

WV MI & RTT Board's Organizational Issues

Introduction

The WV Medical Imaging & Radiation Therapy Technology Board of Examiners (hereafter, Board) position statements reflect the beliefs or standing of the Board. These statements were adopted by the Board at their June 3, 2009 meeting. In reviewing these position statements, radiologic technologists must take into account existing state statutes and institutional policy.

The Board uses the term radiologic technologist throughout its official documents to describe personnel working in any discipline or specialty area of radiologic technology. Radiologic technology is the term that describes the medical disciplines and specialties that use ionizing radiation, non-ionizing radiation, radio frequency and electromagnetic waves for diagnostic medical imaging, interventional procedures and radiation therapy. The Board recognizes the following disciplines in their licensure laws: radiography, radiation therapy, magnetic resonance imaging (MRI) and nuclear medicine. Specialties in radiologic technology include mammography, cardiovascular-interventional radiography, computed tomography and other specialty areas.

For easier reference, the Board position statements are alphabetized and divided into five sections:

- ◆ Board Organizational Issues

- ◆ Educational Issues

- ◆ Licensure Issues

- ◆ Practice Issues

- ◆ Quality Management, Quality Care and Safety Issues

Educational Issues

All educational requirements are given in the laws of the Board. Please refer to W. Va. Code § 30-23 et. Seq. And § 18CSR 1 for the requirements.

The Board position statements reflect the beliefs or standing of the American Society of Radiologic Technologists. In reviewing these position statements, medical imaging and radiation therapy technologists must take into account existing state and/or federal statutes and institutional policy.

Position Statements

Standards of Education and Certification for Radiologic Technologists: Standards of Education and Certification are stated in the WV laws and Rules of the Board. Please refer to W. Va. Code § 30-23 et. seq. and § 18 CSR 1

The Board endorses quality education and life-long learning of medical imaging, radiation therapy, nuclear medicine, and magnetic resonance imaging professionals. The Board opposes any abbreviated primary educational program that does not meet the minimum standards to those established by the JRCERT, JRCNMT or other programmatically equivalent accreditation bodies.

The Board endorses the certification program administered by the American Registry of Radiologic Technologists (ARRT), Nuclear Medicine Technology Certification Board (NMTCB) that is based upon the standards for educational programs in the radiologic sciences adopted by the Joint Review Committees. These requirements for certification are considered the minimum essential for the proper, safe operation of medical imaging and radiation therapy equipment. Such standards should be, at the minimum, equivalent to those established for educational accreditation by the Joint Review Committees or equivalent accreditation agencies and certification by the ARRT and/or NMTCB.

Licensure Issues

Position Statements

Licensure of Personnel Practicing in the Radiologic Sciences

It is the position of the Board that radiologic technologists practicing radiography, nuclear medicine, magnetic resonance imaging and radiation therapy and other imaging disciplines or specialties in health care facilities are certified by agencies such as the American Registry of Radiologic Technologists (ARRT), Nuclear Medicine Technology Certification Board (NMTCB), American Registry of Magnetic Resonance Imaging Technologist (ARMRIT), Medical Dosimetrist Certification Board (MDCB) and meet state licensure requirements.

Practice Issues

Position Statements

Brachytherapy Remote Afterloading Equipment

The Board advocates that brachytherapy utilizing remote afterloading equipment be performed by credentialed personnel, who may include registered radiation therapists, certified medical dosimetrists, board-certified radiation oncologist and board-certified medical radiation physicists.

Breast Sonography

The Board advocates that breast sonography is within the scope of practice for mammographers and sonographers with appropriate clinical and didactic education and where federal or state law and/or institutional policy permit.

Diagnostic Medical Imaging

The Board defines medical imaging as the use of ionizing radiation, electromagnetic radiation, or radioactivity for evaluation of body tissue in order to diagnose injury and disease by means of image production

Drug Administration

The Board advocates that preparation, identification and administration of contrast media, radiopharmaceuticals and/or medications are within the scope of practice of medical imaging and radiation therapy technologists. This administration is only appropriate with clinical and didactic education provided there is a written order of a licensed practitioner and where federal or state law and/or institutional policy permit.

Ensuring Radiation Exposures Are As Low As Reasonably Achievable

The Board recommends that all individuals performing medical imaging examinations and radiation therapy treatments employ “as low as reasonably achievable” (ALARA) principles to minimize patient and occupational radiation dose.

Evaluating Medical Images for Technical Adequacy

The Board recommends that the technical adequacy of medical images produced by a licensed medical imaging and/or radiation therapy technologist should only be evaluated by a licensed technologist within their scope of practice.

Fluoroscopic for Positioning

The Board recognizes that the routine use of fluoroscopy to ensure proper positioning for radiography prior to making an exposure is an unethical practice that increases patient dose unnecessarily and should never be used in place of appropriate skills required of the competent medical imaging and/or radiation therapy technologist.

