



The Practice Standards for Medical Imaging and Radiation Therapy

Nuclear Medicine 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 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 Nuclear Medicine Practice Standards

Definition

The practice of nuclear medicine and molecular imaging is performed by a segment of health care professionals responsible for the administration of ionizing radiation (radioactive material and computed tomography) and non-ionizing radiation and adjunctive medications to patients for diagnostic, therapeutic or research purposes. Radioactive materials, medications and imaging and nonimaging equipment are used in nuclear medicine and molecular imaging to study various organs, body systems and samples to aid in the diagnosis, treatment and treatment planning of various pathological conditions.

Although an interdisciplinary team of clinicians, nuclear medicine technologists and support staff plays a critical role in the delivery of health services, it is the nuclear medicine technologist who performs the nuclear medicine and molecular imaging procedure or the therapy at the request of and for interpretation by a licensed practitioner and under the supervision of an authorized user.

Nuclear medicine and molecular imaging technology integrates scientific knowledge, technical competence and patient interaction skills to provide safe and accurate procedures with the highest regard to all aspects of patient care. A nuclear medicine technologist recognizes patient conditions essential for the successful completion of the procedure.

Nuclear medicine technologists must demonstrate an understanding of human anatomy and physiology, chemistry, physics and instrumentation, mathematics, medical terminology and pharmacology. Nuclear medicine technologists must maintain a high degree of accuracy in all aspects of the procedure. They must possess, use and maintain knowledge about radiation safety principles. Nuclear medicine technologists independently perform or assist the licensed practitioner and authorized user in the completion of nuclear medicine and molecular imaging procedures and treatments. Nuclear medicine technologists prepare, administer and document activities related to ionizing radiation (radioactive material and computed tomography) and non-ionizing radiation, medications and radiation exposure in accordance with federal and state laws or lawful institutional policy.

Nuclear medicine technologists are the primary liaison between patients, licensed practitioners and other members of the health care team. Nuclear medicine 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, nuclear medicine technologists participate in quality improvement processes and continually assess their professional performance.

Nuclear medicine technologists think critically and use independent, professional and ethical judgment 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 nuclear medicine procedures.

Nuclear medicine technologists prepare for their roles on the interdisciplinary team by successfully completing a program in nuclear medicine 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 or the Nuclear Medicine Technology Certification Board. Those passing the ARRT examination use the credential R.T.(N). Those passing the NMTCB examination use the credential CNMT.

Eligibility to take the NMTCB specialty examinations in nuclear cardiology and/or positron emission tomography requires appropriate primary certification and documentation of clinical experience at the time of the examination. Those who successfully complete these examinations may use the credentials NCT and/or PET.

Medical imaging and radiation therapy professionals performing multiple modality hybrid imaging should be registered by certification agencies recognized by the ASRT and be educationally prepared and clinically competent in the specific modality(ies) they are responsible to perform. Medical imaging and radiation therapy professionals performing diagnostic procedures in more than one imaging modality will adhere to the individual practice standard for each.

To maintain ARRT and/or NMTCB primary and/or specialty certifications, nuclear medicine technologists must complete appropriate continuing education requirements to sustain their expertise and awareness of changes and advances in practice.

Overview

Nuclear medicine technologists are part of the interdisciplinary team that plays a critical role in the delivery of health services as new modalities emerge and the need for imaging and nonimaging procedures increases. A comprehensive procedure list for the nuclear medicine technologist is impractical because clinical activities vary by the practice needs. As the field of nuclear medicine and molecular imaging advances, the clinical activities for the nuclear medicine 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 nuclear medicine technologist should, within the boundaries of all applicable legal requirements and restrictions, exercise individual thought, judgment and discretion in the performance of the procedure.

Nuclear Medicine 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 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 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.
- 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 nuclear medicine technologist also includes:

1. Performing nuclear medicine procedures as prescribed by a licensed practitioner and under the supervision of an authorized user.

