

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2013

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HOUSE BILL 742

Short Title: NC CARE in Radiologic Imaging. (Public)

Sponsors: Representatives Murry and Insko (Primary Sponsors).

For a complete list of Sponsors, refer to the North Carolina General Assembly Web Site.

Referred to: Health and Human Services, if favorable, Finance.

April 11, 2013

1 A BILL TO BE ENTITLED
2 AN ACT PROVIDING FOR THE REGULATION AND LICENSING OF PERSONS WHO
3 PERFORM AND ADMINISTER RADIOLOGIC IMAGING AND RADIATION
4 THERAPY 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 Technologists and Radiation Therapists.

10 "**§ 90-735. Title.**

11 This Article may be cited as the "North Carolina Competency, Accuracy, Responsibility,
12 and Excellence (CARE) in Radiologic 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 radiologic
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
18 radiologic imaging and radiation therapy procedures. Therefore, it is essential to establish
19 standards of education for these technologists and to provide for appropriate examination and
20 licensure.

21 "**§ 90-737. Definitions.**

22 The following definitions apply in this Article:

- 23 (1) Board. – The Radiologic Imaging and Radiation Therapy Board of
24 Examiners.
- 25 (2) Cardiovascular invasive specialist. – A person other than a licensed
26 practitioner who performs fluoroscopy to visualize cardiac or vascular
27 anatomy. Individuals licensed as a cardiovascular invasive specialist may not
28 perform computed tomography, magnetic resonance imaging,
29 mammography, radiation therapy, or radiography.
- 30 (3) Hybrid imaging or radiation therapy equipment. – Equipment that combines
31 more than one radiologic imaging modality into a single device.
- 32 (4) Ionizing radiation. – Radiation that may consist of alpha particles, beta
33 particles, gamma rays, X-rays, neutrons, high-speed electrons, high-speed
34 protons, or other particles capable of producing ions. Ionizing radiation does



- 1 not include radiation, such as radiofrequency or microwaves, visible infrared
2 or ultraviolet light, or ultrasound.
- 3 (5) License. – A certificate issued by the Board authorizing the licensee to use
4 radioactive materials or radiologic imaging or radiation therapy equipment
5 on humans for diagnostic or therapeutic purposes in accordance with the
6 provisions of this Article.
- 7 (6) Licensed practitioner. – A person licensed to practice medicine, dentistry,
8 podiatry, or chiropractic in this State.
- 9 (7) Limited X-ray machine operator. – A person other than a licensed
10 practitioner who performs limited diagnostic X-ray procedures using
11 equipment that emits external ionizing radiation resulting in diagnostic
12 radiographic images that are limited to select human anatomy. Individuals
13 licensed as a limited X-ray machine operator may not perform computed
14 tomography, fluoroscopy, magnetic resonance imaging, mammography,
15 procedures involving contrast media, radiation therapy, or mobile imaging.
- 16 (8) Magnetic resonance. – The use of magnetic fields and radiofrequency
17 signals to create diagnostic images or dynamic images for medical purposes.
- 18 (9) Magnetic resonance technologist. – A person other than a licensed
19 practitioner who performs magnetic resonance procedures under the
20 supervision of a licensed physician using magnetic fields and radiofrequency
21 signals.
- 22 (10) Medical physicist. – A person who is certified by the American Board of
23 Radiology, American Board of Medical Physics, American Board of Health
24 Physics, American Board of Science in Nuclear Medicine, or Canadian
25 College of Physics in Medicine in radiological physics or one of the
26 subspecialties of radiological physics.
- 27 (11) Nuclear medicine technologist. – A person other than a licensed practitioner
28 who, under the supervision of a licensed physician, performs a variety of (i)
29 nuclear medicine and molecular imaging procedures using sealed and
30 unsealed radiation sources, ionizing and nonionizing radiation, and
31 adjunctive medicine and (ii) therapeutic procedures using unsealed
32 radioactive sources.
- 33 (12) Persons who administer radiologic imaging or radiation therapy procedures.
34 – Any person other than a licensed practitioner who administers radiologic
35 imaging or radiation therapy procedures to other persons for medical
36 purposes, including radiographers, radiation therapists, nuclear medicine
37 technologists, magnetic resonance technologists, cardiovascular invasive
38 specialists, and limited X-ray machine operators.
- 39 (13) Radiation therapist. – A person other than a licensed practitioner who
40 administers radiation to humans for therapeutic purposes.
- 41 (14) Radiographer. – A person other than a licensed practitioner who performs a
42 comprehensive set of diagnostic radiographic procedures under the
43 supervision of a licensed physician using external ionizing radiation to
44 produce radiographic, fluoroscopic, or digital images.
- 45 (15) Radiologic imaging. – Any procedure or article intended for use in the
46 diagnosis or visualization of disease or other medical conditions, including,
47 but not limited to, diagnostic X-rays, nuclear medicine, fluoroscopy,
48 magnetic resonance, and other procedures using ionizing radiation or
49 magnetic resonance. However, radiologic imaging does not include the use
50 of ultrasound.

