A BILL TO BE ENTITLED
AN ACT PROVIDING FOR THE REGULATION AND LICENSING OF PERSONS WHO PERFORM AND ADMINISTER RADIOLOGIC IMAGING AND RADIATION THERAPY PROCEDURES.
The General Assembly of North Carolina enacts:

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

"Article 43.
"Radiologic Technologists and Radiation Therapists.

§ 90-735. Title.
This Article may be cited as the "Patient Safety in Radiologic Imaging Act."

§ 90-736. Findings.
The General Assembly finds and declares that the citizens of this State are entitled to the maximum protection practicable from the harmful effects of improperly performed radiologic imaging and radiation therapy procedures and that protection and quality can be increased by requiring appropriate education and licensure of persons operating equipment used for radiologic imaging and radiation therapy procedures. Therefore, it is essential to establish standards of education for these technologists and to provide for appropriate examination and licensure.

§ 90-737. Definitions.
The following definitions apply in this Article:

(1) Board. – The Radiologic Imaging and Radiation Therapy Board of Examiners.

(2) Bone densitometry. – The determination of bone mass by means of the radiation absorption by a skeleton or part of a skeleton.

(3) Certification organization. – A national certification organization that specializes in the certification and registration of radiologic imaging or radiation therapy technical personnel and is accredited by the National Commission for Certifying Agencies, the American National Standards Institute, the International Organization for Standardization, or other accreditation organization recognized by the Board.

(4) Computed tomography. – The process of producing sectional and three-dimensional images using external ionizing radiation for diagnostic or therapeutic purposes.
Fluoroscopy. – The exposure of a patient to X-rays in a fluoroscopy mode, including positioning the patient and fluoroscopy equipment and the selection of exposure factors.

Hybrid imaging. – Radiologic imaging equipment or a radiologic imaging procedure that combines more than one radiologic imaging modality into a single device.

Ionizing radiation. – As defined by G.S. 104E-5(9).

Licensed practitioner. – A person licensed to practice medicine, dentistry, podiatry, or chiropractic medicine in this State.

Limited X-ray machine operator. – A person who is licensed under this Article to perform, under the supervision of a radiographer or licensed practitioner, radiography or bone densitometry procedures resulting in diagnostic radiographic images of selected specific parts of human anatomy or bone density measurements.

Mobile imaging. – Any arrangement in which radiologic imaging services are transported to various sites. Mobile imaging does not include movement within a hospital or movement to a site where the equipment will be located permanently.

Modality. – Technologies used in the diagnosis or treatment of disease or other medical conditions in human beings, including the following:

- Nuclear medicine and its specializations.
- Radiation therapy and its specializations.
- Radiography and its specializations.

Nuclear medicine technologist. – A person who is licensed under this Article to perform nuclear medicine and molecular imaging procedures using sealed and unsealed radiation sources, ionizing and nonionizing radiation, adjunctive medicines, and therapeutic procedures using unsealed radioactive sources.

Public member. – A resident of North Carolina who is not a licensed practitioner, does not perform radiologic imaging or radiation therapy procedures under this Article, and is not affiliated with any group or profession that provides or regulates health care or that may in any way hinder the public member in representing the interest of the public.

Radiation therapist. – A person who is licensed under this Article to perform procedures involving administration of external source ionizing radiation to human beings for therapeutic purposes.

Radiographer. – A person who is licensed under this Article to perform a comprehensive set of diagnostic radiographic procedures using external ionizing radiation to produce radiographic, fluoroscopic, or digital images.

Radiologic imaging. – Any procedure or article intended for use in the diagnosis or visualization of disease or other medical conditions in human beings, including, but not limited to, radiography, nuclear medicine, fluoroscopy, and other procedures using ionizing radiation. Radiologic imaging does not include the performance of sonography procedures.

Radiologist. – A physician licensed under Article 1 of this Chapter who is board-eligible for certification or who is certified by the American Board of Radiology, the American Osteopathic Board of Radiology, the British Royal College of Radiology, or the Royal College of Physicians and Surgeons of Canada.

Radiologist assistant. – A licensed radiographer who is additionally licensed under this Article to perform a variety of activities under the supervision of a
radiologist in the areas of patient care, patient management, and radiologic imaging procedures.

