

HOUSE No. 4097

The Commonwealth of Massachusetts

In the Year Two Thousand Twelve

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
2 following 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,

11 medical nuclear physics, and medical health physics.

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

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

20 (c) Any member of the board may be removed by the governor for neglect of duty,
21 misconduct or malfeasance or misfeasance in office after being given a written statement of the
22 charges against him and sufficient opportunity to be heard thereon. Upon the death or removal
23 for cause of a member of the board, the governor shall fill the vacancy for the remainder of that
24 member's term.

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

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

32 Section 263. As used in sections 263 to 276, inclusive, the following words shall have
33 the following meanings:-

34 "Board", the board of registration in medical physics, established under section 109 of
35 chapter 13.

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

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

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

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

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

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

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

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

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

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

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

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

76 "Therapeutic radiological physics" or "radiation oncology physics", the medical physics
77 specialty relating to the therapeutic applications of x-rays, gamma rays, electron and charged
78 particle beams, neutrons and radiations from sealed radionuclide sources; the equipment

79 associated with their production, use, measurement and evaluation; the quality of images
80 resulting from their production and use; and the medical health physics associated with this
81 specialty.

82 Section 264. The board shall adopt, amend and rescind rules and regulations as it deems
83 necessary for the proper conduct of its duties.

84 Section 265. The board shall keep a full record of its proceedings and keep a register of
85 all persons licensed by it, which shall be available for public inspection. The register shall
86 contain the name of every living licensee, the licensee's last known place of business and last
87 known place of residence, and the date and number of the licensee's license as a medical
88 physicist.

89 Section 266: The board shall:

- 90 (1) issue licenses to those applicants it finds qualified;
- 91 (2) adopt regulations establishing licensing and licensing renewal requirements;
- 92 (3) investigate complaints against persons licensed under this section;
- 93 (4) hold hearings and order the disciplinary sanction of a person who violates any
94 provisions of sections 263 to 276, inclusive, or a regulation of the board;
- 95 (5) approve education and training programs that meet the requirements of the board
96 and sections 263 to 276, inclusive, and deny revoke, or suspend approval of such programs for
97 failure to meet the requirements;
- 98 (6) adopt standards for approved medical physicist education and training;

- 99 (7) adopt professional continuing education requirements for medical physicists; and
100 (8) adopt ethical standards.

101 Section 267. The practice of the profession of medical physics, as referred to in sections
102 263 to 276 inclusive, shall mean the use of principles and accepted protocols of physics to
103 provide the quality, quantity, and placement of radiation during the performance of a radiological
104 procedure.

105 A license to practice medical physics may be issued with special competency in one or
106 more specialty areas in which the licensee has satisfied the provisions of section 270.

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

110 Only a person licensed under sections 263 to 276 shall practice the profession of medical
111 physics.

112 Section 268. Only a person licensed under section 270 shall use the title "licensed
113 medical physicist".

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

120 Section 270. To be eligible for licensure by the board as a medical physicist, an applicant
121 shall:

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

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

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

130 Section 271. (a) The board may issue a provisional license to persons who:

131 (1) fulfills all requirements for a licensed medical physicist under section 270 except
132 those relating to board certification or experience; or

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

135 (3) has been licensed or certified in good standing as a practitioner of 1 of the
136 subspecialties of medical physics for at least 2 years in another jurisdiction, including a foreign
137 country, that has licensing or certification requirements substantially equivalent to the
138 requirements of sections 263 to 276 as determined by the board, and

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

141 ii. is sponsored by a person licensed under sections 263 to 276 with whom the
142 provisional license holder will practice during the time the person holds a provisional license.

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

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

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

150 Section 272. Nothing in sections 263 to 276 shall be construed to:

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

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

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

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

161 Section 273. The board may issue a license to practice medical physics within 1 or more
162 specialties in this state, without board certification, to a person who meets the requirements of
163 clause (1) and (2) of section 270 and who in addition has earned a bachelor's, master's or doctoral
164 degree from an accredited college or university that signifies the completion of a course of study
165 acceptable to the board, and has demonstrated to the board's satisfaction, in the case of an earned
166 bachelor's degree, the completion of at least 15 years of full-time work experience in the medical
167 physics specialty for which application is made, or, in the case of an earned master's or doctoral
168 degree, the completion of at least 2 years of full-time work experience in the 7 years preceding
169 the date of application in the medical physics specialty for which application is made and the
170 equivalent of 1 year or more of full-time work experience in the 10 years preceding the date of
171 application for each additional specialty for which application is made.

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

174 Section 274. The board shall require continuing education sufficient to maintain
175 professional certification.

176 Section 275. (a) The board may, after a hearing pursuant to chapter 30A, revoke,
177 suspend, or cancel the license of a medical physicist, or reprimand or censure a medical physicist
178 if it finds upon proof satisfactory to the board that such medical physicist:

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

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

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

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

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

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

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

193 (8) acted in a manner which is professionally unethical according to ethical standards
194 of the profession of medical physics or violated any provision of sections 263 to 276; or

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

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

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

207 Section 276. (a) Any person who practices medical physics without a license granted
208 pursuant to sections 263 to 276, inclusive, shall be punished by a fine of not less than \$100 nor
209 more than \$1,000, or by imprisonment for not more than 3 months, or by both. The board may
210 petition in any court of competent jurisdiction for an injunction against any person practicing
211 medical physics or any specialty thereof without a license. Such injunction may be issued
212 without proof of damage sustained by any person. Such injunction shall not relieve such person
213 from criminal prosecution for practicing without a license.

214 (b) Nothing in this section shall be construed to prevent or restrict the practice, service or
215 activities of (1) any person licensed in the commonwealth from engaging in activities within the
216 scope of practice of the profession or occupation for which such person is licensed, provided that
217 such person does not represent to the public, directly or indirectly, that such person is licensed
218 under sections 263 to 276, inclusive, and that such person does not use any name, title or
219 designation indicating that such person is licensed under said sections 263 to 276, inclusive; (2)
220 any person employed as a medical physicist by the federal government or an agency thereof if
221 that person provides medical physics services solely under the direction and control of the
222 organization by which such person is employed.

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

226 SECTION 4. Nothing in this act shall preclude any person who was practicing medical
227 physics before the effective date of this act from practicing medical physics in the
228 commonwealth until the board of medical physics establishes procedures for the licensure of
229 medical physics pursuant to sections 263 to 276, inclusive, of chapter 112 of the general laws.