1 (16) Radiologist. – A physician certified by or board-eligible to be certified for
2 the American Board of Radiology, the American Osteopathic Board of
3 Radiology, the British Royal College of Radiology, or the Canadian College
4 of Physicians and Surgeons in that medical specialty.

5 (17) Radiologist assistant. – An advanced-level radiographer who works under
6 the supervision of a radiologist to perform patient assessment, patient
7 management, and selective clinical imaging procedures.

8 **"§ 90-738. License required; exemptions.**

9 (a) On or after October 1, 2014, no person shall administer or offer to administer
10 radiologic imaging or radiation therapy procedures on humans for diagnostic or therapeutic
11 purposes as defined in this Article or otherwise indicate or imply that the person is licensed to
12 administer radiologic imaging or radiation therapy procedures unless that person is currently
13 licensed as provided under this Article.

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

15 (1) A licensed practitioner administering radiologic imaging or radiation therapy
16 procedures.

17 (2) A registered dental hygienist (RDH).

18 (3) A dental assistant I or II who has satisfactorily completed one of the
19 following:

20 a. The North Carolina radiography equivalency examination.

21 b. Dental assisting school through an American Dental Association
22 accredited program.

23 c. The Dental Assisting National Board examination.

24 d. Been classified as a dental assistant II in this State under the laws
25 regulating the practice of dentistry.

26 (4) A resident physician licensed under Article 1 of this Chapter.

27 (5) A student enrolled in and attending a school or college of medicine or
28 radiologic imaging or radiation therapy who performs radiologic imaging or
29 radiation therapy procedures on humans while under the supervision of a
30 licensed practitioner, radiographer, radiation therapist, nuclear medicine
31 technologist, magnetic resonance technologist, or cardiovascular invasive
32 specialist holding a license under this Article. New graduates awaiting
33 national accreditation may be issued a provisional license for employment
34 purposes for a period not to exceed one year.

35 (6) A person administering radiologic imaging or radiation procedures who is
36 employed by the United States government when performing duties
37 associated with that employment.

38 (7) A registered sonographer.

39 (8) A registered radiologist assistant.

40 **"§ 90-739. Scope of practice; limitations.**

41 (a) The Board shall establish licensure standards for a radiographer, radiation therapist,
42 nuclear medicine technologist, cardiovascular invasive specialist, magnetic resonance
43 technologist, and limited X-ray machine operator. As new modalities using ionizing radiation
44 or magnetic resonance for medical purposes are developed and merged with existing
45 modalities, the Board shall, after consulting with the appropriate radiologic imaging and
46 radiation therapy organizations, establish standards for (i) the education and credentialing of
47 persons performing radiologic imaging or dosimetric planning and (ii) delivering radiation
48 therapy.

49 (b) A person holding a license under this Article may use radioactive substances or
50 equipment emitting ionizing or nonionizing radiation for medical radiologic imaging and
51 radiation therapy procedures on humans for diagnostic or therapeutic purposes by prescription

1 of a licensed practitioner only, provided the application of a substance or the use of equipment
2 is limited in a manner specified under this Article.

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

5 (1) Individuals licensed to perform radiation therapy may only perform
6 computed tomography for treatment simulation.

7 (2) Individuals licensed to perform nuclear medicine may only perform
8 computed tomography fusion imaging on a hybrid unit.

9 (3) By January 1, 2016, all individuals licensed to perform radiologic imaging
10 and radiation therapy who perform computed tomography for diagnostic
11 purposes must be certified in computed tomography by the American
12 Registry of Radiologic Technologists.

13 **§ 90-740. Radiologic Imaging and Radiation Therapy Board of Examiners.**

14 (a) Creation. – The North Carolina Radiologic Imaging and Radiation Therapy Board
15 of Examiners is created.

16 (b) Composition and Terms. – The Board shall consist of 11 members who shall serve
17 staggered terms. The Board members shall be appointed by the Governor and the initial Board
18 members shall be appointed on or before October 1, 2013, as follows:

19 (1) One member who is a registered radiographer who shall serve for a
20 three-year term.

21 (2) One member who is a registered nuclear medicine technologist who shall
22 serve for a two-year term.

23 (3) One member who is a registered radiation therapist who shall serve for a
24 one-year term.

25 (4) One member who is a full-time educator of a program that prepares
26 providers licensed under this Article who shall serve for a two-year term.

