

HOUSE No. 3515

The Commonwealth of Massachusetts

PRESENTED BY:

Carlo Basile

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 the practice of medical physics.

PETITION OF:

NAME:

Carlo Basile

DISTRICT/ADDRESS:

1st Suffolk

HOUSE No. 3515

By Mr. Basile of Boston, a petition (accompanied by bill, House, No. 3515) of Carlo Basile relative to the practice of medical physics and the harmful effects of excessive and unnecessary radiation. Public Health.

The Commonwealth of Massachusetts

In the Year Two Thousand Eleven

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. Purpose and Scope.

2 The Massachusetts Legislature finds that the practice of medical physics by incompetent
3 persons is a threat to the public health and safety. It is, therefore, the responsibility of this state to
4 protect the public health and safety from the harmful effects of excessive and unnecessary
5 radiation by ensuring that the practice of medical physics is entrusted only to persons who are
6 licensed under this section.

7 Section 2. Definitions.

8 As used in this article:

9 1. "Clinical" shall mean activities directly relating to the treatment or diagnosis of human
10 ailments.

11 2. "Specialty" or "specialty area" shall mean the following branch or branches of special
12 competence within medical physics:

13 (a) "Diagnostic radiological physics" shall mean the branch of medical physics relating to
14 the diagnostic applications of x rays, gamma rays from sealed sources, ultrasonic radiation, radio
15 frequency radiation and magnetic fields; the equipment associated with their production, use,
16 measurement and evaluation; the quality of images resulting from their production and the use of
17 medical health physics associated with this subfield;

18 (b) "Medical health physics" shall mean the branch of medical physics pertaining to the
19 safe use of x rays, gamma rays, electron and other charged particle beams [or] neutrons or
20 radionuclides and of radiation from sealed radionuclide sources for both diagnostic and
21 therapeutic purposes, except with regard to the application of radiation to patients for diagnostic
22 or therapeutic purposes and the instrumentation required to perform appropriate radiation
23 surveys;

24 (c) "Medical nuclear physics" shall mean the branch of medical physics pertaining to the
25 therapeutic and diagnostic applications of radionuclides, except those used in sealed sources
26 for therapeutic purposes; the equipment associated with their production, use, measurement and
27 evaluation; the quality of images resulting from their production and use and the medical health
28 physics associated with this subfield; and

29 (d) "Therapeutic radiological physics" or "radiation oncology physics" shall mean the
30 branch of medical physics relating to the therapeutic applications of x-rays, gamma rays, electron
31 and charged particle beams, neutrons and radiations from sealed radionuclide sources; the
32 equipment associated with their production, use, measurement and evaluation; the quality of

33 images resulting from their production and use; and the medical health physics associated with
34 this subfield.

35 3. "Medical physics" shall mean the branch of physics that is associated with the practice
36 of medicine

37 4. "Radiation" means ionizing or non-ionizing radiation above background levels which
38 is used to perform a diagnostic or therapeutic medical or dental radiological procedure.

39 5. "Radiological physics" shall mean diagnostic radiological physics, therapeutic
40 radiological physics or radiation oncology physics, medical nuclear physics and medical health
41 physics.

42 6. "Radiological procedure" shall mean a test, measurement, calculation, or radiation
43 exposure used in the diagnosis or treatment of diseases or other medical or dental
44 conditions in human beings that includes therapeutic radiation, diagnostic radiation, nuclear
45 magnetic resonance, or nuclear medicine procedures.

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

51 8. "Direct Supervision" means a Qualified Medical Physicist must exercise General
52 Supervision and be present in the facility and immediately available to furnish assistance and

53 direction throughout the performance of the procedure but is not required to be present in the
54 room when the procedure is being performed.

55 9. "Personal Supervision" means a Qualified Medical Physicist must exercise General
56 Supervision and be present in the room during the performance of the procedure.

57 Section 3. Definition of "practice of medical physics".

58 1. The "practice of the profession of medical physics" shall mean the use of principles
59 and accepted protocols of physics to provide the quality, quantity, and placement of radiation
60 during the performance of a radiological procedure.

61 2. A license to practice medical physics shall be issued with special competency in one
62 or more specialty areas in which the licensee has satisfied the requirements of section 6 of this
63 article.

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

67 4. Only a person licensed under this article shall practice the profession of medical
68 physics.