Fluoroscopy by Radiologic Technologists For Interpretive Procedures

Interpretative fluoroscopic procedures are to be performed only under the direct supervision of a West Virginia licensed physician, with the exception of spotting of the terminal ileum by a properly trained, licensed radiographer. Direct supervision is defined as a West Virginia licensed physician being in the room or by live remote audio / video.

Hyperthermia

The Board supports that the operation of medical hyperthermia equipment to treat human malignancies is best performed by registered radiation therapists.

Monitoring Patient Exposure During Utilization of Digital Radiography Systems

The Board advocates that health care facilities using digital radiography systems should monitor patient exposure. Exposure indicator data should be included in the Digital Imaging Communications in Medicine (DICOM) header for images sent to picture archiving and communication systems (PACS) or in the patient demographics field for images printed to film, and in either case should be part of the permanent patient record. The exposure indicator should not be altered to modify image appearance and should accurately record the exposure or exposure factors used in producing the image. Health care facilities should collect patient exposure range distributions and reject analyses as part of the quality assurance program. This exposure data should be reviewed routinely by the health care facility.

Operation of Simulation and Radiation Therapy Treatment Units

It is the position of the Board that the operation of simulation and radiation therapy treatment units is best performed within the scope of practice by registered radiation therapists who can show documentation of education within their curriculum and/or specialized training that has been approved by the Board.

Peripherally Inserted Central Catheter Lines or Ports for Power Injectors

The Board advocates that the use of power injectors with peripherally inserted central catheter (PICC) lines or ports is within the scope of practice for medical imaging and radiation therapy technologists with the appropriate clinical and didactic education when a Food and Drug Administration (FDA) approved PICC line catheter or port specifically for power injectors is used, when manufacturer guidelines regarding infusion rate and pressure are followed and where federal or state law and/or institutional policy permits.

Personnel Performing Image-guided Procedures

It is the position of the Board that only medical imaging and/or radiation therapy technologists certified by the American Registry of Radiologic Technologists (ARRT), Cardiovascular Credentialing International (CCI), Nuclear Medicine Technology Certification Board (NMTCB), or American Registry of Magnetic Resonance Imaging Technologist (ARMRIT) perform medical imaging that is used to guide procedures.

Placement and Removal of Peripherally Inserted Central Catheter (PICC)

The Board does not endorse that placement and removal of peripherally inserted central catheters.

Pregnant Medical Imaging Technologists and the Magnetic Resonance Environment

The Board advocates that the pregnant medical imaging technologist should not enter the magnetic resonance (MR) scanner/magnet room while scanning is in progress due to limited knowledge of the effects of gradient magnetic/radio frequency fields.

Qualifications for Performing Ionizing Radiation Emitting Bone Mineral Densitometry

It is within WV Code § 30-23, that only licensed medical imaging technologists perform ionizing radiation emitting equipment for bone densitometry examinations.

Qualifications for Performing Cardiovascular-interventional Radiography

The Board recommends that only licensed medical imaging technologists credentialed in cardiovascular-interventional (CI), vascular-interventional (VI), or cardiovascular-interventional (CV) radiography by the American Registry of Radiologic Technologists (ARRT) or radiologic technologists credentialed as registered cardiovascular invasive specialists (RCIS) by Cardiovascular Credentialing International (CCI) should perform all cardiovascular-interventional procedures.

Qualifications for Performing Diagnostic Computed Tomography

It is the recommendation of the Board that only medical imaging technologists certified in computed tomography (CT) by the American Registry of Radiologic Technologists (ARRT) or equivalent perform all diagnostic and interventional computed tomography examinations and procedures.

Qualifications for Performing Magnetic Resonance

It is a requirement of the Board that only medical imaging technologists certified in magnetic resonance (MR) by the American Registry of Radiologic Technologists (ARRT) or equivalent perform all diagnostic and interventional magnetic resonance examinations and procedures, as mandated by WV Code § 30-23.

Qualifications for Performing Mammography

The Board advocates that only radiologic technologists certified in mammography by the American Registry of Radiologic Technologists (ARRT) perform all mammography examinations and procedures.

Qualifications for Performing Medical Dosimetry

It is the recommendation of the Board that only individuals certified in medical dosimetry by the Medical Dosimetrist Certification Board (MDCB) or equivalent perform medical dosimetry procedures.

Qualifications for Performing Nuclear Medicine

It is a requirement of the Board that only medical imaging technologists certified in Nuclear Medicine technology by the American Registry of Radiologic Technologists (ARRT) or Nuclear Medicine Technology Certification Board (NMTCB) perform all diagnostic and interventional Nuclear Medicine examinations and procedures, as mandated by WV Code § 30-23.

