



# The Practice Standards for Medical Imaging and Radiation Therapy

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## Limited X-Ray Machine Operator 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 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 Limited X-Ray Machine Operator Practice Standards**

## **Definition**

The operation of x-ray equipment in a limited scope is performed by a segment of health care employees responsible for the administration of ionizing radiation for diagnostic, therapeutic or research purposes. A limited x-ray machine operator performs radiographic procedures within the scope of practice, producing images at the request of and for the interpretation by a licensed practitioner. A limited x-ray machine operator acquires additional images at the request of a licensed practitioner or radiographer.

An interdisciplinary team of clinicians, radiologic technologists and support staff plays a critical role in the delivery of health services; the limited x-ray machine operator performs radiographic examinations within his or her scope of practice.

Limited x-ray machine operators are individuals other than a radiographer who perform static diagnostic radiologic images on selected anatomical sites. They must demonstrate an understanding of human anatomy, physiology, pathology and medical terminology. Limited x-ray machine operators must possess, use and maintain a high degree of accuracy in radiographic positioning and exposure technique. They must possess, apply and maintain knowledge of radiation protection and safety.

Limited x-ray machine operators perform radiographic procedures within their scope or assist the licensed practitioner or radiographer in the completion of radiographic procedures.

Limited x-ray machine operators must remain sensitive to the needs of the patient through good communication, patient monitoring and patient care skills. As members of the health care team, limited x-ray machine operators participate in quality improvement processes and continually assess their performance.

Limited x-ray machine operators think critically and use independent and ethical judgment in all aspects of their work. They engage in ongoing education to include their area of practice to enhance patient care, public education, knowledge and technical competence.

## **Education and Certification**

Limited x-ray machine operators prepare for their roles on the interdisciplinary team in a number of ways. Various education and training programs for limited x-ray machine operators exist throughout the United States.

Many states may require the completion of a program of study prior to administering a state licensure exam for limited x-ray machine operators. Several states use some or all of the Limited Scope of Practice in Radiography state licensing exams developed by the American Registry of Radiologic Technologists. States that administer an exam and issue a license or certification may use various terminologies to designate a limited x-ray machine operator. The limited x-ray machine operator may have limitations in performing ionizing radiation procedures specific to their scope of practice, and may be prohibited from performing other tasks.

## **Overview**

Limited machine operators are part of an interdisciplinary team that 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 limited x-ray machine operator is impractical because clinical activities vary by the practice needs and expertise of the limited x-ray machine operator. As limited x-ray machine operators gain more experience, knowledge and clinical competence, the clinical activities for the limited x-ray machine operator 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 limited x-ray machine operator should, within the boundaries of all applicable legal requirements and restrictions, exercise individual thought, judgment and discretion in the performance of the procedure.

## Limited X-ray Machine Operator Scope of Practice

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

- Providing optimal patient care.
- Corroborating a patient's clinical history with procedure and ensuring information is documented and available for use by a licensed practitioner.
- Assuming responsibility for patient needs during procedures.
- Preparing patients for procedures.
- Applying principles of ALARA to minimize exposure to patient, self and others.
- Evaluating images for technical quality and ensuring proper identification is recorded.
- Identifying and responding to emergency situations.
- Providing education.
- Performing ongoing quality assurance activities.
- Applying the principles of patient safety during all aspects of patient care.

The scope of practice of the limited x-ray machine operator also includes:

1. Performing diagnostic radiographic procedures prescribed by a licensed practitioner of a specific area of anatomical interest based on limited education, training and licensure/certification within his or her scope of practice.
2. Assisting a licensed practitioner or radiographer during static radiographic procedures.
3. Optimizing technical exposure factors in accordance with the principles of ALARA.
4. Evaluating images for overall diagnostic quality.