69 Section 4. Use of the title "licensed medical physicist".

70 Only a person licensed under this article shall use the title "licensed medical physicist".

71 Section 5. State Board for medical physics.

72 1. A state board for medical physics shall be appointed by the Department of Public
73 Health upon the recommendation of the commissioner and shall assist on matters of licensure
74 and professional conduct in accordance with provisions of existing physician licensure laws.
75 Notwithstanding these provisions, the state board shall assist the board for medicine solely in
76 medical physics matters and shall also function as the state board for medical physics. The
77 licensure requirements for licensed medical physicists shall be waived for the initial state board
78 appointees, provided that such appointees shall have received national certification in their
79 specialty.

80 2. The state board shall consist of eight individuals, to be composed of the following:

81 (a) Four licensed medical physicists represented by each of the following specialties:

82 (i) diagnostic radiological physics,

83 (ii) therapeutic radiological or radiation oncology physics,

84 (iii) medical nuclear physics, and

85 (iv) medical health physics;

86 (b) Three licensed physicians represented by each of the following specialties:

87 (i) diagnostic radiology,

88 (ii) radiation therapy or radiation oncology, and

89 (iii) nuclear medicine; and

90 (c) A representative of the public at large.

91 3. The state board must meet at least twice a year to provide administrative review of the
92 licensure program to include review of applications, continuing education requirements and
93 enforcement actions.

94 Section 6. Requirements and procedures for professional licensure.

95 To qualify for a license as a professional medical physicist, an applicant shall fulfill the
96 following requirements:

97 1. Application: file an application with the state;

98 2. Education: have received an education including a graduate degree from an accredited
99 college or university in accordance with state regulations. Such person shall have completed such
100 courses as defined by the state board to practice in the medical physics specialty in which the
101 applicant has applied for a license;

102 3. Experience: have experience in his or her medical physics specialty satisfactory to the
103 board and in accordance with the state regulations; and

104 4. Board Certification: receive and maintain board certification in his or her medical
105 physics specialty satisfactory to the board; and

106 5. Fee. The fees collected will be handled in the following manner:

107 (a) Payment and distribution.

108 (i) The state board shall pay all fees collected under the provisions of this subtitle to the
109 Massachusetts Comptroller.

110 (ii) The Comptroller shall distribute all fees to the state board established under Section
111 five in this article.

112 (b) Use. The fees shall be used to cover the actual documented direct and indirect costs
113 of fulfilling the statutory and regulatory duties of the state board as provided by the provisions of
114 this subtitle.

115 Section 7. Provisional Licenses. Provisional Licenses shall be issued by the Department
116 of Public health to eligible applicants, as follows:

117 1. Eligibility. The following persons shall be eligible for a provisional license:

118 (a) a person who fulfills all requirements for a licensed medical physicist except those
119 relating to board certification or experience; or

120 (b) a medical physics student enrolled in a graduate or post-graduate program approved
121 by the state board; or

122 (c) a person has been licensed or certified in good standing as a practitioner of one the
123 subspecialties of medical physics for at least two years in another jurisdiction, including a
124 foreign country, that has licensing or certification requirements substantially equivalent to the
125 requirements of this article as determined by the state board and

126 (i) has passed a national or other examination recognized by the state board relating to
127 the subspecialties of medical physics; and

128 (ii) is sponsored by a person licensed under this article with whom the provisional
129 license holder will practice during the time the person holds a provisional license.

130 2. Limit of practice. An individual with a provisional license shall be authorized to
131 practice medical physics only under the direct supervision of a licensed medical physicist and
132 only in the sub-specialty of such licensed medical physicist;

133 3. Duration. A provisional license permit shall be valid for two years. It may be renewed
134 at the discretion of the state ;

135 4. Fee. The fees collected will be handled in the following manner:

136 (a) Payment and distribution.

137 (i) The state board shall pay all fees collected under the provisions of this subtitle to the
138 Massachusetts Comptroller.

139 (ii) The Comptroller shall distribute all fees to the state board established under Section
140 five in this article.

141 (b) Use. The fees shall be used to cover the actual documented direct and indirect costs
142 of fulfilling the statutory and regulatory duties of the state board as provided by the provisions of
143 this subtitle.

144 5. Experience. Medical physics experience obtained in this state to be credited towards
145 the experience requirement for licensure must be obtained under a provisional license.

