GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2015

S SENATE BILL 498

Short Title:	Enhance Patient Safety in Radiologic Imaging.	(Public)
Sponsors:	Senators Meredith and Tucker (Primary Sponsors).	
Referred to:	Rules and Operations of the Senate.	

March 26, 2015

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:

"Article 43.

"Radiologic Technologists and Radiation Therapists.

"<u>§ 90-735. Title.</u>

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This Article may be cited as the "Patient Safety In Radiologic Imaging Act."

"§ 90-736. Findings.

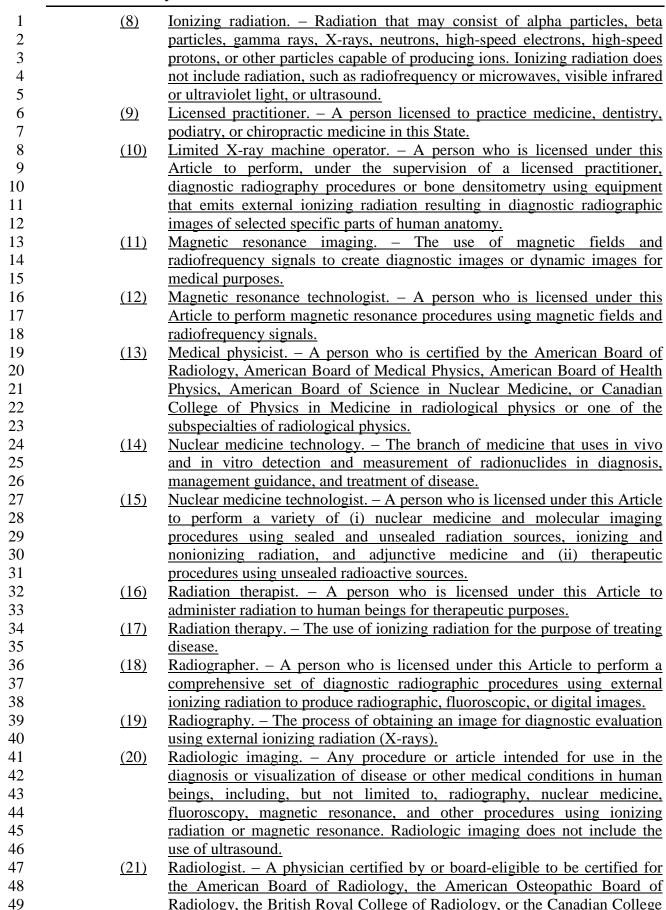
The General Assembly finds and declares that the citizens of this State are entitled to the maximum protection practicable from the harmful effects of improperly performed radiologic imaging and radiation therapy procedures and that protection and quality can be increased by requiring appropriate education 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) <u>Board. The Radiologic Imaging and Radiation Therapy Board of Examiners.</u>
- (2) Bone densitometry. The determination of bone mass by means of the radiation absorption by a skeleton or part of a skeleton.
- (3) Bone densitometry technologist. A person who is licensed pursuant to this Article as a limited X-ray machine operator with a permit to perform bone densitometry testing.
- (4) <u>Cardiovascular invasive specialist. A person who is licensed pursuant to this Article to perform fluoroscopy to visualize cardiac or vascular anatomy.</u>
- (5) Computed tomography. The process of producing sectional and three-dimensional images using external ionizing radiation.
- (6) Fluoroscopy. The exposure of a patient to X-rays in a fluoroscopy mode, including the positions of the patient, positioning of the fluoroscopy equipment and the selection of exposure factors.
- (7) Hybrid imaging equipment. Equipment that combines more than one radiologic imaging modality into a single device.





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of Physicians and Surgeons in that medical specialty.

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1 Radiologist assistant. – A person who is licensed under this Article to (22)2 perform a variety of activities under the supervision of a radiologist in the 3 areas of patient care, patient management, radiologic imaging, or 4 interventional procedures guided by radiologic imaging. 5 "§ 90-738. License required; exemptions. 6 On or after October 1, 2016, no person shall perform or offer to perform radiologic 7 imaging or administer or offer to administer radiation therapy procedures on humans for

diagnostic or therapeutic purposes as defined in this Article or otherwise indicate or imply that

the person is licensed to perform radiologic imaging procedures or administer radiation therapy unless that person is currently licensed as provided under this Article.