"§ 90-738. License required; exemptions.
(a) License Required. – Except as provided in this section, only a person currently licensed under this Article may perform or offer to perform radiologic imaging or radiation therapy procedures on humans for diagnostic or therapeutic purposes or otherwise indicate or imply that the person is licensed to perform radiologic imaging or radiation therapy procedures.
(b) License Required for Employment. – No person or business entity shall knowingly employ a person who does not hold a license, or is not exempt under this Article, to perform radiologic imaging or radiation therapy procedures on humans for diagnostic or therapeutic purposes.
(c) No Limitation or Enlargement of Practice. – Nothing in this Article relating to radiologic imaging or radiation therapy shall limit or enlarge the practice of a licensed practitioner.
(d) Exemptions. – The provisions of this Article shall not apply to the following:
   (1) A licensed practitioner performing radiologic imaging procedures or administering radiation therapy.
   (2) A registered dental hygienist (RDH).
   (3) A dental assistant I or II who has satisfactorily completed one of the following:
      a. The North Carolina radiography equivalency examination.
      b. Dental assisting school through an American Dental Association-accredited program.
      c. The Dental Assisting National Board examination.
      d. Classification as a dental assistant II in this State under the laws regulating the practice of dentistry.
   (4) A resident physician licensed under Article 1 of this Chapter.
   (5) A student enrolled in and attending a school or college of medicine or radiologic imaging or radiation therapy who performs radiologic imaging or radiation therapy procedures on humans while under the supervision of a licensed practitioner, radiographer, radiation therapist, or nuclear medicine technologist holding a license under this Article.
   (6) A person administering radiologic imaging or radiation procedures as an employee of the United States government.
   (7) A person performing ultrasound procedures or sonography.
   (8) A person performing radiologic procedures or therapy on nonhuman subjects or cadavers.
   (9) A person licensed to perform radiologic imaging or radiation therapy who is performing supervised clinical procedures in preparation for certification in an additional radiologic imaging or radiation therapy modality who has registered with the Board. The Board may grant this exemption for a period not to exceed three years, and this exemption may be renewed by the Board.

"§ 90-739. Scope of practice; limitations.
(a) The Board shall establish licensure standards for the following radiologic imaging and radiation therapy modalities:
   (1) Limited X-ray machine operator.
   (2) Nuclear medicine technologist.
   (3) Radiation therapist.
   (4) Radiographer.
   (5) Radiologist assistant.
(b) A person holding a license under this Article may use radioactive substances or equipment emitting ionizing radiation for radiologic imaging or radiation therapy procedures only by prescription of an individual authorized by the State to prescribe radiologic imaging or radiation therapy procedures and under the supervision of a licensed practitioner.

(c) A person holding a license under this Article may use radioactive substances or equipment emitting ionizing radiation for radiologic imaging or radiation therapy procedures only within the scope of that license as specified in this Article and under the rules adopted by the Board.

(d) Individuals licensed as limited X-ray machine operators shall perform tasks only within the scope of the specific permit issued to them as provided in G.S. 90-742(c)(1) under the supervision of a licensed practitioner or radiographer and shall not perform computed tomography, fluoroscopy, mammography, radiation therapy, mobile imaging procedures, or imaging procedures using contrast media.

(e) Effective January 1, 2021, all individuals licensed to perform radiologic imaging and radiation therapy who perform computed tomography for diagnostic purposes must be certified in computed tomography by the American Registry of Radiologic Technologists, the Nuclear Medicine Certification Board, or another certification organization recognized by the Board.

(f) A person licensed to perform nuclear medicine technology may perform computed tomography for attenuation correction on hybrid imaging equipment.

(g) A person licensed to perform radiation therapy may perform computed tomography for treatment planning purposes.

(h) A person licensed to perform radiography may perform fluoroscopy and bone densitometry.

(i) A person licensed as a radiologist assistant shall not interpret images, make diagnoses, or prescribe medications or therapies.

“§ 90-740. Radiologic Imaging and Radiation Therapy Board of Examiners."

(a) Composition of Board. – The North Carolina Radiologic Imaging and Radiation Therapy Board of Examiners is hereby created. The Board shall consist of seven members appointed by the Governor and shall serve at the pleasure of the Governor. The initial board shall be appointed within 90 days following the effective date of this section. The members of the Board shall include:

1. One licensed nuclear medicine technologist.
2. One licensed practitioner who is a radiologist and supervises radiologic imaging or radiation therapy professionals.
3. One licensed practitioner who is not a radiologist and supervises radiologic imaging or radiation therapy professionals.
4. One licensed radiation therapist.
5. One licensed radiographer.
6. One radiologist assistant.
7. One public member.

