The Practice Standards for Medical Imaging and Radiation Therapy

Cardiac Interventional and Vascular Interventional Technology

Practice Standards
Preface to Practice Standards

A profession’s practice standards serve as a guide for appropriate practice. The practice standards define the practice and establish general criteria to determine compliance. Practice standards are authoritative statements established by the profession for evaluating the quality of practice, service and education provided by individuals who practice in medical imaging and radiation therapy.

Practice Standards can be used by individual facilities to develop job descriptions and practice parameters. Those outside the imaging, therapeutic and radiation science community can use the standards as an overview of the role and responsibilities of the individual as defined by the profession.

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

Format

The Practice Standards are divided into six sections: introduction, scope of practice, clinical performance, quality performance, professional performance and advisory opinion statements.

Introduction. The introduction provides definitions for the practice and the minimum qualifications for the education and certification of individuals in addition to an overview of the specific practice.

Scope of Practice. The scope of practice delineates the parameters of the specific practice.

Clinical Performance Standards. The clinical performance standards define the activities of the individual responsible for the care of patients and delivery of diagnostic or therapeutic procedures. The section incorporates patient assessment and management with procedural analysis, performance and evaluation.

Quality Performance Standards. The quality performance standards define the activities of the individual in the technical areas of performance, such as equipment and material assessment safety standards and total quality management.

Professional Performance Standards. The professional performance standards define the activities of the individual in the areas of education, interpersonal relationships, self-assessment and ethical behavior.

Advisory Opinion Statements. The advisory opinions are interpretations of the standards intended for clarification and guidance of specific practice issues.
Each performance standards section is subdivided into individual standards. The standards are numbered and followed by a term or set of terms that identify the standards, such as “assessment” or “analysis/determination.” The next statement is the expected performance of the individual when performing the procedure or treatment. A rationale statement follows and explains why an individual should adhere to the particular standard of performance.

Criteria. Criteria are used to evaluate an individual’s performance. Each set is divided into two parts: the general criteria and the specific criteria. Both should be used when evaluating performance.

General Criteria. General criteria are written in a style that applies to imaging and radiation science individuals. These criteria are the same in all of the practice standards, with the exception of limited x-ray machine operators and medical dosimetry, and should be used for the appropriate area of practice.

Specific Criteria. Specific criteria meet the needs of the individuals in the various areas of professional performance. While many areas of performance within imaging and radiation sciences are similar, others are not. The specific criteria were drafted with these differences in mind.
Introduction to Cardiac Interventional and Vascular Interventional Technology Practice Standards

Definition

This practice standards document for cardiac interventional and vascular interventional technology is inclusive of the practice areas of vascular interventional and cardiac interventional technology.

The practice of cardiac interventional and vascular interventional technology is performed by health care professionals responsible for the administration of ionizing radiation to humans and animals for diagnostic, therapeutic or research purposes. A cardiac interventional and vascular interventional technologist performs radiographic and other procedures at the request of and for interpretation by a licensed independent practitioner.

The complex nature of disease processes involves multiple imaging modalities. The cardiac interventional and vascular interventional technologist is a vital member of a multidisciplinary team that forms a core of highly trained health care professionals who each bring expertise to the area of patient care.

Cardiac interventional and vascular interventional technology integrates scientific knowledge, technical competence and patient interaction skills to provide safe and accurate procedures with compassion. A cardiac interventional and vascular interventional technologist recognizes patient conditions essential for the successful completion of the procedure.

The cardiac interventional and vascular interventional technologist must demonstrate an understanding of human anatomy, physiology, pathology and medical terminology. He or she must maintain a high degree of accuracy in radiographic positioning and exposure technique. Cardiac interventional and vascular interventional technologists must possess, use and maintain knowledge about radiation protection and safety. Cardiac interventional and vascular interventional technologists independently perform or assist the licensed independent practitioner in the completion of cardiac interventional and vascular interventional technology procedures. Cardiac interventional and vascular interventional technologists prepare, administer and document activities related to medications in accordance with state and federal regulations or lawful institutional policy.

The cardiac interventional and vascular interventional technologist is the primary imaging liaison between patients, licensed independent practitioners and other members of the support team. Cardiac interventional and vascular interventional technologists must remain sensitive to the needs of the patient through good communication, patient assessment, patient monitoring, and patient care skills. As members of the health care team, cardiac interventional and vascular interventional technologists participate in quality improvement processes and continually assess their professional performance.
Cardiac interventional and vascular interventional technologists think critically and use independent, professional and ethical judgments in all aspects of their work. They engage in continuing education, to include their area of practice, to enhance patient care, radiation safety, public education, knowledge, and technical competence.

