

HOUSE No. 3973

The Commonwealth of Massachusetts

HOUSE OF REPRESENTATIVES, March 25, 2014.

The committee on Public Health to whom was referred the petition (accompanied by bill, House, No. 1984) of of Carlo Basile relative to the practice of medical physics and the harmful effects of excessive and unnecessary radiation, reports recommending that the accompanying bill (House, No. 3973) ought to pass.

For the committee,

JEFFREY SANCHEZ.

HOUSE No. 3973

The Commonwealth of Massachusetts

In the Year Two Thousand Fourteen

An Act relative to the practice of medical physics.

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

1 SECTION 1. Chapter 13 of the General Laws is hereby amended by adding the following
2 section:

3 Section 109. (a) There shall be a board of registration in medical physics, herein called
4 the board. The board shall consist of 8 members who are residents of the commonwealth, who
5 shall be appointed by the governor, 4 of whom shall be licensed medical physicists, 3 of whom
6 shall be physicians registered pursuant to chapter 112, and 1 of whom shall be a member of the
7 general public, subject to the provisions of section 9B.

8 Licensed medical physicist board members shall include representatives from the
9 following specialties: diagnostic radiological physics, therapeutic radiological or radiation
10 oncology physics, medical nuclear physics, and medical health physics.

11 Physician board members shall include representatives from the following specialties:
12 diagnostic radiology, radiation therapy or radiation oncology, and nuclear medicine.

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

19 (c) Any member of the board may be removed by the governor for neglect of duty,
20 misconduct or malfeasance or misfeasance in office after being given a written statement of the
21 charges against him and sufficient opportunity to be heard thereon. Upon the death or removal

22 for cause of a member of the board, the governor shall fill the vacancy for the remainder of that
23 member's term.

24 (d) The board shall meet not less than 2 times per calendar year. At its first meeting and
25 annually thereafter, the board shall elect from among its members a chairperson, a vice-
26 chairperson and a secretary who shall each serve for 1 year and until a successor is appointed and
27 qualified. Board members shall serve without compensation but shall be reimbursed for actual
28 and reasonable expenses incurred in the performance of their duties.

29 SECTION 2. Chapter 112 of the General Laws is hereby amended by adding the
30 following 14 sections:-

31 Section 264. As used in sections 264 to 277, inclusive, the following words shall have
32 the following meanings:-

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.
36 "Diagnostic radiological physics", the medical physics specialty relating to the diagnostic
37 applications of x rays, gamma rays from sealed sources, ultrasonic radiation, radio frequency
38 radiation and magnetic fields; the equipment associated with their production, use, measurement
39 and evaluation; the quality of images resulting from their production and the use of medical
40 health physics associated with this specialty.

41 "Direct Supervision", a qualified medical physicist exercising general supervision and
42 present in the facility and immediately available to furnish assistance and direction throughout
43 the performance of the procedure but is not required to be present in the room when the
44 procedure is being performed.

45 "General Supervision", a procedure is performed under a qualified medical physicist's
46 (QMP) overall direction and control but the QMP's presence is not required during the
47 performance of the procedure. The training of the personnel who actually perform the procedure
48 and the maintenance of the necessary equipment and supplies are the continuing responsibility of
49 the QMP.

50 "Medical health physics", the medical physics specialty pertaining to the safe use of x
51 rays, gamma rays, electron and other charged particle beams, neutrons or radionuclides and of
52 radiation from sealed radionuclide sources for both diagnostic and therapeutic purposes, except
53 with regard to the application of radiation to patients for diagnostic or therapeutic purposes and
54 the instrumentation required to perform appropriate radiation surveys.

55 "Medical nuclear physics", the medical physics specialty pertaining to the therapeutic and
56 diagnostic applications of radionuclides, except those used in sealed sources for therapeutic

57 purposes; the equipment associated with their production, use, measurement and evaluation; the
58 quality of images resulting from their production and use and the medical health physics
59 associated with this specialty.

60 "Medical physics", the subfield of physics that is associated with the practice of
61 medicine.

62 "Personal Supervision", a qualified medical physicist exercising general supervision and
63 is present in the room during the performance of the procedure.

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

66 "Radiological physics", diagnostic radiological physics, therapeutic radiological physics
67 or radiation oncology physics, medical nuclear physics and medical health physics.

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

72 "Specialty" or "specialty area", the following subfield or subfields of special competence
73 within medical physics: diagnostic radiological physics, medical health physics, medical nuclear
74 physics and therapeutic radiological physics or radiation oncology physics.

