitioners might be from. The two greatest sources of potential harm stemming from the proposed changes under review: risks related to radiation exposure and the risk of potential policy changes with no clear parameters regarding the number of procedures that would be allowed.

Recommendation 2B:

The Committee members agreed that the potential for new harm can be addressed by defining appropriate standards for education and training as well as defining standards of practice pertinent to specific fluoroscopic procedures.

Recommendation 2C:

The Committee members recommended that Nebraska adopt guidelines and standards similar to those of the State of Minnesota pertinent to the education and training necessary to administer fluoroscopy.

Recommendation 2D:

The Committee members recommended that the Board of Medicine and Surgery and the Board of Advanced Practice Registered Nurses jointly review the guidelines for pain management practice of all national organizations that have established such guidelines pursuant to the development of a set of practice guidelines for fluoroscopy services in Nebraska.

Directive Item Three: “To what extent would the public benefit from the proposed changes?”

Recommendation One:

The Committee members agreed that the public would benefit from the proposed changes because they would increase access to services and not diminish the quality of services.

Directive Item Four: “Is there a more cost-effective alternative to the proposed changes that might address the issues raised during the review?”

Recommendation One:

The Committee members agreed that the idea of allowing CRNAs to independently administer fluoroscopy is the most cost-effective way of addressing the access to care concerns identified.

Directive Item Five: “Are there other issues that should be considered in determining whether to change the scope of practice in this manner?”

Recommendation 5A:

The Committee members recommended that the Nebraska Radiation Control Act be updated so as to define appropriate practice standards for the utilization of fluoroscopic procedures.

Recommendation 5B:

The Committee members recommended that any standards or requirements for fluoroscopy use or any procedures done using fluoroscopy should be applied to all providers.

BACKGROUND INFORMATION ON FLUOROSCOPY ISSUES IN NEBRASKA

On January 31, 2005, Dr. Richard Raymond, Director of the HHS Department of Regulation and Licensure, received a petition from Avera St. Anthony's Hospital and North Central Anesthesia Services in O'Neill Nebraska requesting a determination on the following question, *"Under section 180 NAC 16 and following consultation, collaboration and with the order of a physician, may a CRNA request that fluoroscopic services be provided by a medical radiographer for the purpose of having the CRNA locate the precise point where pain medications will be injected?"* In response, Dr. Raymond issued a declaratory ruling on February 23, 2005 which stated that "only those professionals specifically listed in the Radiation Control Act (See Section 71-3507 to Section 71-3509 Nebraska Revised Statutes) may provide these services. Nurse practitioners currently are not included in this list of professionals."

The Radiation Control Act (Section 71-3503 (28) – Terms, defined) states: Licensed practitioner means a person licensed to practice medicine, dentistry, podiatry, chiropractic, osteopathic medicine and surgery, or as an osteopathic physician.

The Radiation Control Act (Section 71-3508 (3) – Radiation; qualifications; exemptions) states: The department may adopt and promulgate rules and regulations establishing qualifications pertaining to the education, knowledge of radiation safety procedures, training, experience, utilization, facilities, equipment, and radiation protection program that an individual user of sources of radiation shall possess prior to using any source of radiation or radiation-generating equipment. **Individuals who are currently licensed in the State of Nebraska as podiatrists, chiropractors, dentists, physicians and surgeons, osteopathic physicians, physician assistants, and veterinarians shall be exempt from the rules and regulations of the department pertaining to the qualifications of persons for the use of X-ray radiation-generating equipment operated for diagnostic purposes.**

On January 4, 2006 Senator Doug Cunningham introduced LB 838, a bill to amend **Section 71-3508 (3)** to specifically include CRNAs in the exemption from radiation use qualifications of the Radiation Control Act. The Legislature's HHS Committee held a public hearing on LB 838 on January 18, 2006 and indefinitely postponed the bill.

On January 5, 2006 Senator Joel Johnson introduced LB 882 to revise the statutory wording of **Section 71-3503 (28) of the Radiation Control Act** to include physician assistants and nurse practitioners as **"licensed practitioners"** under the Act. The Legislature's Health and Human Services Committee held a public hearing and advanced LB 882 on January 18, 2006 **with an amendment that the definition of "licensed practitioner" be amended to clarify that physician assistants and advanced practice registered nurses are not permitted to direct, perform or interpret fluoroscopic procedures.**

LB 994, signed by the Governor on April 12, 2006, made changes to the **Radiation Control Act, but kept the original definition of licensed practitioners as listed in paragraph two, above in Section 71-3503 (28).**

On January 4, 2007 Senator M. L. Dierks submitted LB 48, which included the proposed language changes contained in LB 838 from the previous session. A public hearing was held on this bill and LB 48 was held in committee with the understanding that a credentialing review of these issues would be undertaken by the HHS Department of Regulation and Licensure. On March 25, 2007, pursuant to this objective, Senator Joel Johnson, Chairperson of the Legislative Health and Human Services Committee, and Dr. Joann Schaefer, Director of the HHS Department of Regulation and Licensure, directed the Credentialing Review Program to initiate a directed review on these issues.

**Directive for Review
of
The Scope of Practice of Certified Registered Nurse Anesthetists
As it Relates to Fluoroscopy**

March 15, 2007

The Director of the Department of Health and Human Services Regulation and Licensure and the Chairperson of the Legislative Health and Human Services Committee are authorized to initiate a directed review under the Nebraska Regulation of Health Professions Act. This directive provides for the directed review of Certified Registered Nurse Anesthetists (CRNAs) for a proposed expansion in scope of practice to include the independent application of fluoroscopy.

Background

Under current provisions for CRNAs defined in Neb. Rev. Stat., Section 71-1734, the scope of practice of CRNAs does not include the administration of medication through the use of a fluoroscope to locate the precise point for a therapeutic intervention. The current LB 48 would expand the scope of practice of CRNAs so as to include this procedure as part of the scope of practice of this profession.

