

IN THE SUPREME COURT OF IOWA

No. 11-1977

Filed May 31, 2013

IOWA MEDICAL SOCIETY
and **IOWA SOCIETY OF ANESTHESIOLOGISTS,**
Appellees,

vs.

IOWA BOARD OF NURSING,
Appellant,

and

IOWA ASSOCIATION OF NURSE ANESTHETISTS
and **IOWA NURSES ASSOCIATION,**
Appellants,

and

IOWA OSTEOPATHIC MEDICAL ASSOCIATION,
Appellee.

Appeal from the Iowa District Court for Polk County, Artis I. Reis,
Judge.

The Iowa Board of Nursing and intervenor nursing associations
appeal from the district court's decision invalidating two administrative
rules permitting advanced registered nurse practitioners to supervise
fluoroscopy. **REVERSED AND REMANDED WITH INSTRUCTIONS.**

Thomas J. Miller, Attorney General, and Chantelle C. Smith and
Sara M. Scott, Assistant Attorneys General, for appellant Iowa Board of
Nursing.

James W. Carney and George W. Appleby of Carney & Appleby, P.L.C., Des Moines, for appellant Iowa Association of Nurse Anesthetists.

Judith R. “Lynn” Boes and Jodie C. McDougal of Davis, Brown, Koehn, Shors & Roberts P.C., Des Moines, for appellant Iowa Nurses Association.

Douglas A. Fulton and Paul A. Drey of Brick Gentry, P.C., West Des Moines, for appellee Iowa Medical Society.

Nicholas J. Mauro of Crawford Quilty & Mauro Law Firm, Des Moines, for appellee Iowa Society of Anesthesiologists.

Kimberly Bartosh and Erik S. Fisk of Whitfield & Eddy P.L.C., Des Moines, for appellee Iowa Osteopathic Medical Association.

WATERMAN, Justice.

In this appeal, we must decide whether the Iowa Board of Nursing and Iowa Department of Public Health exceeded their regulatory authority by enacting rules allowing advanced registered nurse practitioners (ARNPs) to supervise radiologic technologists using fluoroscopy machines. Several physician associations brought this court action against the nursing board and the department of public health to invalidate the rules. Two nursing associations intervened to defend the rules. The district court, on cross-motions for summary judgment, invalidated the rules after concluding that ARNP supervision of fluoroscopy has not been “recognized by the medical and nursing professions” within the meaning of Iowa Code section 152.1(6)(d) (2009), and the nursing board and the department of public health exceeded their authority in promulgating the rules. The nursing board and nursing associations appealed.

The Iowa legislature expressly granted the nursing board interpretive authority as to chapter 152. See Iowa Code § 147.76. In *Renda v. Iowa Civil Rights Commission*, we recognized that such a grant of interpretive authority requires deferential review of the agency’s interpretation of the statute and its application of law to fact. 784 N.W.2d 8, 11 (Iowa 2010). By contrast, without a legislative grant of interpretive authority to the agency, we interpret the statute de novo, as is exemplified in our opinion in *Iowa Dental Ass’n v. Iowa Insurance Division*, ___ N.W.2d ___, ___ (Iowa 2013). Applying *Renda*, we conclude that the nursing board’s application of law to fact is not irrational, illogical, or wholly unjustifiable. We also conclude the rules fall within the authority of the nursing board and department of public health, and the other challenges to the rules fail. Accordingly, the rules at issue

must be upheld. We therefore reverse the decision of the district court and remand for further proceedings consistent with this opinion.

I. Background Facts and Proceedings.

We begin with an overview before a more detailed discussion of the record. The challenged rules are Iowa Administrative Code rules 655—7.2(2), adopted by the nursing board, and 641—41.1(5)(n), adopted by the department of public health. The rulemaking process preceding adoption of these rules generated extensive public comments supporting and opposing the rules as proposed. Supporters advocated adoption of the rules to improve access to healthcare (particularly in rural areas), enhance the safety of certain procedures, lower costs, and clarify the authority for existing practices ongoing for many years in parts of Iowa, which had been approved by various hospital credentialing committees staffed in part by physicians. Those opposed to the rules cited concerns with whether ARNPs were adequately educated and trained in radiation safety to supervise radiologic technologists, as well as other safety concerns, albeit without documenting a single injury attributable to an ARNP-supervised fluoroscopy procedure. The rules were adopted by the nursing board and the department of public health in June 2009 and April 2010, respectively. No objection to the rules was raised by the legislature’s Administrative Rules Review Committee (ARRC), the governor, or the attorney general. Proposed legislation to nullify the rules failed in 2010. The battle moved to the courtroom.

On June 21, 2010, petitioners Iowa Medical Society and Iowa Society of Anesthesiologists filed petitions for judicial review against the nursing board and the department of public health. The district court granted motions to intervene by the Iowa Osteopathic Medical Association opposing the rules, and by the Iowa Nurses Association and

Iowa Association of Nurse Anesthetists supporting the rules. The district court invalidated both rules by summary judgment. The nursing board, Iowa Nurses Association, and Iowa Association of Nurse Anesthetists appealed. The department of public health did not appeal.

We will now undertake a more detailed review of the agency record upon which our decision is based.

A. Rulemaking Proceedings. In December 2006, a radiologic technologist contacted the department of public health's Bureau of Radiologic Health to inquire about who could supervise his operation of a fluoroscopy¹ machine. The department of public health and the bureau

¹The district court described fluoroscopy as a "real-time medical imaging technology that employs a beam of radiation to project a real-time visual image of the body onto a monitor screen." According to the American College of Radiology:

Fluoroscopy is frequently used to assist in a wide variety of medical diagnostic and therapeutic procedures, both within and outside of radiology departments. Fluoroscopic equipment capabilities have changed dramatically in recent years. Modern fluoroscopic equipment is capable of delivering very high radiation doses during prolonged procedures. There have been reports of serious skin injuries in some patients undergoing certain fluoroscopically guided procedures. Therefore, the use of fluoroscopy in medical institutions must be proactively managed to reduce patient radiation exposures to levels that are as low as reasonably achievable consistent with the medical demands of the procedures for which fluoroscopy is used. Management of the use of radiation must also ensure adequate safety of medical personnel involved in these procedures.

ACR Technical Standard for Management of the Use of Radiation in Fluoroscopic Procedures Preamble 1 (Am. Coll. of Radiology) (rev. 2008), available at <http://www.acr.org/~media/ACR/Documents/PGTS/standards/MgmtFluoroProcedures.pdf>.