75 "Therapeutic radiological physics" or "radiation oncology physics", the medical physics
76 specialty relating to the therapeutic applications of x-rays, gamma rays, electron and charged
77 particle beams, neutrons and radiations from sealed radionuclide sources; the equipment
78 associated with their production, use, measurement and evaluation; the quality of images
79 resulting from their production and use; and the medical health physics associated with this
80 specialty.

81 Section 265. The board shall adopt, amend and rescind rules and regulations as it deems
82 necessary for the proper conduct of its duties.

83 Section 266. The board shall keep a full record of its proceedings and keep a register of
84 all persons licensed by it, which shall be available for public inspection. The register shall
85 contain the name of every living licensee, the licensee's last known place of business and last
86 known place of residence, and the date and number of the licensee's license as a medical
87 physicist.

88 Section 267: The board shall:

89 (1) issue licenses to those applicants it finds qualified;

- 90 (2) adopt regulations establishing licensing and licensing renewal requirements;
- 91 (3) investigate complaints against persons licensed under this section;
- 92 (4) hold hearings and order the disciplinary sanction of a person who violates any
93 provisions of sections 264 to 277, inclusive, or a regulation of the board;
- 94 (5) approve education and training programs that meet the requirements of the board
95 and sections 264 to 277, inclusive, and deny revoke, or suspend approval of such programs for
96 failure to meet the requirements;
- 97 (6) adopt standards for approved medical physicist education and training;
- 98 (7) adopt professional continuing education requirements for medical physicists; and
- 99 (8) adopt ethical standards.

100 Section 268. The practice of the profession of medical physics, as referred to in sections
101 264 to 277 inclusive, shall mean the use of principles and accepted protocols of physics to
102 provide the quality, quantity, and placement of radiation during the performance of a radiological
103 procedure.

104 A license to practice medical physics may be issued with special competency in one or
105 more specialty areas in which the licensee has satisfied the provisions of section 271.

106 The practice in any specialty by a person whose license is not issued with special
107 competency for such specialty shall be deemed the unauthorized practice of the profession of
108 medical physics.

109 Only a person licensed under sections 264 to 277 shall practice the profession of medical
110 physics.

111 Section 269. Only a person licensed under section 271 shall use the title "licensed
112 medical physicist".

113 Section 270. A person who desires to be licensed as a medical physicist shall apply to the
114 board in writing on an application form prescribed and furnished by the board. The applicant
115 shall include in the application statements under oath satisfactory to the board showing that the
116 applicant possesses the qualifications required by section 271. At the time of filing the
117 application, an applicant shall pay to the board a fee which shall be set by the secretary of
118 administration and finance.

119 Section 271. To be eligible for licensure by the board as a medical physicist, an applicant
120 shall:

121 (1) have received an education including a graduate degree from an accredited
122 college or university in accordance with requirements prescribed by the board. Such person shall
123 have completed such courses as defined by the board to practice in the medical physics specialty
124 in which the applicant has applied for a license;

125 (2) meet practical experience requirements prescribed by the board in his or her
126 medical physics specialty; and

127 (3) receive and maintain board certification in his or her medical physics specialty
128 satisfactory to the board.

129 Section 272. (a) The board may issue a provisional license to persons who:

130 (1) fulfills all requirements for a licensed medical physicist under section 271 except
131 those relating to board certification or experience; or

132 (2) is enrolled in a medical physics graduate or post-graduate program approved by
133 the board; or

134 (3) has been licensed or certified in good standing as a practitioner of 1 of the
135 subspecialties of medical physics for at least 2 years in another jurisdiction, including a foreign
136 country, that has licensing or certification requirements substantially equivalent to the
137 requirements of sections 264 to 277 as determined by the board, and

138 i. has passed a national or other examination recognized by the board relating to the
139 subspecialties of medical physics; and

140 ii. is sponsored by a person licensed under sections 264 to 277 with whom the
141 provisional license holder will practice during the time the person holds a provisional license.

142 (b) An individual with a provisional license shall be authorized to practice medical
143 physics only under the direct supervision of a licensed medical physicist and only in the sub-
144 specialty of such licensed medical physicist.

145 (c) A provisional license permit shall be valid for 2 years. It may be renewed at the
146 discretion of the board.

147 (d) Medical physics experience obtained in the commonwealth to be credited towards the
148 experience requirement for licensure shall be obtained under a provisional license.

149 Section 273. Nothing in sections 264 to 277 shall be construed to:

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

153 (b) Prohibit the repair or calibration of any test equipment used by licensed medical
154 physicists by any person otherwise allowed to do so under state or federal law; nor

155 (c) Serve to limit radiologic and/or imaging technologists or any individual otherwise
156 authorized by law or regulation from performing quality control measurements or obtaining
157 quality control data under the supervision of a licensed medical physicist; nor

158 (d) Serve to limit neither a service engineer in the repair of radiation producing
159 equipment nor an installation engineer in the installation of radiation producing equipment.