Fluoroscopy is a specific type of diagnostic x-ray procedure wherein x-rays are applied via a movable device creating a continuous flow of images of a patient's internal body structures. Images are displayed on a screen, rather than the static images that are typical of other radiographic procedures. The portability of fluoroscopic procedure provides for greater ability to more precisely identify the source of a patient's health condition. However, it also involves higher risk to the patient due to potentially longer exposure to x-rays than is the case with other radiographic procedures. Those health professionals who administer this procedure need to be well-trained and educated in order to provide assurance of patient safety.

Legislative discussions on this issue were held in 2006 on LB 838, and again in 2007 as regards LB 48. In these discussions, advocates of an expanded practice for CRNAs have argued that these professionals already possess the necessary education and training to safely and effectively apply fluoroscopy. Spokespersons representing physicians have argued that, currently, only physicians have the necessary education and training.

Directive

The points discussed above constitute issues regarding the regulation of health professions that would benefit from a review using the process found in the Nebraska Regulation of Health Professions Act.

The Director of the Department of Health and Human Services Regulation and Licensure and the Chairperson of the Legislative Health and Human Services Committee have found that no appropriate applicant group exists to formulate a proposal and, pursuant to Neb. Rev. Stat., Section 71-6223.02, they have initiated a statutory review of advanced practice nurses who seek to provide fluoroscopy services. To begin such a review, the

Director appoints a Technical Committee. The Technical Committee will examine the issues posed and will make the following determinations:

1. Is there a public health-related need for the proposed expansion of CRNA scope of practice to include fluoroscopy? Such a determination needs to be based on documented evidence, and should focus on the following dimensions of health care delivery:
 - a. Access to fluoroscopy services under the current situation;
 - b. Quality of fluoroscopy services under the current situation;
 - c. Cost of fluoroscopy services under the current situation;
 - d. Quality of the therapeutic intervention when done using fluoroscopy;
 - e. Cost of the therapeutic intervention when done using fluoroscopy.
2. Is there significant potential for new harm that might be associated with the proposed changes in CRNA scope of practice? This determination should take into account at least the following:
 - a. What level of education and training is necessary to independently utilize fluoroscopy safely and effectively?
 - b. What level of education and training is necessary to interpret the images from fluoroscopy?
 - c. What is the level of education, training, and clinical preparation of CRNAs in diagnostic radiographic procedures in general, and in fluoroscopy in particular?
 - d. Have other states approved CRNAs to provide these services? If so, determine what, if any, issues there have been with this practice in other states.
3. To what extent would the public benefit from the proposed changes?
 - a. Would these proposed changes improve access to services?
 - b. How would these proposed changes impact quality of services?
 - c. How would these proposed changes impact cost of services?
4. Is there a more cost-effective alternative to the proposal that might address the issues raised during the review?
5. Are there other issues that should be considered in determining whether to change the scope of practice in this manner? If so, the Committee should make appropriate recommendations on them.

The Committee will draft a report of findings and recommendations on the issues of this review and submit this report to the Board of Health, the Director of the Health and Human Services Department of Regulation and Licensure, and the Unicameral. The review process must be completed within nine months of the first meeting of the Technical Review Committee.

Senator Joel Johnson, Chair
Nebraska Legislature
Health & Human Services Committee

Joann Schaefer, M.D., Chief Medical Officer
Director, Department of Health & Human
Services Regulation and Licensure

Critical Issues and Information

Introduction

During its early meetings the Technical Committee appointed to carry out the review discussed a number of issues critical to the questions posed to them. This section summarizes the committee discussions.

What is fluoroscopy?

Fluoroscopy is a radiological procedure in which a moving x-ray picture of a patient's internal organs is taken. This procedure utilizes a constant flow of x-rays into the patient. Fluoroscopy has been described as a study of moving body structures similar to a movie.

In what health situations is fluoroscopy typically used to diagnose and treat health conditions?

Steve Wooden stated that his profession does not diagnose disease or prescribe medications, and that these are functions performed by medical doctors. CRNAs' use of fluoroscopy includes catheter placement, PICC lines (peripherally inserted central catheters) and needle placement but not diagnosis or the prescription of medications. Surgeons use fluoroscopy in the operating suite with bone fractures and for gallbladder treatment. Applications for fluoroscopy are changing all the time and involve advances in one area of care and retreats in other areas of care. Mr. Wooden commented that one of the advantages of fluoroscopy over other procedures such as ultrasound is that fluoroscopy can create a visible image through bone.

Is there a consensus in the medical community regarding the specific kinds of health problems or conditions that fluoroscopy is commonly used to diagnose? Dr. Massey indicated that in some areas of care, fluoroscopy has become an increasingly common procedure. However, in other areas of care, utilization has decreased because of the high risk associated with its use and the development of acceptable alternative procedures such as ultrasound. Dr. Massey explained that fluoroscopy is like a movie, a "real-time" picture, unlike an x-ray. He indicated that it is in the area of pain management that fluoroscopy has emerged as the core diagnostic procedure.

What is the perceived need for changes to the current situation regarding who can and cannot provide fluoroscopy services? There is a growing need in Nebraska for more practitioners such as CRNAs to provide fluoroscopy services in general and for pain management specifically. Rural areas of the state have a great need for more practitioners to provide pain management, and fluoroscopy has become a vital tool in the area of pain management. Dr. Massey stated that opportunities for the kind of advanced training needed to prepare CRNAs to provide these kinds of services are difficult for non-physicians to access.

What health conditions would CRNAs be using fluoroscopy to diagnose and treat?

