

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2011

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HOUSE DRH30232-LUfqq-90 (03/23)

Short Title: Establish Radiologic Technicians Licensure. (Public)

Sponsors: Representatives Insko and Murry (Primary Sponsors).

Referred to:

1 A BILL TO BE ENTITLED
2 AN ACT PROVIDING FOR THE REGULATION AND LICENSING OF PERSONS WHO
3 PERFORM AND ADMINISTER MEDICAL IMAGING AND RADIATION THERAPY
4 PROCEDURES.

5 The General Assembly of North Carolina enacts:

6 **SECTION 1.** Chapter 90 of the General Statutes is amended by adding a new
7 Article to read:

8 "Article 43.

9 "Radiologic Technicians.

10 "**§ 90-735. Title.**

11 This Article may be cited as the 'North Carolina Consistency, Accuracy, Responsibility and
12 Excellence (CARE) in Medical Imaging and Radiation Therapy Act.'

13 "**§ 90-736. Findings.**

14 The General Assembly finds and declares that the citizens of this State are entitled to the
15 maximum protection practicable from the harmful effects of improperly performed medical
16 imaging and radiation therapy procedures and that protection and quality can be increased by
17 requiring appropriate education and licensure of persons operating equipment used for medical
18 imaging and radiation therapy procedures. Therefore, it is essential to establish standards of
19 education for these operators and to provide for appropriate examination and licensure.

20 "**§ 90-737. Definitions.**

21 The following definitions apply in this Article:

- 22 (1) Board. – The Medical Imaging and Radiation Therapy Board of Examiners.
23 (2) Cardiovascular invasive specialist. – A person other than a licensed
24 practitioner who performs fluoroscopy to visualize cardiac or vascular
25 anatomy. Individuals licensed as a cardiovascular invasive specialist may not
26 perform computed tomography, magnetic resonance imaging,
27 mammography, radiation therapy, or radiography.
28 (3) License. – A certificate issued by the Board authorizing the licensee to use
29 radioactive materials or medical imaging or radiation therapy equipment on
30 humans for diagnostic or therapeutic purposes in accordance with the
31 provisions of this Article.
32 (4) Licensed practitioner. – A person licensed to practice medicine, dentistry,
33 podiatry, or chiropractic in this State.
34 (5) Limited X-ray machine operator. – A person other than a licensed
35 practitioner who performs limited diagnostic radiographic imaging



1 procedures on specific parts of the human anatomy, including chest, spine,
2 skull/sinus, podiatric, or extremity radiography. Individuals licensed as a
3 limited X-ray machine operator may not perform computed tomography,
4 fluoroscopy, magnetic resonance imaging, mammography, procedures
5 involving contrast media, radiation therapy, or mobile imaging.

6 (6) Magnetic resonance technologist. – A person, other than a licensed
7 practitioner, who performs magnetic resonance imaging for diagnostic
8 purposes.

9 (7) Medical imaging. – Any procedures or article intended for use in the
10 diagnosis or visualization of disease or other medical conditions including,
11 but not limited to, diagnostic X-rays, nuclear medicine, fluoroscopy,
12 magnetic resonance, sonography, and other procedures.

13 (8) Medical physicist. – A person who is certified by the American Board of
14 Radiology, American Board of Medical Physics, American Board of Health
15 Physics, American Board of Science in Nuclear Medicine, or Canadian
16 College of Physics in Medicine in radiological physics or one of the
17 subspecialties of radiological physics.

18 (9) Nuclear medicine technologist. – A person, other than a licensed
19 practitioner, who uses radiopharmaceutical agents on humans for diagnostic
20 or therapeutic purposes.

21 (10) Persons who administer medical imaging or radiation therapy procedures. –
22 Any person, other than a licensed practitioner, who administers medical
23 imaging or radiation therapy procedures to other persons for medical
24 purposes, and includes radiographers, radiation therapists, nuclear medicine
25 technologists, sonographers, magnetic resonance technologists,
26 cardiovascular-invasive specialists, and limited X-ray machine operators.