**Education and Certification**

Only medical imaging and radiation therapy professionals who have completed the appropriate education and obtained certification(s) as outlined in these standards should perform cardiovascular interventional procedures.

Cardiac interventional and vascular interventional technologists prepare for their roles on the interdisciplinary team by successfully completing a program in radiography that is programmatically accredited or part of an institution that is regionally accredited, and by attaining appropriate primary certification from the American Registry of Radiologic Technologists.

Eligibility to take the ARRT postprimary examination in vascular interventional radiography or cardiac interventional radiography requires appropriate primary certification in radiography, documentation of structured education and clinical experience at the time of application. Those passing the vascular interventional radiography examination use the credentials R.T.(R)(VI) and those passing the cardiac interventional radiography examination use the credentials R.T.(R)(CI). Individuals with the appropriate primary certification in radiography who have passed the ARRT postprimary examination in cardiovascular interventional radiography use the credentials R.T.(R)(CV). The Cardiovascular Credentialing International is another certifying agency. Individuals with primary certification in radiography who pass the cardiovascular invasive specialist examination as a postprimary certification use the credentials R.T.(R), RCIS.

To maintain postprimary certification for the ARRT and/or CCI, cardiac interventional and vascular interventional technologists must complete the appropriate continuing education requirements to sustain a level of the expertise and awareness of changes and advances in practice.

**Overview**

An interdisciplinary team of radiologists, cardiac interventional and vascular interventional technologists, radiographers and other support staff plays a critical role in the delivery of health services as new modalities emerge and the need for imaging procedures increases. A comprehensive procedure list for the cardiac interventional and vascular interventional technologist is impractical because clinical activities vary by the practice needs and expertise of the cardiac interventional and vascular interventional technologist. As cardiac interventional and vascular interventional technologists gain more experience, knowledge and clinical competence, the clinical activities for the cardiac interventional and vascular interventional technologist may evolve.

State statute, regulation or lawful community custom may dictate practice parameters. *Wherever there is a conflict between these standards and state or local statutes or regulations, the state or*
local statutes or regulations supersede these standards. A cardiac interventional and vascular interventional technologist should, within the boundaries of all applicable legal requirements and restrictions, exercise individual thought, judgment and discretion in the performance of the procedure.
Cardiac Interventional and Vascular Interventional Technologist Scope of Practice

The scope of practice of the medical imaging and radiation therapy professional includes:

• Providing optimal patient care.

• Receiving, relaying and documenting verbal, written and electronic orders in the patient’s medical record.

• Corroborating a patient's clinical history with procedure and ensuring information is documented and available for use by a licensed independent practitioner.

• Verifying informed consent for applicable procedures.

• Assuming responsibility for patient needs during procedures.

• Preparing patients for procedures.

• Applying principles of ALARA to minimize exposure to patient, self and others.

• Performing venipuncture as prescribed by a licensed independent practitioner.

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

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

• Evaluating images for technical quality and ensuring proper identification is recorded.

• Identifying and responding to emergency situations.

• Providing education.

• Educating and monitoring students and other health care providers.

• Performing ongoing quality assurance activities.

• Applying the principles of patient safety during all aspects of patient care.

The scope of practice of the cardiac interventional and vascular interventional technologist also includes:

1. Performing cardiovascular diagnostic/interventional procedures as prescribed by a licensed independent practitioner.
2. Determining radiographic technique exposure factors.

3. Effectively panning the table during exposure.

4. Assisting licensed independent practitioner with fluoroscopic and specialized interventional radiography procedures.

5. Performing noninterpretive fluoroscopic procedures as prescribed by a licensed independent practitioner.

6. Maintaining intra-arterial access as prescribed by a licensed independent practitioner.

7. Participating in physiologic monitoring of patients.

8. Performing manual and mechanical hemostasis, including the use of vascular closure devices, as prescribed by a licensed independent practitioner.

9. Placing, maintaining and removing peripherally inserted central catheters as prescribed by a licensed independent practitioner.