The Committee members were asked whether or not the diagnosis component of fluoroscopy should be taken out of the discussion given statements by Mr. Wooden that

CRNAs do not diagnose. Dr. Massey commented that diagnosis should remain a component of the discussion because there is no way to clearly separate diagnosis from other aspects of a fluoroscopic procedure. Every member of such a team needs to have knowledge and abilities that enable them to “stand alone” if necessary, and each team member must be able to trust the abilities of the other team members. Dr. Massey stated that advanced education and training, as well as continuing education, is vital for a practitioner to stay on top of all of the changes that are taking place in fluoroscopy. He added that CRNAs are not eligible to take all the advanced education and training necessary to either develop or maintain an adequate level of knowledge and skill. Mr. Wooden responded that CRNAs need the consent of a physician to do any fluoroscopic procedure, and nothing being proposed would change that fact in actual practice. He stated that CRNAs work collaboratively with physicians as part of a team, and they assist physicians in conducting their procedures, including diagnostic procedures.

Would CRNAs be ordering fluoroscopic procedures or would they be operating fluoroscopes? Or both?

CRNAs do not intend to set up or operate the actual fluoroscopic equipment, and radiological technologists would do that work. Dr. Massey stated that “operate” refers to the person who is actually “pushing the button” as well as the person ordering the procedure, and that the term refers to both aspects of a procedure. He added that this reinforces the fact that advanced education and training is essential to perform these kinds of procedures.

Steve Wooden commented that CRNAs work as team members and know their limitations. He added that in the context of fluoroscopy, this means that CRNAs work in cooperation with radiological technologists and physicians to perform fluoroscopic procedures. He said that under the proposed changes, physicians would typically order a fluoroscopic procedure, and CRNAs would conduct the procedure in cooperation with radiological technologists, or would conduct the procedure themselves if no radiological technologists were available.

What is the education and training needed to order and perform a procedure using fluoroscopy? Do CRNAs possess this education and training? What is the education and training needed to operate a fluoroscope safely and effectively? Do CRNAs possess this education and training?

Mr. Wooden commented that CRNAs have been doing fluoroscopic procedures, including operating the fluoroscope, for many years all across the United States, but that they need to be able to independently manage the technology associated with this kind of work in order to meet the access needs of rural Nebraska. Teresa Hawk stated that access to these services in rural areas is an important issue, and added that this is an important concern of hers.

Dr. Massey asked Mr. Wooden how CRNAs acquire the education and training to perform fluoroscopic procedures. Mr. Wooden responded that there are seminars, programs, continuing education courses, and on-the-job training opportunities wherein CRNAs can access this education and training. Dr. Westerman asked Mr. Wooden whether the formal CRNA educational curriculum covers these kinds of topics. Mr. Wooden responded that formal educational and training programs typically are not the contexts where these kinds of procedures are learned, and that this is true not only for

nurses, but for other health care professionals such as physicians, for example. He added that this kind of training often takes place during clinical rotations.

Dr. Westerman stated that the Committee needs to know what education and training is needed to provide fluoroscopic procedures safely and effectively. Mr. Barr asked Mr. Wooden if there is an outcome objective in CRNA education and training pertaining to radiographic procedures. Mr. Wooden responded that safety is the core concern of all aspects of CRNA education and training, including those aspects pertaining to radiological procedures. He then stated that CRNAs should not be held to a higher standard regarding these procedures than other health professionals are.

Dr. Westerman asked whether there is a standard of education and training pertaining to fluoroscopy for health professionals who do this kind of work. Linda Coster, R.T., told the Committee that the education and training of RTs comes the closest to defining a standard in this area. This is because radiographic procedures are the core of their work, whereas other health professionals are responsible for many other functions and procedures not directly related to radiography.

Dr. Massey stated that the concern of physicians with the proposed changes in CRNA practice is with spinal diagnostics in general, and pain management in particular. This is because the proposed changes would provide opportunities for de facto expansions of CRNA scope of practice into other areas that are medical in nature, including diagnosis of patients' conditions.

Ms. Coster stated that it is vital that all health care practitioners involved in radiographic procedures as part of a team must be knowledgeable about all aspects of a given procedure, not just their own specialized function within it. For example, those who order a procedure must be aware of the safety implications of what they are ordering, and must be knowledgeable regarding the dangers, as well as the benefits, of the technology used during a procedure. She added that RTs are concerned that CRNA education and training in this regard seems to be somewhat spotty and haphazard. Mr. Wooden responded that we should all be equally concerned about those medical doctors who lack systematic training in this area of care. He reiterated the concern that CRNAs not be held to a higher standard than other practitioners regarding fluoroscopic procedures. Dr. Massey stated that there are some physicians who order epidurals to treat low-back pain, even though epidurals have been found to be ineffective in treating low-back pain. Mr. Horne commented that this information reinforces the point that some way needs to be found to address the potential for harm stemming from not just the actions of CRNAs, but also of physicians.

Mr. Barr asked Mr. Wooden about the potential for de facto expansion of CRNA scope of practice from the proposed changes. Mr. Wooden stated that if these issues occur in actual CRNA practice, the concerns would need to be brought to the attention of the appropriate credentialing board.

Dr. Massey stated that CRNAs do not have access to the same advanced radiological training opportunities as physicians do, and that a single weekend seminar course is not sufficient to establish competency. Dr. Massey stated that to be eligible for the most advanced training available, a practitioner must be a physician and certified in one of four specialized areas.

Mr. Wooden responded that CRNAs have access to better learning opportunities than Dr. Massey believes, including one-to-two-week seminars offered by foremost experts in the field. He added that these courses satisfy the best training standards.

How does CRNA education and training compare with that of other health professionals in the utilization of fluoroscopy?