27 (5) One member who is a registered magnetic resonance technologist who shall
28 serve for a two-year term.

29 (6) One member who is a registered cardiovascular invasive specialist who shall
30 serve for a one-year term.

31 (7) One member who is a limited X-ray machine operator who shall serve for a
32 three-year term.

33 (8) One member who is a radiologist who shall serve for a two-year term.

34 (9) One member who is a medical physicist who shall serve for a three-year
35 term.

36 (10) One member who is a licensed physician practicing in a hospital setting who
37 shall serve for a three-year term.

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

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

42 (c) Qualifications. – Except for the public member of the Board, every member of the
43 Board shall hold a valid license issued by the Board in the category of license for that member's
44 specialty, shall be a resident of this State, and shall remain in active practice and in good
45 standing with the Board as a licensee during their terms. The public member shall be a resident
46 of this State and shall not be (i) a currently or actively licensed practitioner or (ii) a person who
47 administers radiologic imaging or radiation therapy procedures under this Article.

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

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

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

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

11 (h) Meetings. – The Board shall hold at least two meetings each year to conduct
12 business and to review the standards and rules for improving the administration of radiologic
13 imaging or radiation therapy procedures. The Board shall establish the procedures for calling,
14 holding, and conducting regular and special meetings. A majority of Board members
15 constitutes a quorum.

16 **"§ 90-741. Powers of the Board.**

17 The Board shall have the following powers and duties:

- 18 (1) Administer this Article.
- 19 (2) Issue interpretations of this Article.
- 20 (3) Adopt, amend, or repeal rules as may be necessary to carry out the
21 provisions of this Article.
- 22 (4) Employ and fix the compensation of personnel that the Board determines is
23 necessary to carry into effect the provisions of this Article and incur other
24 expenses necessary to effectuate this Article.
- 25 (5) Examine and determine the qualifications and fitness of applicants for
26 licensure, renewal of licensure, and reciprocal licensure.
- 27 (6) Issue, renew, deny, suspend, or revoke licenses and carry out any
28 disciplinary actions authorized by this Article.
- 29 (7) Set fees for licensure, license renewal, and other services deemed necessary
30 to carry out the purposes of this Article.
- 31 (8) Conduct investigations for the purpose of determining whether violations of
32 this Article or grounds for disciplining licensees exist.
- 33 (9) Conduct administrative hearings in accordance with Chapter 150B of the
34 General Statutes when a contested case, as defined in G.S. 150B-2(2), arises
35 under this Article.
- 36 (10) Maintain a record of all proceedings and make available to licensees and
37 other concerned parties an annual report of all Board action.
- 38 (11) Develop standards and adopt rules for the improvement of the administration
39 of radiologic imaging or radiation therapy procedures in this State.
- 40 (12) Adopt a seal containing the name of the Board for use on all licenses and
41 official reports issued by it.

42 **"§ 90-742. Requirements for licensure.**

43 (a) The Board shall admit to examination for licensure any applicant who shall pay a
44 nonrefundable fee pursuant to rules adopted by the Board and submit satisfactory evidence,
45 verified by oath or affirmation, that the applicant meets the following criteria:

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

1 **(b)** In addition to the requirements of subsection (a) of this section, any person seeking
2 to obtain a license in a specific area of radiologic imaging or radiation therapy shall comply
3 with the following requirements:

4 **(1)** Each applicant for a license as a radiographer, radiation therapist, magnetic
5 resonance technologist, cardiovascular invasive specialist, or nuclear
6 medicine technologist shall have satisfactorily completed a course of study
7 in radiography, radiation therapy, magnetic resonance, cardiovascular
8 invasive specialty, or nuclear medicine, respectively, or its equivalent to be
9 determined by the Board.

10 **(2)** The curriculum for each course of study shall be no less stringent than the
11 standards approved by the Joint Review Committee on Education in
12 Radiologic Technology, Joint Review Committee on Nuclear Medicine
13 Technology, Commission on Accreditation of Allied Health Education
14 Programs, or any other appropriate accreditation agency approved by the
15 Board, provided the standards are not in conflict with Board policy.

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

18 **(1)** Have completed a course of study in limited X-ray machine operation
19 incorporating the American Society of Radiologic Technologists (ASRT)
20 Limited Scope Radiography Educational Curriculum approved by the Board.

21 **(2)** The scope of each permit is limited to performing the tasks described in this
22 subsection in nonaffiliated hospital clinics as follows:

23 **a.** Chest radiography permit: radiography of the thorax, heart, and
24 lungs.

25 **b.** Extremities radiography permit: radiography of the upper and lower
26 extremities, including the pectoral girdle.