# Limited X-ray Machine Operator Clinical Performance Standards

## Standard One – Assessment

The limited x-ray machine operator 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 limited x-ray machine operator:

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 limited x-ray machine operator:

1. Locates and reviews previous examinations for comparison.
2. Identifies and removes artifact-producing objects.

# Limited X-ray Machine Operator Clinical Performance Standards

## Standard Two – Analysis/Determination

The limited x-ray machine operator 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 limited x-ray machine operator:

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 limited x-ray machine operator:

1. Verifies that exposure indicator data for digital radiographic systems has not been altered or modified and is included in the Digital Imaging Communications in Medicine (DICOM) header and on images exported to media.
2. Analyzes images to determine the use of appropriate imaging parameters.

## Limited X-ray Machine Operator Clinical Performance Standards

### Standard Three – Education

The limited x-ray machine operator 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 limited x-ray machine operator:

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.

#### *Specific Criteria*

None added.

# Limited X-ray Machine Operator Clinical Performance Standards

## Standard Four – Performance

The limited x-ray machine operator 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 limited x-ray machine operator:

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.

### *Specific Criteria*

The limited x-ray machine operator:

1. Employs proper radiation safety practices.
2. Performs radiographic procedures under the direction of a licensed practitioner or radiographer.

3. Optimizes technical factors according to equipment specifications to meet the ALARA principle.
4. Modifies normal protocol for optimal demonstration of anatomy under the direction of a licensed practitioner or radiographer.
5. Uses pre-exposure collimation and proper field-of-view selection.
6. Uses appropriate uniquely identifiable pre-exposure radiopaque markers for anatomical and procedural purposes.
7. Performs appropriate post-processing on digital images in preparation for interpretation.
8. Applies principles of medical aseptic technique.

# Limited X-ray Machine Operator Clinical Performance Standards

## Standard Five – Evaluation

The limited x-ray machine operator 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 limited x-ray machine operator:

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 limited x-ray machine operator:

1. Seeks assistance from a licensed practitioner or radiographer to improve the quality of the procedure.
2. Evaluates images for overall image quality of a specific area of anatomical interest based on limited education, training and licensure/certification within his or her scope of practice.
3. Recognizes the need to adjust patient position or technical exposure factors to improve the quality of the procedure.

## Limited X-ray Machine Operator Clinical Performance Standards

### Standard Six – Implementation

The limited x-ray machine operator 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 limited x-ray machine operator:

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 limited x-ray machine operator:

1. Performs additional images that will produce the expected outcome based on patient's condition and procedural variance under the direction of a licensed practitioner or radiographer.

## Limited X-ray Machine Operator Clinical Performance Standards

### Standard Seven – Outcomes Measurement

The limited x-ray machine operator reviews and evaluates the outcome of the procedure.

#### *Rationale*

To evaluate the quality of care, the limited x-ray machine operator 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 limited x-ray machine operator:

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.

## Limited X-ray Machine Operator Clinical Performance Standards

### Standard Eight – Documentation

The limited x-ray machine operator 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 limited x-ray machine operator:

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 limited x-ray machine operator:

1. Documents radiation exposure.
2. Documents the use of shielding devices and proper radiation safety practices.

# Limited X-ray Machine Operator Quality Performance Standards

## Standard One – Assessment

The limited x-ray machine operator 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 limited x-ray machine operator:

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 limited x-ray machine operator:

1. Controls access to restricted area during radiation exposure.
2. Follows federal and state guidelines to minimize radiation exposure levels.
3. Performs quality assurance activities under the direction of a licensed practitioner, radiographer or medical physicist.
4. Participates in radiation protection, patient safety, risk management and quality management activities.
5. Develops and maintains standardized exposure technique guidelines under the direction of a licensed practitioner or radiographer.
6. Maintains and performs quality control on radiation safety equipment within his or her scope of practice.

## Limited X-ray Machine Operator Quality Performance Standards

### Standard Two – Analysis/Determination

The limited x-ray machine operator 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 limited x-ray machine operator:

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 limited x-ray machine operator:

1. Analyzes the results of assessment activities under the direction of a licensed practitioner, radiographer and/or medical physicist.