10. Post processing digital data for display or hard copy records, ensuring proper identification is evident.
Cardiac Interventional and Vascular Interventional Clinical Performance Standards

Standard One – Assessment

The cardiac interventional and vascular interventional technologist collects pertinent data about the patient and the procedure.

Rationale
Information about the patient’s health status is essential in providing appropriate imaging and therapeutic services.

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

General Criteria
The cardiac interventional and vascular interventional technologist:

1. Obtains relevant information from all available resources and the release of information as needed.
2. Verifies patient identification and the procedure requested or prescribed.
3. Verifies that the patient has consented to the procedure.
4. Reviews all available patient medical record information to verify the appropriateness of the procedure requested or prescribed.
5. Verifies the patient’s pregnancy status.
6. Assesses factors that may negatively affect the procedure, such as medications, patient history, insufficient patient preparation or artifact producing objects.
7. Recognizes signs and symptoms of an emergency.

Specific Criteria
The cardiac interventional and vascular interventional technologist:

1. Assesses patient lab values prior to procedure.
2. Assesses patient risk for allergic reaction to medication prior to administration.
Cardiac Interventional and Vascular Interventional Clinical Performance Standards

Standard Two – Analysis/Determination

The cardiac interventional and vascular interventional technologist analyzes the information obtained during the assessment phase and develops an action plan for completing the procedure.

Rationale
Determining the most appropriate action plan enhances patient safety and comfort, optimizes diagnostic and therapeutic quality and improves efficiency.

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

General Criteria
The cardiac interventional and vascular interventional technologist:
1. Selects the most appropriate and efficient action plan after reviewing all pertinent data and assessing the patient’s abilities and condition.
2. Employs professional judgment to adapt imaging and therapeutic procedures to improve diagnostic quality and therapeutic outcomes.
3. Consults appropriate medical personnel to determine a modified action plan.
4. Determines the need for and selects supplies, accessory equipment, shielding, positioning and immobilization devices.
5. Determines the course of action for an emergent situation.
6. Determines that all procedural requirements are in place to achieve a quality diagnostic or therapeutic procedure.

Specific Criteria
The cardiac interventional and vascular interventional technologist:
1. Analyzes and determines action plans in conjunction with the cardiovascular team.
2. Verifies current patient history and physical examination are available.
3. Documents or assists in documenting patient medical history related to the procedure.
Cardiac Interventional and Vascular Interventional Clinical Performance Standards

Standard Three – Education

The cardiac interventional and vascular interventional technologist provides information about the procedure and related health issues according to protocol.

Rationale
Communication and education are necessary to establish a positive relationship.

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

General Criteria
The cardiac interventional and vascular interventional technologist:

1. Provides an accurate explanation and instructions at an appropriate time and at a level the patient and their care providers can understand. Addresses questions and concerns regarding the procedure.

2. Refers questions about diagnosis, treatment or prognosis to a licensed independent practitioner.

3. Provides patient education.

4. Explains effects and potential side effects of medications.

Specific Criteria
The cardiac interventional and vascular interventional technologist:

1. Provides pre-, peri- and post-procedure education.

2. Provides information regarding the risks and benefits of radiation.
Cardiac Interventional and Vascular Interventional Clinical Performance Standards

Standard Four – Performance

The cardiac interventional and vascular interventional technologist performs the action plan.

Rationale
Quality patient services are provided through the safe and accurate performance of a deliberate plan of action.

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

General Criteria
The cardiac interventional and vascular interventional technologist:
1. Performs procedural timeout.
2. Implements an action plan.
3. Explains to the patient each step of the action plan as it occurs and elicits the cooperation of the patient.
4. Uses an integrated team approach.
5. Modifies the action plan according to changes in the clinical situation.
6. Administers first aid or provides life support.
7. Uses accessory equipment.
8. Assesses and monitors the patient’s physical, emotional and mental status.
9. Applies principles of sterile technique.
10. Positions patient for anatomic area of interest, respecting patient ability and comfort.
11. Immobilizes patient for procedure.
12. Monitors the patient for reactions to medications.

Specific Criteria
The cardiac interventional and vascular interventional technologist:
1. Monitors ECG, blood pressure, respiration, oxygen saturation, level of consciousness and pain pre-, peri- and post-procedure.

2. Collects, labels and documents blood and tissue samples.

3. Adjusts imaging parameters to achieve a quality diagnostic/interventional procedure.
Cardiac Interventional and Vascular Interventional Clinical Performance Standards

Standard Five – Evaluation

The cardiac interventional and vascular interventional technologist determines whether the goals of the action plan have been achieved.

