The Practice Standards for Medical Imaging and Radiation Therapy

Advisory Opinion Statement
Medication Administration in Peripherally Inserted Central Catheter Lines or Ports with a Power Injector
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After research of evidentiary documentation such as current literature, curricula, position statements, scopes of practice, laws and federal and state regulations and inquiries received by the American Society of Radiologic Technologists Governance Department, the American Society of Radiologic Technologists issued the opinions as contained herein.

Accountability and Responsibility of Medical Imaging and Radiation Therapy Professionals

The profession holds medical imaging and radiation therapy professionals responsible and accountable for rendering safe, effective clinical services to patients and for judgments exercised and actions taken in the course of providing those services.

Acts that are within the recognized scope of practice for a given license or certification may be performed only by those individuals who possess the education and skill proficiency to perform those acts in a safe and effective manner.

The medical imaging and radiation therapy professional’s performance should be consistent with state and federal laws, established standards of practice, facility policies and procedures and be evidence-based.

Advisory Opinion

It is the opinion of the American Society of Radiologic Technologists that based upon current literature; curricula set forth by the ASRT, ASRT Practice Standards for Medical Imaging and Radiation Therapy and Society of Nuclear Medicine and Molecular Imaging; certification examination specifications by the American Registry of Radiologic Technologists and Nuclear Medicine Technology Certification Board; and where federal or state law and/or institutional policy permits:

1. It is within the scope of practice for medical imaging and radiation therapy professionals to access and use a Food and Drug Administration approved PICC line or port designated for use with power injectors, when manufacturer guidelines regarding infusion rate and pressure are followed and where federal or state law and/or institutional policy permits.

GRADE: Strong

Rationale

The ASRT’s position is to determine the practice standards and scopes of practice for medical imaging and radiation therapy professionals. The practice standards’ general stipulation emphasizes the importance of an individual being educationally prepared and clinically competent to practice in the profession of medical imaging and radiation therapy. With proper
education and proven competence, the use of power injectors with PICC lines or ports provides quality patient services in a safe environment.

**Definitions**

Access: The process of inserting the designated needle through the access point of an existing vascular access device to deliver IV fluids or medication.

The following definitions can be found in the Glossary to The Practice Standards for Medical Imaging and Radiation Therapy:

Educationally prepared
Clinically competent

**Evidentiary Documentation**

*Current Literature*
Not applicable.
(Quality of evidence: not applicable)

**Curricula**

The ASRT curricula for all practice areas were reviewed.
2013 Computed Tomography Curriculum

2015 Magnetic Resonance Imaging Curriculum

2017 Radiography Curriculum

2015 Radiologist Assistant Curriculum

Additional nationally recognized curricula were reviewed.

Society of Nuclear Medicine and Molecular Imaging – Technologist Section
2013 Nuclear Medicine Technology Competency-Based Curriculum Guide 5th Edition

(Quality of evidence: High)

**Certification Agency Content Specifications**

The American Registry of Radiologic Technologists content specifications.
2017 Computed Tomography
2017 Vascular-Interventional Radiography

Nuclear Medicine Technology Certification Board (NMTCB)
2017 Components of Preparedness.

2016 Positron Emission Tomography (PET) Specialty Examination Content Outline
Effective June 24, 2018

(Quality of evidence: High)

Scopes of Practice and Practice Standards Reference
ASRT Standards of Practice for Medical Imaging and Radiation Therapy.

Applies to all modality-specific scopes of practice except medical dosimetrist and limited x-ray machine operators.

Identifying, preparing and/or administering medications as prescribed by a licensed practitioner.

Clinical Performance Standards, Standard Four - Performance, General Criteria
7. Uses accessory equipment.

(Quality of evidence: High)

Federal and State Statute Reference(s)
Not Applicable.
(Quality of evidence: not applicable)

Other
(Quality of evidence: not applicable)

Determining Scope of Practice

Each medical imaging and radiation therapy professional must exercise professional and prudent judgment in determining whether the performance of a given act is within the scope of practice for which the medical imaging and radiation therapy professional is licensed, if applicable within the jurisdiction in which he/she is employed, educationally prepared and clinically competent to perform.

The ASRT issues advisory opinions as to what constitutes appropriate practice. As such, an opinion is not a regulation or statute and does not have the force and effect of law. It is issued as a guidepost to medical imaging and radiation therapy professionals who wish to engage in safe practice. Federal and state laws, accreditation standards necessary to participate in government programs, and lawful institutional policies and procedures supersede these standards. The individual must be educationally prepared and clinically competent as a prerequisite to professional practice.

Approved: June 19, 2011
Amended, Main Motion, C-13.21 and C13.23, 2013
Amended, Main Motion, C-16.12, 2016
Amended, Main Motion, C-17.08, 2017
Amended, Main Motion, C-18.08, 2018
ASRT House of Delegates

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