146 Section 8. Exemptions. Nothing in this article shall be construed to:

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

150 2. Prohibit the repair or calibration of any test equipment used by licensed medical
151 physicists by any person otherwise allowed to do so under state or federal law, nor

152 3. Serve to limit radiologic and/or imaging technologists or any individual otherwise
153 authorized by law or regulation from performing quality control measurements or obtaining
154 quality control data under the supervision of a licensed medical physicist, nor

155 4. Serve to limit neither a service engineer in the repair of radiation producing equipment
156 nor an installation engineer in the installation of radiation producing equipment.

157 Section 9. Licensure without board certification

158 Within time frame determined by state of the effective date of regulations implementing
159 the provisions of this article, the state board may issue a license to practice medical physics
160 within one or more specialties in this state, without board certification, to a person who meets the
161 requirements of subdivisions one, two, three and five of Section Six of this article and who in
162 addition has earned a bachelor's, master's or doctoral degree from an accredited college or
163 university that signifies the completion of a course of study acceptable to the state board, and has
164 demonstrated to the state board's satisfaction, in the case of an earned bachelor's degree, the
165 completion of at least fifteen years of full-time work experience in the medical physics specialty
166 for which application is made, or, in the case of an earned master's or doctoral degree, the
167 completion of at least two years of full-time work experience in the seven years preceding the
168 date of application in the medical physics specialty for which application is made and the
169 equivalent of one year or more of full-time work experience in the ten years preceding the date
170 of application for each additional specialty for which application is made.

171 Section 10. Continuing Education Requirements

172 The state shall require continuing education sufficient to maintain professional
173 certification as defined by the state board by regulation.

174 Section 11. License Term and Renewal

175 1. A license is valid for two years from the date granted and shall be renewed every two
176 years.

177 2. The state board by rule may adopt a system under which licenses expire on various
178 dates during the year.

179 3. A person may renew an unexpired license by paying the required renewal fee to the
180 state board before the expiration date of the license.

181 4. The state board shall require documentation of continuing education be submitted with
182 the renewal.

183 5. If a person's license has been expired for 90 days or less, the person may renew the
184 license by paying to the state board the required renewal fee and a penalty fee in an amount equal
185 to one-half of the amount of the renewal fee.

186 6. If a person's license has been expired for longer than 90 days but less than two years,
187 the person may renew the license by paying to the state board the renewal fee that was due at
188 expiration and a penalty fee in an amount equal to the amount of the renewal fee.

189 7. If a person's license has been expired for two years or longer, the person may not
190 renew the license. To obtain a new license, a person must comply with the application
191 requirements of this article and must submit to the state board:

- 192 (a) a supplemental experience record as required by the state board;
- 193 (b) a description of professional activities undertaken during the expiration period;
- 194 (c) a list of current professional references; and
- 195 (d) a transcript for any degree or college credit earned since the person's previous license
- 196 application.

197 Section 12. Enforcement

198 1. In general. Subject to the hearing provisions of Department of Public Health, the state

199 board, on the affirmative vote of a majority of the quorum, may reprimand any licensee, place

200 any licensee on probation, or suspend or revoke a license if the licensee:

201 (a) Fraudulently or deceptively obtains or attempts to obtain a license for the applicant or

202 licensee or for another;

203 (b) Fraudulently or deceptively uses a license;

204 (c) Is guilty of:

205 (i) Immoral conduct in the practice of medical physics; or

206 (ii) Unprofessional conduct in the practice of medical physics;

207 (d) Is professionally, physically, or mentally incompetent;

208 (e) Habitually is intoxicated;

209 (f) Is addicted to, or habitually abuses, any narcotic or controlled dangerous substance as

210 defined in Massachusetts criminal law article;

- 211 (g) Provides professional services:
- 212 (i) While under the influence of alcohol; or
- 213 (ii) While using any narcotic or controlled dangerous substance, as defined in
214 Massachusetts criminal law article or other drug that is in excess of therapeutic amounts or
215 without valid medical indication;
- 216 (h) Promotes the sale of drugs, devices, appliances, or goods to a patient so as to exploit
217 the patient for financial gain;
- 218 (i) Willfully makes or files a false report or record in the practice of medical physics;
- 219 (j) Willfully fails to file or record any medical report as required under law, willfully
220 impedes or obstructs the filing or recording of the report, or induces another to fail to file or
221 record the report;
- 222 (k) On proper request, and in accordance with the provisions of state confidentiality of
223 medical records article, fails to provide details of a patient's medical record to the patient,
224 another physician, or hospital;
- 225 (l) Makes a willful misrepresentation in treatment;
- 226 (m) Practices medical physics with an unauthorized person or aids an unauthorized
227 person in the practice of medical physics;
- 228 (n) Grossly overutilizes health care services;
- 229 (o) Is disciplined by a licensing or disciplinary authority or convicted or disciplined by a
230 court of any state or country or disciplined by any branch of the United States uniformed services