Rationale
Careful examination of the procedure is important to determine that expected outcomes have been met.

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

General Criteria
The cardiac interventional and vascular interventional technologist:

1. Evaluates the patient and the procedure to identify variances that might affect the expected outcome.

2. Completes the evaluation process in a timely, accurate and comprehensive manner.

3. Measures the procedure against established policies, protocols and benchmarks.

4. Identifies exceptions to the expected outcome.

5. Develops a revised action plan to achieve the intended outcome.

6. Communicates the revised action plan to appropriate team members.

Specific Criteria
The cardiac interventional and vascular interventional technologist:

1. Evaluates access site for complications requiring intervention or further treatment.
Cardiac Interventional and Vascular Interventional Clinical Performance Standards

Standard Six – Implementation

The cardiac interventional and vascular interventional technologist implements the revised action plan.

Rationale
It may be necessary to make changes to the action plan to achieve the expected outcome.

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

General Criteria
The cardiac interventional and vascular interventional technologist:
1. Bases the revised plan on the patient’s condition and the most appropriate means of achieving the expected outcome.

2. Takes action based on patient and procedural variances.

3. Measures and evaluates the results of the revised action plan.

4. Notifies the appropriate health care provider when immediate clinical response is necessary, based on procedural findings and patient condition.

Specific Criteria
The cardiac interventional and vascular interventional technologist:
1. Adjusts imaging parameters, patient procedure or computer-generated information to improve the outcome.

2. Performs routine and specialized postprocessing.
Cardiac Interventional and Vascular Interventional Clinical Performance Standards

Standard Seven – Outcomes Measurement

The cardiac interventional and vascular interventional technologist reviews and evaluates the outcome of the procedure.

Rationale
To evaluate the quality of care, the cardiac interventional and vascular interventional technologist compares the actual outcome with the expected outcome.

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

General Criteria
The cardiac interventional and vascular interventional technologist:

1. Reviews all diagnostic or therapeutic data for completeness and accuracy.

2. Uses evidence-based practice to determine whether the actual outcome is within established criteria.

3. Evaluates the process and recognizes opportunities for future changes.

4. Assesses the patient’s physical, emotional and mental status prior to discharge.

Specific Criteria
None added.
Cardiac Interventional and Vascular Interventional Clinical Performance Standards

Standard Eight – Documentation

The cardiac interventional and vascular interventional technologist documents information about patient care, the procedure and the final outcome.

Rationale
Clear and precise documentation is essential for continuity of care, accuracy of care and quality assurance.

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

General Criteria
The cardiac interventional and vascular interventional technologist:

1. Documents diagnostic, treatment and patient data in the medical record in a timely, accurate and comprehensive manner.

2. Documents unintended outcomes or exceptions from the established criteria.

3. Provides pertinent information to authorized individual(s) involved in the patient’s care.

4. Records information used for billing and coding procedures.

5. Archives images or data.

6. Verifies patient consent is documented.

7. Documents procedural timeout.

Specific Criteria
The cardiac interventional and vascular interventional technologist:

1. Obtains and documents data in the medical record pre-, peri- and post-procedure.

2. Documents use of sedation.

3. Documents radiation exposure parameters and initiates further action as needed.

4. Documents administered medications.
Cardiac Interventional and Vascular Intervventional Quality Performance Standards

Standard One – Assessment

The cardiac interventional and vascular interventional technologist collects pertinent information regarding equipment, procedures and the work environment.

Rationale
The planning and provision of safe and effective medical services relies on the collection of pertinent information about equipment, procedures and the work environment.

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

General Criteria
The cardiac interventional and vascular interventional technologist:

1. Determines that services are performed in a safe environment, minimizing potential hazards.

2. Confirms that equipment performance, maintenance and operation comply with the manufacturer’s specifications.

3. Verifies that protocol and procedure manuals include recommended criteria and are reviewed and revised.

Specific Criteria
The cardiac interventional and vascular interventional technologist:

1. Controls access to restricted areas during radiation exposure.

2. Participates in radiation protection, patient and personnel safety, risk management, and quality management activities.
Cardiac Interventional and Vascular Interventional Quality
Performance Standards

Standard Two – Analysis/Determination

The cardiac interventional and vascular interventional technologist analyzes information collected during the assessment phase to determine the need for changes to equipment, procedures or the work environment.

