HOUSE No. 1887

The Commonwealth of Alassachusetts PRESENTED BY: Sean Garballey To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act relative to medical physics.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
Sean Garballey	23rd Middlesex	1/14/2019

HOUSE No. 1887

By Mr. Garballey of Arlington, a petition (accompanied by bill, House, No. 1887) of Sean Garballey relative to the regulation of the practice of medical physics. Public Health.

The Commonwealth of Alassachusetts

In the One Hundred and Ninety-First General Court (2019-2020)

An Act relative to medical physics.

radiation oncology; and nuclear medicine.

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Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Chapter 13 of the General Laws is hereby amended by inserting after section 109 the following section:

Section 110. (a) There shall be a board of registration in medical physics, hereinafter referred to as the board. The board shall consist of 9 members to be appointed by the commissioner of the department of public health. Members shall be residents of the commonwealth. The board shall be comprised of: 5 licensed medical physicists; 3 licensed physicians registered pursuant to chapter 112; and 1 representative of the general public, subject to the provisions of section 9B. The 5 licensed medical physicist board members shall represent the following specialties: diagnostic radiological physics; therapeutic radiological or radiation oncology physics; medical nuclear physics; and medical health physics. The 3 licensed physicians shall represent the following specialties: diagnostic radiology; radiation therapy or

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(b) Members of the board shall be appointed for a term of 3 years, except of the members of the first board, 5 members shall be appointed for terms of 3 years, and 4 members shall be appointed for terms of 2 years. No member shall be appointed to more than 2 consecutive full-terms, provided, however, that a member appointed for less than a full-term may serve 2 full-terms in addition to such of a part of a full-term, and a former member shall again be eligible for appointment after a lapse of 1 or more years.

- (c) The board shall meet not less than 2 times per calendar year. At its first meeting and annually thereafter, the board shall elect from among its members a chairperson, a vice-chairperson and secretary who shall each serve for 1 year and until a successor is appointed and qualified. Board members shall serve without compensation but shall be reimbursed for actual and reasonable expenses incurred in the performance of their duties. The board shall undertake the duties as the rules and regulations of said board shall direct, including the provisions included in sections 275 to 285 of chapter 112. Notwithstanding these provisions, the board shall assist the board of medicine solely in medical physics matters. The licensure requirements for licensed medical physicists shall be waived for the initial state board appointees, provided that such appointees shall have received national certification in their specialty.
- SECTION 2. Chapter 112 of the General Laws is hereby amended by adding the following 11 sections:-
- Section 265. For the purposes of sections 275 to 285, inclusive, the following words shall have the following meanings unless the context clearly requires otherwise:-
- 33 "Board", the board of registration in medical physics established under section 109 of 34 chapter 13.

35 "Clinical", activities directly relating to the treatment or diagnosis of human ailments

"Direct Supervision", a licensed medical physicist must exercise general supervision and be present in the facility and immediately available to furnish assistance and direction throughout the performance of the procedure but is not required to be present in the room when the procedure is being performed.

"General Supervision", a procedure performed under a licensed medical physicist's overall direction and control but the licensed medical physicist's presence is not required during the performance of the procedure. The training of the personnel who actually perform the procedure and the maintenance of the necessary equipment and supplies are the continuing responsibility of the licensed medical physicist.

"Medical physics", a branch of physics that is associated with the practice of medicine by the use of principles and accepted protocols of physics to provide the quality, quantity, and placement of radiation during the performance of a radiological procedure.

"Personal Supervision", a licensed medical physicist must exercise general supervision and be present in the room during the performance of the procedure.

"Radiation", the ionizing or non-ionizing radiation above background levels which is used to perform a diagnostic or therapeutic medical or dental radiological procedure.

"Radiological Physics", shall consist of diagnostic radiological physics, therapeutic radiological physics or radiation oncology physics, medical nuclear physics and medical health physics.

"Radiological Procedure", a test, measurement, calculation, or radiation exposure used in the diagnosis or treatment of diseases or other medical or dental conditions in human beings that includes therapeutic radiation, diagnostic radiation, nuclear magnetic resonance, or nuclear medicine procedures.