(b) Board Member Qualifications for Appointment. – In addition to the requirements of subsection (a) of this section, board members shall meet the following qualifications:

1. Each board member shall be a resident of the State of North Carolina.
2. The public member shall be at least 21 years of age.
3. Except for the public member and the licensed practitioners, each board member shall have at least two years of experience performing radiologic imaging or radiation therapy in the modality for which the board member is appointed.
Edu
cator Appointment Required. – At least one of the board members appointed
shall be a full-time educator in an accredited educational program in radiologic imaging or
radiation therapy.

Terms of Office. – The terms of office shall be three years, except that the terms of
the members appointed to the initial board shall be as follows: Two members shall be
appointed for a term of one year, two members for a term of two years, and three members for
a term of three years. Vacancies shall be filled for an unexpired term only in the manner
provided by the original appointment. No member shall be eligible for appointment to serve
more than two consecutive terms.

Temporary Board Exemption to License Requirements. – A person who performs
radiologic imaging or radiation therapy procedures and is appointed to the initial board shall
not be required to hold a valid license issued by the Board until 12 months after the first
issuance of a license by the Board.

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

Officers. – The officers of the Board shall be a chair and a vice-chair, and other
officers deemed necessary by the Board to carry out the purposes of this Article. All officers
shall be elected annually by the Board for one-year terms and shall serve until their successors
are elected and qualified.

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

Meeting Attendance. – A member of the Board who fails to attend three meetings in
a 18-month period shall forfeit the member’s seat unless the chair, upon written request from
the member, finds that the member should be excused from a meeting because of illness or
death of a family member.

Quorum. – A majority of the voting members of the Board shall constitute a
quorum. No action may be taken by the Board except by affirmative vote of the majority of
those present and voting.

The Board shall have the following powers and duties:

(1) Administer this Article.
(2) Issue interpretations of this Article.
(3) Adopt rules as may be necessary to carry out the provisions of this Article.
(4) Establish the scope of practice for each license or permit type issued by the
Board.
(5) Employ and fix the compensation of personnel that the Board determines is
necessary to carry into effect the provisions of this Article and incur other
expenses necessary to effectuate this Article.
(6) Examine and determine the qualifications and fitness of applicants for
licensure, renewal of licensure, and reciprocal licensure. The Board may, in
its discretion, revise the licensing requirements of this Article for areas of
North Carolina that the Board deems too remote to contain enough qualified
licensees to perform radiologic imaging or radiation therapy procedures on
humans for diagnostic or therapeutic purposes.
(7) Set requirements for continuing education as a requirement for license
renewal. The Board may review and accept the continuing education and
recertification or continuing competency requirements established by a
radiologic imaging or radiation therapy certification organization for license renewal.

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

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

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

(11) Conduct administrative hearings in accordance with Article 3A of Chapter 150B of the General Statutes.

(12) Maintain a record of all proceedings and make available to licensees and other concerned parties an annual report of all Board action.

(13) Develop standards and adopt rules for the improvement of the administration of radiologic imaging or radiation therapy procedures in this State.

(14) Adopt a seal containing the name of the Board for use on all licenses and official reports issued by the Board.

(15) Establish criteria and standards for educational programs offered in the State on radiologic imaging and radiation therapy.

(16) Approve radiologic imaging and radiation therapy educational programs that the Board determines meet the criteria and standards established by the Board.

"§ 90-742. Requirements for licensure.

(a) A person seeking to obtain a license for a radiologic imaging or radiation therapy modality shall comply with each of the following requirements:

(1) At least 18 years of age at the time of application.

(2) Has a high school diploma or has passed an approved equivalency test.

(3) Satisfactory completion of a course of study in nuclear medicine, radiation therapy, or radiography, respectively, or its equivalent to be determined by the Board.

a. The curriculum for each course of study shall be no less stringent than the standards approved by the Joint Review Committee on Education in Radiologic Technology, Joint Review Committee on Education in Nuclear Medicine Technology, Regional Accrediting Agencies, or other educational accreditation agency approved by the Board.

b. A person who holds a current certification and registration by a certification organization recognized by the Board in a radiologic imaging or radiation therapy modality or specialization shall be deemed to have met the requirement of this paragraph for successful completion of a course of study in the modality.

(4) Pass an examination established or approved by the Board.

(b) Radiologist Assistant License. – In addition to the requirements of subsection (a) of this section, a person seeking to obtain a license as a radiologist assistant shall comply with each of the following requirements:

(1) Hold a current license as a radiographer and be currently certified and registered as a radiographer by the American Registry of Radiologic Technologists.