Rationale
Determination of acceptable performance is necessary to provide safe and effective services.

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

General Criteria
The cardiac interventional and vascular interventional technologist:

1. Evaluates services, procedures and the environment to determine if they meet or exceed established guidelines, and revises the action plan.

2. Monitors equipment to meet or exceed established standards and revises the action plan.

3. Assesses and maintains the integrity of medical supplies.

Specific Criteria
The cardiac interventional and vascular interventional technologist:

1. Maintains documentation for tracking implantable devices.
Cardiac Interventional and Vascular Interventional Quality Performance Standards

Standard Three – Education

The cardiac interventional and vascular interventional technologist informs the patient, public and other health care providers about procedures, equipment and facilities.

Rationale
Open communication promotes safe practices.

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

General Criteria
The cardiac interventional and vascular interventional technologist:

1. Elicits confidence and cooperation from the patient, the public and other health care providers by providing timely communication and effective instruction.

2. Presents explanations and instructions at the learner’s level of understanding.

3. Educates the patient, public and other health care providers about procedures and the associated biological effects.

4. Provides information to patients, health care providers, students and the public concerning the role and responsibilities of individuals in the profession.

Specific Criteria
None added.
Cardiac Interventional and Vascular Interventional Quality
Performance Standards

Standard Four – Performance

The cardiac interventional and vascular interventional technologist performs quality assurance activities.

Rationale
Quality assurance activities provide valid and reliable information regarding the performance of equipment, materials and processes.

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

General Criteria
The cardiac interventional and vascular interventional technologist:
1. Maintains current information on equipment, materials and processes.
2. Performs ongoing quality assurance activities.
3. Performs quality control testing of equipment.
4. Participates in safety and risk management activities.
5. When appropriate, wears one or more personal radiation monitoring devices at the location indicated on the personal radiation monitoring device or as indicated by the radiation safety officer or designee.

Specific Criteria
The cardiac interventional and vascular interventional technologist:
1. Provides a safe and sterile environment for patients and staff.
2. Monitors image production to maintain optimal image quality.
3. Consults with medical physicist and/or engineer in performing and documenting the quality assurance tests.
4. Maintains and performs quality control on radiation safety equipment.
Cardiac Interventional and Vascular Interventional Quality Performance Standards

Standard Five – Evaluation

The cardiac interventional and vascular interventional technologist evaluates quality assurance results and establishes an appropriate action plan.

Rationale
Equipment, materials and processes depend on ongoing quality assurance activities that evaluate performance based on established guidelines.

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

General Criteria
The cardiac interventional and vascular interventional technologist:
1. Validates quality assurance testing conditions and results.
2. Evaluates quality assurance results.
3. Formulates an action plan.

Specific Criteria
None added.
Cardiac Interventional and Vascular Interventional Quality Performance Standards

Standard Six – Implementation

The cardiac interventional and vascular interventional technologist implements the quality assurance action plan for equipment, materials and processes.

Rationale
Implementation of a quality assurance action plan promotes safe and effective services.

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

General Criteria
The cardiac interventional and vascular interventional technologist:

1. Obtains assistance to support the quality assurance action plan.

2. Implements the quality assurance action plan.

Specific Criteria
None added.
Cardiac Interventional and Vascular Interventional Quality Performance Standards

Standard Seven – Outcomes Measurement

The cardiac interventional and vascular interventional technologist assesses the outcome of the quality management action plan for equipment, materials and processes.

Rationale
Outcomes assessment is an integral part of the ongoing quality management action plan to enhance diagnostic and therapeutic services.

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

General Criteria
The cardiac interventional and vascular interventional technologist:
1. Reviews the implementation process for accuracy and validity.
2. Determines that actual outcomes are within established criteria.
3. Develops and implements a revised action plan.

Specific Criteria
None added.
Cardiac Interventional and Vascular Interventional Quality Performance Standards

Standard Eight – Documentation

The cardiac interventional and vascular interventional technologist documents quality assurance activities and results.

Rationale
Documentation provides evidence of quality assurance activities designed to enhance safety.

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

General Criteria
The cardiac interventional and vascular interventional technologist:
1. Maintains documentation of quality assurance activities, procedures and results.
2. Documents in a timely, accurate and comprehensive manner.