27 (11) Radiation therapist. – A person, other than a licensed practitioner, who
28 administers radiation to humans for therapeutic purposes.

29 (12) Radiographer. – A person, other than a licensed practitioner, who
30 administers radiation to humans for diagnostic or interventional purposes.

31 (13) Radiologist. – A physician certified by or board-eligible to be certified for
32 the American Board of Radiology, the American Osteopathic Board of
33 Radiology, the British Royal College of Radiology, or the Canadian College
34 of Physicians and Surgeons in that medical specialty.

35 (14) Sonographer. – A person, other than a licensed practitioner, who performs
36 sonography, ultrasound, or echocardiography for diagnostic or therapeutic
37 purposes.

38 **§ 90-738. License required; exemptions.**

39 (a) On or after October 1, 2012, no person shall administer or offer to administer
40 medical imaging or radiation therapy procedures on humans for diagnostic or therapeutic
41 purposes as defined in this Article or otherwise indicate or imply that the person is licensed to
42 administer medical imaging or radiation therapy procedures unless that person is currently
43 licensed as provided under this Article.

44 (b) The provisions of this Article shall not apply to the following:

45 (1) A licensed practitioner administering medical imaging or radiation therapy
46 procedures.

47 (2) A licensed dental assistant or dental hygienist performing dental radiography
48 procedures.

49 (3) A resident physician licensed under Article 1 of this Chapter.

50 (4) A student enrolled in and attending a school or college of medicine,
51 osteopathy, chiropractic, podiatry, dentistry, or medical imaging or radiation

1 therapy who performs medical imaging or radiation therapy procedures on
2 humans while under the supervision of a licensed practitioner, radiographer,
3 radiation therapist, nuclear medicine technologist, sonographer, magnetic
4 resonance technologist, or cardiovascular invasive specialist holding a
5 license under this Article.

- 6 (5) A person administering medical imaging or radiation procedures who is
7 employed by the United States government when performing duties
8 associated with that employment.

9 **"§ 90-739. Scope of practice; limitations.**

10 (a) The Board shall establish licensure standards for a radiographer, radiation therapist,
11 nuclear medicine technologist, cardiovascular invasive specialist, magnetic resonance
12 technologist, sonographer, and limited X-ray machine operator.

13 (b) A person holding a license under this Article may use radioactive substances or
14 equipment emitting ionizing or nonionizing radiation for medical imaging and radiation therapy
15 procedures on humans for diagnostic or therapeutic purposes by prescription of a licensed
16 practitioner only, provided the application of a substance or the use of equipment is limited in a
17 manner specified under this Article.

18 (c) As related specifically to performance of computed tomography, the following
19 limitations shall apply:

- 20 (1) Individuals licensed to perform radiography may perform computed
21 tomography medical imaging.
22 (2) Individuals licensed to perform radiation therapy may only perform
23 computed tomography for treatment simulation.
24 (3) Individuals licensed to perform nuclear medicine may only perform
25 computed tomography for attenuation correction.
26 (4) Individuals licensed to perform radiation therapy, nuclear medicine
27 technology, magnetic resonance technology, or sonography who are certified
28 in computed tomography by the American Registry of Radiologic
29 Technologists may perform computed tomography medical imaging.

30 **"§ 90-740. Medical Imaging and Radiation Therapy Board of Examiners.**

31 (a) Creation. – The North Carolina Medical Imaging and Radiation Therapy Board of
32 Examiners is created.

33 (b) Composition and Terms. – The Board shall consist of 11 members who shall serve
34 staggered terms. The Board members shall be appointed by the Governor and the initial Board
35 members shall be appointed on or before October 1, 2011, as follows:

- 36 (1) One member who is a radiographer who shall serve for a three-year term.
37 (2) One member who is a nuclear medicine technologist who shall serve for a
38 two-year term.
39 (3) One member who is a radiation therapist who shall serve for a one-year
40 term.
41 (4) One member who is a sonographer who shall serve for a three-year term.
42 (5) One member who is a magnetic resonance technologist who shall serve for a
43 two-year term.
44 (6) One member who is a cardiovascular invasive specialist who shall serve for
45 a one-year term.
46 (7) One member who is a limited X-ray machine operator who shall serve for a
47 three-year term.
48 (8) One member who is a radiologist who shall serve for a two-year term.
49 (9) One member who is a radiation oncologist who shall serve for a one-year
50 term.

