

A decorative graphic consisting of a thick, grey diagonal line that runs from the top left towards the bottom right. A large, semi-transparent grey sphere is positioned where the line changes direction, appearing to act as a pivot or a ball-and-socket joint.

# The Practice Standards for Medical Imaging and Radiation Therapy

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## Computed Tomography Practice Standards

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## 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 judging 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 for Medical Imaging and Radiation Therapy 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 education and certification for 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 in 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 including 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 for 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 in evaluating an individual’s performance. Each set is divided into two parts: the general criteria and the specific criteria. Both criteria 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 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 are drafted with these differences in mind.

# Introduction to Computed Tomography Practice Standards

## Definition

The practice of computed tomography is performed by a segment of health care professionals responsible for the administration of ionizing radiation to humans for diagnostic, therapeutic, or research purposes. A computed tomography technologist performs computed tomography procedures and related techniques, producing sectional and three-dimensional images at the request of and for interpretation by a licensed independent practitioner; assists with interventional and therapeutic procedures and may perform fusion procedures.

The complex nature of disease processes involves multiple imaging modalities. Although an interdisciplinary team of radiologists, computed tomography technologists and support staff plays a critical role in the delivery of health services, it is the computed tomography technologist who performs and reformats the computed tomography examination that creates the images needed for diagnosis and the performance of interventional and therapeutic procedures.

Computed tomography integrates scientific knowledge, technical skills, patient interaction and compassionate care resulting in diagnostic information. A computed tomography technologist recognizes patient conditions, assesses and monitors patient vital signs, and takes appropriate action in emergency situations essential for successful completion of the procedure and to maintain quality patient care. A computed tomography technologist exercises independent professional and ethical judgment.

Computed tomography technologists must demonstrate an understanding of human anatomy, human physiology, pathology, pharmacology, computer technology, basic patient care and assessment techniques, radiation physics, radiation biology, radiation protection and medical terminology.

Computed tomography technologists must maintain a high degree of accuracy in positioning and exposure technique. They must possess, utilize and maintain knowledge about radiation protection, safety and current scanning protocols. Computed tomography technologists independently perform or assist the licensed practitioner in the completion of diagnostic, therapeutic, interventional, and fusion computed tomography procedures. Computed tomography technologists prepare, administer and document activities related to, medications and radiation exposure in accordance with federal and state laws or lawful institutional policy.

Computed tomography technologists are the primary liaison between patients, licensed independent practitioners, and other members of the support team. Computed tomography technologists must remain sensitive to the physical and emotional needs of the patient through good communication, patient assessment, patient monitoring and patient care skills. As members of the health care team, computed tomography technologists participate in quality improvement processes and continually assess their professional performance.

Computed tomography technologists think critically and use independent, professional and ethical judgment in all aspects of their work. They engage in continuing education to enhance patient care, public education, knowledge and technical competence.

### **Education and Certification**

Computed tomography technologists prepare for their role on the interdisciplinary team by successfully completing an accredited educational program in radiography, radiation therapy or nuclear medicine technology. Two-year certificate, associate degree and four-year baccalaureate degree programs exist throughout the United States. Accredited programs must meet specific curricular and educational standards.

Upon completion of a course of study in radiography, radiation therapy or nuclear medicine technology from an accredited program recognized by the American Registry of Radiologic Technologists, individuals may apply to take the national certification examination. Those who successfully complete the certification examination in radiography may use the credential R.T.(R) following their name; the R.T. signifies registered technologist and the (R) indicates radiography. Those who successfully complete the certification examination in radiation therapy may use the credential R.T.(T) following their name; R.T. signifies registered technologist and the (T) indicates radiation therapy. Those who successfully complete the certification examination in nuclear medicine technology may use the credential R.T.(N) following their name; the R.T signifies registered technologist and the (N) indicates nuclear medicine technology.

The Nuclear Medicine Technology Certification Board (NMTCB) also is a certifying agency. Once the NMTCB determines an applicant is eligible for the examination, the applicant must take the certification examination within the prescribed time period established by the NMTCB. Those who successfully complete this certification examination may use the credential CNMT, indicating certified nuclear medicine technologist.