(2) Hold current certification and registration as a radiologist assistant by the American Registry of Radiologic Technologists or as a radiology practitioner assistant by the Certification Board of Radiology Practitioner Assistants.
(3) Submit to the Board clinical protocols signed by the supervising radiologist specifying procedures that are performed by the radiologist assistant, levels of radiologist supervision, and locations of practice designated by the supervising radiologist. Updated protocols shall be submitted biannually, consistent with license renewal. The radiologist assistant scope of practice shall be consistent with the most recent version of the Radiologist Assistant Practice Standards published by the American Society of Radiologic Technologists.

(c) Limited X-Ray Machine Operator License. – In addition to the requirements of subdivisions (1) and (2) of subsection (a) of this section, a person seeking to obtain a license as a limited X-ray machine operator shall pass an examination established or approved by the Board.

(1) The license of a limited X-ray machine operator shall be limited in scope through the issuance of permits to perform diagnostic X rays on specific anatomical areas of the human body. The permits that may be issued are as follows:


b. Extremities radiography permit. – Radiography of the upper and lower extremities, including the pectoral girdle.

c. Spine radiography permit. – Radiography of the vertebral column.

d. Skull/sinus radiology permit. – Radiography of the skull and facial structures.

e. Podiatric permit. – Radiography of the foot, ankle, and lower leg below the knee. Podiatric permit holders are limited to working under the supervision of a licensed podiatrist.

f. Bone densitometry technologist permit. – Persons who are certified by the International Society for Clinical Densitometry or the American Registry of Radiologic Technologists in bone densitometry equipment operation shall be granted a permit to perform bone densitometry testing.

(d) Change of Name or Address. – A person holding a license or permit issued under this Article shall notify the Board in writing within 90 days of any name or address change.

(e) Failure to Maintain Required Certification and Registration. – Within 30 days, a licensee shall submit written notification to the Board if the licensee:

(1) Fails to maintain a required certification and registration by a certification organization; or

(2) Is subject to any legal or disciplinary action other than minor traffic infractions or is subject to proceedings for acts or conduct substantially the same as acts or conduct that would constitute grounds for refusal to issue, refusal to renew, suspension, revocation, or other discipline of an applicant or a person holding license or permit under this Article by any of the following:

a. Licensing jurisdiction, whether in the United States or foreign.

b. Health care institution.

c. Professional society or association.

d. Certification organization.

e. Government agency.

f. Law enforcement agency.

g. Court.

§ 90-743. Examinations.
Article for nuclear medicine technology, radiation therapy, radiography, or radiologist assistant, the Board shall accept current certification and registration by a certification organization recognized by the Board in the applicant's or licensee's modality.

(b) Limited X-Ray Machine Operator Examination. – The Board shall use a limited X-ray machine operator examination administered by the American Registry of Radiologic Technologists for persons applying for a limited X-ray machine operator license and permit in nuclear medicine technology, radiation therapy, radiography or bone densitometry testing. The Board shall determine by regulation the examination score that constitutes successful completion.

(c) Acceptance of Chiropractic Radiologic Technologist Certification. – The Board may accept certification and registration from the American Chiropractic Registry of Radiologic Technologists to meet the requirement of this paragraph for successful completion of an examination for a person applying for a limited X-ray machine operator license and permit in spine radiography who works under the supervision of a chiropractor.

(d) Acceptance of Podiatric Medical Assistant Certification. – The Board may accept certification from the American Society of Podiatric Medical Assistants to meet the requirement of this paragraph for successful completion of an examination for a person applying for a limited X-ray machine operator license and permit in podiatric radiography who works under the supervision of a podiatrist.

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

(a) Issuance of License. – The Board shall issue a license to an applicant who meets the requirements for licensure specified in this Article and the regulations adopted by the Board, verified by oath or affirmation, upon payment of a fee as provided in G.S. 90-748.

(b) The Board may issue a license with authorization to perform more than one radiologic imaging or radiation therapy modality if the person is qualified in each modality.

(c) Temporary License. – The Board may issue a temporary license to any person whose license or license renewal may be pending or when issuance is for providing radiologic imaging or radiation therapy services to medically underserved areas as determined by the Board.

(d) New graduates awaiting national certification may be issued a provisional license for employment purposes for a period not to exceed one year.