2. Performing hybrid imaging including PET/CT and SPECT/CT for emission, transmission, and attenuation correction, anatomical location and for use in radiation therapy treatment planning when performed within hybrid imaging as prescribed by a licensed practitioner and under the supervision of an authorized user.
3. Identifying, preparing and/or administering ionizing radiation (radioactive material and computed tomography) and non-ionizing radiation as prescribed by a licensed practitioner and under the supervision of an authorized user.

Nuclear Medicine Clinical Performance Standards

Standard One – Assessment

The nuclear medicine 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 nuclear medicine 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 nuclear medicine technologist:

1. Locates and reviews previous examinations and/or procedures for comparison.
2. Identifies and removes artifact-producing objects.
3. Verifies the patient's lactation or breastfeeding status.
4. Verifies the patient's menstrual cycle.
5. Assesses patient risk for allergic reaction(s) to medication prior to administration.

Nuclear Medicine Clinical Performance Standards

Standard Two – Analysis/Determination

The nuclear medicine 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 nuclear medicine 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 nuclear medicine technologist:

1. Selects appropriate data acquisition equipment and accessories to perform the procedure.
2. Determines radiopharmaceutical dosage based on protocol, patient's age, weight, medical and physical status.
3. Reviews the patient's medical record and the examination request to determine optimal procedure parameters for clinical indications.
4. Determines patient compliance with pre-examination preparation and instructions.

5. Evaluates lab values prior to procedures.
6. Determines the appropriate type and dose of contrast media to be administered for hybrid imaging based on established protocols.

Nuclear Medicine Clinical Performance Standards

Standard Three – Education

The nuclear medicine 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 nuclear medicine 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 practitioner.
3. Provides patient education.
4. Explains effects and potential side effects of medications.

Specific Criteria

The nuclear medicine technologist:

1. Provides pre-, peri- and post-procedure education.
2. Provides instruction to the patient and others regarding the reduction of radiation exposure during and after the procedure.
3. Provides information regarding the risks and benefits of ionizing radiation (radioactive material and computed tomography) and non-ionizing radiation.
4. Instructs patients regarding contrast administration.

Nuclear Medicine Clinical Performance Standards

Standard Four – Performance

The nuclear medicine 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 nuclear medicine 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 nuclear medicine technologist:

1. Administers radioactive material and/or medication through existing vascular access devices.
2. Uses shielding devices.
3. Monitors imaging production to determine variance from established quality standards.
4. Determines optimum placement of electrocardiogram (ECG) electrodes and correctly identifies ECG wave trigger and/or pattern.
5. Uses a power injector for the administration of medication when a Food and Drug Administration approved vascular access device is available; follows manufacturer guidelines regarding infusion rate and pressure.
6. Collects, radiolabels and documents tissue and body fluid samples.

Nuclear Medicine Clinical Performance Standards

Standard Five – Evaluation

The nuclear medicine 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 nuclear medicine 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 nuclear medicine technologist:

1. Reviews procedure to determine if additional images or data will enhance the diagnostic value.
2. Processes images for evaluation by a licensed practitioner.
3. Consults with a licensed practitioner to confirm diagnostic completeness.

Nuclear Medicine Clinical Performance Standards

Standard Six – Implementation

The nuclear medicine 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 nuclear medicine 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 nuclear medicine technologist:

1. Adjusts imaging parameters, patient procedure or computer-generated information to improve the outcome.
2. Assesses procedure for technical quality and makes technical modifications to the data presentations.
3. Performs additional images or data collection as needed.

Nuclear Medicine Clinical Performance Standards

Standard Seven – Outcomes Measurement

The nuclear medicine technologist reviews and evaluates the outcome of the procedure.

Rationale

To evaluate the quality of care, the nuclear medicine 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 nuclear medicine 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.

Nuclear Medicine Clinical Performance Standards

Standard Eight – Documentation

The nuclear medicine 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 nuclear medicine 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 nuclear medicine technologist:

1. Maintains records of the receipt, administration and disposal of radioactive materials.
2. Documents administered dosage and route of administration in patient records.