Eligibility to take the postprimary examination in computed tomography requires registration in radiography, nuclear medicine technology or radiation therapy at the time of examination and documentation of clinical experience and any necessary competencies in specific procedures. Certificates issued by the NMTCB are recognized as meeting the eligibility requirements for computed tomography certification and continued computed tomography registration through the ARRT. After successfully completing the computed tomography postprimary examination, the credentials R.T.(R)(CT), R.T.(T)(CT), or R.T.(N)(CT) may be used if registered by the ARRT and CNMT, R.T.(CT) ARRT if certified by the NMTCB.

To maintain ARRT certification, computed tomography technologists must complete appropriate continuing education requirements to sustain a level of expertise and awareness of changes and advances in practice.

### **Overview**

An interdisciplinary team of radiologists, computed tomography 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 computed tomography technologist is impractical because clinical activities vary by practice needs and expertise of the computed tomography technologist. As computed tomography technologists gain more experience, knowledge and clinical competence, the clinical activities for the computed tomography 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 computed tomography technologist should, within the boundaries of all applicable legal requirements and restrictions, exercise individual thought, judgment and discretion in the performance of the procedure.

## **Computed Tomography Technologist Scope of Practice**

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

- Receiving, relaying and documenting verbal, written and electronic orders in the patient's medical record.
- Corroborating patient's clinical history with procedure, ensuring information is documented and available for use by a licensed independent practitioner.
- Verifying informed consent.
- 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 and maintaining intravenous (IV) 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, ensuring proper identification is recorded.
- Identifying and managing emergency situations.
- Providing education.
- Educating and monitoring students and other health care providers.
- Performing ongoing quality assurance activities.

The scope of practice of the computed tomography technologist also includes:

1. Introducing oneself appropriately to the patient and putting the patient at ease.
2. Performing computed tomography procedures as prescribed by a licensed independent practitioner.
3. Following the direction of a licensed independent practitioner, the computed tomography technologist assists with interventional computed tomography procedures and applies appropriate aseptic surgical technique as needed.

4. Maintaining archival storage of digitized data as appropriate and documenting patient dose exposures.
5. Assisting in maintaining patient records, respecting confidentiality and established policy.

# Computed Tomography Clinical Performance Standards

## Standard One – Assessment

The computed tomography 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 computed tomography technologist:

1. Gathers relevant information from the patient, medical record, significant others and health care providers.
2. Reconfirms patient identification and verifies the procedure requested or prescribed.
3. Reviews the patient's medical record to verify the appropriateness of a specific examination or procedure.
4. Verifies the patient's pregnancy status.
5. Assesses factors that may contraindicate the procedure, such as medications, patient history, insufficient patient preparation or artifacts.
6. Recognizes signs and symptoms of an emergency.

### *Specific Criteria*

The computed tomography technologist:

1. Assesses patient risk for allergic reaction to contrast media prior to administration.
2. Locates and reviews previous examinations for comparison.
3. Receives, relays, and documents verbal and/or telephone orders in the patient's chart.
4. Identifies and removes artifact-producing objects such as dentures, telemetry units, chest leads, jewelry and hearing aids.

## Computed Tomography Clinical Performance Standards

### Standard Two – Analysis/Determination

The computed tomography 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 computed tomography 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 outcome.
3. Consults appropriate medical personnel to determine a modified action plan.
4. Determines the need for and selects supplies, accessory equipment, shielding and immobilization devices.
5. Determines the course of action for an emergency or problem situation.
6. Determines that all procedural requirements are in place to achieve a quality diagnostic or therapeutic procedure.

#### *Specific Criteria*

The computed tomography technologist:

1. Selects various power-up techniques, including routine, nonroutine and fast activation.
2. Determines optimum placement of electrocardiogram (ECG) electrodes.
3. Evaluates lab values prior to administering contrast media, beginning interventional procedures or fusion imaging.
4. Determines patient compliance with pre-examination preparation instructions (e.g., diet, medications).

5. Reviews the patient's medical record and the licensed independent practitioner's request to determine optimal scanning parameters for clinical indication.
6. Determines the appropriate type and dose of contrast media to be administered, based on the patient's age, weight and medical or physical status.

