

# Proposed 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 Licensure of Radiologic Technologist and Radiologic Technologist-Limited
Action Title:	Credentialing of limited licensure in bone densitometry
Date:	12/7/01

This information is required pursuant 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.* Please refer to these sources for more information and other materials required to be submitted in the regulatory review package.

### Summary

Please provide a brief summary of the proposed new regulation, proposed amendments to an existing regulation, or the regulation proposed to be repealed. There is no need to state each provision or amendment or restate the purpose and intent of the regulation; instead give a summary of the regulatory action and alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation.

The proposed amendments would 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 proposed 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.

#### **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 must be provided. Please state that the Office of the Attorney General has certified that the agency has the statutory authority to promulgate the proposed regulation and that it comports with applicable state and/or federal law.

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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.

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- 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.

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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.

# **Purpose**

Please provide a statement explaining the need for the new or amended regulation. This statement must include the rationale or justification of the proposed 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, mammogram, 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.

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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 proposed 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 providing detail of the regulatory action's changes.

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 proposed regulatory action. The term "issues" means: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary

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.

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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.

# Fiscal Impact

Please identify the anticipated fiscal impacts and at a minimum include: (a) the projected cost to the state to implement and enforce the proposed regulation, including (i) fund source / fund detail, (ii) budget activity with a cross-reference to program and subprogram, and (iii) a delineation of one-time versus ongoing expenditures; (b) the projected cost of the regulation on localities; (c) a description of the individuals, businesses or other entities that are likely to be affected by the regulation; (d) the agency's best estimate of the number of such entities that will be affected; and e) the projected cost of the regulation for affected individuals, businesses, or other entities.

#### Projected cost to the state to implement and enforce:

- (i) Fund source: As a special fund agency, the Board must generate sufficient revenue to cover its expenditures from non-general funds, specifically the renewal and application fees it charges to practitioners for necessary functions of regulation.
- (ii) Budget activity by program or subprogram: There is no change required in the budget of the Commonwealth as a result of this program.
- (iii) One-time versus ongoing expenditures: The agency will incur some one-time costs (less than \$1,000) for mailings to the Public Participation Guidelines mailing lists, conducting a public hearing, and sending copies of final regulations to regulated entities. Every effort will be made to incorporate those into anticipated mailings and Board meetings already scheduled.

#### **Projected cost on localities:**

There are no projected costs to localities.

# Description of entities that are likely to be affected by regulation:

The entities that are likely to be affected by these regulations would be persons interested in becoming licensed as radiologic technologists-limited in bone densitometry or persons who currently hold that license and are seeking approved continuing education courses.

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# **Estimate of number of entities to be affected:**

Currently, out of the 930 persons licensed as radiologic technologists-limited, only 25 hold limited licenses to perform bone densitometry. It is not know how many persons would seek the ISCD certification in order to be licensed in Virginia or how many persons who are currently ISCD certified would apply for licensure as rad techs-limited. There are approximately 25 persons with a Virginia address who already hold ISCD certification, but it is unknown how many also hold licensure as radiologic technologists or radiologic technologists-limited.

# **Projected costs to the affected entities:**

The cost for compliance will depend on the pathway to licensure chosen by an applicant for a limited license in bone densitometry. If a person chooses the ISCD certification training program and examination, the total cost would be \$545 for members of the Society and \$645 for non-members. That fee includes the course tuition, all course materials and an examination. For a student or allied health professional, the cost of joining the Society is \$70.

If a person chooses the <u>current</u> pathway to licensure, there are costs associated with obtaining the 50 hours of approved education and passage of the core section of the AART examination. To apply to sit for the examination, the applicant must pay a \$75 fee to the AART. The cost for approval of a training program is \$25, payable to the Board to review the credentials of the instructor and program content for compliance with regulation. If the applicant enrolls in a training program through the Virginia community college system, the cost for training would be approximately \$500.

# **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 cross-walk - of changes implemented by the proposed regulatory action. Where applicable, include citations to the specific sections of an existing regulation being amended and explain the consequences of the proposed 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).

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# 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.

#### **Alternatives**

Please describe the specific alternatives to the proposal considered and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the action.

Current regulations (18 VAC 85-101-70) allow the Board to license an applicant as a RT-L if he has been trained in any <u>educational</u> program it deems acceptable. Therefore, it would be possible to accept an alternate certification program in bone densitometry as evidence of adequate training to protect public safety. The problem rests with the examination requirement in 18 VAC 85-101-60, which requires the applicant to provide evidence that he has received a passing score as determined by the board on the core section of the ARRT examination for Limited Scope of Practice in Radiography.

Instead of the ARRT examination providing the basis for licensure, the Board needs to be able to accept another credential as the standard for bone densitometry technicians. Since 1995, the International Society for Clinical Densitometry (ISCD) has sponsored a professional certification program and continuing education courses in order to qualify physicians and technologists.

Professional certification courses are offered throughout the year at sites throughout the U.S. and globally. The technical skills and medical knowledge base required to proficiently perform bone densitometry are far better covered by the ISCD course than the current ARRT-directed *core* curriculum. In addition, the ISCD technologist certification course requires prior satisfactory completion (course and exam) of the DXA scanner *manufacturer's training* and *documented six months supervised, clinical scanning experience* (and 100 scans; the current licensure requirement is 10). This certification process is considered clinically rigorous and more relevant to what a well-trained DXA tech should know and be able to do than the ARRT *core* curriculum and exam.

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#### **Public Comment**

Please summarize all public comment received during the NOIRA comment period and provide the agency response.

An announcement of the board's intent to amend its regulations was posted on the Virginia Regulatory Townhall, sent to the Registrar of Regulations, and sent to persons on the PPG mailing list for the board. Public comment was received until November 7, 2001. During the 30-day comment period, there were no comments received. However, prior to publication of the NOIRA, the following comments were received from members of the public:

Dr. Paul Rochmis wrote to request the board consider the content of a manufacturer-based training program and the ISCD certification course.

Drs. Barbara Zedler and Bob Downs have spoken to the Advisory Committee and the Board urging the adoption of an alternative credential for bone densitometry and have worked in drafting the proposed language.

# **Clarity of the Regulation**

Please provide a statement indicating that the agency, through examination of the regulation and relevant public comments, has determined that the regulation is clearly written and easily understandable by the individuals and entities affected.

The Advisory Committee on Radiologic Technology, comprised of licensed radiologic technologists, physicians and members of the Board approved the acceptance of another credential for licensure in bone densitometry and appointed an ad hoc committee to draft the amendments. The ad hoc committee consisted of rad tech and physician members who have expertise in radiography and specifically in bone densitometry. The Assistant Attorney General who provides counsel to the Board has been involved during the development and adoption of proposed regulations to ensure clarity and compliance with law and regulation.

#### **Periodic Review**

Please supply a schedule setting forth when the agency will initiate a review and re-evaluation to determine if the regulation should be continued, amended, or terminated. The specific and measurable

regulatory goals should be outlined with this schedule. The review shall take place no later than three years after the proposed regulation is expected to be effective.

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Public participation guidelines require the Board to review regulations each biennium or as required by Executive Order. Regulations will be reviewed again during the 2003-04 fiscal year.

# Family Impact Statement

Please provide an analysis of the proposed regulatory action that assesses the potential 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.