ARNPs utilize fluoroscopy in numerous procedures they perform within the scope of their practice, including peripheral insertion of an extended length intravenous central catheter (PICC line), swallow studies, foreign body location, precise needle location for procedures such as breast biopsy, and interventional pain management. Use of fluoroscopy in these procedures allows the ARNP to see the precise spot to inject the medicine or to insert the vascular device. If ARNPs were not permitted to supervise fluoroscopy, the procedure would either need to be done blind or by a physician or under the supervision of a physician.

began collaborating with the nursing board to address the inquiry and, ultimately, to develop rules permitting ARNPs² to supervise fluoroscopic procedures performed by radiologic technologists. At that time both boards were aware that hospitals across the state had been credentialing³ ARNPs to supervise fluoroscopy and that several ARNPs had reportedly been supervising fluoroscopy for over twenty years.

The nursing board and the department of public health noted the ARNPs who were currently supervising fluoroscopic procedures may have been acting within the scope of their practice under the then-existing rules, but recognized those rules were unclear. The rule existing at that time provided that “[t]he use of fluoroscopic X-ray systems by radiologic technologists and students shall be performed under the direct supervision of a licensed practitioner of the healing arts for the purpose

²An advanced registered nurse practitioner is

a nurse with current licensure as a registered nurse in Iowa or who is licensed in another state and recognized for licensure in this state The ARNP is prepared for an advanced role by virtue of additional knowledge and skills gained through a formal advanced practice education program of nursing in a specialty area approved by the board. In the advanced role, the nurse practices nursing assessment, intervention, and management within the boundaries of the nurse-client relationship. Advanced nursing practice occurs in a variety of settings, within an interdisciplinary health care team, which provide for consultation, collaborative management, or referral. The ARNP may perform selected medically delegated functions when a collaborative practice agreement exists.

Iowa Admin. Code r. 655—7.1. The board of nursing has recognized four different specialty areas of nursing practice for advanced registered nurse practitioners: certified clinical nurse specialists, certified nurse-midwives, certified nurse practitioners, and certified registered nurse anesthetists. *Id.* r. 655—7.2(1).

³Each hospital has a credentialing and privileging committee. Those committees are generally comprised of several physicians and other hospital administrators and medical staff members. ARNPs who wish to use fluoroscopy in their practice must first become credentialed and privileged to do so. The hospital committee considers numerous factors, including the ARNP’s specific educational background, actual experience in performing the procedure, and any identified problems they have had in practice. *See id.* r. 481—51.5(4).

of localization to obtain images for diagnostic purposes.” Iowa Admin. Code r. 641—41.1(5)(1)(2) (2008). “Licensed practitioner of the healing arts” is not included in the definition section in chapter 41; however, individual definitions for “licensed practitioner” and “healing arts” appear in an earlier chapter’s definitions. *See id.* r. 641—38.2. Although found in a different chapter, these definitions apply to the rules found in several later chapters, including chapter 41. *See id.* (“As used in these rules, these terms have the definitions set forth below and are adopted by reference and included herein for 641—Chapters 39 to 45.”).

“Healing arts” is broadly defined in chapter 38 as

the occupational fields of diagnosing or treating disease, providing health care and improving health by the practice of medicine, osteopathy, chiropractic, podiatry, dentistry, nursing, veterinary medicine, and supporting professions, such as physician assistants, *nurse practitioners*, radiologic technologists, and dental hygienists.

Id. (emphasis added). The term “licensed practitioner” is more narrowly defined as

a person licensed or otherwise authorized by law to practice medicine, osteopathy, chiropractic, podiatry, or dentistry in Iowa, or certified as a physician assistant as defined in Iowa Code section 148C.1, subsection 6, and is authorized to prescribe X-ray tests for the purpose of diagnosis or treatment.

Id. Nurse practitioners are not mentioned in this definition. Thus, supervision of fluoroscopy procedures performed by radiologic technologists was not within the scope of practice for ARNPs under the definitions contained in chapter 38 and applicable to the rule found in chapter 41.

On December 15, the nursing board made a finding that the scope of practice for ARNPs includes the ability “to order, perform, supervise and interpret x-ray tests [including fluoroscopy] for the purpose of

diagnosis or treatment.” The nursing board’s finding garnered support from the Iowa Hospital Association,⁴ the Iowa Association of Nurse Anesthetists,⁵ and the Iowa Nurses Association. The nursing board’s finding, however, was opposed by physicians’ groups, including the Iowa

⁴In a letter dated March 11, 2008, the Iowa Hospital Association confirmed that ARNPs working for rural hospitals were already supervising fluoroscopy:

To assess the current extent of this issue, the Iowa Hospital Association has recently verified with many rural hospitals across the state that the practice of ARNP’s performing procedures with the assistance of fluoroscopy is either currently being done or will be done in the near future. Coincidentally, this practice has been supported and even encouraged by medical providers within these communities.

⁵The Iowa Association of Nurse Anesthetists submitted a letter to the nursing board that focused on the absence of any injuries resulting from certified registered nurse anesthetist supervision and the importance of the access it provides to patients in rural communities:

No safety violations by CRNAs using fluoroscopy have been reported to the Board of Nursing, the IANA or the Bureau of Radiologic Health. The malpractice rates of CRNAs in Iowa have decreased, also indicating our continued safe practice. CRNAs are the sole providers of anesthesia services in over 90 of the 121 hospitals in Iowa. To limit the use of a tool that has the potential for enhancing the safety of our existing practices without any evidence of actual harm will impose severe limits on access to care for citizens who rely on CRNAs to provide these services presently. ARNPs have been able to order, perform, interpret and supervise X-ray tests for many years without adverse outcomes, and we should be allowed to continue to do so. The citizens of Iowa depend on our services, and restricting their access to high quality, safe care by limiting which tools we are able to use is not in the best interests of Iowa.

Medical Society,⁶ the Iowa Society of Anesthesiologists, and the Iowa Board of Medicine.⁷

The discussions and debate continued for another three years. The department of public health noticed a proposed amendment to its subrule 41.1(5) in early 2007, but rescinded the proposed rule after receiving considerable opposition from physicians' groups.⁸ In June 2008, the nursing board rescinded its finding and continued working with these groups. In the end, after three years of collaboration, the

⁶The Iowa Medical Society argued that the rule was overly broad, that ARNPs do not receive sufficient education and training to supervise fluoroscopy, that permitting certified registered nurse anesthetists "to supervise fluoroscopy is in direct contradiction to national radiologic standards," and that "supervision" as defined in Iowa Administrative Code chapter 42

requires more oversight than telling a radiation technologist to "push a button." In consideration of public safety and applying the minimum standard necessary to ensure public safety, for CRNAs to adequately supervise a student or radiologic technologist, a CRNA would have to obtain equal or greater training than the radiologic technologist.