Nuclear Medicine Quality Performance Standards

Standard One – Assessment

The nuclear medicine 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 nuclear medicine 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 nuclear medicine technologist:

1. Performs area monitoring and surveys to assess radiation exposure levels and contamination sites.
2. Complies with federal and state laws to minimize radiation exposure levels.
3. Controls access to restricted area(s).
4. Participates in radiation protection, patient safety, risk management and quality management activities.
5. Maintains and performs quality control on radiation safety equipment according to regulatory agencies.

Nuclear Medicine Quality Performance Standards

Standard Two – Analysis/Determination

The nuclear medicine 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 nuclear medicine 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 nuclear medicine technologist:

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

Nuclear Medicine Quality Performance Standards

Standard Three – Education

The nuclear medicine 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 nuclear medicine 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

The nuclear medicine technologist:

1. Ensures radiation safety instruction information and limitations are provided to patient following therapeutic procedures.

Nuclear Medicine Quality Performance Standards

Standard Four – Performance

The nuclear medicine 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 nuclear medicine 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 nuclear medicine technologist:

1. Complies with radiation protection rules and standards.
2. Uses radiation detecting equipment.
3. Demonstrates safe handling, receipt, storage and disposal of radioactive materials.
4. Monitors shielding effectiveness.
5. Wears a ring badge on the dominant hand, with the label facing the radiation source.
6. Maintains security of radioactive material.

Nuclear Medicine Quality Performance Standards

Standard Five – Evaluation

The nuclear medicine 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 nuclear medicine technologist:

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

Specific Criteria

None added.

Nuclear Medicine Quality Performance Standards

Standard Six – Implementation

The nuclear medicine 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 nuclear medicine technologist:

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

Specific Criteria

The nuclear medicine technologist:

1. Employs devices to minimize radiation levels.
2. Manages radioactive contamination and uses decontamination procedures.

Nuclear Medicine Quality Performance Standards

Standard Seven – Outcomes Measurement

The nuclear medicine 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 nuclear medicine 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

The nuclear medicine technologist:

1. Reviews and evaluates quality assurance processes and tools for effectiveness.

Nuclear Medicine Quality Performance Standards

Standard Eight – Documentation

The nuclear medicine 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 nuclear medicine technologist:

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

Specific Criteria

The nuclear medicine technologist:

1. Documents radioactive materials quality testing procedures and maintains results for inspection.
2. Documents instrumentation quality testing procedures and maintains results for review.
3. Reports any out of tolerance deviations from quality assurance activities to appropriate personnel.
4. Documents the implementation, evaluation and modification of the radiation safety plan under the authority of the Radiation Safety Officer (RSO).

Nuclear Medicine Professional Performance Standards

Standard One – Quality

The nuclear medicine 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 nuclear medicine 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

The nuclear medicine technologist:

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

Nuclear Medicine Professional Performance Standards

Standard Two – Self-Assessment

The nuclear medicine 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 nuclear medicine 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

The nuclear medicine technologist:

1. Monitors and participates in federal and state law and accreditation standards affecting nuclear medicine and molecular imaging.

Nuclear Medicine Professional Performance Standards

Standard Three – Education

The nuclear medicine 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 nuclear medicine 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

None added.

Nuclear Medicine Professional Performance Standards

Standard Four – Collaboration and Collegiality

The nuclear medicine 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 nuclear medicine 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 nuclear medicine technologist:

1. Instructs others in radiation safety.

Nuclear Medicine Professional Performance Standards

Standard Five – Ethics

The nuclear medicine 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 nuclear medicine technologist:

1. Provides health care services with consideration for a diverse patient population.
2. Acts as a patient advocate.
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

The nuclear medicine technologist:

1. Reports unsafe practices to the Radiation Safety Officer (RSO), regulatory agency or other appropriate authority.

Nuclear Medicine Professional Performance Standards

Standard Six – Research and Innovation

The nuclear medicine 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 nuclear medicine 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.

Nuclear Medicine Advisory Opinion Statements

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

Medication Administration by Medical Imaging and Radiation Therapy Professionals.

Medication Administration through Existing Vascular Access.

Placement of Personal Radiation Monitoring Devices.