(e) Temporary License for Cross-Training. – A person licensed under this Article may apply to the Board for a temporary license in an additional radiologic imaging or radiation therapy modality to complete clinical experience requirements for an applicable training pathway established by a certification organization recognized by the Board. Temporary licenses issued for training purposes shall expire three years after issuance.

(f) Display of License; License to Be Available Upon Request. – The copy of the current license of all license holders must be maintained at their places of employment.

§ 90-745. Educational programs approved by the Board.

(a) In order to obtain approval by the Board, educational programs in radiologic imaging or radiation therapy shall (i) be offered by a medical facility or educational institution and (ii) be affiliated with one or more hospitals or clinics to provide the requisite clinical education.

(b) The curriculum for each course of study in radiologic imaging or radiation therapy shall be no less stringent than the standards approved by the Joint Review Committee on Education in Radiologic Technology, Joint Review Committee on Education in Nuclear Medicine Technology, Regional Accrediting Agencies, or other educational accreditation agency approved by the Board.

§ 90-746. License renewal.
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, as provided in G.S. 90-748, 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.

As a condition of license renewal, each individual licensed as a radiographer, radiation therapist, nuclear medicine technologist, or limited X-ray machine operator shall be required to complete 24 hours of continuing education approved by the Board. Individuals licensed as radiologist assistants shall complete 50 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 or other certification organization recognized by the Board for renewal.

The Board shall notify a licensee at least 60 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.

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

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

The Board is authorized to charge and collect fees not to exceed the following:

1. Initial, provisional, or temporary license application fee, one hundred dollars ($100.00).
2. Biennial license fee, one hundred fifty dollars ($150.00).
3. Temporary license fee, one hundred dollars ($100.00).
4. Duplicate license, twenty-five dollars ($25.00).
5. License renewal late fee, seventy-five dollars ($75.00).

All fees payable to the Board shall be deposited in the name of the Board in financial institutions designated by the Board as official depositories and shall be used to pay all expenses incurred in carrying out the purposes of this Article.

All salaries, compensation, and expenses incurred to carry out the purposes of this Article shall be paid by the Board exclusively out of the fees received by the Board as authorized by this Article or out of funds received from other sources.

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

1. Obtaining a license by means of fraud, misrepresentation, or concealment of material facts.
2. Engaging in unprofessional conduct pursuant to rules adopted by the Board.
3. Having been convicted of or pleaded guilty or nolo contendere to a crime involving moral turpitude or any crime that indicates that the licensee or applicant is unfit or incompetent to administer radiologic imaging or radiation therapy procedures or that the licensee or applicant has deceived or defrauded the public.
Engaging in any act or practice in violation of any of the provisions of this Article or any rule adopted by the Board or aiding, abetting, or assisting any person in such a violation.

Committing an act or acts of malpractice, gross negligence, or incompetence in administering radiologic imaging or radiation therapy procedures.

Practicing as a person licensed to administer radiologic imaging or radiation therapy procedures without a current license.

Engaging in conduct that could result in harm or injury to the public.

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

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

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

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

The provisions of this act are severable. If any section, subsection, subdivision, paragraph, sentence, or clause of this act or its application to any person or circumstance is held invalid or unconstitutional, it shall not affect other provisions or applications of this act which can be given effect without the invalid provision or application.

Notwithstanding the requirements of G.S. 90-740, as enacted by Section 1 of this act, the initial appointees to the Radiologic Imaging and Radiation Therapy Board of Examiners filling the membership positions for licensed radiologist, licensed nuclear medicine technologist, licensed radiation therapist, licensed cardiovascular invasive specialist, and licensed limited X-ray machine operator do not have to meet the licensure requirements established in Section 1 of this act, provided that these initial appointees shall apply for and obtain a license from the Board within 90 days after the Board begins issuing licenses.

Persons other than radiologist assistants who have been engaged in the practice of radiologic imaging and radiation therapy and who do not hold a current registration from a voluntary professional certification organization approved by the Radiologic Imaging and Radiation Therapy Board of Examiners may continue to practice in the modality of radiologic imaging or radiation therapy in which they are currently employed provided that they (i) register with the Board on or before October 1, 2018, (ii) do not change the scope of their current employment practice, (iii) complete all continuing education requirements for their area of practice annually as prescribed by the Board, (iv) practice only under the supervision of a licensed practitioner; and (v) obtain a license from the Board on or before October 1, 2022.

Sections 2 and 3 of this act are effective when they become law. Except as otherwise provided, the remainder of this act becomes effective January 1, 2018.