# 1. Limited X-ray Machine Operator Quality Performance Standards

## Standard Three – Education

The limited x-ray machine operator 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 limited x-ray machine operator:

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 limited x-ray machine operator:

1. Provides information on certification or accreditation to the patient, other health care providers and the general public.

# Limited X-ray Machine Operator Quality Performance Standards

## Standard Four – Performance

The limited x-ray machine operator 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 limited x-ray machine operator:

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 limited x-ray machine operator:

1. Performs assessment activities under the direction of a licensed practitioner, radiographer or medical physicist.
2. Routinely reviews patient exposure records and reject analyses as part of the quality assurance program.

## Limited X-ray Machine Operator Quality Performance Standards

### Standard Five – Evaluation

The limited x-ray machine operator 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 limited x-ray machine operator:

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

#### *Specific Criteria*

The limited x-ray machine operator:

1. Performs evaluations under the direction of a licensed practitioner, radiographer or medical physicist.

## Limited X-ray Machine Operator Quality Performance Standards

### Standard Six – Implementation

The limited x-ray machine operator 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 limited x-ray machine operator:

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

#### *Specific Criteria*

The limited x-ray machine operator:

1. Implements the quality assurance action plan under the direction of a licensed practitioner, radiographer or medical physicist.

# Limited X-ray Machine Operator Quality Performance Standards

## Standard Seven – Outcomes Measurement

The limited x-ray machine operator 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 limited x-ray machine operator:

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 limited x-ray machine operator:

1. Develops and implements a modified action plan under the direction of a licensed practitioner, radiographer or medical physicist.
2. Reviews and evaluates quality assurance processes and tools for effectiveness.

## Limited X-ray Machine Operator Quality Performance Standards

### Standard Eight – Documentation

The limited x-ray machine operator 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 limited x-ray machine operator:

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

#### *Specific Criteria*

The limited x-ray machine operator:

1. Documents quality assurance activities under the direction of a licensed practitioner, radiographer and/or medical physicist.
2. Reports any out of tolerance deviations from quality assurance activities to appropriate personnel.

## Limited X-ray Machine Operator Professional Performance Standards

### Standard One – Quality

The limited x-ray machine operator 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 limited x-ray machine operator:

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.

## Limited X-ray Machine Operator Professional Performance Standards

### Standard Two – Self-Assessment

The limited x-ray machine operator 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 limited x-ray machine operator:

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 limited x-ray machine operator:

1. Monitors and participates in federal and state laws and accreditation standards affecting limited x-ray machine operators.

## Limited X-ray Machine Operator Professional Performance Standards

### Standard Three – Education

The limited x-ray machine operator 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 limited x-ray machine operator:

1. Advocates for and participates in continuing education related to area of practice, to maintain and enhance clinical competency.
2. Advocates for and participates in vendor specific applications training to maintain clinical competency.

#### *Specific Criteria*

The limited x-ray machine operator:

1. Maintains certification(s) or license related to area(s) of practice.
2. Maintains knowledge of the most current practices and technology used to minimize patient dose while producing diagnostic quality images.

## Limited X-ray Machine Operator Professional Performance Standards

### Standard Four – Collaboration and Collegiality

The limited x-ray machine operator 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 limited x-ray machine operator:

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*

None added.

## Limited X-ray Machine Operator Professional Performance Standards

### Standard Five – Ethics

The limited x-ray machine operator 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 limited x-ray machine operator:

1. Provides health care services with consideration for a diverse patient.
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*

None added.

## Limited X-ray Machine Operator Professional Performance Standards

### Standard Six – Research and Innovation

The limited x-ray machine operator 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 limited x-ray machine operator:

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*

The limited x-ray machine operator:

1. Investigates avenues to continue progress to become a registered radiographer.

## **Limited X-ray Machine Operator Advisory Opinion Statements**

Placement of Personal Radiation Monitoring Devices.

Use of Post-Exposure Shuttering, Cropping and Electronic Masking in Radiography.