Specific Criteria
None added.
Cardiac Interventional and Vascular Interventional Professional Performance Standards

Standard One – Quality

The cardiac interventional and vascular interventional technologist strives to provide optimal patient care.

Rationale
Patients expect and deserve optimal care during diagnosis and treatment.

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

General Criteria
The cardiac interventional and vascular interventional technologist:
   1. Collaborates with others to elevate the quality of care.
   2. Participates in ongoing quality assurance programs.
   3. Adheres to standards, policies and established guidelines.
   4. Applies professional judgment and discretion while performing the diagnostic study or treatment.
   5. Anticipates, considers and responds to the needs of a diverse patient population.

Specific Criteria
None added.
Cardiac Interventional and Vascular Interventional Professional Performance Standards

Standard Two – Self-Assessment

The cardiac interventional and vascular interventional technologist evaluates personal performance.

Rationale
Self-assessment is necessary for personal growth and professional development.

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

General Criteria
The cardiac interventional and vascular interventional technologist:

1. Assesses personal work ethics, behaviors and attitudes.

2. Evaluates performance and recognizes opportunities for educational growth and improvement.

3. Recognizes and applies personal and professional strengths.

4. Participates in professional societies and organizations.

Specific Criteria
None added.
Cardiac Interventional and Vascular Interventional Professional Performance Standards

Standard Three – Education

The cardiac interventional and vascular interventional technologist acquires and maintains current knowledge in practice.

Rationale
Advancements in the profession and optimal patient care require additional knowledge and skills through education.

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

General Criteria
The cardiac interventional and vascular interventional technologist:

1. Maintains credentials and certification related to practice.

2. Advocates for and participates in continuing education related to area of practice, to maintain and enhance clinical competency.

3. Advocates for and participates in vendor specific applications training to maintain clinical competency.

Specific Criteria
The cardiac interventional and vascular interventional technologist:

1. Maintains competency in the use of diagnostic/interventional devices.
Cardiac Interventional and Vascular Interventional Professional Performance Standards

Standard Four – Collaboration and Collegiality

The cardiac interventional and vascular interventional technologist promotes a positive and collaborative practice atmosphere with other members of the health care team.

Rationale
To provide quality patient care, all members of the health care team must communicate effectively and work together efficiently.

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

General Criteria
The cardiac interventional and vascular interventional technologist:
1. Shares knowledge and expertise with others.
2. Develops and maintains collaborative partnerships to enhance quality and efficiency.
3. Promotes understanding of the profession.

Specific Criteria
The cardiac interventional and vascular interventional technologist:
1. Informs others about radiation safety.
2. Informs others regarding medication considerations as they relate to the procedure.
Cardiac Interventional and Vascular Interventional Professional Performance Standards

Standard Five – Ethics

The cardiac interventional and vascular interventional technologist adheres to the profession’s accepted ethical standards.

Rationale
Decisions made and actions taken on behalf of the patient are based on a sound ethical foundation.

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

General Criteria
The cardiac interventional and vascular interventional technologist:
1. Provides health care services with consideration for a diverse patient population.
3. Accepts accountability for decisions made and actions taken.
4. Delivers patient care and service free from bias or discrimination.
5. Respects the patient’s right to privacy and confidentiality.
6. Adheres to the established practice standards of the profession.
7. Adheres to the established ethical standards of recognized certifying agencies.

Specific Criteria
None added.
Cardiac Interventional and Vascular Interventional Professional Performance Standards

Standard Six – Research and Innovation

The cardiac interventional and vascular interventional technologist participates in the acquisition and dissemination of knowledge and the advancement of the profession.

Rationale
Scholarly activities such as research, scientific investigation, presentation and publication advance the profession.

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

General Criteria
The cardiac interventional and vascular interventional technologist:
  1. Reads and evaluates research relevant to the profession.
  2. Participates in data collection.
  3. Investigates innovative methods for application in practice.
  4. Shares information through publication, presentation and collaboration.
  5. Adopts new best practices.

Specific Criteria
None added.
Cardiac Interventional and Vascular Interventional Advisory Opinion Statements

Injecting Medication in Peripherally Inserted Central Catheter Lines or Ports with a Power Injector.

Medication Injections by Medical Imaging and Radiation Therapy Professionals.

Medication Injection Through Existing Vascular Access.

Placement of Personal Radiation Monitoring Devices.