

Final Regulation Agency Background Document

Agency Name:	Board of Medicine, Department of Health Professions
VAC Chapter Number:	18 VAC 85-101-10 et seq.
Regulation Title:	Regulations Governing the Practice of Radiologic Technology
Action Title:	Bone densitometry
Date:	8/5/02

Please refer to the Administrative Process Act (§ 9-6.14:9.1 *et seq.* of the *Code of Virginia*), Executive Order Twenty-Five (98), Executive Order Fifty-Eight (99), and the *Virginia Register Form, Style and Procedure Manual* for more information and other materials required to be submitted in the final regulatory action package.

Summary

Please provide a brief summary of the new regulation, amendments to an existing regulation, or the regulation being repealed. There is no need to state each provision or amendment; instead give a summary of the regulatory action. If applicable, generally describe the existing regulation. Do not restate the regulation or the purpose and intent of the regulation in the summary. Rather, alert the reader to all substantive matters or changes contained in the proposed new regulation, amendments to an existing regulation, or the regulation being repealed. Please briefly and generally summarize any substantive changes made since the proposed action was published.

The amendments will provide an additional credential qualifying an applicant to be licensed as a radiologic technologist-limited in bone densitometry. The Board would recognize the training course, examination and certification by the International Society for Clinical Densitometry for a limited license in that anatomical area. The amended regulations would also clarify that a licensee who performs bone densitometry would have to get additional training and pass ARRT examinations in order to add other anatomical areas. Finally, an amendment would allow the Board to accept other approved entities offering continuing education courses for bone densitometry.

Changes Made Since the Proposed Stage

Please detail any changes, other than strictly editorial changes, made to the text of the proposed regulation since its publication. Please provide citations of the sections of the proposed regulation that have been altered since the proposed stage and a statement of the purpose of each change.

In the adoption of final amendments, the Board has clarified that a person seeking limited licensure to perform bone densitometry may also train and practice under a doctor of chiropractic as well as a doctor of medicine or osteopathy.

Statement of Final Agency Action

Please provide a statement of the final action taken by the agency: including the date the action was taken, the name of the agency taking the action, and the title of the regulation.

On August 2, 2002, the Board of Medicine adopted final amendments to 18 VAC 85-101-10 et seq., Regulations Governing the Practice of Radiological Technology for the purpose of establishing an additional credential for licensure of radiologic technologist-limited to perform bone densitometry.

Basis

Please identify the state and/or federal source of legal authority to promulgate the regulation. The discussion of this statutory authority should: 1) describe its scope and the extent to which it is mandatory or discretionary; and 2) include a brief statement relating the content of the statutory authority to the specific regulation. In addition, where applicable, please describe the extent to which proposed changes exceed federal minimum requirements. Full citations of legal authority and, if available, web site addresses for locating the text of the cited authority, shall be provided. If the final text differs from that of the proposed, please state that the Office of the Attorney General has certified that the agency has the statutory authority to promulgate the final regulation and that it comports with applicable state and/or federal law

Chapter 24 establishes the general powers and duties of health regulatory boards including the responsibility to promulgate regulations, levy fees, administer a licensure and renewal program, and discipline regulated professionals.

§ 54.1-2400. General powers and duties of health regulatory boards.--The general powers and duties of health regulatory boards shall be:

1. To establish the qualifications for registration, certification or licensure in accordance with the applicable law which are necessary to ensure competence and integrity to engage in the regulated professions.