- The provisions of this Article shall not apply to the following: (b)
 - A licensed practitioner performing radiologic imaging procedures or administering radiation therapy.
 - A registered dental hygienist (RDH). (2)
 - A dental assistant I or II who has satisfactorily completed one of the (3) following:
 - The North Carolina radiography equivalency examination. a.
 - Dental assisting school through an American <u>b.</u> Dental Association-accredited program.
 - The Dental Assisting National Board examination. <u>c.</u>
 - d. Been classified as a dental assistant II in this State under the laws regulating the practice of dentistry.
 - A resident physician licensed under Article 1 of this Chapter. <u>(4)</u>
 - <u>(5)</u> 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, nuclear medicine technologist, magnetic resonance technologist, or cardiovascular invasive specialist holding a license under this Article.
 - (6) A person administering radiologic imaging or radiation procedures who is employed by the United States government when performing duties associated with that employment.
 - A person performing ultrasound procedures or sonography. (7)
 - (8) A person performing radiologic procedures or therapy on nonhuman subjects or cadavers.

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

- The Board shall establish licensure standards for the following radiologic imaging and radiation therapy modalities:
 - <u>(1</u>) Radiographer.
 - (2) Radiation therapist.
 - Nuclear medicine technologist. (3)
 - (4) Cardiovascular invasive specialist.
 - (5) Magnetic resonance technologist.
 - (6) Limited X-ray machine operator.
 - Radiologist assistant. (7)
- A person holding a license under this Article may use radioactive substances or equipment emitting ionizing or magnetic resonance for radiologic imaging and radiation therapy procedures on humans for diagnostic or therapeutic purposes 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.

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- (c) A person holding a license under this Article may use radioactive substances or equipment emitting ionizing or magnetic resonance for radiologic imaging and radiation therapy procedures on humans for diagnostic or therapeutic purposes only within the scope of that license as specified in this Article and under the rules adopted by the Board.
- (d) <u>Individuals licensed as cardiovascular invasive specialists shall not perform computed tomography, magnetic resonance imaging, mammography, nuclear medicine, radiation therapy, or radiography.</u>
- (e) Individuals licensed as limited X-ray machine operators shall perform tasks only within the scope of the specific permit issued to them by the Board for a particular area of the human anatomy as provided in G.S. 90-742(d) and shall not perform computed tomography, fluoroscopy, magnetic resonance imaging, mammography, radiation therapy, mobile imaging procedures, or imaging procedures using contrast media.
 - (f) The performance of computed tomography shall be limited as follows:
 - (1) Individuals licensed to perform radiation therapy may perform computed tomography for treatment simulation.
 - (2) <u>Individuals licensed to perform nuclear medicine may perform computed tomography fusion imaging on a hybrid unit.</u>
 - (3) By January 1, 2018, 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.
- (g) <u>Individuals licensed as radiologist assistants shall not interpret images, make diagnoses, or prescribe medications or therapies.</u>

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

- (a) <u>Creation. The North Carolina Radiologic Imaging and Radiation Therapy Board of Examiners is created.</u>
- (b) Composition and Terms. The Board shall consist of 11 members who shall serve staggered terms. The Board members shall be appointed by the Governor, the President Pro Tempore of the Senate, and the Speaker of the House of Representatives. Initial Board members shall be appointed on or before October 1, 2015, as follows:
 - (1) The Governor shall appoint one member who is a licensed radiographer who shall serve for a three-year term.
 - (2) The Governor shall appoint one member who is a licensed nuclear medicine technologist who shall serve for a two-year term.
 - (3) The Governor shall appoint one member who is a licensed radiation therapist who shall serve for a one-year term.
 - (4) The President Pro Tempore of the Senate shall appoint one member who is a full-time educator of a program that prepares providers licensed under this Article who shall serve for a two-year term.
 - (5) The President Pro Tempore of the Senate shall appoint one member who is a licensed magnetic resonance technologist who shall serve for a two-year term.
 - (6) The President Pro Tempore of the Senate shall appoint one member who is a licensed cardiovascular invasive specialist who shall serve for a one-year term.
 - (7) The President Pro Tempore of the Senate shall appoint one member who is a licensed radiologist assistant who shall serve for a three-year term.
 - (8) The Speaker of the House of Representatives shall appoint one member who is a radiologist who shall serve for a two-year term.