⁷The Iowa Board of Medicine's letter to the board of nursing stated as follows:

In addition to reviewing the current regulations, the Board considered CRNA education and found that it does not routinely and sufficiently cover radiology. Radiation exposure in fluoroscopy far exceeds that of a regular X-ray. With public safety in mind, the Board chose, at its November 7-8, 2007 meeting, not to write a new policy but to ask the Department of Public Health to enforce current policy that forbids a CRNA from supervising a radiologic technologist or student in the use of fluoroscopy.

The Board understands the difficulties this may impose but finds the public health consequences warrant enforcement at least until other arrangements can be made for CRNAs to become more educated in radiology. The Board is willing to consider proposals in this regard.

⁸The board of nursing's finding and the department of public health's proposed rule, in addition to activities in other states, prompted a resolution from the American Medical Association stating that organization "encourage[s] and support[s] state medical boards and state medical societies in adopting advisory opinions and advancing legislation, respectively, that interventional pain management of patients suffering from chronic pain constitutes the practice of medicine." Am. Med. Ass'n House of Delegates, Resolution: 903 (I-07), *Interventional Pain Management: Advancing Advocacy to Protect Patients from Treatment by Unqualified Providers 2* (2007).

nursing board and department of public health were unable to reach a workable compromise with these groups. On September 11, the nursing board referred the issue to its ARNP Advisory Committee to begin the rulemaking procedure.

1. *The nursing board's rulemaking procedure.* The nursing board published its notice of intended action for its rule on April 22, 2009. The comment period for the rule was left open until June 3. Comments in support of the rule were received from several organizations, including the Iowa Association of Nurse Anesthetists, Iowa Nurse Practitioner Committee, the Iowa Hospital Association, and the Iowa Nurses Association. The nursing board also received comments in support of the rule from certified registered nurse anesthetists, hospitals, radiologic technologists, and physicians.

The Iowa Association of Nurse Anesthetists noted ways the rule will enhance patient safety and access to health care, and observed the absence of any reported injuries from ARNP-supervised fluoroscopy. The Iowa Hospital Association's letter of support for the rule noted that "[t]he proposed amendment would assure that ARNPs receive initial training in radiation physics, radiobiology, radiological safety and radiation management and additional annual training on time, dose, shielding and the effects of radiation." The nursing board also received supporting comments in letters from rural hospitals regarding their existing reliance on the supervision of fluoroscopy by a subspecialty of ARNPs. The Iowa Nurses Association observed the rule reflected existing practice.

The nursing board received comments in opposition from the board of medicine and several physicians' organizations, including the Polk County Medical Society, American Society of Radiologic Technologists, Iowa Society of Anesthesiologists, Iowa Medical Society, and the Iowa

Radiologic Society. Individual comments opposing the proposed rule were received from radiologists, doctors, radiologic technologists, a dentist, and an associate professor for Trinity College of Nursing & Health Sciences' radiology program. The opposition focused on whether it was appropriate and safe for ARNPs to supervise persons who had more knowledge and experience in radiology and on whether the educational requirements set forth in the rule would adequately resolve this knowledge gap. One commentator, a radiologist from Cedar Rapids, raised concerns about radiation risks and inadequate training.

The professor at Trinity College expressed her concern that ARNPs, who “receive **no** education in radiation, radiation biology, or radiation protection,” would be supervising her students who “receive [hundreds] of hours of instruction solely on radiation protection and then many, many hours of practical application with skilled practitioners critiquing their radiation safety practices.” The American Society of Radiologic Technologists opposed the proposed rule on grounds that one who supervises a procedure should be able to perform it. The Iowa Board of Medicine formally objected to the proposed rule because it viewed the ARNPs' training as insufficient.

The Iowa Society of Anesthesiologists' objection focused on “the proposed rule[s] attempts to expand nursing practice into the area of chronic interventional pain medicine, a highly specialized field that constitutes the practice of medicine,” and which involves life-threatening risks because it requires “[p]lacement of needles in proximity to vital spinal and vascular structures under fluoroscopic guidance.” Accordingly, the Society contended that “[i]f complications do arise, the physician must know how to respond correctly and immediately in order to avoid a disastrous outcome. Failure to understand any of the above

can ultimately lead to paralysis, stroke, or death.” The Society also disputed proponents’ contention that this expansion was necessary to ensure patients in rural areas had access to chronic-pain medicine: “No deprivation exists for any patient in Iowa with regard to access to chronic pain medicine, because no Iowan lives more than two hours from a physician board certified in pain medicine.” The Society further disputed the proponents’ assertion that ARNPs have been supervising fluoroscopy for over twenty years, noting that “most procedures currently being taught within accredited pain medicine fellowships did not exist in their current forms prior to this decade.” A physician downplayed the safety record of fluoroscopy by warning that it may take years for cancer to manifest from radiation exposure.

A public hearing for the rule was held on June 3. Twenty-two people attended the hearing, including representatives from the Iowa Nurses Association, the Iowa Association of Nurse Anesthetists, the Iowa Association of Nurse Practitioners, the Iowa Department of Public Health, the Iowa Radiological Society, the Iowa Medical Society, and the board of medicine. The nursing board’s notice of the adoption and filing of ARC 7888B summarized the commentary from the public hearing as follows:

Comments opposing rules stated that education required was less than required of the radiological technologist or non radiological physician, did not require direct supervision by a radiologist, does not require the establishment of a collaborative practice agreement with a physician and is not recognized by the medical professions as being within the scope of practice. Comments also focused on radiological exposure of individuals involved. Comments supporting rule change were received from radiological technologists, physicians, hospital administrators, nurses, advanced practice nurse and associations.

The nursing board adopted rule ARC 7888B on June 10 and published the rule on July 1, with an effective date of August 5. The rule as promulgated provides:

7.2(2) *Supervision of fluoroscopy.* An advanced registered nurse practitioner (ARNP) shall be permitted to provide direct supervision in the use of fluoroscopic X-ray equipment, pursuant to 641—subrule 42.1(2), definition of “supervision.”

a. The ARNP shall provide direct supervision of fluoroscopy pursuant to the following provisions:

(1) Completion of an educational course including content in radiation physics, radiobiology, radiological safety and radiation management applicable to the use of fluoroscopy, and maintenance of documentation verifying successful completion.

(2) Collaboration, as needed, as defined in rule 655—7.1(152).