- 2. To examine or cause to be examined applicants for certification or licensure. Unless otherwise required by law, examinations shall be administered in writing or shall be a demonstration of manual skills.
- 3. To register, certify or license qualified applicants as practitioners of the particular profession or professions regulated by such board.
- 4. To establish schedules for renewals of registration, certification and licensure.
- 5. To levy and collect fees for application processing, examination, registration, certification or licensure and renewal that are sufficient to cover all expenses for the administration and operation of the Department of Health Professions, the Board of Health Professions and the health regulatory boards.
- 6. To promulgate regulations in accordance with the Administrative Process Act (§ 9-6.14:1 et seq.) which are reasonable and necessary to administer effectively the regulatory system. Such regulations shall not conflict with the purposes and intent of this chapter or of Chapter 1 and Chapter 25 of this title.
- 7. To revoke, suspend, restrict, or refuse to issue or renew a registration, certificate or license which such board has authority to issue for causes enumerated in applicable law and regulations.
- 8. To appoint designees from their membership or immediate staff to coordinate with the Intervention Program Committee and to implement, as is necessary, the provisions of Chapter 25.1 (§ 54.1-2515 et seq.) of this title. Each health regulatory board shall appoint one such designee.
- 9. To take appropriate disciplinary action for violations of applicable law and regulations.
- 10. To appoint a special conference committee, composed of not less than two members of a health regulatory board, to act in accordance with § 9-6.14:11 upon receipt of information that a practitioner of the appropriate board may be subject to disciplinary action. The special conference committee may (i) exonerate the practitioner; (ii) reinstate the practitioner; (iii) place the practitioner on probation with such terms as it may deem appropriate; (iv) reprimand the practitioner; (v) modify a previous order; and (vi) impose a monetary penalty pursuant to § 54.1-2401. The order of the special conference committee shall become final thirty days after service of the order unless a written request to the board for a hearing is received within such time. If service of the decision to a party is accomplished by mail, three days shall be added to the thirty-day period. Upon receiving a timely written request for a hearing, the board or a panel of the board shall then proceed with a hearing as provided in § 9-6.14:12, and the action of the committee shall be vacated. This subdivision shall not be construed to affect the authority or procedures of the Boards of Medicine and Nursing pursuant to §§ 54.1-2919 and 54.1-3010.
- 11. To convene, at their discretion, a panel consisting of at least five board members or, if a quorum of the board is less than five members, consisting of a quorum of the members to conduct formal proceedings pursuant to § 9-6.14:12, decide the case, and issue a final agency case decision. Any decision rendered by majority vote of such panel shall have the

same effect as if made by the full board and shall be subject to court review in accordance with the Administrative Process Act. No member who participates in an informal proceeding conducted in accordance with § 9-6.14:11 shall serve on a panel conducting formal proceedings pursuant to § 9-6.14:12 to consider the same matter.

12. To issue inactive licenses and certificates and promulgate regulations to carry out such purpose. Such regulations shall include, but not be limited to, the qualifications, renewal fees, and conditions for reactivation of such licenses or certificates.

The specific statutory authority for the Board to license radiologic technologists-limited and to determine requisite education and training is found in Chapter 29 of Title 54.1 as follows:

§ 54.1-2900. Definitions (Exerpted).

As used in this chapter, unless the context requires a different meaning:

"Practice of radiologic technology" means the application of x-rays to human beings for diagnostic or therapeutic purposes.

"Radiologic technologist, limited" means an individual, other than a licensed radiologic technologist, dental hygienist or person who is otherwise authorized by the Board of Dentistry under Chapter 27 of this title and the regulations pursuant thereto, who performs diagnostic radiographic procedures employing equipment which emits ionizing radiation which is limited to specific areas of the human body.

§ 54.1-2956.8:1. Unlawful to practice radiologic technology without license; unlawful designation as a radiologic technologist or radiologic technologist, limited; Board to regulate radiologic technologists. Except as set forth herein, it shall be unlawful for a person to practice or hold himself out as practicing as a radiologic technologist or radiologic technologist, limited, unless he holds a license as such issued by the Board.

In addition, it shall be unlawful for any person who is not licensed under this chapter whose licensure has been suspended or revoked, or whose licensure has lapsed and has not been renewed to use in conjunction with his name the words "licensed radiologic technologist" or "licensed radiologic technologist, limited" or to otherwise by letters, words, representations, or insignias assert or imply that he is licensed to practice radiologic technology.

The Board shall prescribe by regulation the qualifications governing the licensure of radiologic technologists and radiologic technologists, limited. The regulations may include requirements for approved education programs, experience, examinations, and periodic review for continued competency. The provisions of this section shall not apply to any employee of a hospital licensed pursuant to Article 1 (§ 32.1-123 et seq.) of Chapter 5 of Title 32.1 acting within the scope of his employment or engagement as a radiologic technologist.