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- The Speaker of the House of Representatives shall appoint one member who 1 **(9)** 2 is a medical physicist who shall serve for a three-year term. 3
 - The Speaker of the House of Representatives shall appoint one member who (10)is a licensed physician practicing in a hospital setting who shall serve for a three-year term.
 - The Speaker of the House of Representatives shall appoint one public <u>(11)</u> member who shall serve for a two-year term.

Upon the expiration of the terms of the initial Board members, members shall be appointed by the appointing authority making the initial appointment for terms of three years and shall serve until their successors are appointed. Successors shall be appointed by the appointing authority making the original appointment and shall be registered in the same specialty as the member of the Board they will replace. No member may serve more than two consecutive terms.

- Qualifications. Except for the public member of the Board, every member of the Board shall hold a valid license issued by the Board in the category of license for that member's specialty, shall be a resident of this State, and shall remain in active practice and in good standing with the Board as a licensee during their terms. The public member shall be a resident of this State and shall not be (i) a currently or actively licensed practitioner or (ii) a person who administers radiation therapy procedures under this Article.
- Vacancies. A vacancy shall be filled in the same manner as the original appointment and shall be filled within 45 days after the vacancy occurs. Appointees to fill vacancies shall serve the remainder of the unexpired term and until their successors have been duly appointed and qualified.
- (e) Removal. - The Board may remove any of its members for neglect of duty, incompetence, or unprofessional conduct. A member subject to disciplinary proceedings as a licensee shall be disqualified from participating in the official business of the Board until the charges have been resolved.
- (f) Compensation. - 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 who shall be licensed under this Article, 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 (h) 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.

"§ 90-741. Powers of the Board.

The Board shall have the following powers and duties:

- Administer this Article. (1)
- (2) Issue interpretations of this Article.
- **(3)** Adopt rules as may be necessary to carry out the provisions of this Article.
- Employ and fix the compensation of personnel that the Board determines is (4) necessary to carry into effect the provisions of this Article and incur other expenses necessary to effectuate this Article.
- Examine and determine the qualifications and fitness of applicants for <u>(5)</u> licensure, renewal of licensure, and reciprocal licensure.
- Issue, renew, deny, suspend, or revoke licenses and carry out any <u>(6)</u> disciplinary actions authorized by this Article.

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- 1 (7) Set fees for licensure, license renewal, and other services deemed necessary to carry out the purposes of this Article.
 - (8) Conduct investigations for the purpose of determining whether violations of this Article or grounds for disciplining licensees exist.
 - (9) Conduct administrative hearings in accordance with Article 3A of Chapter 150B of the General Statutes.
 - (10) Maintain a record of all proceedings and make available to licensees and other concerned parties an annual report of all Board action.
 - (11) Develop standards and adopt rules for the improvement of the administration of radiologic imaging or radiation therapy procedures in this State.
 - (12) Adopt a seal containing the name of the Board for use on all licenses and official reports issued by the Board.
 - (13) Establish criteria and standards for educational programs offered in the State in radiologic imaging and radiation therapy.
 - (14) 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) The Board shall admit to examination for licensure any applicant who shall pay a nonrefundable fee, as set forth in G.S. 90-748, and submit satisfactory evidence, verified by oath or affirmation, that the applicant meets the following criteria:
 - (1) At the time of the application is at least 18 years of age.
 - (2) <u>Has obtained a high school diploma or a high school graduation equivalency</u> certificate.
- (b) In addition to the requirements of subsection (a) of this section, any person seeking to obtain a license for a specific modality of radiologic imaging or radiation therapy, other than a limited X-ray machine operator or radiologist assistant, shall comply with the following requirements:
 - (1) Satisfactory completion of a course of study in radiography, radiation therapy, magnetic resonance, cardiovascular invasive specialty, or nuclear medicine, respectively, or its equivalent to be determined by the Board. 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, Commission on Accreditation of Allied Health Education Programs, or any other appropriate accreditation agency approved by the Board, provided the standards are not in conflict with Board policy.
 - (2) Pass an examination established or approved by the Board.
- (c) <u>In addition to the requirements 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.</u>
- (d) 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:
 - (1) Chest radiography permit: radiography of the thorax, heart, and lungs.
 - (2) Extremities radiography permit: radiography of the upper and lower extremities, including the pectoral girdle.
 - (3) Spine radiography permit: radiography of the vertebral column. Spine radiology permit holders are limited to working under the supervision of a licensed chiropractor.
 - (4) Skull/sinus radiology permit: radiography of the skull and facial structures.