160 Section 274. The board may issue a license to practice medical physics within 1 or more
161 specialties in this state, without board certification, to a person who meets the requirements of
162 clause (1) and (2) of section 271 and who in addition has earned a bachelor's, master's or doctoral
163 degree from an accredited college or university that signifies the completion of a course of study
164 acceptable to the board, and has demonstrated to the board's satisfaction, in the case of an earned
165 bachelor's degree, the completion of at least 15 years of full-time work experience in the medical
166 physics specialty for which application is made, or, in the case of an earned master's or doctoral
167 degree, the completion of at least 2 years of full-time work experience in the 7 years preceding
168 the date of application in the medical physics specialty for which application is made and the
169 equivalent of 1 year or more of full-time work experience in the 10 years preceding the date of
170 application for each additional specialty for which application is made.

171 Applicants for licensure under this section shall be filed with the board not later than 18
172 months after the effective date of this act.

173 Section 275. The board shall require continuing education sufficient to maintain
174 professional certification.

175 Section 276. (a) The board may, after a hearing pursuant to chapter 30A, revoke,
176 suspend, or cancel the license of a medical physicist, or reprimand or censure a medical physicist
177 if it finds upon proof satisfactory to the board that such medical physicist:

178 (1) Fraudulently or deceptively obtains or attempts to obtain licensure as a medical
179 physicist;

180 (2) violated any provision of law relating to the practice of medicine or medical
181 physics, or any rule or regulation adopted thereunder;

182 (3) acted with gross misconduct in the practice of medical physics or of practicing
183 medical physics fraudulently, or beyond its authorized scope, or with gross incompetence, or
184 with gross negligence on a particular occasion or negligence on repeated occasions;

185 (4) practiced medical physics while the ability to practice is impaired by alcohol,
186 drugs, physical disability or mental instability;

187 (5) knowingly permitted, aided or abetted an unlicensed person to perform activities
188 requiring a license for purposes of fraud, deception or personal gain;

189 (6) has been convicted of a criminal offense which reasonably calls into question the
190 ability to practice medical physics;

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

192 (8) acted in a manner which is professionally unethical according to ethical standards
193 of the profession of medical physics or violated any provision of sections 264 to 277; or

194 (9) is disciplined by a licensing or disciplinary authority or convicted or disciplined
195 by a court of any state or country or disciplined by any branch of the United States uniformed
196 services or the Veterans' Administration for an act that would be grounds for disciplinary action
197 under this section.

198 (b) If after a hearing the board finds that there are grounds to suspend or revoke a license
199 to practice medical physics, or to reprimand a licensed medical physicist, the board may impose
200 a fine instead of suspending the license or in addition to suspending or revoking the license or
201 reprimanding the licensee.

202 (c) Unless the board agrees to accept the surrender of a license of an individual the board
203 licenses, the individual may not surrender the license nor may the license lapse by operation of
204 law while the individual is under investigation or while charges are pending. The board may set
205 conditions on its agreement to accept surrender of a license.

206 Section 277. (a) Any person who practices medical physics without a license granted
207 pursuant to sections 264 to 277, inclusive, shall be punished by a fine of not less than \$100 nor
208 more than \$1,000, or by imprisonment for not more than 3 months, or by both. The board may
209 petition in any court of competent jurisdiction for an injunction against any person practicing
210 medical physics or any specialty thereof without a license. Such injunction may be issued
211 without proof of damage sustained by any person. Such injunction shall not relieve such person
212 from criminal prosecution for practicing without a license.

213 (b) Nothing in this section shall be construed to prevent or restrict the practice, service or
214 activities of (1) any person licensed in the commonwealth from engaging in activities within the
215 scope of practice of the profession or occupation for which such person is licensed, provided that
216 such person does not represent to the public, directly or indirectly, that such person is licensed
217 under sections 264 to 277, inclusive, and that such person does not use any name, title or
218 designation indicating that such person is licensed under said sections 264 to 277, inclusive; (2)
219 any person employed as a medical physicist by the federal government or an agency thereof if
220 that person provides medical physics services solely under the direction and control of the
221 organization by which such person is employed.

222 SECTION 3. The board of medical physicists, established pursuant to section 109 of
223 chapter 13 of the general laws, shall establish regulations for the licensure of individuals
224 practicing medical physics prior to the date on which the board commences issuing licenses.

225 SECTION 4. Nothing in this act shall preclude any person who was practicing medical
226 physics before the effective date of this act from practicing medical physics in the
227 commonwealth until the board of medical physics establishes procedures for the licensure of
228 medical physics pursuant to sections 264 to 277, inclusive, of chapter 112 of the general laws.