§ 54.1-2956.8:2. Requisite training and educational achievements of radiologic technologists and radiologic technologists, limited.

The Board shall establish a testing program to determine the training and educational achievements of radiologic technologists or radiologic technologists, limited, or the Board may accept other evidence such as successful completion of a national certification examination, experience, or completion of an approved training program in lieu of testing and shall establish this as a prerequisite for approval of the licensee's application.

The Assistant Attorney General who provides counsel to the Board of Medicine has provided a letter of assurance that the amended regulations are consistent with statutory law.

Purpose

Please provide a statement explaining the need for the new or amended regulation. This statement must include the rationale or justification of the final regulatory action and detail the specific reasons it is essential to protect the health, safety or welfare of citizens. A statement of a general nature is not acceptable, particular rationales must be explicitly discussed. Please include a discussion of the goals of the proposal and the problems the proposal is intended to solve.

Osteoporosis is the most common metabolic bone disorder, often called the silent epidemic because it is asymptomatic and not clinically apparent till a fracture occurs. In 1995, an estimated 1.3 million osteoporotic fractures occurred, at a cost of \$13.8 *billion*. The National Osteoporosis Foundation projects a tripling of the number of fractures by 2040; undoubtedly, the financial impact of this will be staggering.

The single best predictor of fracture risk is bone mass or bone mineral density (BMD). Bone densitometry by DXA (dual energy x-ray absorptiometry) scan is the most widely used technique for measuring bone mass. Peripheral sites (heel, distal forearm) can be measured to *screen* for low bone mass; central sites (hip, lumbar spine) are measured to *diagnose* osteoporosis and *monitor* treatment response.

Densitometry is noninvasive, rapid, accurate, precise, and safe. Unlike other radiologic procedures an Radiologic Technologist-Limited does, DXA scanning is automated to the point that the operator cannot change the scan time, radiation dose, or distance from the radiation source. All these are preset by the scanner's manufacturer. Also unlike other x-ray procedures, the effective radiation dose to the patient is extremely small – about *1/10 that of a chest x-ray, manmogram, or dental bitewing x-ray.* While DXA has generally superceded the single-energy densitometry (SXA), some practices may still utilize the older technology, so it was also included in the definition of bone densitometry.

In the Code of Virginia, a radiologic technologist, limited" is defined as an individual who performs diagnostic radiographic procedures employing equipment which emits ionizing radiation which is limited to specific areas of the human body. Equipment utilized in diagnosing and monitoring osteoporosis does emit ionizing radiation, all be it in very small doses. Therefore, technicians operating that equipment are deemed to need a license as a radiologic technologist-limited (RT-L) to practice.

There is already a serious problem with under diagnosis and under treatment of the growing public health threat of osteoporosis. Much of the solution lies in wider availability and access to screening (densitometry). However, there is already a shortage of RTs and RT-Ls (general and densitometry) in Virginia, particularly in medically underserved areas. This serves to further limit the scope and reach of screening, diagnostic, and monitoring efforts, and unnecessarily raise the costs of scanning—all of which are diametrically opposed to the Board's mission to protect the health, safety, and welfare of the citizens of the Commonwealth.

Current regulations require a person to have 40 hours in general knowledge of x-rays and to pass the basic examination of the American Registry of Radiologic Technologists in order to be licensed. Yet a significant portion of the current education and examination requirement for RT-Ls involves aspects irrelevant to bone densitometry techs.

In order to adequately address the serious problem of a shortage of technicians to perform bone densitometry, the Board has amended its regulations to accept another credential available specifically for bone densitometry. The inability of physicians and diagnostic centers to hire licensed technicians has an adverse impact on a significant proportion of Virginia's citizens, particularly peri- and postmenopausal women, and the amendments are endorsed by the Board's Advisory Committee on Radiological Technology and a number of physicians across the state who have spoken to the Board about the problem.

Substance

Please identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. Please note that a more detailed discussion is required under the statement of the regulatory action's detail.

Amendments will provide a definition for bone densitometry and for the ISCD or International Society of Clinical Densitometry. Successful completion of the ISCD certification course and examination would be accepted by the Board to qualify an applicant for limited licensure to practice in bone densitometry. Finally, an amendment would allow the Board to accept an entity other than the ARRT for continuing education hours for the radiologic technologist-limited whose scope of practice is bone densitometry.