What should the standard be for education and training? Mr. Wooden commented that the core concern is patient safety pertinent to such things as radiation shielding, exposure time and amount of radiation exposure. He added that of all practitioners, RTs and CRNAs are the most cognizant of these matters because they are the practitioners who receive the most exposure to radiation in their work environment.

Concerns related to Nebraska's current Radiation Control Act

Committee members expressed concern about the State's current Radiation Control Act throughout the review process. The Act as a whole has not been revised in many years and multiple sections are in need of updating. This task should probably fall to the Medical Radiographer Advisory Committee.

After reviewing the critical issues and the information available, the Committee began to consider the specific items of the Directive for Review.

Directive Item One: Is there a need to expand CRNA scope of practice to include fluoroscopic procedures?

Dr. Barr stated that the idea of allowing CRNAs to use fluoroscopy would enhance access to services as long as there is assurance of appropriate education and training. He added that he likes the approach used by Minnesota, which requires that all practitioners who use fluoroscopy meet certain educational and training requirements. Dr. Massey asked Dr. Barr what services he thought this approach would enhance. Dr. Barr responded that the use of fluoroscopy for line placement would be an example. Dr. Massey stated that he has checked with the hospitals regarding what percentage of fluoroscopic procedures are used for the placement of central lines and catheterizations, for example. He said that BryanLGH and St. Elizabeth Hospitals report that none of these procedures have been performed during the past year, and that PICC lines are currently done on the floor 98% of the time without the use of fluoroscopy. He went on to state that what the CRNAs really want is to use fluoroscopy for pain management in general, and for medication injections in particular.

Mr. Wooden stated that he and Dr. Massey are both concerned with public safety, but that they have differing views on who is qualified to use fluoroscopy. In Hastings, fluoroscopy is consistently used in the placement of lines. He stated that they take good care of patients, and added that anyone who has concerns about CRNA quality of care should take their concerns before the licensing boards. Dr. Massey said that he is concerned about the political aspects of credentialing boards, and that hospital credentialing boards such as at Avera St. Anthony's in O'Neill are likely to be influenced by what is good for that facility. Mr. Wooden clarified that he was speaking in the context of state licensing boards. Teresa Hawk commented that she has always considered that the licensing boards make good decisions. Mr. Wooden added that

facility credentialing boards can take away authority from a scope of practice, but cannot add any authority to one. Mr. Montgomery reminded the Committee that scopes of practice are determined by state statutes, and that if a recommendation comes forward, the state licensing board can change regulations.

The only practitioners allowed to independently provide fluoroscopy services in Nebraska at this time are physicians, dentists, podiatrists, chiropractors and osteopathic physicians. Data provided by the Office of Rural Health shows the geographical distribution of physicians and CRNAs specializing in anesthesia or radiology in the state. These data show that the physician specialists in question are much more geographically concentrated in the eastern and urban areas of Nebraska than are CRNAs.

The data also show that there are discrepancies between the geographical distribution of physicians and CRNAs in Nebraska sufficient to indicate significant access to care problems for patients residing in remote rural areas related to the provision of such specialized services as fluoroscopy, given the current restrictions on who can provide these kinds of services independently. Nearly 90 percent of physicians specializing in radiology or anesthesiology are located in the more urbanized counties of Eastern Nebraska, specifically, Lancaster, Douglas, and Sarpy counties, whereas that statistic is approximately 50 percent for the practices of CRNAs. Additionally, at least some CRNAs maintain practices in forty rural counties, whereas the physician specialists identified maintain practices in only nine rural counties in Nebraska. Furthermore, CRNAs maintain practices in some of the most remote rural areas of the state, such as Cherry and Box Butte Counties. That is not the case with the physician specialists. Their practices outside of Eastern Nebraska tend to be located along the I-80 corridor.¹

Directive Item Two: Is there potential for new harm from this proposed expansion is CRNA scope of Practice?

Dr. Barr stated that it's been made very clear that there is a potential for harm, but said that the question is, how can we limit or minimize this potential for harm? He asked whether there is any information regarding the extent to which harm has actually occurred in other states that already allow the proposed scope for CRNAs. Dr. Ihle said that if anyone would know the answer to this question it would be malpractice insurance carriers and that if they do not record objections to the proposed scope, then there probably is no reason for concern. Dr. Massey stated that Louisiana is the only state in which this expansion of scope of practice has been clearly defined, and that insurance companies would not yet have information pertinent to the track record on the outcomes associated with such a scope of practice. Mr. Wooden said that insurance companies are not restricting CRNA reimbursement regarding the procedures in question. Dr. Westerman asked whether this might be an appropriate place to suggest that any use of fluoroscopy by a CRNA be done in consultation with a physician. Mr. Wooden responded that there is no exception being requested by CRNAs regarding the authority of physicians. Dr. Barr suggested that perhaps what is needed is a list of training elements that everyone who uses fluoroscopy has to be certified to perform. David Montgomery commented that standards can be set without requiring certification, but that certification is probably the easiest way to accomplish this.

The professionals under discussion in this section are Certified Registered Nurse Anesthetists (CRNAs). These health professionals are advanced practice nurses that have specialized education, training, and credentialing in anesthesiology. CRNAs must be credentialed as RNs in order to qualify for CRNA education and training programs. Most CRNAs work in conjunction with anesthesiologists, and as the scope of anesthesiology grows, so does the scope of CRNA practice. Under regulations from the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) relative to pain management, each acute care facility must have a pain management team, and CRNAs are part of these teams.

CRNAs administer more than 65 percent of the 26 million anesthetics given to patients in the United States each year. As anesthesia specialists, CRNAs are the sole providers of anesthesia in 85 percent of rural hospitals, enabling these medical facilities to provide obstetrical, surgical, and trauma stabilization services.

There is an increasing demand for CRNAs to become involved in pain management, and this is one of the most heavily requested areas for CRNA continuing education courses.