1 (10) One member who is a medical physicist who shall serve for a three-year
2 term.

3 (11) One public member who shall serve for a two-year term.

4 Upon the expiration of the terms of the initial Board members, members shall be appointed
5 for terms of three years and shall serve until their successors are appointed. No member may
6 serve more than two consecutive terms.

7 (c) Qualifications. – Except for the public member of the Board, every member of the
8 Board shall hold a valid license issued by the Board in the category of license for that member's
9 specialty, shall reside or be employed in North Carolina, and shall remain in active practice and
10 in good standing with the Board as a licensee during their terms. The public member shall be a
11 resident of this State and shall not be (i) a currently or actively licensed practitioner or (ii) a
12 person who administers medical imaging or radiation therapy procedures under this Article.

13 (d) Vacancies. – A vacancy shall be filled in the same manner as the original
14 appointment and shall be filled within 45 days after the vacancy occurs. Appointees to fill
15 vacancies shall serve the remainder of the unexpired term and until their successors have been
16 duly appointed and qualified.

17 (e) Removal. – The Board may remove any of its members for neglect of duty,
18 incompetence, or unprofessional conduct. A member subject to disciplinary proceedings as a
19 licensee shall be disqualified from participating in the official business of the Board until the
20 charges have been resolved.

21 (f) Compensation. – Each member of the Board shall receive per diem and
22 reimbursement for travel and subsistence as provided in G.S. 93B-5.

23 (g) Officers. – The officers of the Board shall be a chair, who shall be licensed under
24 this Article, a vice-chair, and other officers deemed necessary by the Board to carry out the
25 purposes of this Article. All officers shall be elected annually by the Board for one-year terms
26 and shall serve until their successors are elected and qualified.

27 (h) Meetings. – The Board shall hold at least two meetings each year to conduct
28 business and to review the standards and rules for improving the administration of medical
29 imaging or radiation therapy procedures. The Board shall establish the procedures for calling,
30 holding, and conducting regular and special meetings. A majority of Board members
31 constitutes a quorum.

32 **"§ 90-741. Powers of the Board.**

33 The Board shall have the following powers and duties:

34 (1) Administer this Article.

35 (2) Issue interpretations of this Article.

36 (3) Adopt, amend, or repeal rules as may be necessary to carry out the
37 provisions of this Article.

38 (4) Employ and fix the compensation of personnel that the Board determines is
39 necessary to carry into effect the provisions of this Article and incur other
40 expenses necessary to effectuate this Article.

41 (5) Examine and determine the qualifications and fitness of applicants for
42 licensure, renewal of licensure, and reciprocal licensure.

43 (6) Issue, renew, deny, suspend, or revoke licenses and carry out any
44 disciplinary actions authorized by this Article.

45 (7) Set fees for licensure, license renewal, and other services deemed necessary
46 to carry out the purposes of this Article.

47 (8) Conduct investigations for the purpose of determining whether violations of
48 this Article or grounds for disciplining licensees exist.

49 (9) Conduct administrative hearings in accordance with Chapter 150B of the
50 General Statutes when a contested case, as defined in G.S. 150B-2(2), arises
51 under this Article.

- 1 (10) Maintain a record of all proceedings and make available to licensees and
2 other concerned parties an annual report of all Board action.
3 (11) Develop standards and adopt rules for the improvement of the administration
4 of medical imaging or radiation therapy procedures in this State.
5 (12) Adopt a seal containing the name of the Board for use on all licenses and
6 official reports issued by it.