(3) Compliance with facility policies and procedures.

b. The ARNP shall complete an annual radiological safety course whose content includes, but is not limited to, time, dose, distance, shielding and the effects of radiation.

c. The ARNP shall maintain documentation of the initial educational course and all annual radiological safety updates.

d. The initial and annual education requirements are subject to audit by the board pursuant to 655—subrule 5.2(5).

Iowa Admin. Code r. 655—7.2(2) (2009). The following definition of “supervision” appeared in Iowa Administrative Code rule 641—42.1(2) at the time the nursing board adopted its rule:

“*Supervision*” means responsibility for and control of quality, radiation safety and protection, and technical aspects of the application of ionizing radiation to human beings for diagnostic or therapeutic purposes. Indirect supervision is being physically present in the immediate vicinity and able to assist if needed. Direct supervision is physically observing and critiquing the actual procedure and giving immediate assistance if required.

Id. r. 641—42.1(2).

2. *The department of public health's rulemaking procedure.* The department of public health published notice of ARC 8161B on September 23, 2009. The proposed rule rescinded Iowa Administrative Code rule 641—41.1(5)(l)(2) and enacted rule 641—41.1(5)(n) in its place. The comment period for the rule was left open until December 7, during which time the department of public health received comments in support of the rule from organizations, including the Iowa Association of Nurse Anesthetists, the Iowa Hospital Association, rural clinics, and individual health care practitioners such as certified registered nurse anesthetists, doctors of osteopathy, physicians, and radiologic technologists. In a letter dated May 4, 2010, setting forth a concise statement regarding its adoption of rule 641—41.1(5)(n), the department of public health summarized the comments it received in support of the proposed rule as follows:

1) Patient Safety. Fluoroscopy provides a visual image to make the procedures safer and more effective for patients. Fluoroscopy assists the practitioner in visualizing the precise location to inject a medication or place a device, which leads to better outcomes for patients than using a blind technique.

2) Sufficient Training Requirements. The training and education requirements promulgated by the Iowa Board of Nursing ensure the safe and competent supervision of radiologic technologists.

3) Anesthesia Services. Hospitals and clinics rely on CRNAs for anesthesia services. Many rural hospitals rely on CRNAs to provide all of their anesthesia services and utilize fluoroscopy as an important component of patient care.

4) Access to Care. ARNPs provide access to care in rural Iowa. If ARNPs are not authorized to supervise this procedure it would impede access to quality patient care for rural Iowans.

5) Codifies Existing Practice. The rule codifies existing practice. ARNPs have been authorized to order and supervise radiologic procedures for over twenty years; they have ordered and supervised fluoroscopy when necessary. The Iowa Board of Nursing has confirmed that it is within the ARNP's scope of practice to provide direct supervision in

the use of fluoroscopic x-ray equipment and that ARNPs have utilized fluoroscopy for years for four primary purposes: (1) location of a foreign body; (2) needle localization for procedures such as breast biopsies and chronic pain treatments; (3) swallow studies; and (4) insertion of extended length IV lines (PICC lines).^{9]}

6) History of Safe Use. ARNPs have a history of safe utilization of fluoroscopy while supervising radiologic technologists. There are no documented cases of misadministration or injuries resulting from ARNPs supervising fluoroscopic procedures.

7) Use by Other Health Care Providers. The rules currently authorize [physicians' assistants] to directly supervise radiologic technologists using fluoroscopic equipment, which establishes a precedent for ARNPs to perform this function given their similar level of educational training and classification as independent practitioners.

8) Standards from Other States. Several surrounding states authorize CRNAs to utilize and supervise fluoroscopy.

The department of public health received comments in opposition to the rule from the board of medicine, the Iowa Medical Society, the Iowa Society of Anesthesiologists, the Society of Interventional Radiology, the American College of Radiology, and the Iowa Radiologic Society, as well as from individual radiologic technologists, physicians, and professors. The department of public health summarized these comments in its concise statement:

⁹The nursing board submitted a supporting comment, which noted as follows:

ARNPs currently perform a variety of procedures with the use of fluoroscopy. ARNPs have provided safe and prudent care to Iowans with the use of fluoroscopy for several years.

Fluoroscopy is used by ARNPs for the following purposes:

1. Location of a foreign body.
2. Needle localization, i.e., breast biopsy and chronic pain treatment.
3. Swallow studies.
4. Insertion of extended length IV lines (PICC).

1) Patient Safety. Patients can be harmed if fluoroscopic-guided procedures are performed incorrectly, including substantial increases in radiation doses to patients when the fluoroscopist does not use proper technique or when unnecessary procedures are performed. Conditions which require fluoroscopy are by their nature complex and this patient population is vulnerable to over-treatment, incorrect treatment, and complications. Only appropriately trained physician specialists should supervise these procedures.

2) Education and Training Insufficient. The nursing curriculum for ARNPs does not include adequate training in fluoroscopy, radiography, radiation safety, radiation management, or radiation biology. In addition, the training and education rules adopted by the Board of Nursing are insufficient to ensure competency and safety. As a result, ARNPs lack the education, training, and experience to supervise fluoroscopy. Only appropriately qualified physicians have the skills, training, and experience to safely supervise this procedure.^[10]

3) National Medical Standards. The rule contradicts national medical standards. The American College of Radiology Standards for Use of Radiation in Fluoroscopic Procedures provides guidelines on supervision of fluoroscopy which recommend supervision by a radiologist or other qualified physician.

4) Inclusion of all ARNPs is Overly Broad. The inclusion of all areas of ARNPs, as opposed to solely including CRNAs, creates an overly broad rule.

5) Scope of Practice. According to the Board of Medicine and various medical associations, it is outside the scope of practice of an ARNP to supervise fluoroscopy.

6) Rule Inconsistent with Practice in Other States. Several states do not authorize ARNPs to perform or supervise fluoroscopy.

¹⁰A letter dated October 23, 2009, from the American Society of Radiologic Technologists asserted as follows:

[A]n individual who supervises someone performing a procedure should have at least the same requirements. Under the current language, you will regularly have the supervisor knowing considerably less about the safe operation of medical imaging equipment than the technologist he or she supervises. Such a situation is not conducive to providing quality health care.