The level of education and training of CRNAs in Nebraska are as follows:

Masters or Ph.D.: 42.9%; Bachelors: 26.2%; Associate: 5.8%; Diploma: 25.1% ²

Information provided about radiation control regulations in the State of Minnesota shows that educational and training standards have been developed for those who provide fluoroscopy services in that state. Minnesota requires all practitioners that perform fluoroscopy independently to have training in the following areas:

- a. X-ray generation and control
- b. X-ray dosimetry
- c. Image formation
- d. Image acquisition
- e. Image processing and management ³

Directive Item Three: To what extent would the public benefit from these proposed changes?

Steve Wooden stated that the idea of allowing CRNAs to independently administer fluoroscopy would benefit Nebraskans in the areas of access to care, quality of care and the costs of care. Dr. Massey stated that the aspect of cost is one where there could very well be a negative impact for the public in that costs are likely to increase, not decrease, as a result of the proposed changes. He added that the costs of delivering care utilizing complex medical equipment is significantly greater in rural hospital settings as opposed to larger urban hospital settings. This is because costs per procedure are higher in rural areas due to lower volume. He stated that Medicare and Medicaid often charge as much as four times more for procedures done in rural hospitals, and that the proposed changes would increase costs due to the fact that CRNAs would emphasize using rural health care facilities. Dr. Massey added that if we increase access to care in rural areas with their smaller populations, we will increase the cost of procedures in total and per procedure. He indicated that this would be true regardless of who is doing the procedures.

Teresa Hawk responded that as she sees the overall cost issue, costs should go down once access is increased because this should increase patient volume in rural health care facilities.

Steve Wooden stated that he would argue that the overall costs are impacted far less than what Dr. Massey is stating once other aspects of cost are factored in such as time off from work, travel, etc. He added that overall costs of a service are set by each facility, not by Medicare or Medicaid. Ms. Hawk commented that Dr. Massey's comments assume that all rural patients are covered under Medicare or Medicaid, which is not necessarily the case.

The Office of Rural Health provided data that supports the idea of expanding the scope of practice of CRNAs to include the independent provision of fluoroscopy because it indicated that there is a need to improve access to fluoroscopic services. Information regarding educational and training standards for fluoroscopy developed by the State of Minnesota provided a means by which the potential for new harm associated with expanding CRNA scope of practice could be addressed in a manner consistent with public safety.

Directive Item Four: Is there a more cost-effective means of addressing the public health needs raised during the review than the proposed changes?

Dr. Massey stated that he thinks that the current situation is more cost-effective. Teresa Hawk stated that since we are addressing CRNAs, we don't have to take into consideration that the facilities would cost more and Mr. Wooden agreed with her. Mr. Montgomery said that the Committee members need to focus on the big picture of overall cost-effectiveness, and whether there is another way to address the issues in question than what is being proposed. Dr. Massey stated that a lot of this depends on exactly what CRNAs would be doing with the expanded scope of practice and that if it's pain management, then the most cost-effective approach is the status quo.

Steve Wooden responded that CRNAs are practicing pain management now and will continue to do so. There is a group of CRNAs that are paying a physician to sit in their office to meet the standard of physician oversight. Dr. Massey responded that this is a perfect example of using the letter of the law to contradict the spirit of the law. He stated that the best recommendation would be to do nothing. This would be the best way of keeping down the costs of health care.

Data provided by the Office of Rural Health showed that access to care would likely improve as a result of the proposed changes, and that this in turn would lower the costs of care for patients residing in remote rural areas of Nebraska pertinent to such things as travel costs, lodging costs, and time off from work.

Nebraska Medical Association representatives provided data during the review which showed that costs to the health care system in the form of increases in Medicare costs might occur as a result of the proposed changes. The cost of delivering care utilizing complex medical equipment is significantly greater in rural hospital settings as opposed to larger urban hospital settings. This is because costs per procedure are higher in rural areas due to lower volume. Medicare and Medicaid often charge as much as four times more for procedures done in rural hospitals, and the proposed changes would increase costs due to the fact that CRNAs would emphasize using rural health care facilities. If

access to care is increased in rural areas with their smaller populations, the cost of procedures in total and per procedure will increase, regardless of who is doing the procedures.⁴

Preliminary Findings and Recommendations of the Committee

Introduction

After reviewing the information presented during the review, the Committee members formulated preliminary recommendations on the issues. The purpose of formulating preliminary recommendations was to generate and focus public comment on the issues in a public hearing context. Once these comments were received, the Committee members could proceed with finalizing their recommendations. These preliminary recommendations were generated via Committee consensus rather than formal roll call votes on formal motions.

1) Is there a public health-related need for the proposed expansion of CRNA scope of practice to include fluoroscopy?

The Committee members agreed that there is a public health-related need to allow CRNAs to use fluoroscopy in Nebraska.

The following public health-related problems associated with the current situation of fluoroscopy services in Nebraska were identified during the course of the review:

- a. Access to fluoroscopy services for Nebraskans who live in rural areas is significantly more limited than is the case for Nebraskans who live in the more urbanized areas of our state, or along the I-80 corridor.
- b. Due to greater travel costs and time spent away from work, the cost of accessing fluoroscopy services for Nebraskans who live in rural areas is significantly greater than is the case of Nebraskans who live in the more urbanized areas of the state, or along the I-80 corridor.
- c. Current restrictions on the scope of practice of CRNAs in Nebraska that in effect disallow these practitioners from utilizing fluoroscopy independently has limited the ability of patients in the state to access these services, especially patients who reside in medically underserved areas. CRNAs are somewhat more evenly distributed around the state than are physicians who have an expertise in radiology.

