

**Chairman Mustio, Chairman Readshaw, and members of the House Professional Licensure Committee:**

**My name is Anthony Montagnese. I am, by training and experience, a board-certified medical physicist practicing primarily at Lancaster General Health in Lancaster. I am here today to testify in support of House Bill 1545.**

**Through 30 years of experience, I have evaluated the safe use and image quality of diagnostic imaging and radiation therapy machines, procedures, and departments, not only across this Commonwealth but nationwide as a consultant.**

**My somewhat unique career in health care positions me as neither the individual who operates the machines, nor as the care provider who evaluates the images. Instead, I am charged with ensuring that the individual who operates the machines is in a radiation-safe environment, that the patient is receiving as little radiation as necessary to produce a high quality, diagnostic image, and that the general public are not unnecessarily exposed to radiation from these activities.**

**In this capacity, I have seen my fair share of equipment malfunctions or miscalibrations, and failures of policy or procedure. But, in my opinion, there is no greater risk to the patient than from an improperly trained or educated technologist or therapist. These individuals are required to make decisions on a daily basis that impact the amount of radiation dose a patient receives, as well as the quality of the images that a Radiologist or other physician must use to diagnose disease or conditions.**

**Even with the remarkable technological advances that I have witnessed in my career in the machines that deliver the radiation, the detectors that convert this into a diagnostic image, and the rapid delivery of these images to physicians, there remains a human element in the form of the technologist who must select machine settings, properly position the patient, and operate highly advanced software.**

Fortunately, I have worked primarily with technologists who have proper training and certification, and even this will not prevent the occasional error. But, as Dr. Haidet has pointed out, these technologists, whom have mostly been hospital-based, fall under the purview of the Joint Commission standards on personnel competence.

I have also had occasion to interact with individuals in physician offices and clinics who were not technologists by training, yet were allowed to operate x-ray equipment, and even, in one case, a therapeutic machine that can deliver very high doses of radiation. In those cases, it was clear to me that, while these individuals might be able to perform simple x-ray procedures based on “how to” instructions from a manufacturer or physician, they lack the background and extent of training that is required to make clinically significant decisions on a case-by-case basis. Of the nearly, 15,000 medical or dental x-ray machine facilities registered with the Department of Environmental Protection, only about 2% are hospital facilities that fall under the standards of the Joint Commission.

In conclusion, my support of House Bill 1545 is based on the belief that the citizens of this Commonwealth deserve the peace-of-mind and confidence that any diagnostic or therapeutic medical or dental procedure they receive, which involves the application of ionizing radiation, has been delivered by an individual with verified competence and experience. Such a measure will reduce the number of unnecessary or repeated procedures; thus, reducing the overall radiation burden on the patient population of Pennsylvania.

Thank you for allowing me this time.

**Anthony D. Montagnese, M.S., DABR**  
**Certified Medical Physicist/Radiation Safety Officer**