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- 1 (5) 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.

 4 (6) Bone densitometry technologist permit: notwithstanding the provisions of
 - (6) Bone densitometry technologist permit: notwithstanding the provisions of subsection (c) of this section, individuals who are certified by the International Society for Clinical Densitometry or the American Registry of Radiologic Technologists in bone densitometry shall be granted a permit to perform bone densitometry testing.
 - (e) In addition to the requirements of subsection (a) of this section, a person seeking to obtain a license as a radiologist assistant shall:
 - (1) Be licensed as a radiographer by meeting the requirements of subsection (b) of this section.
 - (2) Be certified and registered as a registered radiologist assistant by the American Registry of Radiologic Technologists or be certified as a radiology practitioner assistant by the Certification Board of Radiology Practitioner Assistants.
 - Submit to the Board clinical protocols signed by the supervising radiologist specifying procedures to be performed by the radiologist assistant, the level of supervision to be provided by the supervising radiologist, and locations of practice designated by the supervising radiologist. Updated protocols shall be submitted biannually consistent with the timing for radiologist 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.

"§ 90-743. Examinations.

- (a) To meet the requirement of examination, the Board shall accept current registration by the American Registry of Radiologic Technologists, Nuclear Medicine Technologist Certification Board, or Cardiovascular Credentialing International. The Board may accept current registration of other recognized national voluntary certification organizations, provided that the standards of that organization are substantially equivalent to those established by the Board.
- (b) 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 permit in chest, extremity, skull/sinus, podiatric, or spine radiography.
- (c) The Board may accept certification from the American Chiropractic Registry of Radiologic Technologists for persons applying for a limited permit in spine radiography.
- (d) The Board may accept certification from the North Carolina Board of Podiatry Examiners for persons applying for a limited permit in podiatric radiography.

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

- (a) The Board may issue a license to each applicant who meets the requirements for licensure specified in this Article, upon payment of a fee as provided in G.S. 90-748.
- (b) The Board may issue a temporary license to any person whose licensure or license renewal may be pending or when issuance is for the purpose of providing radiologic imaging or radiation therapy services to medically underserved areas as determined by the Board. 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 an 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. A temporary license shall not be issued for a period longer than 180 days.

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- (c) New graduates awaiting national certification may be issued a provisional license for employment purposes for a period not to exceed one year.
- (d) 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, 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 approved by the Board to 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, 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.
- (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. 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.
- (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 certification 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.

- (a) The Board is authorized to charge and collect fees not to exceed the following:
 - (1) <u>Initial, provisional, or temporary license application fee, one hundred dollars</u> (\$100.00).
 - (2) Biennial license fee, two hundred dollars (\$200.00).
 - (3) Temporary license fee, one hundred dollars (\$100.00).
 - (4) Provisional license fee, two hundred dollars (\$200.00).
- 51 <u>(5)</u> <u>Duplicate license, twenty-five dollars (\$25.00).</u>

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- 1 (6) <u>License renewal late fee, seventy-five dollars (\$75.00).</u>
 2 (b) All fees shall be set by the Board pursuant to rules adopted to
 - (b) All fees shall be set by the Board pursuant to rules adopted under this Article. 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.
 - (c) All salaries, compensation, and expenses incurred or allowed 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 funds received from other sources.

"§ 90-749. Disciplinary authority.

- (a) 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.
 - (4) 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.
 - (5) Committing an act or acts of malpractice, gross negligence, or incompetence in administering radiologic imaging or radiation therapy procedures.
 - (6) Practicing as a person licensed to administer radiologic imaging or radiation therapy procedures without a current license.
 - (7) Engaging in conduct that could result in harm or injury to the public.
 - (8) <u>Having a license issued under this Article revoked or suspended or other</u> disciplinary action taken, whether in this State or another jurisdiction.
 - (9) 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.
- (b) 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.

"§ 90-750. Violation a misdemeanor.

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.

"§ 90-751. Injunctive relief.

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, restraining order, or take other appropriate action."

SECTION 2. 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,

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October 1, 2020.

SECTION 4. This act is effective when it becomes law.

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

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, 2016; (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

SECTION 3. Persons other than radiologist assistants who have been engaged in

obtain a license from the Board within 90 days after the Board begins issuing licenses.

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