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"Specialty" or "specialty area", includes the following branch or branches of special competence within medical physics: (1)"Therapeutic Radiological Physics" or "Radiation Oncology Physics", a branch of medical physics relating to the therapeutic applications of x-rays, gamma rays, electron and charged particle beams, neutrons and radiations from sealed radionuclide sources; the equipment associated with their production, use, measurement and evaluation; the quality of images resulting from their production and use; and the medical health physics associated with this subfield. (2) "Diagnostic Radiological Physics", a branch of medical physics relating to the diagnostic applications of x rays, gamma rays from sealed sources, ultrasonic radiation, radio frequency radiation and magnetic fields; the equipment associated with their production, use, measurement and evaluation; the quality of images resulting from their production and the use of medical health physics associated with this subfield; (3) "Medical Nuclear Physics", a branch of medical physics pertaining to the therapeutic and diagnostic applications of radionuclides, except those used in sealed sources for therapeutic purposes, the equipment associated with their production, use, measurement and evaluation; the quality of images resulting from their production and use and the medical health physics associated with this subfield; and (4) "Medical Health Physics", a branch of medical physics pertaining to the safe use of x rays, gamma rays, electron and other charged particle beams or neutrons or radionuclides and of radiation from sealed radionuclide sources for both diagnostic and therapeutic purposes, except with regard to the application of radiation to patients for diagnostic

or therapeutic purposes and the instrumentation required to perform appropriate radiation surveys.

Section 266. The board shall adopt, amend and rescind rules and regulations as it deems necessary for the proper conduct of its duties. The board shall keep a full record of its proceedings and keep a register of all persons licensed by it, which shall be available for public inspection. The register shall contain the name of every active licensee, the licensee's last known place of business and last known place of residence, and the date and number of the licensee's license as a medical physicist.

Section 267. The board shall: (1) adopt rules and regulations establishing licensing requirements; (2) issue licenses to those applicants it finds qualified; (3) investigate complaints against persons licensed under this section; (4) hold hearings and order the disciplinary sanction of any person who violates any of the provisions of sections 265 to 275, inclusive, or a regulation of the board; (5) approve education and training programs that meet the requirements of the board and sections 265 to 275, inclusive, and deny revoke, or suspend approval of such programs for failure to meet the requirements; (6) adopt standards for approved medical physicist education and training; (7) adopt professional continuing education requirements for medical physicists; and (8) adopt ethical standards.

Section 268. The practice of the profession of medical physics, as referred to in sections 265 to 275, inclusive, shall mean the use of principles and accepted protocols of physics to provide the quality, quantity, and placement of radiation during the performance of a radiological procedure. A license to practice medical physics shall be issued with special competency in one or more specialty areas in which the licensee has satisfied the requirements of section 270. The

practice in any specialty by a person whose license is not issued with special competency for such specialty shall be deemed the unauthorized practice of the profession of medical physics. Only a person licensed under section 270 shall practice the profession of medical physics and shall use the title "licensed medical physicist".

Section 269. A person who desires to be licensed as a medical physicist shall apply to the board in writing on an application form prescribed and furnished by the board. The applicant shall include in the application statements under oath satisfactory to the board showing that the applicant possesses the qualification required by section 270. At the time of filing the application, an applicant shall pay to the board a fee which shall be set by the secretary of administration and finance.

Section 270. To be eligible for licensure as a medical physicist, an applicant shall fulfill the following requirements:

(a) file an application with the board;

- (b) have received an education including a graduate degree from an accredited college or university in accordance with regulations and have completed such courses as defined by the board in the medical physics specialty in which the applicant has applied for a license;
- (c) have experience in his or her medical physics specialty satisfactory to the board and in accordance with regulations;
- (d) receive and maintain board certification in his or her medical physics specialty satisfactory to the board; and
- (e) pay the fees associated with licensing for a medical physicist.

121 Section 271. (a) The board may issue a provisional license to any person who: 122 (1) fulfills all requirements for a licensed medical physicist under section 270 except 123 those relating to board certification or experience; or 124 (2) is enrolled in a graduate or post-graduate program approved by the board; or 125 (3) has been licensed or certified in good standing as a practitioner in a subspecialty of 126 medical physics for at least 2 years in another jurisdiction, including a foreign country, that has 127 licensing or certification requirements substantially equivalent to the requirements of sections 128 265 to 275 as determined by the board, and 129 (i) has passed a national or other examination recognized by the board relating to the 130 subspecialties of medical physics; and 131 (ii) is sponsored by a person licensed under sections 265 to 275 with whom the 132 provisional license holder will practice during the time the person holds a provisional license. 133 (b) An individual with a provisional license shall be authorized to practice medical 134 physics only under the direct supervision of a licensed medical physicist and only in the sub-135 specialty of such licensed medical physicist. 136 (c) A provisional license permit shall be valid for two years. It may be renewed at the 137 discretion of the board. 138 (d) Medical physics experience obtained in the commonwealth to be credited towards the 139 experience requirement for licensure shall be obtained under a provisional license.