7 **"§ 90-742. Requirements for licensure.**

8 (a) The Board shall admit to examination for licensure any applicant who shall pay a
9 nonrefundable fee established by the rule of the Board and submit satisfactory evidence,
10 verified by oath or affirmation, that the applicant meets the following criteria:

- 11 (1) At the time of the application is at least 18 years of age.
12 (2) Has successfully completed a four-year course of study in a secondary
13 school approved by the State Board of Education, or passed an approved
14 equivalency test.

15 (b) In addition to the requirements of subsection (a) of this section, any person seeking
16 to obtain a license in a specific area of medical imaging or radiation therapy shall comply with
17 the following requirements:

- 18 (1) Each applicant for a license as a radiographer, radiation therapist, magnetic
19 resonance technologist, cardiovascular invasive specialist, sonographer, or
20 nuclear medicine technologist shall have satisfactorily completed a course of
21 study in radiography, radiation therapy, magnetic resonance technology,
22 cardiovascular invasive specialist, sonography, or nuclear medicine,
23 respectively, or its equivalent to be determined by the Board.
24 (2) The curriculum for each course of study shall be no less stringent than the
25 standards approved by the Joint Review Committee on Education in
26 Radiologic Technology, Joint Review Committee on Nuclear Medicine
27 Technology, Commission on Accreditation of Allied Health Education
28 Programs, or any other appropriate accreditation agency approved by the
29 Board, provided the standards are not in conflict with Board policy.

30 (c) In addition to the requirements of subsection (a) of this section, any person seeking
31 a license as a limited X-ray machine operator shall comply with the following requirements:

- 32 (1) Have completed a course of study in limited X-ray machine operation
33 incorporating the American Society of Radiologic Technologists (ASRT)
34 Limited Scope Radiography Educational Curriculum approved by the Board.
35 (2) The scope of each permit is limited as follows:
36 a. Chest radiography permit: radiography of the thorax, heart, and
37 lungs.
38 b. Extremities radiography permit: radiography of the upper and lower
39 extremities, including the pectoral girdle.
40 c. Spine radiography permit: radiography of the vertebral column.
41 d. Skull/Sinus permit: radiography of the skull and facial structures.
42 e. Podiatric permit: radiography of the foot, ankle, and lower leg below
43 the knee.

44 (d) The Board shall establish criteria and standards within the State for educational
45 programs in medical imaging and in radiation therapy and approve these programs upon
46 finding that the criteria and standards have been met.

47 **"§ 90-743. Examinations.**

48 (a) Applicants for licensure as a radiographer, radiation therapist, nuclear medicine
49 technologist, magnetic resonance technologist, cardiovascular invasive specialist, sonographer,
50 or limited permit X-ray operator shall be required to pass an examination approved by the
51 Board.

1 **(b)** The Board shall accept current registration by the American Registry of Radiologic
2 Technologists, Nuclear Medicine Technologist Certification Board, Cardiovascular
3 Credentialing International, American Registry of Diagnostic Medical Sonography, or other
4 recognized national voluntary credentialing bodies, provided that the standards of that body are
5 at least as stringent as those established by the Board.

6 **(c)** The Board shall use a limited X-ray machine operator examination administered by
7 the American Registry of Radiologic Technologists for persons applying for a limited permit in
8 chest, extremity, skull/sinus, podiatric, or spine radiography provided that the standards of that
9 body are at least as stringent as those established by the Board.

10 **"§ 90-744. Issuance of license; temporary license; display of license.**

11 **(a)** Upon payment of the appropriate fee, the Board may issue a license to each
12 applicant who meets the requirements for licensure specified in this Article.

13 **(b)** The Board may issue a temporary license to any person whose licensure or license
14 renewal may be pending or when issuance may be justified by special circumstances. A
15 temporary license shall be issued only if the Board finds that it will not violate the purpose of
16 this Article or endanger the public health and safety. A temporary license shall expire 90 days
17 after the date of the next examination if the applicant is required to take the examination. If the
18 applicant does not take the examination on the scheduled date, the temporary license shall
19 expire. In all cases, a temporary license shall expire when the determination is made either to
20 issue or deny the applicant a regular license and in no event shall a temporary license be issued
21 for a period longer than 180 days.