The department of public health held a public hearing for the rule on October 28, 2009. Representatives from professional organizations on both sides of the issue attended, as did representatives from the boards of nursing and medicine. Rule ARC 8161B was adopted at a hearing held on March 10, 2010. At that time, the nursing board described the results of its survey of the use of fluoroscopy by ARNPs in Iowa. The nursing board mailed 1459 letters to ARNPs and received 387 responses from ARNPs practicing in Iowa; forty-three reported that they use fluoroscopy in their practice. These forty-three ARNPs who use fluoroscopy in their practice reported the length of their use as follows:

<u>0-5 years</u>	<u>6-10 years</u>	<u>11-15 years</u>	<u>16-20 years</u>	<u>>20 years</u>
33	4	3	0	3

The department of public health published its rule on April 7, with an effective date of May 12. This rule provides:

n. Supervision of fluoroscopy. The use of fluoroscopy by radiologic technologists and radiologic students shall be performed under the direct supervision of a licensed practitioner or an advanced registered nurse practitioner (ARNP), pursuant to 655-subrule 7.2(2), for the purpose of localization to obtain images for diagnostic or therapeutic purposes. The use of fluoroscopy by radiologist assistants shall be defined in 641—42.6(136C).

Iowa Admin. Code r. 641—41.1(5)(*n*).

According to its concise statement regarding the adoption of this rule, the department of public health identified the following as its principal reasons for overruling the opposition's concerns with the rule:

1. The comments received from CRNAs, physicians, hospitals, and several associations support a finding that ARNPs are currently supervising fluoroscopic procedures in this state and that such practice has been longstanding. ARNPs are currently supervising fluoroscopic procedures in several areas of practice, including needle localization and insertion of PICC lines.

2. The Iowa Department of Public Health and the State Board of Health were not provided with any documented evidence that the supervision of fluoroscopy by ARNPs has resulted in any misadministration or reportable injuries in this state. Rather, the preponderance of the comments and testimony support the position that the supervision of fluoroscopy enhances patient safety and patient access to care. The State Board of Health is cognizant of the needs of rural Iowans and recognizes that many areas of this state rely on ARNPs and [physicians' assistants] to provide health care to Iowans. The State Board of Health is concerned that its failure to adopt this rule would impede access to care for Iowa's rural patient population.

3. The Iowa Department of Public Health and the State Board of Health have expressed to the Iowa Board of Nursing a need to address training and education for ARNPs that supervise fluoroscopy. In response, the Iowa Board of Nursing established rule 655 IAC 7.2(2) which outlines specific educational requirements for their licensees that supervise these procedures. The Iowa Department of Public Health and the State Board of Health find that these educational requirements are sufficient to ensure competency to supervise these procedures and that the rule provides an ARNP in a supervisory role adequate knowledge about the risks associated with the use of fluoroscopy.

4. Arguments that these rules conflict with the national standard of care focus on the American College of Radiology (ACR) Technical Standard for Management of the Use of Radiation in Fluoroscopic Procedures (Revised 2008). In the Preamble of this document, ACR clearly articulates "These standards are an educational tool. . . . They are not inflexible rules or requirements of practice and are not intended, nor should they be used, to establish a legal standard of care." In light of the purpose for these standards, the fact that ARNPs have a history of supervising fluoroscopic procedures in this state, and the fact that other states authorize ARNPs and CRNAs to supervise fluoroscopy, the Iowa Department of Public Health and the State Board of Health find that the adopted rule does not conflict with legal standards of care or the standard of practice in Iowa.

3. *Legislative and executive review.* The legislature's ARRC met on July 14, 2009, and reviewed the nursing board's adopted rule ARC 7888B. The ARRC made a "general referral" of the rule to the general assembly, which means the ARRC recommended the rule be considered

by the entire general assembly. *See* Iowa Code § 17A.8(7). The “general referral” did not delay the effective date of the rule.

Although permitted to do so pursuant to Iowa Code section 17A.4(6)(a), neither the governor, attorney general, nor the ARRC filed an objection with the nursing board or the department of public health alleging that either rule was “unreasonable, arbitrary, capricious, or otherwise beyond the authority delegated to the agency.” Similarly, the governor did not exercise his ability to “rescind [the] adopted rule[s] by executive order” as provided for in section 17A.4(8).

Legislation was later proposed to overturn these rules. Senate Study Bill 3085 would have prevented ARNPs from using fluoroscopy in pain management. *See* S.S.B. 3085, 83rd G.A., 2d sess., explanation (Iowa 2010) (“This bill specifically defines the practice of chronic interventional pain medicine and the techniques used in that practice. The bill limits the practice of interventional pain medicine to licensed physicians, podiatrists, or dentists.”). House File 2136 would have prevented ARNPs from providing chronic pain management intervention to patients. H.F. 2136, 83rd G.A., 2d sess. (Iowa 2010). House Joint Resolution 2006 would have nullified the nursing board’s rule.¹¹ The legislature ultimately declined to enact any measure to overturn or limit the rules at issue.

¹¹The explanation for House Joint Resolution 2006 provided as follows:

This joint resolution nullifies an administrative rule adopted by the board of nursing that allows an advanced registered nurse practitioner to provide direct supervision in the use of fluoroscopic X-ray equipment. The joint resolution takes effect upon enactment.

H.J. Res. 2006, 83rd G.A., 2d sess., explanation (Iowa 2010).

B. District Court Proceedings. On June 21, 2010, the Iowa Society of Anesthesiologists and the Iowa Medical Society petitioned for judicial review of the rules promulgated by the nursing board and the department of public health. The Iowa Society of Anesthesiologists is a statewide organization comprised of anesthesiologists practicing in the fields of anesthesiology and pain management. The Iowa Medical Society is a statewide nonprofit professional organization representing approximately 5200 medical and osteopathic physicians. Their petitions urged the court to invalidate the rules as exceeding the regulators' authority because the medical profession had not recognized supervision of fluoroscopy as being within the scope of practice of ARNPs, and the operation of radiation machines was within the exclusive purview of the department of public health. The district court consolidated the actions on August 11 and entered an order staying the rules on November 23.

Meanwhile, the district court granted motions to intervene in support of the rules filed by the Iowa Association of Nurse Anesthetists and the Iowa Nurses Association, respectively, in the consolidated action. The Iowa Nurses Association is a statewide, nonprofit organization representing registered nurses licensed to practice in Iowa. The Iowa Association of Nurse Anesthetists is a statewide organization that represents certified registered nurse anesthetists licensed to practice in Iowa. The district court also granted a motion to intervene in opposition to the rules filed by the Iowa Osteopathic Medical Association, a statewide, nonprofit organization that represents osteopathic physicians licensed to practice in Iowa.