Section 272. Nothing in sections 265 to 275 shall be construed to:

(a) Affect, prevent or in any manner expand or limit the authority of any person otherwise authorized by law or regulation to practice any function of a medical physicist, or any department or agency authorized by law or regulation to regulate the use of radiation, nor

- (b) Prohibit the repair or calibration of any test equipment used by licensed medical physicists by any person otherwise allowed to do so under state or federal law, nor
- (c) Serve to limit radiologic and/or imaging technologists or any individual otherwise authorized by law or regulation from performing quality control measurements or obtaining quality control data under the supervision of a licensed medical physicist, nor
- (d) Serve to limit neither a service engineer in the repair of radiation producing equipment nor an installation engineer in the installation of radiation producing equipment.

Section 273. Within time frame determined by the effective date of regulations implementing the provisions of sections 275 to 285, the board may issue a license to practice medical physics within one or more specialties in this state, without board certification, to a person who meets the requirements of paragraphs (a) and (b) of section 280 and who in addition has earned a bachelor's, master's or doctoral degree from an accredited college or university that signifies the completion of a course of study acceptable to the board, and has demonstrated to the board's satisfaction, in the case of an earned bachelor's degree, the completion of at least 15 years of full-time work experience in the medical physics specialty for which application is made, or, in the case of an earned master's or doctoral degree, the completion of at least 2 years of full-time work experience in the 7 years preceding the date of application in the medical physics specialty for which application is made and the equivalent of 1 year or more of full-time work experience in the 10 years preceding the date of application for each additional specialty

for which application is made. Applicants for licensure under this section shall be filed with the board not later than 18 months after the effective date of this act.

Section 274. The board shall require continuing education sufficient to maintain professional certification as defined by the board by regulation.

Section 275. (a) The board may, after a hearing pursuant to chapter 30A, revoke, suspend, or cancel the license of a medical physicist, or reprimand or censure a medical physicist, or place any medical physicist licensed under section 280 on probation, upon proof satisfactory to a majority of the board that said medical physicist:

- (1) fraudulently or deceptively obtained or attempted to obtain licensure as a medical physicist;
- (2) fraudulently violated any provision of law relating to the practice of medicine or medical physics, or any rule of regulation adopted hereunder;
- (3) acted with gross misconduct in the practice of medical physics or of practicing medical physics fraudulently, or beyond its authorized scope, or with gross incompetence, or with gross negligence on a particular occasion or negligence on repeated occasions;
- (4) practiced medical physics while the ability to practice is impaired by a physical or mental illness, alcohol abuse or substance abuse;
- (5) knowingly permitted, aided or abetted an unlicensed person to perform activities requiring a license for purposes of fraud, deception or personal gain;
- (6) has been convicted of a criminal offense which reasonably calls into question the ability to practice medical physics;

(7) violated any rule or regulation of the board; or

- (8) acted in a manner which is professionally unethical according to ethical standards of the professional of medical physics or violated any provisions of section 275 to 285.
- (b) If after hearing the board finds that there are grounds to suspend or revoke a license to practice medical physics, or to reprimand a licensed medical physicist, the board may impose a fine instead of suspending the license or in addition to suspending or revoking the license or reprimanding the licensee.
- (c) Unless the board agrees to accept the surrender of a license of an individual the board licenses, the individual may not surrender the license nor may the license lapse by operation of law while the individual is under investigation or while charges are pending. The board may set conditions on its agreement to accept surrender of a license.
- SECTION 3. Nothing in this act shall preclude any person who was practicing medical physics before the effective date of this act from practicing medical physics in the commonwealth until the board of medical physics establishes procedures for the licensure of medical physics pursuant to sections 275 to 285, inclusive, of chapter 112.