## Computed Tomography Clinical Performance Standards

### Standard Three – Patient Education

The computed tomography 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 computed tomography technologist:

1. Verifies that the patient has consented to the procedure and fully understands its risks, benefits, alternatives and follow-up. The computed tomography technologist verifies that written or informed consent has been obtained.
2. Provides accurate explanations and instructions at an appropriate time and at a level the patients and their care providers can understand. Addresses patient questions and concerns regarding the procedure.
3. Refers questions about diagnosis, treatment or prognosis to a licensed independent practitioner.
4. Provides related patient education.
5. Explains precautions regarding administration of medications.

#### *Specific Criteria*

The computed tomography technologist:

1. Instructs patients regarding examination preparation prior to imaging procedures.
2. Instructs patients regarding contrast considerations.
3. Provides information about risks and benefits of radiation.
4. Consults with other departments, such as patient transportation and anesthesia, for patient services.

## Computed Tomography Clinical Performance Standards

### Standard Four – Performance

The computed tomography 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 computed tomography technologist:

1. Performs procedural timeout.
2. Implements an action plan.
3. Explains each step of the action plan to the patient 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. Utilizes 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 computed tomography technologist:

1. Performs venipuncture, verifies IV patency and maintains IV access.

2. Utilizes radiation shielding devices.
3. Utilizes technical factors according to equipment specifications to minimize radiation exposure to the patient.
4. Identifies positive cardiac R-wave trigger.
5. Collects and documents tissue samples.

## Computed Tomography Clinical Performance Standards

### Standard Five – Evaluation

The computed tomography 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 computed tomography technologist:

1. Evaluates the patient and the procedure to identify variances that may 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 revised action plan to appropriate team members.

#### *Specific Criteria*

The computed tomography technologist:

1. Reviews images to determine if additional scans will enhance the diagnostic value of the procedure.

## Computed Tomography Clinical Performance Standards

### Standard Six – Implementation

The computed tomography 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 computed tomography 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 appropriate health care provider when immediate clinical response is necessary based on procedural findings and patient condition.

#### *Specific Criteria*

The computed tomography technologist:

1. Performs retrospective reconstruction on raw data.
2. Performs routine and specialized postprocessing.
3. Adjusts imaging parameters, patient procedure or computer-generated information to improve the outcome.

## Computed Tomography Clinical Performance Standards

### Standard Seven – Outcomes Measurement

The computed tomography technologist reviews and evaluates the outcome of the procedure.

#### *Rationale*

To evaluate the quality of care, the computed tomography 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 computed tomography technologist:

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

## Computed Tomography Clinical Performance Standards

### Standard Eight – Documentation

The computed tomography 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 computed tomography technologist:

1. Documents diagnostic, treatment and patient data in the medical record in a timely, accurate and comprehensive manner.
2. Documents exceptions from the established criteria or procedures.
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 computed tomography technologist:

1. Archives images to data storage devices.
2. Documents radiation exposure parameters.
3. Documents administered radionuclide activity and volume.

## Computed Tomography Quality Performance Standards

### Standard One – Assessment

The computed tomography 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 computed tomography technologist:

1. Determines that services are performed in a safe environment, minimizing potential hazards, in accordance with established guidelines.
2. Confirms that equipment performance, maintenance and operation comply with manufacturer's specifications.
3. Verifies that protocol and procedure manuals include recommended criteria and are reviewed and revised.

#### *Specific Criteria*

The computed tomography technologist:

1. Participates in radiation protection, patient safety, risk management and quality management activities.
2. Performs area monitoring and surveys to assess radiation exposure levels and contamination sites.
3. Complies with federal and state laws to minimize radiation exposure levels.
4. Maintains controlled access to restricted area during radiation exposure.
5. Maintains and performs quality control on radiation safety equipment such as aprons, thyroid shields, etc.

## **Computed Tomography Quality Performance Standards**

### **Standard Two – Analysis/Determination**

The computed tomography 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 computed tomography technologist:

1. Assesses services, procedures and environment to meet or exceed established guidelines and adjusts the action plan.
2. Monitors equipment to meet or exceed established standards and adjusts the action plan.
3. Assesses and maintains the integrity of medical supplies such as a lot/expiration, sterility, etc.