The Committee members concluded that expanding the scope of practice of CRNAs to include fluoroscopy would clearly improve access to this component of health care for those who reside in remote rural areas of our state. Nebraska Medical Association representatives presented a counterargument to this information regarding access to care by stating that medical doctors do routinely travel to clinics located in rural areas of Nebraska to provide access to pain management care.⁵

Data provided by the Office of Rural Health shows that there are discrepancies between the geographical distribution of physicians and CRNAs in Nebraska

sufficient to indicate significant access to care problems for patients residing in remote rural areas related to the provision of such specialized services as fluoroscopy, given the current restrictions on who can provide these kinds of services independently.

2) **Is there significant potential for new harm that might be associated with the proposed changes in CRNA scope of practice?**

- 2a. The Committee members agreed that there is significant potential for new harm associated with the idea of expanding fluoroscopy services to include independent administration by CRNAs.

The CRNA Committee members found that there is significant potential for new harm or danger to the public associated with the idea of allowing CRNAs to independently administer fluoroscopy procedures. CRNA education and training in fluoroscopy is difficult to define, and for the most part, it occurs as part of on-the-job training. The Committee members concluded that there is a need for additional assurance that CRNAs meet all necessary safety and training standards before they should be approved to perform fluoroscopic procedures.

The Committee members examined documentation pertinent to the education and training of CRNAs, and did not find clear evidence to indicate the existence or extent of specific training or academic preparation focused on radiological procedures *per se* in that education and training.⁶ During the review, representatives of the CRNA profession indicated that typically, CRNAs receive this training on the job from their physician employers. There was a consensus among the Committee members that there is a need for more formal education and training focused on fluoroscopy before the proposed changes in scope should be approved.⁷ Information provided by representatives of the Medical Association further reinforced the idea that there is a need for additional education and training on the part of CRNAs pertinent to fluoroscopic procedures.⁸

The Committee members also found that most non-radiologist physicians learn about fluoroscopy in much the same way as CRNAs, by learning from other practitioners via on-the-job training and through continuing education.⁹

- 2b. The Committee members agreed that the potential for new harm can be addressed by defining appropriate standards for education and training, as well as defining standards of practice pertinent to specific fluoroscopic procedures.

Education and training standards for performing fluoroscopy have been developed for health professions in the State of Minnesota under that state's rules and regulations for the Minnesota Radiation Control Act.¹⁰ The Committee members agreed that there is a need for all health care practitioners who perform fluoroscopic procedures independently to be required to satisfy such educational and training standards, including physicians.¹¹

- 2c. The Committee members recommended that Nebraska adopt guidelines and standards similar to those of the State of Minnesota pertinent to the education

and training needed to administer fluoroscopy. These guidelines are defined in the rules and regulations of Minnesota's Radiation Control Act.¹²

The Committee members stated that these are the kind of training requirements that should be required in Nebraska for all practitioners who perform fluoroscopy independently.¹³

3) To what extent would the public benefit from the proposed changes?

A majority of Committee members agreed that the public would benefit from the proposed changes because they would increase access to services and not diminish the quality of services.

The Committee members agreed that current restrictions on the ability of CRNAs in Nebraska to perform fluoroscopic procedures have restricted access to these services, especially for patients who reside in medically underserved areas. They concluded that the practices of CRNAs are more evenly distributed around the state than are those of physicians who provide fluoroscopic services, and that data provided during the course of the review supports this contention.¹⁴ The Committee members clarified that they made this recommendation as one component of a set of recommendations that includes recommendations for additional educational and training requirements for CRNAs as well as for other practitioners that utilize fluoroscopic procedures.¹⁵

4) Is there a more cost-effective alternative to the proposed changes that might address the issues raised during the review?

A majority of Committee members agreed that the idea of allowing CRNAs to independently administer fluoroscopy is the most cost-effective way of addressing the access to care concerns identified.

The Committee members were convinced by data received pertinent to the comparative geographical distribution of CRNAs and physicians in Nebraska that CRNAs are relatively more available to provide fluoroscopic procedures in rural areas of this state than are physicians.¹⁶

The Committee discussed the issue of cost of services several times. Concern was expressed about the potential for high costs of fluoroscopy services if they are provided in small rural hospitals. Concerns about the overall cost of services under the current situation for patients who reside in rural areas were also expressed. Those costs might include time off from work, travel expenses and so on.

5) Are there other issues that should be considered in determining whether to change the scope of practice in this manner?

5a. The Committee members recommended that the Nebraska Radiation Control Act be updated so as to define appropriate practice standards for the utilization of fluoroscopic procedures.

The current Radiation Control Act needs clarification as regards the education, training, and practice standards necessary to provide fluoroscopy services

independently in a manner that is safe and effective. The Act has not been revised in many years and multiple sections are in need of updating. This task should probably fall to the Medical Radiographer Advisory Committee.¹⁷

The current Radiation Control Act names the health professions that are allowed to perform fluoroscopic procedures, but it does not provide a rationale or standard as to why certain professions are allowed to perform this procedure, while other health professions are, in effect, excluded. Also, the current act does not define practice protocols for the use of fluoroscopy, and the Committee members agreed that this is something that is needed.

- 5b. The Committee members also recommended that the education and training standards recently adopted by the State of Minnesota be used by Nebraska as a starting point for the development of such standards in our state.

The Committee members found that the rules and regulations of the Radiation Control Act of the State of Minnesota pertinent to training requirements for fluoroscopy are required for all practitioners that perform fluoroscopy independently in that state.¹⁸

- 5c. The Committee members recommended that the Board of Medicine and Surgery and the Board of Advanced Practice Registered Nurses jointly review the guidelines for pain management practice of all national organizations that have established such guidelines in order to develop a set of practice guidelines for this area of care in Nebraska.

