The Practice Standards for Medical Imaging and Radiation Therapy

Advisory Opinion Statement

Medication Administration Through Existing Vascular Access

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After a study of evidentiary documentation such as current literature, curricula, position statements, scopes of practice, laws, 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 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; the curricula set forth by the ASRT, Society of Nuclear Medicine and Molecular Imaging and the National Educational Curriculum for Sonography; certification examination specifications by the American Registry of Radiologic Technologists, Nuclear Medicine Technology Certification Board and Cardiovascular Credentialing International; recommendations by the American College of Radiology; and where federal or state law and/or institutional policy permits that it is within the scope of practice for medical imaging and radiation therapy professionals to access and administer medications through existing vascular access.

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, accessing and administering medications through existing vascular access 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.

Existing vascular access**:** Peripheral or central vascular implanted devices or external access lines that include, but are not limited to, peripherally inserted central catheter lines, intravenous lines, central lines and ports.

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

Clinically competent
Educationally prepared
Medication

Evidentiary Documentation

Current Literature

American College of Radiology. *ACR Manual on Contrast Media, Version 10.3*. http://www.acr.org/quality-safety/resources/contrast-manual 2017.

American College of Radiology. *ACR Practice Parameter for Performing and Interpreting Diagnostic Computed Tomography (CT)*. https://www.acr.org/-/media/ACR/Files/Practice-Parameters/ct-perf-interpret.pdf?la=en 2017.

American College of Radiology. *ACR Practice Parameter for Performing and Interpreting Magnetic Resonance Imaging (MRI).* https://www.acr.org/-/media/ACR/Files/Practice-Parameters/mr-perf-interpret.pdf?la=en 2017.

American College of Radiology. *ACR-SPR Practice Parameter for the Use of Intravascular Contrast Media.* https://www.acr.org/-/media/ACR/Files/Practice-Parameters/ivcm.pdf?la=en 2017.

Rockwell D. A competency for central line use in radiology. *Journal of Radiology Nursing*. 2008; 27 (2): 84.

(Quality of Evidence: High)

Curriculum

The ASRT curricula for all practice areas were reviewed.

2014 ASRT Cardiac-Interventional and Vascular-Interventional Curriculum

2013 ASRT Computed Tomography Curriculum

2015 ASRT Magnetic Resonance Imaging Curriculum

2013 ASRT Mammography Curriculum

2014 ASRT Radiation Therapy Professional Curriculum

2017 ASRT Radiography Curriculum

2015 ASRT Radiologist Assistant Curriculum

Additional nationally recognized curricula were reviewed.

Joint Review Committee on Education in Diagnostic Medical Sonography

2016 National Education Curriculum for Sonography
NEC Common Curricula

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 (ARRT) content specifications:

2017 Computed Tomography

2017 Magnetic Resonance Imaging

2017 Nuclear Medicine

2017 Radiography

2018 Registered Radiologist Assistant

2017 Vascular-Interventional Radiography

Cardiovascular Credentialing International (CCI):

2016 Registered Cardiovascular Invasive Specialist (RCIS) exam overview task list.

Nuclear Medicine Technology Certification Board (NMTCB)

2017 Components of Preparedness.

(Quality of evidence: High)

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

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

Performing venipuncture as prescribed by a licensed practitioner.

Starting, maintaining and/or removing intravenous access as prescribed by a licensed practitioner.

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

(Quality of evidence: High)

Federal and State Statute Reference(s)
Not applicable.

(Quality of evidence: not applicable)

Other
Not applicable.

(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 engage in safe practice. Federal and state laws, accreditation standards necessary to participate in government programs, and institutional policies and procedures supersede these standards. The individual must be educationally prepared and clinically competent as a prerequisite to professional practice.

Approved: July 1, 2012
Amended, Main Motion, C-13.21 and C13.23, 2013
Amended, Main Motion, C-16.14, 2016
Amended, Main Motion, C-17.10, 2017
Amended, Main Motion, C-18.12, 2018
ASRT House of Delegates Links to external websites may change without notice.