The parties filed cross-motions for summary judgment. The district court held a hearing on the motions for summary judgment on September 9, 2011. After finding that "none of the material facts at issue

in this matter are in dispute,” the district court granted summary judgment on October 31. The district court concluded that the nursing board and department of public health’s rules were “invalid, illegal, void and of no effect.” The order stated in part:

33. The Iowa Board of Nursing itself, both in its rulemaking process and in its support of the Iowa Department of Public Health rulemaking, could not set forth or point to any recognized standards showing that the medical or nursing professions have recognized ARNP supervision of fluoroscopy either in national training, education or curriculum standards. In fact, the Iowa Association of Nurse Anesthetists admitted during the rulemaking process that CRNAs—an even smaller subspecialty in the scope of nursing—do not receive sufficient training at the University of Iowa Nurse Anesthesia program to make CRNAs competent to utilize fluoroscopy in practice.

34. The medical profession’s objections and [the nursing board’s] survey . . . demonstrate as a matter of law that ARNPs’ “direct supervision” of fluoroscopy as the term is defined within these rules is not a recognized practice by the medical profession. As such the [nursing board’s] rule exceeds its statutorily delegated authority and violates Iowa law.

The district court also invalidated the department of public health’s rule as promulgated on “the mistaken impression that [the nursing board’s] action in expanding the scope of practice for ARNPs was a legitimate exercise of its statutory authority.”

Citing to Iowa Code section 136C.3, the district court also found that the department of public health could not delegate its duty to “establish minimum criteria and safety standards, including continuing education requirements, and administer examinations and disciplinary procedures for operators of radiation machines and users of radioactive materials,” to the nursing board. Accordingly, the district court concluded that ARNPs could only provide “‘direct supervision’ of fluoroscopy as the term is defined within the Iowa Administrative Code,

[if] they . . . satisfy minimum education and safety standards, including continuing education requirements and an examination established by the Iowa Department of Public Health.”

The nursing board and intervenors supporting the rule appealed. We retained the appeal.

II. Scope of Review.

Judicial review of agency rulemaking is governed by Iowa Code chapter 17A. *Auen v. Alcoholic Beverages Div.*, 679 N.W.2d 586, 589 (Iowa 2004). “[T]he district court acts in an appellate capacity.” *City of Sioux City v. GME, Ltd.*, 584 N.W.2d 322, 324 (Iowa 1998). “We review the district court’s decision to determine whether it correctly applied the law.” *Id.* The agency decision is reviewed under section 17A.19(10). *Auen*, 679 N.W.2d at 589. We apply that section to determine whether we reach the same result as the district court. *Id.* The legislature has clearly vested the nursing board with rulemaking and interpretive authority for Iowa Code chapter 152 governing the practice of nursing. See Iowa Code § 147.76 (“The boards for the various professions shall adopt all necessary and proper rules to administer and *interpret* this chapter and chapters 148 through 158, except chapter 148D.” (Emphasis added.)); *Renda*, 784 N.W.2d at 11 (“The question of whether interpretive discretion has clearly been vested in an agency is easily resolved when the agency’s enabling statute explicitly addresses the issue.”); *Houck v. Iowa Bd. of Pharmacy Exam’rs*, 752 N.W.2d 14, 17 (Iowa 2008) (recognizing section 147.76 vests interpretive authority in the licensing boards).

Accordingly, the following standards in section 17A.19(10) for judicial review of agency rulemaking are applicable here:

The court may affirm the agency action or remand to the agency for further proceedings. The court shall reverse, modify, or grant other appropriate relief from agency action . . . if it determines that substantial rights of the person seeking judicial relief have been prejudiced because the agency action is any of the following:

. . . .

b. Beyond the authority delegated to the agency by any provision of law or in violation of any provision of law.

. . . .

l. Based upon an irrational, illogical, or wholly unjustifiable interpretation of a provision of law whose interpretation has clearly been vested by a provision of law in the discretion of the agency.

m. Based upon an irrational, illogical, or wholly unjustifiable application of law to fact that has clearly been vested by a provision of law in the discretion of the agency.

Iowa Code § 17A.19(10).

Because the issues decided are legal in nature, we will review the district court’s summary judgment as though it were a ruling on the merits in a judicial review action. *See GME*, 584 N.W.2d at 324–25. “An agency rule is presumed valid and the party challenging the rule has the burden to demonstrate that a “rational agency” could not conclude the rule was within its delegated authority.’” *Id.* at 325 (quoting *Overton v. State*, 493 N.W.2d 857, 859 (Iowa 1992)); *see also* Iowa Code § 17A.19(8)(a) (“[I]n suits for judicial review of agency action . . . [t]he burden of demonstrating . . . the invalidity of agency action is on the party asserting invalidity.”).

III. Analysis.

Our review is “controlled in large part by the deference we afford to decisions of administrative agencies.” *Cedar Rapids Cmty. Sch. Dist. v. Pease*, 807 N.W.2d 839, 844 (Iowa 2011). In this case, the legislature’s express grant of interpretive authority dictates a deferential standard of review that requires reversing the district court and upholding the rules

promulgated by the nursing board and the department of public health. See *Renda*, 784 N.W.2d at 11.

A. Recognition by the Medical Profession. The central issue is whether the district court correctly reversed the nursing board’s determination that the supervision of fluoroscopy procedures by ARNPs is “recognized by the medical and nursing professions” within the meaning of Iowa Code section 152.1(6)(d).¹² That determination involves

¹²Iowa Code section 152.1(6) sets forth the scope of practice for registered nurses as follows:

The “*practice of the profession of a registered nurse*” means the practice of a natural person who is licensed by the board to do all of the following:

a. Formulate nursing diagnosis and conduct nursing treatment of human responses to actual or potential health problems through services, such as case finding, referral, health teaching, health counseling, and care provision which is supportive to or restorative of life and well-being.

b. Execute regimen prescribed by a physician, an advanced registered nurse practitioner, or a physician assistant.

c. Supervise and teach other personnel in the performance of activities relating to nursing care.

d. *Perform additional acts or nursing specialties which require education and training under emergency or other conditions which are recognized by the medical and nursing professions and are approved by the board as being proper to be performed by a registered nurse.*

e. Make the pronouncement of death for a patient whose death is anticipated if the death occurs in a licensed hospital, a licensed health care facility, a Medicare-certified home health agency, a Medicare-certified hospice program or facility, an assisted living facility, or a residential care facility, with notice of the death to a physician and in accordance with any directions of a physician.

f. Apply to the abilities enumerated in paragraphs “a” through “e” of this subsection scientific principles, including the principles of nursing skills and of biological, physical, and psychosocial sciences.

