

HOUSE No. 4048

The Commonwealth of Massachusetts

**In the One Hundred and Eighty-Ninth General Court
(2015-2016)**

An Act relative to 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 inserting after
2 section 108 the following section:

3 Section 109. (a) There shall be a board of registration in medical physics, hereinafter
4 referred to as the board. The board shall consist of 8 members to be appointed by the
5 commissioner of the department of public health. Members shall be residents of the
6 commonwealth. The board shall be comprised of: 4 licensed medical physicists; 3 licensed
7 physicians registered pursuant to chapter 112; and 1 representative of the general public, subject
8 to the provisions of section 9B. The 4 licensed medical physicist board members shall represent
9 the following specialties: diagnostic radiological physics; therapeutic radiological or radiation
10 oncology physics; medical nuclear physics; and medical health physics. The 3 licensed
11 physicians shall represent the following specialties: diagnostic radiology; radiation therapy or
12 radiation oncology; and nuclear medicine.

13 (b) Members of the board shall be appointed for a term of 3 years, except of the members
14 of the first board, 4 members shall be appointed for terms of 3 years, and 4 members shall be
15 appointed for terms of 2 years. No member shall be appointed to more than 2 consecutive full-
16 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) The board shall meet not less than 2 times per calendar year. At its first meeting and
20 annually thereafter, the board shall elect from among its members a chairperson, a vice-
21 chairperson and secretary who shall each serve for 1 year and until a successor is appointed and
22 qualified. Board members shall serve without compensation but shall be reimbursed for actual
23 and reasonable expenses incurred in the performance of their duties. The board shall undertake
24 the duties as the rules and regulations of said board shall direct, including the provisions included
25 in sections 265 to 275 of chapter 112. Notwithstanding these provisions, the board shall assist the
26 board of medicine solely in medical physics matters. The licensure requirements for licensed
27 medical physicists shall be waived for the initial state board appointees, provided that such
28 appointees shall have received national certification in their specialty.

29 SECTION 2. Chapter 112 of the General Laws is hereby amended by adding the
30 following 11 sections:-

31 Section 265. For the purposes of sections 265 to 275, inclusive, the following words shall
32 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.

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

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

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

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

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

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

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

59 "Specialty" or "specialty area", includes the following branch or branches of special
60 competence within medical physics: (1) "Diagnostic Radiological Physics", a branch of medical
61 physics relating to the diagnostic applications of x rays, gamma rays from sealed sources,
62 ultrasonic radiation, radio frequency radiation and magnetic fields; the equipment associated
63 with their production, use, measurement and evaluation; the quality of images resulting from
64 their production and the use of medical health physics associated with this subfield; (2) "Medical
65 Health Physics", a branch of medical physics pertaining to the safe use of x rays, gamma rays,
66 electron and other charged particle beams or neutrons or radionuclides and of radiation from
67 sealed radionuclide sources for both diagnostic and therapeutic purposes, except with regard to
68 the application of radiation to patients for diagnostic or therapeutic purposes and the
69 instrumentation required to perform appropriate radiation surveys; (3) "Medical Nuclear
70 Physics", a branch of medical physics pertaining to the therapeutic and diagnostic applications of
71 radionuclides, except those used in sealed sources for therapeutic purposes, the equipment
72 associated with their production, use, measurement and evaluation; the quality of images
73 resulting from their production and use and the medical health physics associated with this
74 subfield; and (4) "Therapeutic Radiological Physics" or "Radiation Oncology Physics", a branch
75 of medical physics relating to the therapeutic applications of x-rays, gamma rays, electron and
76 charged particle beams, neutrons and radiations from sealed radionuclide sources; the equipment
77 associated with their production, use, measurement and evaluation; the quality of images

78 resulting from their production and use; and the medical health physics associated with this
79 subfield.

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

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

95 Section 268. The practice of the profession of medical physics, as referred to in sections
96 265 to 275, inclusive, shall mean the use of principles and accepted protocols of physics to
97 provide the quality, quantity, and placement of radiation during the performance of a radiological
98 procedure. A license to practice medical physics shall be issued with special competency in one
99 or more specialty areas in which the licensee has satisfied the requirements of section 270. The

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

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

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

112 (a) file an application with the state;

113 (b) have received an education including a graduate degree from an accredited college or
114 university in accordance with regulations and have completed such courses as defined by the
115 board in the medical physics specialty in which the applicant has applied for a license;

116 (c) have experience in his or her medical physics specialty satisfactory to the board and in
117 accordance with regulations;

118 (d) receive and maintain board certification in his or her medical physics specialty
119 satisfactory to the board; and

120 (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.

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

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

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

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

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

151 Section 273. Within time frame determined by state of the effective date of regulations
152 implementing the provisions of sections 265 to 275, the board may issue a license to practice
153 medical physics within one or more specialties in this state, without board certification, to a
154 person who meets the requirements paragraphs (a) and (b) of section 270 and who in addition has
155 earned a bachelor's, master's or doctoral degree from an accredited college or university that
156 signifies the completion of a course of study acceptable to the board, and has demonstrated to the
157 board's satisfaction, in the case of an earned bachelor's degree, the completion of at least 15
158 years of full-time work experience in the medical physics specialty for which application is
159 made, or, in the case of an earned master's or doctoral degree, the completion of at least 2 years
160 of full-time work experience in the 7 years preceding the date of application in the medical
161 physics specialty for which application is made and the equivalent of 1 year or more of full-time
162 work experience in the 10 years preceding the date of application for each additional specialty

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

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

167 Section 275. (a) The board may, after a hearing pursuant to chapter 30A, revoke,
168 suspend, or cancel the license of a medical physicist, or reprimand or censure a medical
169 physicist, or place any medical physicist licensed under section 270 on probation, upon proof
170 satisfactory to a majority of the board that said medical physicist:

171 (1) fraudulently or deceptively obtained or attempted to obtain licensure as a
172 medical physicist;

173 (2) fraudulently violated any provision of law relating to the practice of medicine
174 or medical physics, or any rule of regulation adopted hereunder;

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

178 (4) practiced medical physics while the ability to practice is impaired by alcohol
179 or drugs;

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

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

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

185 (8) acted in a manner which is professionally unethical according to ethical
186 standards of the professional of medical physics or violated any provisions of section 265 to 275.

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

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

195 SECTION 3. Nothing in this act shall preclude any person who was practicing medical
196 physics before the effective date of this act from practicing medical physics in the
197 commonwealth until the board of medical physics establishes procedures for the licensure of
198 medical physics pursuant to sections 265 to 275, inclusive, of chapter 112.