



AMERICAN ASSOCIATION
of PHYSICISTS IN MEDICINE

3169



August 14, 2018

Fiona E. Cormack
Director of Regulatory Review
Independent Regulatory Review Commission
333 Market Street, 14th Floor
Harrisburg, PA 17101

VIA E-Mail: irrc@irrc.state.pa.us

Re: IRRC# 3169: Public Meeting August 16, 2018: Rulemaking, Environmental Quality Board [25 PA. Code Chs. 215-221, 225, 227, 228, 230 and 240] Radiological Health

Dear Ms. Cormack:

The American Association of Physicists in Medicine (AAPM)¹ is pleased to submit comments to the Pennsylvania Independent Regulatory Review Commission (IRRC) regarding its review of the final rules submitted by the Environmental Quality Board (PA EQB) that would update and amend Article V radiological health regulations establishing and maintaining adequate radiation protection standards and oversight.

AAPM Concerns on IRRC Review

Background

The AAPM submitted comments on the proposed rulemaking to the PA EQB on June 26, 2017. In those comments, AAPM expressed concern that the proposed definition of Qualified Medical Physicist (QMP) in section 221.2 would not ensure that individuals providing the

¹ The American Association of Physicists in Medicine (AAPM) is the premier organization in medical physics, a broadly-based scientific and professional discipline encompassing physics principles and applications in biology and medicine whose mission is to advance the science, education and professional practice of medical physics. Medical physicists contribute to the effectiveness of radiological imaging procedures by assuring radiation safety and helping to develop improved imaging techniques (e.g., mammography, CT, MR, Ultrasound). They contribute to development of therapeutic techniques (e.g., prostate implants, stereotactic radiosurgery), collaborate with radiation oncologists to design treatment plans, and monitor equipment and procedures to insure that cancer patients receive the prescribed dose of radiation to the correct location. Medical physicists are responsible for ensuring that imaging and treatment facilities meet the rules and regulations of the U.S. Nuclear Regulatory Commission (NRC) and various state regulatory agencies. AAPM represents over 8,500 medical physicists.

designated medical physics services are qualified to do so. The AAPM recommended adoption of its own definition of QMP to protect the inviolability of the title QMP and make it consistent with other states and the Conference of Radiation Control Program Directors (CRCPD) guidance. Further, AAPM recommended that “Qualified Expert” (QE) be employed to describe those who are working in the field but who lack board certification. The AAPM regrets that PA EQB did not change the proposed definition of QMP in this final draft.

Recommendations

THE DEFINITION OF QMP AS CURRENTLY WRITTEN DOES NOT ADEQUATELY PROTECT THE HEALTH AND SAFETY OF PATIENTS OR CLINICAL STAFF. The current definition would allow individuals who have not completed an accredited residency program or achieved board certification to represent themselves as QMPs.

USING THE AAPM DEFINITION OF QMP WILL NOT DISENFRANCHISE ANYONE WORKING IN THE STATE BECAUSE THOSE INDIVIDUALS NOT MEETING THE REQUIREMENTS FOR QMP UNDER AAPM’S DEFINITION CAN BE CHARACTERIZED AS QES AND CONTINUE PRACTICING. The “QE” designation would allow those individuals who are currently providing clinical services to continue to serve in their current roles. The AAPM is proposing a solution that meets ALL OF THE PA EQB’S CONCERNS EXPRESSED IN ITS RESPONSE TO AAPM.

THE PA EQB IS RELYING ON A FALSE LOGIC THAT IF SOMEONE HAS BEEN DOING A JOB ALREADY, THEN THEY MUST BE DOING IT PROPERLY. The AAPM questions the PA EQB’s assertion that “individuals providing the medical physics services are already qualified to do so.” There are significant variations in practice environments that may limit the sufficiency of on-the-job training. We respectfully disagree with the PA EQB’s statement that these alternate pathways designate “equivalent qualifications.” We are especially concerned because we believe the PA EQB is relying on an erroneous assumption which favors entrenched business interests over the assurance of quality for patients.

In the following comments, AAPM, re-states its remarks from its earlier comments to PA EQB and urges the IRRC to require adoption of AAPM’s recommendations:

Definition of QMP

As currently written in Chapter 221 §221.2, the definition of *Qualified Medical Physicist* provides three alternative pathways to be considered a “Qualified Medical Physicist.” The AAPM believes that the pathways as proposed are insufficient to assure that individuals providing the designated medical physics services are qualified to do so. This is especially true given the complexity of modern X-ray equipment, including computed tomography (CT). The AAPM recommends that the IRRC require the PA EQB to adopt AAPM’s definition as stated in AAPM’s Professional Policy Statement² or the definition of Qualified Medical Physicist from the Conference of Radiation Control Program Directors Suggested State Regulations for Control of Radiation (CRCPD SSRCR), Part F, Sec. F.2, p.11³:

“Qualified medical physicist (QMP)” means an individual who meets each of the following credentials:

- 1. Has earned a master's and/or doctoral degree in physics, medical physics, biophysics, radiological physics, medical health physics, or equivalent disciplines from an accredited college or university; and*
- 2. Has been granted certification in the specific subfield(s) of medical physics with its associated medical health physics aspects by an appropriate national certifying body and abides by the certifying body's requirements for continuing education;*

As stated in its comments to the proposed regulations, AAPM is particularly concerned by the alternate pathways to QMP status presented in paragraphs ii and iii of the Chapter 221, §221.2 Definition of QMP. Paragraph ii provides as follows:

(ii) An individual who does not meet the requirements of subparagraph (i) shall meet each of the following credentials to qualify as a QMP:

(A) Has earned a master's or doctoral degree, or both, in physics, medical physics, biophysics, radiological physics, health physics or equivalent disciplines from an accredited college or university.