Iowa Code § 152.1(6) (emphasis added); see also *id.* § 152.1(5)(a) (excluding from the practice of nursing “[t]he practice of medicine and surgery and the practice of osteopathic medicine and surgery, as defined in chapter 148, . . . except practices which are recognized by the medical and nursing professions and approved by the board as proper to be performed by a registered nurse” (emphasis added)). The Missouri Supreme Court has recognized the “thin and elusive line that separates the practice of medicine and the practice of professional nursing in modern day delivery of health services.’”

the application of law—section 152.1(6)(d)—to fact, specifically the agency record. We must defer to the board’s application of law to fact unless it is “irrational, illogical, or wholly unjustifiable.” See Iowa Code § 17A.19(10)(m). We are required to view the nursing board’s determination through the prism of our deferential standard of review.

The parties challenging the rules argue, and the district court ruled, the “medical profession” has not “recognized” ARNP supervision of fluoroscopy. Who speaks for the medical profession as to such recognition? The Iowa Board of Medicine, Iowa Medical Society, Iowa Society of Anesthesiologists, and Iowa Osteopathic Medical Association all deny the medical profession has recognized ARNP supervision of fluoroscopy. Do they effectively have a veto over such a determination by the Board charged under Iowa law with the regulation of nursing? Intervenor Iowa Nurses Association argues no such veto should be allowed:

[I]f the District Court’s ruling were to be upheld, it would fundamentally alter the nursing profession, as well as healthcare within Iowa, by allowing physician associations to have absolute veto power over any proposed new nursing rule, regardless of the actual opinions of Iowa physicians and of the actions of Iowa physicians in their privileging of nurses to perform various practices.

Our court has not interpreted section 152.1(6)(d). But, the Office of the Iowa Attorney General addressed a related question in an opinion issued shortly after the enactment of this statute. In 1976, the executive director of the nursing board asked the Iowa Attorney General to give an

Mo. Ass’n of Nurse Anesthetists, Inc. v. State Bd. of Registration for the Healing Arts, 343 S.W.3d 348, 360 (Mo. 2011) (quoting *Sermchief v. Gonzales*, 660 S.W.2d 683, 688 (Mo. 1983)). The court noted that at least forty state legislatures, including Iowa’s, have authorized “the broadening of the field of practice of the nursing profession.” *Sermchief*, 660 S.W.2d at 690 & n.6.

opinion as to “whether [the] board may define by rule those groups who are to define nursing practice for submission to the board.” 1976 Op. Iowa Att’y Gen. 727. The attorney general provided the following opinion regarding the interpretation of the nursing board’s authority under section 152.1(6)(d):

There is nothing in that section or in any other provision of the Act which makes [reference] to any specific medical or nursing groups. Your board has the ultimate authority to further define nursing, and the Legislature apparently wants you to receive input from the medical and nursing professions. However, there is nothing mandatory that you specifically name those organizations from which you will allow input. Since you have the duty to define nursing based upon input from others, it is entirely possible that the Legislature was intending to allow you to pick certain organizations, although it certainly did not so state. However, we deem such a move unwise, not in a purely legal sense, but because the greatest amount and variety of input should give you a better base from which to define nursing. Also, by specifically limiting such information to certain groups, the board may be binding itself for the future and may only be able to receive additional information by amendment of the rules. Your board also appears to be under the impression that medical or nursing organizations must define the practice of nursing and submit such definition to you for approval. We do not see anything in the Act which will lead to that conclusion. Again, the Legislature is giving you the opportunity to receive a great amount of input from the medical and nursing associations that will enable *you* to define nursing.

Id. at 728–29 (emphasis added).

We agree with the attorney general’s reasoning. The plain language of section 152.1(6)(d) allows the *nursing board* to decide whether the medical and nursing professions have recognized a particular practice of nurses. If the legislature had intended to give another agency or organization the power to determine recognition by the medical profession, it would have said so in this provision. See *Auen*, 679 N.W.2d at 589 (“We determine legislative intent from the words

chosen by the legislature, not what it should or might have said.”). We conclude the nursing board could apply section 152.1(6)(d) to determine that ARNP supervision of fluoroscopy is “recognized by the medical and nursing professions” despite the opposition of the board of medicine and physician organizations. In light of the legislature’s express grant of interpretive authority to the nursing board, we are to uphold the board’s application of law to fact in this determination unless it is “irrational, illogical, or wholly unjustifiable.” Iowa Code § 17A.19(1)(l); *see Auen*, 679 N.W.2d at 590; *see also Renda*, 784 N.W.2d at 11 (“The amendments to chapter 17A clarified when the court should give deference to an agency’s interpretation of law.” (citing Arthur Earl Bonfield, *Amendments to Iowa Administrative Procedure Act, Report on Selected Provisions to Iowa State Bar Association and Iowa State Government* 62 (1998))). Applying this deferential standard of review, we conclude the district court erred by reversing the nursing board’s determination.

The agency record shows that the credentialing committees, which include physicians, at sixteen or more Iowa hospitals had granted privileges to ARNPs to supervise fluoroscopy. *See* Iowa Code § 135B.7(3) (setting forth the criteria that must be included in the hospital’s rules governing the granting of clinical privileges to practitioners including ARNPs). Moreover, forty Iowa medical doctors wrote comments supporting the nursing board’s proposed rule. And, the board of medicine had never sought to enjoin any ARNP from supervising fluoroscopy as practicing medicine without a license, even though ARNPs had been doing so openly in Iowa for up to twenty years. We hold it was not irrational, illogical, or wholly unjustifiable for the nursing board to determine that ARNP supervision of fluoroscopy is recognized by the medical and nursing professions.

A different standard of review explains the result in *Spine Diagnostics Center of Baton Rouge, Inc. v. Louisiana State Board of Nursing*. 4 So. 3d 854, 867–68 (La. Ct. App. 2008) (affirming declaratory judgment enjoining nursing board from allowing certified registered nurse anesthetists to practice interventional pain management). There, the appellate court reviewed the trial court’s declaratory ruling for abuse of discretion and the factual findings of the trial court (not the nursing board) under a “manifest error or clearly wrong standard.” *Id.* at 863.

B. Supervision Versus Operation and Training Requirements.

We next must decide whether the district court erred in invalidating the rules based on Iowa Code section 136C.3, which grants the department of public health control over the use of radiation machines, including the training requirements for operators. The district court invalidated the rules on grounds that the department improperly delegated to the nursing board the responsibility to specify the training required. The issue turns on the difference between “supervision” and “operation.” It is undisputed that ARNPs are not licensed to operate fluoroscopy machines. The parties challenging the rules contend an ARNP responsible for *supervising* the use of fluoroscopy must be personally able to *operate* the equipment. The rules’ supporters disagree. No party cites any caselaw deciding this specific issue.