27 **c.** Spine radiography permit: radiography of the vertebral column.
28 Spine radiology permit holders are limited to working under the
29 supervision of a licensed chiropractor.

30 **d.** Skull/Sinus radiology permit: radiography of the skull and facial
31 structures.

32 **e.** Podiatric permit: radiography of the foot, ankle, and lower leg below
33 the knee. Podiatric permit holders are limited to working under the
34 supervision of a licensed podiatrist.

35 **(d)** The Board shall establish criteria and standards within the State for educational
36 programs in radiologic imaging and radiation therapy. The Board shall approve the educational
37 programs upon determining that the programs meet criteria and standards established by the
38 Board.

39 **"§ 90-743. Examinations.**

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

43 **(b)** The Board shall accept current registration by the American Registry of Radiologic
44 Technologists, Nuclear Medicine Technologist Certification Board, Cardiovascular
45 Credentialing International, or other recognized national voluntary credentialing bodies,
46 provided that the standards of that body are substantially equivalent to those established by the
47 Board.

48 **(c)** The Board shall use a limited X-ray machine operator examination administered by
49 the American Registry of Radiologic Technologists for persons applying for a limited permit in
50 chest, extremity, skull/sinus, podiatric, or spine radiography, provided that the standards of that
51 body are substantially equivalent to those established by the Board.

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

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

(b) The Board may issue a temporary license to any person whose licensure or license renewal may be pending or when issuance may be justified by special circumstances. A temporary license shall be issued only if the Board finds that it will not violate the purpose of this Article or endanger the public health and safety. A temporary license shall expire 90 days after the date of the next examination if the applicant is required to take the examination. If the applicant does not take the examination on the scheduled date, the temporary license shall expire. In all other cases, a temporary license shall expire when the determination is made either to issue or deny the applicant a regular license. However, a temporary license shall not be issued for a period longer than 180 days.

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

"§ 90-745. Educational program approval.

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

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

(1) Establish procedures for an educational program to follow in making application for approval by the Board.

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

"§ 90-746. License renewal.

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

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

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

(d) The Board may provide for the late renewal of an automatically lapsed license upon the payment of a reinstatement fee. The licensee shall maintain credentialing in his or her licensed specialty throughout the licensure period established by the credentialing body.

"§ 90-747. Reciprocity.

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

"§ 90-748. Fees.

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

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

9 **"§ 90-749. Disciplinary authority.**

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

13 (1) Obtaining a license by means of fraud, misrepresentation, or concealment of
14 material facts.

15 (2) Engaging in unprofessional conduct pursuant to rules adopted by the Board.

16 (3) Having been convicted of or pleaded guilty or nolo contendere to a crime
17 involving moral turpitude or any crime which indicates that the licensee or
18 applicant is unfit or incompetent to administer radiologic imaging or
19 radiation therapy procedures or that the licensee or applicant has deceived or
20 defrauded the public.

21 (4) Engaging in any act or practice in violation of any of the provisions of this
22 Article or any rule adopted by the Board or aiding, abetting, or assisting any
23 person in such a violation.

24 (5) Committing an act or acts of malpractice, gross negligence, or incompetence
25 in administering radiologic imaging or radiation therapy procedures.

26 (6) Practicing as a person licensed to administer radiologic imaging or radiation
27 therapy procedures without a current license.

28 (7) Engaging in conduct that could result in harm or injury to the public.

29 (8) Having a license issued under this Article revoked or suspended or other
30 disciplinary action taken, whether in this State or another jurisdiction.

31 (9) Being unfit or incompetent to administer radiologic imaging or radiation
32 therapy services by reason of deliberate or negligent acts or omissions,
33 regardless of whether actual injury to a patient is established.

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

39 **"§ 90-750. Violation a misdemeanor.**

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

43 **"§ 90-751. Injunctive relief.**

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

48 **"§ 90-752. Civil penalties.**

49 (a) Authority to Assess Civil Penalties. – The Board may assess a civil penalty not in
50 excess of one thousand dollars (\$1,000) for the violation of any section of this Article or the
51 violation of any rules adopted by the Board. The clear proceeds of any civil penalty assessed

1 under this section shall be remitted to the Civil Penalty and Forfeiture Fund in accordance with
2 G.S. 115C-457.2.

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

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

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

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

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

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

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

15 **SECTION 2.** The Radiologic Imaging and Radiation Therapy Board of Examiners
16 (Board) created under G.S. 90-740, as enacted in Section 1 of this act, shall adopt rules to
17 provide a method for recognition of individuals whose training and experience are determined,
18 at a minimum, to be equivalent to the training or experience of a graduate of an accredited
19 educational program in the individual's area of specialty. Any rules adopted by the Board
20 pursuant to this section shall expire seven years after the date this act becomes effective.

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