#### *Specific Criteria*

The computed tomography technologist:

1. Evaluates results of quality control testing on radioactive material for compliance.

# Computed Tomography Quality Performance Standards

## Standard Three – Education

The computed tomography 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 computed tomography 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 along with the biological effects of radiation, sound wave, or magnetic field and protection.
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.

# Computed Tomography Quality Performance Standards

## Standard Four – Performance

The computed tomography 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 computed tomography technologist:

1. Maintains current information on equipment, materials and processes.
2. Performs ongoing quality assurance activities.
3. Performs quality control testing of equipment.

### *Specific Criteria*

The computed tomography technologist:

1. Monitors image production to determine technical acceptability.
2. Performs routine archiving status checks.
3. Performs quality testing on radioactive materials prior to administration.
4. Complies with radiation protection rules and standards.
5. Utilizes radiation detecting equipment.
6. Demonstrates safe handling, storage and disposal of radioactive materials.
7. Monitors shielding effectiveness.
8. Consults with medical physicist in performing and documenting the quality assurance tests.

## Computed Tomography Quality Performance Standards

### Standard Five – Evaluation

The computed tomography 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 computed tomography technologist:

1. Validates quality assurance testing conditions and results.
2. Evaluates quality assurance results.
3. Formulates an action plan.

#### *Specific Criteria*

None added.

## Computed Tomography Quality Performance Standards

### Standard Six – Implementation

The computed tomography 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 computed tomography technologist:

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

#### *Specific Criteria*

The computed tomography technologist:

1. Employs devices to minimize radiation levels.
2. Uses decontamination procedures.

## Computed Tomography Quality Performance Standards

### Standard Seven – Outcomes Measurement

The computed tomography 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 computed tomography technologist:

1. Reviews the implementation process for accuracy and validity.
2. Determines that actual outcomes are within established criteria.
3. Develops and implements a modified action plan.

#### *Specific Criteria*

None added.

## Computed Tomography Quality Performance Standards

### Standard Eight – Documentation

The computed tomography 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 computed tomography technologist:

1. Maintains documentation of quality assurance activities, procedures and results in accordance with established guidelines.
2. Documents in a timely, accurate and comprehensive manner.

#### *Specific Criteria*

The computed tomography technologist:

1. Documents radioactive materials quality testing procedures and maintains results for inspection.
2. Documents instrumentation quality testing procedures and maintains results for review.

# Computed Tomography Professional Performance Standards

## Standard One – Quality

The computed tomography 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 computed tomography 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 diagnostic study or treatment.
5. Anticipates and responds to patient needs.
6. Respects cultural variations.

### *Specific Criteria*

The computed tomography technologist:

1. Performs procedures in accordance with the Nuclear Regulatory Commission (NRC) or in agreement with state regulations.

## **Computed Tomography Professional Performance Standards**

### **Standard Two – Self-Assessment**

The computed tomography 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 computed tomography 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.

## **Computed Tomography Professional Performance Standards**

### **Standard Three – Education**

The computed tomography technologist acquires and maintains current knowledge in practice.

#### *Rationale*

Advancements in the profession 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 computed tomography technologist:

1. Completes education related to practice.
2. Maintains credentials and certification related to practice.
3. Participates in continuing education to maintain and enhance competency and performance.
4. Shares knowledge and expertise with others.

#### *Specific Criteria*

None added.

## **Computed Tomography Professional Performance Standards**

### **Standard Four – Collaboration and Collegiality**

The computed tomography 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 computed tomography technologist:

1. Shares knowledge and expertise with members of the health care team.
2. Develops collaborative partnerships to enhance quality and efficiency.
3. Promotes understanding of the profession.

#### *Specific Criteria*

The computed tomography technologist:

1. Instructs others in postprocedural radiation safety.

## Computed Tomography Professional Performance Standards

### Standard Five – Ethics

The computed tomography 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 computed tomography technologist:

1. Provides health care services with respect for the patient's dignity, age-specific needs and culture.
2. Acts as a patient advocate.
3. Takes responsibility 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.

#### *Specific Criteria*

None added.

## Computed Tomography Professional Performance Standards

### Standard Six – Research and Innovation

The computed tomography 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 computed tomography 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.
6. Pursues lifelong learning.

#### *Specific Criteria*

None added.

## **Computed Tomography Advisory Opinion Statements**

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