The dispositive question is whether an ARNP who “directly supervises” the use of fluoroscopy is an “operator” of a radiation machine. The nursing board’s rule permits ARNPs “to provide direct supervision in the use of fluoroscopic X-ray equipment, pursuant to 641—subrule 42.1(2), definition of ‘supervision.’” Iowa Admin. Code r. 655—7.2(2). That rule defines “supervision” as follows:

“*Supervision*” means responsibility for and control of quality, radiation safety and protection, and technical aspects of the application of ionizing radiation to human beings for diagnostic or therapeutic purposes. Indirect supervision is being physically present in the immediate vicinity and able to assist if needed. *Direct supervision is physically observing and critiquing the actual procedure and giving immediate assistance if required.*

Id. r. 641—42.1(2) (2008) (emphasis added).¹³ We see nothing in the plain language of the rules or statute that requires the ARNP supervising fluoroscopy to have the legal or technical ability to operate the equipment. Many professionals supervise work done by others without the license or ability to do the work themselves. For example, an architect or general contractor who is not a licensed electrician may nevertheless supervise electrical wiring by licensed electricians in a construction project. We affirm the agency determination that a qualified ARNP may directly supervise fluoroscopy without acting as an operator of the radiation machine within the meaning of chapter 136C.

The department of public health considered and rejected the position by the physician groups opposed to the rules. The department’s concise statement regarding adoption of its rule specifically determined that the training for ARNPs was adequate for their supervisory role:

3. The Iowa Department of Public Health and the State Board of Health have expressed to the Iowa Board of Nursing a need to address training and education for ARNPs

¹³The department of public health subsequently removed the definition of “supervision” contained in chapter 42, effective March 13, 2013. See Iowa Admin. Code r. 641—42.2 (Feb. 6, 2013). As with statutes, we continue to use the contemporaneous definition cross-referenced in the nursing board’s rule. See 2B Norman J. Singer & J.D. Shambie Singer, *Statutes and Statutory Construction* § 51:8, at 315 (7th ed. rev. 2012) (“Repeal of a referred statute has no effect on the reference statute unless the reference statute is repealed by implication with the referred statute.”); 73 Am. Jur. 2d *Statutes* § 16, at 256 (2012) (“The repeal of a statute cross-referenced in another statute does not render the descriptive reference inapplicable; instead, the court must look to the language of that section of the cross-referenced statute in effect at the time the specific cross-reference was enacted.”).

that supervise fluoroscopy. In response, the Iowa Board of Nursing established rule 655 IAC 7.2(2) which outlines specific educational requirements for their licensees that supervise these procedures. The Iowa Department of Public Health and the State Board of Health find that these educational requirements are sufficient to ensure competency to supervise these procedures and that the rule provides an ARNP in a supervisory role adequate knowledge about the risks associated with the use of fluoroscopy.

We believe the district court erred in second-guessing the department of public health and nursing board on the adequacy of ARNP training to supervise fluoroscopy. Significantly, nowhere in the voluminous record is there any report of an injury resulting from ARNP-supervised fluoroscopy, although the practice has been ongoing in parts of Iowa for many years. The record affirmatively shows ARNPs have been safely supervising fluoroscopy and are adequately trained to do so. The equipment at all times is operated by a licensed radiologic technician. The visual images provided by the fluoroscopy improve patient safety by guiding the precise placement of needles, insertion of PICC lines, location of foreign objects, and other procedures. Importantly, allowing ARNP supervision of fluoroscopy improves access to health care for rural Iowans and helps lower costs. We cannot conclude the agency rulemaking was irrational, illogical, or wholly unjustifiable.

These regulatory judgments fall within the scope of the authority and expertise of the nursing board and department of public health. The challengers failed to meet their “burden to demonstrate that a ‘rational agency’ could not conclude the rule was within its delegated authority.” *GME*, 584 N.W.2d at 325 (citation and internal quotation marks omitted).

IV. Conclusion.

For the foregoing reasons, we hold the district court erred in invalidating the agency rules that allow qualified ARNPs to supervise fluoroscopy. Accordingly, we reverse the summary judgment of the

district court and remand for entry of an order lifting the stay and upholding Iowa Administrative Code rule 655—7.2(2) and rule 641—41.1(5)(*n*).

REVERSED AND REMANDED WITH INSTRUCTIONS.

All justices concur except Cady, C.J., who dissents, and Zager, J., who takes no part.

CADY, Chief Justice (dissenting).

I respectfully dissent. I would affirm the decision of the district court.

Our legislature authorized the Iowa Board of Nursing (Board) to enact rules governing the nursing profession, including rules that address what constitutes the practice of the profession of a registered nurse. In addition to other acts, the Board may authorize registered nurses to perform acts “which are *recognized by the medical and nursing professions . . .* as being proper to be performed by a registered nurse.” Iowa Code § 152.1(6)(d) (2009). Our legislature directed that both professions must recognize the act as proper for registered nurses to perform.

The question in this case is whether the nursing board properly found that the supervision of fluoroscopy by registered nurses is recognized by the medical profession as being proper for registered nurses to perform. The question is not whether the Board disagrees or agrees with the medical profession, but whether the medical profession approves the procedure as proper for registered nurses.

The medical profession clearly does not approve the procedure at issue. Every Iowa medical professional society, board, or association that has weighed in on the question in this case has concluded the procedure should not be approved for registered nurses. The evidence to the contrary is merely anecdotal and basically limited to some opinions from individual doctors, and evidence that numerous hospital credentialing committees in Iowa have credentialed individual registered nurses to supervise fluoroscopy. See Iowa Admin. Code r. 481—51.5(4).

There can be no doubt that the evidence in support of the Board action falls far short by any standard as a voice of the medical profession. Credentialing committees are not only comprised of physicians, but also include hospital administrators and medical staff personnel. Their collective voice is not the voice of the medical profession. Additionally, credentialing committees only address questions of the qualifications of individuals to perform particular procedures. A credentialing committee does not address the larger issues identified by the legislature in section 152.1(6) of whether the medical profession as a whole has approved a procedure as being properly performed by registered nurses.

Registered nurses may be qualified to supervise fluoroscopy. Yet, the legislature has left it for the medical profession to make this decision, in partnership with the nursing profession. The legislature, however, did not leave it to the nursing board to decide. The Board clearly acted well beyond its authority, contrary to a clear legislative directive.