Qualifications for Performing Radiation Therapy Procedures

It is strongly advocated by the Board that only radiation therapists certified in radiation therapy by the American Registry of Radiologic Technologists (ARRT) perform all radiation therapy procedures.

Qualifications of Personnel Utilizing Multi-Modality Imaging Equipment in Performing Fusion Imaging Examinations

The Board recommends that personnel utilizing multi-modality imaging equipment and performing fusion imaging with components requiring multiple modality competencies, should be registered by the American Registry of Radiologic Technologists (ARRT), Nuclear Medicine Technology Certification Board (NMTCB), American Registry of Magnetic Resonance Imaging Technologists (ARMRIT), or other nationally recognized certifying agency. The Board also requires that these technologists show documentation of education within their curriculum and/or specialized training that has been approved by the Board and within their scope of practice.

Radiologic Technologists Performing Diagnostic Medical Sonography

The Board advocates that diagnostic medical sonography is a scope of practice for the radiologic technologist certified in sonography.

Radiographic Technique Charts

The Board advocates that radiographic technique charts should be used by persons performing diagnostic medical imaging and that health care facilities make radiographic technique charts available to persons performing radiography.

Removal of Devices for Invasive Radiologic Procedures

The Board advocates that the removal of devices for invasive radiologic procedures is within the scope of practice for medical imaging and/or radiation therapy technologists with appropriate clinical and didactic education and where federal or state law and/or institutional policy permit.

Spot Filming a Voiding Cystogram Study

The Board does not advocate spot filming of a voiding cystogram by a medical imaging technologist.

Technical Assistants and Aides in Radiologic Technology

The Board recognizes that it is necessary for health care entities to employ personnel to perform some of the non-technical functions of radiologic technology, e.g., film processing, filing and patient transportation. This category of employment is **not** recognized as an introduction to a career in the radiologic sciences. The technical assistant **may not** position the patient, set technical factors, initiate the exposure, or evaluate images.

Use of Medical Ultrasound for Non-medically Prescribed Purposes

The Board opposes the use of medical ultrasound for the purpose of non-medical entrepreneurial application or entertainment contrary to the tenets of ethical medical practice. The performance of condition-specific ultrasound examinations should be based on clinical indications stipulated by a licensed health care practitioner.

Vascular Access

The Board advocates that accessing existing peripheral or central vascular implanted devices or external access lines to administer contrast media, radiopharmaceuticals and medications or maintaining line patency is within the scope of practice for medical imaging and/or radiation therapy technologists with appropriate clinical and didactic education and where federal or state law and/or institutional policy permit.

Venipuncture

The Board advocates that performing venipuncture to administer contrast media, radiopharmaceuticals and/or medications is within the scope of practice for medical imaging and/or radiation therapy technologists with appropriate clinical and didactic education and where federal or state law and/or institutional policy permit.

Verbal and/or Telephone Orders

The Board advocates that it is within the scope of practice of medical imaging and/or radiation therapy technologists to receive, relay and document verbal, facsimile, electronic and/or telephone orders in the patient's chart where federal or state law and/or institutional policy permit.

Wearing Radiation Monitoring Devices

The Board supports the position of wearing the primary personal monitoring device outside of the apron at the level of the thyroid to approximate the maximum dose to the head and neck. In specific cases such as high-dose fluoroscopy or high-dose rate brachytherapy, a second monitor may be indicated. The monitor should be worn at the waist under protective apparel, if appropriate. In the case of a minor (under 18 years of age) or a declared pregnant worker, a second monitoring badge is required by law.

Each radiologic technologist should maintain consistency of location in wearing of the personal monitoring device.

Quality Management, Quality Care and Safety Issues

Full-body Computed Tomography (CT) Screening on Asymptomatic Patients

The Board opposes the use of full-body CT screening for healthy patients with no symptoms or risk factors.

Radiologic Science Working Environment

The Board acknowledges that it is the shared responsibility of the medical imaging and/or radiation therapy technologist and the employer to provide a safe, efficient, pleasant and supportive work environment. The medical imaging and/or radiation therapy technologist should actively participate in this process.

Staffing for Radiation Therapy Treatment Delivery

It is the position of the Board that two registered radiation therapists per patient per treatment unit is the minimum standard for safe and efficient delivery of radiation therapy.

Support of the Mammography Quality Standards Act

The Board supports the Mammography Quality Standards Act of 1992 and subsequent re-authorizations.

Safe Handling of Radiographic Chemicals

The Board advocates that radiologic technologists and health care facilities be aware of and follow the current Occupational Health and Safety Administration (OSHA) regulations for occupational exposure to hazardous chemicals in laboratories including photographic and radiographic processing chemicals.