Issues

Please provide a statement identifying the issues associated with the final regulatory action. The term "issues" means: 1) the advantages and disadvantages to the public of implementing the new provisions; 2) the advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, please include a sentence to that effect.

1) The primary advantages and disadvantages to the public.

There are no disadvantages to the public. The new credential for performance of bone densitometry is considered by physicians who testified to the Board to be more rigorous than the current pathway for limited licensure. For example, current regulations require the applicant to have successfully performed at least 10 bone density procedures under direct supervision and observation. The ISCD certification requires the applicant to have completed at least 100 DXA scans or the equivalent number of peripheral scans. The public may be better protected by the availability of additional, well-trained bone density technicians.

2) The primary advantages and disadvantages to the Commonwealth.

There are no advantages or disadvantages to the Commonwealth; there will be no additional cost for licensing or enforcement of standards for radiologic technologists-limited.

Public Comment

Please summarize all public comment received during the public comment period and provide the agency response. If no public comment was received, please include a statement indicating that fact.

Proposed regulations were published in the Virginia Register of Regulations on April 22, 2002. Public comment was requested for a 60-day period ending June 21, 2002. A Public Hearing before the Advisory Board on Radiologic Technology was held on May 8, 2002, at which time there was no comment. One person from the Virginia Department of Health (VDH) commented on the Townhall website on the proposed regulations under consideration by the Board.

Comment: VDH has registered approximately 250 bone densitometry machines & some are located in hospitals and others in satellite facilities associated with hospitals. Does the Board intend to require licensure for those operators?

Board Response: If the machine registered by VDH for bone densitometry is operated by an employee of a licensed hospital, that person is exempt from the licensure requirement, according to § 54.1-2956.8:1. of the Code of Virginia. Regardless of the location of the machine, the key factor is the employment of the person performing the x-ray. In its periodic review of regulations, the Board intends to restate the statutory exemption in the regulation.

Detail of Changes

Please detail any changes, other than strictly editorial changes, that are being proposed. Please detail new substantive provisions, all substantive changes to existing sections, or both where appropriate. This statement should provide a section-by-section description - or crosswalk - of changes implemented by the proposed regulatory action. Include citations to the specific sections of an existing regulation being amended and explain the consequences of the changes.

18 VAC 85-101-10. Definitions.

Definitions for bone densitometry and the ISCD are added to provide clarity to the amended regulations in which those terms are used.

18 VAC 85-101-60. Examination requirements.

The requirements for examination in the area of bone densitometry are carved out of the regulation for limited licensure in other areas and set out separately in subsection C. To qualify for limited licensure in bone densitometry, an applicant would either have to meet the current requirements or provide evidence that he has passed the certification examination offered by the International Society for Clinical Densitometry (ISCD).

18 VAC 85-101-70. Educational requirements for radiologic technologists-limited.

Current regulations authorize the Board to accept educational programs other than those that meet the requirements set forth in subdivision 1, which consists of 40 hours of training in image production, equipment operation and radiation protection and at least 10 hours in the specific anatomical area for which licensure is being sought. The Board determined that it was clearer to the applicant if the ISCD certification course for bone densitometry was also specified in regulation.

The Board added a requirement that persons trained by the ISCD course or the ACRRT course for chiropractic, who want to add other anatomical areas to their licensure, would have to meet the basic training in the other anatomical areas as well as in radiation safety, image production, and equipment operation.

18 VAC 85-101-150. Biennial renewal of license.

Current regulations require 12 hours of continuing education for biennial renewal of rad techlimited licensure in the anatomical areas corresponding to the license; hours must be approved and documented by the American Registry of Radiologic Technologists. The proposed regulation would permit hours offered by another entity to be approved by the board for limited licensees whose scope of practice is bone densitometry.

Family Impact Statement

Please provide an analysis of the regulatory action that assesses the impact on the institution of the family and family stability including the extent to which the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

The proposed regulatory action would not strengthen or erode the authority and rights of parents, encourage or discourage economic self-sufficiency, strengthen or erode the marital commitment or increase or decrease disposable family income.