The Committee members noted that the standards of the International Spine Intervention Society (ISIS) are one set of standards that should be considered as a basis for the development of such guidelines.¹⁹

Final Recommendations of the CRNA Committee

Introduction

Copies of the preliminary findings and recommendations were distributed to interested parties pursuant to generating public comment on these findings and recommendations at a public hearing. During the Public Hearing, testimony was received on the following issues pertinent to fluoroscopy services in Nebraska:

1. Access to care in rural areas of Nebraska
2. The potential benefits from the proposed expansion in CRNA scope of practice
3. The potential for new harm from the proposed expansion in CRNA scope of practice
4. The education and training of CRNAs and quality of care issues
5. Cost of care issues associated with the proposed changes in CRNA scope of practice

The information received during the Public Hearing was considered during the formulation of the Final Recommendations of the Committee.

The Final Recommendations of the CRNA Committee Formulated on October 1, 2007 are as Follows:

Directive Item One: Is there a public health-related need for the proposed expansion of CRNA scope of practice to include fluoroscopy?

Preliminary and Final Recommendation One:

There is a public health-related need to allow CRNAs to use fluoroscopy in Nebraska.

Steve Wooden moved and Dr. Barr seconded that the Committee members approve this preliminary recommendation as written. Voting aye were Barr, Hawk, Horne, Ihle and Wooden. Voting nay was Massey. The motion carried.

The majority of the Committee members were convinced by data received pertinent to the comparative geographical distribution of CRNAs and physicians in Nebraska that CRNAs are relatively more available to provide fluoroscopic procedures in rural areas of this state than are physicians.

Directive Item Two: Is there significant potential for new harm that might be associated with the proposed changes in CRNA scope of practice?

Preliminary Recommendation 2A:

There is significant potential for new harm associated with the idea of expanding fluoroscopy services to include independent administration by CRNAs.

During Committee discussion on this preliminary recommendation, Dr. Massey identified what he believes to be the two greatest sources of potential harm stemming from the proposed changes under review: risks related to radiation exposure and the risk of potential policy changes with no clear parameters regarding the number of procedures that would be allowed. Dr. Massey moved and J.B. Barr seconded that the Committee members add these two items as new bullet points to the first preliminary recommendation under Directive Item Two.

Dr. Barr suggested that it might be better to state the motion so as to communicate that there are concerns about the potential for new harm inherent in the idea for expanding the number of practitioners who perform fluoroscopic procedures independently, regardless of what group or groups these practitioners might be from, and then add the two specific items of concern at the end of the motion. Dr. Massey agreed that Dr. Barr's suggestion was the best way to clarify his motion, and then adopted Dr. Barr's wording in place of his original motion

The Committee Members Approved Final Recommendation 2A as follows:

There are concerns about the potential for new harm inherent in the idea of expanding the number of practitioners who perform fluoroscopic procedures independently, regardless of what group or groups these practitioners might be from. The two greatest sources of potential harm stemming from the proposed changes under review: risks related to radiation exposure and the risk of potential policy changes with no clear parameters regarding the number of procedures that would be allowed.

Dr. Massey moved and Dr. Barr seconded that this recommendation be approved as rewritten. Voting aye were Barr, Hawk, Horne, Ihle, Massey and Wooden. There were no nay votes. The motion passed.

The Committee members clarified that the potential for harm in this area of care stems from any expansion in the number of practitioners that utilize fluoroscopy, regardless of what professional group or groups are being added to the list of those allowed to provide these services.

Preliminary and Final Recommendation 2B:

The potential for new harm can be addressed by defining appropriate standards for education and training as well as defining standards of practice pertinent to specific fluoroscopic procedures.

Dr. Barr moved and Dr. Massey seconded that the Committee members approve this preliminary recommendation as written. Voting aye were Barr, Hawk, Horne, Ihle, Massey and Ihle. There were no nay votes. The motion passed.

Preliminary and Final Recommendation 2C:

The Committee recommends that Nebraska adopt guidelines and standards similar to those of the State of Minnesota pertinent to the education and training necessary to administer fluoroscopy.

Dr. Barr moved and Dr. Massey seconded that the Committee members approve this preliminary recommendation as written. Voting aye were Barr, Hawk, Horne, Ihle, Massey and Wooden. There were no nay votes. The motion passed. The Committee members clarified that such guidelines and standards should apply to all practitioners that utilize fluoroscopic procedures independently.

At Dr. Barr's suggestion, the Committee members agreed that the third recommendation (see Recommendation Four, below) currently listed under **Item Five** be relocated from **Item Five** and made the fourth recommendation under **Item Two**.

Preliminary and Final Recommendation 2D:

The Board of Medicine and Surgery and the Board of Advanced Practice Registered Nurses jointly review the guidelines for pain management practice of all national organizations that have established such guidelines pursuant to the development of a set of practice guidelines for fluoroscopy services in Nebraska.

Dr. Barr moved and Teresa Hawk seconded that the Committee members approve this preliminary recommendation as written and relocated. Voting aye were Barr, Hawk, Horne, Ihle, Massey and Wooden. There were no nay votes. The motion passed.

Directive Item Three: To what extent would the public benefit from the proposed changes?

Preliminary and Final Recommendation One:

The public would benefit from the proposed changes because they would increase access to services and not diminish the quality of services.

Steve Wooden moved and Dr. Ihle seconded that the Committee members approve this preliminary recommendation as written. Voting aye were Barr, Hawk, Horne, Ihle and Wooden. Voting nay was Massey. The motion passed.

Directive Item Four: Is there a more cost-effective alternative to the proposed changes that might address the issues raised during the review?

Preliminary and Final Recommendation One:

The idea of allowing CRNAs to independently administer fluoroscopy is the most cost-effective way of addressing the access to care concerns identified.

Steve Wooden moved and Dr. Barr seconded that the Committee members approve this preliminary recommendation as written. Voting aye were Barr, Hawk, Horne, Ihle and Wooden. Voting nay was Massey. The motion passed.