231 or the Veterans' Administration for an act that would be grounds for disciplinary action under
232 this section;

233 (p) Fails to meet appropriate standards as determined by appropriate peer review for the
234 delivery of quality medical care performed in an outpatient facility, office, hospital, or any other
235 location in this State;

236 (q) Willfully submits false statements to collect fees for which services are not provided;

237 (r) Was subject to investigation or disciplinary action by a licensing or disciplinary
238 authority or by a court of any state or country for an act that would be grounds for disciplinary
239 action under this section and the licensee:

240 (i) Surrendered the license issued by the state or country to the state or country; or

241 (ii) Allowed the license issued by the state or country to expire or lapse;

242 (s) Gives away or administers drugs for illegal or illegitimate medical purposes;

243 (t) Refuses, withholds from, denies, or discriminates against an individual with regard to
244 the provision of professional services for which the licensee is licensed and qualified to render
245 because the individual is HIV positive;

246 (u) Except in an emergency life-threatening situation where it is not feasible or
247 practicable, fails to comply with the Centers for Disease Control's guidelines on universal
248 precautions;

249 (v) Fails to display the notice required under notice of CDC guidelines on universal
250 precaution.

251 (w) Fails to cooperate with a lawful investigation conducted by the state board;

252 (x) Is convicted of insurance fraud as defined in state insurance article;

253 (y) Willfully makes a false representation when seeking or making application for
254 licensure or any other application related to the practice of medical physics;

255 (z) By corrupt means, threats, or force, intimidates or influences, or attempts to intimidate
256 or influence, for the purpose of causing any person to withhold or change testimony in hearings
257 or proceedings before the state board or those otherwise delegated to the state office of
258 administrative hearings;

259 (aa) By corrupt means, threats, or force, hinders, prevents, or otherwise delays any person
260 from making information available to the state board in furtherance of any investigation of the
261 state board;

262 (bb) Intentionally misrepresents credentials for the purpose of testifying or rendering an
263 expert opinion in hearings or proceedings before the state board or those otherwise delegated to
264 state office of administrative hearings; or

265 (cc) Fails to keep adequate medical records as determined by appropriate peer review.

266 2. Crimes involving moral turpitude.

267 (a) On the filing of certified docket entries with the state board by the Office of the
268 Attorney General, the state board shall order the suspension of a license if the licensee is
269 convicted of or pleads guilty or nolo contendere with respect to a crime involving moral
270 turpitude, whether or not any appeal or other proceeding is pending to have the conviction or
271 plea set aside.

272 (b) After completion of the appellate process if the conviction has not been reversed or
273 the plea has not been set aside with respect to a crime involving moral turpitude, the state board
274 shall order the revocation of a license on the certification by the Office of the Attorney General.

275

276 3. Imposition of penalty. If after a hearing the state board finds that there are grounds
277 under this article to suspend or revoke a license to practice medical physics, or to reprimand a
278 licensed medical physicist, the state board may impose a fine subject to the state board's
279 regulations:

280 (a) Instead of suspending the license; or

281 (b) In addition to suspending or revoking the license or reprimanding the licensee.

282

283 4. Disposition of funds. The state board shall pay any fines collected under this article
284 into the general fund.

285 5. Conditions for surrender of license.

286 (a) Agreement of state board required. Unless the state board agrees to accept the
287 surrender of a license of an individual the state board regulates, the individual may not surrender
288 the license nor may the license lapse by operation of law while the individual is under
289 investigation or while charges are pending.

290 (b) Conditions on agreement. The state board may set conditions on its agreement to
291 accept surrender of a license.

292 Section 13. Ethical Guidelines

293 Recommend practice standards for the practice of medical physics which are consistent
294 with the Code of Ethics prepared by the American Association of Physicists in Medicine and
295 American College of Medical Physics and disciplinary guidelines adopted under current
296 applicable state law.

297 Section 14. Separability.

298 If any section of this article, or part thereof, shall be adjudged by any court of competent
299 jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder of
300 any other section or part thereof.

301 This act shall take effect eighteen months after the date on which it shall have become a
302 law; provided however, that any actions necessary for the implementation of the provisions of
303 this act on its effective date are authorized and directed to be completed on or before such
304 effective date.