22 **(c)** Any person issued a license under this Article shall display the official license
23 document or a verified copy in each place of regular employment.

24 **"§ 90-745. Program approval.**

25 **(a)** A program approved by the Board in radiography, radiation therapy, nuclear
26 medicine technology, magnetic resonance technology, cardiovascular invasive specialist,
27 sonography, or limited X-ray machine operation may be offered by a medical facility or
28 educational institution. The program shall be affiliated with one or more hospitals or clinics
29 that, in the opinion of the Board, shall provide the requisite clinical education.

30 **(b)** Pursuant to rules adopted by the Board, the Board shall do the following:

31 **(1)** Adopt procedures for an educational program to follow in making
32 application for approval by the Board.

33 **(2)** Provide a process for review of approval by a recognized national voluntary
34 accrediting organization.

35 **"§ 90-746. License renewal.**

36 **(a)** Every license issued under this Article shall be renewed on or before January 1
37 every two years. The license shall be renewed upon the payment of a renewal fee if, at the time
38 of application for renewal, the applicant is not in violation of this Article, and has complied
39 with any continuing education requirements pursuant to rules adopted by the Board.

40 **(b)** As a condition of license renewal, each individual licensed as a radiographer,
41 radiation therapist, sonographer, magnetic resonance technologist, cardiovascular invasive
42 specialist, or nuclear medicine technologist shall be required to complete 24 hours of
43 continuing education as approved by the Board. Individuals licensed as limited X-ray machine
44 operators shall complete 12 hours of continuing education approved by the Board. A licensee is
45 not required to duplicate the continuing education hours submitted to the American Registry of
46 Radiologic Technologists (ARRT) for renewal.

47 **(c)** The Board shall notify a licensee at least 30 days in advance of the expiration of his
48 or her license. The licensee shall inform the Board of any change of the licensee's address. Each
49 licensee is responsible for renewing his or her license before the expiration date. Licenses that
50 are not renewed automatically lapse.

1 (d) The Board may provide for the late renewal of an automatically lapsed license upon
2 the payment of a reinstatement fee. No reinstatement renewal may be granted more than five
3 years after a license expires.

4 **"§ 90-747. Reciprocity.**

5 The Board may, upon application and payment of proper fees, grant a license to a person
6 who resides in this State and has been licensed, certified, or registered to perform or administer
7 medical imaging or radiation therapy procedures in another jurisdiction if that jurisdiction's
8 standards of competency are substantially equivalent to those provided in this Article in
9 accordance with rules adopted by the Board.

10 **"§ 90-748. Fees.**

11 (a) All fees shall be set by the Board pursuant to rules adopted under this Article. All
12 fees payable to the Board shall be deposited in the name of the Board in financial institutions
13 designated by the Board as official depositories and shall be used to pay all expenses incurred
14 in carrying out the purposes of this Article.

15 (b) All salaries, compensation, and expenses incurred or allowed to carry out the
16 purposes of this Article shall be paid by the Board exclusively out of the fees received by the
17 Board as authorized by this Article or funds received from other sources. In no case shall any
18 salary, expense, or other obligation of the Board be charged against the State treasury.

19 **"§ 90-749. Disciplinary authority.**

20 (a) The Board may deny, suspend, revoke, or refuse to renew a license or impose
21 probationary conditions on a license if the licensee or applicant for licensure has engaged in
22 any of the following conduct:

- 23 (1) Obtaining a license by means of fraud, misrepresentation, or concealment of
24 material facts.
- 25 (2) Engaging in unprofessional conduct pursuant to rules established by the
26 Board.
- 27 (3) Having been convicted of or pleaded guilty or nolo contendere to a crime
28 involving moral turpitude or any crime which indicates that the licensee or
29 applicant is unfit or incompetent to administer medical imaging or radiation
30 therapy procedures or that the licensee or applicant has deceived or
31 defrauded the public.
- 32 (4) Engaging in any act or practice in violation of any of the provisions of this
33 Article or any rule adopted by the Board or aiding, abetting, or assisting any
34 person in such a violation.
- 35 (5) Committing an act or acts of malpractice, gross negligence, or incompetence
36 in administering medical imaging or radiation therapy procedures.
- 37 (6) Practicing as a person licensed to administer medical imaging or radiation
38 therapy procedures without a current license.
- 39 (7) Engaging in conduct that could result in harm or injury to the public.
- 40 (8) Having a license issued under this Article revoked or suspended or other
41 disciplinary action taken whether in this State or another jurisdiction.
- 42 (9) Being unfit or incompetent to administer medical imaging or radiation
43 therapy services by reason of deliberate or negligent acts or omissions
44 regardless of whether actual injury to a patient is established.

45 (b) The denial, refusal to renew, suspension, revocation, or imposition of probationary
46 conditions upon a license may be ordered by the Board after a hearing held in accordance with
47 Chapter 150B of the General Statutes and rules adopted by the Board. An application may be
48 made to the Board for reinstatement of a revoked license if the revocation has been in effect for
49 at least two years after the date of the Board's order revoking the license.

50 **"§ 90-750. Violation a misdemeanor.**

1 Any person who violates any provision of this Article shall be guilty of a Class 1
2 misdemeanor. Each act of such unlawful practice shall constitute a distinct and separate
3 offense.

4 **"§ 90-751. Injunctive relief.**

5 The Board may make application to any appropriate court for an order enjoining violations
6 of this Article, and upon a showing by the Board that any person has violated or is about to
7 violate this Article, the court may grant an injunction, restraining order, or take other
8 appropriate action.

9 **"§ 90-752. Civil penalties.**

10 (a) Authority to Assess Civil Penalties. – The Board may assess a civil penalty not in
11 excess of one thousand dollars (\$1,000) for the violation of any section of this Article or the
12 violation of any rules adopted by the Board. The clear proceeds of any civil penalty assessed
13 under this section shall be remitted to the Civil Penalty and Forfeiture Fund in accordance with
14 G.S. 115C-457.2.

15 (b) Consideration Factors. – Before imposing and assessing a civil penalty, the Board
16 shall consider the following factors:

17 (1) The nature, gravity, and persistence of the particular violation.

18 (2) The appropriateness of the imposition of a civil penalty when considered
19 alone or in combination with other punishment.

20 (3) Whether the violation was willful and malicious.

21 (4) Any other factors that would tend to mitigate or aggravate the violations
22 found to exist.

23 (c) Schedule of Civil Penalties. – The Board shall establish a schedule of civil penalties
24 for violations of this Article and rules adopted by the Board.

25 (d) Costs. – The Board may assess the costs of disciplinary actions against any person
26 found to be in violation of this Article or rules adopted by the Board."

27 **SECTION 2.** For a period not to exceed two years after this act becomes effective
28 upon payment of the proper fee as established by the Board, an individual providing
29 documentation of employment for two of the preceding three years as a radiographer, radiation
30 therapist, nuclear medicine technologist, magnetic resonance technologist, cardiovascular
31 invasive specialist, sonographer, or limited X-ray machine operator may be issued a license by
32 the Medical Imaging and Radiation Therapy Board of Examiners (Board) created under
33 G.S. 90-740, as enacted by Section 1 of this act, without having to pass an examination as
34 required by G.S. 90-743, enacted by Section 1 of this act. Individuals applying for licensure
35 pursuant to this section shall provide to the Board a statement of responsibility for the actions
36 of the individual in the performance of medical imaging or radiation therapy procedures, a
37 certificate of competence, and a list of medical imaging or radiation therapy procedures the
38 individual is authorized to perform signed by the physician supervising the individual in the
39 performance of medical imaging and radiation therapy procedures. Individuals registered with
40 the American Registry of Radiologic Technologists (ARRT) do not need a certificate of
41 competence.

42 **SECTION 3.** This act is effective when it becomes law.