The Committee discussed the aspect of costs from several different perspectives:

There could very well be a negative impact for the public in that costs are likely to increase, not decrease, as a result of the proposed changes. The cost of delivering

care utilizing complex medical equipment is significantly greater in rural hospital settings as opposed to larger urban hospital settings because costs per procedure are higher in rural areas due to lower volume. Medicare and Medicaid often charge as much as four times more for procedures done in rural hospitals.

Regarding the overall cost issue, costs should go down once access is increased because this should increase patient volume in rural health care facilities.

Overall costs are impacted far less than stated once other aspects of cost are factored in such as time off from work, travel, etc. Overall costs of a service are set by each facility, not by Medicare or Medicaid. The assumption that all rural patients are covered under Medicare or Medicaid is not necessarily the case.

The majority of the Committee members were convinced by data received pertinent to the comparative geographical distribution of CRNAs and physicians in Nebraska that CRNAs are relatively more available to provide fluoroscopic procedures in rural areas of this state than are physicians.

Directive Item Five: Are there other issues that should be considered in determining whether to change the scope of practice in this manner?

Preliminary and Final Recommendation 5A:

The Committee recommends that the Nebraska Radiation Control Act be updated so as to define appropriate practice standards for the utilization of fluoroscopic procedures.

Steve Wooden moved and Teresa Hawk seconded that the Committee members approve this preliminary recommendation as written. Voting aye were Barr, Hawk, Horne, Massey and Wooden. There were no nay votes. The motion passed.

The Committee members stated that they felt the Radiation Control Act to be the place where practice standards for all practitioners that perform fluoroscopic procedures should be located.

Preliminary Recommendation 5B:

The Committee recommends that the education and training standards recently adopted by the State of Minnesota be used by Nebraska as a starting point for the development of such standards in our state.

Because this Recommendation has already been addressed under Directive Item Two, the Committee members agreed to replace this preliminary recommendation with the following final recommendation.

The Committee Members Approved Final Recommendation 5B as follows:

The Committee recommends that any standards or requirements for fluoroscopy use or any procedures done using fluoroscopy should be applied to all providers.

Steve Wooden moved and Teresa Hawk seconded that the Committee members approve this modified recommendation. Voting aye were Barr, Hawk, Horne, Ihle, Massey and Wooden. There were no nay votes. The motion passed. The Committee members clarified that the focus of this recommendation is on all practitioners that utilize fluoroscopy independently, not just CRNAs.

OVERVIEW OF COMMITTEE PROCEEDINGS

The Committee members met for the first time for orientation to the review process and initial discussion on the issues on July 11, 2007.

The Committee members met for their second meeting on July 26, 2007 to continue the discussion of the issues of the review and to define the agenda for their public hearing.

The Committee members met on August 20, 2007 for their public hearing.

The Committee members met on September 10, 2007 to formulate their preliminary recommendations on the issues under review.

The Committee members met on October 1, 2007 to finalize their recommendations on the issues under review.

The Committee members met via teleconference on October 29, 2007 to finalize their report of recommendations.

¹ (The Distribution of CRNAs and Physicians from The UNMC Health Professions Tracking Center for 2007, provided by the Office of Rural Health, Division of Public Health; Department of Health and Human Services. Also see Nebraska Anesthesiology and Pain Management Specialties 2007 from the Office of Rural Health, both appended at the end of this report.)

² "Certified Registered Nurse Anesthetist (CRNA) Licensure in Nebraska" – compiled by Charlene Kelly, Ph.D., R.N., Section Administrator for Nursing and Nursing Support, Credentialing Division, HHS Department of Regulation and Licensure, May 25, 2007

³ (Rules and Regulations, Radiation Control Act, State of Minnesota, Minnesota State Department of Health, Page 128, (AR3645), August 3, 2007

⁴ ("Medicare Reimbursement: Facility versus Clinics", provided by John Massey, M.D.)

⁵ (Minutes of the First and Second Meetings of the Committee, held July 11 and July 26, 2007, respectively)

⁶ (The Curriculum of the Bryan LGH CRNA Training Program, provided by James Cuddeford, CRNA, the Program Director)

⁷ (Minutes of the Third Meeting of the Committee, August 20, 2007)

⁸ (Letters from Dr. Richard Belatti, M.D., August 27, 2007; Dr. K.E. Le Blance, M.D., Louisiana State Board of Medical Examiners, June 26, 2006; and Dr. Mark J. Lema, M.D., President of the American Society of Anesthesiologists, September 7, 2007)

⁹ (Minutes of the Third Meeting of the Committee August 20, 2007)

¹⁰ (Rules and Regulations, Radiation Control Act, State of Minnesota, Minnesota State Department of Health, Page 128, (AR3645), August 3, 2007

¹¹ (Minutes of the Third Meeting of the Committee, August 20, 2007)

¹² (Rules and Regulations, Radiation Control Act, State of Minnesota, Minnesota State Department of Health, Page 128, (AR3645), August 3, 2007)

¹³ (Minutes of the Third Meeting of the Committee, August 20, 2007)

¹⁴ (Data previously cited under preliminary recommendations and findings, page 7 of this report, and the map of Nebraska appended at the end of this report)

¹⁵ (Minutes of the Third Meeting of the Committee, August 20, 2007)

¹⁶ (Data previously cited under preliminary recommendations and findings, page 7 of this report)

¹⁷ (Minutes of the Third Meeting, held on August 20, 2007)

¹⁸ (Rules and Regulations, Radiation Control Act, State of Minnesota, Minnesota State Department of Health, Page 128, (AR3645), August 3, 2007)

¹⁹ (Minutes of the Third Meeting of the Committee, August 20, 2007)