² AAPM Professional Policy 1, *Definition of a Qualified Medical Physicist*; link: <http://www.aapm.org/org/policies/details.asp?id=316&type=PP>.

³ CRCPD SSRCR Part F, Sec. F.2: http://www.crcpd.org/SSRCRs/Part_2015.pdf

(B) Has 3 years of documented relevant clinical training and experience in each of the subfields in the definition of "medical physics," under the supervision of a QMP who is qualified to practice in the same subfield, for each of the areas in which the individual intends to practice.

(C) Completes the continuing education requirements of an applicable certifying body of health/radiological physics or in one or more of the subfields of medical physics in which the individual practices.

This pathway allows an individual to practice as a QMP without obtaining a board certification or working through an accredited residency program. We do not believe that working under the supervision of a QMP for three years provides the equivalent of education and training represented by board certification or an accredited residency program. Moreover, there are great variations in practice environments that may limit the structure, consistency and sufficiency of on-the-job training received under the supervision of a QMP for three years.

The AAPM recommends designating individuals who meet the education and training requirements stated in this paragraph as "Qualified Experts (QEs)" rather than as QMPs. The CRCPD SSR, Part F, Sec. F.2, p.11⁴ provides the following definition for qualified expert:

"Qualified Expert (QE)" means an individual who is granted professional privileges based on education and experience to provide clinical services in diagnostic medical physics by the Agency.

This designation would allow the QE to provide clinical services as specified by the PA EQB. Provision of some clinical services should be limited to only QMPs—i.e., those individuals with board certification. The AAPM believes adopting this additional designation would give greater clarity to the definition of QMP and recognize the considerable achievement represented by board certification.

Paragraph iii of the proposed regulation provides as follows:

⁴ *Id.* at 11.

(iii) An individual who has been practicing as a QMP in health/radiological physics or in one or more of subfields of medical physics for at least 5 years prior to _____, (*Editor's Note: The blank refers to the effective date of adoption of this proposed rulemaking.*) is exempt from the requirements of subparagraphs (i) and (ii). Documentation of at least 5 years of practicing as a QMP in health/radiological physics or in one or more of the subfields of medical physics must be maintained for each of the fields or subfields, or both, in which the individual practices. As of _____, (*Editor's Note: The blank refers to the effective date of adoption of this proposed rulemaking.*) an individual who qualifies as a QMP under this subparagraph shall meet the continuing education requirements in subparagraph (ii)(C).

Again, we are concerned that this alternate pathway allows an individual to practice as a QMP without board certification. We believe that this requirement should not be side-stepped, and we recommend that individuals meeting the requirements of paragraph iii also be designated as QEs. This designation would allow those individuals who are currently providing clinical services to continue to serve in their current roles, without any disruption caused by rule implementation.

In summary, AAPM asserts:

THE DEFINITION OF QMP AS CURRENTLY WRITTEN DOES NOT ADEQUATELY PROTECT THE HEALTH AND SAFETY OF PATIENTS OR CLINICAL STAFF.

ADOPTING THE AAPM DEFINITION OF QMP WILL NOT DISENFRANCHISE ANYONE WORKING IN THE STATE BECAUSE THOSE INDIVIDUALS NOT MEETING THOSE REQUIREMENTS FOR QMP CAN BE CHARACTERIZED AS QES AND CONTINUE PRACTICING. The AAPM is proposing a solution that meets ALL OF THE PA EQB'S CONCERNS EXPRESSED IN ITS RESPONSE TO AAPM.

THE PA EQB IS RELYING ON A FALSE LOGIC THAT IF SOMEONE HAS BEEN DOING A JOB ALREADY THEN THEY MUST BE DOING IT PROPERLY. THE PA EQB'S ALTERNATE PATHWAYS DO NOT REPRESENT "EQUIVALENT QUALIFICATIONS."

The AAPM recommends:

- **IRRC require PA EQB to adopt the Conference of Radiation Control Program Directors (CRCPD) Suggested State Regulations for Control of Radiation (SSRCR), Part F definition of QMP; and**
- **“QMP” be uniformly defined for the benefit of patient, worker and general public safety, and that “QE” be employed to describe those who are working in the field but who lack board certification.**

The AAPM hopes that the IRRC will consider AAPM’s recommendations in its review of the final radiological health rule. Should IRRC staff have any questions, please contact Richard J. Martin, JD, at (571) 298-1227 or richard@aapm.org.

Sincerely,

A handwritten signature in black ink that reads "Bruce Thomadsen". The signature is written in a cursive, flowing style.

Bruce R. Thomadsen, PhD, FAAPM, FACMP
President, AAPM